

The Encyclopedia of Religion and Nature - Volume 1 (A-I)

Bron Taylor

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Introduction

Introducing Religion and Nature

What are the relationships between human beings, their diverse religions, and the Earth's living systems?

The question animating this encyclopedia can be simply put. The answers to it, however, are difficult and complex, intertwined with and complicated by a host of cultural, environmental, and religious variables. This encyclopedia represents an effort to explore this question in a way that illuminates these relationships without oversimplifying the dynamic relations between human beings, their religions, and the natural environment.

This introduction and the "readers guide" that follows it provide a map to this terrain. The introduction explains the questions that gave rise to this project, describes the approach taken and rationale for editorial judgments made along the way, spotlights some of the volume's most important entries, and speculates about the future of nature-related religion as well as the increasingly interdisciplinary scholarly field that has emerged to track it. The "Readers Guide," located after this introduction, should not be missed, for it describes the different types of entries included in the encyclopedia and explains how to use it.

Religion and Nature Conundrums

In the second half of the twentieth century, as environmental alarm grew and intensified, so did concern about the possible role of religion in nature. Much of this concern has involved a hope for a “greening” of religion; in other words, it envisioned religion promoting environmentally responsible behavior. So fervent has this preoccupation become that, since the early 1970s, “green” has become a synonym for “environmental” in its original adjectival form, and it has now also mutated into verb and adverb, regularly deployed to signal environmentally protective action. Indeed, the term “green” will be used throughout these volumes to convey environmental concern, awareness, or action.

Curiosity regarding the relationships between human culture, religion, and the wider natural world, however, goes far beyond the question as to whether religions are naturally green, turning green, or herbicidal. The kinds of questions that arise from the nexus of religion and nature are many and diverse – but they have not always been in scholarly focus, a fact that this encyclopedia seeks to remedy.

In the *Encyclopedia of Religion and Nature* (ERN) we set forth a dozen analytical categories, both while pursuing entries and while guiding contributors, hoping this would arouse discussion and debate in a number of areas that had received too little critical scrutiny. Additionally, the aim was to foster a more nuanced analysis in areas that had already drawn significant attention. We asked prospective writers to illuminate the following questions, grouped into a dozen analytical categories, to the fullest extent possible, given their relevance to the specific subject matter in focus:

1. How have ecosystems shaped human consciousness, behavior, and history, in general, and *religions* and their environment-related behaviors in particular, if they have?
2. What are the perceptions and beliefs of the world’s religions toward the Earth’s living systems in general and toward individual organisms in particular? In what ways have these traditions promoted ecologically beneficent or destructive lifeways? Are some religions intrinsically greener than others?
3. Are religions being transformed in the face of growing environmental concern, and if so, how? To what extent do expressed beliefs about duties toward nature cohere with behaviors toward it?
4. Do various religions have internal and external resources for, or barriers to, the kind of transformations that are widely considered necessary if humans are to achieve ecologically sustainable societies? If they can be, what are the effective ways in which greener religions have been and can be encouraged?

5. How are various and different religions, from old and established to new and emergent, influencing one another as people struggle to address – and to make sense of – their environmental predicaments? How are contemporary environmental understandings influencing religion? Are ecological understandings more influential on religions than the other way around?

6. To what extent (if at all) can contemporary environmental movements be considered religious? If they are religious, should we consider all of the resource-related conflicts in which they are engaged to be religious struggles?

7. What are the reciprocal influences between nature and religion in interhuman conflict and violence? Does natural resource scarcity play a significant role in this regard, intensifying conflicts and the likelihood of religion-and-nature-related violence? Yet more specifically, what are the reciprocal influences between apocalyptic or millenarian religions, and environmental sciences, which are producing increasingly alarming prognostications?

8. What are the relationships among religious ideas, breeding, and population growth and decline? How is this related to other questions listed here?

9. How are the sciences integrated into contemporary nature-related religion and ethics? Is it possible for religions to consecrate scientific narratives, such as evolution, in such a way as to invent religions with *no* supernatural dimension? If so, can we still call such worldviews and perceptions religious?

10. With regard to nature religions, here defined as religions that consider nature to be sacred: What are the “spiritual epistemologies,” the perceptions in nature, the sources and cultural constructions, which have shaped them? And how and to what extent are political ideologies integrated into the nature-religion stew?

11. What are the impacts of “globalization” on nature-related religion and behavior; specifically, what are the processes, pathways, and limits to crossfertilization within and among different religions and regions in our increasingly interconnected world? Are there any patterns or tendencies emerging globally in contemporary Earth-related spirituality and religion?

12. If, indeed, there are patterns and tendencies, how are the people involved in nature-related religion and spiritualities reshaping not only the religious terrain, but also the political and ecological landscape around the world?

Readers interested in such questions should find much of interest in these volumes.

The remainder of this introduction explores the emerging fields related to religion and nature that have variously been dubbed “religion and ecology,” “ecological anthropology,” “cultural ecology,” and “environmental history.” The discussion of these fields and subfields includes several dimensions:

1. It provides and examines working definitions for terms that were critical to the framing of the project, including “religion,” “nature,” and “nature religion.”

2. It explores the genesis and evolution of interest in “religion and nature,” both among religionists and scholars. This section focuses first on the American Conservation Movement, and secondly on seventeenth-century Europe and on developments up

to the Environmental Age (shorthand in this introduction for the age of environmental awareness that emerged forcefully in the 1960s). It then spotlights the religion and nature debates during this period, including developments among “world religions,” “nature religions,” and in theories purporting to explain the natural origins and persistence of religion.

3. A concluding section overviews some of the ways in which this encyclopedia begins to address the future of religion, nature, and the understandings of these relationships.

Defining Religion, Nature, and Nature Religion

From the beginning of this project, the objective has been to encourage robust debate and to explore the widest possible range of phenomena related to the relationships between religion, nature, and culture. This leads inevitably to the very beginnings of the scholarly study of religion, for long and lively debates regarding what constitutes religion have often been deeply connected to discussions about the role nature plays in it. Because even this definitional terrain has been contested, in constructing this encyclopedia the aim has been to avoid excluding by definitional fiat some of the very phenomena and perspectives that are under discussion. Despite this reluctance to impose a definition of religion on the overall endeavor, however, any study has to be guided by a consistent set of standards and has to be clear about its subject matter. This terminological section, therefore, explains the operational definition of religion that has informed the construction of these volumes. It also clarifies other terms critical for this study, such as “spirituality,” “nature,” and “nature religion.”

One reason for this terminological interlude is that in contemporary parlance, people increasingly replace the term “religion” with “spirituality” when trying to express what moves them most deeply. Nowhere is the preference for the term “spirituality” over “religion” more prevalent than among those engaged in nature-based or nature-focused religion.

A number of scholars have noted and sought to understand the distinction between the terms spirituality and religion, and the preference many contemporary people express for the former over the latter. In one seminal study, the sociologist of religion Wade Clark Roof found that for many, “to be religious conveys an institutional connotation [while] to be spiritual . . . is more personal and empowering and has to do with the deepest motivations in life” (Roof 1993: 76–7). A number of subsequent empirical studies supported Roof’s analysis and found ample evidence that many people understood the distinction as Roof had described it and considered themselves spiritual but not religious. In survey research conducted by Daniel Helminiak, for example, 19 percent of respondents called themselves spiritual. For these people, religion “implies a social and political organization with structures, rules, officials, [and] dues [while] *spirituality* refers only to the sense of the transcendent, which organized religions carry and are supposed to foster” (Helminiak 1996: 33). Another study similarly found that “religiousness is increasingly characterized as ‘narrow and institutional,’ and spirituality . . . as ‘personal and subjective’ ” (Zinnbauer et al. 1997: 563).

The distinction between *religion* as “organized” and “institutional” and *spirituality* as involving one’s deepest moral values and most profound life experiences is probably the most commonly understood difference between the two terms. But there are additional idea clusters that often are more closely associated with spirituality than religion; and these ideas tend to be closely connected with nature and a sense of its value and sacredness.

Given its commonplace connection with environmental concerns, when considering nature-related religion, it is important to include what some people call *spirituality*. This is not to say that scholars and other observers must maintain the same understanding of the distinction between spirituality and religion that has emerged in popular consciousness. Most of those who consider themselves to be spiritual can be considered religious by an external observer, for they generally believe that life has meaning and that there is a sacred dimension to the universe.

Some argue that religion requires belief in divine beings and supernatural realities, however, and insist that even profoundly meaningful experiences and strong moral commitments cannot count as religion in the absence of such beliefs. An entry on the “Anthropology of Religion” by Jonathan Z. Smith and William Scott Green in *The HarperCollins Dictionary of Religion* asserts, for example, that religion is best defined as “a system of beliefs and practices that are relative to *superhuman* beings” (1995: 893). They argue that such a restrictive definition is best because it “moves away from defining religion as some special kind of experience or worldview” and excludes “quasi-religious religious movements” such as Nazism, Marxism, or Nationalism (1995: 893–4).

While the desire to exclude such movements as religions is understandable, to strictly enforce this definition would be unduly restrictive. It would eliminate some forms of Buddhism, for example, as well as a wide variety of people who consider themselves to be deeply spiritual and who regularly rely on terms like “the sacred” to describe their understanding of the universe or their places in it, but who do not believe in divine beings or supernatural realities. In short, such a restrictive definition of religion would preclude consideration of much nature-related religiosity.

By way of contrast, the framing of this encyclopedia was influenced more by religion scholar David Chidester’s reflections on the sometimes violent debates and struggles over understandings and definitions of religion. Chidester acknowledges that some working definition of religion is required for its study. But he also argues that because the term “*religion*” has been a contested category, a single, incontestable definition of religion cannot simply be established by academic fiat” (Chidester 1996b: 254). He proposes, instead, a self-consciously vague definition: religion is “that dimension of human experience engaged with sacred norms” (1987: 4).

Chidester acknowledges that some will consider such a definition not only vague but circular, but contends that vagueness can be an asset when trying to understand the diversity of religion. Vagueness is certainly a virtue when studying nature-related religion, partly because there are so many forms of it. Circularity may be inevitable.

Chidester asserts, “A descriptive approach to the study of religion *requires* a circular definition of the sacred: Whatever someone holds to be sacred is sacred.” He concludes that the task of religious studies, therefore, “is to describe and interpret sacred norms that are actually held by individuals, communities, and historical traditions” (1987: 4). This encyclopedia is premised similarly, for to adopt a more restrictive definition would exclude a variety of actors who regularly deploy metaphors of the sacred to describe their deepest spiritual and moral convictions. Moreover, some substantive definitions of religion (which specify things that constitute religion, such as myths, beliefs in divine beings, symbols, rites and ethics) as well as functional ones (which describe how religions operate and influence and/or are influenced by nature and culture), create restrictive lenses that make it impossible for them to apprehend some forms of nature spirituality. So to adopt such definitions would preclude from discussion much of what *The Encyclopedia of Religion and Nature* set out to illuminate.

Filling out further his understanding of religion as an engagement with the sacred, however this is understood, Chidester adds, what people hold to be sacred tends to have two important characteristics: ultimate meaning and transcendent power . . . Religion is not simply a concern with the meaning of human life, but it is also an engagement with the transcendent powers, forces, and processes that human beings have perceived to impinge on their lives (1987: 4).

Such a flexible understanding of religion provides a good starting point for this encyclopedia’s inquiry into the connections between nature, religion, and culture. The only part of Chidester’s definition that we might need occasionally to set aside is the nebulous term “transcendent” – at least if this evokes a sense of something supernatural or somehow beyond the observable and sensible world – for much nature-based spirituality involves a perception of the sacred as immanent.

From the outset, then, an open operational definition, adapted from Chidester’s, has informed the construction of this encyclopedia. It understands religion as “*that dimension of human experience engaged with sacred norms, which are related to transformative forces and powers and which people consider to be dangerous and/or beneficent and/or meaningful in some ultimate way.*” For many, this meaningfulness and the sacred norms associated with it have much to do with nature. And nature itself, another problematic term that also has inspired robust discussion, can be for our purposes understood simply: Nature is that world which includes – but at the same time is perceived to be largely beyond – our human bodies, and which confronts us daily with its apparent otherness.

With such minimalist definitions of religion and nature in mind, how then are we to understand them when they are combined into the term “nature religion”? Here also there is no scholarly consensus, as illustrated in the entry on NATURE RELIGION itself, as well as in my own entry on “Nature Religion” in *The Encyclopedia of Religion* (Taylor 2005). (Encyclopedia entries mentioned in this introduction are indicated by SMALL CAPITAL LETTERS, as in the previous sentence.) But in contemporary parlance there does seem to be a strong tendency to define as nature religion any

religiosity that considers nature to be sacred (extraordinarily powerful in both dangerous and beneficial ways) and worthy of reverent care. This is the simple definition that I will employ in this introduction as shorthand for what I have sometimes called “nature-as-sacred” religion.

This encyclopedia’s contributors have not, however, been bound to my own usage of the term in this introduction. Catherine Albanese, for example, in *NATURE RELIGION IN THE UNITED STATES*, which builds upon her influential book *Nature Religion in America* (1990), understands the term more broadly. For Albanese, nature religion is a trope for all religious phenomena in which nature is an important religious symbol or conceptual resource, whether or not nature is considered sacred. Careful readers will be alert to the different ways contributors in this encyclopedia may use the same terminology.

In sum, the definitions that shaped the construction of this encyclopedia, and this introduction and reader’s guide, were adopted for strategic reasons. The aim in finding simple and inclusive definitions of “religion” and “nature” has been to invite the widest variety of perspectives to engage the meaning and relationships that inhere to the human religious encounter with nature. The aim in defining nature religion as “nature-as-sacred” religion (in this introduction only) has been to distinguish it from “the natural dimension of religion,” an apt phrase borrowed from Albanese that I use to represent the entire “religion and nature” or “religion and ecology” field (Albanese

1990: 6). Understanding this wider, natural dimension of religion is certainly as important as understanding religions that consider nature to be sacred. The rest of this introduction and the diversity of entries that follow make this clear.

The Evolution of Interest in Religion and Nature

This overview of the genesis and evolution of interest in religion and nature covers a lot of territory and is necessarily selective. While impressionistic, it does describe the major trends and tendencies characteristic of the religion and nature discussion. It is divided into three sections.

The first section is focused on the United States between the mid-nineteenth century and the age of environmentalism which, despite the presence of conservationists and conservation thinkers before this period, cannot be said to have arrived until the 1960s. This section introduces the important role that differing perspectives on religion and nature played in the rise of environmentalism globally. The second section focuses on the evolution of nature and religion-related thinking among intellectuals, especially since the seventeenth century in Europe, and it follows these streams into the 1960s. This section explores the ways “nature religions” were understood before and after the Darwinian revolution, and suggests some ways in which evolutionary theory transformed the religion and nature debate, both for intellectuals and wider publics. Introducing these two streams sets the stage for an introduction to the perspectives and debates surrounding religion and nature during the age of environmentalism. Taken together, this overview illuminates trends that are likely to continue and thus it poses questions about the future of religion and nature.

Religion and Nature in the American Conservation Movement

When analyzing the ways and reasons people have thought about the relationships between religion and nature, it is wise to consider not only the cultural, but also the environmental context. This is certainly true when we examine the emergence of the conservation movement, and its intersections with perspectives on religion and nature.

By the mid-nineteenth century, largely for building construction and the production of “pig iron,” deforestation in the United States had begun to evoke environmental alarm. This led to a survey in the Federal Census of 1880 that documented the dramatic decline of American forests. Meanwhile, the fossil-fuel age had begun with the first pumping of petroleum from the ground in 1859

(by Edwin L. Drake in Pennsylvania) and the invention of practical and useful two and four-stroke internal combustion engines in Europe (in 1875 and 1876). These developments led to the automobile age, which for all practical purposes began in 1885.

The invention of the internal combustion motor was accompanied by a dramatic increase in self-conscious reflection on the role that religion plays in shaping environments. This occurred in no small part because the alteration (and degradation) of the world's environments intensified and accelerated rapidly as humans developed and wielded ever-more powerful petroleum-fueled power tools as they reshaped ecosystems and their own, built environments.

Not coincidentally, this was also a period when ROMANTICISM and other nature-related spiritualities, birthed first in Europe, as well as the modern conservation movement, were germinating on American ground. The artist Frederick Edwin Church, for example, painted "Twilight in the Wilderness" (1860) inspiring the so-called Hudson School and generations of painters and later photographers (*see* ART), including the twentieth-century photographer ANSEL ADAMS, who depicted the sublime that he found in the American landscape. The American naturalist and political writer HENRY DAVID THOREAU, who was also a leading figure in the religious movement known as TRANSCENDENTALISM, wrote *Walden* in 1854. He included in it a now-famous aphorism, "in wildness is the preservation of the world" and believed that nature not only has intrinsic value but provides the source of spiritual truth. Thoreau kindled the WILDERNESS RELIGION that found fertile ground in America and provided a spiritual basis for conservation. In *The Maine Woods* (1864) Thoreau called for the establishment of national forest preserves, helping to set the stage for the National Park movement and the BIOSPHERE RESERVES AND WORLD HERITAGE SITES that would follow. In that very year, the American President Abraham Lincoln protected California's spectacular Yosemite Valley, which eventually expanded in size and became one of the world's first national parks.

Thoreau influenced JOHN MUIR, the Scottish-born nature mystic who, after growing up on a Wisconsin farm and hiking to the Gulf of Mexico as a young man, eventually wandered his way to California in 1868. Muir became one of the first Europeans to explore Yosemite and the rest of the Sierra Nevada Mountains. He found in them a sacred place where he could hear the "divine music" of nature, even giving RALPH WALDO EMERSON, Thoreau's Transcendentalist mentor, a tour of Yosemite Valley in 1871. Muir was, however, bitterly disappointed by Emerson's unwillingness to linger and listen to the valley's sacred voices. In 1892 Muir founded the SIERRA CLUB to prevent the desecration of these mountains by insensitive humans.

In the early twentieth century an archetypal battle was joined between John Muir and GIFFORD PINCHOT. At this time Muir was America's foremost representative of an ethic of "nature preservation." He would also become the spiritual godfather of the international National Park movement, which was founded significantly on perceptions of the sacredness of natural systems. Pinchot served as the first Chief Forester of the United States between 1899 and 1910. He influentially espoused a utilitarian

environmental ethic of fair and responsible use of nature for the benefit of all citizens, present and future.

Pinchot, like many politically progressive Christians of his day in North America, had been decisively influenced by its “Social Gospel” movement, a largely liberal expression of Christianity that sought to apply Christian principles to the social problems of the day. Consequently Pinchot sought to promote “the conservation of natural resources” (bringing the phrase into common parlance) partly to aid the poor and partly to promote democratic ideals against powerful corporate interests, which he believed unwisely despoiled the country’s natural heritage. Although Muir and Pinchot initially became friends, based in part on their mutual passion for the outdoors, Pinchot’s utilitarian ethic and Muir’s preservationist one were incompatible. Their competing values led them, inexorably, into an epic struggle over which management philosophy, with its attendant religious underpinnings, would guide policies related to public wildlands.

Muir considered the grazing of sheep in Yosemite, and later, plans to dam Yosemite’s Hetch Hetchy Valley, for example, to be desecrating acts. Pinchot became a powerful federal official who successfully promoted grazing and dam building. Muir denounced Pinchot as an agent of desecration asserting that there was “no holier temple” than Hetch Hetchy Valley. Pinchot thought Muir had failed to apprehend the religious duty to develop natural resources for the good of humankind. The historian Roderick Nash called the Hetch Hetchy controversy a “spiritual watershed” in American environmental history. This watershed demonstrated that a “wilderness cult” had become an important political force in American environmental politics (Nash 1967: 181). (*See also* WILDERNESS SOCIETY, MARSHALL, ROBERT and LEOPOLD, ALDO.) In subsequent decades such WILDERNESS RELIGION would remain potent and lead to bitter land-based conflicts all around the world. Indeed, as the preservationist national parks model spread, often alongside and competing with management models that promoted a utilitarian, “multiple use” doctrine for public lands, the cultural divide between the competing ethical and religious orientations represented by Muir and Pinchot appeared to go global.

There were many other dimensions to such religion-related land-use disputes, however, including the typical deracination (displacement from their original habitats), sometimes by genocide, of the peoples already living on lands designated “public” by nation-states. These people often had their own religious claims and connections to these lands. So as the demand to protect natural places intensified around the world, it involved more than a dispute between the spiritual biocentrism (life-centered ethics) of John Muir and the utilitarian anthropocentrism (human-centered ethics) of Gifford Pinchot. Whether in view or hidden from sight, the resulting disputes often, if not always, intertwined with disputes related to power, ethnicity, class, and nationality (*see* MANIFEST DESTINY). These controversies were inevitably mixed in with diverse and competing understandings regarding how properly to understand the sacred dimensions of life, and where the sacred might be most powerfully located.

Some of the peoples who survived deracination as the result of the global expansion of nation-states would eventually claim a right to their original lands and landbased spiritual traditions. This trend further complicated the complex relationships between political, natural, and cultural systems. The disputes between Muir and Pinchot were repeated in the years that followed; and to these were added disputes between their spiritual progeny and those who later condemned both conservationist and preservationist movements for promoting an imperial project that harmed the inhabitants of lands immorally, if not illegally, declared public. In the United States and many other countries that established national parks, as environmental degradation continued, movements arose in resistance to them. Such conflicts provided one more tributary to the growing of scholarly interest in religion, nature, and culture.

Religion and Nature from Seventeenth-Century Europe to the Environmental Age

Curiosity about the relationships between nature, religion, and culture, of course, predated the modern conservation era. Much of this resulted from the encounter between anthropological observers and indigenous people, and much of this occurred (from the mid-nineteenth century onward) in a Darwinian context involving an effort to understand the ways in which religions emerged, and changed, through the processes of biological evolution. Put differently, a central question was: *How and why did religion evolve from the natural habitats from which humans themselves evolved?*

Many answers have been proposed, and these have often been grounded largely upon analyses of the religions of indigenous peoples. In many indigenous societies, the elements or forces of nature are believed to be inspirited and in reciprocal moral relationships in which there are two-way ethical obligations between non-human and human beings. In the eighteenth century such perceptions were labeled, for the first time, NATURE RELIGION and TOTEMISM (which postulated early religion as involving a felt sense of spiritual connection or kinship relationship between human and nonhuman beings). In the late nineteenth century the anthropologist E.B. Tylor coined the term ANIMISM as a trope for beliefs that the natural world is inspirited. Many early anthropologists considered Totemism and/or Animism to be *an* early if not *the* original religious form. Tylor and many other anthropologists and intellectuals observing (or imagining) indigenous societies also considered their religions to be “primitive,” and expected such perceptions and practices to wither away as Western civilization expanded.

Over the past few centuries a variety of terms have been used which capture the family resemblances found in the spiritualities of many indigenous societies, as well as contemporary forms of religious valuation of nature, including “natural religion,” “nature worship,” “nature mysticism,” “Earth religion,” PAGANISM and PANTHEISM

(belief that the Earth, or even the universe, is divine). Whatever the terms of reference (and readers will do well to consult the specific entries on these terms for their various and often contested, specific definitions), nature religion has been controversial, whether it is that of wilderness aficionados, indigenous people, or pagans. Here we can introduce this rich and contested terrain only by underscoring a few central tendencies, pivotal figures, and watershed moments in the unfolding cultural ferment over religion and nature. In-depth treatments are scattered, of course, throughout the encyclopedia.

In mainstream occidental (Western) culture, which was shaped decisively by the monotheistic, Abrahamic religions (Judaism, Christianity, and Islam), the tendency has been to view what we are calling nature religions (in general) and paganism (in particular) as primitive, regressive, or even evil. (*See* PAGANISM: A JEWISH PERSPECTIVE, for one example). One way or another, these critics have viewed nature religions negatively as having failed to apprehend or as having willfully rejected a true theocentric understanding of the universe as God-created. According to this point of view, nature religions perilously worship the created order or elements of it rather than the creator God.

Such criticisms came not only from monotheistic conservatives but also from some of the Western world's greatest thinkers. The German philosopher FRIEDRICH HEGEL, for example, advanced an idealistic philosophy that considered nature religions primitive because of their failure to apprehend the divine spirit moving through the dialectical process of history.

There were strong countercurrents, however, to the general tendency to view nature religions negatively. The cultural movement known as ROMANTICISM, already mentioned as an influence on the American conservation movement, emerged as a strong social force in the eighteenth century. Inspired in large measure by the French philosopher JEAN-JACQUES ROUSSEAU (1712–1778), Romanticism was further developed and popularized by a number of literary figures including Samuel Taylor Coleridge (1772–1834) in England and Johann Wolfgang von Goethe (1749–1832) in Germany. Those philosophers who labored to develop a compelling PHILOSOPHY OF NATURE also played a major role in the influence of Romanticism, both in Europe and America.

The Romantics rejected destructive, dualistic and reductionistic worldviews, which they considered to be a central feature of Western civilization. For Rousseau, and many dissenters to the occidental mainstream before and since, indigenous peoples and their nature religions were not primitive but noble, providing models for an egalitarian and humane way of life, one that was immune from the avarice and strife characteristic of the dominant European cultures. (*See* ROMANTICISM AND INDIGENOUS PEOPLES and NOBLE SAVAGE.)

It was into this social milieu, in which views about nature religion were already polarized, that CHARLES DARWIN introduced *On the Origin of Species* in 1859. The work elaborated the nascent theory of evolution that had already begun to emerge, perhaps most significantly, by specifying natural selection as its central process. The theory soon made its own, decisive impact.

For many, evolutionary theory disenchanting (took the spirits out of) the world. Generations of scholars after Darwin came to view religions as originating in misperceptions that natural forces were animated or alive. A close friend of Darwin, John Lubbock, initiated such reflection in *The Origin of Civilization and the Primitive Condition of Man* (1870), citing as evidence Darwin's observation that dogs mistake inanimate objects for living beings. Lubbock asserted that religion had its origin in a similar misapprehension by early humans.

In the next century an explosion of critically important scholarly works appeared. Most wrestled with what they took to be the natural origins of religion, or with "natural religion," or with what they considered to be the "worship of nature," or with the symbolic importance and function of natural symbols in human cultural and religious life. Among the most important were J.F. McLennan's articles on "The Worship of Animals and Plants" (1869–1870),

E.B. Tylor's *Primitive Culture* (1871), F. Max Müller's *Natural Religion* (1888), Robertson Smith's *Lectures on the Religion of the Semites* (1889), Baldwin Spencer and F.J. Gillen's *Native Tribes of Central Australia* (1899), Emile Durkheim's *Elementary Forms of the Religious Life* (1912), James G. Frazer's *Totemism and Exogamy* (1910) and *The Worship of Nature* (1926), Mircea Eliade's *Patterns in Comparative Religion* (1958) and *The Sacred and the Profane* (1959), Claude Lévi-Strauss's *Totemism* (1962, translation 1969), Victor Turner's *Forest of Symbols* (1967), and Mary Douglas's *Purity and Danger* (1966) and *Natural Symbols* (1970).

Among the high points in these works were E.B. Tylor's invention of the term animism as a name for indigenous nature religion and a corresponding theory to explain how it came into existence; and FRIEDRICH MAX MÜLLER's historiography which traced the origin of Indo-European religion to religious metaphors and symbolism grounded in the natural environment, especially the sky and sun. Sir James Frazer, who had been decisively influenced by both of these figures, added his own theories that the personification and "worship of nature" was the common root of all religion and that the remnants of pagan religion can be discerned in European folk culture. Quoting Frazer provides a feeling for the ethos prevalent among these early anthropologists.

[By] the worship of nature, I mean . . . the worship of natural phenomena conceived as animated, conscious, and endowed with both the power and the will to benefit or injure mankind. Conceived as such they are naturally objects of human awe and fear . . . to the mind of primitive man these natural phenomena assume the character of formidable and dangerous spirits whose anger it is his wish to avoid, and whose favour it is his interest to conciliate. To attain these desirable ends he resorts to the same means of conciliation which he employs towards human beings on whose goodwill he happens to be dependent; he proffers requests to them, and he makes them presents; in other words, he prays and sacrifices to them; in short, he worships them. Thus what we may call the worship of nature is based on the personification of natural phenomena (Frazer 1926: 17).

Reflecting the influence of the evolutionary perspective, Frazer thought that nature religions were anthropomorphic superstitions and would naturally be supplanted, first by polytheism, then by monotheism. He also believed that this was part of a “slow and gradual” process that was leading inexorably among civilized peoples to the “despiritualization of the universe” (Frazer 1926: 9). Many anthropological theorists during the nineteenth and early twentieth century seemed to agree that the nature religion characteristic of early humans and the world’s remaining “primitives” would eventually be supplanted either with monotheistic forms or no religion at all. Many of these early anthropologists were, therefore, also early proponents of the secularization thesis, which generally expects the decline of religion.

MIRCEA ELIADE drew on much of this earlier scholarship when publishing his seminal works in the 1950s and early 1960s, but in contrast to much of it, he maintained a subtle, positive evaluation of religion, including nature religion. At the heart of his theory lay his belief that early religion was grounded in a perception that a “sacred” reality exists that is different from everyday, “profane” realities, and that it manifests itself at special times and places, usually through natural entities and places. Indeed, for Eliade, the sacred/profane dichotomy was at the center of all religious perception. Moreover, for Eliade, the recognition of the sacred has something fundamental to do with what it means to be human.

Although Eliade’s theory was sharply criticized in the latter half of the twentieth century, his exhaustive comparative scholarship helped to establish that, in the history of religions, natural systems and objects are intimately involved in the perception of the sacred, and that this is an important aspect of religious life. Symbolic anthropologists, including Claude Lévi-Strauss (in some minds), Victor Turner, and Mary Douglas, for their part, scrutinized the functions of natural symbols in religion and culture, making provocative suggestions as to why nature draws human attention in a religious way.

Clearly, while there have been many competing perspectives about the relationships between religion and nature, some generalizations can be made. Many people have considered forces and entities in nature to have their own powers, spiritual integrity, or divinity, and have considered plants and animals, as well as certain earthly and celestial places, to be sacred. Certainly, these kinds of beliefs have often enjoined specific ritual and ethical obligations. Undoubtedly, the forces and entities of nature have been important and sometimes central religious symbols that work for people and their cultures in one way or another. Even when these entities and forces are not themselves considered divine, sacred, or even personal, they can point or provide access to divine beings or powers that are beyond ordinary perception. In sum, to borrow an expression from Claude Lévi-Strauss who first used it when reflecting, more narrowly, about animals in the history of religion, nature, from the most distant reaches of the imagined universe, to the middle of the Earth, is religiously “good to think.”

Religion and Nature in the Environmental Age

This brief review brings us up to the 1960s, the cusp of the age of environmental awareness and concern, which was symbolically inaugurated with the celebration of the first Earth Day in 1970. This was a period characterized by an explosion of interest in religion and nature, although such interest was not new. What was novel was a widespread and rapidly growing alarm about environmental deterioration, which for some added an apocalyptic urgency to the quest to determine whether religion was to blame or might provide an antidote. If so, the question naturally followed, of what sort would such an antidote be?

A multitude of entries in this encyclopedia explore this period and its competing perspectives. Here we will outline the main streams of discussion from this period to the present, noting especially how the environmental consequences of religious belief and practice came to the fore- front of the discussion for the first time. Discussion of the main issues and questions that were engaged are listed in the following three subsections.

World Religions and Environmentalism

In 1967 CLARENCE GLACKEN published *Traces on the Rhodian Shore: Nature and Culture in Western Thought from Ancient Times to the End of the Eighteenth Century*. It was the most important historical overview of the complicated and ambiguous relationships between religion and nature in the Western world. Especially detailed in its analysis of Classical culture (including its pagan dimensions and long-term cultural echoes) and Christianity, it brought the reader right up to the advent of the Darwinian age. Donald Worster in *Nature's Economy: A History of Ecological Ideas* (1977, second edition 1994) continued the story up and into the age of ecology. This work helped inspire further scholarly investigation during the 1960s and 1970s of the environmental impacts brought on by Western culture and its philosophical, religious, and scientific underpinnings. Taken together, these works portray (sometimes in an oversimplified manner) an epic struggle in Western culture between organicist and mechanist world-views – and concomitantly – between those who view the natural world as somehow sacred and having intrinsic value, and those who view the Earth as a way station to a heavenly realm beyond the Earth, or, who viewed life on Earth in a utilitarian way, as having value only in its usefulness to human ends. A common dialectic in these works, as seen in the growing body of literature that followed, was the notion that religious ideas were decisive variables in human culture, and thus, they were either culprit or savior with regard to environmental and social well-being.

It was during the decade between the publication of Glacken's and Worster's works (1967 and 1977) that ENVIRONMENTAL ETHICS sprang forth as a distinct subdiscipline in philosophy. While there were many factors that led to this outpouring of

ethical interest in nature, a short article by the historian Lynn White became a lightning rod for much of the subsequent discussion. Indeed, the LYNN WHITE THESIS became well known and played a significant role in the intense scrutiny that would soon be focused on the environmental values and practices that inhere to the so-called “world religions.” (“World religions” is shorthand for Judaism, Christianity, Islam, Daoism, Confucianism, Buddhism, Hinduism, and sometimes Jainism, which are commonly considered of major importance either because of their antiquity, influence, transnational character, or large number of adherents.)

Published in 1967 in the widely read journal *Science*, White’s article contended that monotheistic, occidental religions, especially Christianity, fostered anti-nature ideas and behaviors. His most striking and influential claim, however, may have been: “Since the roots of our

[environmental] trouble[s] are so largely religious, the remedy must also be essentially religious” (White 1967: 1207). Although others had expressed such views long before he did, the increasing receptivity in America to non-Western religious beliefs that accompanied the 1960s cultural upheavals, combined with the simultaneous growth of environmental alarm, made the ground fertile for the reception and debate of such views. Much of the environmental alarm was precipitated by RACHEL CARSON – an American scientist who was motivated by her own deep, spiritual connections to nature – whose *Silent Spring* (1962) warned about the environmentally devastating consequences of industrial pollution and pesticide use. With such works fueling environmental anxieties, White’s assertions quickly engendered several types of response, both among scholars and the wider public.

From those already acquainted with such arguments, there was often hearty agreement. Some had already been influenced by Romantic thought, or by historical analyses such as Perry Miller’s classic work, *Errand into the Wilderness* (1956), which analyzed the Puritans’ encounter with wild nature in America, or Max Weber’s *The Protestant Ethic and the Spirit of Capitalism* (1958), which found in religious ideas the roots of capitalism’s voracious appetite for nature’s resources. White’s thesis also inculcated or reinforced beliefs that were becoming more prevalent in America, that religions originating in Asia, or nature religions including those of indigenous societies, were spiritually and ethically superior to those which had come to predominate in the Western world. This was ironic, for White thought there were currents in the Christian tradition that could provide solid ground for environmental ethics.

Those in the monotheistic, Abrahamic traditions, who encountered such perspectives, tended to respond in one of three ways: either apologetically, arguing that properly understood, their traditions were environmentally sensitive; in a confessional way, acknowledging that there were truths to such criticisms and that internal religious reform should be undertaken to make their religions environmentally responsible; or with indifference, viewing the criticisms, and environmental concern, as of minor if any importance to their religious faith. This latter response ironically provided evidence for the critical aspects of White’s thesis.

These types of responses came from both laypeople and scholars. Scholarly experts in sacred texts, both those religiously committed and uncommitted to the traditions associated with them, began investigating these texts and other evidence about their traditions for their explicit or implicit environmental values.

Before long, the soul searching White's thesis helped to precipitate within occidental religions began to be taken up by devotees and scholars of religions originating in Asia. This occurred, in part, because of certain scholarly reactions to White's thesis. The geographer Yi Fu Tuan, for example, pointed out in an influential article published in 1968, that deforestation was prevalent before the advent of Christianity. Moreover, he asserted, in China there was great abuse of the land before Western civilization could influence it.

Following Tuan, gradually, more scholars began to ask, "Why has environmental decline been so pronounced in Asia if, as had become widely believed, Asian religions promote environmental responsibility?" Just as White's thesis had precipitated apologetic, confessional, and indifferent reactions within the world's Abrahamic traditions, the diverse reactions to White's thesis triggered similar reactions among religionists and scholars engaged with Asian religions.

In the case of both Western and Asian religions, religious studies scholars played a significant role in the efforts to understand the environmental strengths and weaknesses of their traditions. Scholars of religion have often played twin roles as observers and participants in the religions they study, of course, so it is unsurprising that, in the face of newly perceived environmental challenges, they would play a role in rethinking the traditions' responsibilities in the light of them. Quite a number of them, indeed, became directly involved in efforts to push the traditions they were analyzing toward ethics that take environmental sustainability as a central objective. The many, diverse entries exploring the world's religious traditions describe in substantial detail the emergence of efforts to turn the world's major religious traditions green. The role of religion scholars in these efforts is reviewed in

RELIGIOUS STUDIES AND ENVIRONMENTAL CONCERN.

What is perhaps most remarkable about these efforts is how rapidly the environment became a centerpiece of moral concern for substantial numbers of religious practitioners, and scholars engaged with the world's major religious traditions. More empirical work is needed to understand the extent to which and in what ways environmental values have been influencing practitioners of the world's dominant religions. Early efforts by social scientists to understand these trends, and the challenges they face as they seek to do so, are assessed in SOCIAL SCIENCE ON RELIGION AND NATURE.

Nature Religions and Environmentalism

In addition to the view that Asian religions provide an antidote to the West's environmental destructiveness, nature religions have been offered as alternatives which

foster environmentally sensitive values and behaviors. While indigenous societies have been foremost in mind in this regard, paganism, whether newly invented or revitalized from what can be reconstructed of a pre-Christian past (or both), has also been considered by some to offer an environmentally sensitive alternative. In this light or sense, a variety of new religious movements, recreational practices, scientific endeavor, and other professional work, can also be understood as nature religions.

As was the case in the late nineteenth and early twentieth century, during the age of ecology, anthropology was a major contributor to the debates. But the tendency to view negatively such cultures was decisively reversed as some anthropologists began to ask questions *from* an evolutionary perspective. The most important of these was whether religion in general (and the religions of indigenous societies in particular) served to enhance the survival of the human organism. Put differently, they asked: Does religion help the human species to adapt successfully to its natural habitats, and if so, under what circumstances?

The answer that many came to was that the taboos, ethical mores, and rituals that accompany religious worldviews often evolve in such a way that the religion promotes environmental health and thus individual reproduction and group survival.

This kind of perspective can be briefly illustrated. In the mid-twentieth century, the anthropologist Julian Steward, whose own work in “cultural ecology” was based foremost on his analyses of the relationships between indigenous peoples of western North America’s Great Basin, argued that human culture represents an ecological adaptation of a group to its specific environment. He asserted that such adaptation always involved the effort to harness and control energy. The anthropologist Leslie White, who like Steward based his perspective on studies of North American Indians, also considered social evolution to involve the effort to harness and control energy. In the 1960s, MARVIN HARRIS followed their lead, especially spotlighting the role of religion. He found, for example, that the myth of the sacred cow in India confers on the human cultures of South Asia material and ecological advantages. The myth functioned in an ecologically adaptive manner, he argued, by helping to maintain the nutrient cycles necessary for India’s agro-ecosystems, thus maintaining the carrying capacity of the land. An often cited quote from Harris conveys his perspective:

Beliefs and rituals that appear to the nonanthropological observer as wholly irrational, whimsical, and even maladaptive have been shown to possess important positive functions and to be the dependent variable of recurrent adaptive processes (1971: 556).

ROY RAPPAPORT was another anthropologist who began publishing in the mid-1960s, including his path-breaking book, *Pigs for the Ancestors: Ritual in the Ecology of a New Guinea People* (1968). His arguments had affinities with Steward and Harris, but his focus was on how religious rituals and symbol systems can function in ecologically adaptive ways. Indeed, for Rappaport, “Religious rituals

. . . are . . . neither more nor less than part of the behavioral repertoire employed by an aggregate of organisms in adjusting to its environment” (Rappaport 1979: 28).

For such theorists, religions evolve and function to help people create successful adaptations to their diverse environmental niches. Moreover, naturalistic evolutionary assumptions (rather than the supernaturalistic beliefs of their adherents) are sufficient for understanding the complex relationships between religions and ecosystems. Such a theoretical perspective, it is important to note, is the opposite of the idealistic premises informing much of the rest of the religion-and-nature discussion, which has tended to assume that religious ideas are the driving force behind environmental changes.

Steward, White, Harris, and Rappaport are considered pioneers of the fields variously called “cultural ecology,” “ecological anthropology,” and “historical ecology.” Sometimes dismissed as “environmental determinists” by their critics, in their own distinct ways, they brought evolution forcefully back into the analysis of human/ecosystem relationships by insisting that, while there certainly are reciprocal influences between human beings and the natural world, the ways human beings and their religious cultures are shaped *by* nature and its evolutionary processes should not be forgotten.

ETHNOBOTANY is another sub-field of anthropology that was influenced by and contributed to analyses of ecological adaptation. Its roots can be traced to early twentieth-century efforts to document the uses of plants by indigenous peoples. By mid-century, however, its focus had expanded to an analysis of the ways in which plants are used in traditional societies to promote the health of people, their cultures, and environments. Ethnobotany has been interested in the way plants are used to effect healing and facilitate connection and harmony with divine realities, as well as (sometimes) in the ecosystem changes brought on by such uses.

Ethnobotany became a major tributary to a related but broader line of anthropological inquiry into “indigenous knowledge systems” and TRADITIONAL ECOLOGICAL KNOWLEDGE, which is a subset of such knowledge systems. Here the focus was on the entire corpus of ecological knowledge gained by a people in adapting to their environments over time. Quite often, this analysis attended to the ways in which religious beliefs and practices become intertwined with such knowledge and inseparable from it. Leading figures in ethnobotany and in the analysis of traditional ecological knowledge included Harold Conklin, Richard Schultes, Darrell Posey, William Balée, Gerardo ReichelDolmatoff, and Stephen Lansing. In various ways and drawing on research among different peoples, they asserted that religious beliefs in general, including those having to do with the spiritual importance or power of plants, animals, and sacred places, can lead to practices that maintained the integrity of the ecosystems to which they belonged. A large volume edited by Darrel Posey entitled *Cultural and Spiritual Values of Biodiversity* (1999), which was published by the United Nations Environmental Programme, shows the growing influence of such analysis.

For many of the anthropologists investigating religion/ environment relationships in indigenous cultures, it was irrelevant whether indigenous people accurately perceived dimensions of experience outside of the powers of ordinary observation (such as divine spirits in natural entities). Some analysts of such systems, however, based

on experiences they had while living among indigenous peoples and participating in their lifeways and ceremonies, became convinced that there were important spiritual truths expressed by their worldviews and practices. For those moved spiritually by these cultures there was value in them beyond their ability to foster environmentally sustainable lifeways.

The preceding developments, leading to the conclusion that the worldviews of indigenous cultures promote environmentally sustainable lifeways, represented a remarkable shift in the understanding of such peoples. But this change did not go unchallenged. Critics including Shepard Kretch argued that these sorts of perspectives – which purported to find ecological sensitivity embedded in cultures living in relatively close proximity to natural ecosystems – actually expressed an unfounded and romantic (and often denigrating) view of indigenous people. Some such critics complained that tropes of the “ecological Indian” perpetuate views of indigenous people as primitive and unable to think scientifically. The use of plants and animals in traditional medicines, which has contributed significantly to the dramatic decline of some species, was used as evidence to question assertions that indigenous, nature-oriented religions are adaptive, rather than maladaptive, with regard to ecosystem viability.

This introduction to the lively debates about indigenous societies and their nature religions can be followed up in a number of entries (and the cross-references in them), including AMERICAN INDIANS AS “FIRST ECOLOGISTS,” ANTHROPOLOGY, ANTHROPOLOGY AS A SOURCE OF NATURE RELIGION, ECOLOGY AND RELIGION, ECOLOGICAL ANTHROPOLOGY, ETHNOBOTANY, RELIGIOUS ENVIRONMENTALIST PARADIGM, and TRADITIONAL ECOLOGICAL KNOWLEDGE.

PAGANISM, including WICCA, HEATHENRY, and DRUIDRY, to name a few types, is another form of nature religion that has also enjoyed a positive reappraisal during the age of ecology. Contemporary Paganism is now often labeled “neo-paganism” to contrast current forms with Classical ones, or to indicate that such spirituality has been undergoing a process that involves (depending on the analysis) either revitalization (based on formerly underground and suppressed knowledge), or imaginative reconstruction (based on what can be surmised about pre-monotheistic religions through archeological and historical research). Much of this new religious production draws directly on (sometimes discredited) scholarly work. James Frazer’s belief that remnants of pagan worldviews and lifeways can be discerned in the folk customs of Europe provided pagans a sourcebook in folk culture for the construction of their religions. The poet and literary figure ROBERT VON RANKE GRAVES in *The White Goddess* (1948) offered an influential work subsequently used by many pagans to construct their own goddess-centered, Earth-revering spirituality. And the archeologist Marija Gimbutas – who controversially claimed in the 1980s and 1990s that a goddess-centered culture, which honored women and the Earth, existed in much of Eastern Europe prior to the invasion of a bellicose and patriarchal Indo-European society – provided what

for many pagans was an inspiring vision of the potential to reestablish egalitarian, Earth-revering, pagan culture.

Indeed, toward the end of the twentieth century, a growing number of scholars who identified themselves as pagan were involved in the diverse efforts to make viable religious options out of these traditions. A part of this endeavor has involved assertions that paganism holds nature sacred and therefore has inherent reason to promote its protection and reverent care. This kind of perspective proliferated as did the number of tabloids, magazines, journals, and books devoted to analyzing, and promoting, contemporary paganism.

Paganism thus became an attractive religious alternative for some non-indigenous moderns, perhaps especially environmentally concerned ones, who value indigenous religious cultures for their environmental values, but either found them largely inaccessible, or chose not to borrow from them because of the often strongly asserted view that efforts to “borrow” from indigenous peoples actually constitute cultural theft. (Various perspectives in this regard are discussed in *INDIGENOUS RELIGIONS AND CULTURAL BORROWING*.) Paganism also sometimes shares ideas and members, and certainly has some affinities, with those environmental movements that expressly consider nature to be sacred, such as *BIOREGIONALISM*, *DEEP ECOLOGY*, *ECOFEMINISM*, *ECOPSYCHOLOGY*, and *RADICAL ENVIRONMENTALISM*. Participants in these movements usually view both indigenous and pagan religions as environmentally salutary and often link their own identity to such spirituality.

A growing number of scientists, including those pioneering the fields of *CONSERVATION BIOLOGY* and *RESTORATION ECOLOGY*, and those promoting *RELIGIOUS NATURALISM*, share a central, common denominator belief in nature religions regarding the sacredness of life. Unlike many of the other forms of nature religion, they tend to stress the sacrality of the evolutionary processes that produce biological diversity. Participants in such scientific professions often view their work as a spiritual practice. Some of these have been influenced by those who, like the religion scholar

THOMAS BERRY, believe that science-grounded cosmological and evolutionary narratives should be understood as sacred narratives, and that so understood, they will promote reverence-for-life ethics. The entomologist *EDWARD O. WILSON*’s apt phrase for the grandeur of the evolutionary process, which he called the “*EPIC OF EVOLUTION*”; the “*GAIA*” theory, which was developed by atmospheric scientist *JAMES LOVELOCK* and conceives of the biosphere as a selfregulating organism; as well as *CHAOS* and *COMPLEXITY THEORY*, which draw on advanced cosmological science and reinforce metaphysics of interdependence, have all been used to express this kind of spirituality.

Such science has contributed, through *EVOLUTIONARY EVANGELISM* and ritual processes such as the *COUNCIL OF ALL BEINGS*, to efforts to resacralize the human perception of the Earth. Indeed, scientific narratives reverencing cosmological and biological evolution are increasingly being grafted onto existing world religions. They are also emerging as new religious forms, independent of the longstanding reli-

gious traditions. Some such scientific nature religion, while relying on metaphors of the sacred to describe feelings of belonging and attachment to the biosphere, sometimes also self-consciously express a nonsupernaturalistic worldview.

Whether they retain or eschew supernaturalism, sacralized evolutionary narratives are proving influential in international venues – perhaps most significantly through the EARTH CHARTER initiative and during the UNITED NATION’S “EARTH SUMMITS” – in which belief in evolution and a reverence for life are increasingly affirmed. These sorts of religious developments suggest some of the directions that nature religion may continue to move in the future.

Many NEW RELIGIOUS MOVEMENTS and forms of NEW AGE spirituality also qualify as nature religions, including religiosity related to ASTROLOGY, CROP CIRCLES, DOLPHINS, SATANISM, THE COUNCIL OF ALL BEINGS, THE HARMONIC CONVERGENCE, THE MEN’S MOVEMENT, and UFOs and EXTRA TERRESTRIALS. A wide variety of recreational and other practices that might not seem at first glance to have anything to do with nature spirituality can on close observation also qualify, such as

MOUNTAINEERING, ROCK CLIMBING, SURFING, FLY FISHING, HUNTING,

GARDENING, and even attendance at MOTION PICTURES and THEME PARKS. As was the case with PAGANISM, during the environmental age, these diverse practices and forms of spirituality have increasingly taken on green characteristics, which are then, to an uncertain degree, integrated into worldviews and ethics.

The New Age movement has contributed significantly to the spiritualities and ritualizing of other nature religions, including paganism and radical environmentalism, to name just two. The reciprocal influences among nonmainstream religious subcultures have begun to draw more scholarly attention, as for example in *The Cultic Milieu: Oppositional Subcultures in an Age of Globalization* (Kaplan and Lööv 2002). Such an analysis is pertinent to the examination of much nature-related religious production, as can be seen in PAGAN FESTIVALS, NEW AGE, and the CELESTINE PROPHECY, among other entries.

Like most religions, nature religions carve out their religious identity in contrast (indeed often in selfconscious opposition) to other religious perspectives and interests. Participants in nature religions tend especially to criticize other religions for their environmental failings. Nature religions themselves, as we have seen, have long been criticized as misguided, primitive, and dangerous. Beginning in the 1980s they have also sometimes been charged with being violence-prone and criticized for promoting ethnic nationalism, and even racism and Fascism. (*See also* NEO-PAGANISM AND ETHNIC NATIONALISM IN EASTERN EUROPE.)

In the age of ecology, then, it is clear that nature religions received a mixed reception, both denigrated as regressive and lauded for promoting environmental sensitivity. While scholars and laypeople continued to express both points of view and the issue

may have become more polarized, it is also true that significant growth toward more positive views occurred. Indeed, as illustrated in RELIGIOUS ENVIRONMENTALIST PARADIGM, an increasing number of scholars express a Rousseau-like belief in the superiority of those societies that can be characterized as having intimate spiritual relationships with nature; especially when such societies are compared to those with otherworldly cosmologies and/or which privilege science-based epistemologies.

Theories on the Natural Origins and Persistence of Religion

A third important area of discussion regarding the relationships between religion and nature intensified during the age of ecology. It reprised the effort to uncover the origins and persistence of religious and ethical systems, by examining both biological and cultural evolution.

Like James Frazer, who viewed religion as a product of evolution grounded in an anthropomorphism that personifies natural phenomena, these newer theories continued to be reductionistic; they implicitly or explicitly discounted what believers consider to be the “truths” involved. While such evolutionary theories were inevitably speculative in nature, the newer ones had the advantage of being able to draw on new fields such as evolutionary psychology and cognitive science, as well as on a much more sophisticated and critical body of ethnographic data.

Edward Wilson began his career as an entomologist and became, by the end of the twentieth century, one of America’s best-known scientists, in part due to his work on biological diversity and because of the growing concern about losses to it. But in 1984 he published *Biophilia: The Human Bond with Other Species*, in which he articulated an important theory that purported to explain the origins of the human love for nature. His thinking along these lines was an outgrowth of his broader theory on the origins of ethical systems, published as *Sociobiology* (in 1975). This theory asserted that affective, spiritual, and moral sentiments all evolve from evolutionary processes because they favor individual and collective survival. Ethics in general and environmental values in particular, therefore, are the natural result of human organisms finding their ecological niche and adapting to their environment. Wilson’s ideas stimulated much of the subsequent discussion over the possibility of an evolutionary root of religion, ethics, and environmental concern.

Among the most important works to follow were Stewart Guthrie’s *Faces in The Clouds: A New Theory of Religion* (1993), Pascal Boyer’s *The Naturalness of Religious Ideas: A Cognitive Theory of Religion* (1994) and *Religion Explained: The Evolutionary Origins of Religious Thought* (2002), Walter Burkert’s *Creation of the Sacred: Tracks of Biology in Early Religions* (1996), V.S. Ramachandran and Sandra Blakeslee’s *Phantoms in the Brain* (1998), David Sloan Wilson’s *Darwin’s Cathedral:*

Evolution, Religion, and the Nature of Society (2002), and Scott Atran's *In Gods We Trust: The Evolutionary Landscape of Religion* (2002).

Guthrie sounded much like Frazer, drawing on cognitive science and psychology to argue that religion is, essentially, anthropomorphism, resulting from the human penchant to explain realities by attributing them to something other than human agency. According to Guthrie, humans opt for such beliefs unconsciously, for the most part, but they do so for what are ultimately rational reasons, for if the belief is correct, then there is much to gain from it and little to lose if the belief is unfounded.

Boyer, Burkert, and Atran agreed with much of Guthrie's analysis, tracing religiosity, at least in part, to the existential challenges that come with the uncertainties of life, and a corresponding tendency to anthropomorphize natural entities and forces. Boyer lucidly explained the logic behind such human cognitive tendencies. Boyer argued, in summarizing a number of studies including a doctoral dissertation by Justin Barrett, that it is *natural* to invent agent-like . . . gods and spirits [because] our agency detection systems are biased toward over-detection. Our evolutionary heritage is that of organisms that must deal with both predators and prey. In either situation, it is far more advantageous to overdetect agency than to underdetect it. The expense of false positives (seeing agents where there are none) is minimal, if we can abandon these misguided intuitions. In contrast, the cost of not detecting agents when they are actually around (either predator or prey) could be very high (Boyer 2001: 145; [See also

HUNTING AND THE ORIGINS OF RELIGION.]

David Sloan Wilson takes a similar approach to these theorists, drawing on evolutionary and cognitive science, agreeing that religion is a product of evolution and that the religious beliefs of its practitioners are fallacious. Like them, he sees survival value in the tendencies that spur religion. He concluded, however, in a way that seemed to echo Edward O. Wilson's arguably more positive view of religion: religion promotes individual and collective fitness by providing values that promote cooperative behaviors that in turn enhance the prospects for survival. This point of view resembles that of Edward Wilson's later work, in which he expressed hope that new religious forms and values would evolve that would be grounded in science and promote environmental conservation.

The theorists introduced here agree that nature plays a major, if not the decisive role in shaping human culture, religion, and survival strategies. But they disagree about many of the particulars – for example, about whether religion is ecologically adaptive, maladaptive, both, or neither. Moreover, they face strong criticisms from scholars who believe they overemphasize the influence of nature on people and their societies, and neglect the importance of human agency and the power of culture. The archeologist Jacques Cauvin, for one important example, disputes those who claim to have revealed environmental or materialist causes for the shift from foraging lifeways and animistic spiritualities to agriculture and theistic religions. In *The Birth of the Gods and the Origins of Agriculture* (2000), he claimed that archeological evidence proves that belief in gods predated the agricultural revolution. He deduced from this his conclusion

that those who believe theistic religion is a product (or an adaptation related to) the domestication of plants and animals, cannot muster compelling supporting evidence.

The body of research available as data for those exploring such issues has grown rapidly. Discussion and debate will continue over the origins, persistence, or “natural decline” of religion, as well as over its possible ecological functions. New lines of inquiry may play increasingly important roles. Just as cognitive science exploring human consciousness has spurred further debate, ethology (the study of animal cognition and behavior) is also beginning to make some interesting if speculative suggestions. In this encyclopedia, for example, JANE GOODALL reflects on the possibility of a kind of nature-related PRIMATE SPIRITUALITY, based on her observations of chimpanzee behavior near jungle waterfalls, and Mark Beckoff, in COGNITIVE ETHOLOGY, SOCIAL MORALITY, AND ETHICS, argues that such science may well revolutionize human understandings of both religion and ethics, extending both beyond humankind.

While there is a robust debate under way among the various theorists and perspectives which is here only briefly introduced, it is critical to remember that these perspectives are not mutually exclusive. There may be strong “natural” inclinations to religious perception, as well as maladaptive and/or adaptive functions of such religions, for example. With regard to the possible ecological functions of religion, it would be wise to remember, as Gustavo Benavides suggests in ECOLOGY AND RELIGION, that “adaptation is a process rather than a state.” Therefore, it is important to analyze both maladaptive and adaptive religious phenomena, and even more importantly for environmental conservation, to determine the circumstances under which religion might shift from maladaptive to adaptive forms.

Religion and Nature and the Future of Religion and Nature

Shortly before his death in 1975, the British historian Arnold Toynbee argued

The present threat to mankind's survival can be removed only by a revolutionary change of heart in individual human beings. This change of heart must be inspired by religion in order to generate the will power needed for putting arduous new ideals into practice (Porritt 1984: 211; for the original quote see Toynbee and Ikeda 1976: 37).

Jonathan Porritt, who paraphrased Toynbee in this quote, was a prominent member of the International Green Party movement in the 1970s and went on to lead Friends of the Earth (UK) in 1984. Porritt's subsequent comment on Toynbee's view illustrates a common understanding about religion found within green subcultures all around the world:

I would accept this analysis, and would argue therefore that some kind of spiritual commitment, or religion in its true meaning (namely, the reconnection between each of us and the source of all life), is a fundamental part of the transformation that ecologists are talking about (Porritt 1984: 211).

Obviously, Lynn White was not the only one who was convinced that religion was a decisive factor in the environmental past and that it could play an equally important role in the future. For his part, Toynbee thought that humankind needed a new religion that respected natural systems and that such a religion would resemble pantheism. Moreover, such a religion would have more in common with Buddhism than with historical monotheism, which he thought (again like White) was especially responsible for environmental decline.

Such views, that religion could be both a cause and a solution to environmental decline, precipitated much of the ferment over religion and nature throughout the environmental age. It certainly led to efforts to awaken the world's predominant religious traditions to an understanding that the protection of the Earth and its living systems should be considered a "sacred trust" (as the EARTH CHARTER ecumenically put it). This idealistic assumption, that religious ideas can shape environmental behavior, has also inspired many efforts to revitalize or invent nature religions, all of which in one way or another consider nature to be sacred, and deduce from this perception a reverence-for-life ethic. It is not easy to answer whether this idealistic perspective is correct; this introduction and many of the entries to which it points demonstrate how complicated such an assessment can be. It may well be that those who argue that religion is an important or decisive variable in the ways in which human beings relate

to the Earth's living systems are simply exaggerating the importance of religious ideas when it comes to their influence on environment-related behavior.

If those who think that religion is a decisive or important variable in the human impact on nature are correct, however, or even on the right track and in need only of minor correction, then the inquiry into the relationships between people and Earth's living systems is not merely an intellectual exercise. The answers, however murky, might illuminate the paths to an environmentally sustainable, and perhaps even a socially just future. The answers might just suggest promising ways to think about the proper relationships between people and other forms of life, and inspire actions in concert with them. Although many engaged in the religion-and-nature field hope for such a payoff, the diverse and contested approaches to religion and nature revealed in this encyclopedia suggest that any consensus will be difficult to achieve.

In addition to questions about whether and to what extent religion has shaped or might shape environments (negatively or positively), this encyclopedia introduces and addresses a battery of additional conundrums. These include questions along a path less often traveled during the debates over religion and ecology: especially questions regarding the impact of nature, and different natures for that matter, on human consciousness in general and on religion (and religion-inspired environmental practices) in particular.

Perhaps these sorts of questions, while fundamentally scientific in nature, are themselves a reflection of new ethical forms that began to flower in the wake of Darwinian thought. These values are quite easily deduced from an evolutionary worldview, which promotes a sense of kinship grounded in an understanding that all life shares a common ancestor and came into existence through the same survival struggle. These values displace human beings from an isolated place, alone at the center of moral concern. Perhaps these scientific questions, in reciprocal production with new forms of religious thought, will shape the religious hybrids that will come to characterize most the religious future. Perhaps these hybrids will prove adaptive, facilitating the survival not only of the human community, but also of the wider community of life, upon which humans depend. If so, this exceptionally interesting species, *Homo sapiens sapiens*, might yet live up to its lofty (if self-designated and highly ironic) name.

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Acknowledgments and Description of the Genesis and Evolution of the Encyclopedia

The idea for this encyclopedia was hatched by Jeffrey Kaplan who suggested it to me over lunch during the American Academy of Religion meeting in San Francisco in November, 1997. He became interested in the relationships between religion and nature when noting some interesting similarities in the nature spiritualities that could be found within two distinct, radical subcultures in Europe and America, that of the racist right, which he had been studying for years, and radical environmentalism, a movement with which I had conducted extensive field work. He knew I had been focusing broadly on “religion and nature” and thought that given his extensive work with major reference works – including his own *Encyclopedia of White Power* (2000) and as a graduate student assisting in the production of *The Fundamentalism Project* (Marty and Appleby 1991–1995) – that we could produce a valuable reference work. I agreed and began to work up a prospective list of entries.

It was obvious from the outset that the field was very broad and that to do it justice we would need to reach widely across disciplinary lines. During the next two years we brainstormed over 400 entries and contributors, began issuing invitations to those we hoped would agree to be associate or assistant editors, secured a publisher, and brought Sean Connors on board to develop a beautiful website for introducing and administering the project, which was set up at www.religionandnature.com. Connors became a web guru in the subsequent years, and I am grateful he stuck through this project. He did so graciously despite many pressures, and moreover, has put in a significant amount of *pro bono* time.

A number of scholars were invited to a November 1998 meeting in Boston, immediately before the American Academy of Religion meeting, to think about the project. The night before, during a conversation over what name would be best for the encyclopedia, of many options, “religion and nature” was offered up, and it quickly appeared to provide the broadest trope for the project, superior therefore to the more common “religion and ecology” appellation. The next day some twenty scholars joined in a day-long discussion of the breadth and framing of the project, as well as its specific entries and contributors. From there we developed lists of cooperating editors and an additional list of entries to pursue. After the meeting the amalgamated list was dis-

tributed to all of those then involved in the project. These scholars were then asked what entries, contributors, and perspectives were missing. Throughout the project, I invited newly identified contributors to consult the online lists of entries (which could be sorted and reviewed in a number of ways) and suggest how we could strengthen it. This encyclopedia has, therefore, been shaped by a snowball methodology. Snowball it did, to nearly 1000 entries and over 500 contributors.

Throughout the project we sought to provide broad coverage of the subject matter, both chronologically and with regard to religious type, geographical region, and a number of other themes (such as science, religion, and nature). With the enthusiastic help of the University of Tennessee's Rosalind Hackett, who served as conference chair for the 2000 International Association for the History of Religions in Durban, South Africa, I convened a series of sessions on religion and nature. These sessions helped to ensure that the African continent would not be neglected, and led to many valuable connections. I also had many meetings and a great deal of correspondence with all of the collaborating editors and many of the encyclopedia's contributors. I followed up every suggestion that seemed promising.

This is not to say that the encyclopedia succeeded at being comprehensive – there are some regions where I failed to find able and willing contributors; North Africa west of Egypt and Antarctica come immediately to mind as examples. We did cover more ground than I thought would be possible at the outset, however. It turned out that there are many scholars who, when asked, can analyze religion and nature in the regions or traditions or periods they are most familiar with, even if they had not previously focused their view in this direction. Nevertheless, some readers will no doubt wonder why one subject and not another was covered. There may be justifiable criticisms along these lines, although most of the subjects likely to be identified as missing were probably pursued without success. More importantly, however, is the recognition that today no reference work can be entirely comprehensive, so perhaps a better test of an encyclopedia's efficacy is its success at demarcating the territory to be covered and analyzing carefully a representative sample of the phenomena in question.

One incurs many debts in orchestrating a scholarly project like this and I wish to acknowledge the many and sometimes extraordinary contributions that have been made. First, I would like to thank those I have, in agreement with Consulting Editor Jeffrey Kaplan, designated Executive, Associate and Assistant Editors. These decisions were based on their overall contributions to the project. Associate Editors played significant roles in shaping a sub-area in the encyclopedia, often helping to identify entries and recruit contributors and providing peer reviews of entries in their own areas of expertise, as well as making substantial contributions of their own to it. Assistant Editors provided significant assistance in recommending entries and/or recruiting contributors, sometimes played a role in reviewing submissions, and usually contributed their own entries. They are listed immediately after the title page of this encyclopedia. Three scholars who deserve special recognition have been designated Executive Editors: Michael York, Adrian Ivakhiv, and Laura Hobgood-Oster. They have done

everything the other editors have done but more of it, and always in an exceptionally good-natured and timely manner.

Many of the 518 contributors, in addition to their own writing, provided suggestions and leads which enriched the project significantly. I cannot remember where all such good ideas came from, but wish to thank those who provided them. I would also like to thank those contributors who, at one point or another, went out of their way to find a prospective contributor, a bibliographical reference, or provided a peer review of one or more entries. These extra efforts represented extraordinary kindness, which I will not forget. Every standard entry in this encyclopedia was fully peer reviewed, not only by Jeffrey Kaplan and myself, but by one or more scholars familiar with the subject under scrutiny. I also wish to thank the fine scholars who reviewed and helped me improve my own contributions to this encyclopedia, including Sarah McFarland Taylor, Becky Gould, Sarah Pike, Graham Harvey, Arne Kalland, Michael York, Adrian Ivakhiv, Michael Zimmerman, Curt Meine, Ron Engel, Les Sponsel, Stephen Humphrey, and Anna Peterson. Having such friends and colleagues is one of the great rewards of this kind of collaborative scholarship.

I would like to thank the pioneers of the emerging scholarly fields which have most often been labeled “environmental ethics” and “religion and ecology.” Some of these figures have entries about them, for their contributions have been seminal. Many others (but not all who could have been mentioned) appear in RELIGIOUS STUDIES AND ENVIRONMENTAL CONCERN, ENVIRONMENTAL ETHICS, or other entries. These scholars provided the foundational work that made this project possible, and in some ways timely and necessary. They were the ones who raised many of the questions that are probed in these pages.

I also need to thank a number of student assistants who have assisted in this project, often for short periods of time, but without whom this encyclopedia would not have been completed as promptly as it was. A number of these were involved with the Environmental Studies program at the University of Wisconsin Oshkosh, where I was before I moved to the University of Florida (in 2002) to help develop a graduate program that has an emphasis in Religion and Nature. Now settled in, I have had the able assistance of several exceptional graduate students, Todd Best, Gavin Van Horn, Luke Johnson, and Bridgette O’Brien, who handled, with scrupulous attention to detail, many of the production tasks. I have also, already, learned a great deal from my new colleagues in Florida, including through their contributions to this encyclopedia; eight faculty members and three graduate students have contributed articles to it.

As is usually the case, the greatest debts of gratitude that accumulate during a scholarly project are to those who have suffered the most from it. I wish to underscore, therefore, my gratitude to Jeffrey Kaplan for seeing through this project. Over its course it more than doubled in size. Despite this unwelcome increase in workload, he read nearly every entry (sometimes several times). With his broad, history of religion training, he made regular and substantial contributions to its quality. I am grateful, as well, to Jeff’s wife, Eva. She has been remarkably gracious considering the hours this

project has consumed that might otherwise have been more family focused. Finally to my children, Anders, Kaarin, and Kelsey, and to my wife Beth, I owe the greatest measure of thanks, for their long forbearance and support, which affords me the luxury of pursuing the issues engaged in these pages.

Bron Taylor, The University of Florida

Reader's Guide

This encyclopedia explores the conundrums addressed in the volume's introduction and it does so by examining a wide variety of religion-and-nature-related phenomena. It also does so in a variety of ways, including through its three distinct entry genres.

Scholarly entries have been written in a standard encyclopedia genre in which the premium has been to introduce a theme, historical period or event, region, tradition, group, or individual, while analyzing its relevance to the overall discussion in a scholarly and balanced way. With these fully peer-reviewed entries, care has been taken to provide readers with sufficient information and recommended readings to enable independent follow-up and further research.

Scholarly Perspectives entries, which are demarcated and are denoted by the symbol **SP**, afford prominent figures an opportunity to reflect on the religion and nature field in a more personal and reflective way, or their authors may advance an argument in a way that would be atypical in a standard, scholarly encyclopedia entry.

Practitioner entries, which are also demarcated by the symbol **P** are written by individuals actively engaged in one or another form of nature-related spirituality. They further illuminate the ferment over religion and nature by providing wide latitude for religious practitioners who are interested in religion and nature to express themselves in their own words.

Most entries are easy to find alphabetically. Some that are closely related to longer ones are nestled adjacent to them in "sidebar" entries, which are enclosed in a lined box. Sidebars are designed to illuminate or otherwise extend the discussion in the associated entry.

Because website locations are notoriously ephemeral, unless direct quotes are taken from them they have not been included in the further reading sections. The many groups and individuals discussed in these volumes can, of course, be easily found through internet search engines. The website associated with this project, which is located at www.religionandnature.com, has links to many of the groups noted in the text, as well as to supplementary information related to many of the entries. This information includes graphics, photographs, music, non-English bibliographic resources, and bibliographic information available after the encyclopedia was published. Readers will be able to learn more by visiting this website in the future, which is intended to be periodically updated.

Cross-references follow most entries. These do more than point to directly related entries; they provide contrasts and sometimes unexpected comparative reference points. In this introduction, cross-references are indicated by SMALL CAPS in the text, as are

the cross-references in two entries that were written to complement the introduction: ENVIRONMENTAL ETHICS and RELIGIOUS STUDIES AND ENVIRONMENTAL CONCERN.

Indeed, after reading the introduction most readers would do well to begin with these two entries, adding

ECOLOGY AND RELIGION, ECOLOGICAL ANTHROPOLOGY, and SOCIAL SCIENCE ON RELIGION AND NATURE for an overview of anthropological and other social scientific approaches to understanding the religion/nature/culture nexus. Combined with the adjoining encyclopedia introduction, these entries provide a broad introduction to the religion and nature field.

Of course, some will prefer to begin immediately by paging through the volumes and reading entries that strike their interest, then following the cross-references at the end of each entry. Another approach would be to page through the general index and read entries clustered there, for example, by religion or region. Alternatively, one could follow a particular figure of interest through many entries where she or he might be mentioned, an approach that would illuminate that individual's contributions and influence. The work can be read in other ways as well – regional overviews first, or all the entries on specific traditions or themes. It could also be read chronologically, starting with our entries on PALEOLITHIC RELIGIONS and then those exploring ancient civilizations, for example, before moving to later periods. Another way to start would be to turn to the volume's list of contributors and read the entries written by writers with whom one is already familiar. The voices in the *Encyclopedia of Religion and Nature* include some of the world's environmental, religious, and scholarly luminaries, as well as a wide variety of scholars and religious practitioners from around the world. For many of the contributors, English is not their first language, and their writing reflects some of the grammatical conventions of their mother tongues. We have edited such entries lightly, and hopefully, have retained the sense as well as the feel for the original submission.

The approaches to this work will, little doubt, be as numerous and diverse as the contributors to it and the readers of it.

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Epigraph

The earth holds manifold treasures in secret places; wealth, jewels, and gold shall she give to me.

She bestows wealth liberally; let that kindly goddess bestow wealth upon us! (44)

Your snowy mountain heights, and your forests, O earth, shall be kind to us!

The brown, the black, the red, the multi-colored, the firm earth that is protected by Indra,

I have settled upon, not suppressed, not slain, not wounded. (11)

(Hymns of the Atharva Veda, tr. Maurice Bloomfield, University of Oxford Press, 1897).

The gentle Way of the universe appears to be empty, yet its usefulness is inexhaustible . . .

It harmonizes all things

And unites them as one integral whole.

Dao Te Ching, 4

The virtue of the universe is wholeness It regards all things as equal

The virtue of the sage is wholeness He too regards all things as equal

Dao Te Ching, 5

When people lack a sense of pure spiritual piety Toward natural life, then awful things happen in their life. Therefore, respect where you dwell.

Dao Te Ching, 72

God made wild beasts of every kind and cattle of every kind, and all kinds of creeping things of the earth.

And God saw that this was good.

Genesis 1:25 (New Jewish Publication Society Translation, 1985)

A

Abbey, Edward (1927–1989)

Edward Abbey spent many seasons in the wilderness as fire lookout, back-country ranger, explorer, river rat, self-styled “follower of the truth no matter where it leads.” He was the author of twenty-one books and scores of articles that collectively express his lifelong commitment to the principles of anarchism, and his deep, abiding love for the flow of Nature. With the publication of his classic book of essays, *Desert Solitaire* in 1967, he became recognized as both a gifted writer and an outspoken advocate for the natural environment. And with the publication of his best-known novel *The Monkey Wrench Gang* in 1975, Abbey became the earliest and perhaps most influential voice of the newly awakened radical environmental movement.

Abbey was born on 29 January 1927 and grew up in rural northwestern Pennsylvania which he felt imposed upon him a sense of intellectual and spiritual myopia. He required the vast, arid landscape of the American Southwest wherein his mind and soul were free to soar as he explored the hidden slot canyons, climbed countless mountains, ran exquisite rivers, and hiked the boundless Colorado Plateau and Basin and Range provinces. He arrived in New Mexico shortly after World War II equipped with a brilliant mind, a powerful sense of intuition, and a finely honed body well suited for any adventure. He loved to read, write, listen to great music, make love to beautiful women (“I never made love to a woman I didn’t love, at least a little bit”), and wander the back country alone, or with a good friend or two. He placed supreme value on friendship, honor, and a lifetime free to explore the mysteries of nature.

While both an undergraduate and post-graduate student at the University of New Mexico, Abbey was mentored by Professor Archie Bahm who specialized in Chinese philosophy. Professor Bahm introduced Abbey to the works of Lao Tzu and Chuang Tzu, Daoist philosophers in whose works Abbey was able to perceive the wellsprings of anarchism.

In May, 1951, Abbey was invited to speak on anarchist philosophy at the University of New Mexico by Professor Bahm. In this lecture, the notes from which I have in my collection of Abbey papers, Abbey provided early evidence of what would become his great philosophical contribution to Western culture, a meld of anarchism and radical environmentalism. He went on in the lecture to define many types of anarchism and styled himself a barefooted anarchist.

I hate cement. I have never seen a sunflower grow in cement. Nor a child.

Now even Aristotle recognized the vegetative element in man. It is that which enables us to grow. A man *is* a plant, fundamentally, and if he is to grow he must grow like a cottonwood, upward and outward, exfoliating in air and light, his head in

the clouds, perhaps, but his feet rooted in Mother Earth. Now if we insist on sealing ourselves off from the Earth below by cement and asphalt and iron and other dead and sterile substances, and from the sun above by a dense layer of smoke, soot, poisonous gases, skyscrapers, helicopters, I do not think we will survive as human beings...

For these reasons, I must advocate bare-footed anarchism, anti-urban, anti-industrial, anti-housing development, anti-land improvement anarchism. I look forward to that happy day when shoes will become obsolete and all of us can run around squelching our toes in the mud of April (Author's lecture notes).

Ultimately, Abbey was awarded a master's degree in philosophy. His thesis was entitled "The Morality of Violence" and focused on the points of view of five libertarian or anarchist thinkers including Proudhon, Bakunin, Godwin, Sorel and Kropotkin. He remained a self-proclaimed anarchist throughout his life, an anarchist at large within the flow of Nature.

Edward Abbey was a great outdoorsman. Much of his writing was inspired by recollections of wandering through desert wildernesses where encounters with fellow humans were infrequent. He told me that once, while living in Death Valley, he had what he regarded to be a natural mystical experience wherein he perceived himself to be integrated within the natural world around him, able to perceive an interconnective energy between all animate and inanimate objects, all the while immersed in a level of joy never to be repeated during his lifetime. His quest to return to this state of consciousness is revealed on page six of the original edition of *Desert Solitaire* published in 1967.

The personification of the natural is exactly the tendency I wish to suppress in myself . . . I want to be able to look at and into a juniper tree, a piece of quartz, a vulture, a spider, and see it as it is in itself, devoid of all humanly ascribed qualities . . . I dream of a hard and brutal mysticism in which the naked self merges with a non-human world and yet somehow survives still intact, individual, separate.

In 1975, Abbey delivered a lecture entitled "In Defense of Wilderness" at St. John's College in Santa Fe, New Mexico, which I recorded and subsequently excerpted for my biographical memoir of Abbey entitled *Adventures with Ed: A Portrait of Abbey*. This lecture includes one of Abbey's more imaginative speculations on the nature of reality.

Is it not possible that rocks, hills and mountains, and the great physical body of the Earth itself may enjoy a sentience, a form of consciousness which we humans cannot perceive only because of the vastly different time scales involved? . . . Say that a mountain takes 5,000,000 of our human or solar years to complete a single thought. But what a grand thought that single thought must be. If only we could tune in on it. The classic philosophers of both east and west have tried for 5,000 years more or less to convince us that *Mind* is the basic reality, maybe the only reality and that our bodies, the Earth and the entire universe is no more than a thought in the mind of God. But consider an alternative hypothesis. That Buddha, Plato, Einstein and we are all thoughts in the minds of mountains, or that humanity is a long, long thought in the mind of the Earth. That we are the means by which the Earth, and perhaps the

universe becomes conscious of itself. I tell you that God, if there is a god, may be the end, not the origin of this process. If so, then our relationship to Earth is something like that of our minds to our bodies. They are interdependent. We cannot exploit or abuse our bodies without peril to our mental health and our survival . . . As mind is to body, so is humanity to Earth. We cannot dishonor one without dishonoring and destroying ourselves (Loeffler 2000: 127–8).

On 1 January 1983, Ed Abbey and I returned to his home in the Sonoran Desert after a camping trip in the Superstition Mountains of southern Arizona. Abbey had recently learned that he was afflicted with the malaise that would ultimately claim his life. I recorded Abbey reflecting on the nature of religion in today's technocratic world, which is included in my book, *Headed Upstream: Conversations with Iconoclasts*.

I regard the invention of monotheism and the otherworldly God as a great setback for human life . . . Once we took the gods out of nature, out of the hills and forests around us and made all those little gods into one great god up in the sky, somewhere in outer space, why about then human beings, particularly

Europeans, began to focus our attention on transcendental values, a transcendental deity, which led to a corresponding contempt for nature and the world which feeds and supports us. From that point of view, I think the (American) Indians and most traditional cultures had a much wiser world view, in that they invested every aspect of the world around them – all of nature – animal life, plant life, the landscape itself, with gods, with deity. In other words, everything was divine in some way or another. Pantheism probably led to a much wiser way of life, more capable of surviving over long periods of time.

. . . Call me a pantheist. If there is such a thing as divinity . . . then it must exist in everything, and not simply be localized in one supernatural figure beyond time and space. Either everything is divine, or nothing is. All partake of the universal divinity – the scorpion and the packrat, the Junebug and the pismire. Even human beings. All or nothing, now or never, here and now (Loeffler 1989: 14–15).

Abbey thoroughly believed in living life to its fullest and confronting the truth fearlessly. The following also appears in *Headed Upstream*.

An adventurous human life should be enough for anybody, and should free us from the childish hankering for immortality . . . If this life here and now on this splendid planet we call Earth is not good enough for us, then what possible pleasure or satisfaction or happiness could we find in some sort of transcendental, eternal existence beyond time and space? Eternity, in that sense, beyond time, could be nothing but a moment, a flash, and we probably experience that brilliant flash of eternity at the moment of death. Then we should get the hell out of the way, with our bodies decently planted in the Earth to nourish other forms of life – weeds, flowers, shrubs, trees . . . which support the ongoing human pageant – the lives of our children. That seems good enough for me . . . I think the desire for immortality is based on . . . a terrible fear of dying, fear of death, which comes from not having fully lived. If your life has been wasted, then naturally you're going to hate giving it up. If you've led a cowardly,

or paltry, or tedious, or uneventful life, then as you near the end of it, you're going to cling like a drowning man to whatever kind of semi-life medical technology can offer you . . . Better by far to fall off a rock while climbing a cliff, or to die in battle (Loeffler 1989: 17–18).

For Edward Abbey, sauntering through landscapes both known and especially unknown was among life's greatest pleasures. We sauntered together for many miles over the course of many years, and the act of walking and musing resulted in countless hours of boundless conversation. Often Abbey reflected on the meaning of existence. We discussed the role of the anarchist as environmentalist, and Abbey clearly revealed his belief that every species including the human species has a right to existence, but that the human species has no greater right than any other. He determined that the voices of other species, indeed that of the entire biotic community, were not being heard by humanity. Thus he concluded that humans sensitive to the miracle of life must assume responsibility for defending habitat against encroachers from within what he called "the military-industrial complex and their lackeys in government."

He regarded sabotage against the tools of governmental and industrial terrorism as a supremely ethical act. He clearly differentiated between terrorism and sabotage, proclaiming that everything from the military strafing of villages in Vietnam to the chaining of trees to clear land for cattle grazing were acts of terrorism against life. Committing acts of sabotage against tools of terrorism was required if habitats were to be defended against indiscriminate pillagers who pursued growth for the sake of growth, a condition he regarded as the ideology of the cancer cell.

Abbey believed that causing harm to fellow humans was to be avoided unless one's self, family or friends were being threatened. He advocated sabotage but warned that under no circumstances must people be harmed as a result of sabotage. In a word, eco-terrorists are those engaged in acts of terrorism against the natural environment, and definitely not those who are defending the environment against the onslaught of eco-terrorism.

Abbey believed in the evidence of the five bodily senses. He believed in protecting every freedom that allowed his intellect to soar. He regarded himself as an absolute egalitarian. He also intuited a sense of the numinous in nature, and although he rarely wrote about that, it was not an uncommon topic for conversation. He was not frivolous in his speculations, but as with any intelligent philosopher, he constantly sought the underlying meaning of existence. He experienced one episode with a hallucinogen, LSD. It was an uncomfortable experience, not at all illuminating. He frequently reiterated that the only time he felt close to that numinous quality was after he had been camping for a minimum of ten days, or enough time for the flow of Nature to purge the "white noise" generated by day-to-day existence within the materialistic technocracy of American culture.

Abbey loved the natural world, and felt himself "out of synch" with the time into which he had been born. He told me he would have been at home in the Pleistocene as a hunter-gatherer; or as a Plains Indian riding bareback through the early nineteenth

century. He regarded the advent of agriculture as the beginning of serfdom and slavery. He contended that more harm had been wrought by the plowshare than the sword.

Abbey's great contribution to philosophy was the meld of anarchism and environmentalism. These two distinct philosophic persuasions conjoined in his mind. On the one hand, the anarchists Proudhon, Bakunin and Kropotkin defined that spirit of resistance to government, human hierarchy and deadly immersion in the status quo that Abbey practiced his life long. On the other hand, Henry David Thoreau, John Muir, Robinson Jeffers and David Brower forwarded an environmentalist point of view that also prevailed in Abbey's mind from an early age. With the publication of his novel, *The Monkey Wrench Gang*, he brought these two philosophic themes together. He told me that it was in this novel that he actually found his voice, a voice that must never be stilled.

Abbey believed that unless the current juggernaut of "growth for the sake of growth" can be forestalled, the higher vertebrates including the human species are in grave jeopardy of extinction. He calls for a much higher ideal wherein recognition of the sacred quality of life within habitat sets the standard for the human endeavor. A few days before his death, he gave a final speech before a gathering of Earth First! members, exhorting them to keep the faith with courage and dignity.

Edward Abbey died on 14 March 1989 at the age of 62 years and 45 days in his writing cabin in the Sonoran Desert west of Tucson. He lies buried in a desert wildness far from any human community. His grave is marked with a single stone that bears his name, the dates of his birth and death, and his epitaph, which reads, "No Comment."

Jack Loeffler

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- See also:* Anarchism; Death and Afterlife in Robinson Jeffers & Edward Abbey; Deep Ecology; Earth First! and the Earth Liberation Front; Pantheism; Radical Environmentalism.

Aboriginal Art – Warlpiri

Indigenous Australians produce rich and diverse art expressive of their relationships with the land and the cosmos. By way of example, this entry focuses on Warlpiri graphic art of the Western Desert region of Australia.

The Dreaming is the most powerful mechanism through which Warlpiri organize and understand the significance of places. The Dreaming has various levels of meaning: it is the mythological realm of totemic Ancestors; it is the embodiment of metaphysical potency in the land; it is the “Law” to which humans must conform; and it is the spiritual identity of the individual.

The Warlpiri conceive of landscape as a manifestation of the Dreaming. Like other Australian Aboriginal peoples, Warlpiri tell of a realm in which the Earth and animals do not exist in their present forms. In this realm, mythological ancestors emerge from a featureless Earth, transform it, and create the landscape. The clouds and hills, billabongs, grasses, and trees are created during this period, as are animals, and kinship patterns, taboos, and other tribal laws. When the ancestors complete their creative wanderings they change into Spirit Beings, and they continue to dwell in special places within the land.

The landscape is understood by Warlpiri as being criss-crossed with mythological tracks, each with an accompanying mythic narrative, song-cycle, dance enactment, and ritual caretakers. Each of these Dreaming tracks consists of a series of sacred sites and the paths between these sites. The myths associated with these tracks recount the actions of the ancestors; their subsistence activities, their fights, their love making, their ceremonies, etc.

Warlpiri art and myth can best be understood in terms of places, for it is the landscape which provides the most obvious and enduring evidence of Dreaming occurrences. But for Warlpiri, land is more than simple evidence, it is the actual transfiguration of Ancestral Being. The Land *is* the Dreaming. Each myth has an accompanying graphic map and a song, which refer to incidents and places associated with the Ancestors. To Warlpiri, myth, graphic design, and song reinforce each other and share in the virtue of the Dreaming.

Warlpiri art is concerned with mapping the mythological landscape. Paintings function as Dreaming maps of important places and events; charting the travels of totemic ancestors, and depicting sacred places they create. The paintings being done by Warlpiri today belong to a class of Aboriginal art that has come to be known as the Western Desert Style. The canvas paintings, executed in acrylics, are enmeshed in the larger system of Warlpiri social, political, religious, and ecological values. Derived

from traditional designs, they are expressive of Warlpiri emotion, purpose, and place within the landscape.

The visual style of Warlpiri art replicates the narrative style of Warlpiri myth. Myths recount ancestral travels through the country; paintings depict these travels and the sites associated with them. This narrative style is evident in the interconnected circles and lines that are so prevalent in Warlpiri paintings. The circle/line composition is widely used to illustrate the journeys of Ancestral Beings and the places that they create; the sites represented by circles, the paths connecting the sites represented by lines. This site/path structure graphically maps the Dreaming and iconically illustrates the movements of Ancestral Beings across the land. It provides a structure that links Dreaming events to geographical places and life experiences.

The line motif reflects Warlpiri mobility and the emphasis on movement across the country. It illustrates travels through the landscape and depicts the tracks of Ancestral Beings. Conversely, circles are used to depict places. The symmetry of Warlpiri art assists in the ordering of experience and space. Through symmetrical compositions, Warlpiri impose a structure on phenomena that may otherwise lack this quality.

Every Warlpiri graphic design represents both an identifiable locality and its mythological association, but the knowledge to interpret the design is gained only through synthetic understanding of the Dreaming and the land. Dreaming maps, however, are not just about farremoved myths. They signify, among other things, aspects of cultural ecology around which society is organized. They are expressive of kinship rules, rights to resources, ecological and sacred knowledge, and other elements of social and environmental organization.

Paintings recall the ancestral landscape and map the interdependent relationship between humans and natural systems. In “reading” paintings, Warlpiri interpret that land and their place within it. Warlpiri paintings are rooted in specific locales, and metaphorically relate to the ancestors who created those places. Graphic designs illustrate the way in which Warlpiri view themselves within the context of the world and its origins.

Paul Faulstich

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Australian Aboriginal; Rock Art – Batwa/Pygmies (Central Africa); Rock Art – Chewa (Central Africa); Rock Art – Hadzabe/Sandawe (Eastern Africa); Rock Art – Northern Sotho (Southern Africa); Rock Art – Sintu; Rock Art – Western United States; San (Bushmen) Apocalpytic
Rock Art.

Aboriginal Dreaming (Australia)

The concept of the “Dreaming,” or “Dreamtime,” is the great gift that Aboriginal Australians bring to world spirituality. Dreaming celebrates the joy and plenitude of the living world. At the heart of Dreaming is life – its emergence, its growth and nurturance, its interactions and organization, its connections and continuities.

The power that created the world is neither dead nor confined to the past. Creation stories vary across the continent, but hold as shared concepts of origin the travels and actions of the great creative ancestral beings, or Dreamings, who walked the land and sea. All through their travels, the Dreamings brought into being the differences that matter. Foundational creation concerns that which endures.

The Australian continent is well covered with the tracks of the Dreamings: walking, slithering, crawling, flying, swimming, chasing, hunting, weeping, dying, giving birth. They were performing rituals, distributing the plants and marking the zones of animal distributions, making the landforms and water, and making the relationships between one place and another, one species and another. They were leaving parts or essences of themselves; they would look back in sorrow; and then continue traveling, changing languages, changing songs, changing identity. They were changing shape from animal to human and back to animal again, and they were becoming ancestral to particular animals and particular humans. Through their creative actions they demarcated a world of difference. And they made the patterns and connections that crosscut difference.

Dreaming men and women, whatever their species, created a gendered landscape. Land and sea do not privilege women to the exclusion of men, and while gendered places may speak to opposition, they speak also to dialogue. Gendered place locates women and men separately as well as together.

One side of Dreaming is that which creates and endures, and the other side is this ephemeral world: the living things, the relationships between and among them, the waters that support their lives, the cultural forms of action and knowledge that sustain the created world. Aboriginal people’s daily lives, as well as their ritual and other forms of care, unfold in an ecological poetics of connection. The work of creation continues to happen in the world precisely through the ephemeral. Both daily and ritual work seeks to ensure the continuous flourishing of ephemeral life. Dreaming is thus actualized in present time; the perduring life of creation is carried in contemporary time and place by ephemeral life forms. Aboriginal religious practice intensifies the experience of life, placing ultimate value in the living systems and life processes that sustain this, the created world.

Country

Dreamings established countries. A country is small enough to accommodate face-to-face groups of people and large enough to sustain their lives; it is politically autonomous in respect of other, structurally equivalent countries, and at the same time is interdependent with other countries. Each country is itself the focus and source of law and life practice. To use the philosopher's term, one's country is a nourishing terrain, a place that gives and receives life.

Country is multi-dimensional – it consists of people, animals, plants, Dreamings, underground, Earth, soils, minerals and waters, surface water, and air. There is sea country and land country; in some areas people talk about sky country. Country has origins and a future; it exists both in and through time. I use the term “eco-place” to speak to a locatedness that is not human-centered and that is attentive to the complexities of life in a given place. Each country (land or sea) contains a plurality of sites, and the sites are connected by tracks; the tracks are also ceremonies that work across bounded countries. The system of eco-places thus situates sites within countries; equally importantly the tracks are connectivities. Dreaming geography elaborates the intersecting and crosscutting patterns of connection between eco-places.

Country in Aboriginal English is not only a common noun but also a proper noun. People talk about country in the same way that they would talk about a person: they speak to country, sing to country, visit country, worry about country, feel sorry for country, and long for country. People say that country knows, hears, smells, takes notice, takes care, is sorry or happy. Country is a living entity with a yesterday, today and tomorrow, with a consciousness, and a will toward life. Because of this richness, country is home, and peace; nourishment for body, mind, and spirit; heart's ease.

Caring for country

My teacher Hobbles Danaiyarri, who belonged to the savanna region on the desert fringe in the Northern Territory, offered a succinct explanation of his people's responsibilities toward land: “Before white people, Aboriginal people were just walking around organizing the country.”

Research into how Aboriginal people organize the country is still quite new. Looking at the continent as a whole, it is now evident that Aboriginal people's fire ecology is responsible for the open grasslands that covered much of the continent, for the preservation of specific stands of fire sensitive vegetation and remnant rainforests, and for the maintenance of a mosaic of micro-ecological niches which enable a rich diversity of life forms to flourish. Animal and plant life was sustained through habitat diversity and through a range of protections that include preservation of breeding sites and refugia, and the imposition of food taboos.

Aboriginal ecological poetics are sensual. People say that their country calls them into action: they know the messages, they listen, smell, see, understand, and respond. When people are away from country they know well they experience sensory deprivation that feels like loss, banality, and inertness of spirit. One of my teachers, Kathy Deveraux, whose home is in the paperbark swamps of the north, described the experience of coming home: “You see the birds, you see the country, and your senses come back to you. You know what to do and where to go.”

Ecological poetics cluster around practices of knowledgeable care. Many people have an encyclopedic knowledge of the plants and animals of their country, of the habitat requirements of plants and animals, of how to interpret the tracks and other traces of life in the land, of signs and seasons, and of the communities of symbiosis that enable life to flourish through the generations. April Bright, another paperbark person, explained the responsibility to burn: “The country tells you when and where to burn . . . If we don’t burn our country every year, we are not looking after our country” (Bright 1995: 59).

Care of country expresses two major propositions concerning the flourishing of life in this created world. The first is that a country and its people take care of each other. This proposition emphasizes place and proximity in the organization of care, and asserts that relationships of care are reciprocal. To take care of one’s country is to take care of the conditions whereby country can continue to provide sustenance for living things, including the people who belong to (and take care of) the place. The second proposition is that those who destroy their country ultimately destroy themselves.

Local, fine-grained detailed knowledge is transmitted in the pedagogy of daily life, in myth and story, in song, ceremony and the visual arts. The conventional Western division between pragmatic action and religious action falls down completely in practices of care. One of the best-documented examples of the convergence of pragmatic action and mythico-religious action is the Dreaming track of the red kangaroo (*Macropus rufus*) in Central Australia. This track traverses some of the toughest desert country in the world, and the sacred sites coincide with the most favored areas for kangaroos. In particular, there is a strong correlation between Red Kangaroo Dreaming sites and the permanent waters that are the sources of fresh herbage during drought. The red kangaroo requires fresh green herbage; after rains the animals forage widely, but in drought they must rely on localized areas. As the sites are protected, so too are the kangaroos at these sites. These are places to which living things retreat during periods of stress, and in which hunting is forbidden.

Totemism

There are numerous types of totemism within Australia, and all express a non-random relationship between a particular person and particular other species or other

aspects of the natural world. Clan totemism is widespread; it links group, ancestral/Dreaming species, and country (sites and, often, tracks). According to Strehlow's key analysis of Aranda societies in the Central Australian desert, each clan is associated with a number of totemic beings, with one of which the clan is most intimately associated and for which it bears a central responsibility. Each clan is a set of descendants of a Dreaming ancestor.

A set of clans comprises a regional ritual community, and that regional group is also a community of social and ecological reproduction. It is a community made up of politically autonomous groups, each of which is responsible for the well-being of several species and of the other groups. The system is one of interdependence – the rain people, for example, make rain for everybody, humans and non-humans, and they depend on others to fulfill their responsibilities. The kangaroo people depend on the rain people for water, and take responsibilities for kangaroos. Their actions benefit everybody, including kangaroos.

Not only in Central Australia, but across the whole continent, there are similar structures of interdependence, restraint, control of sanctuaries, protection of permanent waters, refugia, breeding sites, and selective burning for the preservation of certain plant communities and other fire-sensitive areas.

Ceremony

Ceremony invigorates creation. Dreamings traveled, and they stopped, and now they remain fixed in place, except in ceremony. The work of ceremony draws the Dreamings into direct contact. In many parts of Australia, ceremony brings the Dreamings up from their underground or underwater sites and brings them into the surface world again. People sing and dance the tracks of major Dreamings, and as they do so they charge up the fertility, patterning and connectedness of the created world.

Many of the ceremonies are “increase rituals.” These rituals aim toward the regeneration of a particular species, but as the ethnobotanist Peter Latz points out, people are not attempting to initiate uncontrolled increase. The goal is to maintain the levels of resources within their country. In his studies in Central Australia Peter Latz concludes that increase ceremonies were carried out for each of the important food plants and animal species utilized by desert people. To promote the well-being of animals and plants it is necessary that the appropriate rituals be performed by the correct people (that is, the people whose totem or Dreaming that species is or whose country it is through other forms of relationship). Sites repeat across the landscape, so that the well-being of any one species does not depend solely on one site but is linked to people in many places, all of whom carry out their responsibilities. The mosaic patterning of habitat diversity and connection is also the pattern of human groups in regional associations.

Land is Law

Indigenous knowledge systems and systems based on Western scientific tradition have often been seen as the most distant poles on a continuum that ranges from “myth” to “fact.” Recent analysis undermines this dichotomy, and research in Australia shows that indigenous ecological knowledge on this continent is detailed, localized, and well grounded in empirical observations. Moreover, indigenous knowledge is embedded within a system of ethics that is oriented toward long-term productivity.

The ecological poetics of Dreaming concern life’s continuity and ability to flourish. Dreaming thus constitutes laws of existence and guides for behavior. Both metaphysical and ecological, Dreaming configures human life within the context of creation and continuity.

The Aboriginal philosopher Mary Graham writes that indigenous cultures of land and place are based on two axioms: the land is the law; and you are not alone in the world. These two axioms can be heard as an indigenous ethic and practice of connectivity. The second axiom – you are not alone – situates humanity as participant in a larger living system. The first – land is law – requires humanity to work with rather than against nature. The purpose of law is the purpose of Dreaming: to sustain a world in which life flourishes.

“White people ask us . . .”

One of the best Aboriginal explanations of Dreaming is by Mussolini Harvey:

White people ask us all the time, what is Dreaming? This is a hard question because Dreaming is a really big thing for Aboriginal people. The Dreamings made our Law. This Law is the way we live, our rules. This Law is our ceremonies, our songs, our stories; all of these things came from the Dreaming.

The Dreamings are our ancestors, no matter if they are fish, birds, men, women, animals, wind or rain . . . All things in our country have Law, they have ceremony and song, and they have people who are related to them...

In our ceremonies we wear marks on our bodies, they come from the Dreaming too . . . When we wear that Dreaming mark we . . . are keeping the country and the Dreaming alive. That is the most important thing . . . (in Bradley 1988: xi–xi).

Past and future

Mussolini Harvey’s statement that Dreaming law cannot change fits well with archeological evidence. The best contemporary dating techniques indicate that Aboriginal people have been in Australia for at least 60,000 years, and the archeological record shows long periods of apparent stability. This was the continent of huntergatherers; it

was the only continent inhabited solely by people whose way of life depended on “organizing the country” without domesticating plants and animals. It was thus unique, and Aboriginal Dreaming may fairly be said to constitute one of the most deeply developed religions emergent from this particular way of being human.

Many Aboriginal people claim that they have the oldest continuous religious tradition extant on Earth. This claim rests primarily on evidence from the rock art of Arnhem Land. In this vast body of religious art, the sequence reveals a moment at which the Rainbow Snake is unambiguously identifiable. As the Rainbow Snake is of continuing and extreme significance, continuity is asserted. Experts’ views on dates vary considerably, and at this time the dating is based on inference rather than technology, so it has not yet been possible to offer objective evidence. A widely shared view is that the Rainbow Snake images date from the period of sea-level rise following the last glaciation, and thus could be about 8000–9000 years old. Rainbow Snakes in this ancient art are nearly identical to those that are painted on bark and canvas in Arnhem Land today, as prehistorian Darrell Lewis (1988) shows in his monograph on Arnhem Land rock art.

Claims for the antiquity and continuity of Aboriginal religious traditions are balanced by current evidence of the flexibility and contemporary viability of these same traditions. In spite of nearly two centuries of predictions that Aboriginal people were dying out, losing their culture, losing their traditions, and assimilating into “white” society, Aboriginal Dreaming is alive and well all over Australia.

Flexibility has been demonstrated most profoundly in encounters between Dreaming and Christianity. While many of these encounters have been extremely painful, particularly when missionaries were involved in breaking up families, suppressing indigenous culture, and forcibly requiring people to abandon their traditional religious practices, the resilience of indigenous religion has facilitated an astonishing measure of cultural survival. Rather than abandoning their traditions, in many parts of Australia Aboriginal people found ways to accommodate Christian teachings within Dreaming. In the process of accommodation they indigenized Christianity, bringing it into country, locating it in sacred sites, connecting it directly with the Dreamings and people of each country. Australia is now marked not only with indigenous Dreaming action, but also with exogenous activity: the footprints of Jesus, remnants of Arks, the hill where Ned Kelly landed his boat, and similar sites offer the prospect that colonizing action is being transformed into Dreaming geography.

In addition to indigenizing Christianity and colonial culture, Aboriginal religious practice is, in some areas, now indigenizing “settler” Australians. Aboriginal spiritual leaders working in contexts of decolonization open their sacred sites to non-indigenous people, share the teachings, accede to a variety of religious practices within their sacred sites, and seek to impart their modes of belonging to people whose roots are elsewhere. Non-indigenous people who are welcomed into indigenous sites are themselves spiritual seekers who are looking for less oppressive ways of settling into Australia.

Working with the view that the violence and racism of conquest scar the oppressor as well as the oppressed, some indigenous spiritual leaders organize intercultural events within which they assist in healing the pain of colonization for all the participants.

The idea of caring for country has been adopted from indigenous people and has become a national slogan directed toward developing an Australian environmental conscience. Indigenous practices of care in upholding biological diversity are taken as models for sustainable human life in Australia. An emergent movement of spiritual revitalization emphasizes the land as the source of social and spiritual recovery. Aboriginal leaders in this movement see non-Aboriginal Australians' alienation from the land as a spiritual void that can be healed.

The future of Dreaming is thus predicated on the poetics of its long history: the mutually life-affirming relationships between people and country, among people and other living things, and between past and present. Increasingly, Dreaming Law is generating life-affirming relationships between settler and indigenous peoples and is offering a spiritual and ecological template for the future.

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See also: Aboriginal Art; Aboriginal Spirituality and the New Age in Australia; Australia; Indigenous Religions and Cultural Borrowing; Rock Art – Australian Aboriginal.

Aboriginal Environmental Groups in Canada

Indigenous peoples in Canada have been active in protecting their territories from exploitation for centuries. Fighting to protect indigenous land rights and self-determination is synonymous with environmental protection for many Aboriginal people, since the land and creation provide the foundation for their languages, spirituality, knowledge systems, and traditional forms of governance. Aboriginal cultures in Canada view the “environment” quite broadly, as a concept that encompasses relationships between the physical and spiritual worlds, inter-relationship and interdependency between humans, plants and animals and our own internal environments. This broad view relates issues around health and healing, decolonization, resistance, governance, language and self-determination to the land. These issues, often viewed outside of the concept of “environment” from a Western perspective, are included in Aboriginal environmental perspectives.

Aboriginal nations are often on the front lines when it comes to dealing with environmental devastation and their nations have employed a diversity of strategies to promote environmental protection including public education, legal action, engaging in scientific research, alliance building with non-Aboriginal environmental groups, and direct action, to name a few. The Innu nation has worked hard to protect their lands from the impacts of mining, road building, potential forestry development and low-level military flight-testing. The Grand Council of Crees has educated Canadians and Americans about the devastating impacts of hydro-electric development and unsustainable forestry practices on Cree lands. The Interior Alliance, composed of the Southern Carrier, St’at’imc, Secwepemec, Nlaka’pamux and Okanagan nations, has been a prominent voice raising the environmental impacts of large-scale tourist development in the Canadian media, in addition to outlining the potential impacts of recent trade agreements on their rights and their lands. In Nunavut, the Inuit Tapirisat has documented the impacts of contamination on Inuit communities and the Arctic environment in addition to sounding alarms about startling changes in their climate and ecosystem as a result of global warming.

Many Aboriginal people consider themselves the original caretakers of Mother Earth, and feel they have a responsibility to work to protect and heal the land from centuries of exploitation. At the local level, several communities have initiated local environmental groups concerned with issues impacting the land. The Grassy Narrows Environmental Group has worked to protect their territory in northern Ontario from industrial log-

ging and to heal their lands from the devastating impacts of mercury contamination. The Kanawake Environmental Program developed a successful community recycling program on their territory near Montreal. The Pictou Landing First Nation in Nova Scotia is operating the first Forest Stewardship Council certified woodlot in Canada. These projects have succeeded despite numerous barriers. It is often difficult for Aboriginal communities in Canada to initiate these projects because they are not afforded any core funding for environmental protection from the Department of Indian Affairs. It is still quite difficult to attract necessary financial support from other government departments and private foundations, leaving the economically poorest communities in Canada with few financial resources to deal with the enormous environmental issues they face.

One of the first Aboriginal environmental organizations in Canada formed in response to extreme industrial contamination in the Mohawk Territory of Akwesasne. The Akwesasne Task Force on the Environment (ATFE) was created in 1987 as a community-based, grass-roots organization, to address the environmental problems facing the Mohawk Nation community of Akwesasne. The “mission of the Akwesasne Task Force on the Environment is to conserve, preserve, protect and restore the environment, natural and cultural resources within the Mohawk Territory of Akwesasne.” The task force founded the Kaniatarowanen’neh Research Institute to conduct environmental research as well as launching advocacy campaigns to promote the clean-up of toxic waste sites adjacent to the community created by industry. The ATFE is also involved in environmental education initiatives as well as promoting the development of sustainable economic initiatives at the community level. Similar work is carried on at the confederacy level by the Haudenosaunee Environmental Task Force (HETF), composed of representatives from 15 Haudenosaunee communities in Canada and the United States (HETF, nd).

At the national level, the Assembly of First Nations (AFN) under the current leadership of Matthew Coon Come has continued to emphasize the importance of the environment despite massive government funding cuts. The AFN is currently involved in the development of the Nuclear Fuel Waste Act, and the proposed Species at Risk and Marine Conservation Areas Acts, in addition to participating in the development of amendments to the Canadian Environmental Assessment Act. The Congress of Aboriginal peoples, representing Métis and off-reserve Aboriginal peoples, works to address environmental issues impacting urban Aboriginal people and Métis communities.

The Centre for Indigenous Environmental Resources (CIER) is another organization active at the national level. CIER is an Aboriginal-controlled non-profit organization based in Winnipeg, Manitoba and is dedicated to the protection, preservation and renewal of Mother Earth. Founded in 1994, CIER was created to implement environmental-capacity-building initiatives in First Nations by developing necessary research, education and technical resources to enable communities to address the environmental issues facing their communities. To this end, CIER operates the First Nations Environment and Education Program for Aboriginal youth from across Canada

educating their youth in indigenous and western scientific environmental perspectives. CIER also operates Winds and Voices Environmental Services, offering Aboriginal environmental consulting to organizations from across Canada. In addition to advocating for Aboriginal peoples and the environment at national and international levels, CIER has also created an innovative green office space demonstrating that it is possible to promote indigenous environmental values in contemporary times and in urban environments.

Aboriginal environmental organizations are also committed to sharing information and building alliances with other environmental and social justice groups. The First Nations Environmental Network (FNEN), affiliated with the Canadian Environmental Network, is a national organization of indigenous nations, individuals, and nonprofit groups working on environmental issues. They are committed to protecting, defending, and restoring the balance of all life by respecting and honoring traditional indigenous values. They operate as a network, linking grassroots indigenous peoples nationally and internationally to lend support to the variety of environmental issues facing indigenous peoples.

The Boreal Forest Network (BFN), the North American Affiliate of the Taiga Rescue Network, is a network of environmental groups, indigenous peoples and individuals working together to protect, restore and promote the sustainable use of North America's remaining boreal forest, in addition to ensuring that indigenous rights are respected and there is local control of forest resources. Given that 80 percent of the people living in North America's boreal forests are indigenous peoples, the participation of indigenous nations within the network has been an important force facing policy and decision making within the network.

Leanne Simpson (Anishinaabe Kwe)

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See also: American Indians as "First Ecologists"; Haudenosaunee Confederacy; Indigenous Activism and Environmentalism in Latin America; Indigenous Environmental Network; Law, Religion, and Native American Lands.

Aboriginal Spirituality and the New Age in Australia

Australian Aboriginal religious traditions are the focus of some interest in the international alternative health and spirituality movement, better known as the “New Age.” This interest emerges from and reflects a wider pattern in “Western” thought that imagines contemporary indigenous peoples as embodying a primal human relationship to the natural world. Within this framework, the “West” tends to be associated with a set of cultural attitudes that reduce natural landscapes to mere resources for economic exploitation, while indigenous peoples are characterized as the guardians of true ecological and, therefore, spiritual wisdom. This link between spirituality and knowledge of the natural world can be traced throughout the history of European thought. It is clearly evident, for example, in the eighteenth-century work of Jean Jacques Rousseau, who wrote about the “Noble Savage,” and in nineteenth-century Romanticism, which celebrated all that was “natural” in the face of ever-increasing industrialization.

Although many Aboriginal people live in cities and rural towns, and although the Australian continent is environmentally diverse, New Age representations of Aboriginal culture tend to focus on spiritual connections with the central desert region. One of the most well-known New Age accounts of Aboriginal spirituality is Marlo Morgan’s novel, *Mutant Message Down Under*. This popular story, originally published as non-fiction, introduces a group whom Morgan refers to as the “Real People.” The members of this central Australian “tribe” have had no contact with non-Aboriginal Australians and embody, according to Morgan, all that is wise and good in human-kind. Her narrative explains that the Real People have chosen to “leave Planet Earth” because damage to the environment is making it increasingly uninhabitable for them (1994: 148). Before they disappear, however, the Real People decide to pass their ecological and spiritual wisdom on to a white American woman (Morgan) so that she can carry their “message” to the rest of the world; the message being that non-indigenous people (mutants) must become more spiritually aware and less destructive of the natural environment. Similarly Lynn Andrews’ book, *Crystal Woman*, tells of the author’s spiritual journey to central Australia where she meets an elderly Aboriginal woman, a “shamaness,” who shares her wisdom with the white, American “apprentice.” In Andrews’ story, however, the American heroine heals the Aboriginal community she visits and paves the way for its members to join forces with indigenous peoples throughout the world. Although Andrews and Morgan both claim that their stories are true, their accounts are more

representative of the themes that inform New Age discourses than of the experiences and concerns commonly reported by Aboriginal people themselves.

Other well-known New Age texts that focus on Aboriginal spirituality are Robert Lawlor's *Voices of the First Day* and the collection of books by James Cowan, most especially *The Elements of the Aborigine Tradition*. Unlike the volumes by Morgan and Andrews, these are clearly presented as non-fiction and offer seemingly authoritative descriptions of Aboriginal culture. However, like Morgan and Andrews, their interpretations are idiosyncratic and highly contested outside of the New Age community.

It is possible to argue that there has been a greater curiosity about Aboriginal spirituality in European and American New Age communities, especially in the healing powers attributed to didjeridu music, than in the Australian context, where interest in the spiritual traditions of indigenous North Americans has often been more visible. Research on the alternative health and spirituality movement in Australia, however, does indicate that Aboriginal imagery is occasionally incorporated into New Age workshops and rituals, often in combination with images from other indigenous cultures. There have also been several Australian versions of New Age vision quests, based on Native American models. These have focused on stories, images and places associated with Aboriginal cultures and have tended to take the form of pilgrimages, for non-Aboriginal people, to places of spiritual significance to Aboriginal communities. These "quests" often start in a capital city and involve an overland journey into Central Australia.

Aboriginal sacred sites, most especially Uluru in the center of Australia, are commonly believed, by many New Age thinkers, to constitute important components of a magnetic energy grid that spans the entire planet. Many New Age believers gathered at Uluru on 16 August 1987 to participate in the Harmonic Convergence, a global event that involved thousands of people traveling to sacred sites around the world to meditate on universal peace. The traditional Aboriginal owners later discouraged New Age gatherings at Uluru, claiming that New Age visitors failed to respect their requests for privacy and sensitivity.

Aboriginal reactions to New Age interest in their religious beliefs and practices, like those of other indigenous peoples, vary widely. It is possible to identify three general overlapping categories of response. Some Aboriginal people actively accommodate the New Age. These individuals believe that there is potential for the Aboriginal community to benefit from such attention. The HarperCollins edition of Marlo Morgan's book, for example, originally included a written endorsement by Burnam Burnam, an Aboriginal man who felt that the story rightfully represented Aboriginal people as "regal and majestic." Other Aboriginal elders have also argued that sharing their spiritual traditions with non-Aboriginal people is a way of encouraging greater levels of understanding and appreciation of their cultures, thus furthering Aboriginal struggles for land rights and social justice. Another category includes Aboriginal people who themselves adopt New Age beliefs and practices and merge them with traditional Aboriginal spirituality. Some of these people, such as Tjanara Goreng-Goreng, an Aboriginal woman from Queensland, have run workshops in Australia and overseas for

non-Aboriginal people interested in Aboriginal spirituality and New Age philosophies. While Goreng-Goreng clearly asserts that there are many things she would never share with non-Aboriginal people, she also feels that it is important to build spiritual and social bridges between indigenous and non-indigenous groups in Australia and around the world.

A third category of response includes those who are strongly opposed to New Age “appropriations” of Aboriginal cultural imagery and actively protest against them. Robert Eggington, the Chairman of an Aboriginal arts advisory committee based in Western Australia, has promoted a “declaration against the continued spiritual colonization” of Aboriginal people and has led a long-term campaign against Marlo Morgan for what many believe are her blatant misrepresentations of Aboriginal cultures.

Commentators and indigenous activists worldwide argue, along similar lines to Eggington, that New Age interest in and use of indigenous spiritual and cultural imagery represents the ongoing colonization of indigenous peoples. Aboriginal lawyer, Larissa Behrendt (1998) draws attention to the ways in which romantic representations of indigenous people, such as those favored by the alternative health and spirituality movement, can have real disadvantages for Aboriginal people in their daily lives. She suggests that those Aboriginal individuals and groups who do not fit New Age stereotypes of “traditional” indigenous culture can suffer discrimination resulting from accusations that they are not “authentic” or “real.” Such challenges to individual and group identity can have serious political consequences for indigenous minorities.

One of the criticisms often directed, by Aboriginal people and their supporters, at participants in the New Age movement who profess an interest in Aboriginal spirituality, is that this interest often fails to acknowledge the links between religious beliefs and other less esoteric cultural traditions. For example, in an interview with researchers Denise Cuthbert and Michelle Grossman, Helena Gulash, an Aboriginal woman from Queensland, drew attention to Aboriginal attitudes to the restriction of religious knowledge. She explained that Aboriginal culture was not “an open book” and that there were certain things that were only appropriate for people to learn at specific times in their lives (1997: 51–2). Gulash pointed out that many New Age believers were unwilling to accept or respect such restrictions. She also indicated that while people involved in the New Age movement were often very eager for Aboriginal people to “share” their spiritual wisdom they tended to be less interested in learning about “the human level of things,” or in “developing connections” with the Aboriginal community (1997: 61). Gulash also claimed that there had been “very little practical help forthcoming or offered from the New Age movement to actually help [Aboriginal people] get [their] land back” (1997: 56), a struggle that is constantly identified as being essential to the ongoing survival of Aboriginal communities and cultures. There is, however, enormous diversity within the alternative health and spirituality movement, and degrees of individual commitment to matching spiritual “rhetoric” with lifestyle change and political and environmental activism vary considerably. While some people want to “honor” indigenous people without supporting them, others are eager to become

more involved in indigenous issues. Occasionally this desire may even result in a move away from some of the assumptions promoted in mainstream New Age discourses.

New Age interests in indigenous belief systems sometimes overlap with those of people involved in the environmentalist movement. Jane Jacobs, a lecturer in geography and environmental studies, explained that “the spiritualism and holistic visions associated with land-based indigenous cultures have an obvious appeal” (1994: 305) to ecofeminists and deep ecologists. She argued that although these “Western” groups tend to emphasize the seemingly universal values of Aboriginal cultures at the expense of the particular characteristics that make them unique and valuable to their places of origin, opportunities also exist for Aboriginal people to benefit from such interest. Jacobs told the story of a group of Aboriginal women (Arnernte) from Australia’s Northern Territory who managed to gain crucial financial and political support from feminist and environmentalist groups around the world for their campaign against the destruction of a sacred women’s site by government developers. Their cause was successful partly because the traditional Aboriginal owners promoted the site as a place of importance for all Australian women, not just for Aboriginal women – even if non-Aboriginal people were unaware of it. Jacobs believed that by universalizing the value of their site these Aboriginal women were able to gain the active support of non-Aboriginal “counter-cultural” groups.

The New Age movement is especially vulnerable to accusations of cultural appropriation because of its emphasis on “picking and mixing” elements of many different spiritual traditions to create belief systems tailored to the interests and concerns of individual participants. However, New Age use of indigenous imagery cannot be understood apart from the currency that same imagery has in the wider society. Although the borrowing of cultural imagery, ideas or behaviors always has the potential to cause harm or offense to some groups, it is also a taken-for-granted practice in both indigenous and nonindigenous societies. New Age representations of and interests in Aboriginal people must be understood within the cultural context from which they emerge. However, they must also be understood within their political contexts and due consideration must be given to their possible consequences for “real-life” communities.

Jane Mulcock

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See also: Indigenous Religions and Cultural Borrowing; New Age.

Abortion

Almost all environmental problems – pollution, overconsumption of limited resources, global climate change, destruction of non-human species, habitat, and land – are results of humans exceeding the carrying capacity of the planet. While part of the solution to these problems involves changing behaviors so that we might “walk more lightly” on the Earth, a central strategy to saving the Earth involves curbing population growth. Although education, increased rights of women, and a more just distribution of economic resources are essential to long-term population control, family planning has been an important policy with regard to short-term efforts to curb population growth. And effective family planning practices have almost always included inexpensive access to abortion, particularly where access to and effectiveness of other forms of contraception are limited. Consequently, the religious and ethical issues surrounding abortion become important in the religious and ethical discussion of environmental sustainability.

Daniel Maguire observes that when it comes to overpopulation, “Religion has been part of the problem” (2001: 149). Whether it is the biblical injunction to be fruitful and multiply, the Vedic view that a woman should marry before puberty so as not to waste any opportunity to become pregnant, or the Confucian ideal that status comes from numerous offspring, virtually all the traditional religions of the world have promoted increased fertility rather than limited family size. Concomitant to the promotion of fertility, many traditional religions are associated with teachings that explicitly condemn abortion. Of the world’s religions, Christianity, in particular, especially in its Roman Catholic and conservative evangelical Protestant forms, has taken the strongest stand against abortion, not only by teaching the view in its churches, but also by promoting political activism to make abortion illegal for anyone, Christian or not. Hindu, Buddhist, and Islamic religious bodies have often spoken out against abortion, though they have been less likely to promote the view as social policy. However, conservative Islamic nations allied themselves with the Vatican to oppose United Nations initiatives supportive of family planning and abortion at conferences in Rio de Janeiro in 1992 and Cairo in 1994 (Maguire 2001: 31). A survey of the teachings of these traditional religions, (see Steffan 1996), suggests that opposition – or at least resistance – to abortion, is rooted in a common conviction, namely, that all life, even fetal life, is sacred.

Ironically, the very concern with the sacredness of all life found in the world’s traditional religions, has increasingly been recognized by various environmentalists as an important resource for supporting environmentalism, even deep ecology and

ecofeminism (see Barnhill and Gottlieb, *Deep Ecology and World Religions*). Put simply, the recognition that all life is sacred, whether that is understood in terms of the intrinsic goodness of all creatures who are valued by their creator or in terms of a divine aspect present in every thing, supports the conviction of biocentric ethics that recognizes all living creatures have value in themselves apart from human use. However, if various forms of environmentalism share the view that all life is sacred or intrinsically valuable, then does this imply that deep ecologists and ecofeminists, among others, should oppose abortion for the same reasons that many traditional religions have apparently opposed abortion? Indeed, some critics have asserted as much. Janet Biehl has argued that for ecofeminists to be consistent, they must “oppose abortion on the grounds that it is destructive to ‘life’ ”(Biehl in Clausen 1991: 346). Even though Clausen dismisses Biehl’s claim as “indiscriminate” and not a view held by ecofeminists, there does seem to be a moral ambiguity about abortion that warrants examination. After all, the biocentric affirmation of the intrinsic value (or sacred status) of non-human life, by implication, raises the intrinsic value or sacred status of incipient human life or fetal life as well. Indeed, it does not appear to matter whether the fetus is understood as human or less than human, for if all living things are sacred, then fetuses count as sacred too. While Biehl’s assertion may not represent the de facto views of ecofeminists and other biocentric environmentalists, it would seem that if we ignore or dismiss the intrinsic value or sacredness of fetal life, that we run the risk of trivializing the intrinsic value of nonhuman life. Is there, then, a way to talk about the intrinsic value or sacred worth of fetal life that still allows for the practice of abortion as one means of family planning, or does a consistent biocentrism ultimately lead to opposition to abortion? At this point, Daniel Maguire suggests that religion might “be part of the solution” (2001: 149).

Maguire points out that in spite of the stereotype that traditional religions are anti-abortion, a more careful survey indicates that the major world religions have actually had a more nuanced assessment of the practice of abortion. Even in the Roman Catholic expression of Christianity, the strong anti-abortion stance of the Church is a relatively new development, and it is not universally affirmed by theologians. The official theologian of the Catholic Church, Thomas Aquinas, did not consider the fetus to have a human soul for at least forty days after conception (if male – ninety days if female). The fifteenth-century Saint Antoninus and seventeenth-century Jesuit theologian Thomas Sanchez allowed that abortions were permissible to save the life of the mother (Maguire 2001: 37–8). As late as the first half of the nineteenth century, the Vatican distinguished between abortions that were homicides (when the fetus was fully formed) and those that were not. Of course, Maguire is not arguing that the Catholic Church has ever been supportive of abortion on demand, but he is pointing out that the Church’s teaching has reflected an ambiguity about the nature of the fetus; even when abortion was condemned in the earlier tradition, it was not usually viewed as homicide. Although, current papal teaching does condemn all abortion as homicide,

there is, nonetheless, among today's Catholic theologians, a wide range of perspectives on abortion that can claim to be rooted in the tradition.

Maguire and others provide parallel analyses of non-Christian religions that indicate that abortion, even where it was seen as undesirable, was also viewed as permissible under certain circumstances, ranging from health of the mother to the psychological and economic well-being of the family and the sustainability of the community. Perhaps the most interesting example of how a traditional religion has dealt with the moral ambiguity surrounding abortion is found in Japanese Buddhism. In spite of the "First Precept of Buddhism," namely, "Do not kill, but rather preserve and cherish all life," which for many Buddhists entails vegetarianism, abortion is a fairly important means of birth control among Japanese Buddhists. Indeed, many have credited Japan's liberal laws on abortion as the major reason for Japan's success in curbing its population growth. There is an obvious tension between Buddhist principle and practice here.

One way that Japanese Buddhists have dealt with this tension is through a ritual called *mizuko kuyo*⁻, a term which has been translated as "water child" or "liquid life" ritual. In this ritual, a person who has had an abortion (or miscarriage or still-birth) performs a ceremony similar to that of honoring one's ancestors, but along with memorializing the aborted fetus, the person in effect apologizes to the *mizuko* or "water child" for not having the opportunity to be born (see LaFleur 1996: 218–25 for a fuller description of various forms of *mizuko kuyo*⁻). The ritual provides a means to assuage guilt, or more positively, to maintain one's sense of humanity. According to LaFleur, the ritual is a pivotal way that Japanese Buddhists have dealt with the morality of aborting a life with sacred value: "through this ritual their moral options are not limited to either categorically forbidding abortion or, at the exact opposite pole, treating the fetus as so much inert matter to be dispensed with guiltlessly" (LaFleur 1996: 224). Elsewhere,

LaFleur argues that *mizuko kuyo*⁻ provides another option [to viewing the fetus as either fully human or as entirely non-human], however, one which may be both more accurate and more useful, namely that of seeing the fetus as an ambiguous entity, neither exactly human nor adequately rendered as a mere thing. What interests many of us in the Japanese case is that in Japan, at least by persons wanting to bring religious values into the equation, the fetus is described largely in terms of this ambiguity (LaFleur 1998: 388).

In short, the sacredness of human life is honored without being absolutized.

These examples from traditional religions demonstrate that while it is wrong to say that these religions unequivocally oppose family planning efforts that include abortion, it is true that they see abortion as morally problematic. Even Maguire's liberal reading of Roman Catholic tradition acknowledges that a newly developed fetus has some value, and the rite of *mizuko* reminds the practitioner that the death of the fetus is a real loss. Although recognizing that abortion is morally problematic might seem to point back to anthropocentrism, that very recognition also affirms that there is something sacred at stake. What is implied for a biocentric ethics is that while the affirmation of

the intrinsic value of all life does not preclude abortion as one means of family planning and population control, it does encourage us to seek less harmful alternatives wherever those are feasible.

Paul Custodio Bube

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See also: Breeding and Contraception; Fertility and Abortion; Fertility and Secularization; Judaism and the Population Crisis; Population and Consumption – Contemporary Religious Responses; Population, Consumption, and Christian Ethics.

Adams, Ansel (1902–1984)

A renowned American photographer and conservationist, Adams fused his passions for photography and nature into stunning black-and-white images of the American West, and in the process became one of the best-known and most honored lensmen in the world.

Unchurched, yet deeply religious, Adams viewed nature as sacred and California's Sierra Nevada Mountains as his cathedral. According to photography scholar John

Stzarkowski, "The thing that Adams most wanted to do as an artist was to photograph his mountains as a holy place" (Starkowski in Adams 1994: 26).

Adams' belief in the sanctity of nature derived from several sources. His father introduced him to Walt Whitman, Henry David Thoreau, and Ralph Waldo Emerson. Whitman's pantheism, Thoreau's faith in nature, and Emerson's transcendental view of God in nature set well with him.

On a mountain outing in 1925, Adams carried a copy of English poet Edward Carpenter's *Toward Democracy*. The book extolled nature as the ultimate source of spiritual insight.

When Ansel Adams read Carpenter among the granite peaks of the Sierra Nevada, it was the perfect combination of a time and a place, a set of ideas and a receptive mind. Reading Carpenter helped to confirm his growing sense of the spiritual power of nature and its potential for the redemption of society (Spaulding 1995: 50).

The following year, Adams met the pantheist poet Robinson Jeffers and his wife Una at their home in Carmel. They became friends. Jeffers regarded the universe as divine, a vibrant whole, with all of its parts expressions of the same creative energy. Jeffers' poetry deeply affected the photographer. Adams considered Jeffers a genius who "produced much of America's greatest poetry . . . Jeffers was a prophet of our age" (Adams 1985: 86–7).

Intellectual debts aside, Adams' greatest inspiration sprang from wild nature. He experienced natural wonders as symbols of spiritual life. Adams "stressed that people have a profoundly spiritual need for nature. It was this spiritual connection between the Earth and its inhabitants that Adams sought to express in his photographs" (Adams 1995: 8).

To make the connection, Adams consciously tried to convey the equivalent of what he saw and felt at the moment he released the shutter. He spent countless hours in his darkroom perfecting his images. Adams devised a "Zone System" to gain maximum tonal range from black-and-white film. He defined it as "a framework for understanding exposure and development, and visualizing their effect in advance" (Adams 1985: 311).

He called negatives “the score” and prints “the performance.” Adams altered the “straight reality” of his negatives by intensifying or subduing the dramatic play of light and shadow in his prints, thereby attaining his vision of nature’s grandeur.

Adams’ compositions drew criticism from some quarters because they excluded human beings and ignored environmental deterioration. He responded that his pictures always included two persons, the photographer and the viewer, and he chose to accent the positive in his work. Through his photography, Adams sought to lift people’s thoughts above material concerns:

We are now sufficiently advanced to consider resources other than materialistic, but they are tenuous, intangible, and vulnerable to misapplication. They are, in fact, the symbols of spiritual life – a vast impersonal pantheism – transcending the confused myths and prescriptions that are presumed to clarify ethical and moral conduct . . . In contemplation of the eternal incarnations of the spirit which vibrate in every mountain, leaf, and particle of Earth, in every cloud, stone, and flash of sunlight, we make new discoveries on the planes of ethical and humane discernment, approaching the new society at last, proportionate to nature . . . (Adams 1950: 50).

His ability to give viewers a sense of “the metaphysical implied by the physical” informs his best work, says art authority David Robertson. By evoking immanent divinity in his natural landscapes, Adams captures a transforming vision of a cosmic order that contains and maintains our world . . . No artist in Yosemite history has so effectively as Ansel Adams let us glimpse the majesty of this order; no other artist has so enabled us to sense its glory and partake of its power (Robertson 1984: 124).

To commemorate his legacy, Congress named a wilderness area south of Yosemite in his honor, and the U.S. Geological Survey demarked an 11,760 foot peak “Mount Ansel Adams.” His ashes were scattered on its slopes, becoming one with the mountains he loved and photographed so stunningly.

His images live on to stir deeper appreciation for wildlands and greater reverence for the natural world.

Garry Suttle

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See also: Jeffers, John Robinson; Thoreau, Henry David; Sierra Club; Whitman, Walt.

Adams, Carol (1950–)

Carol Adams has been the primary voice linking animal rights with feminism, particularly focusing on the religious dimensions of these issues. Her seemingly obvious yet incredibly controversial statement that “people with power have always eaten meat” points to the inherent sexism, racism, speciesism and violence of patriarchal culture. Adams has published close to 100 books and articles on issues of ecofeminism, domestic violence and the spirituality of vegetarianism. In addition, her work has been featured in the documentary “A Cow at My Table.”

Since the 1970s Adams has been an activist addressing issues of poverty, racism, sexism and animal rights. She received her Master of Divinity from Yale University Divinity School in 1976 and is an adjunct professor at Perkins School of Theology, Southern Methodist University, in Dallas.

Adams’ seminal work, *The Sexual Politics of Meat: A Feminist-Vegetarian Critical Theory* (1990), suggests that animals are the absent referent in the act of meat eating. They also become the absent referent in images of women butchered, fragmented, or consumable. Thus a structure of overlapping but absent referents links violence against women and animals. Through the structure of the absent referent, patriarchal values become institutionalized. Presentations of this book are often accompanied by her widely acclaimed “Sexual Politics of Meat Slide Show” in which Adams visualizes the links between women and meat.

She also edited the volume *Ecofeminism and the Sacred* (1993), the first anthology to focus on ecofeminism and spirituality. Adams deliberately included essays that embody the diverse manifestations of ecofeminist spirituality. In various essays she analyzes the construction of bodies in feminism. She posits that self/other dualisms central to patriarchal thought lead to a feminizing or animalizing of all “others.” Thus all “others” can “naturally” be dominated.

She elaborates on the themes of compassionate spiritual practice in *Meditations on the Inner Art of Vegetarianism: Spiritual Practices for the Body and Soul* (2001). Central to her ecofeminist work is the shared embodiedness of all beings. Carol Adams’ provocative, ground-breaking insights into the interconnections between violence against human and nonhuman animals provides a powerful lens through which patriarchal culture can be viewed and critiqued.

Laura Hobgood-Oster

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See also: Animals; Christianity(8d) – Feminist Theology; Ecofeminism – Historic and International Evolution; Hunting Spirituality; Vegetarianism (various); Women and Animals.

Aesthetics and Nature in China and Japan

Chinese Aesthetics

Chinese aesthetics, influenced strongly by Daoism, Confucianism, and Buddhism, manifests a distinctive and complex view of nature. The basic assumption is that the world of phenomena manifests the *Dao*, the way of nature. The *Dao* is not a separate reality but rather the patterned processes of the natural world, or perhaps the disposition of the universe to act in a patterned, harmoniously interactive way. The human ideal is to understand the *Dao* and act in harmony with it.

This view of nature can appropriately be called “organic” for various reasons. First, all of reality is included. There is no separate, transcendent realm; heaven, Earth, and humans (the “Triad”) are all fully part of nature. Second, nature is self-creative. Rather than a separate creator who made the world in the past, nature by itself displays ongoing creation. *Zaohua*, the “Creative,” acts in spontaneous and unpredictable ways but is always skillful in creating the beauty and harmony of the natural world.

Third, all things – including rocks and water – have vitality, called in Chinese *qi*, literally the “breath” of life. Fourth, each phenomenon has an individual nature, and this consists not of some essence but of a distinctive power (*de*), spirit (*shen*), and pattern of growth. And finally, all phenomena are organically interrelated. The world is one continuous field of *qi*, with each phenomenon not a separate thing but rather a temporary form within it, like a whirlpool in a stream.

Art is the evocation of the spirit of phenomena, rather than a depiction of surface reality. Painters, for instance, are supposed to capture the specific *qi* or “spirit resonance” of things. If the artist does, then the painting itself will exhibit *qi* and be an instance of *zaohua*. The artist participates in nature’s creativity.

In order to accomplish this, the artist or poet must go through meditative practices that consist fundamentally of two things: removing the delusion of a separate self and the desires it produces, and concentrating upon the subject until there is a direct communion with it. That communion is described metaphorically in various ways, for instance, as “entering into” the rock or tree, or as allowing the phenomenon to enter into the artist, resulting in the “complete bamboo in the breast.” Literary treatises such as the *The Poetic Exposition on Literature* (*Wen fu*) by Lu Ji (261–303) and the *The Literary Mind and the Carving of Dragons* (*Wenxin diaolong*, ca. 523) by Liu Xie

(465–522) spoke of a “spirit journey” in which the poet’s inner spirit roamed out into the world. Such communing with nature is possible because we are within nature’s field of *qi* and thus ontologically continuous with all other things.

Thus a major aesthetic concern was the relationship between self and nature, inner and outer. The Chinese saw nature as an ongoing dynamic of stimulus and response among all things, and humans were included in this. Emotions arise in reaction to circumstance, and from the earliest statement of poetics, the “Great Preface” to the Book of Song (*Shi jing*) [ca. first century], poetry was seen as a voicing of that response. It was assumed that there was a strong correlation between “scene” (*jing*) and “emotional response” (*qing*), and the great poet achieved a unity of the two.

Because humans are a part of nature, human culture is not seen as something separate from nature or unnatural. This was particularly stressed in the first chapter of *The Literary Mind and the Carving of Dragons*. The term for both literature and culture is *wen*. Originally the term meant the pattern a phenomenon makes (e.g., the particular sound a pine makes in the wind, the colors of a tiger, the shapes of a cloud). Human culture – literature and art in particular – is the *wen* of humans. The words written by a poet are essentially no different from the tracks a bird makes in sand. Culture is, thus, natural, but that naturalness is realized only if the person acts as nature does, with spontaneity according to one’s true inner nature rather than based on the desires of the ego-self.

This view gives humans a paradoxical status within nature. We are the only phenomena that fail to exhibit naturalness. However, humans also are given an exalted status within nature, for if an artist creates in a natural way, then the “mind of nature” is revealed and the transformations of nature are brought to “completion.” Thus we have a responsibility to act in a natural way. If we act on the basis of our personal desires or if we delude ourselves into thinking we are separate from nature, then nature’s transformations cannot reach fulfillment and disharmony results.

The notion of nature at work here is different from what we are used to in the West. Although there are numerous different meanings of our word “nature,” two meanings have been particularly influential. One we could call “dualistic”: nature is whatever humans have not created or manipulated. The opposite of this notion of nature would be “culture” or “human,” and a skyscraper or toxic waste would be considered unnatural. The second notion of nature we could call “monistic”: nature is whatever exists in our world. A skyscraper or toxic waste are in this sense natural, and the “natural” sciences can study them. Here the opposite of nature would be the “supernatural.” Chinese aesthetics is based on a third, “adverbial” notion of nature. As in the monistic notion of nature, humans are “essentially” a part of nature. However, existentially humans may act unnaturally if they don’t act spontaneously according to their nature. The opposite of this sense of the natural is the artificial, the forced, and inevitably the disharmonious. Thus human culture may or may not manifest the mind of nature. Essentially humans are natural, but existentially the natural is only a possibility. We must work to realize it.

Japanese Aesthetics

Japanese literary aesthetics are rooted in both Shinto and Buddhism. In Shinto, nature is characterized by places of spiritual power, mystery, and beauty. Moreover, the agricultural year is ritualized according to seasons, with special religious festivals celebrating the particular character of the season. Thus nature has places ritually set-off as divine and also involves a natural process of seasonal change that we are actively enmeshed in.

Buddhism offered a view of nature that emphasized impermanence and interrelationship. All things are transient and unstable, and they are radically interdependent. Reality is “empty” of the permanence and self-subsistent independence we normally associate with it. But as the Heart Sutra states, “emptiness is form and form is emptiness”: the phenomenal world is also ultimate reality, a vast dynamic field of interrelationships. The problem is that our delusion about permanence and discreteness involves a sense of separation from the world and leads to desires and attachments and thus suffering. The ideal is an experience of oneness with the world, a realization of its sacred nature, deep contentment, and a spontaneous way of acting devoid of desires.

The first major statement of Japanese poetics is the introduction to the *Collection of Poems Ancient and Modern* (*Kokinwakshū*, ca. 920). It reflects the sense of intimate connection between humans and nature found in

Shinto and Chinese aesthetics. Poetry is a natural reaction to what is emotionally moving in a particular moment, with nature and love being the two main contexts for deep feeling. To be human is to be moved by nature’s beauty and to express one’s emotions, and thus poetry is as natural as a bird’s song. Artistic expression of emotion arose as a refinement and fulfillment of our natural movements.

A focus on nature, recognition of the transience of all things of beauty, and the ideal of tranquility formed the basis of many Japanese aesthetic ideals. The most fundamental aesthetic idea may be *mono-no-aware*, the “pathos of things.” It involves an exquisite sensitivity to impermanence, whether it is the falling of leaves or one’s own process of aging. A kind of sweet sorrow arises from the simultaneous affirmation of beauty and a recognition of its passing away. Included is a sense of acceptance, resulting in a tranquil sorrow that comes from seeing and conforming to the essential quality of life. Thus *aware* refers to both an objective condition of reality and an emotional state of mind.

Yūgen (“mysterious depth”) is an ideal that was particularly prominent in the medieval period (1186–1603) when aesthetics were particularly influenced by Zen Buddhism. Although *yūgen* was interpreted in various ways over the centuries, it generally refers to the inexhaustible richness of reality that defies human conception. The world has a dimension of mystery that we can only indirectly feel or intuit. Because of this sense of wonder and depth, *yūgen* often is characterized by a feeling of sorrowful, calm yearning for a beauty that cannot be fully grasped. As the poet Fujiwara no Shunzei (1114–1204) stated, a deep intuition into *yūgen* can be attained through *shikan*,

“tranquility and insight,” a Buddhist form of meditation on the vast and ever-changing net of interrelationships that characterize the world. It is suggested in poetry by images that have reverberations of meaning that create an indefinable atmosphere. For Kamo no Cho^{mei} (1155– 1216), the profound subtlety of *yu^{gen}* can be found in an autumn evening when, looking up at a limitless sky empty of color, we are inexplicably moved to tears.

A different type of poetic idea that is relevant to the Japanese view of nature is *hon'i* (“poetic essences”). Plants and animals as well as famous scenes in nature tended to be associated with particular qualities. A tree, a bird, and a particular landscape were thought to have a kind of “true nature” that poets were expected to grasp and then suggest in their poetry. In most cases, these qualities were also linked to particular seasons. The poetic essence of the bird *chidori* (plover), for instance, is melancholy. This correlation stemmed from the sorrowful sound of its call and from being found along the coast, which was considered a place distant from the capital, thus suggesting loneliness. Because of its association with sadness and its tendency to flock during the desolation of winter, it is a “winter” image

(despite being a year-round resident of Japan). While those in the modern West might feel that this aesthetic puts artificial limitations on our responses to nature, to the traditional Japanese it is a way of recognizing the essential nature of things and cultivating a sensitivity that responds to their depth and subtlety.

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Confucianism and Environmental Ethics; Daoism; Japanese Gardens; Japanese Love
of Nature; Rexroth, Kenneth Kawabata; Yasunari.

Aesthetics of Nature and the Sacred

1. Natural Archetypes

Confronting nature one experiences archetypes of the world – sun and sky, wind and rain, rivers and Earth, the everlasting hills, shores, seas, forests and grasslands, the fauna and flora. These represent – more literally represent, present again – the elemental forces of nature. They bear the signature of time and eternity, with an aura of ancient past subliminally there, processes timelessly recurring. A living landscape couples dynamism with antiquity and demands an order of aesthetic interpretation that one is unlikely to find in art and its artifacts.

The phenomenon of forests, for example, is so widespread, persistent, and diverse, spontaneously appearing almost wherever moisture and climatic conditions permit, that forests cannot be accidents or anomalies but rather must be a characteristic expression of the creative process. There is also the steppe and the veldt, the tundra and the sea, and these too have their power to arouse a sense of antiquity and of ongoing life.

Aesthetic experience of nature moves beholders with how the central goods of the biosphere – hydrologic cycles, photosynthesis, soil fertility, food chains, genetic codes, speciation, reproduction, succession – were in place long before humans arrived. Aesthetics is something that goes on in experiences of the human mind, but the dynamics and structures organizing natural history do not come out of the mind. Immersed in a nonhuman frame of reference, subjective though aesthetic experience may be, one makes contact with the natural certainties. At more depth, these are the timeless natural givens that support everything else.

On these scales humans are a late-coming novelty, and yet the only species that can behold and ponder this genesis, and that awareness too is aesthetically demanding. The challenge is to complement the natural dynamics, which have been ongoing over the millennia, with this novel emergent that comes into being when persons arrive, enjoy their unique presence, and search for the significance of life. “I went to the woods,” remarked Thoreau, “because I wished to live deliberately, to front only the essential facts of life, and see if I could not learn what it had to teach, and not, when I came to die, discover that I had not lived” (Thoreau 1966: 61).

No one can live in bare woods alone; civilization too is, for humans, an essential fact of life. The town, however, is not so aboriginally archetypal. Were civilization to collapse, the Earth would revert to wildness, because this is the foundational ground. Such aesthetic power of nature stands in strong contrast to classical experience of art forms, religious though these arts often are. The creations of sculptors, painters, musicians, and craftsmen always betoken civilization. In nature, one is not dealing with art, artifact, artist; one has penetrated to the foundational ground.

In the heavens, there are stars, galaxies, celestial beauties, which are also required (as astronomers have discovered) for the construction of all but the simplest elements, and thus they are required for Earth and life. There are inanimate earthen kinds that nature generates over the epochs: mountains, canyons, rivers, estuaries, also stimulating aesthetically. But the miracle of Earth is that nature decorates this geomorphology with life. There are trees rising toward the sky, birds on the wing and beasts on the run, age after age, impelled by a genetic language two billion years old. There is struggle and adaptive fitness, energy and evolution inventing fertility and prowess. There is succession and speciation, muscle and fat, smell and appetite, law and form, structure and process. There is light and dark, life and death, the mystery of existence.

Once this was Eden with its tree of life, or the shoot growing out of the stump of Jesse, or the cedars of Lebanon clapping their hands in joy; today the experience is more science-based. Some aestheticians caution whether one should require much science here, since being moved by natural beauty is perennial and multi-cultural. Still, when the science is added, the science only intensifies this sense of life's transient beauty sustained over chaos, life persisting in the midst of its perpetual perishing. A visit to these wilds contributes to the human sense of place in space and time, of duration, antiquity, continuity, to the human mystery of being the sole aesthetician in a kaleidoscopic universe. There one encounters "the types and symbols of Eternity" (William Wordsworth in Selincourt 1965: 536).

2. Sublime Nature

Encountering these outdoor archetypes humans reach the sense of the sublime. By contrast, few persons get goose pimples indoors; maybe in church, but infrequently in art museums, in shopping centers, or at the city park. The sublime invokes a category that was, in centuries past, important in aesthetics, but today many think it to have lapsed. Still, although the category is not currently fashionable, the sublime is perennial in encounter with nature because wherever people step to the edge of the familiar, everyday world, they risk encounter with grander, more provocative forces that touch heights and depths beyond normal experience, forces that transcend daily life and which both attract and threaten. Mountains, forests, canyons, seas – these are never very modern or postmodern, or even classical or pre-modern. They explode such categories and move beholders outside culture into fundamental nature.

Almost by definition, the sublime runs off scale. There is vertigo before vastness, magnitude, antiquity, power, elemental forces austere and fierce, enormously more beyond our limits. The forest's roots, its radical origins, plunge down to depths one knows not where. The trees point upward along the mountain slope, which rises to join the sky, and the scene soars off to heights unknown. The frames and pedestals familiar to cultured aesthetic experience are gone. There is no choir, no organist seated at the console, no artist signature at the bottom of the painting, no gardener planting the oncoming season's flowers. One encounters what was aboriginally there in its present incarnation.

In some realms of nature – awe-struck before the midnight sky, or watching a sunset over arctic ice, or deep in the Vishnu schist of the Grand Canyon in the Southwestern United States – beauty and power are yet lifeless. In a forest, however, the sublime and the beautiful are bound up with the struggle for life – windswept bristlecone pines along a ridge in California's Sierra Nevada. The aesthetic challenge is conflict and resolution presented on these awesome scales. In the intensity of this conflict, there can often be religious yearning for life in another world, where the hunger, thirst, death of this one is transcended. But the earthen beauty remains nevertheless. The ancient Hebrews found green pastures in the valley of the shadow of death (Psalm 23). The desert languished, but sooner, later, always, there was rain: "The desert shall rejoice and blossom; like the crocus it shall blossom abundantly" (Isa. 35:1–2).

Clouds, seashores, mountains, forests, even deserts are never ugly; they are only more or less beautiful; the scale runs from zero upward with no negative domain. Destroyed forests can be ugly – a burned, windthrown, or diseased forest. But even the ruined forest, regenerating itself, still has positive aesthetic properties. Trees rise to fill the empty place against the sky. A forest is filled with organisms that are marred and ragged – oaks with broken limbs, a crushed violet, the carcass of an elk. But these are only penultimately ugly; ultimately these are presence and symbol of life forever renewed before the winds that blast it. Consider the "flower of the field; for the wind passes over it, and it is gone, and its place knows it no more" (Ps. 103:15–16). "Consider the lilies of the field, how they grow; . . . I tell you, even Solomon in all his glory was not arrayed like one of these" (Matt. 6:28–29).

Forests are full of shadows, and this is metaphorically as well as literally true. The darkness shadowing life is as much the source of beauty as is light or life. In some moods, nature is ugly, even evil ("fallen"), and the problem of justifying nature's harshness has much troubled religious thought. Still, there are streams in the desert. Light shines in the darkness, and the darkness has not overcome it. Yes, giants have fallen, and rotting logs fill the forest floor. See these cones: there is power in them enough to regenerate the forest for millennia. Put your hand in this humus from which the present forest rises – "the immeasurable height of woods decaying, never to be decayed" (William Wordsworth in Selincourt 1965: 536). The ugliness softens and is reset in somber beauty. When one remembers this regeneration of new life out of old on a scale of centuries and millennia, one knows the sense of the sublime.

3. Sacred Nature

When beauty transforms into the sublime, the aesthetic is elevated into the numinous. “Break forth into singing, O mountains, O forest, and every tree in it!” (Isa. 44:23). “The trees of the Lord are watered abundantly; the cedars of Lebanon which he planted” (Ps. 104:16). “The groves were God’s first temples” (William Cullen Bryant in Frazer 1994: 82–97). The forest is a kind of church. Trees pierce the sky, like cathedral spires. Light filters down, as through stained glass. The forest canopy is lofty, far above our heads. Forests, like sea and sky, invite transcending the human world and experiencing a comprehensive, embracing realm. Encounters with primordial nature often prove more provocative, perennial signs of this than many of the traditional, often outworn, symbols devised by the churches. Life regenerated is out there in nature; on such an Earth we may hope in beauty forever.

Parallel experiences are found in Asian faiths:

As I come along the mountain path, What a heart-warming surprise,
This cluster of dainty violets! (Basho[⁻])

Full moon, and under the trees Patterned shadows – how beautiful
Alongside mine! (Baishitsu)

As with Christian longing for heaven beyond Earth and its struggles, the Asian faiths can also dwell on the *dukkha*, suffering, and unsatisfactoriness of this life, at times casting this aesthetic experience into doubt.

Aestheticians may protest that their experiences need not be religious (as some protested before that these experiences need not be scientific). Nevertheless, the line between aesthetic respect and reverence for nature is often crossed unawares, somewhere in the region of the sublime. Mountaintop experiences, the wind in the pines, a howling storm, a quiet snowfall in wintry woods, solitude in a grove of towering spruce, an overflight of honking geese – these generate “a sense sublime of something far more deeply interfused . . . a motion and spirit that impels . . . and rolls through all things. Therefore I am still a lover of the meadows and the woods, and mountains” (William Wordsworth in Selincourt 1965: 105). John Muir exclaimed, “The clearest way into the Universe is through a forest wilderness” (in Wolfe 1938: 313).

Science secularizes nature, although historians will notice that Christian monotheism had already disenchanted nature. That might be thought to make secular nature less provocative of religious experience. But primordial nature has proved strangely resistant to being secularized in the etymological sense of that term, being reduced to “this present age” (Latin *saeculum*), or reduced to the merely “profane” (common, ordinary) either. Some features of nature mechanize well (planets in orbit; tectonic plates). But elsewhere there is too much that is organic, or, better, too much that is vital, or, better still, too much that is valuable.

When value is discovered there, as with the forest as spontaneously self-organizing, as generator of life, not merely as resource, but as Source of being, the forest starts to become a sacrament of something beyond, something ultimate in, with, and under

these cathedral groves. Vital nature has a way of spontaneously reenchanting itself – a vast scene of sprouting, budding, leafing out, flowering, fruiting, passing away, passing life on. Forests are not haunted, but that does not mean that there is nothing haunting about forests. Perhaps the supernatural is gone, but here the natural can be supercharged with mystery. Science removes the little mysteries (how acorns make oaks which make acorns) to replace them with bigger ones (how the acorn-oak-acorn loop got established in the first place). Thanks to the biochemists, molecular biologists, geneticists, botanists, and ecologists, modern beholders know about how this green world works. But is this an account that demystifies what is going on?

Moses thought that the burning bush, not consumed, was quite a miracle. Modern naturalists hardly believe any more in that sort of supernatural miracle; science has made such stories incredible. What has it left instead? A self-organizing photosynthesis driving a life synthesis that has burned for millennia, life as a strange fire that outlasts the sticks that feed it. This is rather spirited behavior on the part of secular matter, “spirited” in the animated, root sense of a “breath” or “wind” that energizes this mysterious, vital metabolism. The bushes in the Sinai desert, the cedars of Lebanon – all such woody flora are hardly phenomena less marvelous even if one no longer wants to say that this is miraculous.

Indeed, in the original sense of “miracle” – a wondrous event, without regard to the question whether natural or supernatural – the phenomenon of photosynthesis with the continuing floral life it supports is the secular equivalent of the burning bush. The bush that Moses watched was an individual in a species line that had perpetuated itself for millennia, coping by the coding in its DNA, fueled by the sun, using cytochrome *c* molecules several billion years old, and surviving without being consumed.

To go back to the miracle that Moses saw, a bush that burned briefly without being consumed, would be to return to something several orders of magnitude less spectacular.

The current account from science is a naturalistic account, but this nature is quite spectacular stuff. The forest wilderness, Muir insisted, is a window into the universe. Science traces out some causes, which disappear rearward in deep time, and carry on a continuing genesis, and leave the beholder stuttering for meanings. The forest remains a kind of wonderland, a land that provokes wonder. The empirical phenomena about which there is absolutely no doubt need more explanation than the secular categories seem able to give.

Loren Eiseley, surveying evolutionary history, exclaims, “Nature itself is one vast miracle transcending the reality of night and nothingness” (1960: 71). Ernst Mayr, one of the most celebrated living biologists, impressed by the creativity in natural history, says, “Virtually all biologists are religious, in the deeper sense of this word, even though it may be a religion without revelation . . . The unknown and maybe unknowable instills in us a sense of humility and awe” (Mayr 1982: 81). The sublime is never really far from the religious. If anything at all on Earth is sacred, it must

be this enthralling creativity that characterizes our home planet. Here an appropriate aesthetics becomes spiritually demanding.

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See also: Aesthetics and Nature in China and Japan; Jung, Carl Gustav.

African Earthkeeping Churches – Association of (Zimbabwe)

During his study of religious factors in Zimbabwe's political liberation struggle (*chimurenga*), Professor M.L. Daneel became aware of a widespread need in African grassroots society in the Masvingo Province for effective engagement in the preservation of a fast deteriorating environment. After initial discussions with rural traditionalists and Christians it was decided to engage in a new liberation struggle, this time on behalf of God's creation. Thus the "war of the trees" was declared; a war which targeted three environmental concerns: tree planting, wildlife conservation, and the protection of water resources; a war, moreover, which was to draw on similar sources of religious inspiration, as did the preIndependence *chimurenga*.

The "green army" of earthkeepers which came into being was composed of two sister organizations: AZTREC, the "Association of Zimbabwean Traditionalist Ecologists," and the AAEC, "Association of African Earthkeeping Churches." The former comprises traditionalist chiefs, clan elders, and spirit mediums who engage in environmental reform at the behest of the senior guardian ancestors of the land (*varidzi venyika*) and the oracular high-god cult at the Matopo hills. The latter is made up of some 150 to 180 African Initiated Churches (AICs), mainly of the prophetic or pentecostal type (i.e., Zionists and Apostles) that represent an estimated total of two million adherents throughout Zimbabwe.

Together the two sister organizations belong to a financially and tactically empowering agency called ZIRRCON (Zimbabwean Institute of Religious Research and Ecological Conservation) – an expanded version of Professor Daneel's original empirical research unit. This body today represents the largest NGO for environmental reform at the rural grassroots of Zimbabwe. Some eight million trees have already been planted in several thousand woodlots since the inception of the movement in the period 1986 to 1988. Twelve main nurseries in various districts of the Masvingo Province each cultivate between 50,000 and 100,000 seedlings annually. Through AZTREC and the AAEC peasant communities are mobilized on a massive scale to establish their own woodlots near stable water points. Satellite nurseries for seedlings are also developed by women's clubs, youth groups at schools, and AIC theological training centers. A great variety of trees are planted for commercial, religious, aesthetic, and ecologically-protective purposes. ZIRRCON and its sister organizations cultivate larger numbers of indigenous tree seedlings than any other institute in Zimbabwe.

The main “weapon” used by the AAEC in its quest for a liberated, rejuvenated creation is a eucharist of tree planting, popularly and aptly referred to by AIC participants as the *maporesanyika* (i.e., “Earth-healing”) ceremony. As a thoroughly contextualized sacrament in the African context, this ceremony represents a compelling challenge to African churches and the world Church, as regards Christian stewardship in creation.

The ceremony is always ecumenical in nature. Green fighters of numerous churches attend to provide momentum from a united platform. In addition, a contingent of traditionalist AZTREC members are invited to participate, in recognition of religious pluriformity in the struggle, as well as the concern for all of life, the entire Earth community. The liturgical sequence of the eucharist starts with the digging of holes and related preparations (e.g., fencing in the new woodlot, called “the Lord’s Acre”). The preparation of the Holy Communion table, with tree seedlings and sacramental elements standing side by side, is followed by song and dance in celebration of the renewal of God’s Earth. Leading AIC earthkeepers preach rousing sermons, the contents of which profile the emergence of an intuitive grassroots theology of the environment.

The sacrament itself is introduced by public confessions of ecological sins, such as random tree felling, causing soil erosion through riverbank cultivation and the use of sledges, etc., under the guidance of Spirit-filled prophets. Communicants then proceed to the communion table, seedling in hand, as if to draw creation symbolically into the inner circle of Christ, the Redeemer of all creation. As they move from the communion table to “the Lord’s Acre” the communicants further enact the ritual incorporation of Earth community in sacramental celebration by addressing the seedlings to be planted, as follows:

You, tree, my brother . . . my sister Today I plant you in this soil
I shall give water for your growth

Have good roots to keep the soil from eroding Have many branches and leaves so
that we can sit in your shade breathe fresh air and find firewood.

Personalizing humans’ relations with nature in this manner fosters new attitudes of respect for the inanimate members of Earth-community and promotes sound after-care of the trees planted. In conclusion, a healing ceremony for afflicted earthkeepers is performed with laying-on of hands, sprinkling of holy water, and prayers to the tune of rhythmic dance and song. Thus the treeplanting sacrament integrates the healing of Earth and humans as witness of Christ’s good news to the world.

The AAEC’s tree-planting eucharist represents ecclesiological reorientation and change. Through repeated implementation of this sacrament the Church’s mission obtains a more comprehensive liberationist and ecological thrust. Whereas the Zionists and Apostles have always used the annual *Paschal* celebrations with their climactic eucharistic ceremonies as “launching pads” for wideranging missionary campaigns, the earthkeeping eucharist itself, in this instance, becomes the witnessing event, the proclamation of good news to all creation. It is enacted in nature and in the presence of non-Christian fellow fighters

(of AZTREC) in “the war of the trees.” The implication here is not that the classical mission mandate of Matthew 28:19, with its call for repentance, conversion, human salvation, and church formation is overridden. But mission in this context derives from and reenacts the healing ministry of Christ. It relates to the believer’s stewardship in service of all creation, as required in the Genesis story, and is strengthened by faith in Christ “in whom all things hang together” (Col. 1:17).

During a tree-planting eucharist Bishop Wapendama, leader of the “Signs of the Apostles Church,” preached about the church’s environmental mission as follows:

We are now deliverers of the stricken land . . . Deliverance, God says, lies in the trees. The task that Jesus has left us is the one of healing. We, the followers of Jesus have to continue with his healing ministry . . . So, let us all fight, clothing, healing the Earth with trees! It is our task to strengthen this mission with our [large] numbers of people. If all of us work with enthusiasm, we shall heal and clothe the entire land (Wapendama sermon, Signs of the Apostles Church headquarters in Masvingo district, November 1991).

In his call for engagement in the earthkeeping mission, Wapendama shows awareness of the fact that God is the one who initiates deliverance and restoration of the ravaged Earth. But he emphasizes that the responsibility to deliver the stricken Earth here and now lies with the Christian body of believers (i.e., the Church). Wapendama’s insights also reflect the understanding of African earthkeeping Christians that the Church’s mission involves much more than mere soul-saving. Through their Earthcare commitments they share a vision similar to the one held by Bishop Anastasios of Androussa, that “the whole world, not only humankind but the entire universe, has been called to share in the restoration that was accomplished by the redeeming work of Christ” (Androussa in Messer 1992: 69–70).

How then does the “green mission” affect the life and shape of an earthkeeping church? First, there is a noticeable shift of the healing focus at AIC church headquarters. The black “Jeruselems” of Zion are still healing colonies where the afflicted, the marginalized, and the poor can feel at home. But the concept *hospitara* now includes the connotation of “environmental hospital” to care for the wounded Earth. The “patient” is the denuded land; the “dispensary” becomes the nursery with its assortment of medicines (i.e., exotic, indigenous, and fruit-tree seedlings); and the entire church community becomes the healing agent under the guidance of the church’s principal Earth-healer. Second, in the context of the AAEC a new generation of iconic church leaders is emerging. They replace the first-generation icons, such as Bishop Mutendi of the Zion Christian Church and Prophet Johane Maranke of the *vaPostori* who featured as “black Messiahs” to their followers. Now, instead of a single leader mirroring the presence of the biblical Messiah in Africa’s rural society, the mode of operation is shifted to an entire group of “Jeruselems” enacting and proclaiming the grace and salvation implicit in Christ’s presence in the Creator’s neglected and abused world. Thereby the entire *oikos* is declared God’s “holy city.” Third, the AAEC’s afforestation programs have stimulated a need for the formulation and implementation of new

ethical codes. Leading earthkeepers increasingly insist that the Church is an institution with legislative and disciplinary powers, the vehicle of uncompromising struggle as it discerns and opposes evil forces that feed on mindless exploitation of the limited resources of the Earth. In this mission the militant Church is at risk, prepared to be controversial, to suffer and sacrifice whatever discipleship in this realm requires.

The AAEC's message of and struggle for liberation is holistic in nature. By virtually standing in embrace with trees at the communion table the earthkeeping communicants acknowledge Christ's Lordship over all the Earth (Matt. 28:18). In this demonstration of respect to all "members" of Earth community the AICs substitute exploitive perceptions of human dominion over nature with a service of humble stewardship. At the same time this form of Earth-care underscores the empowerment of poor and marginalized people to make a contribution of such significance that it captures, for once, the imagination of the nation, the recognition of the government. It incorporates quality of being for the earthkeepers, their liberation from obscurity in remote rural areas of Zimbabwe, their overcoming of marginality and futility as news media repeatedly report on their work, and their liberation from the hopelessness of poverty as salaried nursery keepers and office workers; budding woodlots and smallscale income-generating projects at least revive some hope for a better future. Hence, the dehumanizing shackles of decades of colonial rule and the desecration of nature, caused largely by disproportionate land apportionment, are both shaken off in the quest for salvific healing for all life on Earth.

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See also: African Independent Churches (South Africa); Masowe Wilderness Apostles; Zion Christian Church (South Africa).

African Independent Churches (South Africa)

The multitude and variety of churches that have arisen since the advent of Christianity in South Africa are commonly referred to in literature as African Independent Churches (AIC). Political correctness insists on the substitution of “indigenous” or “initiated” for “independent,” since the carving out of independence would imply an original dependence on missionary Christianity, whose parental claims might still be exercised. Neither one of the alternatives is, however, historically accurate. Whatever the label, an AIC more neutrally describes a religious association, exclusively African in membership, that is free from white administration and tutelage. First appearing at the close of the nineteenth century, these churches have historical roots that can be traced to developments early in the century, when white expansion northward from the Cape Colony began to overwhelm with its superior technology predominantly pastoral societies, turning them into vassals deprived of their land. Foremost in African experience of this invasion were the inroads of foreign missionary societies into indigenous culture and religious beliefs. It was in the gradual conversion of these societies into a Christian proletariat that the seeds of religious independence were planted.

The AICs in South Africa took two divergent forms arising from different sets of circumstances in the experience of the colonized: missionary discrimination and the repression of workers. The discriminatory practices of the missionaries produced churches called Ethiopian, the first of their kind appearing in 1892. Although they preached a Christian creed of egalitarianism, the missionaries were reluctant to promote black pastors to positions of responsibility and refused to interact with them as equals. The educated lower clergy eventually rebelled by establishing separate African churches in Johannesburg that were free from white control, but in all other respects were replicas of the parent bodies. Ethiopia was chosen as a rallying point because it was the biblical prototype of Africa and because contemporary Ethiopia embodied the ideal of political independence. In 1904, the first charismatic Zionist Church appeared among exploited farm workers in a remote rural area. As a response to conditions of near enslavement, the workers adopted a Pentecostal strain, imported from working-class America by a white missionary, which empowered them with the Holy Spirit to provide a novel form of healing that was neither scientific nor African.

Since the beginning of the twentieth century, the AICs have grown phenomenally and have spread geographically throughout southern Africa, following the migrant

routes from the South African mines to present-day Zimbabwe, Zambia, Malawi and Congo. Within South Africa alone, according to the official enumeration in 1990, AIC members constitute 30 percent of the total African population. Since they are most numerous in northeastern South Africa and heavily concentrated in the densely populated urban areas around Johannesburg and Durban, their proportional representation in these cities is in the region of 40 percent or beyond. There is an unmistakable correlation between AIC expansion and the transformation of rural migrants into a settled urban population. Although no exact figures are available, there is every indication that this development has favored the growth of Zionist rather than Ethiopian churches.

While retaining the doctrine and organization of their missionary forebears, the “Ethiopians” strive to project an image of Christian autonomy under black leadership. Typically, the ministry is moderately educated with some scriptural training, often by correspondence and ironically from Bible colleges established by the churches from which they originally seceded. Once strongly committed to African emancipation through alignment with nationalist movements, “Ethiopians” are now politically quiescent, respectable Christians with middle-class aspirations. They have not attracted much in the way of recent scholarly attention, but the available evidence suggests that they are in decline, with nothing distinctive to offer and unable to recruit replacements for their largely aging membership. A few of their leaders have achieved some prominence by claiming to be spokesmen for AICs in general, but without the support of the Zionist majority.

There are several thousand Zionist churches in existence at any time, some expanding while others decline, and new ones arising at a rate faster than those dying out. Nobody can claim to speak for Zionists in general because, lacking a semblance of central organization or an agreed canon of orthodoxy, they are characterized by wide variation of belief and by obsessive disunity. Many retain a sense of authenticity and orthodoxy by tracing historical links to the first Zionist foundation and by preserving certain tenets of the early founders. These groups take pride in calling themselves “Christian” Zionists and distance themselves from “new” Zionists, whose pretensions they disparage. “New” Zionists, some old in years of existence, are undoubtedly in the majority, if only because anyone inspired by a spiritual vision and prophetic message can set up a church and woo followers by borrowing selected elements of Zionism, mixing them with features of African religion and reconstructing these to fit the founder’s own esoteric design. Still other charismatic churches are not Zionist in any sense. Also of prophetic origin, these churches are attempts to adapt traditional religion to modern needs and are often led by several generations of a particular family. Some – for example the Zion Christian Church near Pietersburg, under the leadership of Lekyanyane, and the Nazareth Baptist Church outside of Durban, identified with Shembe – are spectacularly large, even though both churches exaggerate the size of their followings. Most Zionist churches are of very modest size because of an inherent tendency to segment and subdivide, to which even the large “traditionals” are not entirely immune.

While the range of differences expressed in Zionism defies generalization, some salient features may be singled out for comment, predominantly in connection with “Christian” Zionists. Most Zionist churches seek to ameliorate/alleviate the condition of the poor, with varying success. The two main strategies are economic uplift and healing. The first is an economic package blending a disciplined way of life, sobriety, abstemiousness, hard work, saving and mutual support. The maintenance of discipline is entrusted to a preaching hierarchy of preacher, who preaches to a local congregation and may recruit converts; an evangelist, who in addition to preaching has the right to baptize and process entry into full membership; a minister who has charge of one or more congregations; and a bishop, who oversees several ministers. These positions can be embellished at will by the addition of contingent offices. The preaching function draws on the Bible as a source of moral precept and exemplary precedent. At the “Christian” end of the Zionist spectrum, the preaching ranks are monopolized by married men; “newer” Zionists admit women to the ministry and there are even female bishops. The ministry, however, is unspecialized. Unwaged and without formal training, incumbents must work for a living and, since leaders are seldom more than barely literate, education is not a qualification for office. Apart from founding a church of one’s own, entitlement to office rests upon experience, endurance and an ability to recruit followers.

Healing draws on a different kind of expertise, that of the prophet; and here the difference between “Christian” and “new” becomes more manifest. Later strains of Zionism restored ancestors to their healing role, commonly in some form of partnership with the Holy Spirit, and prophets in their healing work derived their insights into the nature of illness and remedy from these twin sources. With this goes a marked tendency for prophetic healing to become the dominant or sole concern of these

“newer” churches, to the virtual exclusion of Biblecentered preaching. Prophet leadership then becomes the norm, with corresponding female ascendancy. The more conservative “Christian” Zionists recognize both male and female prophets, but male prophets are given a better hearing and all prophets are subordinate to the male preaching hierarchy. Healing power and prophetic insight are derived from the Holy Spirit alone and healing power is not divorced from preaching. Preachers are charged with drawing on the Bible to stir up the enthusiasm of the congregation and arouse the Holy Spirit among them, in such a way as to build up a wave of spiritual power that can be used by the prophet to heal the sick. A major concern is to alleviate the damage done to individuals by sorcery and to equip them with symbolic protective devices suffused with the power of communal prayer.

Zionists eschew the pharmacopoeia of traditional African healing specialists, who rely on potions and powders made from plant and animal ingredients, while equally rejecting the medicines available at modern pharmacies and other commercial outlets. Christian Zionists in particular rely almost exclusively on the healing properties of water, often fortified with the impress of a communal blessing. Water is ritually employed to regenerate, to renew and to purify in the motions both of external washing and of in-

ternal purging. The first major washing that a Zionist undergoes is that of baptism by triune immersion, ideally in ocean breakers or in a strong river current, performed by a minister or evangelist in the name of the Christian trinity. On numerous subsequent occasions during their lifetime, Zionists submit to repeated dunking by a prophet, invoking the Holy Spirit, for purposes of purification and renewal. The point about these exercises is that the water should be in motion, turbulent or surging, and charged with natural energy; an indication that the Spirit is active in these events. Less orthodox Zionists may credit ancestors with secondary influence on such occasions. All Zionists have recourse to water as an emetic and as a purgative to expel evil from a body in distress, for sorcery is manifest in its corporeal effects. Saltwater, to which a blessing is imparted, is used for this purpose, often with the addition of ashes. Zionist healers who lapse into the usage of traditional medicines are quietly cut off from Christian fellowship. The other natural agent in Zionist healing is wood. The staff that each Zionist carries is cut from trees growing close to water and is a conductor of personal spiritual vitality and healing power. The staff is explicitly referred to as a “weapon,” to be used in the unremitting battle with sorcery.

The Zionist AICs are churches of the poor and uneducated, seeking to meet the needs of the hard-pressed, for whom the primary appeal is the healing service. The attraction is greater for women, who outnumber men among members by at least two to one. They gain not only from healing attention and communal support, but also from marriage to a disciplined frugal breadwinner or, failing that, the possibility of converting a spouse into a reliable Zionist provider. Zionism, therefore, values and promotes the stability of the family unit in an urban environment not conducive to it, and it rewards good family men with status and office. The insistence on monogamous marriage and on premarital sexual abstinence, however much some individuals may succeed in slipping its constraints, means that Zionists are particularly well placed to survive the worst of the rampant AIDS epidemic. In general, Zionists do not confront AIDS as such. In common with many other Africans, they are prone to consider any such insidious wasting disease to be the outcome of sorcery, a malady that is mystically transmitted by malicious others, and to be treated on those terms. Should a church member contract the disease, he or she is assured of the compassionate support of a small caring community and will not be abandoned. Where Zionists really hold the advantage over AIDS is in their preventative measures, derived from their overall morally driven restrictive pattern of living. Their closed disciplined communities, within which faithfulness to a single marriage partner is enjoined and premarital sexual activity is proscribed, are consciously maintained to exclude spiritual contamination, but have the unintended consequence of erecting a *cordon sanitaire* against sexually transmitted diseases. While some of the youth may rebel against the restrictions and take their chances outside the fold, the majority who remain within are morally armed against the epidemic.

Economically, morally and therapeutically, for men and women alike, Zionist churches provide havens of safety and order in the perceived chaos of urban society.

Set apart by their chosen lifestyle, Zionists are separated from normal patterns of association and, accordingly, behave as isolates in the workplace and other public spaces. Part of their refusal to participate fully in relations with outsiders, with whom they have little in common, is their consistent avoidance of any political activity. This apolitical stance did not endear them to the activists of the liberation struggle and it left them doubly exposed to the bitter street fighting between rival contenders for power in the preelection period. Paradoxically, it ultimately earned them a kind of political respectability, as party leaders went in search of votes among this very large constituency.

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See also: African Earthkeeping Churches – Association of (Zimbabwe); Church of Nazareth, KwaZulu-Natal (South Africa); Masowe Wilderness Apostles.

African Religions and Nature Conservation

Religions originating in Africa traditionally held an integrated cosmogony between the gods and nature. Indeed, although most African Traditional Religion(s) contain various aetiologies (the investigation in philosophical terms of causes and origins), the notion of a disjunction between the spiritual life and nature is entirely antithetical to African thought. While wariness of generalizations and parodying is important, it is nevertheless the case that it was with the advent of colonialism, and the concurrent importation of religions from outside the continent, that a breach between religion and nature first crept, then sped, and finally hurtled, into Africa. Traditionally, Africans, especially outside of the cities, were conscious of their natural environment. Nature conservation thus found its “natural” home in the beliefs and practices of African Religions.

Many African Traditional Religions (ATRs) contain myths about the creation of the world, and in most there is a belief in a creator God/god or gods. Such stories serve to explain why societies are the way they are; why the world around looks and functions the way it does; and often give an acknowledgement of the presence of good and evil. Almost without exception nature provides the centerpiece for such stories. Traditionally, the gods are all around: present in the nature of which people are a part. Therefore to respect the spiritual is to respect nature. The converse is equally true. The rape of the land is traditionally seen as a violation of the spirit world, and only to be undertaken at peril.

The inseparable link between religion and nature pervades traditional African religious life, and is therefore important in conservation. Where there are rivers we often find a god described in terms of water. Spiritual beliefs and practices thereby reflect the close link with water. Rain is vital and valued in all African societies, and occasionally the gods share the same name as, or cognate derivatives of, water itself. Thus the Didinga name for God is *Tamukujen*, and for rain *tamu*. Likewise, the Idowu use *Owo*, and the Maasai *En-kai*, for both God and rain. Sometimes rain is personified as a divinity or deity, for example, among the Elgeyo, Igbo, Suk, and Tonga peoples. Sometimes, as in the Akamba and the Tiv peoples, rain is seen as God’s saliva. All over Africa God is seen as rain giver, and everywhere there are thus rain makers. Bodies of water such as rivers, lakes, streams, and waterfalls are often associated with major deities or spirits and are thus held in great respect and revered. A good example of this is the famous Mami Water (Mother of Water) of West Africa.

For some peoples, such as the Lugbara and Langi, rocks are a manifestation of God. The Luvedu claim that God left his footprints on certain rocks that are still soft and visible. For the Akamba the first people came out of a rock that can still be seen today. Where the sky is readily visible, the gods may be described by celestial objects. The same is true of mountains, forests, plains, and rocks: examples of this may be seen among the Banyarwanda, Bari, Bavenda, Ingassana, Madi, and Sonjo. Sometimes God is described in terms of pastoralists, other times of cultivators. For example, for the Batammaliba of Togo and Benin, Kuiye is the God who lives in the mountains and savannah: a religious reflection of the immediate surrounding environment. Thus for the Ngombe peoples the dense rainforest is associated with God, and his name means “the everlasting One of the forest” or “the One who clears the forest” or “the One who began the forest.” Words associated with the gods thus reflect this link with nature. The creator God is variously described as “He of the big rainbow” (*Chiuta*); “Of the Water” (*Chisumphu*); “Of the Sky” (*Mulungu*). For the Galla of Ethiopia the sun is God’s eye; whilst for the Balese the sun is God’s right eye and the moon his left. Amongst the Ila of Zambia the sun signifies God’s eternity; and for the Fon of Ghana the moon has special significance in their rituals – and babies are brought out to be bathed in its light.

Thunder is likewise something spiritual: usually it is heard as God’s voice. For some, such as the Zulu and Gikuyu, it is the movement of God. For the Yoruba and Tiv it is an expression of God’s anger. Among the Banunu, Bateke, Batende, and Basengoli of the Congo thunder is traditionally seen as a fight between the sky giants. Amongst the Akan of Ghana, thunderbolts are God’s axes; but in many other ATRs the storms are governed by deities of the sky rather than the so-called high-God. Lightning is similarly spectacular in much of Africa. For the Gikuyu it is God’s weapon for clearing the way when moving from one sacred place to another. For many African peoples, lightning is a form of punishment.

Thus sacred sites, whether of water, rocks, trees, or mountains, exist in many African societies. This provides a natural cradle for conservation. Nature is both respected and revered. But this is not to say that Africans traditionally view the relationship between life and nature as perfect: far from it. Almost all understand the world around them to be disordered in some way. Nature is by no means perfect. Signs of slippage and decay are all around. One of the most common myths, with slight regional variations, describes the separation of Earth and sky. In the beginning, the sky and the Earth were close together, and people went back and forth to the sky by means of a rope ladder. When people died, the creator God brought them back to life again. In those times a woman needed to pound only one kernel of corn in her mortar to feed everyone. But once, a newly married woman, in a moment of impulsive greed, put more than a single kernel of corn into her mortar so that she could make more than the normal quantity of flour. Because of the extra corn in the mortar she had to lift her pestle higher to pound the extra corn. As she raised her pestle higher she hit God in the sky. God became angry and said, “Before you were always satisfied with a little food, but

from now on you will always know hunger, even if you cultivate a great deal.” Then a sparrow flew by and cut the rope, and later a man died. People grieved because they had never before known a person to die, so they threw ashes on themselves as a sign of mourning.

There are many other similar myths that describe a state of disorder in the natural world. In all cases, however, it is important to remember that humans are seen as a part of nature, and also, therefore, as part of the disorder. ATRs do not place humans on a particular pedestal. Rather, spiritual well-being depends on a harmonic relationship with the gods and with the environment. Life is a unity, a web of relationships extending outwards with all that is around: humans, flora, fauna, and gods. Indeed, even to separate those terms, as if distinct categories, is to miss the point that in African religious life everything is interconnected. As such, if one part suffers, all do. South Africa’s independence movement leader, Archbishop Desmond Tutu, had a famous aphorism that African epistemology may be summarized as “I think, therefore we are” and is not to be limited to *Homo sapiens*, but applies to the entirety of nature.

Neither, therefore, are such beliefs in the origin of life and the place of the gods to be confined to the past. Indeed, their importance lies in their presence in everyday life. The stories live on, in part because they provide explanations for the current relationship between African religions and nature. In all these cases the essential element is the requirement to remain in harmony with nature and the spirits. There is no place here for a naive liberal hermeneutic, however. Africans kill animals as much in their everyday life for food as they do in their traditional rituals. But in traditional thought such actions were always characterized by mutual respect between human being and environment, by a deep sense of one’s own fragility, and by thanksgiving. Not only do Africans traditionally live in the present, but there is also an awareness that today’s hunter may become tomorrow’s prey. In the cycle of life nothing can be taken for granted, and every day is a day more than might be expected.

Many taboos exist in order to preserve this delicate balance between humans and nature: a balance believed to be in the hands of the gods and departed spirits who, therefore, need to be placated. In the Bandundu region of the Congo the spirits require a day of rest every fourth day, known as *Mpika*. No hunting is allowed on *Mpika* for it gives the forest a rest, allows animals a chance to hide, and acknowledges the dependence of all human beings on the gods for material well-being. A similar notion can be found in many African societies. Another example can be seen among Ghanaian fishermen who must also rest every fourth day to allow the sea a chance to rest alike. To break such a taboo would be to incur the wrath of the sea-god. In this we also find an example of the deep respect for the hunter’s prey. Nothing is taken for granted in the link with nature. To catch and kill, just as to cultivate, traditionally requires skill, cunning, and the blessing of the gods.

Taboos that have been generated by folkloric myths about animals have also in the past helped to preserve them. For example, there have been long-held taboos against the killing of bonobos. The Mondangu people of Wamba in the Democratic Republic

of the Congo have a story that humans and bonobos once lived alongside each other in the forest, with both species going about their daily lives naked. Cloth was introduced into the village one day, but no bonobo was present. Consequently, the cloth was divided among those there. When the bonobo returned he asked for a piece of the cloth but there was none left. The bonobo sped off into the forest shouting that he hadn't wanted to live in the village anyway, nor wear the cloth. But such stories of the "brotherly" heritage humans and bonobos share have been discounted as antiquated by many people, and the hunting of bonobos in this area has increased drastically over the last twenty years.

This breaking-down of taboos can be seen throughout Africa. Whilst there are complex reasons for taboo alteration, at least part of the reason for it can be attributed to the increasing loss of control Africans have over their environment. With the crippling dependency of African nations on other countries, natural conservation practices were at first marginalized, and then frequently discarded. The economic and population pressures facing most African countries severely limit the choice over which animal to hunt, or not to hunt. Without natural resources to turn to, there is little room for taboos to restrict killing, let alone for nature conservation.

Nowhere is the breaking of the link between religion and nature in traditional African life seen more than in the sense of place. Prior to the arrival of colonialists Africans saw themselves more as lodgers in the land than possessors. The notion of owning land was felt to run counter to the delicate balance between humans and the environment which pervades ATRs. How, after all, can one "own" nature? In this traditionally held cosmogony, nature is seen as humanity's neighbor, and the spirit world as its custodian who must be placated. But the God of Christianity and Islam who was brought to Africa by outsiders was theologically a God who was distinct from nature. Notwithstanding the desire of some African theologians to demonstrate monotheism retrospectively, the God brought by missionaries was, in some important respects, the opposite of the deities of ATRs: and it does traditional African beliefs an ill-service to pretend otherwise. For, although it is true that the creator God of many ATRs is distant and remote, less accessible than the spirits and intermediaries, nevertheless this God is still connected with the natural world – be it the sky, the fields, the forest, or the water. The God of Christianity and Islam imported to Africa was, crucially, ontologically different from the created order. The latent dualism of the Fall-redemption model inherent in both Western Christianity and Islam was alien to Africa. In ATRs the creator God is connected with, and a part of, the natural order. It is highly significant that the doctrine of *creatio ex nihilo* is absent from ATRs. In this sense God unconnected from the natural world is inconceivable. The implications for nature conservation in Africa have been marked. In much Christian theology, humans are seen as the custodian of the animal kingdom, which is a far cry from the "within nature" perspective of ATRs. Animals are no longer to be admired or, when hunted, revered and thanked, but clinically killed, processed and sold in a never-ending conveyor belt of consumerism.

Alongside the arrival of the imported religions came the now-relentless assault of modernity. In addition, the Christianity brought to the continent by missionaries came hand in glove with Western medicine and Western progress. Rather than a holistic view of human nature came an allopathic approach. The traditional African belief of an inextricable link between religion and nature now teeters on the verge of collapse. African Traditional Religions, once the bedrock of nature conservation, hewn out from the surrounds over hundreds of years, are undergoing dynamic, and occasionally terminal, change.

There is a bitter irony in that “nature conservation” is much promoted in the West when the main culprit of the depletion of the rainforests is unequivocally Western logging and mining companies. These mainly French, British and German companies, having exhausted the more accessible forests of Africa, now turn upon the remote regions of Central Africa to pillage the timber, making great gashes through the virgin forests, opening them up to wide-scale hunting. Consequently the bushmeat trade is booming. For example, by 1986, 80 percent of the rainforests of the Ivory Coast had been decimated by logging. African traditional beliefs and practices are no match for multinational companies in terms of power and influence.

In face of the onslaught, there seems little choice but to jump on the bandwagon and embrace commercialization. The lure of the lifestyle of the West, and its portrayal on television, has also taken its toll on religious beliefs and practices, which in turn has had consequences for attitudes to nature. There is such an imbalance in material wealth between the West and Africa that many Africans have been lured into assimilating Western values for their own. Traditional religious values replaced with Western values include new belief systems and ways of dealing with nature. In countries from the Democratic Republic of the Congo to Liberia, hunting parties en masse are ransacking the forests of their animals, with no animal safe from the droves into trade or medicine. This has led to the phenomenon of so-called “silent forests,” where trees may be increasingly protected from the chainsaw but the forests are emptied of their fauna. Although Westernization can be partly attributable as a cause, the growing numbers of people are having an impact on wildlife, as is the opening of roads for logging and the huge monetary rewards people have found in the medicinal trade. The results for nature conservation on the continent are potentially catastrophic.

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See also: Kaphirintiwa – The Place of Creation (Central Africa)

Afrikaner Theology

In 1652, Dutch, German, and French colonists began arriving at the Cape of Good Hope to find a new place for themselves under the African sun. In the words of Afrikaans lyricist Johannes Kerkorrel: they came to ask for food and water and stayed for so much more. These groups of colonists later blended into the Afrikaner people, with its own history, language (Afrikaans), internal tensions, cultures and subcultures. The history of the Afrikaner people is filled with ambiguities. It is inseparable from the legacy of colonialism and slavery. As elsewhere in the world, European colonists subjugated the indigenous peoples with military and economic power. They conquered the land with determination, sweat, tears, blood and a Calvinist sense of calling. And then they fell in love with the land. Traditionally, Afrikaner people have a deep sense of rootedness in the land. Many Afrikaners are able to trace their ancestors back for up to twelve generations. Afrikaans poets such as Leipoldt and Boerneef express a deep love for the land in beautiful and humorous nature poetry.

After 1806, the colonial conquests of the Afrikaner people were overshadowed by those of the British. This led to a quest for political independence and further colonial conquests. The evils of British imperialism blinded most Afrikaner people to the evils of their own colonial conquests. The “Great Trek” of 1832, the formation of two Boer republics, the discovery of diamonds and gold and the Anglo-Boer war (1899–1902) followed. Together with the rise of Afrikaner nationalism, the apartheid era (1948–1994) represents a brief but tragic episode when Afrikaners managed to exercise political power yet again. The notion of “Afrikaners” is a highly contested one.

It is not necessarily the preferred self-description of all Afrikaans-speaking people of European descent. This category would also have to include many Afrikaansspeaking “colored” people who trace their complex biological and historical roots to the indigenous Khoi and San, Malay slaves, European colonists and Nguni tribes. The term “Afrikaner” is often used in a narrower sense to refer to those who maintain Afrikaner nationalist sentiments, or even more narrowly, to those who strive for political independence. It will be used here, somewhat imprecisely, in a broader sense (i.e., to refer to all people who were classified as “white” under apartheid rule and whose home language is Afrikaans).

Most Afrikaners belong to, or used to belong to, reformed churches of Dutch origin. The notion of “Afrikaner theology” is more complex though. In an important article on “The Roots and Fruits of Afrikaner Civil Religion,” David Bosch identified three dominant influences on the religious beliefs of Afrikaners. This includes the staunch Dutch Calvinism of Abraham Kuyper (who asserted that every inch of society must come

under God's reign), the deep pietism of Scottish and Dutch evangelicalism, and neo-Fichtean romantic nationalism. These streams were blended into what Bosch labeled "Afrikaner civil religion."

Afrikaner theology should not be equated with apartheid theology that emerged in the 1930s in an attempt to legitimize the emerging socio-political dispensation at that time. The latter should be understood as one somewhat esoteric manifestation of the former. Apartheid theology was based on the notion of the divine orders of creation in the neo-Calvinist cosmology of Dooyeweerd and Stoker. It assumed that each order of creation was sovereign within its own context. The existence of different racial groups was treated as one of these orders of creation. The different races were ordained by God to be

"apart" from one another from the very beginning. They are not only distinct from one another; they should also be kept apart, hence the socio-political dispensation of apartheid/apartness.

Afrikaner theology, especially in its more recent forms, should be understood as a broad spectrum of reformed and often deeply evangelical theologies that emerged from these historical roots. In religion and in politics, Afrikaners have seldom been a homogeneous people.

What, then, is the relationship between Afrikaner theology and nature? A few comments will illustrate the moral ambiguities in this regard.

In many ways, the history of the Afrikaner people forms a trajectory in the interpretation of Genesis 1:28. The command to "subdue" and to "rule" over the Earth provided them with a strong sense of calling. Afrikaners became fruitful and multiplied and they literally subdued the land, its indigenous peoples, the slaves, and the oftenharsh agricultural conditions. They built dams to "tame" the rivers and to provide water for agriculture and new towns in a water-scarce country. They hunted the wildlife, some to the point of extinction. They felled indigenous trees (especially yellowwood and stinkwood) to provide timber for building material and furniture. They built roads and railways to gain access to remote areas. They planted crops in areas that were not suitable for agriculture. They occupied the land and marginalized the land claims of other peoples and of other living species. The way in which they ruled the land was not always compatible with their love for the land.

The disastrous environmental legacy of the apartheid period has been well documented. The creation of squalid urban townships has led to air and water pollution, a lack of sanitation and waste removal, contagious diseases and localized overpopulation. These conditions still affect the living conditions and health of millions of South Africans. Forced removals under apartheid led to a very high population density in former "homelands" or Bantustans. This created a vicious circle of poverty and malnutrition, overgrazing, deforestation, soil erosion, the disruption of river systems and further poverty. In addition, indigenous peoples were marginalized on land that was earmarked for nature conservation, game parks and eco-tourism (for the wealthy). The

ideology and theology of apartheid allowed these conditions to deteriorate unabatedly for decades.

The command to rule over the Earth in Genesis 1:28 is indeed ambiguous. For many Afrikaners it has the more positive connotations of stewardship, of being the land's caretakers, of "tending the garden," of earthkeeping (Gen. 2:15). This has fostered an environmental ethos among Afrikaners where emphasis is placed on using resources wisely and frugally. Accordingly, the environmental "track record" of Afrikaner people, on the land that they have occupied, is quite satisfactory. This applies to the prudent use of farmland, numerous exemplary nature conservation projects and to urban landscaping. Indeed, Afrikaner people are rooted in the land and many are deeply committed to the land that they inhabit.

Traditionally, the self-understanding of Afrikaner people was expressed in the stereotype of a rugged but honest farmer who lives close to nature in a harsh environment. This sense of being close to "nature out there" has been retained in an urbanized context. Many Afrikaner families and the youth (who can afford it) spend their holidays and weekends closer to nature (e.g., at pristine beaches, on mountain and hiking trails, touring the countryside, on game safaris, on hunting and fishing expeditions, or on outstretched farms). The irony is that the environmental consequences of this quest to experience nature "out there" are seldom recognized. The longing for tranquility is also undermined by the quest for ever-greater adventure and excitement. As a result, this longing for nature does not manage to counter an increasingly consumerist culture but actually reinforces it.

The quest for experience and adventure has a religious parallel. Since 1994, many Afrikaner Christians have opted for an apolitical form of Christianity. Many, including those who remain within reformed churches, are lured toward more experiential forms of religious expression that are more and more influenced by Pentecostal spiritualities. This does not offer much hope to counter the greedy and vulgar forms of consumerism than seem to possess many Afrikaners and that can only alienate people from nature.

Ernst M. Conradie

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See also: Christianity (6c1) – Reformation Traditions (Lutheranism and Calvinism); Christianity (6c2) – Calvin, John (1509–1564) and the Reformed Tradition; Masowe Wilderness Apostles.

Ahimsa

Ahimsa, a Sanskrit word meaning “non-injury” and often known in the English language as “non-violence,” is a significant concept in several of the religions originating in South Asia. Ahimsa implies both not causing injuries to other living beings and not adopting an aggressive attitude. The early protagonists of ahimsa in ancient India, who probably lived in Bihar and the eastern part of Uttar Pradesh, directed their critique toward animal sacrifice.

The principle of non-injury, therefore, became generally recognized not so much as a critique of war but as an opposition to the institutionalized killing of animals. Hence in South Asia, ahimsa has especially been understood to regulate the relationship between humans and the living beings of nature and the discussions of ahimsa in the religious texts often concern the human–nature relationship.

In South Asian religions the borders between humans and other species are not absolute. Humans are reborn as animals and plants, animals and plants are reborn as humans. Other living beings are therefore in a fundamental way similar to humans. The religious foundation of ahimsa is the idea that the same life or consciousness principle (*atman*, *purusha*, *jiva*) is present in all living beings, that this life principle does not die when the body dies but is reborn in a new body, and that the new body in principle can belong to any species. Killing living beings, or causing others to kill them, stains the individual with moral impurities and will be punished after death. What kind of rebirth an individual gets, that is, if she is reborn as a human, an animal, as a plant, in hell, etc., is determined by karma, that is, the sum total of her acts, and by the rituals performed on her behalf.

Two classical traditions of ahimsa are found in South Asia; one considers ahimsa as an absolute value, the other considers ahimsa as the foremost duty (*ahimsa paramodharma*) but accepts justified violence. The first tradition is tied up with renunciation, asceticism and monasticism and is an ideal for monks and nuns in Jainism, Buddhism and Hinduism. The second has dominated Hinduism (with the exception of its renunciant traditions).

Ahimsa is the religious motivation for vegetarianism, a custom more popular in India than in any other part of the world. Ahimsa problematized the human relationship to nature as food. Eating, a fundamental necessity in order to stay alive, is mainly based on killing other living beings (animals or plants) or having them killed for us by someone else. Most Jains, therefore, are vegetarians. Most Buddhists of the world are not vegetarians since Buddhism identifies karma strictly with intention (*cetana*). Hence eating meat not intentionally killed for oneself is not a moral fault, according to

Buddhism. Western converts to Buddhism, however, are often vegetarians. Less than half of the Hindus are vegetarians, and although some Hindus would be disgusted by even the thought of eating meat, many consider eating meat a minor offence.

Because it is impossible to live without killing other living beings, the ultimate act of ahimsa is to avoid being reborn, that is, to attain *moksha*, ultimate salvation. Ahimsa is therefore not attainable in this world but is an ideal and a distant goal toward which one can progress. A sign that a person has progressed far in perfection of ahimsa is, according to the Yoga tradition, that his presence generates an absence of enmity (*Yogasutra* 2.35).

In the classical texts, examples of a lack of enmity in animals are used to illustrate the power of ahimsa of such a person. Wild animals become peaceful in the presence of such a yogin and the enmity between animals such as cat and mouse ceases.

Mahatma Gandhi believed in the dogma of Yoga that perfection in ahimsa begets a suspension of enmity in one's surroundings. He expanded the meaning of ahimsa by having it include not only non-injury toward all living beings, but also service, love and humility. He also reformed ahimsa by transforming it into a political method of nonviolent resistance. Gandhi further interpreted ahimsa as the complete, and in fact as the only method, to realize God. Ahimsa for Gandhi meant a humble acceptance of the right of all life forms to flourish. He wrote: "So long as man does not of his own free will put himself last among his fellow creatures, there is no salvation for him. Ahimsa is the farthest limit of humility" (1957: 505).

A reinterpretation of the Gandhian tradition of ahimsa is at the foundation of the Deep Ecology tradition of contemporary environmentalism. Here ahimsa means an acceptance of the right of all living beings to flourish, and a willingness to defend with nonviolent means parts of nature such as rivers, waterfalls, forests and wilderness areas which by themselves are defenseless against human violence.

Knut A. Jacobsen

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See also: Deep Ecology; Gandhi, Mohandas; Hinduism; India; Jataka Tales; Prakriti; Yoga and Ecology.

Albert the Great (ca. 1206–1280)

Best known as one of the first medieval philosophertheologians to clarify Christian teachings through the appropriation of Aristotelian philosophy, and as the teacher of Thomas Aquinas, Albert the Great (*Albertus Magnus*) was also a pioneering natural scientist. During the Middle Ages he gained a reputation on a par with Aristotle's in physics, astronomy, chemistry, mineralogy, geography, human and animal physiology, zoology, and botany.

Albert was born near the river Danube, in Swabia (now Germany). While a student in Padua, he joined the Dominicans. His order assigned him numerous tasks that required travel, especially between Cologne, Paris, and Rome. As a mendicant priest, "Father Albert" traveled by foot and relied on the hospitality of farmers and villagers. Through observation and local inquiry he thoroughly familiarized himself with the flora and fauna of Western Europe, including its mountain ranges. (Once he arranged to have himself lowered over a cliff's edge to check whether eagles indeed lay only one egg per season, as was the common belief.) His illustrated descriptions, classifications, and explanations (still largely untranslated from the Latin), form the first encyclopedic overview of European natural history.

Albert's scientific work led contemporaries to object that he spent his time on matters irrelevant to salvation – or worse, on sorcery. However, Albert insisted that reason will not contradict revelation. Familiar with the parallel view of contemporary Muslim scholars, he had come to see the rational exploration of experiential data as an important avenue to knowing and serving the Creator.

Louke van Wensveen

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See also: Animals; Animals in the Bible and Qur'an.

Alchemy

Alchemy in the West is chiefly understood as a European search, possibly from the first century developing initially in Hellenistic Egypt, for the *philosopher's stone* (*lapis philosophorum*) or elixir of immortality. As the endeavor to transform chemicals and particularly base metals into gold, medieval alchemy became the springboard for modern chemistry. Alchemy itself underlies much religious development in general and is especially to be found in Daoism, Hinduism, Buddhism and Hermetic Christianity. Comprising both the more mundane effort to develop precious substances and the more esoteric concern of spiritual transformation, alchemy flourished in Greece during the second and third centuries and in the Arab world of the seventh and eighth centuries. It reentered Europe with the Moors of Spain in the tenth century where it was combined with various kabbalistic understandings.

Its peak occurred during the Renaissance in the works of Theophrastus Paracelsus (1493–1541), Giordano Bruno (1548–1600), John Dee (1527–1608), Jacob Boehme (1575–1624) and Robert Fludd (1574–1637). As a spiritual pursuit, alchemy became superseded by the development of chemistry as a physical science. It suffered not only through ecclesiastical opposition – even persecution – but also with the growth of rationalism as well as the replacement of its theory of the four elements (water, Earth, fire and air) as the building blocks of all tangible reality.

European alchemy traces its origins to Hermes Trismegistus, the legendary magician and astrologer. A product of the Platonic/Neoplatonic tradition, the hermetic arts adhered to the understanding of correspondence: as above, so below. Alchemy's "Great Work," accordingly, seeks to reconcile opposites and augment the divine harmony between heaven and Earth. As part of this pursuit, the alchemist attempts not only to transform something from lesser to greater value but also to find the panacea for disease and the ability to prolong life indefinitely. Consequently, in its heyday, the art of alchemy was both a medieval chemical science and a speculative philosophy. It consisted of three parts – each paralleling the supposed fundamental principles of all existence, namely, sal, sulphur and mercury. Sal, or what Fulcanelli termed "spagyrik," Paracelsus' *spao* ("I separate") plus *ageiro* ("I combine"), concerns the preparation of remedies. Mercury refers to the alchemist's spiritual development and his or her consequent ability to manipulate the physical realm. For Jung, this is the area that corresponds to depth psychology. Sulphur is correlated to the third phase of alchemy that seeks, through the Philosopher's Stone, to rectify nature's part in the Fall as Christ was able to redeem humanity. When all metals are changed into gold, the construction of the golden Jerusalem will be possible.

Despite its decline, the medieval understanding of alchemy has been transformed by Carl Jung (1875–1961) into a spiritual understanding that has come to permeate much of today’s magical and New Age practice. Recognizing alchemy as a projective system in which psychic configurations of the unconscious become understandable once mirrored in outer reality, Jung stressed the study of alchemy and astrology as vehicles for discovering archetypal components of the human psyche. Jung referred to individuation as the result of psychological insight and spiritual development that arise through understanding the magical qualities of matter and celestial bodies as unconscious psychical projections. In traditional alchemical drawings of Alchymia, the personification of alchemy, the figure is depicted holding the “Hermetic Vessel” that allegedly contains the key or “philosopher’s stone” to all mysteries. It is within this vessel that the “Great Work” is undertaken. For Jung, distinguishing between the *prima material* (primal substance) and the *massa confusa* (unconscious), the allegorical attempt to liberate gold represents the differentiation of the primal Self into consciousness. In other words, it is symbolic of bringing the Self to full realization and completion. Following the alchemical trajectory and rationalization, Jung felt that the perfected transmutation of the soul is achieved by the total union of opposites – a coming together that engenders the soul’s own metamorphosis. The emerald vessel and tablet belonging to Hermes Trismegistus have come to be identified with the Holy Grail which, in turn, has tended to fuse Arthurian legend with the art of alchemy. Apart from the modern esoteric and psychological interpretations of alchemy by Jung and others, it is important to recognize the fundamental contrast between alchemy and science. The former is religious to the extent that it proceeds from certain assumptions about nature. Modern sciences work instead, at least theoretically, with no intrinsic assumptions about nature but rather from verified laws and hypotheses based on these laws. But for alchemy, the “law of correspondence” upon which it traditionally operates presupposes an analogy between the macrocosm and microcosm, between the cosmos and the human being. From this, it follows that coordination exists between the planets, plants, metals and various regions within the human body. According to Paracelsus, certain gifted people who are in the “light of nature” are capable of discerning the signatures or signs that signify the synchronization between the different cosmic levels. The underlying assumption of alchemy is that the whole of nature is alive – including the metals which are believed to be growing within the womb of Mother Earth. For Basilius Valentinus, metals themselves desire to become gold and their transmutation by the alchemist through the Philosopher’s Stone is simply an acceleration of natural healing processes.

Alchemy has made a further comeback beyond Jung’s work with psychological archetypes. In its contemporary form there is a return to the correlation between physical processes of transformation and psychological/spiritual states of mind, but this is currently understood more in psychonautic terms, that is, the exploration of consciousness through ingestion, even combinations, of entheogens, hallucinogens or psychedelics. The basic assumption upon which the psychotropic community proceeds is the interconnectedness of all life and the universe. James Lovelock’s Gaia Hypoth-

esis that considers the world to be a single living organism is one articulation of this assumption. Exploring the depths and the inner recesses of the mind is believed to be the corollary of cosmological reflection and philosophy – one that is supported and even encouraged by the “gifts” of nature. If contemporary alchemists no longer hold the world to be in a fallen state requiring redemption or transmutation, they nevertheless consider nature to be alive and intrinsically sacrosanct.

Michael York

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See also: Christianity (5) – Medieval Period; Gaia; Gaian Pilgrimage; Jung, Carl; Lovelock, James; Psychonauts; Western Esotericism.

Allen, Paula Gunn (1939–)

Paula Gunn Allen is a writer and literary critic. With a Laguna Pueblo/Sioux/Scotch mother and a Lebanese American father, Allen focuses much of her writing and analyses on issues of identity. She is particularly engaged with the theme of recovering American Indian spiritual identity and values of harmony, peace, and cooperation.

The cosmology of the Laguna Pueblo is woman-centered and Earth-affirming. The Great Goddess, sometimes called Grandmother Spider or Thought Woman, is the creator of all things – material and immaterial. The female-centered traditions of her mother’s cultural group, as well as the goddess-centered strands of Lebanese and Celtic Scots that make up the rest of her heritage, permeate Allen’s writing. In her novel, *The Woman Who Owned the Shadows* (1983), the “half-breed” protagonist finds a spiritual identity or home in the god-women traditions. Allen’s other writings continue this theme of the recovery of spiritual identity and renewed harmony.

In *Spider Woman’s Granddaughters* (1989), Allen recovers women-centered traditions by collecting the stories of various native women. Their stories, like her own, articulate the threats of colonizing patriarchal European culture, as well as the persistent hope for healing and enduring power of tribal understandings of reciprocity and right relationship – human, ecological, and spiritual.

Storytelling for Allen serves as a ritual map, or guide, in the recovery of native spiritual traditions. The spiritual recovery entails a renewed harmony with one’s body and with the rest of nature. In her brief essay “The Woman I Love is a Planet; the Planet I Love is a Tree” reprinted in *Off the Reservation* (1998), Allen describes spiritual harmony as honoring the gifts of the Earth and cherishing of bodies. She explains that the body “is not the dwelling place of the spirit – it is the spirit . . . it is life itself” (1998: 122).

Molly Jensen

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Alliance of Religion and Conservation (ARC)

One day in 1953 two men stood on the summit of Mt. Everest, Sir Edmund Hillary, a Western scientist, and Sherpa Tenzing, a Himalayan Buddhist. Separated as they were by culture and beliefs, they had together scaled the highest mountain in the world and had, for the first time in history, reached its summit. What they did speaks volumes for the real differences between them and their cultures. Edmund Hillary stuck a Union Jack, the flag of Great Britain, in the snow and claimed to have “conquered” Mt. Everest. Sherpa Tenzing sank to his knees and asked forgiveness of the gods of the mountain for having disturbed them.

This story told by Martin Palmer catches much of the spirit and rationale of The Alliance of Religion and Conservation (ARC), which in 1995 succeeded the WWF (World Wide Fund for Nature) Network on Conservation and Religion, and extended the emphasis of the Network to support and develop practical projects.

The Network, launched in 1986 in Assisi, started out with representatives from five major religious traditions (Buddhism, Christianity, Islam, Hinduism, and Judaism). By 1995, when ARC took over from the Network, groups from four more religious traditions (Baha’i, Sikh, Jainism, and Daoism) had joined. By 2001 the members of ARC numbered eleven (Shintoism and Zoroastrianism having been added) and according to its latest newsletter ARC currently works with 41 different faith traditions within the mentioned major religious traditions. ARC’s aims are to assist and encourage evolution of practical, educational projects furthering the involvement of religions in caring for the natural environment, to assist and encourage the development of religious and ethical programs within conservation bodies, to assist and encourage events which bring together religion and conservation groups, to raise funds for these aims and to publish and promote materials exploring the links between religions and conservation.

Examples of projects are: reforestation and education programs to preserve the ancient pilgrimage sites of Vrindavan and Sri Jgannath Forests in India, programs of preservation of Huichol Indian sacred landscape and pilgrimage routes in Mexico, environmental surveys and educational programs to manage the needs of increased tourism of Daoist and Buddhist sacred mountains in China, a churchyard conservation project and a sacred land project in the UK, a Muslim environmental management of Misali Islan in Tanzania, protection (with the Maronite Church) of the Harisa forest in

Lebanon, and projects for restoring the biodiversities of monasteries of Mount Athos (Greece), of Solan (France), and of Petrovka (Russia).

In addition to this, ARC supports a development dialogue between representatives of the member religious traditions and the World Bank, and like its predecessor, the Network on Religion and Conservation, ARC supports conferences and the issuing and evaluation of declarations on nature and conservation by the members.

In November 2000 another project, the Sacred Gifts, in which faith groups are invited to pledge, as Sacred Gifts, projects ranging from issues of climate change to marine conservation, was formally presented and celebrated in

Nepal. Climate change, ethical investments, toxics, forests, and sacred land have been identified as key areas for ARC-supported projects.

ARC is an independent foundation, a registered charity, sponsored by WWF-UK, WWF-International, MOA International and the Pilkington Foundation. The administration of ARC is headed by Martin Palmer, International Consultancy on Religion, Education & Culture (ICOREC).

Tim Jensen

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See also: Mountaineering; Network on Conservation and Religion; World Wide Fund for Nature (WWF).

Alpha Farm

Located in the coastal range of central Oregon, the intentional community of Alpha Farm was founded in 1972. The community grows a substantial amount of its own food using completely organic growing methods, and attained certified organic status in January 2001. Income is shared collectively, and the community owns the land and buildings. Although Alpha members are occasionally employed at “outside” jobs or freelance work, most community work centers on the farm and communally owned enterprises such as Alpha-Bit, a cafe/bookstore/gift shop in nearby Mapleton.

Alpha community members claim a non-specific, nature-based spiritual self-identity. While the early days of Alpha were infused by language reflecting interest in a variety of spiritual influences, contemporary discourse implies an increasing unwillingness to paint themselves a particular religious color. Members emphasize a quest for harmony with a generalized “spirit,” choosing not to express this harmony through “god talk” or specific religious symbols, but instead utilizing nature-religion-oriented themes.

Many residents of Alpha Farm claim the presence of “nature devas” on community land, an appropriation of a concept often credited to the Findhorn community. The land at Alpha functions both as a physical setting for the daily life of community members and as a spiritual context through acknowledgment of devic life. Nature devas are believed to be the architectural blueprints for the varieties of plant life on Earth, determinants of physical characteristics such as shape, smell, medicinal potential, etc. Nature spirits are the individualized conscious essence of particular plants, manifesting the archetypal blueprints in local environments. Both nature devas and nature spirits are open to communication with “sensitive” humans sharing the land. In exchange for the guidance and wisdom of nature devas and spirits, Alpha Farm has designated an isolated section of community land offlimits to humans, creating an undisturbed sanctuary for the nature intelligences. The prohibition on human intrusion into this area is considered an act of respect, a gift of isolation.

Nature religion as practiced at Alpha Farm is a practical strategy responding to what sociologists term the “chaos of modernity.” The creed is environmentalism, the rejection is not of worldly pleasures but the pressure of the modern world, the dogma is simplicity. This brand of nature religion is rooted in a feeling of activism, less theoretical than practical, less theological than lived.

Alpha Farm’s self-identified values include pacifism, feminism, voluntary simplicity, and the power of group process. Maintenance of the farm and community represents a strategy for the expression and manifestation of one’s individual spirituality in a communal context. The aphorism “work is love made visible,” utilized by the Bruderhof

and other intentional communities, serves to self-identify Alpha Farm as part of the lineage of intentional communities in the United States.

Intentional communities like Alpha Farm represent the manifestation of a larger dissatisfaction with modern society. Communal life at Alpha Farm is practiced in a context of shared meaning: a lived response to materialism and consumerism; a consciousness of place catalyzed by a belief in conscious, sacred nature intelligences; and the embracing of a meaningful and sustainable alternative lifestyle.

John Baumann

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See also: Back to the Land Movements; Brook Farm; Farm, The; Findhorn Foundation/Community; Fruitlands; New Religious Movements; Tolstoy Farm.

Altars and Shrines

Altars and shrines are sacred spaces where the everyday world touches on and interacts with the divine. There, individuals and groups establish, negotiate and maintain relationships to the sacred. An altar is a surface where acts of worship are performed, while a shrine is a natural or human-made place made sacred by its associations with a holy personage or quality. Altars and shrines may be located in either public or private spaces. They have been important in many religions for thousands of years.

The earliest shrines were located in natural places such as caves and springs. Archeologists have found objects and paintings at these locations that suggest Paleolithic hunters were leaving offerings there. While we know little about the beliefs and practices of our early human ancestors, the leaving of offerings and sacrifices presupposes the existence of a reciprocal relationship between the devotee and the powers being worshipped or appeased: devotees assume that spirits feel and behave much like human beings, returning gifts with special favors such as good hunting and plentiful game. This aspect of religious behavior seems to be nearly universal, and is central to the development of shrines and altars.

Because early humans were completely dependent on the natural environment for survival, they considered natural forces, such as those associated with Earth and water, sacred, and made shrines in natural locations to maintain good relations with those forces. A number of religions have maintained this practice.

The Japanese ancestral religion known as Shinto, or “the way of the gods,” preserves this traditional relationship between humans and the natural world. In Shinto, the gods, or *kami*, which range from Amaterasu, the goddess of the sun, to local and ancestral spirits, are believed to dwell in remote natural places such as mountains, streams and forests. Early Japanese agriculturalists observed that water, which was necessary for rice cultivation, came down from the mountains in form of streams. They deduced that mountains and streams were sacred forces animated by *kami*; in order to ensure a successful rice harvest, the farmers needed to maintain good relations with the *kami*. Since the *kami* lived far away from the villages, the farmers built shrines so they could visit once a year during their festivals and receive offerings from their worshippers.

Today, each village and town has its Shinto shrine. Shrines are constructed to suggest a forest so that the visiting *kami* will feel more at home. Many Japanese visit these shrines at times of important transition – before a job interview, a significant exam, or upon the birth of a child – to ensure good luck. They purify themselves with water, then leave an offering, usually a coin, for the *kami*. Sometimes offerings of incense, food or flowers are left for the *kami* at natural shrines in the mountains or forests.

Some Japanese also keep home altars for ancestral kami that protect the patriline. While Japan has become an urban, industrialized culture, the shrines symbolize the continuing connection between humans and natural world, and a recognition of human dependence on nature. Anthropologist Conrad Arensberg, working in Ireland, discovered a connection between natural shrines and folk beliefs that served to maintain a clean environment and good community relations. Local farmers believed that certain trees, hills and streams belonged to the fairies, spiritual beings associated with specific locations. They told Arensberg that very bad luck would come to those who violated fairy sites by cutting down trees, planting or building on fairy land, or fouling water sources; such actions, they said, would offend the fairies, who would then punish the offender with misfortune. Arensberg reasoned that these beliefs kept farmers from over-farming the land and polluting their environment. The prohibition against dumping waste into streams also kept community relations harmonious. Much like some rituals, certain shrines and the practices associated with them can function to regulate relations between human communities and their environments.

Some new religious movements in North America and Europe use altars to reconnect with the sacred in nature. Neo-pagans often keep altars in their homes that serve to hold tools for rituals. Tools may include natural objects that reinforce the connection between practitioners and the sacred and symbolize aspects of the divine. For example, a neo-pagan altar usually holds natural objects to represent the elements air, fire, water and Earth, which are thought to correspond to the four cardinal directions and to be the principal elements of life. Neo-pagans may conceive of the Earth itself as a goddess; their altars often hold representations of her as well. For neo-pagans, the presence of these sacred objects represents their connection to the immanent divine in nature, and their respect and reverence for the planet and all life on it. In many cases, this translates into political and environmental activism.

Not all religions with natural shrines use them to preserve an ecologically friendly relationship between humans and their environment. A case in point is Hinduism. In rural India, many natural places and objects are considered dwelling places of the gods, and are treated as shrines. Local deities called *yaksas* and *nagas* are associated with trees and pools. Stones and Earth mounds are thought to contain the essence of Shiva, the lord of death and rebirth. Villagers may sprinkle these objects with water or smear them with *kumkum*, a red powder thought to convey blessings. They leave offerings of food, flowers, incense, and statues at these sites to propitiate the deities, which are considered both beneficent and potentially dangerous. However, after the *puja*, or celebration honoring a deity, is over, worshippers dump the offerings, including clay and plaster representations of the deities, into lakes, streams and rivers. Toxins from the decomposing garbage can cause the death of fish and other organisms that live in the water. Thus existence of natural altars and shrines within a culture is not always an indicator of increased environmental consciousness.

Sabina Magliocco

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See also: Sacred Space/Place; Trees – as Religious Architecture.

Altner, Günter (1936–)

German biologist and theologian Günter Altner was a pioneer in Europe for his interpretation of the environmental crisis as a radical challenge to change the understanding and praxis of (natural) science and to change the cultural self-understanding of our civilization and Christianity. He also founded the Institute for Applied Ecology in Freiburg.

Since 1974 Altner has argued for the need of an alternative epistemology for the perception and understanding of nature, and he has profiled such an alternative in dialogue with an impressive manifold of concepts such as ecological evolution theory, open-system-physics, nature philosophy, zoology semiotics and creation theology. One of Altner's studies proposes the thesis that the European culture is characterized by an obvious "Verdrängung" of the fear of death. Technical progress gives humans the illusion of being able to escape from death. Love of life necessarily needs a consciousness of dying, he claims.

As environmental ethicist, Altner has drawn on Albert Schweitzer and developed a holistic ethics of respect for life. Schweitzer's sentence "I want to live among others who want to live" was given a central significance for ethics by Altner in his solution of the conflict between anthropocentrism and bio/ecocentrism. The conflict between creatures struggling for their survival is real and serious. Creatures have to enter a discourse about their singular and common conditions of survival. Every one of them has to be given the chance to participate and to be heard. Common interests have to be identified. Nonhuman creatures have to be represented in the discourse. Life can never be qualified in a quantitative hierarchy, as for example in utilitarian ethics, but: "All life is worth to live." As a Christian theologian Altner interpreted the ecological challenge in light of the Cross, where nature revealed a civilization in crisis. The contribution of Christians and churches is to motivate a new integration of ecological, scientific, ethical, and religious concepts in the openness of the encounter of humanity and nature. "Creation" is understood by Altner as "an event of emergence in time" of which human beings are a part. Altner's God is present in the midst of the suffering of creation where s/he acts as a Savior of life in its wholeness.

Altner has been influenced philosophically by Martin Heidegger, Georg Picht and Carl von Weizsäcker; ethically by A. Schweitzer; and theologically by Ernst Wolf,

J. Moltmann, and later by Teilhard de Chardin. One of his most interesting contributions to environmental ethics is the adaptation of the theory of "the semiotic circle" of life that has been developed by zoologist Jakob von Uexküll. Altner's many contributions have strongly influenced environmental debates in German-speaking countries.

To these he has contributed with humility and respect for the mystery of life and an open-minded anti-reductionist reflexivity with phenomenological, ethical, and ecotheological significance.

Sigurd Bergmann

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See also: Christianity (7b) – Political Theology; Heidegger, Martin; Schweitzer, Albert; Teilhard de Chardin, Pierre.

Amazonia

Because traditionally most indigenous societies in Amazonia think in monistic rather than dualistic terms, their biological, cultural, and spiritual ecologies coincide in many ways. Of course indigenes distinguish between ordinary and extraordinary phenomena. However, indigenes usually nurture a holistic view of their place in relation to nature and the supernatural. Most consider the human body to be the residence for several spirits. Many more spirits are thought to dwell in the mountains, forests, waters, and rocks of the local landscape which are often considered to be sacred places. Accordingly, the Amazon forest as habitat is a source of spiritual as well as physical sustenance.

The geographical region called Amazonia encompasses the Amazon river basin and adjacent areas such as the Orinoco. The largest portion of Amazonia is in Brazil, but it also extends into adjacent Bolivia, Peru, Colombia, Venezuela, Guyana, Suriname, and French Guiana. Amazonia contains about 40 percent of the world's rainforests, and within this natural cathedral many indigenes still practice their own religion.

A major consideration for understanding nature, culture, and religion in Amazonia is diversity within and between different environments and through space and time. Some 30,000 species of vascular plants occur in the various environments. Many types of forests are found, from wet, semi-deciduous, and dry; lowland, hill, and mountain; and seasonally flooded (*varzea*, *igapo*, or *pirizal*, depending on water conditions) to areas never inundated (*terra firme*). Other types of forest are characterized by distinctive concentrations of a special plant form like lianas, or a particular taxa like bamboo or babassu palms. Mangroves grow along muddy coasts where tides infuse saltwater. There are also many other types of environments, including savannahs (grasslands) and aquatic ecosystems (rivers, streams, lakes, and swamps). Distinctive ecosystems occur in northern Brazil and the Guayana Highlands on island-like land forms such as sandstone table mountains (*tepui*) and granite outcrops or domes (*inselbergs*). These are often believed to be sacred places by locals with the result that the use of resources in and around them is greatly reduced, avoided, or even prohibited, thus in effect creating wildlife sanctuaries.

In Amazonia neither environments nor societies are primeval, pristine, static, and uniform. The initial colonization and subsequent economic development of Amazonia by indigenes themselves may extend back 10,000 years or more. Estimates vary, but in 1500, when Europeans started to explore the Amazon, there may have been one to six million people living in several hundred different cultures with distinctive languages. The first Europeans observed large population concentrations with hierarchical chief-

doms on Marajo Island in the mouth of the Amazon River and extending up stream along its floodplains and those of its major tributaries.

European contact devastated native societies along the major rivers through warfare, economic exploitation, slavery, new diseases and massive epidemics, Christian missionization, and so on. Massive depopulation as the result of introduced epidemics and other contact agencies reduced many populations by up to 90 percent or more. The systemic repercussions of depopulation throughout indigenous cultures must have severely challenged their worldviews and rendered them more susceptible to colonial forces such as missionaries. Those indigenes along the major rivers who survived, usually became *caboclos*, a mixture of indigenous, African, and European elements, biologically as well as culturally and religiously. Indigenes deep in the interior, especially in watersheds of distant tributaries above a series of rapids and falls where navigation was extremely difficult, were usually more likely to survive and retain their culture and religion, but did not completely escape external influences.

Recent scholarship tends to view prehistoric and historic societies in Amazonia as qualitatively different in culture, religion, demography, ecology, and environmental impact. Massive depopulation of indigenes with initial contact processes relieved economic pressure on the environment and nature rapidly recovered. Thus, subsequent Western explorers and colonists encountered something they imagined to be “wilderness” or an underpopulated and underexploited frontier.

Current intellectual fashions in anthropology, ecology, and related fields, debate the extent to which the forests of Amazonia are natural and/or anthropogenic. This reflects the dualistic thinking of most Westerners which constructs and imposes binary oppositions on phenomena such as nature/culture, animal/human, wild/domesticated, wilderness/garden, primitive/civilized, and natural/supernatural. However, many indigenous cultures challenge such dualisms. If indigenes are an integral and inseparable part of nature, then forest is garden and garden is forest. Of course, indigenes can distinguish between garden and forest, but most do not do so in terms of unnatural versus natural. An indigenous garden is no less natural than the massive underground chambers of leaf-cutter ants where they cultivate fungi from leaves as food. It is not that much different from a gap in the forest created by a tree fall from senility, a storm, landslide, river shift, or other natural cause. Indeed, human technology (ax, bush knife, and fire) is used to create the slash-and-burn garden or swidden, and plant species which local people consider useful are concentrated in it. However, fire is a natural force when it occurs from lightning or a volcano, and is not necessarily unnatural just because a human ignites and uses it. The plants in a swidden are not plastic, but natural, no matter to what degree they are domesticated, cultivated, and managed. In traditional swidden horticulture, the space in the forest is used only temporarily as a garden, and then gradually over a few decades nature recovers until it becomes indistinguishable from the surrounding forest.

Indigenous environmental impact is usually negligible to moderate, unless population and/or market pressures exceed the regenerative capacity of the forest, thereby

creating patches of savanna in the forest or even contributing to local or regional deforestation. Swiddens are sustainable under traditional conditions – low population density, subsistence economy, and large reserves of forest for future gardens while old ones turn to fallow and eventually into forest. This is utterly unlike Western clear-cutting for conversion to pasture for cattle ranching, or flooding by dams for hydro-electric power, both to supply luxuries for distant cities at the expense of the local environment and people. However, the difference is not merely ecological and economic, it is also the difference between worldviews and associated attitudes and values. For most indigenes and many caboclos, nature is respected and revered as inhabited by spirits. For most other people entering Amazonia, nature is treated as merely object and commodity for economic exploitation.

When the indigenous hunter leaves his village or camp to go hunting in the forest, he believes that he experiences not only the ordinary plants and animals, but also the extraordinary. He thinks that the spirit guardians of the animals may allow him to kill certain prey for food, or even facilitate this by placing them in his path. As long as he enacts appropriate respect, reciprocity, and rituals, then he and his relatives will eat meat. However, if he or someone else disrupts the spiritual world of the forest, then the indigenes believe that there will be negative repercussions, the hunter or a member of his family or community will become sick or even die. Then the local shaman, a parttime religious specialist, attempts to restore balance and harmony to nature and society. He monitors the condition of the interpenetrating ecological, human, and spiritual communities, and tries to make adjustments through contacting helper spirits to mediate, usually with the assistance of tobacco or hallucinogenic plant substances like *ayahuasca*. Indigenous Amazonians try to promote the survival and well-being of their community through an elaborate system of taboos, rituals, ceremonies, symbols, and associated oral traditions.

There is a tendency, for instance, among traditional indigenous societies in Amazonia to avoid or prohibit killing animals like the harpy eagle, jaguar, anaconda snake, river otter, and freshwater dolphin. In effect, even if only inadvertently, this recognizes the ecological role of these keystone species as top carnivores crucial in the regulation of prey populations. However, various combinations of carnivore and herbivore species are avoided or taboo among indigenous cultures. This may have a conservation effect, even if unintentional, by creating a mosaic of reserves freeing a somewhat different combination of species from predation pressure in each. Also among some societies, faunal taboos may channel hunting away from the less accessible and more vulnerable herbivore species, like tapir or deer, to those which provide a better cost/benefit ratio together with a more sustained yield, such as large rodents like the paca or capybara. Special places in the forest and in water bodies may be considered sacred, or the haunts of dangerous spirits, and avoided accordingly, thus, in effect, creating game sanctuaries.

Indigenous practices comprise no less of a system of land and natural resource use, management, conservation, and development than their Western counterparts, if

racist and ethnocentric thinking is rejected. Furthermore, most traditional indigenous societies are usually sustainable and green in their beliefs, values, and practices. They have not only been tested, developed, and refined over many centuries or even millennia, but they are grounded religiously as well as pragmatically.

In 1500, Amazonia was not an endangered region, but it has progressively become so under the influences of colonialism, neocolonialism, industrialization, and globalization, especially in recent decades. By now change is simply unprecedented in its rate, scale, and repercussions. Today Amazonia is one of the world's most endangered places in every respect, including ecologically, demographically, epidemiologically, technologically, economically, socially, culturally, and spiritually. It is as if industrial society were out to destroy one of the very things that might save it. Amazonia is generally viewed by industrial nations as one of the last frontiers on the planet with an untapped wealth of natural resources such as gold, minerals, oil, timber, and medicinal plants awaiting discovery and extraction to distant markets for quick profit. The myth of El Dorado persists, although in twenty-first century form. Meanwhile, indigenous systems that have proven adaptive for centuries to millennia are being threatened, degraded, and even destroyed by maladaptive alien systems.

Leslie E. Sponsel

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See also: Amazonian Folktales; Ayahuasca; Huaorani; Indigenous Activism and Environmentalism in Latin America; Kogi (Northern Colombia); Rainforests (Central and South America); Reichel-Dolmatoff, Gerardo – and Ethnoecology in Colombia; Rubber Tappers; Shamanism – Ecuador; Shamanism – Traditional; Traditional Ecological

Knowledge; Tukanoan Indians (Northwest Amazonia); U'wa Indians (Colombia);
World Conference of Indigenous Peoples (Kari Oca, Brazil); Yanomami.

Amazonian Folktales

In addition to the immense lore produced by indigenous groups in the Amazon, there also exists a large body of oral and written narratives produced by mestizo descendants of natives and multi-ethnic newcomers to the region who live in the forest and small settlements throughout Amazonia. While a few of the tales contain themes and characters related to life in an urban setting, the large majority articulate plot developments involving humans, supernatural animals and entities inhabiting the deep forest, rivers and lakes. These stories combine elements of the ecological cosmologies of native Amazonians, Judeo-Christian and other Western themes, and historical transformations enacted by old and new inhabitants coming into the region since the arrival of colonialism.

While vividly manifesting and illustrating many aspects of Amazonian life, expectations, desires, and negotiations with the immediate environment, these oral narratives incorporate the presence of an array of magical plants and animals, enchanted places, spiritual beings living in the forests, and underwater and celestial realms. Voiced within notions of conservation and a socialized nature, these tales convey beliefs of regional indigenous cultures that perceive the human realm to be part of the environment, related to animals, trees and sacred places. The supernatural animals and magical entities play important roles in the tales by providing people with advice and knowledge of the forest. They have the power to reward or penalize humans according to their interaction with others and natural beings.

Many of the tales which illustrate such mythological importance of reciprocity and balance with nature are constructed with the fabric of direct experiences of fishermen, loggers, rubber tappers, hunters, intruders, and other forest dwellers. In accordance with the indigenous ecological cosmologies, central characters who make their living hunting or fishing may experience punishment from the guardian of the forest or from supernatural animals dwelling in the waters when they kill animals who are too young or when they slay too many. Plots also convey a prescribed visit to a shaman who serves as the mediator between human and supernatural domains. Many times he is a mestizo who lives in and serves the small settlements. Often the shaman advises a special penance to repair damage done by a careless individual. Charms and prayers from the shaman during a hallucinatory state, accompanied by tobacco smoke, may help to appease the spirit of the forest who is angry with the hunter or fisherman daring to disrupt the balance. It is not unusual to see the tales end with intruders dying from a spirit-sent disease that the shaman is unable to cure.

Among the lore surrounding entities who dwell in the rainforest, there are stories about those who serve as guardians. Plants and animals are believed to have mothers or spirits to defend them. The most feared by hunters, and known by many Amazonians, is a protean figure called *Curupira* in the Brazilian and Colombian Amazon and *Chullachaqui* or *Shapshico* in Peru. *Chullachaqui* means *uneven foot* and is frequently depicted in this manner. He is the protector of animals, frequently known to kidnap his victims or cause them to become lost in the forest. In order to find a lost hunter, relatives and friends must seek help from a shaman. With the help of tobacco or in many cases a hallucinogenic vine called Yagé, the shaman can locate the person. Many times he must explain that the hunter has been taken and punished for his disrespectful behavior or for disobeying the *Curupira*'s warning given directly or in the hunter's dreams asking him not to kill young animals, go hunting during certain times, or enter forbidden realms.

Involving a composite of cultural themes, these tales also feature Christian morality and observances of certain sacred days. One example is the tale of the *Mapinguari*, a one-eyed hideous giant forest monkey and a greedy hunter who disobeys the sacred principle of resting on the Sabbath day to keep it holy. Disregarding advice, the hunter pushed into the forest to hunt on Sunday anyway claiming that "one must also eat on Sundays." For this disobedience, he is punished with death. While gnawing the limbs of the hunter the *Mapinguari* affirms, "one must also eat on Sundays."

These codes of conduct and attitudes of respect for nature show the powerful presence of indigenous cosmologies that view nature as a living being rather than an expendable commodity. Spirits, supernatural animals and characters who populate the air, rivers and lakes watch over behavior, and give power and advice to healers and shamans who constitute an integral part of this lore. Freshwater dolphins are considered extraordinary beings that live in modern and sophisticated underwater cities. They are believed to be able to turn into handsome men and sneak into riverbank settlements and charm women. Killing a dolphin and eating its meat is considered taboo by most Amazonian tribes. Characters in the tales who commit such actions are severely punished. Dolphins are able to grant good luck to fishermen and reveal places for good fishing. They also reprimand avaricious behavior when people overexploit certain fish in the lakes and rivers.

Riverine inhabitants tell countless stories about other animals whose guardians and "mothers" safeguard them by punishing abusive practices. Turtles, for example, whose eggs and meat are sought during the dry season are protected by *Charapamama*. The Anaconda, who along with the dolphins could be regarded as one of the most important mythological figures in all folk narratives in the region, undergoes a variety of transformations in the Amazonian imagination and plays important roles in the notion of respect for the landscape. In many tales the Anaconda also gives advice and healing powers and grants permission for fishing in certain areas. However the Anaconda can become furious and take the form of a *Yacumama*, a fantastic snake with

eyes like the headlights of a truck, and produce an array of atmospheric phenomena tilting boats of greedy fisherman and people who trespass into her realm.

Amazonian folktales, with notions of natural beings who are sometimes rewarding and often vindictive, reflect influences of European and African traditions, as well as native Amazonian lore. Although Christian missionary work has altered Amazonian cultures, the overriding themes of a social relationship with nature continue. These ideas persist in the minds of natives, mestizos, loggers, fishermen and ordinary people in small settlements who articulate their daily lives, needs and expectations within frameworks of respect for nature. With deforestation and increasing need for commodities, new ideologies that seek to demystify nature have emerged.

As a result traditional lore is losing influence in some regions. Time is of the essence in the gathering, studying, recasting, and preservation of Amazonian folktales. Locals, anthropologists, scholars and writers are playing a key role in working with storytellers who are the keepers of the mythologized world. Amazonian populations have become more urban, with the presence of electric lamps, radio, TV, and vehicles even in the most remote areas. These new technologies and the ideas associated with them have in many ways disconnected people from trees, rivers, night and stars in the sky. Thus modern life and rational accounts are transforming imaginative explanations based on interactions with nature. Such factors draw the young from this lore which has served Amazonians not only as entertainment but also as a moral code which maintains the social balance between humankind and nature.

Juan Carlos Galeano

Breakout Box: Mapinguari

Near Tefé, on the banks of the Amazon river, there was a man who loved hunting so much that he'd go almost every day of the year. One Sunday he told his wife, "I'm going to a place where there is good hunting."

"It would be better to wait until tomorrow," his wife said. "It's not good to hunt on Sunday."

"One must also eat on Sundays," the man said as he grabbed his rifle and left.

On his way to the forest, the man stopped by a neighbor's house to invite him. The neighbor didn't want to go and also told him, "It's not good to hunt on Sundays."

The hunter persuaded his neighbor by saying, "One must also eat on Sundays."

The two men crossed a small river and walked for some time through the bush without finding anything. It was as if the animals had disappeared. Toward the end of the afternoon they were frightened by some terrifying screams followed by noise and footsteps. They thought it was a big man, but it was an animal, a black haired apelike creature with a turtle's shell and one big green eye in the middle of its forehead. The men were afraid and the hunter started to shoot, but the bullets could not penetrate the shell. He kept shooting but to no avail.

The animal walked toward the hunter, grabbed him, and threw him to the ground with one of its enormous arms. The other man climbed a tree and watched in horror as the animal tore his friend apart. As it gnawed his friend's arm it said, "One must also eat on Sundays." Then gnawing a leg it repeated,

"One must also eat on Sundays." After the creature devoured the hunter and walked away yawning, the man ran to the town and gave an account of his friend's death. Some people tried to guess what kind of an animal could have eaten the hunter. "If it has only one green eye and its feet are as big as a pestle, it has to be the Mapinguari," said the dead hunter's cousin.

"Surely it didn't eat you, don Luis, because you didn't have a rifle," added the others. One of the men, who knew a great deal, said the hunter could have saved his life if he had shot the creature in the belly button, "because that is where its heart is." The people from the town were so outraged that they organized a search party and went hunting for the creature. They didn't have to look too hard, because the Mapinguari had come back to lick and chew the bones of the hunter.

As soon as it saw the group of men, it attacked, wanting to eat them too. The men fired, not as their friend had done, but straight into its belly button to hit it in the heart. The Mapinguari, shrieking with rage, took off running and disappeared into the forest. Then the men gathered the uneaten bones of the hunter, put them in a sack, and took them back to town. His wife put the bones in a small coffin, and after she and her children mourned him for two nights, she took them to the cemetery. "If only he had heeded my warning," sobbed the poor woman. They say that later she took her children to Manaus where the rest of her family lived.

Text taken from unpublished manuscript Amazonian Folktales, by Juan Carlos Galeano. Translated from the Spanish by Rebecca Ann Morgan and Kenneth Watson

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See also: Dolphins and New Age Religion.

American Indians as “First Ecologists”

The image of North American Indians as first ecologists, conservationists, and environmentalists, which can be called the Ecological Indian, became dominant in the 1960s. Today, many, including American Indians, accept it as an accurate representation of Indian behavior through time. Yet the image has deep intellectual roots and has gone through various iterations, from a generalized nature-dwelling noble indigeneness, through one emphasizing pragmatic skill in the environment, to today’s full-blown Ecological Indian.

The Noble Indian in Nature

From the moment they encountered indigenous people in the Western hemisphere, Europeans classified them in order to make them sensible. They made the exotic comprehensible with familiar categories. In the process they reduced men and women to stereotypes, to caricatures, noble or ignoble, benign or malignant, rational or irrational, human or cannibal – savages all. For centuries two polar images of Indians in the New World – noble and ignoble – have clashed. Until recently, the Ignoble Indian ruled; a menacing, malignant image construing the Indian in the extreme as a bloodthirsty, inhuman cannibal akin to the Wild Man of European folklore. In contrast, the Noble Indian (or Noble Savage), never entirely absent – the peaceful, carefree, unshackled human; the wise, dignified elder; the nostalgic romantic; the spiritual guide; the polished orator – was and is a benign, often romantic, image of people living innocent, vigorous, clean lives in a golden world of nature.

Columbus was first to ennoble the inhabitants of the New World when, on his second voyage, he wrote that he had found the Islands of the Blessed and its natural inhabitants – a place and people in the European imagination. His readers were not surprised – at least not those for whom several mythic places originating in pagan or Christian tradition were linked in the imagination and collectively expressed ideas of earthly paradise, eternal spring, or innocent life removed in space or time. An imagery traceable to these understandings remained potent long after Columbus as writers invoked ancients like Tacitus or various classical analogs like the Scythians to render intelligible the native people of the New World.

Over two centuries, the French were without peer in developing an imagery of nobleness. Best known was Jean-Jacques Rousseau, who presented savage life as simple, communal, happy, free, equal, and pure, and ensured that Noble Indians would rule the second half of the eighteenth century as allegorical America or in other genres. He and others mined the classics for ennobling thoughts that they applied unhesitatingly to the native people of the New World, and quickly linked the development of favorable virtues to “la pure Nature.” Many still considered their own (French) civilization superior to any developed by the children of nature in the New World; indigenous people came up wanting in faith, laws, and kings (*ni foi, ni loi, ni roi*). *Ni foi* meant, of course, that religion was barely worthy of the name (as had also been so for Columbus, who depicted Caribs as lacking in religion). Yet while they denigrated these aspects of indigenous culture and institutions they also seized on liberty and equal access to basic resources as characteristic of savage life and important virtues to emulate. Thus, contained in their observations of the New World was a critique of their home society. For example, Michel de Montaigne and Baron de Lahontan set the stage for Rousseau by lauding natural New Worlders and in the next breath condemning French society. Lahontan even invented a Huron Indian named Adario to critique the European scene and those who had stripped him of property. As one historian remarked, many used the New World as a stick with which to beat the Old.

The Skilled Woodcrafter

The nineteenth-century inheritors of the tradition of the Noble Indian in nature include not simply Romantic nature poets but James Fenimore Cooper, the best-selling author from the 1820s through the 1840s and arguably the most important figure in the nineteenth century for further development of such imagery. All manner of Indians can be found in Cooper’s works, especially the Leather-

-family:”Bookman Old Style”;mso-font-width:95%’>stocking series, of which *Last of the Mohicans* is best known today. The most famous are dignified, firm, faultless, wise, graceful, sympathetic, intelligent, and reminiscent of classical sculpture in their bodily proportions. In his portrayal of Noble Indians, Cooper was strongly influenced by John Heckewelder, the Moravian missionary and relativist sympathetic to the Lenape and their history; indeed some criticized Cooper for unrealistically noble portraits “in the school of Heckewelder.”

Whereas for writers of an earlier day it was enough that Indians’ lives unfolded in “nature,” for Cooper what was weighty were Indian *actions* in nature; specifically, their skill in the forests and prairies. Cooper’s Indians demonstrated competence and even transcendent skill in nature. In contrast, non-Indians (except the protagonist Natty Bumppo) generally lacked such skills. Moreover, white men (except Natty) often wasted what they killed or otherwise were greedy. It is Natty, the conservationist, not some

Indian, who has something to say about the gluttony of whites and remarks, “Use, but don’t waste.” There is one notable exception: in forceful remarks in *Last of the Mohicans*, Magua, a Wyandotte Huron lumped with Mohawks and other Iroquois as “Mingoes,” states passionately that the Great Spirit gave Indians North America (“this island”), forested and full of game, but then he also granted whites “the nature of the pigeon” – that is, exploding numbers, tirelessness, and insatiable appetites suited to control over the Earth.

Magua, no Noble Indian, is one of the most infamous of Cooper’s arch-demons, which substantially muddied reception of his message about the Great Spirit or white people’s avarice. For authority one needed Natty himself, the protagonist of heroic proportions (in part from taking on the anti-conservationists of the frontier) and nature herself, heroine of unsurpassed dimensions. Cooper cast nature as sacred for Natty (not Magua), its sacramental quality deriving from God not indigenous animism. There are no such complications, however, when it comes to Cooper’s highly pragmatic image of indigenous skill and craft in nature, which in the mid-nineteenth century was shared even by writers who seldom had anything positive to say about Indians.

When he set out, at the turn of the twentieth century, to reproduce Cooper’s image of skill and craft in nature, Ernest Thompson Seton, a founder of the Boy Scout movement and first chief scout in America, ensured that the image did not die. Charismatic, a riveting speaker and fluid writer whose words reached millions, Seton placed the utmost emphasis on this aspect of Cooperian nobility – Indian skill in nature, which became known as woodcraft. In the 1890s, Seton formed the Woodcraft Indians, a boys’ group that spread and contained the seeds of the Boy Scouts. In time, Seton sought to combat degeneracy and build character and manhood in boys through proficiency in camping, hunting, fishing, mountaineering, boating, signaling, sports, and nature study. He sought to instill in each boy his version of Cooper’s Ideal Indian – a person who was kind, hospitable, cheerful, obedient, chaste, brave, honest, sober, thrifty, and provident; who held land, animals, and all property in common thereby checking greed and the accumulation of wealth (and division between rich and poor); and who condemned waste and those who took delight in slaughtering animals.

Seton’s appropriation of Cooper resulted in the domination, for almost one century, of an image of the Indian as the Skilled Woodcrafter (who increasingly practiced his craft safely in the past). This image flowered in the wake of sharp declines in numbers of buffaloes, white-tailed deer, turkeys, and beaver, and the extinction of the passenger pigeon; deforestation and the western creep of population and industrialization; and the birth of national parks and promotion of conservation through new organizations.

It flourished at the time of – and was in tune with – the progressive conservation movement.

Some traits of Seton’s Skilled Woodcrafter characteristic of Natty Bumppo rather than Cooper’s Indians – thriftiness, condemnation of waste – can probably be traced to the influence of Charles Eastman (also known as Ohiyesa), who was active in scouting circles at Seton’s time and consulted by Seton before the latter published his Ideal

Indian character traits. Eastman was a Sioux Indian who took his maternal grandfather's (the soldier-artist, Captain Seth Eastman) White Man's Road to college and medical school, and for nearly forty years (1900–1940) was the most visible Native American writer and public speaker, producing best-selling books on his own life and Indian ways. Betraying the complexity in the origin of his ideas, he paid homage not just to his Dakota grandparents but to the nature poet Coleridge, and ceased publishing books after he became estranged from his wife, a skilled non-Indian writer from Boston and New York.

Eastman's works (like Seton's) ennobled Indians both by resurrecting romantic visions of lives long past and by emphasizing woodcraft. In the autobiographical *Indian Boyhood*, Eastman spoke about Indians as wild, free, students and children of nature, and masters of woodcraft, and about animals as friends who offered their bodies for sustenance. His relatives, he remarked, taught him to be a close observer of nature and a skilled hunter. He extolled their "spiritual communion" with brother-like animals. He depicted his early life with Indian relatives as natural, altruistic and reverent, and his current life in the company of whites as artificial, selfish, and materialistic. He sought to train Scouts in what he called the "School of Savagery" emulating Indian training in the "natural way." One refrain in Eastman's books – and found in Seton as well – contrasts conservation among Indians and whites: Eastman wrote that Indians killed animals from necessity while white people killed them wantonly for amusement or greedily until none remained. Lastly, Eastman, far more than anyone who preceded him, emphasized the sacral qualities of nature. Even though Eastman considered the Sun Dance barbaric, he extolled the "spiritual communion" that Indians established with animals that possess childlike (innocent) souls. He wrote about every act being a religious act and about sublime nature. A transitional figure, his influence cannot be overstated.

The Ecological Indian from Earth Day to Today

In both Seton and Eastman can be found the germ for the image of the Ecological Indian, which, in the late 1960s early 1970s, became the latest in a 500-year history of images ennobling the relationship between North American Indians and nature. The Ecological Indian is the original ecologist, conservationist, and environmentalist, who has always possessed an intuitive, natural attitude toward the living world. Its most famous rendition appeared in 1971: the Crying Indian (Iron Eyes Cody, a self-ascribed Cherokee actor) enlisted by Keep America Beautiful in an anti-litter campaign; an American Indian weeping because pollution is "a crying shame," his direct gaze riveting viewers and shortly making, to use the language of advertising, over 15 billion people-impressions.

The Crying Indian is structurally reminiscent of Lahontan's Adario in that he stands not alone but against

– against the non-ecological whiteman. The Crying Indian wept for history, for America shattered by European settlers and their successors, for animals hunted to extinction by people of European descent, for trashed, even burning, rivers, littered and scarred and even desecrated landscapes, oil-slicked and tarred seas, and other environmental horrors. The Crying Indian, an American Indian, was free from blame but non-Indians in his gaze were not. As Iron Eyes became iconic, American Indians henceforth became widespread symbols for environmental attitudes and the conservation cause.

Like the preceding images – the Noble Indian in Nature and the Skilled Woodcrafter – the Ecological Indian was the image for the times: an era of violent anti-war and civil rights protest, and of assassination and societal upheaval, but also unprecedented for bitter battles over environmental issues. In this period the language and science of ecology broke into public consciousness (and were conflated with environmentalism), environmental prophets like Rachel Carson gained fame and notoriety, as books appeared with titles speaking to America raped, explosive population growth, or Earth as a sinking ark. The first Earth Day (April 1970) drew the largest demonstration in American history, environmental problems were *Time's* “Issue of the Year” in 1971, and the 1970s were the so-called Environmental Decade.

And as the deployment of the Crying Indian makes clear, Ecological Indians were marshaled to the support of environmental causes. Many in the countercultural movement moved back to the land in communal groups, seeking to reverse their alienation from nature. They turned their backs on Judeo-Christian anthropocentrism and biblical injunctions of dominion and rule over nature (even if one could find almost anything one looks for on humans and nature in the Old and New Testaments, or if adherents to these faiths have behaved in almost every conceivable way toward nature). Many consciously looked to American Indian lives for community, new aesthetics, and personal freedom; they wore beads, lived in tepees, and used tribal metaphors; they mined American Indian religions (and Zen Buddhism) for insight on sacramental qualities in nature. Theirs was a conscious critique of society; in them Lahontan and Rousseau were reborn.

One of the most important environmental organizations to emerge in this era, Greenpeace, was also the most visible for the convergence of environmentalism, critique of the social order, and the Ecological Indian. One Greenpeace founder considered that its aim was to fulfill an American Indian prophecy of a time when people of different ethnic backgrounds would join forces to defend the Earth. They were Warriors of the Rainbow – the name was from a book on American Indian prophecy – who would stop the desecration of the Earth and, like Ecological Indians, preach love for animals and use only what is required for food or clothing. Greenpeace activists wore Red Power buttons, adopted a Northwest Coast killerwhale crest as a symbol, and were blessed by the Kwakwaka'wakw en route to protest in the Aleutians. Greenpeace was supported by the most famous Indian actor, Chief Dan George, and cursed by the most famous Indian fighter on the screen, John Wayne.

American Indians embraced the new shift in perception and actively helped construct the new image of themselves. In 1969, Indians who occupied Alcatraz Island not only sought justice on a number of issues but aimed (among other things) to form an Indian Center of Ecology in order to halt environmental destruction. The Iroquois, through the White Roots of Peace, advocated environmental education, and the Hopi spoke of the need to clean up the Earth else it would again be destroyed.

In Indian writing, a new canon emerged in which nature and the environment figured significantly and which contained an explicit critique of people of European descent and their culture. A concern for sacredness, beauty and harmony, and place and community is manifest in this literature. Among the most widely read works were *Black Elk Speaks* (originally published in 1932), in which Black Elk's reminiscences were filtered (and sometimes created) by John Neihardt, whose goal was to live decently on Earth. Chief Seattle's lament on environmental destruction became gospel for Indians and environmentalists. These and other works in the new canon, by Scott Momaday and others, were replete with images of nature, animism, and harmony in Indian relationships to the environment in contrast to the destructiveness of non-Indians. All this provided fertile soil for the image of the Ecological Indian. This imagery has remained virtually unchanged in the last forty years – but so has concern for the mounting human impact on the environment. The 20th Earth Day in 1990 was considered by some as the largest global demonstration ever, with over 100 million people marking the day in some way. First ozone depletion and now global warming have become worldwide concerns. Today there is worldwide concern over the role the United States will play in solving global environmental problems that to a large extent are of its own making.

Indigenous people generally and American Indians in particular continue to serve as symbols of a time when the human impact on the environment is perceived to have been negligible. In 1992, indigenous people participated critically in the Rio Earth Conference and today they loom large in discussions of the rainforest. Ecological Indians can be found in best-selling books, in film, and on television and video, on global Earth Summit stages, in the writings of historians, native people, ecofeminists, deep ecologists, and others. Most key texts in the new canon remain authoritative although Chief Seattle's speech has deservedly lost its luster. The imagery that fell into place decades ago after centuries of rootedness in ennobling soil has proven to be remarkably resilient. And for many Indian people today, the Ecological Indian is an important aspect of their identity as Indian.

But is the fit, through time, between image and behavior a good one in North America? This important question, especially in a day when neither the enormous scale of transformation in the modern global environment nor the antiquity of the human role in environmental change, in North America or the world, should be in doubt, has been scrutinized elsewhere (for example, in human environmental impact). With respect to the two principal components of the image of the Ecological Indian, ecology and conservation, I have argued in *The Ecological Indian: Myth and History* that while ecological or systemic thought was surely widespread if always culturally

framed, conservation was not. In fact, for the many indigenous people in North America who believed that if respected in proper fashion (respect having nothing to do with Western conservation biology), their prey would later be reborn or reincarnated so that they might again be killed, conservation as it came to be defined in the West was foreign and even senseless. Moreover, no matter what people's beliefs or attitudes might have been, there were surely too few American Indians too thinly spread out to have made much of a lasting difference on lands and resources. The story, in other words, is far more complicated than simple stereotypes suggest.

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See also: Black Elk; Greenpeace; Indian Guides; Indigenous Environmental Network; Mother Earth; Noble Savage; Religious Environmentalist Paradigm; Savages; Scouting; Seattle (Sealth), Chief.

Ammons, A.R. (1926–2001)

For the American poet A.R. Ammons, divinity was an omnipresent force that flowed through everything in existence. In retracing the spiritual journeys of his verse, one finds elements of Christian asceticism, Buddhist renunciation, and Daoist affirmation – but it might be most accurate to describe the religious dimension of Ammons’ work as *pantheistic*. This poet’s world is aflame with a divine spark that appears “everywhere partial and entire . . . on the inside of everything and on the outside” (“Hymn”) (1986: 9), from the darkest depths of space to the teeming sub-layers of soil. Though such a universe might seem godless and uncaring, this would rest on a limited understanding of divinity. For Ammons, the whole world pulsates with power, its spirit dispersed across air, water, and Earth rather than withheld on a shadowy plane.

Like Emerson and Whitman, Ammons senses a primal, primary energy permeating and connecting everything – including the poet. “My nature singing in me is your nature singing,” his glorious ode “Singing & Doubling Together” proclaims (1986: 114). Each created form partakes of an original grace: “I know / there is / perfection in the being / of my being, / that I am / holy in amness / as stars or / paperclips” (“Come Prima”) (1971: 52). All life stems from a cosmic point of beginning, what ancient civilizations called the godhead. The interpenetration of matter is beautifully expressed in Ammons’ early poem “Interval”:

The world is bright after rain for rain washes death out of the land and hides it far beneath the soil and it returns again cleansed with life and so all is a circle and nothing is separable (1971: 36).

This ceaseless cycling is embodied (and disembodied) by the maggot, which “spurs the rate of change,” transfiguring organic matter so that it will someday return to live again (“Catalyst”) (1971: 110). Though every thing must pass away, the irreducible unity of the larger field is preserved: “Earth brings to grief / much in an hour that sang, leaped, swirled, / yet keeps a round / quiet turning, / beyond loss or gain, / beyond concern for the separate reach” (“Salience”) (1986: 50).

The state of things is transience and flux – this is forever brought home to Ammons by his Virgil, the wind: vehicle of mere caprice, but also capable, through its powers of erosion and conveyance, of resisting fixity and hastening change. And so the poet’s efforts “to gather the stones of Earth / into one place” – a suitable metaphor for all our Sisyphean strivings for certitude – are constantly scattered by a wind which has “sown loose dreams / in my eyes / and telling unknown tongues / drawn me out beyond the land’s end” (“In the Wind My Rescue Is”) (1986: 5).

Yet, as one of Rilke's *Sonnets to Orpheus* puts it, "Song is reality" (1986: 231). Even in foreknowledge of its evanescence, poetry follows its way ever onward. The writerly task, for Ammons, is to accept the world through language, rather than create it anew. Wallace Stevens placed his jar upon a hill in Tennessee and emphasized the heroic aspect of poetry, its refashioning of reality from raw materials. But the "Poetics" of Ammons "look for the forms / things want to come as" instead of shaping things into forms (1986: 61). His late book-length poem *Garbage* (1993) is an encomium to found treasures, gold gleaned from the cast-offs of civilization – and dedicated to "bacteria, tumblebugs, scavengers, wordsmiths," all of whom busily rejigger the infinite forms of existence.

"New religions are surfaces," Ammons writes in *Garbage*, "beliefs the shadows / of images trying to construe what needs no / belief . . ." (1993: 27). His poetry does not offer explanations for the mystery of life, but recapitulations of it. "Poems / are fingers, methods, / nets,

/ not what is or / was" ("Motion") (1971: 146), a Zen-like approach that supplants explication with experience, however enigmatic. Accepting the world as a continuum carves out the space for affirmation, however difficult it is to affirm that "to be / you have to stop not-being and break / off from *is to flowing*" ("Guide") (1986: 23).

For Ammons is no tranquil sage sitting cross-legged beneath a tree; at times he quails at the infinite breadth of a universe not actively ordered by a benevolent deity, but imbued with an ambiguous and often violent energy. There are, as Harold Bloom points out, moments of terror in this poetry. But, as spring succeeds each difficult winter in upstate New York, where Ammons taught for many years, affirmation emerges through these reckonings with mortality. In a long poem called "Hibernaculum," Ammons cites a saying of St. Francis (If you give up everything, it's all yours) and opines that nothingness, far from being failure's puzzlement, is really the point of lovely liberation, when gloriously every object in and on Earth becomes just itself, total and marvelous in its exact scope able to exist without compromise out to the precise skin-limit of itself: it allows freedom to fall back from the thrust to the absolute into the world so manifold with things and beings . . . (1971: 379–80).

Even as it embraces life – "I want to get / around to where I can say I'm glad I was here, / even if I must go" (1993: 88) – Ammons' poetry renounces egotism and the grand gesture. Emptying leads to fulfillment, affirmation comes from renunciation; "being is born of not being," in the words of the Tao te Ching. "I have reached no conclusions, have erected no boundaries," Ammons writes in "Corsons Inlet," "no arranged terror: no forcing of image, plan, / or thought: / no propaganda, no humbling of reality to precept" (1986: 44). Coming to enjoy the autonomy of a given moment, the poet gives up any vain hope of freezing life's procession at a standstill.

Ammons is a crucial poet for a spiritually hungry and environmentally impoverished era because his work places *Homo sapiens* not alone on a pedestal, but as one vessel of life force among countless others. In "Corsons Inlet," he watches a flock of swallows preparing for fall migration and calls them "a congregation / rich with en-

tropy” (1986: 45). The religious connotation is not unintentional. For Ammons, we are all “instruments of miracle” – participants in a great cosmic rite of life, death, and eternal change.

Jonathan Cook

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See also: Emerson, Ralph Waldo; Thoreau, Henry David; Whitman, Walt.

Amte, Baba (1914–)

Baba Amte is one of India's most inspiring advocates for the rights of the oppressed, a champion of social justice and environmental awareness. His most recognizable accomplishment is Anandwan, a center for the treatment and rehabilitation of lepers and other disabled people in Chandrapur District in the state of Maharashtra. He is also widely known for his leadership in the protest against the

Narmada Valley Project, the most expensive hydroelectric and irrigation venture ever attempted in India. Amte's vision for India's future was inspired by, among others, Mohandas K. Gandhi, Rabinbranth Tagore, and Sane Guruji, and by the life and teachings of Jesus.

Born Murlidar Devidas Amte on 26 December 1914, in Hinganghat, Wardha District in Maharashtra, the eldest son of a wealthy Brahmin family, his high school studies at a Christian institution in Nagpur acquainted him with the Bible. Later in his life he was to say, "I am a Hindu Brahmin, and a follower of Christ." He states that to be a follower of Christ is not to be affiliated with particular religious institutions but to walk in the shadow of the cross, to follow the example of Jesus in crucifying one's own life for the sake of others. This ideal together with the Hindu concepts of *nishkana karma yoga*, or selfless service without the expectation of reward, and the ideal of *loka sangrahya*, or responsibility for the uplift of the world, produced in him the strong motivation to address issues of moral gravity in the present world.

His commitment to walk in the shadow of the cross was challenged in his early thirties when, after rejecting a lucrative career in law, he served as President of the Worora Municipality. When the local sweepers union went on strike, he identified with their cause by collecting night soil from the town's latrines for a period of nine months. On a rainy night while carrying a basket of night soil on his head, his frightful encounter with a forsaken man suffering through the final stages of leprosy put his life's purpose into focus. After studying at the Calcutta School of Tropical Medicine he set up clinics in villages, providing treatment for over 4000 patients. In 1949 Amte founded a society called the Maharogi Sewa Samity, centered at the place he called Anandwan (the forest of joy). With heroic effort and a government grant of 50 acres of degraded land (later expanded by the grant of another 200 acres), the society, comprised mostly of leprosy patients, constructed a residential facility for the treatment and rehabilitation of lepers and a farm to support its activities. Eventually, Anandwan became a ministry by lepers to other disabled persons, and to the community at large.

In 1964 Baba Amte contracted spondylitis, a condition that has resulted in the progressive degeneration of his spine. During long periods of convalescence he formulated

his vision of a new India, for which Anandwan was the inspiration and model. His vision is of the India advocated by Gandhi in which arrangements are set up not to address the greed of the few but the needs of all, where needs are met by working with nature rather than working to destroy it. He believed that if outcast people on outcast land could develop a self-sufficient community that could benefit others, then a healthy people should be able to do the same for India.

The most visible cause for which Baba Amte has been known in recent years is the Narmada Bachao Andolan

(Save the Narmada Movement). In 1987 he invited a gathering of the most distinguished environmentalists in India to discuss the Narmada Valley Project. At their meeting at Anandwan they concluded that this plan for the construction of 30 major, 15 medium, and 3000 minor dams on the Narmada River and its tributaries would benefit only a few people at the cost of the environment upon which 300,000 local, mostly tribal people, depended. For Amte, who from an early age had been impressed with the traditions of the tribal people of India, and especially for their reverence for nature, this was a morally intolerable undertaking. In 1989 he helped organize and, in spite of failing health, participated in a highly visible protest rally at Harsud, a town in the Narmada Valley to be submerged by the project. In *Cry, The Beloved Narmada* (1989), and other publications, Baba Amte argued that the result of the project would be ethnocide. On 6 March 1990, Baba Amte joined 10,000 protesters who blocked the national highway at Khalghat bridge over the Narmada for 28 hours. Here, with his wife, he resolved to settle among the tribal people in the Narmada Valley, where despite injuries from confrontations with police and repeated arrests he remains a tireless advocate for the poor and for environmental awareness.

For his work with lepers, with the disabled, with tribal people, and for the protection of the environment, Baba Amte has been the recipient of numerous awards both in India and abroad, including the Templeton Prize for Progress in Religion. In the speech he wrote for his son to deliver at the Templeton Award ceremony in London, he stated that his religion is his work and described his work as grounded in *sraddha* or faith and inspired by *karuna* or compassion.

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See also: Hinduism; India; Tehri Dam; Yamuna; Yoga and Ecology.

Ananda Marga's Tantric Neo-Humanism

Ananda Marga is a contemporary Hindu Tantric sect with an international following of several million people. Their animal and plant-rights philosophy, called

Neo-Humanism, is based on a book of the same name written by P.R. Sarkar (1921–1990). He was the organization's founder and wrote spiritual philosophy under the name of Shrii Shrii Anandamurti. The ideology of NeoHumanism is derived from a monistic religious belief that everything is a manifestation of Supreme Consciousness and should be treated as sacred. Sarkar said that the sentiment human beings share toward one another should be extended to include all animate and inanimate entities. He claimed that adopting this point of view would be an aid toward self-realization and establish its practitioners in universalism.

Neo-Humanism emphasizes intensive intellectual analysis and rationality. It encourages people to channel their limited social sentiments into an inclusive ideal termed *Sama-samaja Tattva*, the principle of Social Equality. Simultaneously, Sarkar encouraged people to fight against the social exploitation and dogmas linked to environmental degradation. He decried the destruction of the ecological balance between the human, plant and animal worlds as a result of deforestation. One of NeoHumanism's principle tenets is that all entities have both "existential value" and "utility value." Sarkar pointed out that many people fail to understand this and only work to preserve those entities that have some immediate utility value for them. He considered this both immoral and foolish, not to mention a direct result of human ignorance. One of his controversial assertions, which he elaborated on at length in his book, was the demonization of hypocritical and manipulative exploiters who were engaged in socially and spiritually destructive activities. He literally referred to them as "demons in human form." Sarkar advised that such people be identified and reeducated, essentially along spiritual lines. But in other books of his, such as *Problems of the Day* and *PROUT in a Nutshell – Part VIII*, he stated that force might be necessary in order to control them. Because he approved the use of force in certain circumstances, some members of his organization interpreted that as a call to direct action.

Sarkar's humanistic and environmental concerns are fully integrated into his socioeconomic and political platform called the Progressive Utilization Theory, or PROUT. PROUT is concerned with a more equitable distribution of global wealth and the proper utilization of the physical, mental, and spiritual potential of every living being. Therefore, noted Liberation Theologian Leonardo Boff has supported Ananda Marga's

socio-economic ideas. But the organization has made many wary by calling for a political dictatorship of the self-realized or spiritually evolved.

Ananda Marga is not an apocalyptic sect; therefore its environmental concerns are not connected to a belief in our collective, impending doom. Its spirituality is based on a Hindu type of Tantrism. Despite this, Sarkar's protectiveness with regard to animal and plant life did not hinge on the idea that human beings might be reincarnated into animal or plant bodies. He was a supporter of reincarnation theory, but he was of the opinion that once an entity achieved a human birth, it was, from an evolutionary point of view, very unlikely that such a being would once again return to an animal or plant form. His central concerns were the issues of a spiritually monistic philosophy and the social justice such a philosophy demanded.

Based on Sarkar's writings, organizational members feel that time is of the essence in the fight to establish social justice. They believe that in many parts of the world today, exploited human beings are being crushed under the weight of capitalism and that it may very well be necessary to use force in order to check that trend. It is perhaps with a combined sense of that perceived injustice and a devotional concern for animal life that in the 1980s some of its members in northern England decided in favor of direct action. They planned and allegedly executed the release of animals involved in scientific experiments.

When the news of this direct action was written up in the newspapers, it sparked a debate within the organization about the policy of direct action compared to the slower process of reeducating the general public. Those in favor of the latter had some of Sarkar's writings on their side and they also had hard practical experience. During the 1970s a radical faction of PROUT called the Universal PROUTists Revolutionary Federation engaged in acts of international political terrorism that were contrary to the official policy of both Ananda Marga and PROUT. In the most infamous act a member was jailed for a 1978 bombing of a Hilton Hotel in Sydney, Australia that killed three people.

During this time, Sarkar was imprisoned by Indira Gandhi's government on charges that Ananda Margiis say were purely politically motivated. He was held for seven years and eventually exonerated by the Indian High Court. It seems the bombing was an agitation that aimed to secure his release from jail. The acts of terrorism had a negative impact on all branches of the organization. In the United States, Ananda Marga lost the support of federal financial funding in the form of CETA grants. "Community Education Technical Advocates" grants had been given to the workers of their permanent social service projects. Throughout the world, an organizational reputation for terrorism hampered both the propagation of their spiritual ideals as well as the establishment of their social service projects.

It is noteworthy that while the ideology of NeoHumanism originated on the Indian subcontinent those who elected to engage in direct action based on it were born in England. The vast majority of the organization's spiritual practitioners express their Neo-Humanistic environmentalism in quieter ways. On a daily basis they personally

perform *bhuta yajina*, service to the created universe. Ideally, this consists of services to plants and animals, but services to lesser-evolved, inanimate objects are also undertaken.

As part of an effort to introduce Neo-Humanism into society, Sarkar advocated that Ananda Margiis maintain a series of agrarian communities called Master Units. He placed a special emphasis on them during the last ten years of this life. By the early twenty-first century such communities had been established in India, Australia, Europe, South America, and the United States, although at that time, some entailed little more than land held in the organization's name. In many of these communities, the ideals of Neo-Humanism, such as rural self-empowerment and economic self-sufficiency, have been practically implemented. The premier example among them was established at Ananda Nagar in the Purulia District of West Bengal. It showcases integrated farming techniques, water conservation projects, soil erosion counter measures, a two-phased afforestation program, alternative energy ideas, and a variety of related projects, all spearheaded by Sarkar.

It seems to have been Sarkar's hope that the Master Units would serve as an example of alternative socioeconomic organization that would ultimately have political ramifications. In this regard he spoke about a type of bioregionalism tied to cultural and linguistic factors. He named those regions *Samaj*, which literally means "society." They would be decentralized socio-economic areas. Dividing the world into *Samaj*, along natural ecological, cultural, and linguistic lines, was a visionary system. Sarkar viewed such bioregional politics to be more beneficial than today's modern nation states.

Clearly the organization's socio-spiritual doctrines have fostered environmentally sustainable behavior. But their association with violence and occasional acts of terrorism continues in the minds of many people. The crux of the matter is their stated willingness to use force against society's "demons" in an effort to establish their concept of social justice. During his lifetime, Sarkar was not silent on the issue of terrorism. He stated that those who engaged in it had no understanding of his ideology. In the continuing debate over whether Hindu spiritual traditions promote or detract from ecological awareness and activism Ananda Marga represents affirmative evidence. The extent to which it will effectively promote its socio-economic and political objectives remains an open question.

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See also: Boff, Leonardo; Hinduism; India; Radical Environmentalism; Tantra.

Anarchism

The anarchist tradition has been sharply divided in its relationship to religion, spirituality and nature. On the one hand, the mainstream of Western anarchism has in general been atheist, anti-religious and anti-clerical, and has looked upon religion as a supernaturalist negation of the natural world. On the other hand, there is a long history of anarchistic thought and practice having strong spiritual or religious dimensions, and very often these have taken the form of nature spirituality. The following discussion will examine first the more familiar anti-religious perspective of modern Western anarchism, then various anarchist tendencies across history that have held a spiritual view of reality, and finally, some contemporary anarchist views that exhibit both standpoints.

Almost all the major European classical anarchist theorists opposed religion and defended a secularist, scientific and sometimes positivistic view of nature against what they saw as religious obscurantism and other-worldliness. Max Stirner (1806–1856), the major individualist anarchist theorist, dismissed religion as a belief in illusory “spooks” that undermined the individuality and selfdetermination of the individual. Pierre-Joseph Proudhon (1809–1865), the first important social anarchist theorist, stated that the concept of God was contradictory to rational thought and to human freedom, and that social progress is proportional to the degree to which the concept is eliminated. The anarchist anti-religious viewpoint is perhaps most widely associated with political theorist and revolutionary Mikhail Bakunin (1813–1876), who proclaimed, “I reverse the phrase of Voltaire, and say that, *if God really existed, it would be necessary to abolish him*” (Bakunin 1970: 79–80).

For Bakunin, religion denigrates human nature and the world, and is a means of oppressing humanity. In his view, it is a negation of nature, since it exalts a supernatural and transcendent reality and devalues the material and natural. He claims that there is an objective naturalistic basis for religion: it arises essentially out of the human being’s feeling of absolute dependence on an eternal and omnipotent nature and out of primitive fear of its awe-inspiring powers. He contends that it begins with the attribution of this power to fetishes and ends with its concentration in an all-powerful God, which he sees as the reversal and magnification of the human image itself. Religion is thus essentially a misunderstanding of nature. The system of social domination makes use of this confusion to keep people in a state of subjection and submissiveness through the alliance between the coercive power of the state and the ideological power of the Church.

The large anarchist movements of the nineteenth and early twentieth centuries in general shared the atheism and anti-clericalism of its theoretical founders. The

Bakuninists of the First International (International Working Men's Association, 1864–1876) fought to make the workers' movement officially anti-religious, and the large anarcho-syndicalist movements in southern Europe and Latin America defined themselves in part through their strong opposition to a generally reactionary and hierarchical Church and clergy. The Spanish Revolution (1936–1939), the most important event in the history of the anarchist movement, was marked by fierce opposition to the Church, to the extent of the desecration and burning of churches and harsh treatment of clergy. The Spanish anarchists largely shared Bakunin's view that religion was based on a denial of the natural world. Yet a kind of nature spirituality emerged even within their milieu. This tendency was expressed in a cult of the natural, the romanticizing of nature, and practices such as health-consciousness, nudism and vegetarianism. In this regard, the movement was influenced by the anarchist philosopher-geographer Elisée Reclus (1830–1905), who developed a non-theistic but holistic and spiritual view of nature, advocated animal rights, and wrote of the sublime and inspirational qualities of the natural world.

When one turns to the positive relationship between anarchism and spirituality, one finds a wealth of evidence in many cultures of the world. Some have found one of the earliest anarchist philosophies of nature and human nature in the ancient Chinese classic, the *Tao te Ching* of Lao Tzu (ca. fourth century B.C.E). Daoism is the philosophy of the tao, or way, a term that refers both to the source of all being, and to the path of self-realization of all beings when they are allowed to act freely and spontaneously according to their nature. Lao Tzu presents a vision of nature and human society as an organic unity-in-diversity in which the uniqueness and creative activity of each part of the whole are valued. The natural world is seen as a dynamic balance (symbolized through the complementary polarities of yin and yang) that produces order and harmony when not disrupted by human aggression and domination. Lao Tzu describes this natural harmony in poetic terms: "Heaven and Earth unite to drip sweet dew. Without the command of men, it drips evenly over all" (Lao Tzu 1963: 156). Coercive and authoritarian social institutions are shown to destroy natural balance and the generosity of nature and produce disaster not only for the surrounding natural world, but also within human society itself. The ideal society is depicted as a decentralized, egalitarian community in which all value the "Three Treasures" of compassion, simplicity, and humility. Lao Tzu was a harsh critic of the violent, hierarchical society of his own day, and laments the injustices and inequities that are created in human society by the pursuit of political and economic power. He declares that "[t]he Way of Heaven reduces whatever is excessive and supplements whatever is insufficient. The Way of Man is different. It reduces the insufficient to offer to the excessive" (Lao Tzu 1963: 174). For Lao Tzu, the pursuit of wealth, power and egoistic gratification must be rejected in favor of a way of life based on "non-action" or "actionless action" (*wu-wei*), by which is meant activity that is in accord with one's own Tao or way, but which respects the ways of all others.

Despite these apparently anarchistic or libertarian tendencies in Lao Tzu's thought, some have interpreted him as a defender of the traditional system of rule and even as an advocate of manipulation of the people for authoritarian purposes. For example, the eminent Chinese scholar D.C. Lau interprets the *Tao te Ching* as a rather eclectic collection of writings that has a primarily ethical rather than mystical or philosophical import, and which does not question the concept of political rule. In his view, passages concerning the sage or ruler apply to any follower of the Tao, but are also specific references to an enlightened and skillful "ruler," in a quite literal sense. Social ecologists Murray Bookchin and Janet Biehl have contended that ancient Daoism is merely a form of regressive mysticism. They attacked the idea that the *Tao te Ching* has any anarchistic implications and contend that all references to rulership should be interpreted in an entirely literal sense.

The second great ancient Taoist philosopher, Chuang Tzu, has sometimes been seen as even more radically anarchistic than Lao Tzu and equally ecological in outlook. Chuang Tzu warned against the impulse to eliminate chaos and impose order on the world, which in his view leads ultimately to great destruction. He took a perspectivist position on knowledge and truth, and emphasized, often through humorous or ironic anecdotes, the fact that each being has its own good and perceives reality from its own ultimately incomparable point of view. He rejected human-centered views of reality and the tendency to project human meanings and values onto the natural world. Though the specifically political implications of Chuang Tzu's thought are far from clear, his Daoism has been interpreted as one of the most consistently anarchistic critiques of the domination of humanity and nature and of the egocentric and anthropocentric mentality that underlies domination.

Some have also found a deeply anarchistic dimension in both ancient Buddhism and also in various schools in later Buddhist history. Original Buddhism as established by the founder Shakyamuni Buddha (ca. 563–463 B.C.E.) came out of a questioning of both the social order (the caste system) and the ideological basis (the authority of the Vedic scriptures) of ancient India. It also rejected the idea that any authority, whether a person or written document, could lead one to truth, and that it must instead be reached through direct personal experience. The central Buddhist idea of non-attachment can be given an anarchistic interpretation. Although historical Buddhism has been to varying degrees influenced by inegalitarian social institutions, its goal of non-attachment can be seen as an attack on the foundation of political, economic and patriarchal domination in the desire to aggrandize an illusory ego-self. According to such an interpretation, the ideal of the *sangha* or spiritual community is seen as an anarchistic concept of association based on compassion and recognition of true need, rather than on economic and political power and coercive force. Similarly, Buddhist mindfulness, an awakened awareness of present experience, is seen as implying a sensitivity to the realities of nature and human experience, as opposed to appropriating and objectifying forms of consciousness. The Buddhist tradition is vast, and has been developed in many directions, but it is not difficult to discover in the Buddhist concepts of

awakened mind, non-attachment, and compassion an implicit critique of material consumption and accumulation, coercive laws, and bureaucratic and technocratic forms of social organization.

Nagarjuna (ca. second century) is often considered the most important Buddhist philosopher since Shakyamuni Buddha. Indeed, he can plausibly be interpreted as the most theoretically anarchistic thinker in the history of philosophy. His radically destructive or deconstructive dialectic reveals the contradictions in any formulation of truth or attribution of substantiality to any being. The only “truth” for Nagarjuna consists not in ideas or propositions, all of which lead to contradiction, but rather in the practice of universal compassion and nonattachment. His rejection of the imposition of dualistic and objectifying categories on an internally related and “dependently arising” reality can be seen as an affirmation of the non-objectifiable wholeness and self-creativity of being and nature.

The anarchist tendencies in Buddhism were developed furthest and synthesized with certain aspects of Daoism in the Chinese Ch’an (meditation) School of Buddhism and in its Japanese version, Zen. Zen questions all authorities, including political, intellectual and spiritual ones, and insists on the absolute priority of direct personal experience. Lin-Chi (Rinzai) (d. 866) the founder of Ch’an, is known for his shocking admonition, “Whether you’re facing inward or facing outward, whatever you meet up with, just kill it! If you meet a Buddha, kill the Buddha. If you meet a patriarch, kill the patriarch!” This iconoclastic maxim is a classic Zen statement of the radically anarchistic view that none of our concepts of substantial realities (including even our most exalted concepts) can capture the nature of an ever-changing reality that constantly surpasses all categories and preconceptions. Inherent in this outlook is a deep respect for the integrity of nature and a desire to allow nature to express itself without human domination. Zen painting and poetry (much in the tradition of Daoist art) are noted for their focus on nature and on the numinous power of things themselves.

Anarchistic forms of spirituality have not been limited to Asian traditions, but have also emerged periodically through the history of Western religion. The Joachimite tendency in medieval Christianity is perhaps the most striking example. Joachim of Fiore spoke of the “Third Age” of world history, the Age of the Holy Spirit, which would supersede the rule of law and authority and usher in the reign of universal freedom and love. The Movement of the Free Spirit, which emerged out of the Joachimite and millenarian traditions, is often considered the most anarchistic tendency within medieval and early modern Christianity. The movement originated in the thirteenth century and spread widely across central and Western Europe during the fourteenth and fifteenth centuries. Its most radical tendencies rejected the established Church, the state, law, private property and marriage. Its social outlook was at times a rather curious combination of a radically anarchistic quest for freedom and an elitism that justified an instrumental view of non-members and of things in nature, and a ruthless destructiveness toward all who stood in its way. Nevertheless, it often strongly affirmed nature and the natural. The Adamite tendency in particular saw believers as existing

in a “natural,” prefallen condition, and others spoke of exercising “natural freedom” and following “natural desires.” They practiced nudism and free love, held property in common, and waged relentless war against their surrounding enemies. The anarchistic interpretation of the Free Spirit is best known from Norman Cohn’s classic work, *The Pursuit of the Millennium*. The Free Spirit also plays an important role in anarchist theorist Fredy Perlman’s critique of civilization, *Against History*, and Situationist Raoul Vaneigem devoted an entire book to the movement.

A more recent expression of an anarchistic spirituality within the Christian tradition is the radical religious vision of Romantic poet William Blake (1757–1827). Blake stressed the sacredness of nature, its organic qualities, and the need for humane treatment of other beings. He was one of the most important early rebels against the mechanistic, objectivist, reductionist worldview that came out of Newtonian science. His rejection of the dominant mechanistic worldview is encapsulated in his well-known plea, “may God us keep / From Single vision and Newton’s sleep!” (Blake 1988: 722). His attack on the patriarchal authoritarian God and a spiritually degraded world, and his creation of a new radically utopian mythology can be interpreted as an anarchistic critique of the state, early capitalism, and any ideology or social imaginary based on hierarchy, domination, and the repression of desire, the body, and nature.

Although nineteenth and early twentieth-century European anarchism was generally anti-religious, even there one finds a more overt religious tendency, primarily under the influence of the famous novelist and pacifist anarchist Leo Tolstoy (1828–1910). Tolstoy’s conception of God was not the naively anthropomorphic image that other anarchists attacked, but referred rather to the whole of reality and truth. Furthermore, he believed that the true essence of Christianity is found not in a transcendent Supreme Being or an afterlife with rewards and punishments, but rather in Jesus’ teaching of universal love. For Tolstoy, an acceptance of this teaching satisfies the human longing for meaning in purpose in life, and has far-reaching implications for one’s relationship to both society and nature. First, it results in a dedication to complete nonviolence in society, including an absolute anarchistic rejection of participation in the state, which Tolstoy saw as the most monstrous form of organized violence and coercion. Furthermore, it requires a nonviolent stance toward the whole of nature, a refusal to inflict suffering on sentient beings, and a practice of ethical vegetarianism.

Another important nineteenth-century literary figure in whose work anarchist themes intersect with a spirituality of nature is Henry David Thoreau (1817–1862). In his essay “Civil Disobedience,” Thoreau proclaimed the priority of individual conscience over political authority, asserting his view that “that government is best which governs least” and consequently “that government is best which governs not at all.” He refused to pay his taxes to the state on the anarchist secessionist principle that he could not recognize as his own government one that was also the slave’s government. Although Thoreau’s philosophical and religious perspective is usually associated with American “Transcendentalism,” it can also be seen as an anarchistic spirituality with affinities to aspects of Daoist, Buddhist and indigenous traditions. Thoreau is

best known for his eloquent expression in *Walden* of such themes as the love of and communion with nature, the affirmation of life, compassion for all living beings, and the ills of a materialistic society that is alienated from the natural world and enslaved by its own possessions. His spirituality is perhaps best expressed in the essay on “Walking,” which contains his famous statement that “in Wildness is the preservation of the world.” Thoreau links wildness, freedom, sacredness, and “the gospel according to this moment,” an idea much in the spirit of Buddhist mindfulness. His concern for and celebration of the particularities of place link him to later bioregional thought, and contain an implicit critique of political and economic conceptions of reality.

The renowned anarchist geographer Peter Kropotkin has often been looked to as the major source of ecological ideas among the classical anarchist theorists. His concepts of the importance of mutual aid, spontaneity and diversity in both the natural world and in human society have been important in introducing ecological concepts into social thought. However, Kropotkin was in many ways carrying on the work of his predecessor, the nineteenth-century French geographer and revolutionary Elisée Reclus, who had already developed a profoundly ecological philosophy and social theory. Reclus is one of the most important figures in the development of an anarchistic ecological philosophy and spirituality.

Reclus came out of a tradition of radical Protestant religious dissent, his father having been a minister of a so-called “free church” that broke with the Reformed Church. Though he rejected theism, his anarchism can in some ways be seen as a continuation of his religious tradition. Central to his philosophy was a belief in universal love, which in his view must be extended to all human beings, to other sentient beings, and to nature as a whole. His deep respect for the natural world sometimes reaches a level of awe that verges on a kind of nature mysticism. For Reclus, social organization must be based on this love and solidarity, expressed through a voluntary commitment to the good of the community and the Earth itself. In such a system, each individual would be guided to the greatest degree possible by a free conscience rather than by coercion or centralized authority.

Reclus’ outlook toward nature is at once scientific, moral, aesthetic, and spiritual. In his monumental 16,000-page *New Universal Geography*, and his magnum opus of social theory, *Man and the Earth*, he offers a holistic, evolutionary vision of humanity and nature. Like later ecological thinkers, Reclus finds a harmony and balance in nature, in addition to a tendency toward discord and imbalance. His investigation of the intimate relationship between humanity and the Earth’s regional and local particularities anticipates later bioregional thought. He emphasizes the moral and spiritual aspects of humanity’s relationship to nature, condemns the growing devastation produced by industry and economic exploitation, and argues that whenever humanity degrades the natural world, it degrades itself. A vehement advocate of the humane treatment of animals and of ethical vegetarianism, Reclus wrote several widely reprinted pamphlets on these topics.

An important though relatively neglected figure in early twentieth-century anarchist spirituality is the German political theorist and non-violent revolutionary Gustav Landauer (1870–1919). Landauer is best known as a martyr killed for his leadership in the Munich Council Republic of 1919 and as the mentor of the Jewish libertarian and communitarian religious philosopher Martin Buber (1878–1965). Landauer’s philosophy is rooted in German Romanticist thought and is often described as having mystical and pantheistic tendencies. His major concepts are Spirit (*Geist*), People (*Volk*), and Nation (*Nation*), and his central focus is on the place of the individual in the larger human community, in nature, and in a greater spiritual reality. Landauer associates Spirit with the search for wholeness and universality, and interprets it as an immanent, living reality, the underlying unity of all beings that encompasses both humanity and nature. For Landauer, the great conflict in history is between Spirit and the state. In his famous formulation, the state is above all a relationship between human beings and it can be replaced by creating new relationships based on cooperation rather than domination. Socialism, which is what he called the free, cooperative society, is not a utopian ideal in the future, but rather something that is already present in all cooperative, loving human relationships and which can expand to encompass the whole of society as more non-coercive, non-exploitative relationships are established. Landauer believed that the cooperative society would be achieved when people left the increasingly dominant corrupt and alienated urban society and returned to the land. The new society was to be based on village communities rooted in their natural regions, in which fair exchange would replace economic exploitation, and in which agriculture and industry would be integrated.

Undoubtedly, one of the most important influences on modern anarchist spirituality throughout the world is Mohandas Gandhi (1869–1948), who is widely known for his principles of nonviolence, cooperation, decentralization, and local self-sufficiency. Gandhi summarized his religious outlook as the belief that God is Truth, or more accurately, that Truth is God, and that the way to this Truth is through love. He also states that God is “the sum-total of all life” (Gandhi 1963: 316). At the roots of Gandhian spirituality is the concept of *ahimsa*, which is often translated as “nonviolence” (paralleling the original Sanskrit), but is actually for Gandhi a more positive conception of replacing force and coercion with love and cooperation. Similarly, he is sometimes called an advocate of “civil disobedience,” but he defined his approach, *satyagraha*, as a more positive conception of “nonviolent resistance” to evil, including the injustices of the state.

Although Gandhi did not absolutely reject all participation in the existing state, he rejected the state as a legitimate form of social organization, advocated its eventual elimination, and strongly opposed its increasing power. He warned against looking to the state to reduce exploitation, arguing that its concentrated power and vast coercive force necessarily does great harm and destroys individuality. In place of the centralized state, he proposed village autonomy or self-government, community selfreliance, and local production based on human-scale technologies, ideas that have been enormously

influential on twentieth-century eco-anarchism. Gandhi was also a critic of Western medicine, which he saw as dependent on concentrated wealth and sophisticated technologies, and advocated instead “nature cure” in which the cheapest, simplest and most accessible treatments are used.

For Gandhi, the principle of *ahimsa* was to be extended throughout the natural world. Humans should make an effort to avoid inflicting physical or mental injury to any living being to the greatest possible degree. Accordingly, Gandhi advocated ethical vegetarianism and had a deeply held belief that the Indian tradition of cow protection was of great moral and spiritual value. One of his most oftenquoted statements is that the greatness and moral progress of a nation can be judged by its treatment of animals. Although his concern was often expressed in terms of the welfare of individual beings, he sometimes expressed more strongly ecological concepts, as when he warned of the dangers of human abuse of nature using the image of nature’s ledger book in which the debits and credits must always be equal.

After Gandhi’s death, Sarvodaya, a movement based on his spiritual, ethical and political principles emerged. Vinoba Bhave (1895–1982), the leading figure in the movement for many years, taught absolute nonviolence, social organization based on universal love, decision making by consensus, the replacement of coercion by the recognition of moral authority, and the minimization and eventual abolition of state power. Vinoba’s social philosophy was fundamentally anarchist and communitarian. In pursuit of the movement’s goals he pursued a policy of asking landowners to donate land to the poor (Bhoodan, or “gift of land”) and of establishing village cooperative agriculture (Gramdan or “village gift”). Over a decade, Vinoba walked 25,000 miles across India and accepted eight million acres of Bhoodan land. The history of the Sarvodaya movement is recounted in Geoffrey Ostergaard and Melville Currell’s study, *The Gentle Anarchists*.

Among contemporary thinkers, the celebrated poet and essayist Gary Snyder has probably had the greatest influence in linking anarchism, spirituality and nature. He has also been a major influence on the contemporary ecology movement in showing the ecological implications of Buddhist, Daoist and indigenous traditions. Snyder has connected the concepts of “the wild,” “wild nature” and “wilderness” with the Tao of ancient Chinese philosophy and the dharma of Buddhism. For Snyder, the concept of “the wild” implies a freedom and spontaneity that are found not only in undomesticated nature, but also in the imagination of the poet and in the mind of the spiritually attuned person. He expresses the anarchic nature of the Zen mind in his statement: “the power of no-power; this is in the practice of Zen” (Snyder 1980: 4).

For Snyder, such concepts have farreaching political implications. By the early 1970s he had already outlined a bioregional anarchist position that would replace the state and its artificial political boundaries with a regionalism based on lived experience and a knowledge of the particularities of place. Snyder links the spirituality of place with “reinhabitation,” the development of an intimate acquaintance with one’s locality and region, and the achievement of a larger sense of community that incorporates other

life forms. Snyder finds the roots of such a social vision in the Neolithic community, with its emphasis on productive work, the sharing of goods, and the self-determination of local village communities. From the standpoint of such decentralized, egalitarian communities, the state, social hierarchy, and centralized power are not only illegitimate and oppressive, but also a source of disorder and destruction in both society and the natural world. The wisdom of traditional societies has been a widespread theme in contemporary anarchist thought. This is exemplified by a significant “neo-primitivist” current in ecological anarchism that has identified very strongly with many of the values and institutions of tribal societies. Its proponents argue that for 99 percent of human history human beings lived in stateless societies in which nature spirituality was central to their culture. The nonhierarchical, cooperative, symbiotic and ecological spiritualities of these societies have been taken as an inspiration for a future post-civilized anarchist society.

A strong influence on this current is anarchist theorist Fredy Perlman (1934–1985), who in his influential work *Against His-story, Against Leviathan* depicts (in a kind of radicalized version of the “Myth of the Machine” of social critic Lewis Mumford [1895–1990]) the millennia-long history of the assault of the technological megamachine on humanity and the Earth. Perlman describes early tribal spirituality as a celebration of human existence and nature, and depicts the rise of the ancient despotism that destroyed these societies and replaced their spirituality with a repressive, patriarchal and authoritarian monotheism. He interprets the emergence of such spiritual movements as ancient Daoism, Buddhism and Zoroastrianism as a rebellion against social hierarchy and the domination of nature, and describes the processes through which these spiritualities of freedom were transformed in religions of domination. He also outlines the history of anarchistic spiritual movements, including such striking examples as the Taoist Yellow Turbans, a revolutionary, egalitarian movement of the second century.

Similar themes are developed by David Watson, a leading contemporary critic of the technological megamachine. Watson contends in *Against the Megamachine* that in modern societies an aura of sacredness is concentrated in the ego, in the system of technology, and in economic and political power, whereas primal societies have seen the sacred as pervading the self, the community and the world of nature. Primal spirituality was, he argues, an integral part of a system of egalitarian, libertarian and ecological social values. Furthermore, the participating consciousness of primal peoples conceives of humans as inseparable from larger natural and transhuman realities. Thus, primal peoples have had an anarchistic, nonhierarchical view of both society and nature that constitutes a powerful critique of modern industrial society and offers inspiration for future non-dominating ecological communities.

Ideas similar to those of Perlman and Watson inspire a rather large, vigorous and growing anarcho-primitivist or anti-civilization movement. The best-known theoretical spokesperson for this movement is John Zerzan, who presents a withering critique of civilization, industrialism, technology, the state, and even language and community. Anarcho-primitivist ideas often appear in such publications as *Green Anarchy, Live*

Free or Die, Anarchy: A Journal of Desire Armed and *The Fifth Estate*. Anarchoprimitivism plays an important role in the Earth Liberation Front, which practices sabotage in defense of nature, and in the much larger Earth First!, which is the most important direct action environmental organization. It is also a significant undercurrent in the anti-globalization movement.

Anarcho-primitivists see an inextricable relationship between civilization and the domination of humanity and nature. One of their central themes is the inevitability of the collapse of industrial society, an event that is often looked forward to with anticipation. Primitivists value all that remains free from the domination of civilization, including remaining wilderness areas and autonomous, spontaneous human activity. They look to tribal traditions and hunter-gatherer economies for examples of an ecological sensibility, a balanced relationship to nature, and an ethos of sharing and generosity. However, they do not in general propose a simple reversion to such previous social formations, which are sometimes criticized for alienated social practices. Many primitivists find inspiration in various nature-affirming spiritual traditions as an alternative to the narrow technical rationality of civilization. These include the spirituality of tribal people, various forms of nature mysticism, a general reverence for life and nature, pantheism, and neo-paganism.

Indeed, one finds a continuous and strong anarchist current in neo-paganism in general in both Britain and the United States in recent decades. In Britain there are important anarchist and neo-pagan tendencies within the large marginal subculture that centers around the antiroads movement and defends sites that are of natural, cultural and spiritual significance. Both anti-roads activists and neo-pagans often form decentralized, non-hierarchical organizations practicing such anarchist principles as direct action and consensus decision making. Starhawk, one of the best-known neo-pagan theorists and writers, and an important figure in ecofeminism, has emphasized the connection between the nonviolent, egalitarian, cooperative, anti-patriarchal, anti-hierarchical, and nature-affirming values of anarchism and the pagan worldview and sensibility. The pioneering ecofeminist writer Susan Griffin has inspired thinking about these interconnections since her wide-ranging landmark work *Woman and Nature*, published in 1978. Even earlier, the well-known short-story writer and poet Grace Paley had incorporated feminist, anarchist and ecological themes in her works, which also expresses a deep but subtle spirituality of everyday life.

Hakim Bey, one of the most widely read contemporary anarchist writers, has developed an “ontological anarchism” that finds inspiration in esoteric spiritual traditions of many cultures, including Islamic mysticism, sorcery, shamanism, alchemy, and primordial myths of chaos. Bey’s anarchic sensibility and spirituality encompass everything related to joy, eros, creativity, play, and “the marvelous.” His concept of the Temporary Autonomous Zone (TAZ) as a sphere in which such realities can be experienced is one of the most influential ideas in contemporary anarchism and has stimulated interest in heretical, dissident and exotic anarchistic spiritualities.

There has also been considerable theoretical discussion of anarchism, nature and spirituality in the context of debates within social ecology. Such well-known exponents of social ecology as Murray Bookchin and Janet Biehl have attacked spiritual ecologies as forms of irrational mysticism that often produce social passivity and sometimes are linked to reactionary or fascist politics. On the other hand, proponents of the value of spiritual ecologies (such as David Watson, John Clark and Peter Marshall) have argued for the importance to an anarchist social ecology of spiritual values that are ecological, holistic, communitarian and socially emancipatory. It has been argued that some social ecologists have uncritically adopted a modernist, Promethean, and naively rationalistic view of the self and its relationship to the world, and that spiritual ecologies derived from Asian philosophies and indigenous worldviews, among other sources, can contribute to a more critical, dialectical, and implicitly anarchistic view of selfhood and the place of humanity in nature. This brief survey is far from comprehensive, and a fuller account would encompass such topics as Quakerism and other forms of radical Protestantism, the Catholic Worker movement and other tendencies within the Catholic Left, the spirituality of anarchist intentional communities, and the many literary and artistic figures (including such notable examples as poet Allen Ginsberg and novelist Ursula LeGuin) who have had important insights relating to anarchism, spirituality and nature. However, from the examples discussed, it should be clear that anarchist thought and practice have encompassed a wide diversity of approaches to religion, spirituality, and nature. This multiplicity and divergence continues today. Many contemporary anarchists (especially in Europe and in organizations in the anarcho-syndicalist and anarchocommunist traditions) carry on the atheist, anti-religious, anti-clerical outlook of the classical anarchist movement. Others, including many of the young people who have been drawn to contemporary anarchism through direct action movements, have neither great interest in nor particular antipathy to religion and spirituality. However, an increasing number of political and cultural anarchists are developing an interest in spirituality, and many others have been drawn to anarchist political movements and social tendencies through an initial interest in anarchistic spirituality. Consequently, spirituality, and more particularly the nature-affirming spiritualities of Daoism, Buddhism, neo-Paganism, indigenous traditions, and various radical undercurrents within Western religion, play a significant role in anarchism today and can be expected to do so in the future.

John Clark

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See also: Bioregionalism; Bioregionalism and the North American Bioregional Congress; Blake, William; Buddhism; Daoism; Earth First! and the Earth Liberation Front; Ellul, Jacques; Gandhi, Mohandas; Griffin, Susan; Kropotkin, Peter; Left Biocentrism; Le Guin, Ursula; Radical Environmentalism; Reclus, Elisée; Snyder, Gary – and the Invention of Bioregional Spirituality and Politics; Social Ecology; Starhawk; Thoreau, Henry David.

Anarcho-Primitivism and the Bible

“Anarcho-primitivism” (hereafter AP) is an important current of contemporary deep ecological thought which responds to contemporary environmental and social crises with a radical revisionism of the history of civilization. Though there have been few vigorous engagements between Christian theologians and these radical philosophical currents (exceptions include Jacques Ellul and Vernard Eller), this entry reflects upon possible points of contact between AP ideas and certain trajectories found in the Bible.

The trenchant AP critique of civilization finds surprising resonance in the Hebrew-Christian scriptures – if, that is, they are read as documents of Israelite resistance to Ancient Near Eastern empires from Egypt to Rome, rather than as a legitimating ideology for Christendom. The following eight “talking points” (appearing below in italics), representing salient aspects of the AP perspective as articulated by, for example, John Zerzan, are here correlated with minor and major biblical themes. i) *Civilization represents for AP a pathological regression, rather than an ingenuous progression, of human consciousness.* Although mainstream theology has largely bought into the dominant evolutionary narrative of “Progress,” the Bible’s perspective on historical origins is quite contrary – which is perhaps why it has been increasingly marginalized since the Enlightenment. The “primeval history” of Gen. 1–11, for example, portrays civilization as the “fruit” not of human genius, but of alienation from the symbiotic lifeways of the “Garden.” Its narrative of the “Fall” is one of hard labor, murder, violence and predatory urbanism, culminating in the symbol of Babel’s tower as the zenith of human rebellion against God and nature. It can be read not only as a polemic against the Ancient Near Eastern empires that surrounded Israel, but also as an archetypal diagnosis of civilization-as-pathology. Throughout the rest of the biblical literature this strong strand of skepticism prevails, summarized perhaps best by

Jesus’ trope that “Solomon in all his glory” (an allusion to the Davidic Temple-State, the zenith of Israel’s civilizational power) was less intrinsically valuable than a single wildflower (Lk. 12:27). ii) *AP’s perspective on “pre-history” argues that the late Neolithic domestication of plants and animals led to the domestication of human beings.* Agriculture inexorably gave rise to concentrated populations and increasingly centralized and hierarchical societies in built urban environments. These in turn developed into oppressive city-states, an aggressively colonizing civilization that exerted a powerful centripetal force upon the hinterlands. Thus agriculture is portrayed in Genesis not as a gift of the gods – as in other Ancient Near Eastern myths – but as a curse, the result of human rejection of the old symbiotic lifeways of the “Garden” (Gen. 3:17–19).

While pastoralism is more sympathetically depicted in the biblical literature, we should keep in mind that during the period herders were socially marginalized fringe-dwellers.

From the Babel story on, the walled city and its architecture of domination is denounced regularly, as Ellul argues, including the Egyptian “store cities” built by Hebrew forced labor (Ex. 1:11–14) and the Canaanite fortress of Jericho (Josh. 6:26). And while much literature of the post-Davidic era romanticizes Jerusalem as the “city of God,” the prophetic voice continued to call those who “weigh tribute and count towers” agents of terror – including Israelite rulers (Isa. 33:18; Ezek. 26:3–9; Zeph. 1:16; 3:6). This urban antipathy is best captured by the Psalmist’s lament: “Truly I would flee to the wilderness . . . for I see violence and strife in the city . . . oppression and fraud on its streets” (Ps. 55:7, 9, 11). In the New Testament, John’s vision of the New Jerusalem portends a radical “greening” of the city: gates always open and a river running down Main Street on whose banks grow Eden’s Trees of Life (Rev. 21–22). iii) *AP endorses revisionist anthropological studies that offer a more sympathetic assessment of hunter-gatherer social and economic organization, emphasizing what Marshall Sahlins called the “original affluence” of stoneage cultures.* Up until the last quarter-century, modern anthropologists tended to share Thomas Hobbes’ bias that the lives of “uncivilized” humans were “solitary, poor, nasty, brutish, and short.” Since Sahlins, the consensus (as reflected in, for example, John Gowdy’s collection) has shifted almost 180 degrees; hunter-gatherer cultures tend now to be portrayed as healthier, more leisurely, freer, more materially satisfied, less anxious and infinitely more ecologically sustainable than modern industrial ones. In particular, indigenous practices of subsistence and gift exchange are now being appreciated (particularly by Hyde) as a viable, if radically different, economic paradigm.

This encourages a reassessment of the economic cosmology of the Bible. For example, the story of the manna in the wilderness instructs Israel (newly liberated from slavery in Egypt) about material sustenance as a divine gift (Ex. 16:4). The narrative stresses principles of “just gathering”: only take what is needed, don’t accumulate, and make sure each member of the community has enough

– but not too much (16:16–25)! The Bible emphasizes providential natural abundance, community selflimitation and just sharing. Sabbath year programs of debt-release and wealth redistribution – most notably in the Levitical Jubilee (Lev. 25) – were a hedge against the intense stratification that characterized the slaveand tribute-based economies of ancient Egypt, Assyria and Babylon. The Gift cosmology is reiterated by the prophets: “Come, you who have no money, come buy and eat; come buy wine and milk without money and without cost” (Isa. 55:1). It also makes better sense of New Testament texts that have been anathema to capitalist religion, such as Jesus’ teachings about giving up possessions (Lk. 12:13– 34), the economic sharing in the Acts community (Acts 2:42ff.), and even Paul’s practice of inter-church mutual aid (2 Cor. 8). These suggest that biblical writers may have been trying to rehabilitate the economic ethos of “precivilized” indigenous cultures as a better way. iv) *For AP the ecological crisis necessitates a radical critique of advanced toolmaking and all forms*

of industrial technology, in the belief that when we use tools they use us back in a way that dehumanizes us and destroys our more natural competences. The Bible, as an ancient text, has relatively little to say about “technology” *per se*, but two texts from the earliest strata of Torah are germane. One is the prohibition of domestic fires on the Sabbath (Ex. 35:3), thus circumscribing what clearly was the most ancient human tool. The other reflects a primal suspicion of tools as instruments of domination in relation to nature: “If you make an altar of stones for Me, do not construct it from hewn stone; if you use a tool on it you will defile it” (Ex. 20:25). Scripture has plenty to say about the danger of manufactured objects, particularly in the well-known prohibitions on image-making. But this taboo is more anti-fetishistic than anti-iconic, recognizing that “made objects” inevitably become mystified and sacralized, thus taking on more value than their makers (a classic statement is found in Isa. 43:9–20). This insight was later resurrected in Marx’s theory of commodity fetishism in capitalism, as Guy Debord has shown. Moreover, James Kennedy has also argued that Israel’s rejection of idols was a socioeconomic strategy of resistance to the public symbolism of tributary imperialism in Canaan (Ex. 32; Judg. 6; Deut. 4:19f.).

v) *Work for wages and hierarchical divisions of labor, the sine qua non of toxic civilization, are inherently alienating.* We have seen that agricultural labor is portrayed as antithetical to the divine will in the Fall story (Gen. 3:19). More generally, the Sabbath codes, which grounded in God’s own Self-limiting character (Gen. 2:2f.), sought to constrain the compulsive-addictive potential of all work by circumscribing it. Keeping the Sabbath is the first (Ex. 16:23) and last (Ex. 35:1–3) commandment in the Covenant Code, regularly interrupting the rhythm of the Israel agricultural year by ritual “work stoppages” (Lev. 23). The Law and prophets relentlessly criticize how the rich exploit the labor of the poor (e.g., Lev. 19:13; Am. 5:11). Jesus spins stories that undermine the sanctity of wage-labor (Matt. 20:1–16), and that pit rebellious peasants against wealthy landowners (Mk. 12:1–10). He advocates the right of the hungry to steal food (Mk. 2:23ff.) and invokes the cosmology of divine gift: “Consider the ravens: They do not sow or reap . . . yet God feeds them” (Lk. 12:24). Despite the captivity of modern Christian theology to the Protestant work ethic, the Bible’s Sabbath ethos (including Paul’s theology of grace) privileges being over doing, celebration over work, and gift over possession – again resonating with indigenous wisdom concerning personal, social and physical ecology.

vi) *For some AP theorists, symbolic representation (including language itself) lies at the heart of the “descent” into civilization, becoming a substitute for direct sensory experience of nature and engendering social differentiation.* While a radical critique of language finds no echo in the Bible (indeed, John speculates that “in the beginning was the Word,” Jn. 1:1), the suspicion of “representation” does. Israel’s covenant is sealed not only in the words of Torah, but also by the “witness” of a large stone under an oak tree (Josh. 24:27). It is idolatry (i.e., overrepresentationalism) that is the problem for biblical writers, not nature. Indeed the prophets recognize that even Israel’s own cultic apparatus can become a vehicle of oppression (Amos 5:21–24; Jer. 7:9–14, a text that inspired Jesus’ direct action in the Temple, Mk. 11:15:ff.).

Thus the story of early Israel is full of wild and often magical landscapes that directly reveal God (Ps. 104 and Job 38–41). These include remote deserts (Ex. 17:1) and spring-flooded streams (Josh. 3); lowlands springs (Gen. 26:19–22) and highlands caves (Gen. 19:30; Judg. 6:2;

1 Kgs. 19:9); singing forests and hills (Isa. 44:23; 55:12). YHWH appears under oak trees (Gen. 12:6f.; 18:1; Judg. 6:11; 1 Kgs. 19:4) and the divine voice is encountered in a burning bush (Ex. 3) and on a clouded mountain peak (Ex. 19; see Mk. 9:7). Heroes of the community are “born” in rivers (Ex. 2:3; see Mk. 1:9–11), buried under trees (Gen. 35:8; 1 Sam. 31:13) and walk on the sea (Mk. 4:35–41). Jacob’s ecstatic vision of the *axis mundi* comes in desert wildlands, his head on a dreaming stone: “How awesome is this place! This is none other than the House of God, the gate of heaven!” (Gen. 28:16–17). YHWH is imagined – but never imaged – as a roaring lion (Hos. 11:10), a nursing eagle (Deut. 32:11) and an angry mother bear (Hos. 13:8). As in all tribal societies, there are tales of dangerous adventures with wild animals, from Jonah’s whale to Daniel’s lions. And Israel’s ritual life is in tune with the seasons (Lev. 23) and the cycles of the moon (Ps. 81:3). Jesus prefers the solitude of the wilderness (Mk. 1:35), and invites his disciples to learn from seeds (Mk. 4), trees (13:28), birds (Lk. 12:24) and rain (Mt. 5:45). There are also some eschatological hints that primal, unmediated communion between God, nature and humans will one day be restored (Jer. 24:7; 31:33; Ezek. 36:26), which are intensified in John’s metaphors of existential unity (Jn. 6:35); in Paul’s notion of being “in Christ” (Rom. 8:35–39); and in the Temple-less New Jerusalem in which God dwells directly (Rev. 21:22). vii) *AP advocates a variety of individual and group strategies of “going feral,” both skirmishing with the dominant system and “re-inhabiting” natural spaces for their protection and our “detoxification.”* Two distinctive features of biblical theology are worth noting here. One is the way in which YHWH inhabits the undomesticated spaces outside of civilization, and is encountered only by humans who journey into the wilderness. This becomes the master metaphor of liberation in the Exodus story, and continues in the life of the prophets who go “feral” such as Elijah (1 Kgs. 19:3ff.), John the Baptist (Lk. 3) and Jesus, who begins his ministry with a wilderness “vision-quest” (Matt. 4:1–11). The writer of Hebrews invites believers to solidarity with Christ “outside the gates” of civilization (Heb. 13:12f.), and calls to mind the heroes of the faith who resisted empire by going feral, “wandering in deserts and mountains and living in caves” (Heb. 11:38). The Church is portrayed fleeing the imperial Beast into the desert in John’s Apocalypse (Rev. 12:6).

The other feature is the way nature is portrayed in “opposition” to imperial civilization. Egypt buckles under a siege of natural disasters (the “plagues” of Ex. 7–10). Prophetic oracles denounce the logging practices of Assyria (1 Kgs. 19:20ff.) and the river-polluting cattle ranches of Pharaoh (Ezek. 32:13f.), and long for the day when wild animals will re-inhabit the spaces that citystates have colonized (Isa. 13:19–22; 34:8–15; Ezek. 31): “I will give you as food to the wild birds and animals” (Ezek. 39:4). There is a fascinating story of people returning (if incompetently) to older food-gathering ways during famine (2 Kgs. 4:38–44), a parable of divine abundance vs. imperial scarcity

that Jesus re-enacts in his wilderness feedings (Mk. 6:35ff.). And the apostle Paul – who did his own time in the desert (Gal. 3:17) – calls for radical non-conformity to the dominant cultural codes of Roman civilization (Rom 12:1–2). viii) *The goal of AP is not to “go back to the Neolithic,” which is recognized to be impossible, but rather to (re)discover “future primitivity.”* The Bible agrees that since the Fall the natural world has been increasingly wrenched out of balance by the violence and greed of civilization. It proposes Torah as a code of alternative communal practices having to do with self-limitation. In it we find several interesting attempts to constrain ecocidal tendencies, such as the taboo against eating both mother and young game birds (Deut. 22:6) and the remarkable prohibition on destroying nature during war: “Are trees in the field human beings that they should come under siege from you?” (Deut. 20:19–20). The gospels seem to call for the re-opening of older ways (Mk. 1:2), and Jesus is called the archetypal “Human One” (Mk. 2:28) and the “eschatological Adam” (1 Cor. 15:45). Stories of his healing power suggest an ancient capacity renewed, not just for “shamans” but for all disciples (Mk. 6:12; Acts 3:1ff.). His oppositional stance led the representatives of civilization in Roman Palestine to execute Jesus as a heretic/dissident. The NT thus speaks candidly of the “cost of discipleship” and of faith as “being sure of what we hope for and certain of what we do not see; this is what the ancients were commended for” (Heb. 11:1). The same divine power that created the world is believed able to renew it, and biblical eschatology envisions the restoration of “original peacableness” (Isa. 11:6–9), insisting that a “new heaven and Earth” will ultimately eclipse the dreary reality of empire. This alternative consciousness is not escapist fantasy; it empowers practices of both renewal and resistance (2 Cor. 10:4; Eph. 6:10ff.). As Paul puts it, nature is groaning under its state of captivity, awaiting humans who will cooperate with the divine plan for the liberation of every living thing (Rom. 8:20f.).

Admittedly, few of the interpretations sketched above have been advanced by the theologies of Christendom, nor by contemporary mainstream biblical scholarship – quite the contrary. And there are, to be sure, certain strands of biblical literature that celebrate Israel-as-civilization, which have been used to promote everything AP deplores. But while the Judeo-Christian scriptures may not agree with all AP perspectives, what is surprising is to discover the degree of resonance. As is always the case, new questions open up new hermeneutical vistas. The above suggests that a conversation between biblical theology and radical green anarchism is not only possible, but also key to our exploration of the intersection between religion and nature.

Ched Myers

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- See also:* Anarchism; Christianity (3) – New Testament; Earth Bible; Earth First! and the Earth Liberation Front; Ellul, Jacques; Hebrew Bible; Kropotkin, Peter; Radical Environmentalism.

Andean Traditions

W'aka – The Pre-Colombian Andean Concept of the Sacred

In 1609 the Inca Garcilaso de la Vega, a converted Christian, provided the first Native Andean definition of the term *w'aka*, the pre-Colombian Quechua word used to describe the sacred. According to Inca Garcilaso, *w'aka* not only meant a “sacred thing” such as “idols, rocks, great stones or trees which the enemy (i.e., Satan) entered to make the people believe he was a god” but in addition, Andeans

. . . also give the name *huaca* to things they have offered to the Sun, such as figures of men, birds, and animals . . . *Huaca* is applied to any temple, large or small, to the sepulchers set up in the fields, and to the corners in their houses where the Devil spoke to their priests . . . The same name is given to all those things which for their beauty or excellence stand above other things of the same kind, such as a rose, an apple, or a pippin, or any other fruit that is better or more beautiful than the rest . . . On the other hand they give the name *huaca* to ugly and monstrous things . . . the great serpents of the Antis [Andes] . . . [any] eerie thing that is out of the usual course of nature, as a woman who gives birth to twins . . . double-yolked eggs are *huaca* . . . They use the word *huaca* of the great range of the Sierra Nevada . . . The same name is given to very high hills that stand above the rest as high towers stand above ordinary houses, and to steep mountain slopes . . . (Vega 1966: 76–7).

In other words, *w'aka* could be used to describe primordial beings, objects of worship, sacred spaces, temples, ritual gifts, sacrifices and extraordinary phenomenon of nature. The fluid character of this category reflects the

fluidity of religious forms in the Andes where the sacred emerged directly out of daily encounters with nature – in a basket of harvested fruit might lie a *w'aka* apple.

Andean Creation Myths

Myths about *w'aka* ancestors emphasized the way that nature evolved by adapting to conflict and change. Written in Quechua sometime between 1598 and 1608, the Peruvian Huarochirí manuscript is the oldest Native Andean document that relates local religious traditions and provides detailed accounts of the myths of two of the *w'aka* ancestors, Viracocha and Paria Caca. The manuscript relates how these *w'akas*

created and transformed the world as they traveled through it. As Viracocha or Paria Caca met up with other people, animals, plants or land forms, they would strategically change these creatures through blessings or curses depending on whether the creatures were helpful or hostile to the wanderers. Plant and animal characteristics and features of the Earth and sky all served as proof of the *w'akas'* travels. In the *altiplanos* of Peru these myths still resonate with contemporary *ayllus*, or lineage groups, who say, for example, that the Milky Way is the trail of Viracocha's sperm seeding the night.

In part, the structure of these Andean creation myths responded to a richly varied topography where the combined effect of the equator with extreme changes in altitude gives rise to radical shifts in landscape, flora, and fauna across relatively short distances. Intrinsically, the rugged Andean terrain highlights movement and change. Like the Huarochirí manuscript, oral narratives throughout the region incorporate these themes in creation stories, which illustrate how the world came into being through the interaction of travelers with the environment, other people, plants, animals, elements, and land forms. This understanding of the creation of the world inherently incorporates the experience of migration and immigration, the arrival of the foreign and encounters with the strange. Evolutionary in structure, these narratives address how the familiar world was transformed in these encounters.

Pacarinas – The Dawning Places of Andean People

Unlike the Judeo-Christian creation story, which posits a world that springs into being through verbal command and in a kind of immediate and orderly progression, Andean creation stories insist on many creations always in motion. Out of each valley, from each mountain ridge, arise a new people. The Huarochirí myths, for example relate how Viracocha and Paria Caca served as the progenitors and founders of separate *ayllus* around the region. After a time, often after a difficult battle, these *w'akas* were transformed into stones or prominent features of the landscape. Thus, the Andean people descended both from the *w'aka* as superhuman creature and the

w'aka as specific site of land whether hill, rock, river, spring, cave, tree or stone. This *ayllu* place of origin was known as *pacarina* or “dawning place.”

For Andeans, *pacarinas* created the possibility of multiple, contradictory and yet, non-competitive cosmological truths which could coexist within an extended social space. They served as the primary explanation for differences between people. This informing notion of identity continues in the contemporary Andean world where communities develop differences in dress, agricultural products, and professional specialization in response to the resources available on their home mountain or valley. In Bolivia, for example, the Aymara who were born from and continue to live on Mount Kaata “become the mountain and the mountain becomes them. Wearing symbols of the mountain, they dress like the mountain that gives them their clothes – and the

design for their clothes. Their oneness with the mountain is their integrity” (Bastien 1978: xxiv).

For Andeans, this profound identification with their home place served to sustain and protect Andean belief, culture and community in the face of radical change. According to Christian colonial authorities, for example, *pacarinas* served as the major intrinsic obstacle blocking Andeans from converting to Christianity. In 1621 Pablo José de Arriaga, the infamous Jesuit extirpator, wrote

It is this ignorance which is the cause of [the Andean’s] errors, which they believe deeply, and which has taken root in all of them. They do not know that we all proceed from our first Parents [Adam and Eve] and instead they are persuaded not only that the Spaniards originate from one place, the blacks from another, but that every *ayllu* and groupings of Indians have their own origin and *Pacarina*, which is their own and they name it and adore and offer sacrifices to it. They call it *Camac* which means Creator and everyone says that they have their own Creator and some say that it is such and such a Mountain, others that it is a Spring and others tell many fables and old wives tales about their *Pacarina* (Arriaga 1920: 69).

As Arriaga confirmed in the seventeenth century, at the heart of the Spanish Catholic encounter with Andeans lay a radical difference in interpretations of the sacred and nature.

Andeans and the Living World

For Andeans, the divine permeated everyday life and like nature itself, the sacred expressed its character in multiple and often contradictory ways. This understanding of the sentient, responsive nature of the world yielded up a religious experience that required interacting with and continually acknowledging the spirit character of objects and land. Andean traditions honored the living nature of *Inti* the sun, *Quilla* the moon, specific stars and distinct weather phenomenon like white fog, red fog, rainbows, tornadoes and lightning. They honored *Mamacocha*, the sea and *Mamapacha*, the Earth. Lakes, rivers, the *poquios* or springs, the *cerros*, or high mountains, large rock formations and the rocks themselves all have names and personalities. More specifically, Andeans honored their *pacarinas*, their individual place of origin – the mountains, springs, rivers and lakes out of which the First Man and the First Woman of the *ayllus* were born.

As historian Kenneth Mills argues, what to Arriaga and other “seventeenth-century Europeans seemed a vain cult of stone was in fact a present embodiment – albeit often in natural, petrified forms – and reinterpretation of a long cultural past” (Mills 1997: 43). This “embodiment” and “reinterpretation of a long cultural past” took additional form in the Andean religious practice that focused on the veneration of preserved ancestors, or *malquis*, who were said to be the sons and daughters of the *w’akas*. The

malquis were kept in ancient houses or sepulchers called *machays*. Like the *w'akas*, *malquis* had their own priests, possessions and feast days.

Within their homes, Andeans kept chances – lineage gods that were passed down through family lines and served to guard the welfare of the family – and *conopas*, personal fertility gods. The *conopas* were small natural stones or stones carved to represent llamas, coca, corn, potatoes, etc. These *conopas* served to attract health and bounty to the crop or herd that they represented. While *w'akas* were recognized as sacred sites within the larger *ayllu* or sometimes throughout an entire mountain region, *chancas* and *conopas* offered guidance and protection within the smaller family realm.

Andean Strategies for Engaging Difference

Because the greater Andean cosmological system took into account the specific variance of religious beliefs, sacred sites, and ritual practice that shifted from valley to valley and mountain to mountain, Andeans retained a strong capacity for accepting and acknowledging a range of cultural, mythological, and ritual differences. The “morphing” ability of the *w'akas* themselves, which enabled them to shape-shift from superhuman creature to human ancestor, to land form, to animal or bird, served as pedagogical lessons for engaging differences and ultimately revealed fluidity in Andean notions of identity.

Anthropologist Frank Salomon argues that the theme of transformation through conflict marks the most important cultural value shaping Andean mythology. Accordingly, Huarochirí myths delineate a dominant model “of passage from mere difference (for example, the juxtaposition of antagonistic deities strange to each other) to complementary difference (for example, a revised juxtaposition in which the deities become male and female spouses or siblings embodying opposite ecological principles).” This “formal architecture” of these myths “owes everything to Andean patterns” and “occurs at the greatest and smallest levels of the mythology, in domains from the cults of apical deities . . . to the household relationship between in-laws” (Salomon and Urioste 1991: 4).

This Andean epistemological framework engages multiple and seemingly competitive realities at the same time by incorporating an extensive system of binaries. Unlike the Platonic and Hegelian forms, Andean binaries are complementary and propel circles of exchange along a moving axis. For instance: the sun Inti, associated with the Father, rules men and soil, moves through the day and the year marking his own calendar. On the other end of the axis, the moon Quilla, which rules women and water, moves through the night and the month marking her calendar. Inti and Quilla approach, their light and darkness intermingle, but they never quite connect.

Like Inti and Quilla, men and women, too, maintain complementary differences, which they negotiate sometimes in cooperation, at other times in tension as they move

toward and away from each other in a constant dance. Andean *fiesta* dances mirror this axis of tension and attraction combining lines and circles as women and men approach each other on a line and then move back, or follow each other on a circle, tightly controlled by a repetitive melody and rhythm. In this way, Andean binaries allow the incorporation of very different others by highlighting complementary relationships of exchange.

Andean Traditions Engage Christianity

In the Andes, Native traditions and Christian traditions also exist in this kind of binary relationship of tension and attraction. Based on the patterns of nature found in the Andes, Andean cosmologies privileged transformation and accretion emphasizing complementary differences and thus making room for binary oppositions. This directly shaped how Andeans engaged Christianity. The cult of the Christian saints allowed Andeans to incorporate additional powerful icons into their network of sacred relationships – *w'akas* whose range of influence potentially led all the way to Spain. Because Andean sacred authority depended on a network of *w'aka* alliances with the living land, influential Saints necessarily were understood to have made the appropriate Andean pacts with the *cerros* and other *w'akas* in order to sustain their miraculous power.

This interpretation continues in the Andes today. In Ecuador, for instance, contemporary Quito Runa say that their patron saint, La Virgen del Presentación de Quinche, was born from a rock in the Guayllabamba river. La Virgen de Quinche is a powerful midwife and, like the *w'akas*, she can shape-shift and sometimes appears as a turtle dove beside local *pocyos*, the mountain springs that serve as the eyes or doors to the inner mountain world. Ecuadorian shamans, or *yachajs* say that on the inside of these living mountains lie parallel cities filled with plants, animals, minerals and the spirits of the dead and the unborn. *Yach-ajs* make pacts with the mountains by bathing in the *pocyos*. On the basis of these alliances *yachajs* can attract and repel the circulation of life-giving and life-taking energies and produce coming from the inner mountain world to the communities on the outside. The Virgin of Quinche's ability to transform into a turtle dove and her association with the *pocyos* suggests that she, too, has formed alliances with the living mountains in order to fortify her healing powers.

For Andeans, the morphic quality of the *w'akas*, who in turn reflected evolutionary patterns in nature, formed a structural precedent of change that provided strategies for developing complimentary differences when engaging others. For the Andean people these strategies enabled them to flexibly combine their traditional beliefs with mythic elements introduced by Christianity while, at the same time, preserving communal identities. In effect, the *w'akas* flexibly shape-shifted from ancestor, to *cerro*, to bird, to saint while each manifestation, in turn, continued to represent the "home" *ayllu*.

Andean Identity and Place

In the post-contact era, we can see this transformative fluidity in the expression of Andean identity from the first moments after Spanish conquest all the way to contemporary expressions of traditional Andean culture. In 1555 the *ayllus* surrounding Cuzco converged on the main square carrying one hundred different images of the saints in order to celebrate the first Corpus Christi after the conquest. Anthropologist Michael Sallnow describes how

. . . [e]ach nation paraded in its distinctive ceremonial costume [traditionally ordered by the mountains], carrying aloft along with its saints an image of its bird or animal totem [i.e., its *w'aka* in bird or animal form], or a picture of its *pacarina* – spring, river, lake, mountain, cave, or whatever. Each had its band of flutes, drums, and tambourines, and they sang not in Quechua but in their native tongues, “so as to differentiate one nation from another” (Sallnow 1987: 57).

Here we see how Andean nations expressed their identity through multiple media: native language, song, music, dance, ceremonial dress, *w'aka* totems, and pictures of *pacarinas*, along with the images of their new patron saints. Sallnow argues that while superficially this ceremony resembled a traditional Corpus Christi celebration in Spain there remained a crucial difference. “[T]he Indians accompanying the Christian images in Cuzco were organized not according to any Iberian model but on the basis of national affiliation – affiliation, that is, to one or other of the diverse ethnic groups of the region” (1987: 56). Ultimately, this is an affiliation to and thus an expression of each *ayllu*'s home place – the sacred center of Andean life. Contemporary Qamawara pilgrimages through the department of Cuzco continue ritually to express Andean identity through song, dance, ceremonial dress and *laminas* or framed prints that combine images of their own local saint and *pacarina*. One Qamawaran *lamina*, for instance, features an image of a local miraculous Christ – Qoyllur Rit'i who is accompanied by two *wayrich'uncho* dancers and Mt. Ausankati, the *ayllu*'s home *cerro* in the background. As in colonial times, in the contemporary Native Andean world the strength of the Andean *ayllu* arises directly from its relationship to and identification with powerful living places.

The Living Mountains – The Sacred Center of Andean Life

For Andeans the communal body reflects and expresses the body of the land. The Aymara of Bolivia, for example, see their mountains as sentient creatures with living bodies, complete with head, torso and legs, who must maintain complicated relationships just as people do. As one young Aymaran described his home, Mount Kaata,

The mountain is like us, and we're like it . . . The mountain has a head where alpaca hair and bunchgrass grow. The highland herders of Apacheta offer llama fetuses into

the lakes, which are its eyes, and into a cave, which is its mouth, to feed the head. There you can see Tit Hill on the trunk of the body

. . . Kaata is the heart and guts, where potatoes and oca grow beneath the Earth. The great ritualists live there. They offer blood and fat to this body. If we don't feed the mountain, it won't feed us. Corn grows on the lower slopes of Niñokorin, the legs of Mount Kaata (in Bastien 1978: xix).

Within this Aymaran cosmology the mountain's body produces three different kinds of produce that each express specific characteristics of the *cerro* and the *ayllus* who live there. The communities of Apacheta, Kaata, and Niñokorin each trade, first and foremost, with the corresponding body part – whether head, belly or legs – on which they live. By feeding shrines coca, *chicha* and llama fat and blood, or sacrificing a llama to the land in specific agricultural rites, these communities offer gifts to the mountain in exchange for the mountain's gifts of llama hair, potatoes or corn. Then through trade between the upper, middle and lower communities, these three different kinds of produce, from the three sections of the mountain body, are brought together so that, within each community, the body of the mountain is reunited. Here mountain wholeness incorporates communal and mythoecological differences.

The *ayllus* of Mount Kaata trade in turn with other *ayllus* from neighboring mountains thereby creating extensive flows of produce and communal alliances that ultimately stretch across the Andes like links in a long chain. Local and regional agricultural festivals honoring planting, first fruit and harvest serve as a means to properly celebrate and nourish the mountains while forging bonds between neighboring communities. The local saints that preside over these festivals in turn draw their authority from their historical association to those specific Andean places.

Throughout the Andes, it is the *yachaj's* responsibility to maintain a balance of exchange between the mountain and human communities, between ritually feeding the *cerros* and consuming the fruit of the mountain's body. Should communities fail to nourish appropriately the mountain they live on and take more than they give back, a deficit can arise where the mountain becomes hungry and may begin to kill in order to eat, consuming people in landslides, floods, falls into mountain ravines, or wasting illness. Excessive mining, road building, or thoughtless construction, in particular, can create a ravenous imbalance as machines devour huge portions of the mountain's body. Mining accidents and deadly landslides on roads frequently reveal a hungry mountain – a *cerro bravo* who has been improperly compensated for its loss.

A semantic shift in the modern-day usage of the word *w'aka* reflects the impact that greed has had not only on the relationship between Andean people and the living land, but on the Andean experience of the sacred as well. In Spanish-speaking circles *w'aka* has come to represent “treasure” and refers only to the valuable objects that people left in order to nourish the living places – the objects looted since the conquest from *w'aka* temples, *w'aka* tombs, and other *w'aka* sites. Accordingly, in the contemporary Andean world, the spiritually neglected and therefore greedy mountain no longer dresses in traditional Andean fashion; instead it appears as the Devil or as a Gringo – a white

man dressed in European clothing. Even here, the land's body continues to reflect the social body – changing in appearance as people's identity and their relation to the land also transforms.

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Anima Mundi – The World Soul

Despite Western civilization's persistent bent toward separation from and control of an objectified natural environment, the image of a living, interconnected, and sacred world has persisted. Today that sense of sacrality finds expression in deep ecology, in ecopsychology, and in emergent nature religions. In Classical times, however, and again in the Renaissance, the living world was seen as embodying the "world soul," or in Latin, the *anima mundi*. Since ancient times, therefore, the West has retained the idea of the *anima mundi* in tension with materialist views of the natural world.

The early Greek philosopher Heraclitus (sixth century B.C.E.) taught that the world existed as a tension of opposites, such as war and peace, all animated by a "soul" or essence imagined as divine fire, eternal and uncreated.

About 150 years later, the philosopher Plato, in his dialog *Timaeus*, described how the creator-god (demiurge) placed soul (psyche) at the world's center. This "world soul" mediated between nature and the world of "forms," the abstract, transcendent models used by the creator-god to fashion the universe.

Plato's subsequent followers, the Middle Platonists, viewed the world soul as generating individual souls. They identified it with the goddess Hekate, who moved between worlds and guided souls after death from the earthly realm to heavenly ones.

Soteriologically minded philosophers and theurgists, who wished to assure the rising of their own souls, later advanced the idea that Hekate, by controlling the crossing of the boundary between humanity and divinity, either could aid the ascent or could force the decent of the [individual] soul (Johnston 1990: 38).

The Neoplatonic school, founded by Plotinus (205–270) continued to teach that the universe emanated from a divine incomprehensible source, stretching down to the material world, with the *anima mundi* occupying the middle position. Neoplatonism was revived during the Renaissance, thanks largely to the efforts of philosopher and translator Marsilio Ficino (1433–1499). Exemplifying the humanist tradition that aimed to elevate humans' position in the universe, Ficino taught that humans, through imagination, artistry and magic, could tap into a network of elaborate correspondences through the medium of the *anima mundi* in order to understand and manipulate natural forces.

During the Enlightenment, Europeans embraced the notion that a rational, progressive civilization could transform the world into a smoothly functioning machine. Romantics, however, revived the idea of a living universe whose mysteries can be approached through the power of imagination, which allows communication between humans and the rest of nature.

Twentieth-century thinkers also advanced new concepts of the world soul. The French paleontologist and theologian Teilhard de Chardin suggested that the planet found its soul in the “noosphere,” the total consciousness of all intelligent life. The reality of this consciousness would transcend the biosphere, the sum of all living plants and animals. In 1969, the British scientist James Lovelock suggested that planet Earth be regarded as a totality or a cybernetic (self-correcting) mechanism that seeks to keep all its physical and chemical elements in the right balance for life to exist. This system could be hypothetically regarded as a living entity, “Gaia,” he suggested. According to Lovelock, it seems extremely unlikely that this balance occurred by mere chance; thus, the intention behind it might be said to derive from the *anima mundi*, the world soul.

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Animal Liberation and Animal Rights

– See Animals; Anarchism; Earth First! and the Earth Liberation Front; Environmental Ethics; Radical Environmentalism (and adjacent Rodney Coronado and the Animal Liberation Front); Watson, Paul – and the Sea Shepherd Conservation Society.

Animal Liberation Front

– See Rodney Coronado and the Animal Liberation Front (adjacent to Radical Environmentalism).

Animal Rights in the Jewish Tradition

Any discussion of animal rights in the Jewish tradition must start from the recognition that the concept of “rights,” based on a modern understanding of individuality, is foreign to Judaism. Rather, Jewish law defines obligations that people have to others, whether those others are people, or animals or the land, or whichever entity has moral standing. The equivalent of a right possessed by a person in Jewish law would be the determination that a Jewish or human obligation existed toward that person. One finds that such obligations exist in Jewish law and theology with respect to animals and not only with respect to human beings.

It is clear in the Torah that animals have moral status. Laws about helping an animal fallen under its load (Ex. 23:5, Deut. 22:4), about not muzzling an animal so that it can eat while it works (Deut. 25:4), as well as many of the laws concerning kosher slaughter or *shechitah*, appear to have consideration for the subjective needs of the creatures. The laws of *shechitah* have two goals: minimizing pain to the animal and draining all the blood from the animal’s body. The latter goal is directly connected to a primitive understanding of animal rights, which was expressed in animistic desire to release the animal’s soul, which according to the Torah is found in its blood (Gen. 8:3–4; Lev. 17:14; Deut. 12:23–25). Other laws, like the prohibition against taking the life of a mother and child animal on the same day (Lev. 22:8), reflect a concern for the subjectivity of animals as sympathetically understood by human beings. The prohibitions against sterilizing any animal and against crossbreeding between animals also seem to be rooted in needs of species as well as of individual animals.

The Torah maintains that even domestic animals live for their own sake and not just for ours. All the more so, Torah prohibitions that limit the slaughter of wild animals (Lev. 17:13–14), require one to free a wild mother bird if one wishes to take its eggs (Deut. 22:6–7), and assert the need for wild animals to share in the produce of the land (Lev. 25:6–7), reflect a consciousness that animals have their own purposes and needs that are not trumped by human interests.

In the *halakhah* or legal system of the rabbis, the Torah’s specific prohibitions were organized into a general valorization of the needs of animals (Schochet 1984: 151). The Talmud established that the Torah forbade causing pain and suffering to animals, *tza’ar ba’alei chayyim*, even though this idea is not articulated in any scriptural verse (BT Baba Metzi’a 32b). The laws of Shabbat could be overridden for the sake of this principle (Schochet 1984: 155–7). The rabbis also articulated a near-blanket prohibition

of hunting, despite the Torah's acceptance of slaughtering wild animals as long as their blood was buried in the Earth.

In general, rabbinic interpretation extended and strengthened laws related to animal welfare. Yet there was an understanding of the needs of animals and all creatures that was far deeper than the notion of "welfare." Emero Stiegman writes that in the rabbinic worldview, man is not considered the measure of all things. Nature is not measured against him in metaphysical categories . . . Things were not forced to coalesce; each was seen, not "objectively", but . . . in its specific, separate relationship to its Maker . . . [S]uch a view . . . compels an acceptance of creatures, not according to their supposed nature, but according to their concrete relationships, to God not least. Man also, then, is not seen as an essence, but as related (1979: 500).

If humans are ends-in-themselves, it is not because they possess some essence which sets them apart over all other species. Rather, their value comes from the significance of their relationships, with humans, other creatures and God. Many *midrashim* teach that human beings imitate God by extending mercy to other creatures. *Midrash Tanchuma* asks: "Why is Noah called righteous? Because he fed the creatures of the Holy One, and became like his Creator. Thus it says, 'For the Lord is righteous, loving righteous deeds'" (*Noach* sec. 4, 35). Fundamentally, the meaning of being human is established not only by the way we treat human beings but also by the way we treat the other animals. Stiegman speculates that this emphasis on relationship may be "why the rabbis could affirm man's centrality in creation and his dominion without reducing the world to a mere complex of useful functions."

Since other creatures stand in relation to God and to each other, they have the rabbinic equivalent of intrinsic value, so that the intrinsic needs of animals could override their use-value to humans. These intrinsic needs may be recognized as the equivalent of "animal rights."

Notwithstanding the rules and precepts affirming that animals deserve just treatment, the framework of both the

Torah and the rabbis allowed humans to use animals and to kill them to serve human needs. The application of these laws involved finding a balance between using animals for human purposes, and allowing them to fulfill their own purposes. In essence, Judaism recognized the rights of animals to live according to their needs, while recognizing that human beings had the right to use animals as long as the quality of their lives was preserved.

Rabbinic Theology

What these laws meant theologically is a more complex subject. In rabbinic Judaism, there was a general acceptance of the idea that animals had souls (*Tanchuma*, *Noach* sec. 10, 39; *Genesis Rabbah* 30:6) and that they could choose to fulfill God's purpose. A

traditional way of framing the latter concept is found in a *midrash* about the animals that were saved in Noah's ark:

If [God] remembered Noah, why also the animals? May the name of the Holy One be blessed, who never deprives any creature of its reward. If even a mouse has preserved its family [i.e. species] it deserves to receive a reward (*Tanchuma, Noah* sec. 11, 41).

This affirmation of animals participating in the moral order is expressed directly in the Noah story itself, where the first covenant that God establishes explicitly includes the animals as partners (Gen. 9:12–16). On a more folkloric level, the rabbis held that animals could be moral actors. Animals like Rabbi Pinchas' donkey, who refused to eat untithed grain, could be especially pious, and animals could show mercy to people, as does the raven in this story:

Adam and his partner came and cried over Abel, and they didn't know what to do . . . One raven whose companion died said, "I will teach Adam that this is what to do." He set down his friend and dug in the earth before their eyes and buried him. Adam said, "Like the raven, this is what we will do" (*Pirkei d'Rabi Eli'ezer*, sec. 21).

Within the rabbinic worldview, it is not only human beings who have the capacity to show mercy. In general, ethics is in its essence seen by the rabbis as part of the natural order; this is what it means to call normal ethical behavior "*derekh erez*" or "the way of the Earth" (Kadushin 1938: 117–30). At the same time, there are passages that suggest that everything, including the animals, was created to serve humanity. Rabbinic literature preserves the wisdom of many schools of thought and often expresses the complexity of its subjects by juxtaposing contradictory values.

Theologically, the rabbis also held a modest understanding of the dominion granted to Adam in Genesis 1:26–28. They understood these verses as allowing human beings to use animals for work, but *not* to kill them

(BT *Sanhedrin* 59b). The power of dominion over other animals and the power of conquest over the land, which were present in the blessings of Genesis 1, are noticeably absent in the blessings given to Noah (Gen. 9:1–7), where the permission to eat meat is first articulated. *Genesis Rabbah* (34:12) learns from this that humanity no longer exercised dominion over the animals after the flood; rather, dominion was replaced by fear. According to Rashi's commentary on this passage (11th century), the "dominion" of the garden was the opposite of fear because it meant the power to draw the animals close; that is, "Adam would call the animals and they would come."

One way in which these potentially contradictory values of dominion and compassion were integrated is that animals were understood to fulfill their own needs, on a soul level, by being used for sanctified ends. The ultimate example of this can be found in the animal sacrifices in the Temple, which harvested the intrinsic value of the animal for an end greater than human needs or desires, something we might term its "holiness-value." From a biblical perspective, using animals for sacrifices was a mechanism that affirmed the sacredness of their lives while still allowing them to be eaten. The blood, defined as the *nefesh* or soul in the animal, was put on the altar to make clear that the essence of the animal was not allowed to be used by human beings.

The rabbis affirmed this system, while also occasionally questioning it. When Rabbi Yehudah haNasi, the leading figure of the Talmud, sent a calf that sought refuge with him back to be sacrificed, saying “Go, for you were created for that purpose,” the angels afflicted him with sickness and suffering (BT Baba Metzi’a 85a). The conflicted message of this story is that even the highest use of an animal’s life could not be fully justified from the perspective of righteousness.

Medieval Thought

Rabbinic literature is quite explicit that God cares for animals (e.g., *Deuteronomy Rabbah* 6:1). Nonetheless, later medieval thinkers like Ibn Ezra and Abravanel, influenced by Aristotle’s division between rational beings and all other creatures, declared that the only purpose of the laws against *tza’ar ba’alei chayyim* was moral education (Schochet: 212–15). Importantly, Nachmanides, the earliest one to make this interpretation, emphasized not only that the laws “teach us the trait of compassion” but also that they forbid actions which would cause the extinction of a species (commentary to Deut. 22:7).

Some scholars like David Bleich have interpreted Maimonides as holding this position in *The Guide for the Perplexed* (3:17), though this is incorrect, since Maimonides affirms there that compassion must be shown to the individual animal. This is made clear by the other passages in which Maimonides describes the suffering of animals as the paramount reason for these laws (3:48). In the disagreement between Maimonides and Nachmanides are echoes of the contemporary debate between animal rights and environmental activists over the value of individual lives of animals versus the well-being of species.

In medieval Jewish mysticism and Kabbalah, sensitivity to animals became greatly magnified, in line with the general motive held by the mystics of rejecting the rationalistic thought of the philosophers. For example, *Sefer Chasidim* (Yehudah Hechasi, 12th century) says that if a person causes needless pain to animals . . . he comes to judgment . . . Thus the sages explained “in that day I will strike every horse” (Zech. 12:4) to mean that the Holy One is destined to punish [human beings] for the humiliation of horses from their riders (sec. 43, 104).

Similarly, the innocence of animals is invoked in this same work to understand the reason for the commandment to cover the blood of a slaughtered animal:

[W]hen a person slaughters an animal or bird he should think in his heart, this one that did not sin was slaughtered . . . He should consider how the Holy One commanded him to cover an animal or bird’s blood, lest the angel having authority over them should say, “How is the blood of this one that didn’t sin spilled by the hand of a sinner whose sin is like scarlet and worm” (sec. 373, 273).

Other important figures emphasizing compassion for animals include Rabbis Moshe Cordovero and Moshe Chayyim Luzzato (Sears, 2003). With the emphasis on transmi-

gration of the soul in Kabbalah, the belief that both the righteous and wicked were sometimes reincarnated in animals became widespread. Though some Kabbalists emphasized the practice of strict vegetarianism in response to this belief, most affirmed that an animal's soul could be elevated through being slaughtered and eaten with the right intention by holy people. Moreover, the animal was thought of as yearning for this to happen. Many Chasidic rebbes and teachers also emphasized the deepest compassion for animals; Dovid of Lelov (1746– 1814) was especially known for his piety and passion in this regard. Most of this mystical material was not directed at the normally observant Jew but only at the circle of mystics or *tzadikim*. While this material has relevance to ethical questions it is tangential to the formulation of animal rights in Judaism because it was never seen as binding on the entire community.

Modern Applications

Much of the law relevant to contemporary questions is still being worked out. Rabbi David Rosen, the former Chief Rabbi of Ireland, believes that *tza'ar ba'alei chayyim* requires the prohibition of commercially produced meat:

“The current treatment of animals in the livestock trade definitely renders the consumption of meat halakhically unacceptable as the product of illegitimate means” (1995: 53). Followers of Rabbi Abraham Isaac Kook like Shear-Yashuv Cohen and David Sears, as well as many early leaders of the Jewish environmental movement in North America, such as Richard Schwartz, have strongly advocated for vegetarianism as the best modern response to laws protecting animals. Prohibitions against using animals for cosmetics testing and similarly inessential research have also been made in the United States and Israel. With respect to genetic engineering, some have raised the question of whether these techniques may be applied to animals without violating halakhic mandates, but there is as yet no consensus in this regard.

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See also: Animals; Animals in the Bible and Qur'an; Christianity and Animals; Dogs in the Abrahamic Traditions; Dogs in the Islamic Tradition; Eco-Kabbalah; Jewish Environmentalism in North America; Jewish Law and Animal Experimentation; Jewish Law and Genetic Engineering; Judaism; Maimonides; Vegetarianism and Judaism; Vegetarianism and Rabbi Abraham Isaac Kook; Vegetarianism, Judaism, and God's Intention.

Animals

Any account of religious traditions' engagement with other animals will swell into a multitude of diverse issues, a number of which are extraordinarily complex. Some of the complexities stem from the well-known fact that over the millennia of their existence, religious traditions have provided an astonishing array of views and materials on virtually any general subject that believers, scholars and other interested parties might explore. This variety is made all the more challenging because even within any one religious tradition, such views and materials can be in significant tension.

A very different set of complexities arises from how living beings outside our own species can be startlingly different from one another. Many are mentally, socially, and individually very simple, but others are so complicated and enigmatic mentally and socially that we may not have the ability to understand their lives well. Ignorance of these differences has often led, both within and without religion, to crass oversimplifications. Indeed, many of our most familiar ways of talking about the nonhuman living beings upon the Earth turn out to be, upon careful examination, coarse caricatures and profoundly inaccurate descriptions.

Whatever else may be said of religious traditions regarding nonhuman animals, these ancient and enduring cultural and ethical traditions have unquestionably had profound impacts on countless humans' actions affecting the living beings amidst which we live. Indeed, religion has often been the primary source for answers to questions such as, "Which living beings really should matter to me and my community?" The answers to such questions given by, for example, the early Jains and Buddhists and the early Christians have had, in their respective cultural milieus and beyond, great influence on how the living beings outside the human species have been understood and treated.

Basic Tools and Conceptual Problems

The Place of Inherited Conceptions

Many religious believers' perspectives on nonhuman animals have been dominated by something other than a careful engagement with the animals themselves. For example, inherited preconceptions, which often have taken the form of dismissive generalizations found in documents held to be revealed, in some cases operate as definitive assessments of *all* nonhuman animals' nature, abilities, and moral significance. Heritages of this kind can present severe problems for historians, theologians, and believers who

wish to engage readily available, empirically-based evidence that contradicts, in letter or spirit, inherited views that are inaccurate or in some other way misleading.

Symbolism

Images of nonhuman living beings abound in religious art, writing, and oral traditions. While some of these images are connected in one way or another to the animals portrayed, many are not any more related to the animals pictured or named than the saying “love of money is the root of all evil” (1 Tim. 6:10) is related to botany. Some studies of “religion and animals” are confined solely to the study of religious images of other animals, and in no way raise the issue of the actual biological beings themselves.

Ethics

Religious traditions characteristically foreground ethical concerns for “others.” These others can, of course, include both humans and nonhumans. Some religious traditions insist that the universe of morally considerable beings includes all living beings, while others have had, ethically speaking, a pronounced human-centered bias because they assert that only humans truly matter. Note, however, that even if proponents of these competing claims differ radically as to the extent to which human caring abilities should reach outside the human species, they share the conviction that humans are characterized by extraordinary ethical abilities to care for “others.” A central question in the study of religion and animals is, “Who are the others?”

Treatment of Other Animals

Although there is in many circles a tendency to equate religious views with factual propositions about the world, most religious traditions include the insight that acts speak louder about what one really believes than do spoken or written words. Accordingly, what religious traditions truly “think” about other animals is, at least in part, represented by the actual, “on the ground” treatment of other living beings. A religion which features, say, bull worship in its temples but in no way addresses brutal treatment of cattle in the daily world outside the temple will, quite naturally, seem to us to have a different view of cattle than does a religion that unequivocally prohibits harsh treatment or even killing of bulls and cows.

Interlocking Oppressions

An ancient ethical insight suggests that when a human harms another living being, the actor and even other humans are desensitized, such that they may subsequently

harm more individuals. This insight, found in one form or another in some religious traditions, was one of the classic justifications for anti-cruelty traditions applying to non-human animals. A modern version of this insight underlies contemporary sociologists' and law enforcement officials' assumption that certain instances of human-on-human oppression, such as domestic violence, are psychologically linked to or "interlocked" with violence to nonhuman animals (Ascione and Arkow 1999 provide details of the correlation of, for example, domestic violence against a spouse or children and violence against nonhuman animals). More broadly, the respected Oxford historian

K. Thomas suggests further that the domestication of nonhuman animals "generated a more authoritarian attitude" and "became the archetypal pattern for other kinds of social subordination" (Thomas 1983: 46). These ethical insights suggest that because oppression of one kind of living being seems to lead to the oppression of other kinds of living beings, the study of religion and animals will often benefit from careful study of social justice concerns.

Religions as Carriers of Views about Animals and their Habitat

As holders and educators in matters cultural, intellectual, ethical, social, and ecological, religious traditions mediate views of the world around us across time and place. It is natural then that, since nonhuman animals are truly around and with us in our ecological communities, religious traditions have had a major role in passing along basic ideas about these beings' place in, or exclusion from, our communities of concern. Understanding this feature of religion, particularly as it is a highly contextualized piece in any religious tradition's larger puzzle, is an essential task in the study of religion and animals.

History of Scholarship on Religion and Animals

Even though astonishingly rich information has been developed in certain contemporary life sciences regarding various nonhuman animals' mental, social and emotional complexities, the vast majority of scholarship in contemporary academic institutions goes forward on the assumption that humans alone are intellectually complex, capable of emotional depth and commitment, characterized by social connections and personality development, and able to develop the kinds of autonomy that moral beings intuitively respect. Academic expression today thus reflects regularly the anthropocentric bias of the Western intellectual tradition.

Numerous religious believers across time and place, however, have not adhered to the broad dismissal of nonhuman animals characteristic of the Western intellectual tradition. Many indigenous traditions, for example, reflect a serious engagement with some other living beings as morally and religiously significant beings. There have been

vibrant debates in various places, including the Indian subcontinent, the Hellenistic world, and contemporary life sciences, regarding the specific abilities of nonhuman animals. Sorabji (1993) concludes that Augustine was the pivotal figure in shutting down the debate in the Western intellectual tradition, the upshot being a broad dismissal of other animals' significance relative to humans' importance. Even if this is true, it is well known that concerns for nonhuman animals' welfare have continued to have a place, albeit a subordinate one, in the complex Jewish, Christian, and Islamic traditions as they carried their ancient religious insights into modern times. Francis of Assisi and Albert Schweitzer are oft-cited examples of profound concern for other animals, but seminal figures like Ambrose, Basil, Rumi, Maimonides,

Luther, Calvin, Wesley, Ibn Taymiyah, Isaac Bashevis Singer, Barth, Tillich, Teilhard, and Thomas Berry have reflected their traditions' respective capacities to enable believers to see and care about living beings beyond our species.

Thus, it is facile to conclude that all who have thought about religion and animal issues have, quite naturally and obviously, thought about the issues in the dismissive manner which dominates thinking in the Western intellectual world today. Although there is, as yet, no systematic treatment of the place of nonhuman animals in the doctrines, rituals, experiences, ethics, myths, social realities, and ecological perspectives of religious traditions, it is clear that the picture, when drawn, will be diverse and offer many alternatives for interacting with the Earth's nonhuman lives.

Institutional Realities

In the official pronouncements of the vast majority of organized religions, however, a pronounced humancenteredness still reigns. The eminently anthropocentric biases that dominate modern religious institutions' discourse and conceptual generalities are reflected in the prevailing assumptions as to which "others" are appropriate subjects for humans' considerable ethical abilities. Paragraph 2415 of the revised Catholic Catechism (1994) provides an example of the prevailing anthropocentrism: "Animals, like plants and inanimate things, are by nature destined for the common good of past, present and future humanity." As a result of this kind of human-centeredness, mainline religious institutions have left unchallenged the prevailing practices of modern food animal production and the use of nonhuman animals as subjects in biomedical experimentation. There have been, to be sure, some challenges, though most have come from indigenous traditions and those of the Indian subcontinent.

The World Religions

Hinduism

As a vast set of religious beliefs and subtraditions, this oldest of the so-called world religions offers an immense range of views about the living beings who share our ecological niches. The different views are dominated by two general beliefs that govern the ways in which other animals are conceived. First, human beings, though recognized to be in a continuum with other animals, are considered the model of what biological life should be. A corollary of this hierarchical belief is the claim that the status “human” is far above the status of any other animal. Second, belief in reincarnation, a hallmark of most, though not all, Hindus’ beliefs, includes the notion that any living being’s current position in the cycle of life is a deserved position because it has been determined by the strict law of karma.

These two beliefs have resulted in other animals being viewed with uncertainty. Positively, other animals have been understood to have souls just as do humans. Negatively, though, other animals have been understood to be inferior to any human, a corollary of which is the belief that the existence of other animals must be particularly unhappy, at least compared to human existence. Importantly, humans are by no means considered equal to one another in classical Hinduism, for according to the *sanatana dharma* or eternal law and moral structure of the universe, all humans, like other animals, are born into that station in life for which their past karma has fitted them. Inequalities existing within the social system, as well as the fact that nonhuman animals were considered of less stature than humans, were not viewed as unjust; rather, these different stations in the hierarchy were explained as the result of good or bad deeds performed in former lives. A common claim is that those who act morally are assured of a good rebirth in higher social classes, while wrongdoers are assured of being reborn into the wombs of outcasts or, worse yet, a nonhuman animal. Hindu social codes, embodied in the Laws of Manu, reflect in many different ways this one-dimensional view of other animals as inferior to humans.

Despite the implicit and explicit deprecation of nonhuman animals (and, of course, of “lower”-level humans), the tradition has often exhibited great sensitivity to other animals. The vast scriptures of this tradition include many injunctions that one should treat other animals exactly like one’s own children. Many central texts in the canon, such as Rig-Veda and Atharva-Veda, reveal that the Earth was not thought of as created for humans alone, but for other creatures as well. Thus, many contemporary Hindus argue that all lives, human or nonhuman, are of equal value, and all have the same right to existence. More generally, village life in India provides many examples of coexistence with other animals, though there are, to be sure, examples of mistreatment as well.

Humans, then, even if they have a privileged place in the hierarchy, also have special obligations to all living beings. This way of thinking is often buttressed by the obser-

vation that many Hindu deities, such as Rama and Krishna, who are, respectively, closely associated with monkeys and cows, have been incarnated as other animals. In addition, the deities worshipped in India include Ganesh, an elephant-headed god, and Hanuman, the monkey god.

An ancient form of the tradition was challenged by Buddhists and Jains because it was characterized by a heavy emphasis on animal sacrifice, a practice that stemmed from the ancient scriptures known as the Vedas. The Jains and Buddhists challenged these sacrifices as cruel and unethical, and had a great effect on the later Hindu views of the decency of intentionally sacrificing other animals. *Ahimsa*, the historically important emphasis on nonviolence, has now become a central feature of the tradition.

This sensitive side in Hindus' awareness of other animals is often symbolized by the image of sacred cows wandering the streets of India unmolested and free; yet, the realities for animals in Hindu societies have been and continue to be far more complicated. The traditional respect for other animals has been affected greatly by economic factors which inhibit transmission of ancient values which encourage respect for other animals. Nowadays, the pace of modern development is leaving behind the strong emphasis which almost all Hindu scriptures place on the notion that benefits can be received by not killing or harming other animals.

Buddhism

The place of other animals in the Buddhist tradition is not a simple matter even though there are believers and scholars who claim that Buddhism takes a kind, sympathetic view toward nonhuman lives. Compassion toward other animals is, without question, an important feature of much Buddhist thinking, for the tradition unequivocally expresses concern for nonhuman animals as fellow voyagers in *samsara*. But in important senses the tradition carries an overall negative view of nonhuman animals' existence, standing, and abilities relative to those of members of the human species.

From its earliest stages, the tradition has been characterized by a consistent disparagement of biological beings outside the human species. That deprecation is closely allied with the coarse grouping of all nonhuman animals into a single realm or category thought of as below the human realm. Indeed, the very fact of birth as any kind of animal other than a human is thought of negatively by Buddhists in the sense that it is an unhappy place – as the historical Buddha said in the *Majjhima Nikaya* (III: 213), “so many are the anguishes of animal birth.” Birth at this lower level in the Buddhist hierarchy is the direct result of less than ideal conduct. For example, a human who violates moral norms is constantly threatened with the punishment of re-entering existence at the “lower” level of some nonhuman animal.

Importantly, however, these negative views are moderated by central ethical commitments. One of the most common passages in Buddhist scriptures is the undertaking known as the First Precept, by which a Buddhist commits to refrain from killing any life forms. Vegetarianism, though not universal, is an important ideal as well. And the

bodhisattva's vow to refrain from entering nirvana until all beings are saved reflects the deep commitment possible in the Buddhist tradition to beings outside the human species.

Yet in general, to the Buddhist mind, all other animals are simple relative to humans, and easily understood by the qualitatively superior human capacity for moral and intellectual thinking. Buddhist scriptures also reflect that other animals are often thought of as pests in competition with elevated humans.

All of these factors lead to descriptions of other animals that are caricatures and fundamentally negative, while membership in the human species is seen as an extraordinary attainment and the first of Buddhism's fundamental paradigms. Once a "lower being" has attained membership in the human species, the second, soteriological paradigm set out by Gotama's teachings becomes the focal point.

Buddhist claims about other animals, then, are grounded in the tradition's heavy investment in hierarchical thinking, although the consequences of the hierarchical thinking are surely moderated by the profound ethical commitments to the value of all life. Because of the dominant understanding of the importance of existence as a human versus existence as any other kind of animal, the tradition has never emphasized seeing other animals in terms of their realities. As a result, the dominant claims of Buddhists about other animals tend to the ideological, in that there is a prejudgment about possibilities and an underdetermination of views by factual realities.

The Abrahamic Traditions Generally

Islam, Judaism and Christianity are, on the issue of nonhuman animals, in many essential respects dominated by an ethical anthropocentrism, that is, a pronounced tendency to focus on the members of the human species as if they alone should be the object of fundamental moral protections. This human-centeredness is moderated at critical points, however, by important qualifications. For example, each of the Abrahamic traditions has included, at different times and places, important insights into (1) the moral dimension of other animals' lives, and (2) the importance of limits on humans' instrumental use of other animals.

On the whole, however, each of the Abrahamic traditions, particularly in its mainline interpretations, has been characterized by an unrelenting insistence that it is humans alone who are the deity's chosen species. This elevation of members of the human species over all other animals has often had the effect of providing ready justifications of practices that harm other animals.

Judaism

The views of nonhuman animals that characterize the Jewish tradition are diverse and even contradictory, in part because the Hebrew Bible contains a number of options for thinking about humans in relation to other animals. The prominent paradisa-

model is undergirded by a vision of peace with and between wild animals, and it often functions as a metaphor for cosmic and social peace. A second option – the realistic, this-worldly model – focuses on peace from other animals as a practical aspect of desired *shalom*.

Of these two visions, the second dominates in the sense that human interests, far more than the interests of any nonhuman animals, are typically seen as overwhelmingly more important. The notion “peace from evil animals” is, as Bauckham notes, an “ancient tendency, at least in the Jewish tradition, to consider wild animals primarily as threats to human life” (Bauckham 1994: 8).

This tendency to a negative view of the animals not under humans’ control is represented well by Philo’s image of a continuous war with nonhuman animals. There is, however, a certain irony in the dominant view of wild animals as evil, given that it is a common biblical theme that the disorder in nature comes from archetypal acts of human ancestors and the unfaithfulness of Israel.

Yet even if the dominant view in the Hebrew Bible is that wild animals are evil, other animals nonetheless live under God’s reign. God created and feeds them, and they are a source of pride in God’s exchanges with Job. Nonhuman animals at times appear as examples of right order in great contrast to humans. This less dominant view reflects the important notion that God as the source of creation has conferred goodness on it generally.

The law codes (Ex. 22–23 and 34, Lev. 22 and 25, and Deut. between 14 and 26) also contain many provisions which recognize, at least to some extent, the welfare of other animals. Such recognition is, however, limited in an important respect, for the subject matter is primarily (1) the welfare of domestic animals, that is, those that work or produce benefits for humans, and (2) restrictions on the killing of the few animals which could be sacrificed.

Other animals are mentioned in some of the covenants found in the Hebrew Bible. Most prominent is the covenant with Noah in Genesis 9:9–16. Some theologians, such as Linzey, make a great deal of this in their works, but others have argued that the larger context, and particularly the preceding set of verses (Gen. 9:1–7), radically qualifies the meaning of 9:9–16 and reflects that other animals are “in the subordinate relationship to humankind which has already been set forth in Genesis” (Murray 1992: 33–4).

While there are other, more animal-friendly covenants that are important in the Hebrew Bible, the dominance of the animal-exclusive Abrahamic, Mosaic and Davidic covenants reflects the background beliefs about the importance of members of the human species relative to all other animals. These background beliefs are found throughout the Hebrew Bible, and are particularly evident in the Genesis accounts of (1) the order of creation, the naming of animals, the charge of dominion, and the image of God, and (2) the flood story by way of its emphasis on stewardship, the focus on terrestrials, and the permission to eat other animals.

Yet even if humans were conceived of as separate from the rest of life in critically important ways, the breadth of generalizations about living beings, the number of specific animals mentioned, and observations about the variety of life, confirm that the Hebrews noticed and appreciated, at least in some ways, the extraordinary diversity and interconnectedness of human and nonhuman beings.

The practice of sacrifice (*zebach*) in the Jewish tradition raises complex issues. The animals selected for sacrifice were those which were deemed useful to humans, and both anthropomorphism and anthropocentrism can be seen in the description of these animals, and not others, as “pleasing to God.” Sacrifices of selected animals functioned as an institutionalized means of relief from the impurity generated by humans’ violations of moral rules or purity taboos.

Maimonides in the twelfth century argued that sacrifices were a concession to barbarism. Some modern theologians, looking at the entire range of practices involved and not merely at the act of killing, continue to argue that sacrifice “in its way” represents respect for animal life. A more balanced observation is that sacrifice does not necessarily involve a low view of the sacrificed animals’ lives, though it surely produces what is, from the viewpoint of the animal sacrificed, a harm. Following the destruction of the Temple in 70 C.E., sacrifice of animals within Judaism was no longer a central religious practice, though some Jews pray to this day for a reestablishment of the Temple sacrifices even as various movements of Judaism that advocate modernizing reforms assert vigorously that animal sacrifice should remain a discarded practice.

The occurrence of these instrumental uses of other animals and ultimate rejection of the old sacrificial practices are of limited value in assessing Judaism’s views of other animals, as they deal with only a few domestic animals. There were many other complex animals with which the Jewish tradition was unfamiliar. Further, the significance of sacrifice as a central part of ancient Hebrew practices cannot be evaluated without reference to the Jewish scriptures which reflect moral concern of some kind for other animals. *Tsa’ar ba’alei chayim*, the body of traditional Jewish law that concerns itself with animal welfare, provides a basis for arguing that care for other animals is mandated by the core values and insights of the tradition.

Christianity

The Hebrew vision of humans as a group to be distinguished from all other animals is an emphasis that the early Christians inherited. One interpretation of the mainline Christian tradition is that it narrowed this heritage because the tradition asserted, as part of its basic message, not only a fundamental, radical division between human animals and all other animals, but also the *exclusion* of all other animals’ interests when they are in conflict with even minor, unnecessary human interests. Such an exclusion is more in line with Christianity’s Greek heritage than its Hebrew heritage (Greek views were not mono-lithic, of course – for example, Pythagorean and Dionysian elements

reflect different valuations than do the betterknown Apollonian, rationalist tendencies to elevate human speech and reasoning to god-like levels).

Some prominent claims of the tradition, such as the claim that all humans are made in the image of God and have been given dominion over the Earth, have resulted in persistent refusals to examine the relevance of other animals' actual realities. Some have even insisted that it is *only* human realities which are morally considerable, as occurred when Pope Pius IX said to the English antivivisectionist Anna Kingsford, "Madame, humankind has no duties to the animals" and backed this up by "vigorously" opposing the establishment of a society for the protection of animals in Rome (Gaffney 1986: 149).

An examination of the origin, expression and development of Christian views of other animals suggests that they were integrally tied to deeply ingrained or background cultural views from the Greeks and Hebrews that operated at the level of cultural datum – humans are distinct in every relevant way from all other animals, and therefore are ontologically distinct from the rest of creation. This claim that humans are more important than all other animals continues to be the dominant one in mainline Christian circles.

As noted above, however, there have been many voices within this tradition that have sounded the inherently ethical themes of compassion for and coexistence with other animals. Andrew Linzey has even argued that it is of the essence of Christian theological values that Christians carry out duties of care toward other animals.

Whether the dominant interpretation will remain immune to new factual information developed during careful inquiries into the lives and realities of other animals will be an important indicator of the quality and nature of Christian views about nonhuman animals.

Islam

Even if the Abrahamic traditions' characteristic emphasis on humans as the centerpiece of a created universe can be found throughout the Islamic tradition, it does not always translate into the claim that other animals have been placed on Earth solely for the benefit of humans. It is true that such claims are asserted in the Qur'an (see, for example, *Surahs* 5:4, 16:5–8; 22:28; 22:36; 23:21; 36:71–

3; and 40:79). Yet the tradition also reflects a countervailing recognition of the moral dimension of the very existence of other animals. Further, humans' treatment of other animals, who are deemed creatures of Allah, also plays an important role in the tradition, as indicated not only in the Qur'an but also in passages from other central writings of the tradition such as the body of legal provisions known as *Shari'ah* (the "Way"), and the *Hadith*, the traditional collection relating the actions and sayings of Mohammed and his companions. All of these sources reflect in numerous ways Islamic recognition that other animals have their own importance as Allah's creatures. *Surah* 6:38 admonishes that all other animals have their own communities, and *Surah* 17:44

notes that the component parts of nature are in continuous praise of Allah, although humans may not be able to understand this. Many passages ask that humans see the manner in which other living things testify to Allah's presence and power (see, for example, *Surahs* 16:68–9 and 79; 24:41; and 67:19).

Mohammed himself commented, "Whoever is kind to the creatures of Allah, is kind to himself." He also compared the doing of good or bad deeds to other animals to similar acts done to humans.

There are, to be sure, negative views of other animals in some Qur'anic passages. Negative views also appear in the beliefs of various Islamic sects that infidels after death become other animals or that hell is full of noxious nonhuman animals. The practice of public, ritualized slaughter of other animals for food (*dhabh*), which occurs at the end of the traditional month of fasting (*Ramadan*) and at other times when the meat is used for a celebrative feast and often distributed to the poor, reflects the basic belief that humans are the vicegerent (*Khalifah*) of Allah and that other animals, even if not solely for human use, are in special instances ordained for humans' use. Rules designed to make the killing more humane moderate the meta-message that humans are the living beings that truly matter.

There is a long tradition within Islam by which the arrogance of humans is checked. The commentator Ibn Taymiyah, who died in 1328, argued regarding the Qur'an verses which state that Allah created various parts of the environment to serve humanity: "In considering all these verses it must be remembered that Allah in His wisdom created these creatures for reasons other than serving man, for in these verses He only explains the benefits of these creatures [to man]" (in Deen 1990: 190). Thus, the tradition offers the view that other animals have an integrity or inherent value of their own, even when the standard Abrahamic interpretation of humans as the centerpiece of creation is maintained.

Beyond the World Religions

The traditions considered above by no means exhaust the possibilities or scope of "religion and animals." Native or indigenous traditions provide countless examples of humans' natural and special relationship with many kinds of nonhuman living beings. The diversity cannot be exemplified by anything other than a close engagement with the lifeways of such peoples, but a few passages suffice to hint at the richness of perspectives available in these religious worldviews.

Black Elk opens his now famous account with a reference to sharing and kinship with other animals:

It is the story of all life that is holy and is good to tell, and of us two-leggeds sharing in it with the four-leggeds and the wings of the air and all green things; for these are children of one mother and their father is one Spirit (in Neihardt 1972: 1).

Such connections to other animals lead to extraordinary suggestions, such as, “Birds make their nests in circles, for theirs is the same religion as ours” (in Neihardt 1972: 164– 5). Comparable respect for nonhuman lives can be drawn from stories told by many other indigenous peoples.

There are many additional forms of nature-oriented spirituality that reflect deep concerns for and connections with nonhuman animals. These range from those who focus on communications with specific kinds of animals (often mammals or birds known to be highly social and intelligent, such as dolphins or ravens) to radical environmentalists or “greens” who have experienced an animistic connection of some kind with a particular animal or its larger community. Tending to be decentralized, these religious traditions often give primacy to individual experience. There are also respected members of contemporary science communities, such as the primatologist Jane Goodall and the cognitive ethologist Marc Bekoff, who emphasize the relevance to humans’ spiritual quests of rigorous empirical study of animals outside the human species. Many of the diverse forms of nature-oriented spirituality emphasizing nonhuman animals minimize divisions between “human/nonhuman” and “nature/culture.”

In addition to these nature-oriented forms of spirituality that emphasize noticing and taking nonhuman animals seriously, the Chinese traditions (folk, Taoist, and Confucian), Japanese Shinto, the Jain tradition of India, Sikhism, and many other religious traditions offer profound insights into the importance and ethical dimensions of humans’ connections with other natural beings.

Conclusion

The simple enterprise of asking how the two important topics of “religion” and “animals” intersect offers profound prospects for a deeper understanding of religion, other animals, and humans’ place within ecological webs. In particular, the “religion and animals” inquiry leads to questions about the nature of religious views, language and claims about other animals. These include, of course, questions of a fundamentally ecological nature, for one cannot know about the lives of living beings, human or otherwise, without knowing about their communities, habitats, and wider ecological webs.

Paul Waldau

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See also: Animal Rights in the Jewish Tradition; Animals in African Legend and Ethiopian Scriptures; Animals in the Bible and Qur'an; Bestiary; Buddhism (various); Cetacean Spirituality; Christianity and Animals; Creatures' Release in Chinese Buddhism; Cognitive Ethology, Social Morality, and Ethics; Dogs in the Abrahamic Traditions; Dogs in the Islamic Tradition; Elephants; Goodall, Jane; Hinduism; Hyenas – Spotted; Islam, Animals, and Vegetarianism; Nile Perch; Power Animals; Primate Spirituality; Serpents and Dragons; Snakes and the Luo of Kenya; Whales and Japanese Cultures; Whales and Whaling; Women and Animals.

Animals in African Legend and Ethiopian Scriptures

Animals have played a major role in religious thought all over Africa, not only in what are known as African traditional religions, but also in scriptures preserved by African Judaism, African Christianity, and African Islam. These ancient manuscripts are to be found mainly in the Ethiopian language, Ge'ez, which, although no longer spoken, is still the liturgical language of the Ethiopian Orthodox Church.

When Islam became dominant in North Africa and Arabs controlled the trade route along the Red Sea, Ethiopian Jews and Christians became isolated from their co-religionists. As a result the Falasha Jews (known as *Beta Israel*) are unfamiliar with the Talmud, which was only codified around the year 500. The Torah they use is written not in Hebrew but in Ge'ez. Although they retain only a few Hebrew words in their prayers, they strictly observe the Sabbath, adhere to the dietary commandments in the Book of Leviticus, and celebrate the new moons and the majority of festivals as prescribed in the Pentateuch.

Both African Judaism and African Christianity were enriched by writings not included in the Hebrew Bible, such as *The Book of Jubilees*, *The Ascension of Isaiah* and *1 Enoch* (known as Ethiopian Enoch). Preserved in Ge'ez translations in Ethiopia, most are now extant in their entirety nowhere else. *The Book of Jubilees* (also known as *The Little Genesis* [The blind Alexandrian Christian scholar Didymus referred to it by this name in the fourth century, as did Jerome in the following one.]), which is thought to have been originally composed in Hebrew or Aramaic some time between 175 and 140 B.C.E., enlarges on, and differs from, the canonical Book of Genesis in various respects. It is an apocalypse, so that events such as the Flood are recounted to make them look prophetic – foreshadowings of the final cataclysm. From *Jubilees* we learn that, before the Fall, animals were able to communicate with one another in a “common tongue.” It was only on their expulsion from the Garden of Eden that the mouths of cattle and birds and “of everything that walks or moves, were shut” (*Jubilees* in Sparks 1984: 21).

The book of *Enoch* enjoyed great prestige in the early church and was quoted by Judge and Barnabas, among others. Clement of Alexandria, Irenaeus, and Tertullian all regarded it as “canonical” and, although later rejected by Jerome and Augustine, in the Eastern church *Enoch* continued to be treated with great respect. Chapters 85–90 of *1 Enoch* are known as the *Animal Apocalypse*. Here the various nations are symbolized by animals:

The first generations of mankind were appropriately represented by bulls and cows. It was only after the intervention of the fallen angels that the various peoples could be appropriately represented by such creatures as lions, tigers, wolves, dogs, hyenas, wild boars, foxes, badgers, pigs, facons, vultures, kites, eagles, ravens: many of them fierce and dangerous to man, all of them unclean by Jewish standards and all, certainly, inferior to the original bulls and cows

. . . But all this changes when God has established his kingdom on Earth (Cohn 1993: 176).

This vision of the Last Judgment sees not only human beings but all animal species being changed. As in the vision of Isaiah 65, the lion will literally lie down with the lamb.

In Africa, human beings are traditionally thought of as being part of the animal kingdom, closely related to and not uniquely different from other creatures. Because the creator God intended all creatures to live in harmony, sharing the world's resources without conflict, originally they were able to speak and understand each other's languages.

This paradisaical state of nature is exemplified in legends about the Queen of Sheba. Jews, Christians, and Muslims believe that King Solomon and the Queen of Sheba (known in the Qur'an as Bilqis) shared remarkable gifts of wisdom and learning. Both were able to converse with animals. While the Hebrew Bible briefly records the visit of this African Queen to King Solomon's temple in Jerusalem and the valuable gifts of gold and spices that she brought him (1 Kgs. 10), considerably more of their relationship is revealed in the Talmud, in the Qur'an, in Swahili legend, and in the Ethiopian national epic known as the *Kebra Nagast* (the "Book of the Glory of Kings"). Written in Ge'ez in the fourteenth century, it describes how the Ark of the Covenant was "the first of all things in creation, and how it came to Earth containing the Mosaic law."

When the Queen of Sheba visited Solomon, she not only learnt much of his proverbial wisdom, including astronomy and the languages of the animals, but returned to Ethiopia bearing Solomon's son, Menelik, who later became the first Emperor of Ethiopia. As a young man Menelik was educated in Jerusalem. When he returned home to Ethiopia, he was accompanied by representatives of the twelve tribes of Israel as a bodyguard. In order not to be separated from Zion, these young Israelites carried off the Ark of the Covenant to Ethiopia. The Ark was installed at Aksum, which thus later became the true Jerusalem for Christians as well as for African Jews.

Today, Ethiopian clergy known as *dabtara* are believed to be descended from these officers, and they are respected as the guardians of a long tradition of talismanic art, including pharmaceutical knowledge, bequeathed to Solomon by the angels and written by him in a book which was brought to Ethiopia by Menelik. Of the *dabtara*, Ninian Smart observes:

Their primary art is to sing, and they must study over a long period not merely the complexities of traditional religious music, but also the sacred language of Ge'ez.

Though their knowledge is archaic, they have traditionally formed the learned class and so have been employed often in administration (Smart 1979: 62–3).

Jacques Mercier found that the *dabtara* “moves in the world before the Flood, when spirits revealed themselves to humans and showed them the secrets of the heavens” (1997: 48). Solomon’s book contained portraits of demons that are still used in talismanic scrolls. The art of making scrolls is dependent on animal sacrifice, because until quite recently all Ethiopia’s bound books were handwritten on parchment made from animal skin. The *dabtara* draws images with a red pen on the parchment’s inner side. There is usually an image at the top, one in the middle, and one at the bottom. Then he writes the prayers, inserting the recipient’s baptismal name in red ink. Finally he makes a cylindrical case for the scroll in red leather (Mercier 1997: 48).

Talismans make use of the principal motifs of the Solomon legend – the ring, the seal, the mirror, the palace as labyrinth, the power over demons – that also developed in the Orient, appearing in many stories and esoteric rituals.

Like the *Kebra Nagast*, Swahili legends about King Solomon enlarge on what is recorded in the Qur’an:

Sulemani bin Daudi, King Solomon, ruled many peoples, human, animal and invisible. Allah gave him wisdom and knowledge, so that he understood the secrets of the stars as well as the language of the animals. He could hear what the cocks crowed, what the horses neighed, what the snakes hissed. He also knew the languages of the fishes in the sea and of the demons in the fire; yes, he could even understand the intentions of the trees rustling with their leaves, or the moods of the winds, whispering and roaring (Knappert 1992: 58–9).

It is recorded in the Qur’an that a messenger bird, the hoopoe, first brought Solomon news of the realm of Sheba:

The bird, who was not long in coming, said: “I have just seen what you know nothing of. With truthful news I come to you from Sheba, where I found a woman reigning over the people. She is possessed of every virtue and has a splendid throne” (Surah 27).

From this Surah, *Ta’sin* (The Ant), we learn that Solomon conversed not only with the birds but even with insects:

Solomon succeeded David. He said: “Know, my people, we have been taught the tongue of birds and endowed with all good things. Surely this is the signal favour.”

His forces of jinn and men and birds were called to Solomon’s presence, and ranged in battled array. When they came to the Valley of the Ants, an ant said: “Go into your dwellings, ants, lest Solomon and his warriors should unwittingly crush you.”

He smiled at her words, and said: “Inspire me, Lord, to render thanks for the favour You have bestowed on me and my parents, and to do good works that will please You. Admit me, through Your mercy, among Your righteous servants” (Surah 27).

It is recorded in the Qur’an that, when they were driven out of Mecca, some of Mohammed’s followers found refuge in Abyssinia, but long before Muslims arrived,

Jews had migrated there. They brought with them stories (*midrashim*) about animals that formed part of their oral tradition. According to one such *midrash*:

Solomon was in the habit of summoning all the beasts, birds, reptiles, and spirits to perform in front of him and his fellow kings from neighboring countries. They all came of their own accord. On one occasion the hoopoe (a small bird native to Madagascar) was missing; when finally it was found, it reported to the king that it had been in search of a country anywhere in the world that might not be subject to the authority of Solomon. Eventually the hoopoe had found the city of Qitor in the East, full of gold and silver, and trees watered from the Garden of Eden; its ruler was the Queen of Sheba. Solomon then commanded his scribes to tie a letter to the hoopoe's wing, which it delivered to the queen (Ullendorff 1997: 136, 138).

Moreover, Solomon later made himself a flying carpet to visit Africa but found the heat of the sun unbearable, so he recruited a flock of hoopoes to fly above him and keep his carpet in the shade. As a reward for this service, the hoopoes asked for their heads to be decorated with golden crowns, to which, against his better judgment, Solomon agreed. The result was first that fowlers shot hoopoes for their beauty, and then hunters set traps of cages with looking glasses inside. The foolish hoopoes, lured to see how beautiful they had become, were taken prisoners and sold for their plumage. Finally they went to Solomon:

“What have you done to us? Before we helped you, none sought our lives, now we are in danger of being utterly destroyed.” Solomon replied: “I now see that some creatures are incapable of choosing what is best for themselves, and it is necessary for wiser rulers to help them choose. I warned you that vanity would be your downfall. Now I suggest that all golden crowns be changed to feathers.” And turning his magic ring the king pronounced the necessary words and it was done. The hoopoes exclaimed: “Wise and great is Solomon the king!” (Toperoff 1995: 118–19)

Ethiopia has preserved not only scriptures that supplement and enlarge on those in the Hebrew Bible, but also scriptures that rival those in the New Testament canon. There are gospels and epistles which were judged by St. Jerome and the Roman curia to be “apocryphal” but which continued to be venerated in the Coptic and other oriental orthodox churches. One such, *The Acts of Philip*, has survived in its entirety only in Coptic and Ethiopic translations. From this we learn that the Apostle Philip, accompanied by Mariamne (his sister) and Bartholomew, set out to preach the gospel in Ophiani. Passing through “the wilderness of dragons,” they met a great leopard, who spoke with a human voice, “I worship you, servants of the divine greatness and apostles of the only-begotten Son of God; command me to speak perfectly.” When Philip said, “In the name of Jesus Christ, speak,” the leopard adopted perfect speech..”

Thereupon the leopard confessed that he had the previous night seized a kid, which had “wept like a little child” and begged him “to put off your fierce heart and the beastlike part of your nature, and put on mildness, for the apostles of the divine greatness are about to pass through this desert to accomplish perfectly the promise

of the glory of the only-begotten Son of God.” So Philip and Bartholomew prayed for these two animals, who responded:

We glorify and bless you who have visited and remembered us in this desert, and changed our beastlike and wild nature into tameness, and granted us the divine word, and put in us a tongue and sense to speak and praise your name, for great is your glory.

At the end of this story, the leopard and the kid “fell and worshipped Philip and Bartholomew and Mariamne; and all set out together, praising God” (“The Acts of Philip” in Elliot 1993: 515–16).

Another important scripture, *The Acts of Thomas*, survived in Ge’ez, in both Arabic and Coptic (which is probably the earliest version). It contains many stories of the animals encountered by the Apostle Thomas (known as “The Twin”) on his way to India. One “colt of an ass” identified itself as being “of the family which served Balaam; and to which also belonged that colt on which sat your Lord and your Master.” This encounter caused the apostle to exclaim:

O Jesus Christ, Son of the perfect mercy, O rest and calmness, and you of whom even the unreasoning animals speak; . . . good shepherd, who offered yourself for your sheep, overcame the wolf, and redeemed your sheep and led them to good pastures

– we praise and glorify you and your invisible Father and your Holy Spirit and the mother of all creation (*The Acts of Thomas* in Elliot 1993: 464–5).

Stories of the infant Jesus, who spent his early childhood in Egypt, are found in *The Infancy Gospel of Thomas*, the *Protoevangelium of James* and *The Gospel of Pseudo-Matthew*. From the latter, medieval Christianity derived the image of an ox and an ass round the manger at the Nativity. Many of these stories refer to the Christ-child’s friendly relationship with animals. For instance, soon after their arrival in Egypt, the Holy Family took shelter in a cave where they encountered “many dragons, which worshipped Jesus and then departed . . . Likewise, lions and panthers adored him and accompanied them in the desert.” When Jesus was eight years old, the Holy Family was on the road out of Jericho to the river Jordan, when they met a lioness and her cubs, who played around his feet. The astonishment of the local people at this behavior caused Jesus to exclaim: “How much better are the beasts than you, seeing that they recognize their Lord and glorify him; while you men, who have been made in the image and likeness of God, do not know him!” (*The Gospel of Pseudo-Matthew* in Elliot 1993: 94–7)

These scriptures and legends enable African Christians, Muslims, and Jews to develop a unique awareness of the significance of other species in God’s creation and their intended role in the redemption of this planet.

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See also: Animals; Animals in the Bible and Qur'an; Christianity and Animals; Jewish Intertestamental Literature; Muti and African Healing.

Animals in the Bible and Qur'an

The scriptures of the leading Monotheistic religions, Judaism, Christianity and Islam, assume the supremacy of humankind, established by an almighty God. As stated in the opening remarks of the Bible:

So God created man in his own image, in the image of God created he him; male and female created he them. And God blessed them, and God said unto them, be fruitful, and multiply, and replenish the Earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the Earth (Gen. 1:27–28).

Genesis sanctioned the active participation of the first man at God's side, complementing creation: "Whatsoever Adam called every living creature, that was its name" (Gen. 2:19). Acknowledgment of human beings' domination "over every living thing that moves upon the Earth" did not, at first, bring about any rupture in the basic harmony that characterized all components of divine creation. In the Edenic context humans were vegetarian; only plants – not animals – were intended as food for the forefathers of the human race (Gen. 2:9, 16). Yet, the expulsion of Adam and Eve from the Garden of Eden – explained in terms of the "original sin" in Christian theology – led to the degeneration of Earth, which became hostile and intimidating to human beings. Animals, as well, became fierce; they revolted against their bondage and attacked human society.

Following the Flood, however, when God renewed his alliance with the human race, He confirmed once more human control over the animal kingdom while defining the practical consequences:

And the fear of you and the dread of you shall be upon every beast of the earth, and upon every fowl of the air, upon all that moves upon the earth, and upon all the fishes of the sea; into your hand are they delivered. Every moving thing that lives shall be meat for you . . ." (Gen. 9:2–3).

The message was clear: from then on, animals could lawfully be killed and eaten, in accordance with God's will, subject only to religious dietary restrictions, such as not eating flesh with its blood (Gen. 9:4). Biblical narrative thus fostered an instrumental approach to animals: their existence was justified by their serving the needs of human beings. Still, it encouraged proper care for the needs of domestic animals, "A righteous man regards the life of his beast," (Prov. 12:10), allowing them to rest during the Sabbath (Deut. 5:14) and forbidding taking a mother bird with her eggs for food (Deut. 22:6).

The instrumental approach of the Bible may be explained by the prevailing dependence on animals in agrarian and nomadic societies, for which animals fulfilled different working and guard functions. On the other hand, there is a clear reticence, if not outright antagonism, when it comes to emotional links between the human and animal realms; the latter is relegated to an inferior, independent sphere (in contrast to the role played by animals in Greek mythology, for example). One possible explanation may lie in the Bible's essential animosity toward any remnant of polytheism, especially Egyptian cult and rites. Many animals – dogs, cats, falcons, scarabs, cows, hawks, crocodiles, jackals, lionesses, hippopotami, *inter alia* – were incorporated into the Egyptian pantheon, thus possibly generating the reticence that animals encountered in the Hebrew Bible. From an ecological perspective, moreover, the proliferation of wild animals in the Near East, with the resulting problem of rabies and other diseases that they propagated, might provide a suitable key to the biblical attitude.

Consensus on the precedence of human society, however, did not in itself impose specific attitudes toward individual animals, and differences were indeed considerable in this regard. Biblical literature differentiates between ritually clean and unclean animals, and those that remain in the wild state as against those that have been domesticated. Clean animals were considered suitable for human consumption; they include mammals, such as cattle and sheep, which have a split hoof and chew the cud. Unclean domestic animals include beasts of burden, like the ass, camel, and horse, and pets, like dogs and cats. The prevailing attitude toward animals in the New Testament and early Christian theology, which opposed any close proximity between the human and animal species, was heavily influenced by the biblical approach. The Pauline ideal of contempt for this world of sin further strengthened the gap between the faithful, who became pilgrims on Earth, and the animal kingdom, represented as another reflection of the flesh, with all its vices and weaknesses. The basic recognition of the mastery of human beings, moreover, was further strengthened by the principle of *nomina res essentiant* (i.e., the names Adam gave the animals not only suggested their character but also influenced their role and destination on Earth). Christian doctrine, as it developed from the second century onwards, further brought these tenets to their “logical” conclusions. Theologians like Tertullian, Origen, Saint Augustine, Bede, and Petrus Comestor, preached the total mastery of human beings over animals, since the former were created in God's image and, therefore, were the beneficiaries of his wisdom. If such was the case with simple human beings, it was rather obvious that saints, with their greater commitment to God, were bestowed with a special precedence over animals, similar to that which Adam had enjoyed in paradise. It was said about the abbess of Arles, for example, that “because of her many virtues, birds and animals were obedient to her.” The unprecedented attempt by St. Francis in the early thirteenth century to spread the idea of equality among all creatures – while creating a harmonious balance between humankind and the animal world – was therefore condemned to failure. St. Francis' creed, which favored a more harmonious perception of the universe, was

indeed neglected from medieval to early modern times. It found more receptive ground only in the last century.

At a metaphorical level, Christian liturgy developed, from its very beginnings, a rich symbolic thesaurus, with animal representing the most common virtues and vices that could be found among human beings, as well as humans' relationship with their Creator: the lion courage, the bull strength, the dog fidelity, the snake caution and prudence; the chameleon hypocrisy, the hyena impurity, the wolf greed, the serpent the devil. The fish became one of the earliest, most important Christian symbols, with the five Greek letters of the word, $\iota\chi\theta\upsilon\varsigma$ forming an acrostic signifying Jesus Christ, Son of God, and Savior. Animals also came to represent the principles of the Christian faith: the lamb, the sacrifice of Christ on the cross and the weakness of the Christian; the dove, the image of the Holy Spirit; the deer, the Christians' longing for salvation.

The basic principles of the Islamic faith corroborate some of the characteristics found in the Bible, first and foremost the battle to eradicate any remnant of polytheism. The Qur'an criticizes the practice of consecrating certain animals or of applying a taboo to them (5:103, 6:138–139). Since God had created all animals – a pair of each (51:49) – Muslims are exhorted to treat them kindly. They will be held accountable for how they treat their mounts before Allah in the next world. Notwithstanding the general nature of these claims, Islam, as well, differentiates between those animals that benefited from special divine grace – such as camels, horses, cows, sheep, greyhounds, and bees – and those that possess the evil eye and are, instead, the devil's emissaries, the most prominent being dogs. At a more practical level, the consumption of pigs is forbidden, but all fish may be eaten without ritual slaughter. Although killing a cock is allowed, the Prophet forbade reviling this fowl because it served the faithful by awakening them to perform their religious duty; the same rule applies to fleas “who awakened a prophet.”

All three scriptures further condemn any manifestation of cruelty *per se* toward animals, which are recognized as creatures of God; however, Judaism, Christianity, and Islam also encourage an instrumental approach to animals, at best, while allowing their arbitrary killing, at worst. Perhaps this was the natural sequence in the process of turning the human race into the apex of divine creation, a creed that does not allow any partners of equal status at the side of human beings. Furthermore, teachers from these traditions condemn the practice of pet keeping, relegating the most favorite among the pets, especially dogs, to the status of unclean or maligned animals. Such antagonism may result from the apprehension of ecclesiastical persons that attachment to pets – which bestows on human beings a complete mastery over these creatures and, in consequence, may bring about higher self-esteem

– might have detrimental consequences for the submission of the faithful to an almighty God. No less important, the emotional linkage between a person and his/her pet may weaken human dependence on God's representatives on Earth, the clergy.

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See also: Animal Rights in the Jewish Tradition; Animals; Christianity and Animals; Dogs in the Abrahamic Traditions; Dogs in the Islamic Tradition; Elephants; Francis of Assisi; Hunting and the Origins of Religion; Hyenas – Spotted; Islam, Animals, and Vegetarianism; Primate Spirituality; Serpents and Dragons.

Animism

Coined by the anthropologist E.B. Tylor (1832–1917), the term “animism” refers not to a type of religion but to a theory of religion. Asserting a minimal definition of religion as “belief in spiritual beings,” Tylor argued that religious belief originated in the primordial mistake of attributing life, soul, or spirit to inanimate objects. Although it has generally been dismissed in the academic study of religion as an obsolete term for describing the belief systems of indigenous people who hold that natural phenomena have souls or spirits, animism has nevertheless persisted in popular usage and academic theory to raise problems about the meaning and value of materiality in religion.

Tylor’s theory of animism was premised on a kind of materialism, since he assumed that materiality by definition was “dead” matter, but his theory was also framed in terms of an ideology of European progress, underwritten by evolutionary science, which bore a strange contradiction. Although Europeans supposedly represented the pinnacle of evolutionary development, they could only know that by comparing themselves to a baseline represented by others who had supposedly not evolved. Like other social evolutionists, Tylor found his evolutionary baseline, the “primitive,” in reports submitted by European travelers, missionaries, and colonial agents about indigenous people, the “savage,” on the periphery of empire. While Europeans according to Tylor’s evolutionary scheme had progressed along a developmental trajectory through animism, polytheism, and monotheism to reach the highest achievements of science, evolving from primitive to civilized, indigenous people of the Americas, Africa, Asia, Australia, and the Pacific had supposedly been left behind by evolution, standing over as savage “survivals” of the primitive.

Although Tylor was only interested in contemporary indigenous religions as data for building a theory of the original, primordial, or primitive animism, his term caught on to such an extent that it became commonplace in European inventories of the religions of the world to identify contemporary adherents of indigenous religions as animists. A recent guidebook for Christian missionaries, for example, asserts that 40 percent of the world’s population is animistic (Van Rheen 1991: 30). While this characterization has often been experienced by indigenous people as denigrating, it has occasionally been adopted as a term of self-identification. In Indonesia and Nigeria, for example, representatives of indigenous religions, struggling in a political arena dominated by Muslim and Christian interests, have sought formal recognition as animists. At the same time, animism has sometimes been adopted as a term of self-identification in New Age, neo-pagan, or environmentalist movements. Without addressing those appropria-

tions of the term, this entry concentrates on the history, rationale, and consequences of animism as a theory of religion.

History of Animism

During the nineteenth century, European social scientists developed different terms – fetishism, totemism, and animism – for the original religion of humanity, but each term carried the same allegation that “primitives” or “savages” were incapable of assessing the meaning and value of material objects.

The term, “fetish,” for example, emerged out of intercultural trading relations in West Africa in which European traders argued that Africans, unlike European Christians, had no stable system of value in which they could evaluate objects. Overvaluing apparently trifling objects such as feathers, bones, and cloth used in ritual, Africans undervalued the trade goods brought by Europeans. In this context, European Christians referred to African ritual objects as “fetishes,” a term derived from the Portuguese *feitiço*, referring to nefarious instruments of magic and witchcraft (Pietz 1985). The term, “totemism,” according to John Ferguson M’Lennan, referred to communal alliances under the sign of an animal or an object that combined fetishism with exogamy, mixing the inability to evaluate materiality with regulations governing sexuality (M’Lennan 1870). Arguably, the term, “animism,” mixed fetishism not with human sexuality but with animal psychology. The psychology of dogs, in particular, provided the key to a theory of religion based on attributing animation to inanimate objects.

In his popular survey of human evolution, *The Origin of Civilization and the Primitive Condition of Man*, John Lubbock explained that religion originated as the result of the primitive tendency to attribute animation to inanimate objects. To illustrate this primitive “frame of mind,” Lubbock cited evidence from southern Africa, relying on the early nineteenth-century report from the traveler Henry Lichtenstein that the Xhosa in the Eastern Cape assumed that an anchor cast ashore from a shipwreck was actually alive. In a footnote, Lubbock observed, “Dogs appear to do the same” (Lubbock 1889: 287). As Lubbock’s friend and mentor, Charles Darwin, maintained, religion could be explained in terms of dog behavior. Like Lubbock, Darwin observed that dogs characteristically attributed life to inanimate objects. His dog’s attention to a parasol blowing in the wind, for example, suggested to Darwin that the animal assumed that objects were alive. In this animal psychology, therefore, nineteenth-century theorists had a basis for understanding animism as the “primitive” or “savage” propensity to attribute animation to inanimate objects.

Evidence of Animism

In standard accounts, E.B. Tylor's theory of animism is derived from the "primitive" inability to distinguish between dreams and waking consciousness. When the "primitive" ancestors of humanity dreamed about deceased friends or relatives, they assumed that the dead were still alive in some spiritual form. Out of dreams, therefore, evolved "the doctrine of souls and other spiritual beings in general," a doctrine that was "rational," even if it was a "childish philosophy" enveloped in "intense and inveterate ignorance" (Tylor 1871: I, 22–3).

Where did Tylor get his evidence to support this finding? Instead of observing dogs, Tylor collected accounts about indigenous people, the "savages" who appeared in reports from European travelers, missionaries, and colonial agents. Arguably, Tylor's most important source was an account of Zulu religion from South Africa, *The Religious System of the Amazulu*, which had been published under the authorship of the Anglican missionary Henry Callaway, although the Zulu Christian convert, Mpengula Mbande, actually provided most of the reports collected in the book. Tylor praised *The Religious System of the Amazulu* for providing "the best knowledge of the lower phases of religious belief" (1871: I, 380).

Certainly, Tylor found evidence of an active dream life among Callaway's Zulus. Zulus often saw the shade or shadow of deceased ancestors in dreams. However, Callaway's volume included a detailed account about one Zulu man, an apprenticed diviner, who had become so overwhelmed with visions of spirits that he had described his own body as "a house of dreams" (Callaway 1868–1870: 228, 260, 316). According to Tylor, all Zulus, as "savage" survivals of the "primitive," were subject to dream visions, but "as for the man who is passing into the morbid condition of the professional seer, phantoms are continually coming to talk to him in his sleep, till he becomes as the expressive native phrase is, 'a house of dreams' " (1871: I, 443). Although Tylor appropriated him as an archetype of the "primitive," this particular Zulu man, who served Tylor as a "savage" survival of the original "house of dreams" from which religion originated, was James Mbande, the brother of the Christian convert, Mpengula Mbande. Like his brother, James was torn between the Christian mission and indigenous tradition. While Mpengula went one way, becoming a catechist for the mission, James struggled in the other direction, striving to keep an ancestral dream alive under increasingly difficult colonial conditions. In this case, therefore, the "house of dreams" was not a "primitive," but a colonial situation, the product of contemporary conflicts in southern Africa.

The analysis of dreams, however, did not provide the only evidence for Tylor's theory of animism. In addition, the involuntary physical phenomenon of sneezing was central to Tylor's argument. Here again Callaway's Zulu evidence was definitive. As Tylor observed, sneezing was not originally an arbitrary and meaningless custom, but the working out of a principle. The plain statement by the modern Zulus fits with the hints to be gained from the superstition and folklore of other races, to connect the

notions and practices as to sneezing with the ancient and savage doctrine of pervading and invading spirits, considered as good or evil, and treated accordingly (1871: I, 104).

From Callaway's account, Tylor derived the ethnographic facts that Zulus thought their deceased ancestors caused sneezing; that sneezing reminded Zulus to name and praise their ancestors; that the ancestors entered the bodies of their descendants when they sneezed; and that ritual specialists, such as Zulu diviners, regularly sneezed as a ritual technique for invoking the spiritual power of the ancestors. These Zulu concepts and practices, Tylor concluded, were remnants of a prehistoric era in which sneezing was not merely a "physiological" phenomenon, "but was still in the 'theological stage' " (1871: I, 104).

Much has been made of Tylor's "intellectualist" theory of religion. Although primitives suffered from primordial stupidity, Tylor argued that they nevertheless exercised their limited intellectual powers to develop explanations of the world in which they lived. Unfortunately, Tylor cited a Zulu source in support of this proposition, Callaway's catechist, Mpengula Mbande, who observed that "we are told all things, and assent without seeing clearly whether they are true or not" (1871: II, 387). Although cited by Tylor as evidence of savage ignorance, Mbande's point in this statement was that most Zulus had not been exposed to Callaway's new Christian gospel. Rather than offering evidence of primordial stupidity, therefore, Mbande was announcing his recently acquired Christian commitment. In any event, Tylor's theoretical work, and his use of Zulu evidence, demonstrated that his theory of the origin of religion was based on an analysis of the body as well as the mind. More animal than human, in this respect, "primitive" religion, as revealed according to Tylor by its survival among contemporary Zulu "savages," had evolved out of a bodily process that was as simple, basic, and involuntary as sneezing. However much it might have been theologized, sneezing marked the physiological origin of religion as animism, the belief in pervading and invading spirits.

Consequences of Animism

In building his theory of animism, E.B. Tylor intentionally disguised the colonial conditions that provided his evidence. Ignoring the social, political, intercultural, and interreligious contexts in which his evidence was embedded was not an oversight. It was a method. According to Tylor, "savage religion" had to be abstracted from its living contexts in order to be used in an evolutionary history of human culture that began with primitive animism. "In defining the religious systems of the lower races, so as to place them correctly in the history of culture," Tylor observed in 1892, "careful examination is necessary to separate the genuine developments of native theology from the effects of intercourse with civilized foreigners"

(Tylor 1892: 283). Any trace of more advanced religious concepts, such as ideas of deity, morality, or retribution in an afterlife, could only have entered "savage" religion,

Tylor argued, through such foreign intercourse with “higher” races. Factoring out colonial contacts, relations, and exchanges, he argued, “leaves untouched in the religions of the lower races the lower developments of animism” (Tylor 1892: 298). According to this method, therefore, animism appeared as the original religion – the earliest, the lowest – only by erasing the actual colonial situations in which indigenous people lived. As a result, the theory of animism provided an ideological supplement to the imperial project.

Although it was posed as a scientific explanation of the origin and development of religion, the theory of animism also addressed nineteenth-century European dilemmas about the meaning of materiality. Despite the expansion of scientific materialism, with its implicit challenge to religious belief, the séances of spiritualism were gaining popularity in Europe, promising material proof of spiritual survival of death. Initially, E.B. Tylor considered using the term “spiritualism” for his theory of religion, regarding contemporary spiritualist practices in Europe as a “survival” of prehistoric religion. Like the religious beliefs and practices of indigenous people on the colonized periphery of empire, the spiritualist séance represented an unwarranted persistence in attributing life to dead matter. As a European intellectual problem, therefore, the theory of animism can be situated in the context of nineteenth-century distress about the religious implications of scientific materialism and the scientific implications of a new religious practice such as spiritualism.

At the same time, this theory of the animation of “dead” matter was developed in the midst of the consolidation of commodity capitalism in Europe and North America. The commodity, as Karl Marx provocatively proposed, was not dead matter because it was animated by a “fetishism of commodities,” similar to “primitive” religion, which attributed life to objects “abounding in metaphysical subtleties and theological niceties” (1974: I, 81). While supplementing the colonization of indigenous people, therefore, the theory of animism was also entangled in European struggles to understand the animation of matter in capitalism.

In the anthropology of religion, some theorists have recently attempted to rehabilitate the theory of animism, restating the argument that religion originated in the basic animistic propensity to project human characteristics of life, thought, and feeling onto the natural world, or redefining animism as a “relational epistemology” through which indigenous people gain knowledge by entering into humanizing relations with the natural world. The history of the theory of animism, however, suggests that this theoretical project has inevitably been entangled in local and global negotiations over the meaning of materiality. As a point of entry into the study of religion and nature, the theory of animism presents a problem, bearing traces of nineteenth-century European imperialism, colonialism, and capitalism, rather than a solution for our understanding of religious engagements with the natural world.

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See also: Animism – A Contemporary Perspective; Anthropologists; Bioregionalism and the North American Bioregional Congress; Ecology and Religion; Evolutionary Biology, Religion, and Stewardship; Hunting Spirituality and Animism; Magic; Magic, Animism and the Shaman’s Craft; Noble Savage; Radical Environmentalism; Snyder, Gary; Zulu (amaZulu) Ancestors and Ritual Exchange; Zulu (amaZulu) Culture, Plants and Spirit Worlds (South Africa).

Animism – A Contemporary Perspective

Animism is a term coined to serve in an argument about the origins of religion, but it has survived the widespread rejection of that theory and now thrives as a label for a particular kind of religion. For E.B. Tylor (1871), the term “animism” summarizes his definition of religion as “belief in spiritual beings.” In its new application, animism now labels a type of religion comparable to other types (e.g., monotheism and polytheism). It is typically applied to religions that engage with a wide community of living beings with whom humans share this world or particular locations within it. It might be summed up by the phrase “all that exists lives” and, sometimes, the additional understanding that “all that lives is holy.” As such the term animism is sometimes applied to particular indigenous religions in comparison to Christianity or Islam, for example. It is also used as a self-definition by some indigenous people and some eco-pagans.

The application of the term animism no longer depends on notions about “spirits” or “supernatural” entities. It has been found helpful in drawing attention to ontologies and epistemologies in which life is encountered in a wide community of persons only some of whom are human. Certainly this new usage shares with Tylor’s discussion a concern with materiality and, in this, links animism to wider contestations, for example, about environmentalism and the dichotomous opposition of culture and nature.

In the language of classical European philosophy “person” refers principally to humans and deity. At various times, the question of the personhood of particular groups of humans (Africans and women in particular) has been problematic (e.g., in debates about the recognition and increasing application of human rights). Other beings (animals especially) are problematic in as much as some might be more or less like humans in particular ways (e.g., the feeling of pain, the use of language, or some indicator of intellect or agency) that seem to some theorists to justify the recognition of personhood and thus the extension or recognition of rights. Similarly, Piaget’s approach to childhood development (1933) seems to assume that reality is accurately described in English language’s use of gendered pronouns (“he” or “she”) for persons, in contrast to a wider range of inanimate objects (“it”). In this theory, children “naturally” project life onto inanimate objects until they reach a more advanced stage of development. Reference to European languages in which personal pronouns are applied to what native speakers of those languages also consider inanimate (e.g., chairs) may not necessarily falsify these notions, especially because the concomitant imputation of gender is neither considered nor meaningful. In these and similar ways, animism is problematic

in European-rooted worldviews and discourse. It simultaneously insists on the veracity of Western notions about personhood and materiality, while denigrating other understandings as childish and/or primitive. Those indigenous and environmentalist perspectives that might challenge such positions are thereby disabled and marginalized.

In Anishinaabemowin, the language of Anishinaabeg or Ojibwe people (Native Americans indigenous to the Great Lakes area), the grammatical animism of some words is indicative of something more profound. Here, words are not gendered as they are in European languages, but they are necessarily either “animate” or “inanimate.” This is certainly not a systematized or abstract complex, and speakers may not know why x is animate when y is inanimate, but it does arise from a broader culture in which one might speak *with* animate persons but only *about* inanimate objects. The possibility that gifts might be given to and received from those identified as animate persons is one indication of a “relational epistemology” (Bird-David 1999). Irving Hallowell’s (1960) discussion of Ojibwe ontology includes an important discussion with an unnamed “old man” about whether all rocks are alive and, since he avers that not all rocks are alive, how one might know which ones are. Contrary to the theories of Piaget (1933) and Guthrie (1993), this depends on more than the projection of personality or human-likeness onto allegedly inanimate objects. It is not just that some rocks “look human” (e.g., appearing to have a mouth), or that some are said to have moved of their own volition, but that some humans relate to some rocks in ways that indicate the recognition of life. These ways might include recognition of expressions of agency, will, intellect and so on, but are fundamentally about engagement in a cultural system of respect and reciprocity. Rocks are not mere “nature” in opposition to “culture” but are, or might be, persons who engage with other persons in particular ways. If humans give gifts to rocks, rocks not only receive gifts from humans but also give gifts that initiate relationships.

Nurit Bird-David (1999) has brought Hallowell’s discussion into relation with wider consideration of the relational constitution of persons and with her own research among the Nayaka of south India. Her exploration of this hunter-gatherer epistemology exemplifies the possibilities raised by the new use of the term animism as a challenge to previous approaches. Her work is parallel to that of Ken Morrison (1992) and other scholars of Native American religious traditions who point out that the privileging of spirit over matter, or supernatural over natural, has misdirected attention from the irrelevance of such dichotomies to those who engage religiously with this world. An even stronger critique is raised by Eduardo Viveiros de Castro who contrasts the Western notion that there is a singular nature and multiple cultures (hence multiculturalism) with Amazonian indigenous perspectives that there is a singular culture and multiple natures and therefore “multinaturalism.” While he sees “animism” as “the extension of [human] qualities to beings of other species” (i.e., a term compromised by its role in Tylor’s theory), his own discussion clearly dovetails with those cited above. It further contributes the important invitation to consider that “culture” is not the preserve of humans, but is evident (when seen as these indigenous peoples see things) among other-

than-human persons too. In this light, Western discourses about religions, especially shamanisms, in which “spirits” and “spirituality” are privileged, might be corrected from the animist perspective that everything that lives (and this is a wider category than is typically assumed in the West) is involved in culture.

In addition to anthropological research that discovers or theorizes animisms (in various ways) and categorizations of the world’s religions that include “animists,” it is instructive to consider animism in imaginative literatures. Three examples might suffice. In Alice Walker’s *The Color Purple* (1982) the heroine, Celie, finally stands up to her main abuser and finds that the elements are with her. Her statement, “I am here” can be read as foundational for Walker’s later autobiographical accounts of her own spiritual quest in which it is good to be “here.” In a very different style, Daniel Quinn’s didactic novels (beginning with *Ishmael*, 1995) provoke a consideration that the majority of human cultures are preferable to that of the West. These “leaver” societies assaulted by “taker” culture and its “totalitarian agriculture” demonstrate alternative ways to be human and encourage efforts to create better alternatives for the future. His animism is a principled evocation of the possibility that humanity might live as others live: leaving what is not needed now for others or ourselves to share in the future, going beyond the discourse of sustainability to the celebration of diverse modes of engaging with the world. Central to these novels, once again, is a debate about the commonalities and diversities of culture(s) and nature(s). Finally, in this brief introduction to recent literatures of animism, much Fantasy Fiction suggests that the world is inhabited by a wide range of autonomous living beings with their own interests and concerns. Whether these be speaking trees or elusive elves, it seems that life (including communication, intelligence, suffering, joy and so on) is to be found everywhere in this and any possible otherworlds. These literatures not only explore but encourage imaginative engagements with the world that can be labeled “animist.”

Indigenous, anthropological, fictional and philosophical writings all provide material for a reconsideration of animism. Confronted by the diminishment of ecological diversity, by assaults on “natural environments” and by the seemingly ever-increasing dominance of humanity over this planet, there are those who find the term “animism” helpful in recognizing alternatives. Eco-pagans are significant among the environmentalists whose activism arises from animist perspectives. They are activist not primarily because human life may become untenable if such anti-ecological lifeways continue, nor because a creator deity requires an account of how humans have executed their stewardship of the planet. Animist ecoPagans are primarily on the front lines confronting road building, quarrying, clear-cutting and other exploitative actions, because the community of life is threatened. It is not that only humans can protest or act – although the sight of a human lying in the mud in front of a bulldozer may be a more powerful preventive of destruction than that of a mere animal or plant. In the understanding of many such activists, protest venues might be a location in which humanity confronts itself with conflicting assessments of its place in the scheme of things. Over against the notion that everything is a resource for humanity’s benefit (provided either by

God or nature) is the understanding that humans are only one species among those whose lives and cultures require sustenance and support. Animists may be inspired by experiences of the participation of elusive otherworld beings, but their primary motive is the celebration of seemingly more mundane relationships.

Tylor's theory of animism has been rejected by most. But contemporary animists do not offer assertions about the origins, development and true nature of all religion, but a focused discussion about particular ways of being related to the world. Like the earlier theory it is entangled with notions of materiality, but now this arises from a challenge to discourses that divide spirit and flesh, soul and body, subject and object, life and matter, supernatural and natural, culture and nature, people and environment, community and resources, and so on. In dialogue with particular indigenous ontologies, epistemologies and cosmologies, the new animism contests modernist preconceptions and invites the widening of relational engagements generated and enhanced by gift exchanges and other forms of mutuality. In both indigenous and Western forms, animism encourages humans to see the world as a diverse community of living persons worthy of particular kinds of respect.

Animism is, however, more than the recognition of life in those otherwise considered inanimate. This would continue to prioritize what is exceptional to the West and ignore what is self-evident to those who might appropriately be named "animists." In the end, the recognition of life is far too simple to be generative. What is important is the mutual recognition of the ability to reciprocate, relate and engage. Animists are people who encounter other persons, only some of whom are human, as cultural beings. Their various engagements with what might otherwise be considered the environment or nature constitutes a complex of cultural relationships with a large and diverse community. Such worldviews and lifeways proffer exciting possibilities for underpinning relationships with the other-than-human world that contrast dramatically with what is now normal or natural in modernity. Animism promises the enrichment of human cultures by fuller engagement with what is too often taken as background or resource-available to the construction of culture. Instead, animists are those who seek cultures of relationship rooted and expressed in respectful relationships.

Graham Harvey

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Animism – Humanity’s Original Religious Worldview

By the middle of the nineteenth century, the mere fact of evolution had been around for a good long while. Fossil evidence made it clear that species had undergone evolutionary change from ancient times to the present, and most thinkers of the time were perfectly content to leave it at that. The absence of a theory to explain evolutionary change was not felt by them, not experienced as a pressure, as it was by Charles Darwin. The fact alone wasn’t sufficient for him. He wanted to know *why* species had evolved over time. He knew there had to be some intelligible mechanism or dynamic that would account for it, and this is what he went looking for – with well known results. In his *Origin of Species*, he wasn’t announcing the *fact* of evolution, he was trying to make *sense* of the fact.

In my mid-twenties I began to feel a similar sort of pressure, but it was a vague and undirected one. The modern Age of Anxiety – the anxiety we’re all quite used to living with today – was just being born. In her book *Silent Spring* (1962) Rachel Carson enunciated a startlingly new idea: the pollutants we were so prodigiously pouring into the world didn’t just obligingly vanish, they produced changes, and these changes had consequences – very possibly catastrophic ones. Of course everyone takes this for granted now, but at the time this was devastating news. In his book *The Population Bomb* (1968) Paul Ehrlich pointed out that at our present rate of growth, we were going to make the Earth uninhabitable to our own species within a century. Again, a commonplace idea today, but not so then. Overshadowing these things was the fact that we all lived from day to day with the knowledge that at any moment nuclear devastation could rain down on American cities, to be answered by a rain of nuclear devastation on Soviet cities. The end of civilization – perhaps even of human life itself – was a button-push away.

I wasn’t satisfied with the conventional explanation of all this, which is that we’ve ended up badly because of the Industrial Revolution. To my mind, this is like saying that Hamlet ended up badly because he took on Laertes in a fencing match. To understand why Hamlet ended up badly, you can’t just look at the last ten minutes of his life, you have to go right back to the beginning of his story. I felt a pressure to do the same with us.

But where is the beginning of our story? This isn’t a difficult question to answer. Every schoolchild learns that our story began about 10,000 years ago with the Agricultural Revolution. This isn’t the beginning of the *human* story, but it’s certainly the

beginning of *our* story. It was from this beginning that all the wonders and horrors of our civilization grew.

Everyone is vaguely aware that there have been two ways of looking at the Agricultural Revolution within our culture, two contradictory stories about its significance. The standard version – the version taught in our schools – goes something like this. Humans had been around for a long time, three or four million years, living a miserable and shiftless sort of life for most of that time, accomplishing nothing and getting nowhere. But then about 10,000 years ago it finally dawned on folks living in the Fertile Crescent that they didn't have to live like beavers and bears, making do with whatever food happened to come along; they could cultivate their own food and thus control their own destiny and well-being. Agriculture made it possible for them to give up the nomadic life for the life of farming villagers. Village life encouraged occupational specialization and the advancement of technology on all fronts. Before long, villages became towns, towns became cities, and cities were gathered into kingdoms and empires. Trade connections, elaborate social and economic systems, and literacy soon followed, and *there we went*. All these advances were based on – and impossible without – agriculture, manifestly humanity's greatest blessing.

The other story, a much older one, is tucked away in a different corner of our cultural heritage. It too is set in the Fertile Crescent and tells a tale of the birth of agriculture, but in this telling agriculture isn't represented as a blessing but rather as a curse: a punishment for a crime whose exact nature has always profoundly puzzled us. I'm referring, of course, to the story told in the third chapter of Genesis, the Fall of Adam.

Both these stories are known to virtually everyone who grows up in our culture, from Boston to Beirut to Beijing, including every historian, philosopher, theologian, and anthropologist. But like most thinkers of the midnineteenth century, who were content with the mere fact of evolution and felt no pressure to explain it, all these historians, philosophers, theologians, and anthropologists seem perfectly content to live with these two contradictory stories. The conflict is manifest but, for them, demands no explanation.

For me, it did. As evolution demanded of Darwin a theory that would make sense of it, the story in Genesis demanded of me a theory that would make sense of it.

There have traditionally been two approaches to Adam's crime and punishment. The text tells us Adam was invited to partake of every tree in the garden of Eden except one, mysteriously called the tree of the knowledge of good and evil. As we know, Adam succumbed to the temptation to sample the fruit of this tree. In one approach, the crime is viewed as simple disobedience. From this point of view, the selection of the knowledge of good and evil for interdiction seems entirely arbitrary. God might just as well have chosen the knowledge of war and peace or the knowledge of pride and prejudice. The point was simply to forbid Adam *something* in order to test his obedience. Under this approach, Adam's punishment – banishment from Eden to live by the sweat of his brow as a farmer – was in effect just a spanking; it doesn't

“fit the crime” in any particular way. This is presumably the punishment he would have received no matter what test he failed.

The second approach attempts to make some sort of connection between Adam’s crime and his punishment. Under this approach, Eden is conventionally viewed as a metaphor for the state of innocence, which is lost when Adam gains the knowledge of good and evil. This makes sense, but only if the knowledge of good and evil is understood as a metaphor for knowledge that destroys innocence. So with roughly equivalent metaphors at either end, the story is reduced to banality: Adam lost his innocence by gaining knowledge that destroyed his innocence.

The story of the Fall is coupled with a second that is equally famous and equally baffling, the story of Cain and

Abel. As conventionally understood, these two brothers were literal individuals, the elder, Cain, a tiller of the soil, and the younger, Abel, a herder. The improbability that two members of the same family would embrace lifestyles that were completely antithetical should tip us off to the fact that these were not individuals but emblematic figures, just as Adam was (*Adam* merely being the Hebrew word for *Man*).

If we understand these as emblematic figures, then the story begins to make sense. The firstborn of agriculture was indeed the tiller of the soil, as Cain was said to be the firstborn of Adam. This is an undoubted historical fact. The domestication of plants is a process that begins the day you plant your first seed, but the domestication of animals is a process that takes generations; wild animals don’t become tame overnight, so the herder Abel was indeed the second-born – by centuries, if not millennia (another reason to be skeptical of the notion that Cain and Abel were literally second-generation brothers). A further reason for skepticism on this point is the fact that the farmers and herders of the period occupied adjacent but distinctly different regions of the Near East. Farming was the occupation of the Caucasian inhabitants of the lush Fertile Crescent. Herding was the occupation of the Semitic inhabitants of the Arabian Peninsula to the south. Another piece of background that needs to be understood is that in very ancient times the farming lifestyle was radically different from the herding lifestyle. Tillers of the soil were by the very nature of their work settled villagers; but herders (by the very nature of *their* work) were nomads, just as many present-day herding peoples are. The herding lifestyle was closer to the hunting- gathering lifestyle than it was to the farming lifestyle.

As the farming peoples of the north expanded, it was inevitable that they would confront their Semitic herding neighbors to the south, perhaps in what is now Iraq – with the predictable result. As they have done from the beginning to the present moment, the tillers of the soil needed more land to put to the plow, and as they have done from the beginning to the present moment, they took it. As the Semites saw it (and it is of course their version of the story that we have in Genesis), the tiller of the soil Cain was watering his fields with the blood of Abel the herder.

That the version we have is the Semitic version explains the central mystery of the story, which is why God rejected Cain’s gift but accepted Abel’s. Naturally, this is the

way the Semites *would* see it. In essence, the story says, “God is on our side. God loves us and the way we live but hates the tillers of the soil and the way they live.”

With these provisional understandings in place, I was ready to offer a theory about the first part of the story, the story of Adam’s Fall. What the Semitic authors knew was only the *present* fact that their brothers from the north were encroaching on them in a murderous way. They hadn’t been physically present in the Fertile Crescent to witness the actual birth of agriculture; this was an event that may have occurred hundreds of years earlier, perhaps even thousands of years earlier. All that was clear to them was that some strange development had saddled their brothers to the north with a laborious lifestyle and had turned them into murderers, and they could only suppose that this development was a catastrophe of some kind.

What they observed about their brothers to the north was this peculiarity: they seemed to have the strange idea that they knew how to run the world as well as God. This is what marks them as our cultural ancestors. As we go about our business of running the world, we have no doubt that we’re doing as good a job as God, if not better. Obviously God put a lot of creatures in the world that are superfluous and even baneful, and we’re quite at liberty to get rid of them. We know where the rivers should run, where the swamps should be drained, where the forests should be razed, where the mountains should be leveled, where the plains should be scoured, where the rain should fall. To us, it’s perfectly obvious that we have this knowledge.

In fact, to the authors of the stories in Genesis, it looked as if their brothers to the north had the bizarre idea that they had eaten at *God’s own tree of wisdom* and had gained the very knowledge that God uses to rule the world. And what knowledge is this? It is a knowledge that only God is competent to use, the knowledge that every single action that he might take – no matter what it is, no matter how large or small – is good for one but evil for another. If a fox goes out to stalk a pheasant, it’s in the hands of God whether she will catch the pheasant or the pheasant will escape. If God gives the pheasant to the fox, then this is good for the fox but evil for the pheasant. If God allows the pheasant to escape, then this is good for the pheasant but evil for the fox. There is no outcome that is good for both. The same is true in every area of the world’s governance. If God allows an early thaw and the valley is flooded, then this is good for some but evil for others. If God holds back the thaw then this too will be good for some but evil for others.

Decisions of this kind are clearly at the very root of what it means to rule the world, and the wisdom to make them cannot possibly belong to any mere creature, like Man, for any creature making such decisions would inevitably say, “Every choice I make will be good for me but evil for all others.” And of course this is precisely how the agriculturalist operates, saying,

If I scour this plain to plant food for myself, then this will be evil for all the creatures that inhabit the plain, but it’ll be good for me. If I raze this forest to plant food for myself, then this will be evil for all the creatures that inhabit the forest, but it’ll be

good for me. If I kill off all the predators who might attack my herds or my flocks, then this will be evil for them but good for me.

What the authors of the stories in Genesis perceived was that their brothers to the north had taken into their own hands the rule of the world; they had usurped the role of God. Those who let God run the world and take the food that he has planted for them have an easy life. But those who are not content with the way God runs the world and want to run it themselves must necessarily plant *their own* food, must necessarily make their living by the sweat of their brow. As this makes plain, agriculture was not the crime itself but rather the result of the crime, the punishment that must inevitably follow such a crime. It was wielding the knowledge of good and evil that had turned their brothers in the north into farmers – and into murderers (for murder comes easy to those who think they know how to run the world better than God).

But these were not the only consequences to be expected from Adam's act. The fruit of the tree of the knowledge of good and evil is harmless to God but deadly to Man. It seemed to the authors of these stories that usurping God's role in the world would be the very death of Man.

And so it seemed to me when I finally worked all this out in the late 1970s. This investigation of the stories in Genesis was not, for me, an exercise in biblical exegesis. I'd gone looking for a way to understand how in the world we'd brought ourselves face to face with death in such a relatively short period of time – ten thousand years, a mere eye-blink in the lifespan of our species – and had found it in an ancient story that we long ago adopted as our own and that remained stubbornly mysterious to us as long as we insisted on reading it as if it *were* our own. When examined from a point of view *not* our own, however, it ceased to be mysterious and delivered up a meaning that not only would have made sense to a beleaguered herding people seven or eight thousand years ago but that would also make sense to the beleaguered people of the late twentieth century.

As far as I was concerned, the authors of this story had gotten it right. In spite of the terrible mess we've made of it, we *do* think we can run the world, and if we continue to think this, it *is* going to be the death of us.

In case it isn't evident, I should add that my reading of Genesis is, of course, only a theory. This is what creationists say of evolution, that it's "only a theory, it hasn't been proved," as though this in itself is grounds for dismissal. This misrepresents the point of formulating a theory, which is to make sense of the evidence. So far, Darwin's theory remains the best way we've found to make sense of the evidence, and my own theory has to be evaluated in the same way. Does it make sense of the evidence – the stories themselves – and does it make more sense than any other theory?

But solving this particular riddle only began to alleviate the pressure I felt for answers that were not being looked for at any level of our culture. The philosophical and theological foundations of our culture were laid down by people who confidently believed that Man had been *born* an agriculturalist and civilization builder. These things were as instinctive to him as predation is to lions or hiving is to bees. This

meant that, to find and date Man's birth, one had only to look for the beginnings of agriculture and civilization, and these were obviously not very far back in time.

When in 1650 Irish theologian James Ussher announced the date of creation as 23 October 4004 B.C.E., no one laughed or scoffed, or if they did, it was because of the absurd exactitude of the date, not because the date was absurdly recent. In fact, 4004 B.C.E. is quite a serviceable date for the beginning of what we would recognize as civilization. This being the case, it's hardly surprising that, for people who took it for granted that Man began building civilization almost as soon as he was created, 4004 B.C.E. would seem like a perfectly reasonable date for his creation.

But all this was soon to change. By the middle of the nineteenth century the accumulated evidence of many new sciences had pushed nearly every date in sight back by many orders of magnitude. The universe and the Earth were not thousands of years old, they were billions of years old. The human past extended back millions of years beyond the appearance of agriculture and the birth of civilization. Only those who clung to a very literal reading of the biblical creation story rejected the evidence; they saw it as a hoax perpetrated on us either by the devil (to confound us) or by God (to test our faith). For those who accept the evidence of science, however, the notion that Man had been born an agriculturalist and civilization builder had been rendered totally untenable. He had very definitely not been born either one.

This meant that the philosophical and theological foundations of our culture had been laid by people with a profoundly erroneous understanding of our nature, our origins, and our history. It was therefore urgently important to reexamine these foundations and if necessary to rebuild them from the ground up. Except, of course, that no one at all thought this was urgently important – or even slightly important. So human history extended millions of years back beyond the birth of agriculture. Who cares? No one in the ranks of philosophers or theologians felt the sort of pressure that had moved Darwin to go *beyond* mere acceptance of the fact. Pierre Teilhard de Chardin managed to look at the facts and conclude that the phenomenon of Man was still the central event in cosmic history, so the foundations were intact. But then he had a vested interest in preserving those foundations. Even so, his superiors told him in no uncertain terms to leave the matter alone.

In the last century we gained an understanding of the human story that made nonsense of everything we'd been telling ourselves for upwards of three thousand years, but our settled understandings remained completely unshaken. So what that Man had not been born an agriculturalist and a civilization builder? He was certainly born *to become* an agriculturalist and a civilization builder. It was beyond question that this was our foreordained destiny, and the way we live is the way humans were *meant* to live from the beginning of time. And indeed we must *go on* living this way – even if it kills us.

Facts that were indisputable to all but biblical literalists had radically repositioned us not only in the physical universe but in the history of our own species. That we had been repositioned was all but universally acknowledged, but no one felt any pressure

to develop a theory that would make sense of the fact, the way Darwin had made sense of the fact of evolution. I did.

In *Ishmael* I made the point that the conflict between the emblematic figures Cain and Abel didn't end six or eight thousand years ago in the Near East. Cain the tiller of the soil has carried his knife with him to every corner of the world, watering his fields with the blood of tribal peoples wherever he found them. He arrived here in 1492 and over the next three centuries watered his fields with the blood of millions of Native Americans. Today, he's down there in Brazil, knife poised over the few remaining aboriginals in the heart of that country.

I sent a copy of the book to a friend who, by chance, is a historian. He came back to me with a challenge: *How do you know that humans were living tribally 10,000 years ago?* This is an entirely valid question, which I answered this way: *How do you know that wolves were living in packs 10,000 years ago? That whales were living in pods 10,000 years ago? That geese were living in flocks 10,000 years ago? That baboons were living in troops 10,000 years ago? That bison were living in herds 10,000 years ago? That bees were living in hives 10,000 years ago?* Well, of course you don't, and you can't. Social organizations – and that's what we're talking about here – leave no fossils. In the total absence of contrary evidence, however, it's entirely legitimate to assume that wolves, whales, geese, baboons, bison, and bees did not just recently begin living in packs, pods, flocks, troops, herds, and hives. It's legitimate for much the same reason that it's legitimate to assume that the universe did not just recently begin expanding. It's perfectly conceivable – but not at all credible – that the universe just began expanding in the year 1776.

Everything we're able to observe about the world and the universe indicates that things that work don't capriciously change the way they work. It would be absurd to suppose that wolves originally evolved in hives but then capriciously began living in packs instead, that bees originally evolved in troops but then capriciously began living in hives instead. On the contrary, the only thing that makes sense is to assume that the reason we see wolves living in packs today is that they evolved in packs, that the reason we see bees living in hives today is that they evolved in hives. It's self-evident that no species emerges by failing. Every species emerges by succeeding, and natural selection rewards success with stability and longevity. This is why we must assume that hiving for bees represents the success that allowed bees to emerge as a species in the first place.

In the fifteenth century, for the first time, we began systematically exploring the territory beyond the civilized world, and everywhere we went we found people living in tribes – in every region of every continent. We found the occasional civilization as well, of course, but again, wherever we did not find civilization, we found people living in tribes, and there was no doubt in our minds that this social organization predated our own – was more “primitive” than our own.

The tribe among aboriginal peoples is as universal as the flock among geese, and I doubt if any anthropologist questions that it was humanity's original social organiza-

tion. We didn't evolve in troops or hordes or bands. Rather, we evolved in a social organization that was peculiarly human, that was uniquely successful for *culture-bearers*. It's as reasonable to assume that we evolved as tribal beings as it is to assume that bees evolved as hiving beings. The tribe was successful for humans, which is why it was still universally in place throughout the world three million years later. That it was successful doesn't, by the way, mean it was invulnerable. If we were to explode a hydrogen bomb in the interior of Brazil, we would wipe out hundreds of thousands of species totally, but it would hardly be reasonable to conclude that these species were unsuccessful because they couldn't survive a nuclear explosion.

Our first look into the human past presents us with a resounding challenge to the notion that the way we live was the way humans were somehow *meant* to live from the beginning of time. We *can* live in this hierarchical organization called civilization, just as lions can live in captivity, but saying that this was our inescapable destiny is not much more sensible than saying that the zoo was the inescapable destiny of lions. The tribal organization was natural selection's gift to humanity in the same way that the flock was natural selection's gift to geese.

The elemental glue that holds any tribe together is tribal law. Though this is easy to say, it's less easy to understand, because the operation of tribal law is entirely different from the operation of our law. *Prohibition* is the essence of our law, but the essence of tribal law is *remedy*. Misbehavior isn't outlawed in any tribe. Rather, tribal law prescribes what must happen in order to minimize the effect of misbehavior and to produce a situation in which everyone feels that they've been made as whole as possible. Members of the tribe view their laws as inherently friendly to them, invariably geared to make things better for them, collectively and individually, never worse. For us, of course, the law is an enemy. Collectively, perhaps, it's possible for us to view the law as society's friend, but for each of us individually, the law is an enemy always poised to pounce on us. This doesn't have to be pointed out to anyone who happens to belong to a racial or ethnic group that's subject to police profiling. But it's true for all of us to a degree. A momentary loss of control or lapse in judgment, a stupid action taken in panic, even an innocent gesture taken the wrong way can put you behind bars.

In *The Story of B I* I described in detail how adultery is handled among the Alawa of Australia. If you have the misfortune to fall in love with another man's wife or another woman's husband, the law doesn't say, "This is prohibited and may not go forward." It says, "If you want your love to go forward, here's what you must do to make things right with all parties and to see to it that marriage isn't cheapened in the eyes of our children." It's quite an elaborate process, but it works remarkably well. What makes it even more remarkable is that the process was not worked out in any legislature or by any committee. It's another gift of natural selection. Over countless generations of testing, no better way of handling adultery has been found or even conceivably could be found, because – behold! – it *works*! It does just what the Alawa want it to do, and no one tries to evade it. Even adulterers don't try to evade it – that's how beautifully it works.

Some tribes live under laws that seem grotesque to us, but they don't ask us to live under them. Those laws work for *them* – or they wouldn't be in place. No tribe has ever been found where the people hate their tribal laws. Doubtless there have been tribes where people came to be dissatisfied with their laws, but if so, those tribes have disappeared. In a very real sense, dysfunctional tribes are eliminated by natural selection in the same way dysfunctional species are.

One of the virtues of tribal law is that it presupposes that people are just the way we know they are: generally wise, kind, generous, and well intentioned but perfectly capable of being foolish, unruly, moody, cantankerous, selfish, greedy, violent, stupid, bad-tempered, sneaky, lustful, treacherous, careless, vindictive, neglectful, petty, and all sorts of other unpleasant things. Tribal law doesn't punish people for their shortcomings, as our law does. Rather, it makes the management of their shortcomings an easy and ordinary part of life, which is why the tribe has worked so well for so long.

But during the developmental period of our hierarchical civilization, all this changed very dramatically. Tribal peoples began to come together in larger and larger associations, and one of the casualties of this process was tribal law. If you take the Alawa of Australia and put them together with the Gebusi of New Guinea, the Bushmen of the Kalahari, and the Yanomami of Brazil, they are very literally not going to know how to live. None of these tribes is going to embrace the laws of the others, which may not only be unknown to them but also be incomprehensible to them. How then are they going to handle mischief that occurs among them? The Gebusi way or the Yanomami way? The Alawa way or the Bushman way? Multiply this by a hundred, and you'll have a fair approximation of where people stood in the early millennia of our own cultural development in the Near East.

When you gather up a hundred tribes and expect them to work and live together, tribal law becomes inapplicable and useless. But of course the people in this amalgam are the same as they always were: capable of being foolish, moody, cantankerous, selfish, greedy, violent, stupid, bad-tempered, and all the rest. In the tribal situation, this was no problem, because tribal law was *designed* for people like this. But all the tribal ways of handling these ordinary human tendencies had been expunged in our burgeoning civilization. A new way of handling them had to be invented – and I stress the word *invented*. There was no received, tested way of handling the mischief people were capable of. Our cultural ancestors had to make something up, and what they made up were lists of *prohibited* behavior.

Very understandably, they began with the big ones. They weren't going to prohibit moodiness or selfishness. They prohibited things like murder, assault, and theft. Of course we don't know what the lists were like until the dawn of literacy, but you can be sure they were in place, because it's hardly plausible that we murdered, robbed, and thieved with impunity for five or six thousand years until Hammurabi finally noticed that these were rather disruptive activities.

When the Israelites escaped from Egypt in the thirteenth century B.C.E., they were literally a lawless horde, because of course they'd left the Egyptian list of prohibitions

behind. They needed their own list of prohibitions, which God in his thoughtful way provided – the famous ten. But of course ten didn't do it. Hundreds more followed.

No number has ever done it for us. Not ten, not a hundred, not a thousand, not ten thousand, not a hundred thousand. I have no idea how long the list is by now, but I suspect it runs into the millions, and every single year we pay our legislators to come up with more. But no matter how many prohibitions we come up with, they never do the trick, because no prohibited behavior has ever been eliminated by passing a law against it. Every time someone is sent to prison or executed, this is said to be "sending a message" to miscreants, but for some strange reason the message never arrives, year after year, generation after generation, century after century. Naturally, we consider this to be a very advanced system.

No tribal people has ever been found that claimed *not* to know how to live. On the contrary, anthropologists find them to be completely confident that they know how to live. But with the disappearance of tribal law among us, people began to be acutely aware of not knowing how to live. A new class of specialists came to be in demand, their specialty being the annunciation of how people are supposed to live. These specialists we call prophets.

Naturally it takes special qualifications to be a prophet. You must by definition know something the rest of us don't know, something the rest of us are clearly unable to know. This means you must have a source of information that is beyond normal reach – or else what good would it be? A transcendent vision will do, as in the case of Siddhartha Gautama. A vision led Joseph Smith to the hidden scriptures known as the *Book of Mormon*. A dream will do, provided it comes from God. But best of all, of course, is direct, personal, unmediated communication with God. The most persuasive and most highly valued prophets, the ones that are worth dying for and killing for, have the word directly from God.

But isn't it true (people sometimes ask) that tribal peoples have claimed to have prophets as well? Yes, absolutely, but only when their tribal culture has been destroyed by contact with us; they no longer know how to live and so need the services of a prophet. One of the most famous of these was Wovoka, to whom the means of salvation for his people were revealed in a series of dreams or visions; his Ghost Dance religion would defeat the white man and restore the land to the natives of America. Although some tribal peoples attribute their laws to culture heroes in the distant past, that's all it is, an attribution, rather like the attribution of fire to Prometheus. They don't consult these heroes about how to live (the way we consult our prophets) any more than the Greeks consulted Prometheus about how to start a fire. They don't have to consult them, because they themselves know how to live. The knowledge is in *them*, not in some remote and inaccessible being.

The appearance of religions based on prophetic revelations is unique to our culture. We alone in the history of all humanity needed such religions. We still need them (and new ones are being created every day), because we still profoundly feel that we don't

know how to live. Our religions are the peculiar creation of a bereft people. Yet we don't doubt for a moment that they are the religions of humanity itself.

This belief was not an unreasonable one when it first took root among us. Having long since forgotten that humanity was here long before we came along, we assumed that we were humanity itself and that our history was human history itself. We imagined that humanity had been in existence for just a few thousand years – and that God had been in communication with us from the beginning. So why *wouldn't* our religions be the religions of humanity itself?

When it became known that humanity was millions of years older than we are, no one thought it odd that God had remained aloof from the thousands of generations that had come before us. After all, these were mere savages, unworthy of his attention. The philosophers and theologians of the nineteenth and twentieth centuries weren't troubled by the fact that God disdained to reveal himself until we came along. The fact alone was enough for them, and they felt no pressure to develop a theory to make sense of it. For Christians, it had long been accepted that Christianity was humanity's religion (which is why all of humanity had to be converted to it, of course). It was an effortless step for thinkers like Teilhard de Chardin and Matthew Fox to promote Christ from humanity's Christ to the Cosmic Christ.

On examination of the historical record, however, it seemed to me that there once *was* a religion that could plausibly be called the religion of humanity. It was humanity's first religion and its only universal religion, found wherever humans were found, and it was plausible to suppose that it had been in place for tens of thousands of years. Christian missionaries encountered it wherever they went, and piously set about destroying it. By now it has been all but stamped out either by missionary efforts or more simply by exterminating its adherents. If I am the first to nominate it the most reasonable candidate to stand as the religion of humanity, I certainly take no pride in this, since it's been in plain sight to us for hundreds of years.

Of course it isn't accounted a "real" religion, since it isn't one of ours. It's just a sort of half-baked "prereligion." How could it be anything else, since it emerged long before God decided humans were worth talking to? It wasn't revealed by any accredited prophet, has no dogma, no evident theology or doctrine, no liturgy, and produces no interesting heresies or schisms. Worst of all, as far as I know, no one has ever killed for it or died for it – and what sort of religion is that? Considering all this, it's actually remarkable that we even have a name for it.

The religion I'm talking about is, of course, animism. The name is our invention, derived from the Latin word for soul or spirit. It came to be applied to the religious notions of primitive peoples in the 1860s and 1870s. An early definition was supplied by Sir Edward Tyler in his book *Primitive Culture*:

Animism is the doctrine which places the sources of mental and even physical life in an energy independent of, or at least distinct from, the body. From the point of view of the history of religions, the term is taken, in the wider sense, to denote the belief in the existence of spiritual beings, some attached to bodies of which they constitute the

real personality (souls), others without necessary connection with a determinate body (spirits) (Tyler in Anderson 1950: 9).

I frankly haven't any idea what that means, and I doubt if you could find anyone to explain it to you in the jungles of Brazil or New Guinea. When that definition was cobbled together, missionary reports were pretty thick on the ground, but objective anthropological field studies were as yet nonexistent. After decades of trying to understand what so-called primitive people were trying to tell us about their lives and their vision of humanity's place in the world, I concluded that a very simple worldview was at the foundation of everything they were saying: *The world is a sacred place, and humanity belongs in such a world.*

It's simple but also deceptively simple. This can best be seen if we contrast it with the worldview at the foundation of what our own religions tell us. In the worldview of our religions, the world is anything but a sacred place. For Christians, it's merely a place of testing and has no intrinsic value; it's revealingly said that Satan is the Prince of the World. For Buddhists the world is a place where suffering is inevitable. If I oversimplify, my object is not to misrepresent but only to clarify the general difference between the animist worldview and the worldviews of our culture's religions.

For Christians, the world is not where humans *belong*; it's not our true home, it's just a sort of waiting room where we pass the time before moving on to our true home, which is heaven. For Buddhists, the world is another kind of waiting room, which we visit again and again in a repeating cycle of death and rebirth until we finally attain liberation in the state of nirvana. For Christians, if the world *were* a sacred place, we wouldn't belong in it, because we're all sinners; God didn't send his onlybegotten son to make us worthy of living in a sacred world but to make us worthy of living in heaven. For Buddhists, if the world were a sacred place, then why would we hope to escape it? If the world were a sacred place, then would we not rather welcome the repeating cycle of death and rebirth?

From the animist point of view, humans belong in a sacred place because they themselves are sacred. Not sacred in a special way, not *more* sacred than anything else, but merely *as* sacred as anything else – as sacred as bison or salmon or crows or crickets or bears or sunflowers.

I sometimes encounter those who resent the idea that our ancestors may have gotten in ahead of us, may have possessed a more sublime vision of the world and humanity's place in it than any of ours. They'll ask, "Well, isn't this just paganism?" or "Isn't this just pantheism?" Meaning, didn't we come up with the same thing? I quarrel with no one's answer to this question, but my own answer is no. Paganism, derived from the Latin word for *country-dweller*, is a farmer's religion and developed from farmers' concerns for the fertility of their land and animals, spawning one god after another to look after one thing after another when appropriately compensated through one kind of a sacrifice or another. If animism were kin to paganism, I'd expect to see it producing similar results, but

I've never done so. Varying widely in its details from people to people, animism doesn't automatically posit the existence of one God or many gods or any gods at all. Pantheism declares not only that a specifically singular God exists but that *everything* is God. If anthropological studies of them are to be trusted, tribal animists have no taste for such dogmatic speculations about the nature of God, so I see no grounds for equating animism with pantheism.

The religions of our culture – the so-called Major Religions – are very much ours (and not humanity's), because they answer our particular needs, providing us with ways to rationalize the immutable condition of inequity we experience. Why do a few of us enjoy lives of wealth, power, ease, and luxury while the masses endure lives of poverty, helplessness, toil, and squalor?

Different rationales for this condition developed in the East and West. In the East, under the theory of karma, one's sins and virtues are punished or rewarded in this and subsequent lives; thus if you're born to the life of an untouchable in Bhaktapur, India, where you can never hope to rise to any occupation above cleaning latrines, you have no one to blame but yourself. You have no grounds to envy or hate the Brahmans who shun and despise you; their life of felicity and leisure is only what they deserve, just as your life of poverty and misery is only what you deserve. In this way the arrangement of people into high, middle, and low classes is shown to be justice made manifest in a divinely ordered universe. Buddhism may be seen as offering relief from this rigid posture of resignation to one's lot. Buddha assured his followers that the poor and downtrodden are (or ultimately will be) better off than the rich and powerful, who will find it almost impossible to attain salvation. The poor can live most happily, Buddha said, possessing nothing and living on joy alone, like the radiant gods.

In the West a different rationale was offered by the religions of the Abrahamic tradition – Judaism, Christianity, and Islam. The meek (that is, the suffering poor) will inherit the Earth, Jesus said, and the kingdom of God will turn the hierarchy upside down; the kingdom of God will belong to the poor, not to the rich, and rulers and ruled will change places, making the first last and the last first. Jesus and Buddha agree that, contrary to appearances, riches don't make people happy. Rather, says Buddha, riches just make them greedy. And the poor shouldn't envy the rich their treasures, which are always subject to being stolen by thieves or eaten up by moths and rust; rather, Jesus says, they should accumulate incorruptible treasures in heaven.

Humanity lived for three or four million years without needing rationales like these, since in the tribal organization – notably nonhierarchical – when times are bad all suffer alike, and when times are good all flourish alike. For two hundred thousand generations of our species, religions like ours not only didn't exist, they would also have been superfluous and incomprehensible.

Daniel Quinn

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See also: Anarchism; Anarcho-Primitivism and the Bible; Animism; Animism – A Contemporary Perspective; Bioregionalism and the North American Bioregional Congress; Ecology and Religion; Evolutionary Biology, Religion, and Stewardship; Fall, The; Fox, Matthew; Ghost Dance; Magic, Animism, and the Shaman's Craft; Paganism – A Jewish Perspective; Teilhard de Chardin, Pierre.

Anishnabeg Culture

The Algonkian-speaking Anishnabeg (meaning “human beings”) of the Great Lakes region of North America includes speakers of the Odawa (Ottawa), Ojibwe (Chippewa) and Potawatomi dialects, now known among themselves as the Three Fires, as well as the Algonquins, to their east. Sharing major features of their religion, language and culture are the Cree who live to their north and west, and the various native peoples who live north and south of the St. Lawrence River, as well as Labrador and Newfoundland; more distantly related are the Pikuni (Blackfoot, Blood), who live east of the northern Rockies.

The Anishnabe reserves (Canada) and reservations (United States) are now located in Minnesota, Wisconsin, Michigan, Manitoba and Ontario. Their migration myth speaks of moving from the Atlantic coast along the St. Lawrence River to the Great Lakes. In pre-contact times, the Anishnabeg lived not only in the above areas but along the Atlantic seaboard and the Midwest (Ohio, Illinois, Kentucky) of the present-day United States. In the latter areas, they practiced horticulture and lived in settlements.

Before the effects of contact with Europeans, the Great Lakes Anishnabeg lived a semi-nomadic hunting-gathering lifestyle, traveling by canoe and snowshoe over an established yearly round; for example, traveling to maple forests in early spring when the sap runs and particular lakes in early fall when the “wild rice” ripens. Many traded with more settled peoples, such as the Iroquoian-speaking Wyandot (Hurons), exchanging dried meat and hides for corn and tobacco. Some carried out small-scale horticulture on their own, where the soil and climate was suitable. Some mined copper in shallow pits. Hence, they were familiar not only with towns, but with urban, mercantile centers, such as Cahokia, across the Mississippi from present-day St. Louis, long before Europeans arrived on the scene.

For these people, as hunting-gathering cultures everywhere, “religion,” “spirituality” and “nature” are meaningless terms, for each term would include every aspect of their lives; hence, these words do not denote anything distinguishable, in and of themselves. It is impossible for modern humans to fully appreciate what it meant to live in a situation where everything perceivable is undomesticated nature and every facet of nature is individually numinous. Hence, virtually everything observed or done involved a spiritual, ritual interaction with a *manido* (spirit/deity); all one’s neighbors shared the same understanding; and one’s language reflected these understandings in nuanced, complex ways. Let us, however, attempt to generalize from the contemporary hermeneutic as to how we humans understood the environment as hunter-gatherers.

The world around one – sun, moon, stars, Earth, rivers and lakes, animals, fish, trees, plants, stones (those that are animate), etc. – consists of numinous relatives; we live amidst the divine. These relatives are all more powerful than humans, for humans depend on them for life, but they do not need humans to survive. We need these relations to sacrifice themselves for the many things we require: branches and bark for shelter (wigwams), canoes, baskets and firewood; skin, flesh, bones and sinews for clothing, food, tools and thread; berries, seeds (wild grains), sap and tubers for food, medicine, glue and waterproofing. We encourage our relatives to give themselves to us for these needs by crying to them, asking them to pity us and give us their lives so we may live; in turn, we reciprocate by giving them symbolic gifts, especially tobacco, by honoring them through rituals, by always speaking to them respectfully, and by never wasting their precious gifts. For if we do not, they may not listen to us again or may not come back to life so that they can again sacrifice themselves for our needs.

Humans are so weak and pitiable that not only do we need the gifts of spirits to live, we also need a special, personal relationship with one or more *manido* in order to carry out our functions and for protection from assorted dangers. We are born into a clan, and the clan *dodem* (tutelary spirit, animal or plant) provides a generalized connection to the spirit realm but not a personal one. Hence, elders with known powerful, spiritual connections are asked to dream a name by the parents of an infant. These names provide protection to the children until they are old enough to begin creating their own connections. This is done by vision-questing through fasting, for every human must have a special relationship with a *manido* in order to live.

Children are encouraged, starting with a fast from dawn to dusk, to seek visionary experiences with the numinous, usually theriomorphic spirits (spirits in animal form). Every animal we encounter as we walk through woods and meadows, or paddle on lakes and rivers, is simultaneously an animal and a spirit. On each encounter, it is the animal who chooses in which mode she or he will relate to us; hence, we must always treat every meeting with the greatest respect. Through fasting, we encourage particular spirits to come and speak to us, to offer their powers to aid us in our supporting our family and band, to be a spiritual ally against those who might use their powers to attack us and our kin, even to be a friend. Fasting periods are increased until by adolescence, fasts are of four days or longer duration. Fasting means no food, no water, no sleep, and paying constant attention to our surroundings for those who may come. The major fast for females is at their menarche; for males, it is during puberty. But fasting continues throughout one's life, whenever there is need. For females, each cycle of the moon involves an intimate relationship with Earth and Moon, when the body is renewed and purified. This lessens the need for fasting in order to encounter the spirit realm as compared to males. Other means of communicating with the spirit realm are through lucid dreaming and the use of the Spirit Lodge (called "sweat lodge" by Euroamericans).

Some people develop relationships with the most powerful and dangerous spirits, such as Thunder or the terrible underwater being we dare not name, and can use these

relationships to help other individuals or the community as a whole. There are four different types of experts with specific spiritual talents in these regards. The most powerful perform the “shaking tent” ritual, in which the spirits come and speak with one so all can hear.

The above way of life became disrupted by the earliest contacts with Europeans. These strangers brought diseases for which the people had no immunity and the majority died in repeated waves of epidemics: measles, smallpox, even the common cold. The second factor was the fur trade.

The fur trade was developed mutually, and native peoples saw it as advantageous. For, at first, easily obtainable furs from animals hitherto only occasionally hunted, native people received iron tools, brass pots and firearms.

But under the pressure of the fur trade, the beaver disappeared over much of its traditional area. Peoples of similar cultures allied together and struggled to gain trading monopolies over the disappearing beaver. Warfare replaced raiding, whose primary purpose was to exhibit masculine values, in order to take over large trading and trapping areas. The Iroquoian-speaking Haudenosaunee amalgamated into the Five (later Six) Nations, and armed by the British, drove the Anishnabeg from their traditional areas to their north and west. The Anishnabeg, armed by the French, moved west and pushed Souian-speaking peoples onto the Plains where they found the Spanish-introduced horse. The Anishnabeg returned and pushed the Six Nations south of the Great Lakes, where they remained until, siding with the British during the American Revolution, many fled into Canada.

Thus the fur trade had a major effect on relationships, both human and spiritual. Reliance on trading furs for flour, sugar, blankets and pots – all previously supplied by women through gathering and manufacture from bark and hides – led to a lessening of the economic importance of females. The trapping of beaver, requiring exclusive use of large territories by trappers, usually males, led to the concept of exclusive trapping rights by clans. Both transitions led to the bilateral clans becoming patrilineal. The use of firearms, primarily for warfare, led to a reliance on them for hunting, even though the bow was more practical in the wooded terrain, requiring the trapping of ever more beaver for guns and powder. Animals were becoming a commodity, leading to the desacralization of certain species, as well as dependency, not on the *manido*, but on Europeans. Finally, a taste developed for traded whisky, for which there were no cultural controls, unlike the native cultures in the southern part of North America, where alcohol was used ritually.

The success of the American colonists against the British led to a massive migration of Euro-Americans westward, and the Scottish Highland clearances, followed by the Irish potato famine, led to considerable migration of Europeans into the still British-held north. In both the United States and Canada, the Anishnabeg were forced onto ever-shrinking pieces of land, which the respective governments put under the control of Christian missionaries. Anishnabe children were forcibly removed from their parents and communities and placed in residential schools where they were physically brutal-

ized for speaking their language or continuing any traditional customs, when they did not die of disease. Thus began an official policy of cultural genocide, whose purpose was to destroy native culture and religion, if not the native peoples themselves.

The traditional rituals and relationships with the spirit realm of nature were outlawed, and these laws were enforced by the military (U.S.) and police (Canada). The replacement of traditional spirituality by a simplistic

Christianity emphasizing the sinfulness of native people due to their “race,” and the destruction of the traditional economy based on nature by missionary-controlled welfare led to cultural ennui, to alcoholism, despair, suicide, and the use of relationships with *manido* for sorcery (the use of spiritual power against one’s own neighbors and community for personal gain). The relationship between religion and nature become extremely attenuated; the end of traditional rituals in the early twentieth century, especially vision-questing, meant that most individuals no longer had an intimate relationship with the numinous.

Traditional religion did continue, but in two ways. On the one hand, the original teachings and rituals went underground, to resurface in the 1970s. On the other hand, generations of simplistic Christian missionary teachings led to a focus on the first part of Genesis, misogynistically interpreted, and the *Pater Noster* (“Our Father”) prayer. A revised form of traditional religion, reinterpreted through the missionary lens, arose. Anthropologists studying these cultures passed on to the Anishnabeg Russian scholars’ misunderstandings of Siberian shamanism as the correct way to understand Anishnabe concepts.

Hence, the understanding of the numinous as a multiplicity of natural spirits was overlaid by the assumed superiority of monotheism, and prayers in English were made to a male “Creator” on the model of Genesis or “Our Father,” while in the native language, the reference was made to Grandfather alone, taken from the primal generative couple of Grandmother Sky and Grandmother Earth. But these patrifocal utterances were contradicted by the traditional offerings of tobacco to Sky, Earth and the Four Directions equally. Anthropologists convinced many that it was not all of nature that was numinous, but each species had a male “Master” that alone was divine; this in a culture that had been completely egalitarian with no notion of a chief or “master” and understood that the animals on which humans relied for survival were female, as nurturing and sustenance comes from the female domain. Anthropologists also taught that individuals did not have their own relationships with the spirit realm, but only special individuals to be called by the Tungistic word, “shaman.” Finally, in the late 1960s, the romantic “back to Earth” movement of the dominant culture provided a new term and concept for the female numinous Earth: “Mother Earth.” This was an idealized abstraction of the Earth mother that had little reality to that numinous being, Grandmother Earth, on and by which we live, with whom we can have a vital, intimate relationship.

The actual tradition which went underground began to resurface with the formation of the American Indian Movement (AIM) in the late 1960s. Begun by Anishnabeg in

the Minneapolis-St. Paul area as a force to protect urban natives from racist violence, the youths became connected with traditionalist elders, bypassing their middle-aged parents and Euro-American-recognized political “chiefs,” and began to fast, take part in Spirit Lodges, and, on the Plains, the Thirst Dance (“Sun Dance”). After a phase of militancy which brought the severe plight of native peoples to the public eye, the founding leaders involved themselves with native education and a revitalization of traditional religion.

Among the Anishnabeg, this began with the surfacing of the Midéwiwin, a quasi-institutionalized mode of traditional religion, important in its present form since the earliest days of the fur trade, that suited the modern situation. At first, young people who wished to take up the traditional spiritual life, along with Midéwiwin rituals, were forced by the Christian churches to leave their homes and create communities off the reserves. Slowly, the new traditionalist influence spread and missionaries lost control over the reserves. Non-Midéwiwin traditionalists began to publicly practice healing with natural herbs and their personal relationship with the numinous. Reserves began to gain control over their schools, health centers, police, etc., and the traditional rituals began to be openly practiced.

The Midéwiwin rituals, which hold ceremonial gatherings bringing Anishnabeg together on different reservations four times a year, create a means for urban native people to be again in nature, to fast, participate in Spirit Lodges, and attend four-day initiation and seasonal rituals. Prayers are again addressed, as in the past, to the Grandmothers and Grandfathers, honoring and respecting all aspects of the numinous. In urban areas, the availability of traditional spirituality has provided a foundation for support and health services for natives suffering from alcoholism and other ills of despair. While only a minority of Anishnabeg avail themselves of these opportunities, their numbers continually grow, and with this growth comes a renewed spiritual relationship with nature.

Along with the spiritual plight of the Anishnabeg, the leaders of the revitalized Midéwiwin focused on the contemporary human devastation of Earth, lest Earth take revenge and destroy us. Much of the Midéwiwin’s activities are oriented to education concerning the predicament of our planet, as well as concern and prayers for its recovery during their ceremonials.

Jordan Paper

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See also: American Indians as "First Ecologists"; Haudenosaunee Confederacy; LaDuke, Winona; Mother Earth; Totemism.

Anthropic Principle

The term “Anthropic Principle” refers to two distinct responses – one logical and one metaphysical – to the finding by Western scientific cosmologists that the early universe provided the very conditions necessary for the existence of humankind (Gr: *anthropoi*). According to the logical response, also known as the Weak Anthropic Principle, these cosmological data simply confirm the obvious, for if the initial conditions had not been consistent with the emergence of human life, we would not have been around to observe them (see Barrow and Tipler). According to the metaphysical response, known as the Strong Anthropic Principle, the cosmological data rather provide an occasion for amazement and awe, since they show just how many highly improbable conditions had to pertain simultaneously to make human life possible; when we contemplate this fine-tuning, we may well conclude that the universe has been destined to give rise to us (see Dyson). Because of its teleological character, the Strong Anthropic Principle figures prominently in modern arguments for divine design (see Davies).

Both versions of the Anthropic Principle are inspired by the same scientific data. Cosmologists have shown that although many possible universes would fit Einstein’s equations, very few could support carbon-based life. For such life to emerge, a highly particular set of laws and circumstances must pertain. For example:

If the gravitational constant had been slightly smaller, then stars and planets would not have coalesced; had it been larger, then the universe would have collapsed upon itself.

If the strong nuclear force (which holds nuclei together) had been slightly smaller, then the universe would have contained only the simplest element, hydrogen; had it been larger, then all carbon would have turned into oxygen.

If the weak nuclear force (which causes some nuclei to disintegrate) had been smaller, then no hydrogen could have formed and the universe would have lacked hydrogen-burning stars like our sun, not to mention life-giving water; had it been larger, then supernovae would not have ejected carbon, iron, and oxygen, all essential to life.

If the electromagnetic constant had been smaller, then stars would have burned out too quickly for life to evolve; had it been larger, then stars would not have been hot enough to warm planets sufficiently for carbon-based life.

Some critics of the Strong Anthropic Principle argue that all these conditions, though highly specific, could be the result of chance if enough universes existed to make ours statistically likely. Other critics suggest that, as science progresses, we will likely learn that the seemingly arbitrary laws and circumstances of our universe are in fact necessary. Both chance and necessity are presented as challenges to the idea of

cosmic design, especially by an omnipotent divine agent. In response, proponents of the Anthropic Principle typically argue that these critiques do not rule out divine design as a logical possibility – hence the reasonableness of responding to the hospitality of our universe with a sense of awe.

Louke van Wensveen

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Anthropologists

Anthropologists have studied religion since the beginning of the discipline through a succession of three major different theoretical and methodological approaches: ethnological, ethnographic, and ecological. The ethnological approach was developed mainly in England during the late nineteenth and early twentieth centuries, and principally by Edward B. Tylor (1832–1917) at Oxford University and James G. Frazer (1851–1941) at Cambridge University. Their method involved extensive and detailed cross-cultural comparisons through library research. Their theoretical framework was unilinear evolutionism in which so-called primitive societies were thought to reflect earlier stages in cultural evolution. Tylor considered animism, which he defined as a belief in spiritual beings, to be the foundation of all religion.

Frazer is famous for his monumental *Golden Bough* (1890–1915), a compendium of 12 volumes based on his extensive readings about myth, religion, and magic. His influence was widespread in the academic and public arenas. The abridged version of the *Golden Bough*, first published in 1922, has never gone out of print. In *Totemism and Exogamy* (1910) Frazer examined totemism as both a religion and a form of kinship classification that identifies individuals and groups as descendants of some common ancestor in mythic times, often a species of animal or plant. He recognized that totemic species were usually prohibited as food, foreshadowing more recent research on the potential consequences of taboos for environmental conservation.

In Paris, France, the ethnological approach was pursued by sociologist Emile Durkheim (1858–1918) at the Sorbonne and later by philosopher Claude Lévi-Strauss (1908–) at the College of France. Durkheim's classic study, *The Elementary Forms of Religious Life* (1915), drew mainly from the ethnographic record on Australian Aborigines. From an evolutionary perspective he thought that the Australian aboriginal society was the most primitive and thus provided an opportunity to explore the ultimate origin, character, and functions of religion. However, Durkheim rejected any definition of religion in terms of the supernatural (cf. Tylor), and opposed animism and naturism as adequate explanations of religion (cf. Frazer). (Naturism views aspects of nature like clouds, thunder, lightning, or rainbows as the expression of spiritual beings or forces.) Instead, Durkheim viewed religion as a reflection of society and its power over individuals. He distinguished between the sacred and profane, and considered the sacred to be a social construction as in the case of totemism. Also, he thought that religion molds social categories for understanding nature in terms of time, space, cause, substance, soul, and so on.

Lévi-Strauss, more than any other ethnologist, is associated with the development of structuralism, a perspective that emphasizes the analysis of structural relations as the key to scientific understanding. Things assume meaning through their place in a system. His crosscultural analyses seek to reveal the deeper structural unity underlying the surface diversity of cultures, and thereby to discover natural laws of mind and culture. He approaches myth, ritual, and symbol as functioning to mediate and reconcile elemental binary oppositions like nature/culture, animal/human, and natural/supernatural. However, while he often deals with natural phenomena as conceptualized by a culture, he does not do so in any ecological manner.

Accumulating criticisms of cross-cultural comparisons as a basis for armchair theorizing about cultural evolution and universals led an increasing number of anthropologists to turn away from generalizing toward particularizing instead. Thus, Franz Boas (1858–1942) in the

U.S. emphasized culture history (historical particularism), and A.R. Radcliffe-Brown (1881–1955) and Bronislaw

Malinowski (1884–1942) in England emphasized the practical functions of culture in satisfying psychobiological and social needs (functionalism). In this second approach, ethnography, anthropologists especially interested in religion concentrated on developing a detailed description of this component of culture as a system, based on extensive personal field research. For example, Elsie Clews Parsons (1875–1941) published her two-volume book *Pueblo Indian Religion* (1939) after a quarter of a century of fieldwork. The Pueblos daily interact intimately with the ecosystems in their habitats in Arizona and New Mexico, and this is reflected in much of their religion, as is the case for most indigenous cultures.

In England, Radcliffe-Brown published one of the first monographs on nature religion based on ethnographic fieldwork, *The Andaman Islanders* (1922). (These islands are located in the east Bay of Bengal as part of the territory of India.) The Andamanese believe in spirits of the dead in the sky, forest, and sea, as well as other spirits in natural phenomena. Andamanese relate these spirits to subsistence, food taboos, ceremonies, and aspects of social structure. Also Edward E. Evans-Pritchard's (1902–1973) fieldwork with the Nuer of the Sudan in northern Africa during the 1930s exemplified the ethnographic approach. In his classic book, *The Nuer* (1940), he revealed that their religion is closely connected with their herding economy and society, such as in the ritual sacrifice of cattle to appease spirits during epidemics. The in-depth interpretation of the multiple meanings of religious symbols, behavior, and objects was advanced further in subsequent ethnographic fieldwork in Africa by Victor Turner (1920–1983) in his *The Forests of Symbols* (1967), which focused on the sacred tree of the Ndembu of Zambia in southeastern Africa. Mary Douglas (1921–) also contributed to the interpretative perspective in the anthropological study of religion in her *Purity and Danger* (1966) and *Natural Symbols* (1969), which included comparative analysis of cultural beliefs about pollution as metaphorical statements about society and nature.

Any relevance of the ethnological and ethnographic approaches for understanding the relationships between religions and nature is an inadvertent result of concentrating on indigenous cultures whose religions are usually nature-oriented. However, by the 1940s, the biological science of ecology was beginning to flourish, and by the 1960s, so was environmentalism. These are among the influences in the emergence of a third approach to the anthropology of religion, one that is explicitly, directly, and systematically ecological. Initially it was developed mainly by Roy Rappaport (1926–1997) and Marvin Harris (1927–2001).

Rappaport's dissertation fieldwork with the Maring of Papua New Guinea formed the basis of his subsequent book *Pigs for the Ancestors: Ritual in the Ecology of a New Guinea People* (1967, 1984). This classic work emphasizes the collection of empirical and quantitative data as well as the application of systems theory to examine the functional role of ritual in regulating the relationship between the dynamic fluctuations in human population and natural resources. Rappaport's subsequent studies are largely theoretical, his collection of essays *Ecology, Meaning, and Religion* (1979) and his monumental treatise *Ritual and Religion in the Making of Humanity* (1999).

Harris explicitly and systematically formulated the foundations and principles of cultural materialism and critiqued competing theoretical approaches in his *The Rise of Anthropological Theory* (1968) and *Cultural Materialism: The Struggle for a Science of Culture* (1979). The main point of cultural materialism as a scientific research strategy is that much of culture can be explained as practical responses to the problems of everyday survival and maintenance. Harris assigns infrastructure research priority and causal primacy, and emphasizes “etic” and behavior over “emic” and thought. Infrastructure is the product of the interaction of environment, population, technology, and economy – the material foundation of society and culture. Etic refers to a Western scientific approach, and emic to native or folk viewpoints. In a series of ingenious essays Harris attempts to analyze and explain numerous curious cultural puzzles as stemming from the material conditions of existence, including the religious phenomena of Aztec ritual sacrifice, the sacred cow in India, and the Muslim and Jewish prohibition on eating pork. (Also see his *Cows, Pigs, Wars, and Witches: The Riddles of Culture* [1974], *Cannibals and Kings: The Origins of Culture* [1977], and *Good to Eat: Riddles of Food and Culture* [1985]).

The ecological approaches developed by Rappaport and Harris have been variously followed by several other anthropologists in studying the relationships between religion and nature, including Gerardo Reichel-Dolmatoff in *Amazonian Cosmos* (1971) about the Desana of the Colombian Amazon, Barbara G. Meyerhoff in *Peyote Hunt* (1974) on the Huichol of northern Mexico, Richard Nelson in *Make Prayers to the Raven* (1983) with the Kutchin foragers in the Alaskan forest, and Stephen Lansing in *Priests and Programmers* (1991) on Balinese temple priests and crop irrigation. Recent anthologies edited by John Grim (2001) and Darrell Posey (1999) demonstrate how important this ecological approach to religion has become. Nevertheless, only very recently has the study of spiritual ecology, the relationships between religions and nature, started

to penetrate textbooks on the anthropology of religion (e.g., Bowie 2000). This may coincide with growing awareness of the importance of religion in helping to resolve ecocrises and the unique role anthropologists may play in providing heuristic cases of sustainable green societies in which religion is pivotal.

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See also: Animism; Anthropology as a Source of Nature Religion; Ecological Anthropology; Ecology and Religion; Rappaport, Roy A.; Religious Studies and Environmental Concern; Ritualizing and Anthropology; Totemism.

Anthropology as a Source of Nature Religion

Except for anthropologists and until recently, most scholars of religion tended to concentrate on the so-called great, major, or world religions, namely Buddhism, Christianity, Hinduism, Islam, and Judaism. Certainly these religions are of great historical, cultural, and political importance and their adherents now comprise the majority of humanity, a result of centuries or more of crosscultural contact and especially missionization and colonial expansion that has often decimated preexisting native religions.

Another perspective, however, is provided by cultural evolution, encompassing the prehistoric as well as historic periods. The antiquity of religion appears to extend back to the time of Neanderthals some 70,000 years ago where archeologists find the earliest evidence of intentional burial with funeral offerings such as red ochre and even flowers as evidence by pollen remains. In contrast, so-called great, major, or world religions are relatively recent, developing within just the last few thousand years. In other words, the real great, major, or world religion of humanity from a cultural evolutionary and/or temporal perspective is Animism, which can be considered “nature religion.” This is the belief that nature includes spirits, sacred forces, and similar extraordinary phenomena.

Most humans throughout time and space have practiced some variety of this nature religion, or what anthropologists generally refer to as Animism (Guthrie 1993;

McFadden 1991). While from historic times until today Animism is known to be common in hunter-gatherer, horticultural, and pastoralist societies, it may be present as well to various degrees in others, including nonindigenous ones. Asians often embrace elements of Animism in their personal religion along with “mainstream” religions such as Buddhism, Hinduism, or Islam. In Japan, for instance, Shintoism and Buddhism coexist and often commingle, and Shintoism is a variety of Animism. Neopaganism in contemporary Europe, North America, and elsewhere is a form of nature religion too.

Beyond its prior antiquity and universality, Animism is also important because arguably it is far more natural or ecological than any other religion. White’s (1967) classic essay on the roots of the environmental crisis blamed Christianity, although his line of argument logically encompasses Judaism and Islam as well. These three Abrahamic religions are not very environmentally friendly in the selective interpretations of sacred texts which prevail and tend to oppose spirit against nature, with a rare exception such as St. Francis of Assisi (Lane 1998). While Buddhism, Daoism, Hinduism, and Jainism are arguably potentially far more environmentally friendly than the Abrahamic religions, the Asian countries where the populace practices one or more

of the former set of religions all have severe problems of natural resource depletion and environmental degradation as well, although this is often associated with Westernization. Such degradation points to the perennial problem of discrepancies between the religious ideals and actual behaviors. On the other hand, most indigenous societies which pursued Animism were relatively sustainable ecologically, as is obvious given their existence for centuries or even millennia in the same region without causing natural resource depletion and environmental degradation to an irreversible degree. For such societies, interacting with nature is not merely a physical experience or economic enterprise, but an emotional and spiritual path. Most indigenes do not separate the natural and supernatural as distinct domains; instead they view spirit as part of the web of life.

As the Western study of religion developed, including comparative religion, a division of labor emerged in which most scholarship concentrated on Christianity, Judaism, and eventually included Islam and then later the main Asian religions. The remaining religions, mostly varieties of Animism, were largely left to anthropology. This reflects the tendency to divide religions (and societies) into “civilized” (literate) and “primitive” (oral) traditions, anthropology concentrating on the latter albeit not exclusively (e.g., see Eliade). (However, today the qualifiers oral, pagan, primal, primitive, and tribal are avoided by most anthropologists as pejorative). Thus, from a cultural evolutionary and/or temporal perspective, the majority of the students of religion studied the minority religions (Christianity, Judaism, and so on). In contrast, the relative minority of students of religion (anthropologists) studied the majority religion (Animism). Only in recent decades have anthropologists begun also to study religions like Buddhism or Islam.

As a consequence of this academic division of labor, no other Western discipline is more important as a source for understanding about nature religion than anthropology. There are up to about 7000 distinct cultures in the world today, and many others were known and documented within the last couple of centuries before they became extinct. The majority of these cultures have animistic religions. Because of the holistic approach to describing culture as a whole, most ethnographic monographs, descriptions of a particular culture based on personal fieldwork, include at least one chapter on the local religion. Furthermore, there are numerous ethnographies focused mostly on religion, albeit in its social and cultural contexts while emphasizing behavior as well as beliefs. One need only decide which culture or region is of most interest, and then pursue the available literature through standard sources and research procedures, not that these are perfect. (See Lambek 2002: 573–613 for the most recent and extensive bibliography which is indexed by topic and region.)

If one is concerned with the vast ethnographic record of traditional indigenous societies as a source for nature religions, then it is necessary to identify and probe the relationships between religion and environment by reading between the lines. Spiritual ecology, research explicitly focused on the dynamics of these relationships, only

emerged in the 1990s. Nevertheless, that does not diminish the unique significance of ethnography as an unparalleled source for learning about nature religions.

Some people think that there are problems with recent phenomena like the New Age and prior spiritual movements which often extract and manipulate a creative eclectic mixture of elements from different religions including native ones. Probably the most serious problem is that this appropriation, and the commercialization that often accompanies it, may be considered by the indigenous adherents to the religion to be exploitative, offensive and even sacrilegious. However, some indigenous shamans or spiritual healers have no problem whatsoever with guiding non-indigenes in their own spiritual journey or vision-quest by way of long-established native cultural traditions and techniques. A related problem is that the rich and complex beliefs, values, rituals, symbols, and other phenomena associated with the indigenous religion may quickly lose their original meanings when extracted from their historical, social, cultural, spiritual, and ecological contexts. Nevertheless, often the ethnographic record can help alleviate this problem to some degree by providing detailed information on indigenous religions and their contexts. Furthermore, it could be argued that, if indigenes can adopt religions like some variety of Catholicism or Protestantism, then surely non-indigenes can adopt indigenous religions provided that they do so faithfully. After all, ideally, religious freedom applies to everyone without any kind of racial or cultural discrimination from anyone. Moreover, significantly some anthropologists themselves have become converts and practitioners of some variety of Animism or shamanism, most notable of all Carlos Castaneda and Michael Harner (see Narby and Huxley 2001).

In conclusion, a major challenge for anthropologists and other academics is to reach beyond basic research to actually apply knowledge and engage in advocacy to help protect indigenous religious freedom and its sacred places as well as the environmentally friendly nature of the spiritual, cultural, and historical ecology of the overwhelming majority of such societies. Also, others can learn from indigenous nature religions to promote their own spirituality as well as more sustainable and green societies of their own. At the same time, it must be realized that, under the pretense of scientific objectivity which sometimes assumes the fanatical extreme of scientism, most anthropologists are limited by approaching religion only intellectually and as non-believers rather than also spiritually. (The outsider and insider each have a different set of advantages and disadvantages in understanding any particular religion, thus some moderates would consider them to be complementary approaches.) Therefore, anthropology cannot be considered the only source for learning about nature religions. Ultimately the primary source must remain the nature religion itself, usually through the community of adherents, or through personal communion with nature and especially at sacred places.

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See also: Animism (various); Anthropologists; Castaneda, Carlos; Ecological Anthropology; Ecology and Religion; Evolutionary Biology, Religion, and Stewardship; Harner, Michael – and the Foundation for Shamanic Studies; Noble Savage; Rappaport, Roy A.; Religious Environmentalist Paradigm; Religious Studies and Environmental Concern; Ritualizing and Anthropology; Totemism.

Apocalypticism in Medieval Christianity

Further Reading

Leslie E. Sponsel

According to the book of Genesis, God originally created a harmonious Earth in which everything was good, but,

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Klass, Morton. *Ordered Universes: Approaches to the Anthropology of Religion*. Boulder, CO: Westview Press, 1995. because of the Fall, God caused enmity between humans, the serpent, and the Earth itself, so that humans would have to earn their food by harsh work from the hostile ground (Gen. 3:14–19). Humans hunt, kill and devour animals because of the Fall. Animals attack, slay and eat each other for the same reason. Until the twentieth century in Europe and America – and still throughout much of the world – farmers put in hard labor to produce small crops and nomadic pastoralists lived in tents so that their animals could find sufficient forage in steppes where there is insufficient rainfall to permit agriculture or continuous grazing of the same pastures. In summary, according to Genesis the world, as humans have experienced it, is the result of sin, which disordered the harmonious relationships that God had originally intended. Some apocalyptic thinkers have envisioned the goal of history to be a “new heaven and a new Earth” in which that original harmony is restored and even improved. In these instances nature has been allotted a significant role in apocalypticism.

Isaiah of Jerusalem, writing in the eighth century B.C.E., envisioned a messiah in whose days wolf and sheep, leopard and kid, lion and calf would live peacefully together (Isa. 11:1–9). Isaiah or a later disciple envisioned the Earth drying up and becoming

sick, with only a few inhabitants left, but then God would prepare an immense feast for all the peoples, death would cease to occur and there would never again be sorrow or tears (Isa. 24:4–6, 25:6–8). Another disciple of Isaiah, writing during the discouraging years after the exiles had been allowed to return from Babylon, but had come home to despair rather than glory, summarized the earlier texts about the new heaven and the new Earth in which the redeemed would live in harmony and abundance with all other species (Isa. 65:17–25).

Paul wrote to the Romans that the entire creation had been chained up and made subject to death until that time when God would unveil the coming splendor that would set all of creation free along with the elect (Rom. 8:18–21). John of Patmos envisioned a resurrection of the martyrs who would reign on Earth with Christ for a thousand years (Rev. 20:1–6), and then be replaced by a new heaven and new Earth in the middle of which would be a new Jerusalem, with a tree of life yielding twelve different fruits (Rev. 21:1–22:5).

Two themes emerged from biblical apocalypticism: future harmony between humans and all other species and a transformed Earth that would yield abundant food and drink effortlessly. Both of these themes are expounded in the millennium that the North African Christian Lactantius described in the seventh book of his *Divine Institutes* (ca. 303–317). Lactantius accepted the notion that history was divided into seven world-weeks, each of which would include a thousand years. The seventh or Sabbath worldweek would begin around the year 500. Nature would bring forth abundant food and drink without human effort and peace would prevail between the different species of animals.

Asceticism, however, was sweeping the Roman World from the second century onward. Neo-Platonism taught its adherents to turn away from the material and sensible world toward the One, the source of all being, that could be known only by the mind. Physicians advised abstinence from sex. Monasticism spread rapidly from Egypt and Syria among Christians. Dualists thought that anything material was actually evil, while Christians believed that the body was inferior to the soul and accepted the resurrection of the body only because it was clearly scriptural. Augustine, Bishop of Hippo, (354–430) came to Christianity by way of Neo-Platonism, which satisfied his strongly ascetic bent. Augustine attacked both the worldweek notion and the belief in an earthly millennium. He replaced the world-week with a scheme of seven ages, five of which preceded the birth of Jesus Christ, while the sixth represented the suffering of humans on Earth between Christ and the end of history. The seventh belonged to those souls who had died in Christ and rested in heaven. Augustine spiritualized and individualized the Apocalypse. God had created humans in order to replace the fallen angels with elect, human souls. The City of God was made up of these souls and history would continue until the last one of these had died and been saved. On Earth these elect souls were mingled with the much more numerous reprobate who were the City of Earth and after death the elect rested with God in heaven. Christians should focus themselves as much as possible on spiritual concerns. Material goods hindered spiri-

tual concentration and, therefore, were to be used minimally. Any notion of earthly abundance was repugnant to Augustine. On Earth the reprobate dominated and their greed led to incessant war and strife, which would continue as long as time lasted.

Not all Christians were as ascetic as Augustine. An anonymous fourth-century author composed the *Tiburtine Sibyl*, which concluded by predicting the coming of an emperor whose name would be Constans and who would reign 112 years. Fruit, wheat and wine would be abundant and cheap during his reign, which would end with the arrival of the Antichrist. The Pseudo-Methodius, actually an anonymous eighth-century author, inspired by the Arab Conquest, took up the notion of a final, all-victorious emperor but omitted any mention of earthly prosperity. Adso, writing in the late tenth century in the Ardennes, transferred the role of messianic final emperor to the Frankish kings, again without the notion of material plenty. All three of these texts were widely circulated in medieval Europe after 1000, especially the latter two.

Monastic authors found Augustine's thinking congenial. Often they believed implicitly, if not explicitly, that the elect included only monks. Augustine had postponed the end of history into the indefinite future. The *Tiburtine Sibyl* and similar texts focused primarily on the final generation before the end of time and the second coming.

Reformist apocalyptics applied the concepts and language normally associated with the end of history to the struggle to reform the clergy, a struggle initiated by Pope Leo IX and his successor, Gregory VII in the second half of the eleventh century. Reformists focused on their own contemporary era and the immediate future, not the distant end of time. One of the most prominent and innovative reformists was Hildegard of Bingen (1098–1179) who in her *Scivias*, (1141–1151) followed Augustine, but stated that the Earth had entered the seventh millennium. Reformism appeared strongly in her *Book of the Divine Works* (1163–1173), where Hildegard predicted that the lay princes would force the clergy to divest themselves of their temporal wealth and to give up simony, causing an era of unsurpassed material abundance, spiritual justice, and peace during which Christians would give up their weapons (Part 3, vision 5, chp. 20). Hildegard's ideas were spread widely by a selection of key texts chosen by her disciple Gebeno in the thirteenth century, which included the passage on reform of the clergy.

Abbot Joachim of Fiore (1135–1202), another reformist apocalyptic, used natural imagery, especially in the figures, which he drew to illustrate his notion of three historical phases, the last of which placed Augustine's seventh age within history. Just as the Son came from the Father and the Holy Spirit from both the Father and the Son, so the first phase belonged to the Father, the second predominantly to the Son and secondarily to the Spirit and the third predominantly to the Spirit. The third age had already begun with Bernard of Clairvaux (1090–1153) and would culminate soon after 1200. In one figure, the three periods are represented by two vines that grow and intertwine to form three circles, in the last of which the entire space is covered with foliage. Joachim, however, was thinking in terms of sweeping clerical and monastic reform accompanied by an unprecedented degree of holiness and spiritual understanding among Christians. The future era of the Holy Spirit would be more spiritual and ascetic than

its predecessors. Hence, Joachim nowhere spoke of earthly abundance. Some scholars, however, interpret the era of the Holy Spirit as millennial, but that probably does not imply abundance and earthly prosperity.

Joachimism spread widely between the beginning of the thirteenth century and the middle of the seventeenth century as Marjorie Reeves has shown, but most apocalyptic texts focused on church reform. Thus, the Second Charlemagne prophecy, which was extremely popular in France, predicted the coming of another Charles who would conquer all the enemies of Christ and force all of them to convert.

Exceptions were few. Jean de Roquetaillade (ca. 1310–1366) believed that the millennium would begin in 1370 and endure for exactly 1000 years. Jean quoted Isaiah 2:2–4 about all the peoples coming to the “mountain of the house of the Lord.” Jean’s primary focus was the conversion of the infidels to Christianity and a long period of peace under total Christian dominance. Roquetaillade, however, did briefly allude to Isaiah 60, which hints at material prosperity. The prophecy of a new David in William Langland’s fourteenth-century *Piers Plowman* predicted a king in England whose reign would see all weapons destroyed, warfare ended and honest, fair justice prevailing (passus 3, lines 259–324).

As late as the seventeenth century most apocalyptics focused on reform of the Church and the attainment of unprecedented levels of Christian spirituality. Despite a perceptible shift toward a more positive evaluation of the material world and of this life which began in the twelfth century, the ascetic outlook of the Late Antique world continued to prevail in Christian circles. Christians focused primarily on the salvation of individual souls. Nature, therefore, continued to play only a tangential role in Western apocalypticism.

E.R. Daniel

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See also: Christianity(5) – Medieval Period; Hebrew Bible; Hildegard of Bingen; Jewish Intertestamental Literature; San (Bushmen) Apocalyptic Rock Art.

Appiko Movement (India)

Appiko is a nonviolent grassroots movement for ecological preservation and restoration centered in the Indian State of Karnataka. The word Appiko, meaning “embrace” or “hug” in Kannada, the local language, is derived from the Hindi word Chipko, employed by the movement of that name in the Northern State of Uttar Pradesh (now Uttaranchal). The leader of the Appiko movement, Pandurang Hegde, worked with Sunderlal Bahuguna, a Chipko organizer, and in 1981 participated in part of Bahuguna’s *padyathra* (or foot march) of 4870 kilometers, through the foothills of the Himalayas. In 1987 Bahuguna accompanied Hegde and other Appiko activists in a *pady- athra* of 1450 kilometers through the Western Ghats, presenting slide shows and lectures to create environmental awareness.

Appiko shares with Chipko a recognition of the sacredness of the forests and other aspects of nature upon which the local people depend, the strategy of nonviolent protest which Gandhi practiced and that goes back to the protest against the destruction of trees which the Bishnois people of Rajasthan practiced in 1730, and the non-violent method of disseminating their message through *pady- athras*, folk songs, street plays, and dance dramas. At the same time the Appiko movement is a response to conditions peculiar to the ecological history of the hill regions of Karnataka.

In what is today the Uttara Kannada district of Karnataka, the British takeover of forest resources in the nineteenth century provoked a peasant struggle that continued into the twentieth century. After independence, commercial exploitation continued to ignore the interests of local people. In April 1983, the people of the village of Salkani were shocked at the devastation of a local sacred forest, where every year they gathered to worship the forest goddess. A youth group in the neighboring village of Gubbigadde was also considering measures to stop deforestation. In response to their letters, forest officials stated that the tree felling was being undertaken according to scientific principles and warned them not to interfere. In August 1983 the local people invited Sunderlal Bahuguna to relate the story of the Chipko struggle and the nonviolent method of hugging the trees to save them from the axe. The local people resolved to save their forest by the same nonviolent strategy.

In September of 1983 the Forest Department began felling trees some distance from either Salkani or Gubbigadde. But the news quickly reached the two villages. Before dawn on 8 September 1983, 160 people set out, despite rain and the menace of leeches, for the forest. The village people rushed to the first tree and embraced the trunk before the workers could strike a blow. The wood cutters were moved by their courage and agreed not to fell any trees until the forest department had consulted

with the local people. In October a similar movement was launched in the village of Hursi. In December the state government sent the Forest Minister who agreed, after discussions with local people and an examination of the affected areas, that tree felling was responsible for significant ecological damage. He assured the people that no further clear-felling of natural forests would take place; only dead and dry trees would be cut. Appiko activities soon began in Modagu, another hill district of Karnataka. In Kodagu District the government imposed a ban on the felling of trees. As it came to be known throughout the state, the Appiko movement engendered a new ecological awareness.

The objectives of the Appiko movement are (1) to preserve the remaining tropical forests of the Western Ghats by demanding a basic change in forest policy, from revenue-based to ecology-based management; (2) to restore the natural forests, planting trees that provide food, fodder, fuel, fertilizer, and fiber to local people; and (3) to promote rational use of forest resources by educating local people to avoid harmful practices. To support these objectives the Appiko movement has employed methods derived from the religious traditions of the people. The *padyathra* is an adaptation of the tradition of the pilgrimage that has been a central feature of the religious life of India from ancient times. During the *padyathra* the participants temporarily depart from their homes and encounter the forest as a threatened sacred space. During the *padyathra*, works of the traditional folk theater of Karnataka, called *Yakshagana*, integrate subject matter from the Mahabharata and the Ramayana with contemporary environmental concerns. At these events, special *pujas*, or services of worship, are undertaken in which the local people pledge themselves to the protection of the forest by nonviolent means.

To further these activities, Appiko has established an informal institution called the Parisara Sanmrakshana Kendra (Environmental Conservation Centre) in the town of Sirsi, in which activists from a variety of local groups work together toward their common goal.

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See also: Bahuguna, Sunderlal; Bishnoi; Chipko Movement; Hinduism; India; India's Sacred Groves; Jataka

Tales; Mâldhâris of Gujarât (India); Sarvodaya Shramadana Movement (Sri Lanka).

Aquinas, Thomas (1225?–1274)

Renowned in the Roman Catholic tradition as a saint who was canonized for being a teacher and scholar (1323), a Doctor of the Universal Church (1567), the Prince and Master of all Scholastic Doctors (1879), and the Patron of all Catholic universities and colleges (1880), Thomas Aquinas continues to attract the interest of moral theologians who strive to respond to the problems of their times. The environmental crisis of the twentieth century prompted the examination of his thinking, especially his creation theology and teachings on the moral virtues, and the application of notions that encourage more responsible behavior toward other species and ecological systems. Some scholars have dubbed the ongoing appropriation of these teachings as “eco-Thomism.”

Among the particularly relevant notions in Aquinas’ creation theology are: (1) the innate goodness of all types of animate and inanimate creatures, each of which is essential to the perfection of the universe; (2) the unity of diverse creatures through their interactions with one another to sustain themselves and the internal functioning of the universe; (3) the sacramentality of the physical creation which manifests the invisible presence and character of God, particularly God’s power, goodness, and wisdom; and, (4) the unique capacity of the human creature to identify and choose to act on other creatures in ways that achieve the common good in temporal life as eternal happiness with God is sought.

Scholars are wise to approach these notions recognizing the all-encompassing theological framework within which Aquinas wrote and his medieval understanding of the world as geocentric with its various species created and ordered hierarchically to one another by God to achieve divine purposes. His pertinent teachings must also be retrieved cautiously and informed by contemporary science so that they are meaningful during the twentyfirst century.

When appropriated from an ecological perspective, Aquinas’ teachings may facilitate the faithful to value all types of biota and abiota for their intrinsic and instrumental goodness as essential parts of ecosystems and the greater biosphere, to cooperate with all species and biological systems so they are able to function in sustainable ways for their common good now and into the future, and to preserve species and natural systems because they manifest the character of God who empowers the emergence of creatures over time, who generously endows the universe with the capability to develop itself without divine coercion or interference, and who patiently waits for the universe to emerge at its own pace in expanding space and extending time. Aquinas’ ideas about the human creature need reformulation to enable a more realistic view of *Homo sapiens* as intricately connected with and radically dependent upon other species and physical

systems over cosmological and biological evolutionary time, but his understanding of the human capacity to discern responsible ways of acting in temporal life and to choose whether or not to act accordingly provides a vital perspective from which the faithful can approach ecological degradation.

Appropriating Aquinas' theological anthropology requires accepting the instrumental valuing that permeated his thinking about the human in relation to other creatures. That God intends humans to use other animate and inanimate beings is integral to the medievalist's thinking that God intends creatures to use one another for their sustenance. Within this framework of thinking, humans are restricted to using other creatures for two purposes:

(1) to acquire the necessities for functioning in temporal life, and (2) to gain some inkling of God's character as manifested through the world. The moral virtues guide humans in their use of other creatures, Aquinas explains, and his teachings on the cardinal virtues of prudence, justice, moderation, and fortitude provide a blueprint for responsible behavior that has significance for environmental ethics today.

Key among these virtues, prudence inclines the human person to discern correct ways of acting through a discretionary process of seeking informed advice about the appropriate means of meeting one's needs in life, making a judgment about the best means, and executing that judgment. Seeking counsel on the best options for acquiring the necessities for living constitutes an act of inquiry during which the private needs of the individual and the common good of others are considered. Judging the most appropriate means of acting requires foresight to determine whether or not future needs can be met, circumspection to assure that an action is most suitable in light of a combination of circumstances that may arise, and caution so that evil is avoided by having a firm understanding of the common good. Aquinas' thinking about prudence suggests a theocentric way of assessing how human beings should act toward one another, other living beings, the air, land and water that the faithful can appropriate, inform with contemporary scientific findings, and apply to ecological problems.

The virtues of temperance, justice and fortitude incline the person to follow the dictates of prudence in ecologically responsible ways. Because temperance inclines the individual to curb immoderate desires for material goods and bodily pleasures, the use of intrinsic goods of Earth would be minimized when meeting basic needs. Because the virtue of justice inclines humans individually and collectively to consider the needs of other people to sustain themselves in temporal life, excessive goods would not be coveted by some so others in the present and future would be able to acquire their necessities of life and renewable goods would be sought. Because fortitude strengthens the individual to act virtuously in relation to others despite impediments and dangers that occur, the faithful would persist in acting prudently, justly and moderately in relation to other humans, other species and ecological systems in this life as they seek eternal life with God.

Aquinas' teachings about secondary virtues and vices also have relevance for addressing ecological concerns. A pertinent secondary virtue to temperance is humility,

which removes obstacles like the quest for temporal riches to the person's spiritual quest for eternal happiness with God. All physical goods would be used humbly because they relate ultimately to God, and all the words, deeds, and gestures stemming from the use of physical goods would manifest reverence to God for having enabled their existence. Among the vices that must be avoided are gluttony for physical goods and cruelty to living creatures, both of which have been widely practiced in some sectors of society.

The human person has the innate ability to acquire the moral virtues over time, Aquinas insists. Their application is motivated by the theological virtue of love (*caritas*) which is gratuitously infused in the human person by God and aims ultimately toward eternal happiness with God. This linking of all behavior with the quest for eternity with God provides an incentive for the faithful to strive to live virtuously with other beings of our shared physical systems.

Jame Schaefer

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See also: Apocalypticism in Medieval Christianity; Christianity(5) – Medieval Period; Natural Law and Natural Rights; Virtues and Ecology in World Religions.

Aradia

The goddess Aradia was described in 1898 by the American folklorist Charles Godfrey Leland (1824–1903), who placed her worship as central to an underground pagan Italian religion which he claimed had existed continuously since Etruscan times. Leland, a fascinating combination of progressive journalist, linguist, and serious researcher into little-known arts, from handicrafts to magic, lived primarily in Philadelphia, and in the latter third of his life primarily in London and Florence. In Florence in 1886 he met a woman whom he referred to as “Maddalena,” although her actual name may have been Margherita Talenti. He described her as someone “who was not only skilled in fortune-telling, but who had inherited as a family gift from generations, skill in witchcraft – that is, a knowledge of mystical cures, the relieving of people who were bewitched, the making of amulets, and who had withal a memory stocked with a literally incredible number of tales and names of spirits, with the invocations to them, and strange rites and charms” (Leland 1998: 33). From then on, Leland paid Maddalena a stipend to collect information on Italian folklore and witchcraft, in which he saw elements traceable back to the ancient Etruscan and Roman populations. According to Leland, he learned in 1886 that a manuscript existed “setting forth the doctrines of Italian witchcraft” (Leland 1998: 225). He urged Maddalena to acquire a copy, and in January 1897, she gave him what he called *Aradia*, or the *Gospel of the Witches*.

Leland’s edited version of the *Vangelo*, or *Gospel*, was published two years later. It presents Aradia as the witches’ Messiah, daughter of Diana the Moon goddess. The name “Aradia,” as Leland noted, may have been derived from Herodias, wife of King Herod Antipas of Galilee, and described in the New Testament as an evil woman. In the *Vangelo*, however, Aradia is the brother of Lucifer the Sun god, queen of the witches, and patroness of the poor, the outcast, the outlaw, and the rebel. Although her worship is misrepresented by the Catholic Church as the worship of Satan, Leland viewed it as a “counter-religion” that divinized the Feminine principle of creation, honored the natural cycles of the Moon, and placed its practitioners in an intimate relationship with the powers of the Earth, especially as expressed through herbs and minerals.

Scholars who have studied the published text suggest that she may have presented him with a collection of legends, spells, and rituals that she had collected and written down. (Although Leland’s first draft is preserved, Maddalena’s original manuscript is not, a fact that causes some historians to doubt Leland’s version of the *Vangelo*’s origin.) These he combined with other material on Italian witchcraft that he had collected, similar to what he published in such books as *Etruscan Roman Remains* (1892) and *Legends of Florence* (1896). It is likely, however, that Leland’s published

version is not merely a translation, but was reshaped to emphasize his own views on religion, on women, and on magic. Invocations of Catholic saints, for instance, which are often found in folk magic, do not appear in *Aradia*, the better to emphasize its claim to carry the message of a counter-religion to Catholicism.

Leland's *Aradia*, although published in a small edition, became a significant factor in the British Pagan Witchcraft (Wiccan) revival of the 1940s. One of the best-known invocations, the Charge of the Goddess, was based on an invocation of *Aradia* from the Gospel, and the goddess herself was invoked into the ritual circle and into the person of the priestess by that name. Leland's works figured in the new Wiccans' claim to be carrying on "the Old Religion," and *Aradia* itself became a popular self-chosen magical name. Other writers returned to Leland's books as sources in attempts to recreate a revived Italian pagan religion. *Aradia*'s position as patroness of young lovers and social rebels continues to inspire some contemporary Pagan witches who combine religion with political and environmental activism.

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See also: Paganism (various); Wicca.

Architecture

Architectural projects are located in the crossing of nature, culture and human subjectivity. Houses are necessary for human existence and survival, and building is one of the most elementary processes where human beings form nature. The notion of architecture refers to a conscious and critical act through which places, houses, gardens and environments are planned, designed, built and used. Architecture offers spatial images of the relationship between nature and culture as well as “stages” for their dynamic encounters. The built environments of every cultural period reveal the self-understandings of a population, its views of nature, its spirituality and its ultimate concerns.

The history of settlements and cities could be fruitfully regarded as a history of built religion. In antique culture, for example, the city was a symbol of the cosmos. Premodern people lived in a vertical, rotary and richly symbolic world, where the location of buildings and their relations to each other represented a complex spiritual geography. Asian cultures developed settlements in regard to ecological needs where geomancy was used as a spiritual planning and construction theory. Sacred places have been marked through sacred architecture. Richard Sennett has shown how the city plan of a culture expresses its image of the human body and Yi-Fu Tuan has shown how “topophilia,” the love of a place, constitutes a genuine force of human living.

In its early phase, Christianity did not develop a specific style of architecture itself, but it used both open space in landscape and Hellenistic and Jewish building types like the basilica and the synagogue for its liturgy. Augustine in particular used the image and metaphor of the “city” in his interpretation of God.

The medieval gothic cathedral might be regarded as the most influential Christian sacred architecture where the vision of the salvation of God’s whole creation could be materialized. Nature was culturally transfigured into a built encounter of heaven and Earth in glass and stone. Through the flow of light from heaven down to Earth, God’s presence here and now could be experienced with all human senses. The smooth distribution of colored light from above enlightened a space for liturgical motion in drama and music. As an expression not just of the religious, but also of the moral, ecological and social self-understandings of medieval European culture, the cathedral still represents a unique monument. Its architecture was an “*imago mundi*” of its time, showing the beginnings of the modern transformation of experienced space into mathematical geometrical space as well as the significance of the temporal quality of life in the Middle Ages.

The construction of buildings is a highly material affair that made it easy for architects to relate to the growth of environmental consciousness. The awareness of resources and local use of materials has always been a part of local architecture, even if the consequences of industrialization dissolved the tight connections of places, local materials and buildings, and neglected this awareness. Different approaches of ecologically conscious architecture were developed during the 1960s. The influential “critical regionalism” embedded architecture in local and regional identities including their environmental qualities. Christian Norberg-Schulz developed an influential concept of architecture as the “art of place” where architects should respect the “genius loci,” the spirit of the place. Victor Papanek points to the future need of linking ecology and ethics to each other in all design and architecture. An intensified academic discourse on ethics and architecture emerged in the 1990s, even if enlightenment philosophical aesthetics still dominates our images of beauty. Concepts of natural/environmental aesthetics have been developed by Anglo-American and German thinkers where the ecological design of architecture has also been reflected. A notion like “atmosphere” (G. Böhme) makes it possible to leave the subject/object-split behind in favor of an open perception and reflection of the inner and outer, human and natural qualities of a place and space.

The academic discourse on religion and architecture has mainly concentrated on historical objects. Information on built images of nature and the holy might be easily collected from Religious Studies and its many historical investigations. The challenge for the future of this field is to rediscover the old and to invent new syntheses of the aesthetic, ethical, religious and ecological in the microcosm of architecture.

Contemporary architecture itself reveals a strong search for the spiritual and material in building. Tadao Ando, for example, develops projects and objects where the spirit of the place communicates with elements from different religious and cultural traditions in an optimistic pluralism where houses are constructed in an extreme minimalist use of natural resources. Ando’s architecture is motivated by a vision where inter-religious encounters contribute to the happiness of human beings in harmony with themselves in nature, and where buildings should be interpreted as “refuges and islands for the soul.”

Several creators of modern architecture are intensively at work with the shaping of encounters between the inner and outer environment of human beings as well as eclectically interpreting and integrating spiritual traditions from old and new religions. The field of study of architecture, nature and religion needs to be cultivated in order to support this process.

Sigurd Bergmann

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See also: Fisk, Pliny; Fuller, Buckminster; Trees – as Religious Architecture.

Ariyaratne, Ahangamage Tudor (A.T.) (1931–)

Ahangamage Tudor Ariyaratne, the founder and President of the Sarvodaya Shramadana movement, was born on 5 November 1931 in the village of Unawatuna, near the town of Galle, Ceylon (now Sri Lanka). Early in his career, Ariyaratne served as a science teacher at Nalanda College in Colombo. There in 1958 he organized a series of work camps for his students in a remote village called Kanatoluwa. From these first work camps, the Sarvodaya movement evolved. Influenced by Gandhian and Buddhist ideals, Ariyaratne chose *Sarvodaya* as the name for the movement, a term that had been coined by Mahatma Gandhi to mean “the uplift of all.” Ariyaratne, following Buddhist ideals, translated *Sarvodaya* as “the awakening of all.” From the outset, the Sarvodaya movement had the goal of building a society whose value system would be based on the Gandhian values of truth, nonviolence, and self-denial. Ariyaratne said his aim was to create a “nopovertry, no affluence society.” This aim represented both an interpretation of the Gandhian ideal and an application of the Buddhist Middle Way to social and economic life.

In working to actualize this kind of social revolution, both Ariyaratne and the Sarvodaya movement have advocated policies that have supported nature and the environment. Ariyaratne has argued that the law of nature ranks alongside the law of dharma, and that both of these forms of law have greater authority than the law of the state. The Sarvodaya movement has sought a holistic and integrated form of development and has included respect for nature as a key element in this development. In Sarvodaya’s list of the Ten Basic Human Needs, it accords the first place to “A clean and beautiful environment.” Ariyaratne was influenced by the work of E.F. Schumacher and has followed his “Small is Beautiful” approach to economic development. Following this philosophy, the Sarvodaya movement has been in the forefront of ecological and environmental activism in Sri Lanka for over two decades. Its members have promoted appropriate technology and sustainable development and have operated several model farms where these approaches have been tested and applied. Ariyaratne has also organized demonstrations to preserve the natural environment, such as the one he led to oppose a tourist hotel that was being built in a semiwilderness area. Ariyaratne has viewed his work for the environment as related to his work for society, such as Sarvodaya’s peace campaign. In a Buddhist sense, he regards all these facets of development to be interrelated and the movement has sought to awaken society to this truth.

For his development work and his peace activities, Ariyaratne has received numerous international awards. In 1969 he received the Magsaysay Award for Community Leadership from the Philippines, in 1982 he received the

King Boudouin Award for International Development from Belgium, in 1992 he received the Niwano Peace Prize from Japan, and in 1996, the Mahatma Gandhi Peace Prize from the Government of India. Ariyaratne has continued to lead the Sarvodaya Movement toward the goal of peace and social liberation for all people. His work for spiritual, social and ecological awakening has influenced many people outside of Sri Lanka, such as Joanna Macy and the Buddhist ecology movement in the West.

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See also: Buddhism – Engaged; Gandhi, Mohandas; Macy, Joanna; Sarvodaya Shramadana Movement; Schumacher, Ernest Friedrich.

Arrernte Increase Ceremonies (Central Australia)

The Arrernte country of Central Australia is dry and semi-arid, being comprised of red sand dunes and plains, mountain complexes, and intermittent creeks and streams whose occasional flows soak into their sandy beds or flood out into deserts. The Arrernte people (Aranda, Arunta) are comprised of a number of closely related Aboriginal language and dialect groups, and today use the town of Alice Springs as their regional center. Alice Springs was originally established in 1871 as a relay station and post office on the Overland Telegraph Line.

The function of the Arrernte Increase Ceremonies is to catalyze the healthy increase or reproduction of various animal, plant or meteorological phenomenon, which constitute totems in the indigenous religious belief system. These ceremonies were brought to international attention between 1894–1912 through the collaboration of Walter Baldwin Spencer, the Foundation Professor of Biology at the University of Melbourne, and Frank J. Gillen, the post and telegraph stationmaster at the Alice Springs Overland Telegraph Station. Gillen was also the district Sub-Protector of Aborigines and a student of Aboriginal culture under the local Arrernte Elders. The two made an intensive study of Central Australian Aboriginal peoples and published a number of volumes, which were to be of immense and long-standing influence on European scholars of anthropology, sociology, psychiatry and religion. Gillen was the first to translate the Arrernte concept of the “Altyerre” to the English “Dreamtime.”

Spencer and Gillen asserted (1927: 145) that “Mbanbiuma” was the widespread term for these ceremonies among all of the Arrernte tribal or language groups, while “Intichi-uma” was the name specific to the Central Arrernte around Alice Springs. However, there are further names for these constructs among the different Arrernte language and dialect groups.

Spencer and Gillen (1927: 148–74) described in detail the Arrernte increase ceremonies for the Witchetty Grub, Emu, Hakea Flower, Mulga tree, Manna, Honey-ant, Rain, Kangaroo, and the bulbs of “Irriakura” (*Cyperus rotundus*) plant. There are, however, many more species which collectively represent the natural resources of the Central Australia landscape and which are the respective subjects of increase ceremonies. Spencer and Gillen asserted, “taking the tribe as a whole, the object of these ceremonies is that of increasing the total food supply” (1927: 147).

The increase ceremonies are believed to have been passed down for many generations from Ancestral Beings. Through their ritual actions, the participants believe they connect with the Altyerre or Dreamtime dimension, and renew a spiritual energy linking this dimension of the ancestors with the world of mortal humans. Aspects of the travel of the Ancestral Beings are retold or re-enacted through song, ritual, and artworks with musical accompaniment (boomerang and/or clapstick percussion). Elaborate decorations of ochres and feathers are applied to bodies, ground paintings and ritual artefacts, including wooden shields. Some sculpted or assembled objects are constructed specifically for particular rituals.

Each ceremony pertains to one predominant ancestor and is usually performed by enacting a ritual for each of the constituent sites along the travel route of the ancestor. Each ritual portrays what the ancestor experienced at that site, and a widespread practice is to perform one of these rituals per day. For some sites, a traveling ancestor encounters and interacts with a second travelling ancestor, perhaps exchanging something (an anatomical feature, a language, or a firestick, for example). Where two traveling ancestors met at a site, the corresponding ceremony often involves two ground paintings joined together, with two sets of actors from adjoining countries, reflecting the shared ritual responsibilities. At still other sites, the ancestor did not travel, but was stationary at the site.

Arrernte ancestors, people, sites, totems, rituals are all classified into a number of social categories (“apetherre”) called “sections” and “subsections” by anthropologists, and “skins” in English by Arrernte people. A clan of Arrernte people are ritually responsible for a set of sites (a country) and totems of the same skin identity. Thus a clan of “apwerle” and “kemarre skin” people may have a set of

Rain sites in their country and they would perform rainmaking ceremonies. Associated totems might be certain species of frogs, lightning, certain species of trees believed to be “lightning trees,” several bird species which are said to be “rainmakers” and whose feathers are used in rituals, and types of clouds including the wispy cumulus clouds (“babies” that grow into big rain clouds).

The sacred and secretive objects recorded by Spencer and Gillen as “churinga” (1927: 99) are still used in many of the restricted increase ceremonies, being stored in secret, camouflaged hiding places in the landscape at or near their sacred site. These objects (“tyerrengge”) are believed to have been born in the Altyirre or Dreamtime. When young men are initiated into the ritual cult they are allowed to hold these objects and draw on their perpetual powers. Their initiation involves being sat on the ground paintings and instructed in a process of revelation.

Little anthropological research on ceremony occurred in Central Australia after the work of Spencer and Gillen in the 1890s, the exception being the writing of Professor Theodore Strehlow, originally from Hermannsburg Lutheran Mission. When younger Arrernte men had not been fulfilling their religious duties and certain ceremonies were dying out, despairing Arrernte Elders (especially West Arrernte) entrusted Strehlow to hold their sacred objects. Most of these objects have since been deposited in the

Strehlow Centre, a restricted-access keeping-place in Alice Springs. However with the advent of the Australian Government's *Aboriginal Land Rights Act (Northern Territory) 1976*, various groups of Aboriginal people in the Arrernte nation have revealed their increase ceremonies and disclosed their sacred objects from secret hiding places in restricted court settings in order to win their land claims; thus demonstrating that these ceremonies and their belief systems remain in various parts of Arrernte lands, and continue to be a virile component of Aboriginal religion (and politics).

Spencer and Gillen's books contain innumerable photographs of men dressed in their feather-down and ochre body paint-up, performing near or on the sacred ground paintings and with a variety of decorated sacred objects. The contemporary Arrernte have imposed a restriction on these books being sold or even displayed in Alice Springs bookshops, libraries or museums due to the Aboriginal Law forbidding these images and their associated knowledge to be seen by uninitiated men or women. Interestingly, the visual elements and patterns of these sacred designs have, since the 1970s, been adapted to create the internationally famous "dot-art" style of Aboriginal desert painting.

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See also: Aboriginal Art; Aboriginal Dreaming (Australia); Australia; Rock Art – Australian Aboriginal.

Art

In everyday speech, people often make a contextual distinction between the words “nature” and “environment.” The environment is thought to be scientific and complex. It is viewed as a territory staked out by scientists and defended by environmental activists against degradation and despoliation. Nature, however, evokes a different set of storied descriptors – ones far more positive and personal. Typically, the descriptors associated with nature commingle nature, beauty, and divinity. A Muslim might, for example, cite the beauty of nature as evidence for the existence of a creator beyond human comprehension; whereas, an Algonkian elder could speak of the “great mystery” evident in nature’s beauty and know, thereby, *manitou* animated the universe.

Despite fire, flood, tornado, or other catastrophic natural events, nature – in popular imagination – is good, beautiful, and approachable. Art affirms and informs our soul-stirring experiences of nature – even if the tent was leaky and the happy campers bug-bitten. In North America, American artist Ansel Adams’ (1902–1984) photographs of Yosemite fund the efforts of environmental protection groups seeking to defend wilderness areas and national parks from the encroachment of industrial developers. Exhibitions of French artist Claude Monet’s (1840–1926) paintings of his gardens at Giverny draw long lines of visitors to galleries everywhere, inspiring many to grow their own tossed and tumbled flower gardens. Dutch artist Vincent Van Gogh’s (1853–1890) painting of a starry night is still among the most popular of art reproductions one might find in a university student’s bedroom. All three artists hoped to create in their work something of the revelatory knowledge they had experienced in nature. The popularity of their widely reproduced work today suggests they succeeded. Nature, depicted in their landscapes, is heroically beautiful, a dazzler. Theirs is a profoundly religious view of nature, rooted in a pantheistic appreciation and supported by the nineteenth-century religious philosophy of transcendentalism. Among artists these are not unusual viewpoints. For many – be they artist atheist, deist, or theist – nature itself is experienced as sacred, soulful; in German theologian Paul Tillich’s (1886–1965) terms, nature may even be the ground of being.

The interrelationship of art, religion, and nature is an ancient one. On the walls of hidden caves and rock shelters the world over, human and nonhuman transformation imagery abounds. It is evidenced by the well-known Ice Age imagery found at such European archeological sites as Trois Frères and Lascaux in France or Altamira in Spain. Painted and sculpted animals are shown alive, alone or in groups. The animation of the Paleolithic imagery may suggest human and animal were believed to share personhood. They might transform themselves from one to the other by putting on or shedding an

outer “skin.” Hybrid imagery of human and nonhuman was also possible – a bird-headed woman, a wolf-headed man, for example – just as in later years the Egyptian iconography of Sekhet, lion-headed daughter of Isis, will transfer to Mark, the lion, one of the four Christian evangelists. Aspects of Nanabush, the Great Hare trickster figure of the North American Anishnabe, survive in Tex Avery’s irrepressible imagery of Bugs Bunny. Such imagery attests to an old and intimate understanding of the relationship of human and nonhuman realms in the natural world. Once, not that long ago, what was called “sacred” was entirely natural and a part of the natural world; the “sacred” was not supernatural.

The intimate relationship of our long-ago ancestors with nature was one obtained from a close and careful observation of the nonhuman world around them. Our forebears observed the way a weaver bird stitches a nest together, how the ant tunnels into the Earth, how herds of animals and flocks of birds arrive and depart in relation to counts of the moon and turns of the seasons. Long-ago humans saw flowers bend and turn toward the sun, then close at end of day. People observed birth, death, and transformation in the surrounding world as natural and sacred events. Knowing these events in their own lives, they adopted and adapted construction techniques observed in nonhuman realms and amalgamated the imagery into an encoded material art.

We see those forms today in ancient artifacts that survive in anthropological collections. Although the surviving objects and images are varied in form and number, the subject matter is not encyclopedic in scope. Not all animals, plants, insects or other aspects of the nonhuman, natural world were transmuted or reified into pictorial imagery. Only some things were seen in those special terms, then recorded and transformed into visual imagery.

How were the subject choices made by the artists? Perhaps the answer lay then, as it does now, in the revelatory experience of nature we term today “artistic vision.”

Artistic Vision

Artistic vision is much more than a good idea that propels the artist into the studio. A nature-centered artistic vision is revelatory; some connection is being made by the observer – the artist – with a hidden reality. Whether the vision be as simple as light glinting off a leaf, or the glance of a bird, the flicker of fish, the fact the artist observes something via vision obligates the artist to record it via art in order to show to others what has been shown to the artist. The observation enters into an artist’s field of vision haloed, or highlighted, by further meaning the artist imparts to it. When artists try to explain the effect of visionary obligation on their work as artists, they speak of the experience as one of becoming a “medium.” Not infrequently, the artist subsequently becomes learned in the Earth sciences. Artists draw on the resources of science

– botany, geology, astronomy, physics, etc. – to deepen their understanding of their visions. Earth-centered visions, no different than deity-centered visions, can be

life-changing. The eminent historian of religion, Mircea Eliade, located revelatory experiences under the heading “hierophany.” A hierophany, according to Eliade, might be experienced as theophany or kratophany, or display aspects of both.

A theophany of nature is a revelatory experience associated with named deities located in nature. The ancient Egyptian artist, for example, could depict Nut, the sky, as a slender woman whose starry body arches across the night sky. Hathor might be shown as a cow, or as a cow emerging from a mountain, or as a woman bearing the beautifully curved horns of a cow upon her head. In context, each different image would be understood as displaying some aspect of the powers attributed to Hathor. When Mary, the mother of Jesus, is shown in her aspect as Queen of Heaven, she wears a crown of twelve stars and stands upon the crescent moon. The image continues a primal association of the moon and sea with the feminine, and entirely natural, rhythms of fertility. The so-called “Venus of Laussel” displays the same primal association. It is the best-known of the three Laussel bas reliefs on this theme (one is now lost).

Unlike the theophany, the kratophany of nature, according to Eliade, is a sacred power manifested by means of a particular person, place, or thing. Kratophanies are more diffuse hierophanies and present different situations for the artist. In Peterborough, Ontario, for example, ancient Anishnabe artists used hammerstones to beat visionary drawings by the hundreds into a limestone outcropping. Their petroglyphs are the records of place-specific visions located in nature at that rock. Today the Anishnabe of the region call that place “*Kinomagewapkong*,” “the teaching rock.” The rock is used today by Anishnabe elders to tell the stories of their people to the children. Canadian artist Jennifer Dickson’s work is also of storied places. She travels the world over studying and photographing old gardens. In some places she has experienced site-specific visions. The photographs Dickson makes are study documents, just as are the Anishnabe limestone glyphs. Meditating upon the photographic images in her studio, the artist creates paintings, photo-etchings, serigraphs, and complex photographic suites that suggest visions to be known in these places. Although Dickson lectures widely, she never speaks of her own visionary experiences; nonetheless, people have approached the artist and told her they, too, know the gardens are sacred. Upon seeing Dickson’s art, they felt prompted to travel, as a pilgrim might, to the very places that inspire her work.

Artists who attempt to map their experiences of a beautiful, powerfully animated world in art, do so in the belief their work can and must communicate important, sacred visions to another, to those who see the artwork. The concept of “mapping” is important here. In a religious work of art, the artist asks the viewer to look closely at the work. Looking closely enough to see the work as the artist intends it to be seen is not easy for many today. It is a learned skill. Looking closely requires the viewer to slow down, to consider every color, every line, form, shape, texture to be found in the material reality of the composition. Each part of the image is intended to convey some aspect of the visionary event, the initiating visionary knowledge. One learns to “read” a painting or a sculpture as a map (and one must learn to read those, too). Reading an

artistic image with care allows the viewer's mind to trace the visual choices the artist has made. The painting begins to come alive; it "works" on the viewer's mind. The free associations prompted by looking closely animate the image. The painting may, if the imagery is clear enough, live for years in memory. That is why a Byzantine-rite nun in Ukraine, for example, knows the icons she paints are as truthful a representation of heavenly reality as she can make them; her images are painted prayerfully in response to religious vision. This is also why Vincent Van Gogh's "Starry Night" became one of the iconic paintings of our time. It, too, is honest work.

Sacred Geographies

Some depictions of sacred realities located in nature constitute sacred geographies. These maps are constructed landscapes which include the Earth and the entire universe insofar as it matters. They are cosmographies that account for the origin of the world and of human beings within that world. For the Ojibway priest of the Midé society, a set of sacred birchbark scrolls depicts the mythic journey of bear across the world. The people of central New Guinea knot *bilum*, intricately knotted carry-all bags, to continue the creation of the world. Each time a bag is knotted – and they are knotted continuously by women and by men – the people's specific connection with the powers of the Earth is knotted into place again. In North America, over the course of several days, singers of the Dineh (Navaho) people construct intricate sand paintings in order to realign someone whose life-world has become unbalanced and shaky with all of creation, with all of the cosmos. Tibetan Buddhist monks also construct equally intricate mandalas of colored sands. Theirs are world prayers for healing.

When the medieval European cartographer inscribed "there be monsters" on a fifteenth-century parchment map of the known world, the map-maker's warning alerted viewers to the existence of unknown worlds. Among those worlds was Eden, thought to be a real place with real rivers and animals, from which Adam and Eve, the first parents, had been expelled. Eden was located somewhere beyond the place of the monsters. It was as specific a place as the Christian heaven, itself often depicted as a beautiful walled city with twelve gates.

In India, a fifteenth-century Jain map depicted the order of the world as one centered on a sacred mountain in the middle of a circular continent, the whole circumscribed by two rings separated by oceans; each of the rings was also a continent. A fourteenth-century Japanese map of the world emphasized the importance of Mt. Sumeru, a sacred mountain. American engineer, scientist, gadfly and public intellectual, Buckminster Fuller (1895–1983) devised a *Dymaxion Airocean World* map which not only corrects the proportional flaws of the more usual flat Mercator-type map, but also brilliantly shows the land masses of the world as truly interconnected with one another – and not as continents dramatically separated by oceans. Fuller was a visionary committed to the problem of translating mathematical nature into an "everreinspiring conceptual

intimacy with the Universe,” as he wrote in the catalogue for the Cooper-Hewitt Museum’s inaugural exhibition, *MANtransFORMS*, New York City, October 1976. Fuller had helped design and organize that, too.

The Golden Section

In addition to showing the relationship of parts of nature to one another, maps also measure space. In the West, one system of spatial proportion became, and continues to be, preeminent, if not ubiquitous. It is called Pythagoreanism. Nothing anywhere else – not the Japanese *tatami* system of spatial measurement nor the Chinese system of *feng shui* used to balance or harmonize complementary qualities found in nature, nor even Buckminster Fuller’s *dymaxion* principle of doing more with less – has been as pervasive an influence on international art and design as the Pythagorean system of spatial proportion. It remains so today. Most people have no idea why doors and windows, pieces of paper, computer screens, and a host of other ordinary objects look the way they do. The “why” is found in Pythagoreanism.

Pythagoreanism is based upon the work of the early Greek thinker and scientist, Pythagoras (sixth century B.C.E.) and his followers. It is both religion and mathematics. Pythagoras observed that all of nature could be understood as a relationship of number – whether the relationship was that of notes sounded by a plucked string or the movement of the planets in the firmament above. The key Pythagorean numerical relationship is expressed by the Greek letter Φ (Phi). It is equivalent to 0.618, also called the “golden number.” The golden number is found in nature as a ratio of part to whole and can be drawn as rectangle, pentagram, five-pointed star, and spiral endlessly. In any size, the ratio of part to whole remains steady: it is 1:1.618. In 1202, the Italian mathematician, Fibonacci, demonstrated that a spiraling sequence of prime numbers in which each number is the sum of the two preceding is also an illustration of Φ . Moreover, the Fibonacci number series is observable almost everywhere in nature – in the way petals form on a daisy, for example, or the turns of a conch shell. Only in crystals is it not found. During the European Renaissance, artists became reacquainted with Pythagoreanism and quickly adopted the mathematical principles as tools to help them create compositions depicting a sacred world hidden in nature. Northern European artists traveled to Italy to learn the mathematics of proportion and perspective from Italian teachers. One can see the result of their studies in the harmonic similarities of relationship displayed in the compositions of two otherwise different artists such as the Italian artist Alessandro Botticelli (1445–1510) and the German artist Albrecht Dürer (1471–1528). Artists continue deliberately to invoke the Pythagorean proportional system in their compositions. Canadian artist Dawn Dale, for example, constructs floral mosaics from flower petals she scavenges from her neighbors’ gardens. Dale’s mosaics illustrate rather literally and with punning intent both the mathematics and the source of Pythagoreanism. Once each golden section and

spiral has been formed and seen by others, Dale dumps the whole into a compost heap. The following year there will be more flowers and flower petals. The artist uses only scavenged, recyclable materials for all of her artwork.

Somewhere between 46–30 B.C.E., the Roman architectural historian Vitruvius wrote a treatise on architecture, *De architectura*, based on the work of the Pythagoreans. The text became famous during the Renaissance and has been a touchstone for architects ever since – up to and including those of the Bauhaus and the architects of the “Chicago School.” Because the proportions of the human body mirror ratios extant in the universe, Vitruvius argued buildings must also be built in proportion to the human body in order to create a harmonious and natural whole.

Vitruvius’s treatise was published in Rome in 1486. An Italian translation was prepared in 1520 under the direction of the Italian artist Raphael (1483–1520). Another Italian artist, Alberti (1404–1472), studied Vitruvius’s work closely, then wrote his own treatise on architecture, *De re aedificatoria*. Alberti’s work was hugely influential in the compositions of Brunneleschi (1377–1446), Bramante (1444–1514), Michaelangelo (1475–1564), and Palladio (1508–80). Palladio’s own treatise on architecture in harmony with nature then became the standard for nearly 200 years. Thomas Jefferson (1743–1826) studied Palladio’s work and responded to it with designs for the Virginia State Capital, the University of Virginia campus, and his own home Monticello. All of Jefferson’s architectural work, like that of other Vitruvian-influenced builders, was intended to create a built environment of serenity and natural beauty. That is why the neo-classical building, with its stylized, porticoed entrance and central plan dome, became so popular on university campuses and government complexes everywhere.

We see a diligent attention to the mathematics of proportion and the science of light in the work of Western artists from the sixteenth century onwards. French artist Nicholas Poussin’s (1594–1665) *The Burial of Phocion*, for example, has little to do with grief or mourning. The painting is a mathematically perfected surface of golden sections, multiplied into an endless series of infinite ratios. By the twentieth century, the artist’s concern to learn and portray for others the underlying structures of nature had become highly formalized in the color and compositional theories associated with both theosophy and anthrosophy. In art one finds this thinking underpinning the emergence of a variety of artistic “-isms,” including, precisionism, cubism, orphism, luminism, pointillism, and so forth. All are attempts by artists seeking to portray a perfected, hidden reality of nature.

The well-known drawing of a man arranged within a square within a circle by Italian artist Leonardo da Vinci (1452–1519) is the artist’s own illustration of the Pythagorean ratios as established by Vitruvius. The same drawing is reproduced today as a popular screen saver on computer monitor screens which are, themselves, designed in the ratio of the golden section. Another adaptation of Leonardo’s drawing accompanied one of the far-reaching rockets sent into outer space in the American space program. The NASA drawing depicted figures of a man and a woman in relation to the universe. The proportions were, of course, Pythagorean in origin.

The Garden

With the ascendancy of Christianity in Europe, much of the Greco-Roman admiration of nature was lost. The Romans had painted beautiful scenes of gardens and Arcadian idylls on the walls of their villas and townhouses. The medieval Christian did not. Unlike the Roman farmer who lured the local deities to a particularly enchanting wooded glade by placing a bit of sculpture there, the medieval Christian viewed the woods as a place of robbers and bears. Nature as subject/matter for art had dropped right out of the tradition of painting, as did the ancient Egyptian and Greco-Roman practice of including pleasure gardens in their domestic architecture. The garden, such as it was in the medieval period, was there to be a source of kitchen foods and medicinal herbs.

Art historian Kenneth Clark notes in *Landscape into Art* (1949) that when Italian poet Petrarch (1304–1374) stumbled to the top of a mountain, the poet – overcome by wonder at what he saw – reached into his knapsack and pulled out a copy of Augustine’s *Confessions*. Petrarch evidently felt he needed guidance to understand the scene before him. In Augustine’s writing, Petrarch read that only the human soul could be thought truly wonderful and beautiful. He felt duly chastened. Nevertheless, Augustine’s dour view was under challenge throughout Europe.

Returning from the East, crusaders and traders were bringing with them new ways of writing, thinking, and building. The Islamic tradition of the garden as a bit of *paradise* (“paradise” itself a word of Avestan origin from the ancient Persian) was among those radically inviting new ideas from the East. Devout Muslims built beautiful, geometrically ordered gardens in which flowers and water served as specific reminders of Allah’s compassion and love of beauty, and of the beauty that awaited the faithful in heaven. The Islamic garden must have been an astonishing sight to the medieval Christian soldier. In Christian Europe, there had long been a severance of art from nature and religion. The traditional commingling of nature, beauty, and divinity was shattered for roughly 1000 years (500–1500). What little had survived was deeply shadowed. However, by the time of the Renaissance, the elite of Europe were finding the Islamic garden a model well worth emulating. So, they did, often using Pythagorean proportions in the designs.

In Asia the garden was designed to be an architectonic site where one might observe the teachings of religious practice. Daoist thought brought to perfection the Chinese garden as an art form that stressed the virtue of age. Old stones – very old stones that looked as weathered and ancient as the mountains featured in paintings of the Chinese *literati* tradition – were prized features of the Chinese scholar’s garden. The scholar could stroll through the garden, wearing an embroidered robe depicting the heavens and the earthly seasons, before commencing upon yet another painting of a stylized landscape whose composition would express the religious and philosophical views of nature inherent in Daoism and Buddhism. The painting would then be discussed in detail by other practitioners of the *literati* tradition. This art tradition has flourished

for centuries, from the thirteenth-century Yuan dynasty to the present-day in Chinese communities worldwide.

In Japan, the garden also served as an art form for reifying religious practice and making visible religious paradox. Two main forms had developed by the fourteenth century: the wet garden and the dry garden. The wet garden incorporates the sound and sight of water into the design; the dry garden does not. Both forms incorporate a path which requires the viewer to look variously at aspects of an asymmetrical design – as the path turns up, down, and around changing one’s point of view slowly and deliberately. The garden is a set-aside ground of ritual beauty. Following the path soon brings the visitor to a contemplative state of mindfulness. Viewing places provide stops along the way: here might, for instance, be the place to watch the moonrise. To the Western mind, the Japanese garden is enchanting. American artist Isamu Noguchi (1904–1989) built his first Japanese-style wet garden at the Paris headquarters of UNESCO. Noguchi designed the garden for the specific purpose of providing delegates attending UNESCO sessions with a quiet place for reflection and retreat from contentious meetings. The most famous of the dry gardens is the monastery garden of Ryoan-ji in Kyoto, Japan. Designed in accordance with the austere aesthetic principles of Zen, Ryoan-ji consists of an enclosed space of raked white gravel. Upon the gravel fifteen stones have been placed precisely. That is all. Ryoan-ji is a garden for sitting meditation. The path to be followed is in one’s mind. The artist is traditionally thought to have been a Zen monk named Soami. Ryoan-ji was built around 1480 during the Muramachi period when painting, calligraphy, and ceramics were all art forms deeply influenced by the austere religious practices of Zen Buddhism.

The Landscape in Painting

Just as the garden was rediscovered by Christian Europe after a long hiatus, so was the possibility of the landscape as subject matter in painting. In fourteenth-century Siena, Italy, the Lorenzetti brothers, Ambrogio and Pietro (both ca. 1319–1348?) painted an imposing allegorical fresco, *Good and Bad Government*, incorporating scenes of the countryside. *Good and Bad Government* depicts a world in which good government is coeval with a pleasant and bountiful agricultural countryside and bad government is not. The Lorenzetti frescoes were painted in the thoroughly secular new city hall of Siena. Another century would pass before the landscape appeared again in European art. Its role was minor in the composition. The aspect of nature shown by the artist was usually a pleasant view seen from the safety of the other side of a wall or through a window looking out. Not until the rise of the industrial age, with its polluting cities and breakdown of peasant and yeoman culture in the countryside, would artists begin to paint landscapes as sites of religious vision. Concomitantly, landowners begin to landscape their estates into parklands with cultivated “views” – typically,

Arcadian. In this economic and intellectual climate, ideas of religious utopianism and transcendentalism took hold, and artists were no exception.

By the late eighteenth and nineteenth century, many European and North American romantic artists, by walking in the woods, clambering up mountain trails, and traveling to exotic places, had begun to practice a form of art based on deeply felt experiences of nature they called “the sublime.” The artists portrayed their vivid encounters with nature in poem and painting as evidence of a natural divinity extant in the uncultivated world. The German artist Casper David Friedrich (1774–1840) typifies this approach. His painting, *The Cross in the Mountains* (1807–1808) may be the first landscape hung over an altar as the altarpiece. The painting had been commissioned for a private chapel. At the time it was thought extreme, if not sacrilegious. Today Friedrich’s work is viewed as deeply religious. A hundred years later North American artists continue to be inspired by wilderness as the foci and loci of kratophany in their religio-aesthetic practice of art. The earthwork is the recent, and most dramatic, expression of this religious art.

The Earthwork

Beginning in the early 1970s and continuing to the present-day, a diverse group of artists, working independently of one another, have taken up the task of making the shape of the Earth itself visible – not as an arid or occult mathematical construct, but as a lived place of experiential wonder and awe. Canadian artist Marlene Creates and British artists, Richard Long and Hamish Fulton, for example, walk long distances for days on end. Each has made walking the Earth part of the work they do as artists. Sometimes each one photographs small impermanent structures that they make on site to mark a place where each has been. Marlene Creates walked around the island of Newfoundland. Sleeping upon the ground in her sleeping bag, the imprint of her body could be seen on the soft Earth in the morning. She photographed these places. The photographs are as tender as an old heartache.

In some instances, the artists are retracing old nomadic trails. In the American southwest, for example, American artists Charles Ross and James Turrell are each building a naked eye observatory at sites that ancient people honored, too. Turrell has shaped and smoothed an extinct volcano in Arizona. Ross was led by vision to a particular place in which he believed he would feel a connection with the precession of the Earth’s axis. He found the site to be at the top of a mesa in New Mexico. Neither artist knew that they would find the records of an earlier people in these places, too, but each one has. Each artist’s work is different from the other, yet each is intent upon making visible to others site-specific, religious visions the artists have known at those places. Their visions are instances of a powerful kratophany. They take direction for the work they do from vision and dream, and have done so for many years. In this they

are no different from many of the other artists whose work can be truthfully described as an Earth-centered, religious relationship with nature.

Religious Landscapes as Architectonic Sites

Religious relationships with nature produce different sorts of landscapes reified in material culture and art as architectonic sites. There are four main types, although neither excludes ideas associated with any of the other three. Habits of thought and practice associated with each of the organizations of land can and sometimes do overlap.

Landscapes of “extreme order” are ones in which the social and mythic values of that landscape exist whether the viewer is there or not. These are situations where land is owned and can be inherited. Rights of property are highly important. One must seek “right-of-way,” for example, to walk the land if it is not yours. In art, the English country scene depicting the lord of the manor and all he owns is a pictorial document of the religious idea of “dominion” – that land is there to be used, exploited, owned, and that Christian, especially Protestant, virtue will be rewarded with prosperity. Australian Aborigines also have highly structured views of land. Their landscapes must be “sung” in order to keep them alive. Unsung land dies. Women and men inherit the landscapes, the songlines, for which they are responsible. Individual songlines provide one with a place in the world and a heritage of origin in the land. The songline is property that can be transferred to another.

Landscapes of “seasonal order” are ones in which the participants in this landscape align themselves with the land in response to regular changes of season and other cosmic forces. Some groups are nomadic and move their herds of sheep, for example, from high to low pasture seasonally. Others are hunters and foragers. In winter they live in small family groups. At the end of summer, families gather to tell the stories and exchange news. The religious ideas of life lived in a seasonally ordered world produce a nature-based art which may take two forms: highly portable and personal art or permanent and communal work. The medicine bundle of a North American Cree shaman, for example, is highly portable. It is a small altar that allows the stories animating the objects within to be told whenever and anywhere the bundle is opened. So, too, are the beaded patterns on moccasins or the ornaments on a baby’s cradle board. They tell of encounters with an underwater panther or thunderbird. For the cattle-herding Ngoni-speaking peoples of southeastern Africa, a carved wooden headrest is not only practical – a place to lay one’s head for sleeping – but it is also a religious implement. The carved, wooden headrest provides the means for communicating with one’s ancestors in dreams. Moreover, the wooden headrest acknowledges and acclaims the cow in its patterned carvings, the source of wealth and well-being.

People who value the seasonal landscape have also marked their gathering places in monumental ways. Long ago, the people of the Adena culture in North America

made effigy mounds of animals in widely scattered places. The various peoples who built the monumental burial mounds and other megalithic structures of Europe, Africa, and Asia also gathered seasonally in these places. In a sense the seasonal monumental landscape can be thought of as a centering site of pilgrimage for a people. One might go on pilgrimage to a sacred place, but no one would own that place to the exclusion of others. A contemporary example of the seasonal landscape is the earthwork sculpture constructed by the American artist, Robert Smithson (1928–1973) in 1970. *Spiral Jetty* was built by Smithson at a site along the shore of the Great Salt Lake, Utah, to record a vision he had seen there. In that place, the artist saw the water become red, spinning before his eyes. The jetty is more than 450 meters in length. It is usually underwater, becoming visible only every few years when the lake waters recede. Photographs of the jetty and the story of Smithson’s vision have made the site, nonetheless, a place of pilgrimage for many because, like all sacred sites, something sacred happened here once, and it may happen again.

The architectonic landscape of “porous order” is even more fluid. It might be a site demarcated by standing stones, for example, or a Shinto (*kami-no-michi*) torii gate encountered along a pathway. In this landscape parts of the Earth are experienced as site-specific collecting points of a visionary sacred order. The sites are marked with the lightest hand. One sees through, into, and around. Sometimes one sees above and below into a tripartite universe at that place. Canadian artist Kathleen Gillis, for example, uses the old European technique of dowsing, or waterwitching, to map various sites she wants to know better because she feels they are important – even if the reason is no more than the way the grass grows at that place. Gillis never makes claim as to what she is measuring. She charts on a grid the way the divining rods turn and spin, first one way, then another. The artist says she knows only that she is measuring loops and spirals and turnings in the Earth we should not be ignoring, and we need to be aware of them. Gillis’ “found patterns” often become motifs in her drawings, paintings, and sculpture.

Canadian artist Robin Campbell has been living in Japan for many years in order to work on a complex of art inspired by two sacred mountains – Mt. Hiei and Mt. Ichijo. Campbell calls her body of work “prayers for the well-being of mountains and their forests,” or “prayerful interventions.” Like many other artists working today to create an Earth-centered sacred art, it has been Campbell’s experience that sacred meanings, even fugitive ones, lie within the cognitive mapping schemes of sacred sites.

These meanings can be retrieved through a close analysis of the site’s visual and spatial configurations, its cognitive map – even if the site has been forgotten or despoiled. As part of Campbell’s religio-aesthetic practice, the artist leaves ceramic offerings to the *kami* she finds along the paths of the two despoiled, yet still sacred, Japanese mountains she has come to know so well.

Lastly, the “symbolized microcosm” constitutes a fourth overlapping category of architectonic site. In 1965–1978, the American artist Alan Sonfist built a series of small parks throughout the boroughs of New York City. At each site, the artist built

a living landscape mimicking the one that had been there 300 years earlier. Here, one found balsam pine, not the imported, exotic dandelion. The series, entitled *Time Landscape*, collapsed time. The labyrinth, the Lakota sundance lodge, the medieval cathedral, and the Baha'i temple are all good examples of built spaces in which the architectonic order of the space itself is a mirror of a sacred, cosmic order located in nature or some part of nature – perhaps even in a fish.

Art and Science

In 1984, American artist Betsy Damon was flattened to the ground by an astonishing vision of water as a sacred, elemental force. She saw water as healer, water as life source and the ruination and loss of water everywhere. In her vision she also saw a “living water garden” and knew one day she would build that garden. The artist did not know where and she surely did not know how. Damon’s life and art changed at that point to become one centered on water. Damon started by forming a group of artists and scientists who would talk to one another about water and see what happened from there. The group called themselves “Keepers of the Waters.” In 1993, the city of Chengdu, China, committed to the restoration of its riverfront, asked Damon to design a park. Keepers of the Waters agreed to take on the project and do more: the park would be designed to restore the river water. Work began in 1996 and was completed two years later. Today Cheng-du’s Living Water Garden is a park of 24,000 square meters, cleaning and purifying river water through a natural cleansing system of aeration and filtration, using microbiological and botanical interactions. The park’s overall design was modeled by Damon on the shape of a carp, a fish honoured in Asia for courage and endurance. The carp is emblematic of a virtuous, long life. A *feng shui* expert consulted with the artists and engineers every step of the way to ensure the “fish would see with clear eyes.”

Sometimes, as in Cheng-du, the landscapes of ancient sacred sites go missing and must be mapped again to be seen. For her doctoral dissertation fieldwork in mythological studies in the 1990s, American artist Adrienne Momi assembled a group of Czech artists to work with her at a known, but unexcavated, Neolithic site in the Czech Republic. Using non-invasive mapping and other visualization techniques, the collective of artists worked for two years to learn the site’s sacred dimensions – as they might once have been known. Momi began the cognitive mapping of the site by walking. Coming across the field, she “felt” as though she were walking upon a sacred site. With relatively little problem, the scientists in charge of the area were willing to give Momi and the artists collective permission to cognitively map and explore the site because, as the supervisor of the site explained, he, too, has had the same sort of feeling when he is excavating a site. Each group’s work, both directors felt, would prove to be explanatory and complementary of the other.

UNESCO and the World Heritage List of Cultural Landscapes

In 1972 the United Nations' Convention for the Protection of the World Cultural and Natural Heritage was signed into international law. The convention is charged with protecting natural and cultural sites of "universal," that is, world-wide, significance. The key mechanism for enforcing the provisions of law pertinent to world culture is simply the naming of sites to the World Heritage List. Criteria are narrow and only countries that are signers of the convention may nominate sites for review by the List committee. Cultural landscapes must qualify in at least one of three categories: those landscapes built intentionally, such as parks and gardens; those which evolved through human interaction with the natural environment, even if the site was abandoned, such as an ancient temple complex; and, lastly, landscapes having powerful sitespecific religious and artistic associations. In every one of these categories, the importance of artists' work in pointing to, mapping, and interpreting sites named to the World Heritage List is acknowledged and encouraged. The convention regularly schedules meetings of geographers, ecologists, architects and artists, historians and ethnologists to examine the parameters constituting a "cultural landscape."

In 1998 UNESCO extended the question even further by convening a symposium of scientists and representatives of indigenous peoples to ask if "natural" sacred sites could serve as "indicator sites" for environmental health. Among the many scientific proposals presented and examined, two noted the importance of artists, even non-indigenous artists, working at sacred sites. The reasons were similar: artists work to render hidden realities visible and comprehensible to others. Like other sacred arts, the so-called environmental artist's work has a message: he or she seeks to redirect our attention to the physical environment around us because it is there the artists have found themselves standing in sacred places.

Conclusion

When we think of the relationship of art, nature, and religion as one where the artist is charged with illustrating sacred text or scripture, we thereby run the risk of leaving nature out of the picture entirely and we mistake what it is that the best artists do. The best artists are not skilled illustrators. The best artists are efficient and skilled visionaries. They are very good map-makers and finger-pointers. Many artists have the capability to translate their visionary encounters with nature so that others may see, too. Some do this work superbly. They have been working for years with scientists in order to make the sacred nature of the Earth, as they conceive it to be, more visible to the rest of us. The hand of the artist has left a visible record of nature as a sacred realm of being since the beginning of human history. For the visionary, Earth-centered artist,

the words “environment” and “nature” are *not* separable concepts and commitments. It is the opposite. “Environment” and “nature” are inseparable.

Maureen Korp

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See also: Adams, Ansel; Aesthetics of Nature and the Sacred; Biosphere Reserves and World Heritage Sites; Fuller, Buckmaster; Christian Art; Egypt, Religion, and Nature; Egypt – Ancient; Greco-Roman World; Japanese Gardens; Japanese Love of Nature; Japanese Religions; Landscapes; Rock Art (various); Sacred Geography in Native North America; Sacred Mountains; Sacred Space/ Place; Shamanism – and Art; World Heritage Sites and Religion in Japan.

Art of Living Foundation

The Art of Living Foundation is an international nonprofit educational and humanitarian organization dedicated to creating peace from the level of the individual and fostering human values within the global community. To date over 2 million individuals in over 140 countries have participated in the Foundation's educational and humanitarian programs, which eliminate stress, create a sense of belonging, restore human values, and encourage people from all backgrounds, religions, and cultural traditions to come together in celebration and service.

One of the most important aspects of the Foundation's work is its strong focus on human values in the international arena. This approach calls for a broad and holistic vision that honors the spiritual source of our existence and the interconnectedness and interdependence of all forms of life.

Spiritual and humanitarian leader, Sri Sri Ravi Shankar, founded the Art of Living Foundation in 1982. Today, the Foundation's educational and humanitarian programs are living examples of the truth that the great spiritual traditions possess common goals and values. Sri Sri Ravi Shankar's simple message of love, practical wisdom, and compassion continues to inspire people from all walks of life, encouraging everyone to follow their chosen religious or spiritual path while honoring the path of others. "The only true security that can be found in this world," says Sri Sri Ravi Shankar, "is in the very process of giving love" (Art of Living brochure, 1991).

Human Values and Peace

The work of the Art of Living Foundation is based on the conviction that only by honoring the human and spiritual values which are shared by cultures and traditions everywhere in the world, can we, as a global community, truly achieve our highest human potential. Many people identify themselves primarily with their nationality, race or religion ("I am an American," or "I am a Muslim"), without first experiencing and identifying themselves as a member of the larger human family and its divine or universal source. Education in the human and spiritual values common to all people removes these limitations in each of our minds and provides a practical basis for global peace and cooperation.

Our planet is a living organism, which possesses a rhythm and an innate knowledge of managing itself. We need to realize and move in its rhythm. When this rhythm is disturbed, greed, anguish, stress and disease result. The current crisis in our global

environment is only a projection of our limited minds, clouded in the stress and strain of separation from one another and our common source. We begin to solve the problem by returning to this common source and the values which surround it (Art of Living Foundation position paper delivered at World Summit on Sustainable Development, Johannesburg, South Africa, 2002).

The Art of Living Foundation achieves this goal through both individual and group participation in *sadhana* (spiritual practices), *satsang* (coming together in knowledge) and *seva* (service to others).

Spiritual Practices

The Art of Living Foundation offers a variety of educational programs that teach powerful transformational techniques to expand awareness and dissolve stress. These courses are offered all over the world and are approximately fifteen to twenty hours in length. During the Art of Living Courses, one learns practical and effective techniques that can be practiced at home for just a short time each day.

Breath

Attention to the rhythms of the breath and their effect on health was part of the ancient knowledge of the art of living. One of the main techniques taught on the Art of Living Course is the *Sudarshan Kriya*, a unique breathing technique developed by Sri Sri Ravi Shankar. The *Sudarshan Kriya* uses specific rhythms of the breath to calm the mind and produce profound physical and emotional cleansing. This effortless practice triggers the system to eliminate stress and emotional blocks, which has a profound effect on the whole individual, as well as his relationship to his environment and to others around him.

We need to do a cleansing process within ourselves. In sleep, we get rid of fatigue, but the deeper stresses remain in our body. Sudarshan Kriya cleanses the system from the inside. The breath has a great secret to offer (Sri Sri Ravi Shankar, 1994, quoted in section on “Breath” at the Art of Living website).

Meditation

We gain from our efforts in life. Yet, there are some things that effort cannot accomplish. Meditating is the delicate art of doing nothing – letting go of everything and being who we are. It provides the mind with a much needed, deep rest (Sri Sri Ravi Shankar, Art of Living website).

A natural and graceful system of effortless meditation, *Sahaj Samadhi* meditation as taught by the Art of Living Foundation, allows the conscious mind to settle deeply into

itself. When the mind settles down, it lets go of all tension and stress and centers itself in the present moment. It is only in the present moment that we find true happiness, those moments when we are free from regrets about the past or anxiety about the future. *Sahaj* means natural. *Samadhi* means enlightenment. Without effort, our inner nature is available. *Sahaj Samadhi* meditation is a profound technique that teaches the art of letting go: relax, rejuvenate and recharge.

To bring out the spiritual dimension in life, it is wise to use certain tools that have already been established. In ancient times, people went deep into the understanding of the Self and brought out spiritual practices that help one to remain centered in the Self. The tools they developed have been handed down over the centuries, and hasten progress on the spiritual path. “In the practice of Sudarshan Kriya and Sahaj Samadhi Meditation you can directly experience the vastness of the Self” (Sri Sri Ravi Shankar, from “Breath and Meditation,” Art of Living Website).

Breakout Box: Shankar, Sri Ravi on Consciousness, Nature, and the Art of Living

Our environment begins in our mind, in the way we connect with ourselves, our world and one another. Without a deeper connection to ourselves, this world and the diversity of life that exists within it, appears separate from us and as an entity to be exploited and consumed. When we recognize life as a part of the wholeness that includes ourselves, then it becomes something to honor and respect – something sacred.

Who can stop polluting the Earth? Someone who is aware, someone who knows, who can understand, who respects the Earth. To respect the Earth needs a big heart. A certain level of awareness, of awakening is essential. When you start respecting the living things then you can start respecting inanimate things too. (Sri Ravi Shankar, from a talk on “Consciousness and the Environment,” July 1995, Art of Living audiocassette.)

Animals are sacred and birds are sacred. Actually, it is very difficult to say what is not sacred in creation. Everything that exists on the planet, we understand as *prakriti* and *purusha*, which is so sacred. *Prakriti* is the concept and *purusha* is the spirit. It is not just the spirit that is sacred, but that vessel or instrument through which spirit manifests itself is also sacred.

Why have we forgotten the sacred nature of life? It is because we have moved away from the spirit. All of nature lives with the spirit but we have moved away from the spirit. We are living in a small, little, conceptual world rather than in a real world. We need to bring into our realm three things and they are the three Cs.

The first “C” is cosmology. Every child should know something about this cosmology. Our Shastras say the universe is 119.5 billion years old. Knowledge of cosmology increases our sense of awareness and our sense of the sacred. Every cell in our body is a recycled material. Everyone who is sitting here is recycled material. We are all recycled material. Water is recycled and the soil is also recycled. They come again and

again in many forms. Every time we come back, we come back to purify, to create more purity.

The second “C” is our care for the environment, which is a part of this cosmology. Our care and concern for the environment and our compassion in general for everything in life are one, because life manifests as our environment.

The third “C” is commitment. When these three Cs come together, they form one Big C, which is Culture. We need to feel a commitment to this planet, which is our home. If this Big C doesn’t happen then another C – Corruption – comes into the picture. Corruption doesn’t allow you a cosmic view of life. Indeed it is another more subtle form of pollution.

Don’t think that pollution or the environment is only related to living things. It is also related to subtle things. If you are in a room and you are angry, agitated and depressed, anyone who enters in the room feels more depressed because the environment you have created causes that effect. Everyday we are polluting our environment – just by not being like a child. A child is upset, but the next minute he is happy. But for you to come back to your normal state, it takes time – a week or a month. If you are upset, to smile again takes such a long time.

We are also polluting our environment with negative vibrations. When we walk in the city area where there is violence or drugs, there is such a heavy feeling. The whole vibration is so bad that we want to run away from that place. When we drive through an area where there is a school, or a temple or a place of worship, there is lightness in the atmosphere. So our minds also cause pollution through vibration – through a pattern.

Understanding cosmology and environment is an understanding of life within the context of the universe. Within this context there are spiritual practices which we can do, including meditation, yoga and breathing techniques, so that we remember the vastness of space and time and come to the present moment able to make a commitment to ourselves and the world around us. This commitment becomes stronger when taken in this larger context of time and space. Compassion, Care, Cosmology and Commitment in life – all these things integrate and sustain the wholeness in life that we are all looking for (Sri Ravi Shankar, from a talk, “Consciousness and the Environment,” New Delhi, India, 2003).

Coming Together in Knowledge

To be in knowledge is to have a broad vision of life. Wisdom lies in knowing that the whole world belongs to you (Sri Sri Ravi Shankar). Each week, groups of Art of Living participants all over the world come together for evenings of celebration made complete by the sharing of knowledge. These gatherings are called *satsangs*. When people come together in knowledge, the mind is automatically uplifted out of its normal functioning to something more profound – to an expanded consciousness.

One important aspect of an Art of Living *satsang* is the weekly group practice of *Sudarshan Kriya*. Anyone who has completed an Art of Living course anywhere in the world can join with other practitioners weekly and enjoy the practice of *Sudarshan Kriya*. The foundation also sponsors ongoing group knowledge programs where people come together to discuss ancient knowledge and wisdom as it relates to daily life.

Service to Others

Suffering has many faces. In some parts of the world, people live in squalor and abject poverty, without proper sanitation or housing. Unhygienic conditions, as well as the lack of proper education about health and hygiene, give rise to disease and poor health. In other parts of the world, people have achieved a decent standard of living, but experience suffering of a different kind: dissension, disharmony, stress, violence, crime, environmental decimation and other social ills. In still other parts of the world, war has simply eradicated the social fabric, leaving chaos and great suffering in its wake. There is a pressing need for healing at all levels. For all these situations, the Art of Living Foundation and its sister service organization, the International Association for Human Values (IAHV), offer programs designed to alleviate suffering and transform society.

The 5H program is one such program. The aim of the 5H program is to uplift individuals, families, communities and nations so that the finest human qualities are nurtured and the full potential of human life can be expressed throughout society. Ultimately, the long-term goal is a worldwide social transformation, where poverty, suffering and disease are eradicated, and where peace, harmony and appreciation of nature prevail.

The 5H program takes a holistic approach to social transformation by focusing on five main areas: Health, Hygiene, Homes, Human Values, and Harmony in Diversity. The 5H program teaches a profound respect for the natural world, and allow communities in the developing world to find a greater balance within their own physical environment in a variety of ways, including basic sanitation projects such as water purification and recycling systems. All these programs promote traditional human values by creating a sense of belongingness in the participants, which in turn strengthens their connection with the natural environment.

The Foundation's participation in forums at the United Nations and the World Health Organization underscore its commitment to find a set of universally recognized human values, and apply this set of values in the just allocation of the world's resources. As a founding member of the United Nations Human Values Caucus, and strong proponent for the recognition of the spiritual foundation of all existence, it is not surprising that the Foundation would be involved in the World Summit on Sustainable Development. In fact, it was the Foundation's representatives at the summit who were instrumental in bringing the NGO-community together to call for a more

values-based environmental approach from the U.S. delegation. The Foundation also sent delegates to the World Economic Forum and the first World Social Forum in Porto Allegre, Brazil, as well as hosting its own conference in Bangalore, India.

Delegates representing more than thirty-five countries attended the World Conference on Spiritual Regeneration and Human Values, a five-day event sponsored by Art of Living Foundation and IAHV. The opening panel discussion was entitled, "Spirituality and Sustainable Development." The conference, which featured spiritual, political, social and environmental specialists, opened a new doorway for dialogue and presented innovative approaches to the increasingly urgent problem of sustainable development.

Understanding and experiencing the human spiritual values common to all nations and cultures is the necessary first step in creating a safe and secure future for us all. As long as we are trapped in an identity that forces us to compete or conflict with others for finite resources, a genuine dialogue cannot begin. In this critically important planning session, there can be no "we" and "they," only the larger "we" of one family on this planet, sharing a common destiny. Education can overcome the prejudice of our limitations and move us toward a genuine sense of belongingness – a belongingness not only to each other but to the planet itself (From a paper delivered at the World Summit on Sustainable Development, Johannesburg, South Africa, 2002).

The Art of Living Foundation approaches environmental sustainability on the individual level as well. As an important part of the Foundation's Service programs, local chapters all over the world mobilized teams to participate in environmental clean-up programs and various Earth Day activities. A few examples:

College students from Southern California joined together to celebrate Earth Day with a yoga session in a local park. Their theme: A clean environment starts with me.

In Arizona, volunteers joined their local health food grocers and participated in community festivals to raise awareness of organic farming and our connectedness to the Earth.

In Bangalore, India, hundreds of volunteers took on the task of cleaning up a 15-kilometer stretch of highway as well as offering free development workshops to thousands of local villagers in the area as part of the clean-up project.

These examples demonstrate the Foundation's unique emphasis on combining service and environmental responsibility as a spiritual and values-based solution to global sustainability.

The real revolution in planetary development will come only when we make the expansion of the consciousness of the individual the basis for sustainable community and environmental development. This approach helps us to tap our own deeper resources of joy and strength, enabling us to move beyond limiting concepts of self and other, into a larger sense of our mutual interdependence and belongingness. With this awareness we move naturally into taking responsibility for the effects of our actions and the needs of the larger community. As more and more people move into this deeper sense of connected awareness, then recognition of the Earth as a living being – and our interdependence with it – will follow naturally. That is the Art of Living.

John Osborne

Further Reading

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See also: Breathwork; Hinduism; Re-Earthing; United Nations' "Earth Summits"; Yoga and Ecology.

Asante Religion (Ghana)

Like all African traditional religions, Asante religion is based on some firm pillars. It consists in the belief of *Onyankopon*, who can be described as a creator God, responsible for everybody and everything in the universe, on Earth and under the Earth. He is eternal, loving, good and just. However, he is described more in terms of what he does for his creatures, especially human beings, than what he is in himself.

He is Provider of Life (*Oboadee*), the Giver of the Sun (*Amowia*), the Giver of Water (*Totrobonsu*), the Comfort of the Afflicted (*Abomubuafre*), the Grandfather (*Nana*), the All-Knowing (*Birekyirehunade*), the Self-Loading

(*Atoapoma*), etc. He is the central reality of Asante religion. He is dependable (*Twereduampon*).

He has created myriad spirits, some of them essentially good, others essentially malignant. Some of these spirits remain in their natural habitat (the forest and the wild) while others are domesticated and worshipped. The domesticated spirits are good; they are generically known as *abosom* (singular *obosom*) but each one has its own specific name, like *oboo*, *mmee*, *hunuhata*. It is not only the domesticated spirits, however, that are worshipped. Some also are worshipped in their natural dwelling places such as mountains, trees, rivers. They are obviously not the visible object one sees but the invisible part of that object. These tutelary spirits are good to human beings. They bless human beings spiritually and physically; they prevent diseases, death and calamity in general; they divine the future; they protect their adherents from danger, both spiritual and physical. They can be male or female. They have a well-developed priesthood but the sex of the minister does not depend on the gender of the spirit. In other words, both priestesses and priests serve spirits that are supposed to be male and they equally serve spirits that are supposed to be female. They provide medicine against diseases. They also act against the evil spirits.

They represent *Onyankopon* as his children and superintendents and they reflect aspects of *Onyankopon* such as creativity, wisdom and truth. There are also *abosom* for functions regularly performed by human beings such as hunting, farming and fishing.

These *abosom* apart, we also have spirits that have been human before. Ancestors (*Nananom nsamamfoo*; singular: *Nana saman*) form an important part of Asante religion. To be an ancestor, one must have died; one must have been an adult before death. Adulthood here is almost synonymous with marriage. One must have died a natural death. Death resulting from an unclean disease like leprosy and a tragic event such as accidentally being shot, during childbirth, suicide, accusation of witchcraft (*bayie*), debars a person from being regarded as an ancestor. One who fails to satisfy any of

these conditions can only roam about as a frightful ghost (*samantwentwen*), whom people dread.

The royal ancestors, namely those who have been heads of clans or village communities or district communities, paramount chiefs, and the King of Asante (*Asantehene*) are accorded special honor. Honor can be given to the ancestors in many ways. Children are named after them; when one is eating, one must put a morsel of the food on the ground and pour a little water for the ancestors. Libations are poured to the ancestors and prayers are offered to them but the most important and distinctive feature in ancestor veneration is the institution of royal festivals in their honor. Every chief celebrates one such festival every 42 days, 9 times a year. It is called *Adee*. In ancestor veneration, the head of the group, be it the clan, the village community, the paramountcy or the nation, is the intermediary between the living and the dead.

The Asante have a way of preserving the memory of their royal ancestors. They consecrate a dead royal person's stool, placing it in the stools room and venerating it. Ancestor veneration is so prominent among the Asante that the religion was given the misnomer "ancestor worship" by foreigners.

Besides *Onyankopon*, *Nananom nsamamfoo* and the *abosom*, Asante traditional religion shows itself in all manner of ways. The belief in witchcraft (*bayie*) is as strong here as it can be anywhere. The use of magic (*aduro*) to effect wonderful things, good or bad, still continues. Spiritual poisoning is believed in; totemism is very strong; taboos regulate the Asante's life; traditional medicine, both mystical and physical, is resorted to. *Onyankopon*, *Nananom nsamamfoo* and the *abosom* are the norms of morality.

Inseparable Relationship with Nature

Let us begin with the Earth (*Asaase Yaa*). The Earth is believed to be the female counterpart of *Onyankopon*. When sacrifices are made or libation is poured, *Onyankopon* is first called upon and then *Asaase Yaa*. *Asaase* means the Earth. It is personified as a woman born on a Thursday (*Yaa*). That is why on Thursdays work is forbidden on the Earth. *Asaase Yaa* must be given a rest. A drum language puts it all beautifully: "*Asaase Yaa*, whether we live or whether we die, we depend upon you." The drum language is saying something more than that we are walking on the Earth and that when we die we will be buried in the Earth. It is picturing the Earth as a true mother who supports her children in everything. *Asaase Yaa* is the one that gives us everything we need and require to live. We build on *Asaase*; we farm on *Asaase*; our food products come from *Asaase*. The trees that we use for various purposes are given us by *Asaase*; the rivers whose water we use are given us by *Asaase*. The air itself is from *Asaase*. We walk on *Asaase* to do everything we do. The mountains are on *Asaase* and the mountains form part of the sacred places of religion.

Some of the most powerful *abosom* are connected with mountains – *Mim Boo*, *Abofoo Mmee* are all elevated places whose sacred nature is accepted and respected by Asante

religion. For the Asante, the greatest *obosom* is the River Tano, but the River Tano takes its source from *Asaase* and ends on *Asaase*.

The animals we hunt, even the birds of the air all depend upon *Asaase*. The trees that we venerate as sacred trees are all on *Asaase*. There are some creatures that are held in high respect and esteem, so also are there trees that are supposed to be very powerful. Their spirits come from *Asaase*. There are some *abosom* that are not yet domesticated; they use natural objects found on *Asaase* as their shrines. And even the domesticated ones are based on the *Asaase*, and so whereas *Onyankopon* is the creator of everything, Asante religion would hold that *Onyankopon* has made all the things we need, while we see and require *Asaase* for safe-keeping, and it is from *Asaase* that we receive it.

Asaase is not herself an *obosom*, in the sense that we do not offer sacrifices as such to *Asaase*. But the treatment of *Asaase* leaves us in no doubt that *Asaase* is a key element in Asante religion; indeed *Asaase Yaa* is second only to *Onyankopon* in everything.

It is for this reason that *Asaase* has many taboos. In Asante religion, *Asaase* abhors murder of any kind. Even when a person is killed in war, the killer must cleanse himself ritually to appease *Asaase*. *Asaase* abhors blood. Certain sexual acts, such as having intercourse in the bush, are believed to be repugnant to *Asaase*.

Asaase is so sacred that in the land-tenure system of Asante, land should never be sold. Land is only given in trust to people to farm or to build on. And this explains why nowadays it is very difficult for the government to acquire land for what it believes to be development projects. *Asaase* is never sold and so one can never acquire land as a personal property. *Asaase* belongs entirely to the ancestors and the living have only the usufructuary use of the portion given them.

There are things on Earth that also enjoy the character of sacredness in Asante religion. I have already mentioned some trees and some animals. They form a very important part of Asante religion. The *O sese* (*funtumia* species) tree, from which the famous Asante stools are made, is so sacred that before a carver touches it, he has to make an offering to it. Such animals as the *tromo* (bongo) and the *kwaduo* (duyker) are also sacred and must not be molested. In the case of the *esono* (elephant), when a hunter kills one, Asante religion demands that the hunter sings a song from where he has shot the elephant to the town and everybody who hears that song, which is a mixture of wailing and joy, knows that a big tree has been felled. Several religious rituals are performed before the animal is cut up because it is supposed to be a very powerful creature in the religion of the Asante.

Apart from the individual items in the vegetable and the animal world, the Asante believes strongly in totemism. Totemism is a belief system whereby the Asante is convinced that he has relationships with certain objects of the vegetable world and of the animal world. It is believed that these objects are related to the human being. Therefore, they must be treated with respect and love. These totemic relationships exist between certain trees and their fruits and individuals; they may exist between

certain animals and individuals. They may exist between animals and the clan or trees and the clan; they may exist between certain trees or certain animals and certain groups of people; they may be the result of an injunction by an *obosom*. And so in Asante, we have such relationships between individuals, clans and groups of individuals and such objects as yam, cocoyam, pythons, snails, antelopes, duykers and so on.

The totemic relationship implies that one must not in any way molest one's totem. Before you cut down a tree, you must know that it is not your totem; before you shoot an animal, you must be certain that you are not shooting your totem; otherwise you may be shooting your brother or sister. If one shoots and kills one's totemic relation accidentally, then it is imperative that the offender apologizes and gives a proper burial to the animal, the type of burial one would give to a human being. Totemism and totemic relationships naturally bring about taboos. If you cannot kill an animal, then obviously you cannot eat the flesh of the animal and, in Asante religion, it is supposed that if one is not vigilant enough and one eats the meat of one's totem, one would be greatly perturbed by all kinds of boils, even carbuncles.

The transition from totemism to taboo, therefore, is not difficult. You taboo an animal; in other words you do not eat or molest or probably see an animal because that animal is your totem. And so you hear people saying they taboo yam (*mekyiri bayere*). Naturally, totemic taboos form only a small percentage of the totality of taboos, many of which do not have direct bearing on Asante religion and nature.

The relationship between Asante religion and nature is also manifested in the many sacred groves in which people are buried, especially royal personages. These groves cannot be touched. Sacred groves are sometimes the only sign of the formerly forested area of Asante that one sees when one goes to a village in Asante these days.

In Asante, there are many spots of historical importance and significance that are held in high esteem and venerated with yearly or more frequent offerings. In the Essumeja traditional area, there is supposed to be a hole in a forest that is easily about one square mile in area. It could be much more but its sacredness prevents it from being entered by ordinary people or being surveyed. There is supposed to be a hole in this forest called *Asantemanso* (the source of the Asante nation) from which the seven clans of Asante were supposed to have emerged. Every year, the chief of Essumeja holds a festival in November to commemorate the historical event that brought about the Asante nation.

At the beginning of the festival are seven pots. On these pots, a cow is sacrificed at the start of the festival. Anybody can take as much of the cow as he or she can carry. But between the place of the sacrifice and the village is a river. Before people cross the river, anybody can pounce on them and deprive them of the meat they have cut from the cow. But once you cross the river, the meat is for you. While the sacrifice of the cow is being made, the chief's emissaries disappear into the forest where they go and sacrifice a sheep at the hole that is said to be guarded by a leopard.

In the Offinso traditional area, we have a place called *Tutuampa*. This is a place where in the past people went and drowned themselves in a lake when, during a war,

they were totally deceived into thinking that they had lost the war and that the enemy was next door to destroy them when actually, they had won it. This lake has remained sacred up to now.

The Adansi traditional area has the *Adansi Bona* which is located in a thick forest which, again, is not open to the public. A yearly festival is held in honor of the *Adansi Bona* and sacrifices are made to the object in the forest.

It has been mentioned that the Tano River is the greatest *obosom* of Asante. The source of the Tano River is never without water, and it is the water from that source that is used to purify the King of Asante and the Golden Stool of Asante. The Golden Stool, as is well known, is the symbol of Asante unity. It is the object that was used to rid the Asante of the oppression of the Denkyira in the seventeenth century. Indeed, the River Tano, which now separates the Ashanti Region of Ghana from the Brong Ahafo Region, is so sacred to the Asante that the word *Tano* itself is often used in place of the word *obosom*.

Besides the prohibition of desecrating such places in Asante, bans are placed on hunting in certain periods of the year. There may be bans on the collecting of snails or fishing in a particular river; it may be considered wrong to catch fish from a certain river. All these laws are couched in religious terms, so that they are linked very closely with the religion of the Asante. But in some cases, if you examine the rationale for such bans, you would realize that there is a great deal of pragmatism in them. Obviously, during certain periods of the year, one is not allowed to fish in certain rivers because if fishing were to go on incessantly, there would come a time when all the fish in the river or the lake would be depleted.

One of the greatest natural bodies of veneration is Lake Bosomtwe. Scientifically, Lake Bosomtwe is a crater formed a thousand years ago. No river flows into it and it has no outlets. It is about 26 miles in circumference and has recently become a tourist attraction. It is supposed to be one of ten such lakes in the world. Until recently, Lake Bosomtwe was considered so sacred that one could not use a motorized vehicle on it, including fishers. Unfortunately, motorized boats are now allowed to use the Lake.

Asante traditional religion considers medicine as one of its essential elements. Medicine consists in diagnosis of physical illness and the application of prescribed medication. In this, Asante traditional religion uses natural means. It uses mostly the leaves of trees, their barks, their roots and their seeds. These are prepared in all kinds of ways and applied to a patient in all manner of forms – orally, rectally, ocularly, auricularly, through cuts on the body, nasally, vaginally, through the penis, through marks purposely made on the body, and so on, all depending on the type and the occasion of the malady. Sometimes the medicine is boiled and the hot vapor from it inhaled. Nature comes into the picture very prominently.

Because physical phenomena are supposed also to have their spirits, Asante traditional religion believes in the spirits of trees, of rivers, of mountains, of different kinds of animals and so on. In the night, for example, when one drives over a bridge, one would take care to blow the horn so that if an unwary spirit of the river is sitting on

the bridge for respite, he would be warned and quickly go back to the river to escape danger.

Asante religion also believes in the existence of certain abnormal creatures in the forest. Some of them are monsters, like ogres and some of them dwarfs. They live their natural life and are engaged in their activities in the forest. Asante religion, therefore, can be described as a religion that respects nature, depends upon nature and protects the environment.

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See also: African Religions and Nature Conservation; Biodiversity and Religion in Equatorial Africa; Sacred Groves of Africa; Totemism; West Africa; Yoruba Culture (West Africa).

Asceticism

Asceticism is a universal phenomenon in the world's religions. Space does not permit a survey of asceticism in different traditions, nor any attempt at an integrated theory of asceticism. This entry discusses asceticism and nature specifically, and the ethical relevance of asceticism, understood as the opposite of greed, to the environmental crisis.

When the assertion is made that asceticism is a universal phenomenon, this refers to a recognizable set of practices that lessen or deny altogether the fulfillment of basic human needs and desires. Ascetic practices primarily include fasting, sexual abstinence, reduction of sleep, and poverty or non-possession. They may also include speaking little or observing silence, seclusion, and endurance of discomfort such as extremes of heat or cold. The lifelong asceticism of the monk or renunciant is often taken as a model, but need not be paradigmatic. The practices may be undertaken for longer or shorter periods, and may be more or less rigorous. The term "ascetic" derives from the Greek *askesis*, meaning "exercise" or "practice" such as the training of an athlete. While asceticism is not exactly the same thing as contemplative practice, it is very often held to be necessary for it or to help it.

Beyond this elementary picture, complications ensue. Many diverse accounts have been given of the reasons for and the nature of ascetic practice. These have dealt *inter alia* with the reconfiguration of power relations in the ascetic's departure from prevailing social structures, the deconstruction of the "body," the formation of a new "body," conserving and increasing different kinds of energy, the relation of the ascetic and the erotic, analogies to martyrdom, winning the sympathy of deities, overarching ideologies of body-spirit dualism or "world-rejection," and the discipline of self-mastery for moral freedom and illumination. We cannot consider here the merits of these interpretations, but should observe that they display the great variety of ideologies and goals attendant on ascetic practices in different cultural contexts, while the practices themselves remain identifiable.

There are significant associations between ascetic practices and the natural world. Ascetics have long sought out places in the midst of nature such as the forests or Himalayan caves of India, the mountains of China and Japan, the mountaintops or woods of the vision quest of Native Americans, and the desert birthplaces of Christian monasticism. Two reasons suggest themselves. Negatively, ascetics say they must "flee" from human society and its distractions and corruptions, away from cities, towns and farming communities. The remote place proves to be the less "civilized" or more "wild." Positively, landscape works upon the consciousness of the practitioner. Literature by

ascetics testifies that the beauty of nature gives joy and tranquility and reminds the ascetic of the Creator, and that stark landscapes recall death and foster fearlessness and humility. The ascetic, having removed many other objects of attention, is open to the presence of the land and able to acquire an intense sense of place. Places frequented for many years by ascetics in turn acquire sacredness within a particular religious world of meaning.

Also notable is the intimacy ascetics are often said to develop with animals. St. Francis of Assisi preaching to the birds is the best-known example; one might also mention the bear befriended by St. Sergius of Radonezh, or the rampaging elephant stopped in his tracks by the Buddha's loving-kindness. While Francis had a "burning tenderness" for all living creatures and habitually spoke to them, some ascetics, such as those in Japan or the Americas, attest that by listening they come to understand the languages of animals and birds, even plants. This connection, while familiar in hagiography, is not yet well investigated. Ascetic and contemplative practices, especially in a natural setting, may mitigate not only the social ego but also the human species-identification. Thus asceticism can be linked to concrete experience of the community of all life so prominent in environmental ethics.

Asceticism may also be seen as striving for a state of nature in the practitioner's own person. A "natural asceticism" is described not as self-mortification but the use only of those things necessary to life. The natural state is simplicity free of the non-essential. A "natural" state in other senses is sought by the ascetics who actually imitate animals, for example in their way of acquiring food (as in some Indian yogas), or by nakedness, or aspire to an Edenic natural state in which the new body will be like the body of Adam before the Fall.

Ascetic disciplines have important practical consequences. Overconsumption is one major cause of the destruction of the environment. Fasting or a limited diet and the practice of voluntary poverty achieve reduced consumption as an immediate result. Population increase is another critical factor in the crisis. The celibate's relinquishment of procreation provides a contrast to the pronatalism that even today contributes to population growth, so that the Dalai Lama has said not entirely in jest that the solution to the population problem is "more monks and nuns." Religions, however, also affirm a "normal asceticism" to be practiced by all their adherents and not only a specialized group. The fast of Yom Kippur, normative in Judaism, lasts a single day. The fast of Ramadan is required of all Muslims and, like the Christian Lent, lasts one month. While demanding, it is less extreme than the fasting of some Sufis in history who were fulltime ascetics. Examples can be multiplied of temporary abstinence. Ascetic struggle is widely seen as beneficial for all, and need not be excessive. On the continuum of practice, extreme asceticism is at the opposite end from uncontrolled craving. Moderate or natural asceticism, simplicity, frugality and moderate enjoyment occupy the middle of the continuum. The systems of ascetic practices in the world's religions contain a rich store of psychological knowledge of desire and restraint, and their states of transformation, as well as an array of practical methods. Ascetic tradi-

tions offer abundant resources for the development of environmental ethics, deserving further exploration.

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Astrology

Astrology is an astral form of divination that is traced to the ancient Mesopotamians and Egyptians. Its essential features became established in the seventh century B.C.E. when it prospered as the Neo-Babylonian state religion. Astrology flourished for irregular intervals under the Romans, and in the second century Claudius Ptolemy developed the tropical system that the West employs today. Although our understandings of the cosmos have been superseded by the astronomical discoveries of Copernicus and Galileo, Western astrology continues to follow the Ptolemaic perspective that considers the Earth the phenomenal center of the universe. It was this system that subsequently was brought to Spain by the invading Moors in the ninth century. From there, it developed into a permanent part of the West's cultural legacy. Astrology became popular in France during the reign of Catherine de Medici (1547–1559), while in England it had been practiced by Bede, Alcuin, Roger Bacon (ca. 1214–1294) and, in the seventeenth century, by the magician William Lilly, whose ceremonial circle for the evocation of spirits consisted of astrological symbols. The legend of Faust in Germany portrays him as an astrologer as well as a sorcerer.

In 1816, James Wilson published his *Complete Dictionary of Astrology* in England. Shortly afterwards, various astrological works appeared under the pseudonym of Raphael (Robert C. Smith, 1795–1832). By far, however, it was the theosophist Alan Leo (William Frederick Allen, 1860–1917) who laid the foundations for the present-day understanding of this “science of the stars.” As a professional astrologer, Leo founded the journal *Modern Astrology* and authored numerous books on the subject. In the course of the twentieth century, through its links with theosophy, astrology became the *lingua franca* of the 1960s counterculture as well as the New Age movements that have descended from it. Its use of the astronomical phenomenon of the precession of the equinoxes has become the seminal framework within which the New Age of Aquarius has been heralded. In the New Age context, “star wisdom” has emerged as an elevated form of astrology. This study stresses the importance of eclipses and recognizes, through the keys of an astrological metaphor, the “Cosmic Christ” in the etheric realm of the Earth's body. From the more pagan understanding, on the other hand, the stars become tangible transcendentals, and, as such, they may be considered as real influences on human life or as symbolic metaphors for a synchronistic dynamic.

The key point of departure for the casting of an individual's horoscope is the person's place and time of birth. In casting a person's natal horoscope, the result is a presentation of the positions of the planets and luminaries (sun and moon) relative to the person at the time of his or her birth. In other words, following Ptolemy, as-

trology is a geocentric understanding that takes the individual's terrestrial nativity as the center of the entire cosmos. From this perspective, astrology promotes an interdependent and interconnected picture of the universe as an organic and interrelated whole. Employing the magical principle "as above, so below" by which the microcosm is thought to mirror the macrocosm, astrology seeks an understanding and prediction of earthly, personal and spiritual events through a study of the stars. This is pursued by considering the placements of the planets and luminaries against the twelve astronomical signs (or constellations) of the zodiac and whether these solar system bodies form mutual conjunctions or significant angles *vis-à-vis* the Earth – namely, 90° squares or 180° oppositions as learning obstacles and 60° sextiles or 120° trines as harmonious and favorable influences for the individual or event concerned. Astrology presents a particular organic model of the cosmos that balances the natural, the human or cultural and the mythic. The zodiac consists of seven signs that are animal (four natural, two domesticated, one – Capricorn – ambivalent), three that are human, one that is a human cultural creation: the scales of Libra, and one (possibly two depending again on Capricorn) that is imaginary or fanciful. Together, these represent astrology's understanding of the organic or natural balance cosmos. The planets that move through the zodiac, named by the Babylonians as the "wanderers" and considered to be visible deities, have for the West assumed the names of the Classical gods. The complex of astrological symbolism represents a way of interfacing the mythic with the actual.

With the advent of the empirical sciences, astrology has received increased criticism and attack. Some astrologers maintain that the behavioral characteristics and eventual propensities predicted by the system have been acquired through years, even millennia, of observation. However, astrological interpretation appears instead to derive from an *a priori* matrix relationship between personality archetypes (e.g., mercurial, jovial and saturnine characteristics) and numerology or numerical symbolism. Science condemns this last as superstition, but contemporary spirituality in turn tends to reject the restricted and narrow province of science as applicable to Earth-based traditions with their corollary of emotional and intuitive understanding. On the other hand, astrology must also face antagonism from traditional mainstream Western religions. In particular, canonical Christianity considers that whatever of the supernatural is not "of God" must, by default, be "of the Devil." Foremost among these "satanic arts" is astrology.

Being far from a new or recent interest and, despite being superseded by more sophisticated and predictable systems of explanation, the symbols and terms of astrology have entered into and become part of the cultural register. As modern chemistry follows from alchemy, so too has astronomy been the child of astrology. The astrological/ astronomical heritage has been an inevitable part of humanity's desire to know its place in the universe and understand macrocosmic/microcosmic connections. In the surfeit of choice that has come to characterize the contemporary West, the familiar and methodological are becoming supplemented and sometimes replaced by the exotic and superstitious. Many are turning to forgotten and discarded spiritual vernaculars in an attempt that might be interpreted as stemming from a desire for more colorful

and mystically laden symbols and notions. Astrology is at the forefront of this popular interest – combining as it does the familiar with the obscure.

Newspaper horoscope columns began to appear in the late 1930s. Since that time, they have become a regular feature in the daily tabloids and the weeklies. Whether we judge such columns to be serious or not, whether they are intended to be humorous, whether they simply offer guiding principles and advice that some readers can incorporate into their lives, and whether any of these “Star” pages are based on actual astrological considerations, the fact remains that the daily horoscope has become an accepted part of vernacular culture. Everyone reads one of these columns at some point, and some people actually rely on them and use them. Reporting on Christopher French’s investigations into the psychology of the paranormal at London’s Goldsmith’s College, Senay Boztas claims that “about 75% of people read horoscopes and one in five believes them.” While the majority may not take them seriously, they are nevertheless an accepted part of popular discourse. But inasmuch as this is true, the daily and weekly horoscope page is the tip of the iceberg of astrological esotericism.

Of course, at the much deeper levels we encounter “serious astrology” in the sense of the pursuit of a codified system of horoscope casting and interpretation – a process that is subject to standard empirical testing, confirmation or disconfirmation. But in the context of understanding marginal and/or esoteric practice and its mainstream appeal, it is not the validity of astrology that is here the issue but rather the role that astrology plays in demotic and cultural discourse. Contemporary spirituality speaks in its own language, it has an increasingly identifiable vocabulary, and a large part of this dialogue is grounded in the terminology and concepts of astrology.

In the sense of secularization as representing the process by which the world is being gradually deprived of its sacral character, astrology, nature religion and even New Age do not fit the expected scenario of Western humanity’s rejection of magical images. But as Hill points out, “Interest in astrology seems to be an area of considerable importance even in the most technologically advanced areas of Western society” (1973: 247). The final suggestion is that astrology plays a key role in new forms of religion that attempt to “keep the world sacred.” Erik Davis explains that “people inhabiting all frequencies of the socio- economic spectrum are intentionally reaching for some of the oldest navigational tools known to humankind: sacred ritual and metaphysical speculation, spiritual regimen and natural spell” (1998: 2). For Davis, along with such ancient disciplines as alchemy and numerology, astrology represents a viable way of organizing knowledge.

It is in the human desire for “order” – especially in an increasingly chaotic world – that astrology becomes meaningful to both religion and nature. Its renaissance may in fact be a spontaneous collective organization of reality that allows integration above and beyond the randomness and conflicting tumult of an urban and bureaucratic life that has lost touch with the tides of nature. The tidal ebb and flow, the effect of the sun and moon and, possibly – at least in a psychic/emotional sense

– the other planets as well, is the root idea of the astral that has a growing bearing on contemporary needs for positioning within a world of change. This relevance is reflected both in the emergence of academic study of astrology (Bath Spa University College, Southampton University, the Kepler College of Astrological Arts and Sciences, etc.) and innovative spiritual experimentation such as Findhorn’s “astroshamanism” workshop that employs the astrological chart as a tool for exploring nonordinary realities. As a contemporary social and spiritual means to re-enchantment, astrology represents a denial of the strictly mechanical for the intuitive and inspirational.

In conclusion, astrology provides a framework in examining the central issues of religion and nature for three different reasons: (1) natal astrology and paganism share a concern with locality, (2) the Earth-based orientation of astrology resonates with present-day nature religions, and (3) astrology’s seeking for truths within both the mundane and the transcendental and how these relate to geo-economic, geopolitical, humanitarian, ecological, technological, philosophical and mystical questions engage fully with the forum of contemporary spiritual dialogue. Astrology seeks answers to the meaning of life as well as the how of life. It provides a pragmatic structure that is commensurate with all religions that remain open spiritual methodologies rather than inflexible collections of dogmas and prescriptions.

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See also: New Age; Western Esotericism.

Astronauts

Between 1961 and the first years of the twenty-first century more than 430 humans in spacecraft have blasted into orbit and beyond, seeking greater knowledge of the moon, the solar system, and the universe. But for these astronauts (who fly in spacecraft belonging to the United States) and cosmonauts (who fly in Soviet or Russian spacecraft), now from over 31 different countries, it seems to have been the experience of seeing the beauty and variety of the Earth from space that has most altered their consciousness of themselves, their home planet, and their place in the cosmos. The experiences and photographs, particularly of the early space explorers, gave birth in many of them to a global consciousness and enhanced awareness of their love for humankind, for nature, and for the Earth as a whole. This is exemplified in the book *The Home Planet*, which was conceived and edited by Kevin W. Kelley for the Association for Space Explorers. For many space explorers, deep religious convictions helped them realize their goal of spaceflight, and for others, personal religions evolved and in some cases became movements. American Edgar Mitchell, the sixth man on the moon in 1971, retired in 1972 and in 1973 founded a movement known as the Institute of Noetic Studies, which focuses on scientific study of interconnections through consciousness and the integration of science and spirituality.

Mitchell noted, “We went to the moon as technicians; we returned as humanitarians” (Kelley 1988: 137). Cosmonaut Oleg Makarov, after reviewing communications between cosmonauts and mission control, discovered that “no one has been able to restrain his heartfelt wonder at the sight of the enthralling panorama of the Earth” (Kelley 1988: viii). Cosmonaut Yuri Gagarin, the first human to orbit and see Planet Earth from space on April 12, 1961, remarked in awe: “The Earth is blue.” Following the initial wonder, many have been struck by a strong sense of the commonality, interdependence, and interconnectedness of humans, what astronaut Russell L. Schweikart referred to as “the golden thread that connects us all” (Kelley 1988: vi). On 20 July, 1969 Commander Neil Armstrong and fellow astronaut Edwin “Buzz” Aldrin successfully landed on the moon, and Armstrong, the first human on the moon, made the now-famous statement:

“That’s one small step for [a] man; one giant leap for mankind.” Upon looking at the Earth from space, Mexican astronaut Rodolfo Neri Vela said that seeing oneself as one more person among millions and millions who lived, live, and will live on Earth, one inevitably thought about existence and how we should live to enjoy and share our short lives as fully as possible (Kelley 1988: 83). Syrian cosmonaut Muhammad Ahmad Faris referred to the Earth as “indescribably beautiful with the scars of national boundaries gone” (Kelley 1988: 77) and cosmonaut Yuri Artyukhin noted, it is not important in

which lake you see pollution slicks, or near which continent a hurricane arises, “you are standing guard over the whole of our Earth” (Kelley 1988: 71). Indian cosmonaut Rakesh Sharma’s awareness was also heightened, though he observed that one need not undertake a space flight to see beyond manmade boundaries and prejudices.

American astronaut Russell L. Schweikart described the sight of Earth as a visual embrace with all the life with which you are connected. Most know, he noted, that the life systems of the planet are interrelated, that our human future depends on the well-being of the rainforest and the salt marsh. The journey into space, though, he said, somehow takes this knowledge beyond the intellectual realm and makes it intensely personal (Kelley 1988: v). Watching an orange cloud form from dust storms in the Sahara, ride air currents, and settle over the Philippines with rain, cosmonaut Vladimir Kovalyonok truly understood that “we are sailing in the same boat” (Kelley 1988: 70), so much more interconnected than we imagine.

Many spoke about our as-yet, unfulfilled responsibilities to nature. Cosmonaut Yuri Glazkov reflected, “Nature’s limitless kindness, all she has amassed for billions of years, has made us strong and powerful, and how have we answered this goodness?” (Kelley 1988: 84). Bulgarian cosmonaut Aleksandr Aleksandrov observed that regardless of national origin, “We are all Earth’s children, and we should treat her as our Mother” (Kelley 1988: 109). Vietnamese cosmonaut Pham Tuan remarked that the separation had allowed us truly to see our “long-suffering Earth” and insisted that we must “ensure that we do not bring even the slightest harm to the natural world” (Kelley 1988: 185). Especially when spending long stretches of time in space stations, crew would choose to listen to nature sounds rather than music, noted cosmonaut Anatoli Berezovoy, and according to cosmonaut Georgi Grechko, sought tranquility in their tiny “oasis” of oat and pea plants (Kelley 1988: 105, 107). Residents on space stations, including Cuban cosmonaut Arnaldo Tamayo Méndez, the first Hispanic in space in 1980, returned to Earth and the “good life” with a renewed joy and appreciation to be on land, to feel wind, and to see greenness and life” (Kelley 1988: 112, 127).

Space explorers have developed a profound appreciation and love not only for humans and nature, but also for the Earth as a whole, our life support system, a “small pearl in a thick sea of black mystery” (Kelley 1988: 42). Space has no sound, no smell, no atmosphere, and no color whereas here on the Earth these features and richness, beauty, and life abound. Invoking adjectives such as precious, valuable, vulnerable, and ineffably beautiful and fragile, their common understanding of the imperative to protect the Earth emerged saliently. Cosmonaut Aleksei Leonov said the Earth “must be defended like a holy relic” (Kelley 1988: 25). Chinese-American astronaut Taylor Wang reflected that our new appreciation of the Earth should make us become her protectors rather than her violators and that he himself could not help but love and cherish her (Kelley 1988: 60).

In addition to spiritual insights and renewed appreciation for nature, many astronauts experience their journey as an extension of their religious identity. In the tragic 16day mission of the most recent space voyage which ended on 1 February 2003

when the Space Shuttle Columbia broke up upon reentry into the atmosphere killing all aboard, the seven crew represented seven different religious traditions: Kalpana Chawla, the first Indian woman in space (Hinduism); William McCool (Christianity – Roman Catholicism); Ilan Ramon (Judaism); Rick Husband (Christianity – Charismatic); Laurel Salton Clark (Unitarian Universalism); David Brown, (Christianity – Episcopal); and Michael P. Anderson (Christianity – Baptist, African-American). Payload specialist Colonel Ramon, the first Israeli in space, while not particularly religious on the ground, believed it important to mark the Sabbath in space, carried the Torah and objects from the Holocaust, and commented “I feel I’m representing the whole Jewish people.” A CNN reporter wrote that it was the wonder of life that inspired Laurel Clark most during the space trip. Talking about the silkworm cocoon that she had seen hatch in orbit as part of an experiment, Clark remarked, “Life continues in lots of places, and life is a magical thing.” United States Senator John Glenn, Jr. of Ohio, the first American astronaut to orbit the Earth (1962), went into space again after 36 years and at the age of 77 became the oldest human to voyage in space. Broadcasting from aboard the Space Shuttle Discovery on 1 November 1998, he stated: “I don’t think you can be up here and look out the window as I did the first day and see the Earth from this vantage point, to look out at this kind of creation and not believe in God. To me, it’s impossible – it just strengthens my faith. I wish there were words to describe what it’s like . . . truly awesome.” James Irwin became a minister after his experience in space. Whether religious in traditional ways or not, the experience of being an astronaut consistently seems to give people a larger and deeper sense of purpose, sometimes religious, and appreciation of the preciousness of life and the gifts of the Earth.

Rather than being chosen or deserving of the privilege of spaceflight, astronaut Schweikart spoke of feeling humbled and perceived that as a “sensing element” on behalf of humanity, he had a responsibility to share his experience and communicate his intensified relationship to the planet and all its forms of life (Kelley 1988: 144). Many others also felt a personal responsibility to extend this “precious” awareness of connection. In 1985, dozens of astronauts from around the globe came together to form the Association of Space Explorers to share their perception of the world and express their desire that all the peoples of the world unite to safeguard “our common and only, fragile and beautiful home” (Kelley 1988: ix). In 1988, editor Kelley compiled *The Home Planet*, a collection of astronaut observations and stunning photographs taken from space, to share more widely their experiences and their conviction that, as Donald Williams observed, “the things that we share in our world are far more valuable than those which divide us” (Kelley 1988: 139). The compilation also conveys the sense that any predicament, disagreement, or obstacle can be overcome if we just understand that, as German cosmonaut Sigmund Jähn said, “humankind’s most urgent task is to cherish [the Earth] and preserve it for future generations” (Kelley 1988: 140). Their moving reflections continue to be echoed today in the experiences of a new age of space travelers and succeed in deepening awareness of the “great beauty, incredible wonder,

and unfathomable mystery of our lives” (Kelley 1988: xiii) in this small blue, life-filled planet in an ever-expanding universe.

Paula J. Posas

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See also: Sagan, Carl; Space Exploration.

Athavale, Pandurang Shastri (1920–)

Pandurang Shastri Athavale is a Vedic scholar, philosopher, and social reformer who sought to revive the values and insights of an ancient Indian culture that affirms the value of nature, the self, and other persons. He is the founder of a spiritual and social movement known as Swadhyaya, which addresses contemporary ecological, economic, and social issues in the light of teachings from the *Bhagavadgita* and other ancient sources. The work of the Swadhyaya movement in areas of environmental concern exemplify the relevance of Indian religious traditions in contemporary ecological issues.

Born to Brahman parents in the village of Roha near Mumbai, Athavale's early education was directed by his father and grandfather, both Vedic scholars. Instructed from an early age in classic literature, history, Eastern and Western philosophy, as well as in English, Hindi, and Sanskrit, he took a deep interest in ancient religious texts. When in his late teens he came with his parents to Mumbai, he spent lengthy sessions in the library of the Royal Asiatic Society occupied with such subjects as physiology, sociology, and psychology. At 22 he began delivering lectures on the *Bhagavadgita* at a center known as the Srimad Bhagwad Gita Pathshala, which his father had founded in 1926. His lectures drew attention because of their capacity to relate the teachings of the ancient tradition to the contemporary world. He observed that in the modern age religion has been reduced to the observation of rituals divorced from the fabric of life, but that neither science nor modern social philosophy has adequately addressed the need for community and mutual support. His answer was inspired particularly by his reading of the *Bhagavadgita* and its doctrine of the indwelling presence of God. This doctrine, he said, instills respect for oneself, for nature, and for others regardless of caste, position, or status. It teaches that all persons are divine brothers and sisters in the family of God, and evokes the response of grateful, active devotion. With this response, class conflicts should disappear opening the way for a divine community based on mutual respect, reverence for nature, and cooperation.

In 1954 Athavale (or Dadaji, meaning elder brother, as he is affectionately known to his followers), was invited to present a series of lectures at the Second World Religions Conference in Japan. There the question arose whether a single community lived by the ideals he discussed. Refusing offers of positions in philosophy and religious studies in the United States, Europe, and Japan, Athavale returned to India to make such a community a reality. He established centers for child development (Bal Sanskar Kendra)

that met on Saturdays to instill the values contained in the ancient tradition. In 1956 he established an institution called the Tattvajnana Vidyapeeth or center for philosophic knowledge, offering a two-year course for collegeaged students in Eastern and Western Philosophy, and Vedic religion. Other educational experiments followed. Continuing his lectures at the Srimad Bhagawad Gita

Pathshala he emphasized that devotion (*Bhakti*) is not confined to ritual acts, but includes the offering of one's time and skills to God. In 1957 he challenged 19 of his young followers to bring this message to the villages of India where socialist publications were undermining traditional religious beliefs. What came to be called devotional visits (*Bhaktipheri*), in which participants establish genuine connections with village people, became the principal means to spread his teachings.

Working together, Swadhyayees (adherents of Swadhyaya) of differing castes and classes demonstrate how devotion (*Bhakti*) can be a social force to address problems of ecological degradation, inequality, and poverty. They have expressed their devotion in voluntary projects of forestry, farming, fishing, water resource management, and other areas that have directly improved the lives of over twenty million people.

Pandurang Shantri Athavale has been the recipient of a number of prestigious international awards, including the 1996 Ramon Magasaysay Award for Community Leadership, and the 1997 Templeton Prize for Progress in Religion. He is recognized by over 100,000 Indian villages touched by his teaching as the purveyor of an ancient wisdom that effectively addresses contemporary ecological, economic, and social problems.

George A. James

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See also: Bhagavadgita; Hinduism; India; Swadhyaya.

ATWA

ATWA (an acronym for both “Air, Trees, Water, Animals” and “All The Way Alive”) represents the uncompromising ecological mandate propounded by the infamous American convict Charles Manson (b. 11 November 1934) and a number of his most loyal associates.

The exact origins of ATWA are obscure, although related ecological beliefs appear to have been present among Manson and his associates during the late 1960s. After having spent most of his early life behind bars for a string of criminal offenses ranging from auto theft to check fraud, Manson was paroled in 1967 and found a welcoming environment in the burgeoning counterculture. Together with a small retinue of disaffected young people, he took flight from the “madness of the cities” and established a communal colony at a ranch in the Santa Susana Mountains outside of Los Angeles, California. The group began to make survivalist forays into Death Valley in order to scout out more remote areas of the desert, and in September 1969 some members attempted to thwart nearby road developments by deliberately setting an expensive piece of Earth-moving equipment on fire. This early act of “monkey wrenching” – occurring a number of years before the concept would be popularized by Edward Abbey, Dave Foreman, and other radical environmentalists – was a key factor that caused the encampment of Manson associates to come under scrutiny from local law-enforcement authorities.

A study of contemporary testimonies reveals that Manson discouraged meat eating while advocating a primal understanding of the natural world which included totemistic identification with various animals. Speaking to *Rolling Stone* in 1970 after his arrest in connection with the Tate/LaBianca murders, he stated:

Have you ever seen the coyote in the desert? Watching, tuned in, completely aware. Christ on the cross, the coyote in the desert – it’s the same thing, man. The coyote is beautiful . . . He hears every sound, smells every smell, sees everything that moves. He’s always in a state of total paranoia, and total paranoia is total awareness (Manson in Lombardi 1972: 362)

Asked what he would do if released, Manson replied:

I would go out into the desert. The desert is magic

. . . Nobody ever wanted me and nobody wants the desert . . . I’ll live in the desert, like a coyote. I know where every waterhole is, and every berry and fruit that’s edible . . . The desert is God’s kingdom (Lombardi 1972: 362, 371).

In the years following Manson’s conviction and imprisonment with a life sentence, his close associates Lynette “Squeaky” Fromme and Sandra Good became increasingly

active in their efforts to raise awareness of the present system's failure properly to steward the Earth. In what was apparently a desperate attempt to draw attention to this message, Fromme was apprehended after pulling a 1914 military issue .45 handgun on president Gerald Ford in 1975 in Sacramento, California. Shortly afterward Good was arrested for conspiracy to mail death threats to hundreds of corporate polluters under the aegis of the IPCR, or "International People's Court of Retribution," which may have been a precursor to ATWA. Good served a ten-year sentence and was released, while Fromme is currently serving a life sentence.

By the early 1980s Manson and his supporters were primarily using the term ATWA, which usually stood for "Air, Trees, Water, Animals," to represent their ecologicalspiritual worldview. The name clearly refers to the elements of the biosphere that are crucial to human survival; these can also be closely equated to the four cardinal elements in ancient Hermetic philosophy: Air, Earth, Water, and Fire. ATWA is not represented by any formal organization or membership. In contrast to mainstream environmental groups with bureaucratic structures and tendencies toward compromise, ATWA is a state of radical consciousness, a way of thought and action that seeks to completely redress not just worldwide industrial pollution and ecological imbalance, but also the perceived unnatural evils of media control, consumerism, feminism and patriarchy, overpopulation, and racial intermixing. In blunt language, ATWA's proponents emphasize the unity of life on Earth, which is often spoken of in religious terms. Manson has stated that "Ecology is god, for without it we are dead forever." This perspective informs both the urgency and the moral fervor of statements such as the following from Sandra Good:

You are either working for ATWA – life – or you're working for death. Fix it and live or run from it and die . . . ATWA is ATWAR with pollution. ATWA is a revolution against pollution. ATWA is a holy war ("Access Manson" website).

The representatives of ATWA believe that the devastation of the Earth can only be halted and reversed by a oneworld government with the vision and military power to enforce this goal. It is further implied that Manson is one of the few people possessed of the necessary degree of understanding and insight to articulate the course for such solutions.

Despite the passage of time, Charles Manson maintains his status in American popular culture as a perennial outsider to the "Establishment" and continues to attract interest from new generations of young people. Over the years, aspects of his philosophy have been adopted by radical enterprises ranging from the ultra-left June 2nd movement to revolutionary National Socialists. While Manson's ideas often reach a wide audience through various websites, music releases, and occasional media interviews, only a few outside of his immediate circle appear to have understood the centrality of ATWA to his worldview.

Michael Moynihan

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See also: Ecofascism; Fascism.

Au Sable Institute

The Au Sable Institute of Environmental Studies was developed out of the Au Sable Trails Camp for Youth, Inc., a Christian youth camp begun in northern lower Michigan in 1958. It was transformed into the Au Sable Institute in 1979 by the camp's Board of Trustees and developed by them and their consultant, Calvin B. DeWitt, whom they appointed Director in 1980. The Institute received national public attention with its first Au Sable Forum in the summer of 1980, with this and subsequent forums producing a pattern of thinking, research, and publication that helped to develop the concept of environmental stewardship in secular and religious communities. In these forums, scientists, theologians and practitioners integrate findings on major environmental issues, produce formative publications, and issue influential statements such as the Oxford Declaration on Climate Change produced by 70 leading scientists and ethicists at Climate Forum 2002.

Au Sable was founded to make the little-known concepts of earthkeeping and environmental stewardship part of public life, college and university education, and practical action. Large universities and environmental organizations seemed to neglect religion. And liberal arts colleges, churches, and Christian missions had great potential for contributing here, and yet were not doing so. Consequently, the Institute selected evangelical colleges and universities and their associated churches and denominations as its focus, and in partnership with them developed curricula that would engage them in environmental studies with the Institute. The number of these partners had grown to 60 by 2003.

By 1996 program growth brought "Au Sable Pacific Rim" in the Pacific Northwest as a second campus, while the Michigan campus became "Au Sable Great Lakes." And new sites were established in south India, east Africa, and south Florida in partnership with Bishop Heber College, the African Institute for Scientific Research and Development, and Educational Concerns Hunger Organization, respectively. Students now use a combination of any of these sites to gain certification in four areas of Environmental Studies and also may earn a post-baccalaureate Stewardship Ecologist diploma. Faculty come from institutions linked with the Institute, from state and private universities, and various agencies to teach stewardship-based and faith-based courses in environmental studies in threeand five-week courses. Graduate students at Wisconsin, Michigan and Cornell work as Au Sable Graduate Fellows to assure that their stewardship education keeps abreast of their graduate studies.

Research is fostered by the Institute among the faculty of Participating Colleges, and natural scientists, theologians and ethicists from around the globe. A major outlet

for this research is the Au Sable Forum and its publications. Institute students are educated for careers in environmental research, teaching, and practical stewardship, with a strong emphasis on developing leadership.

Institute education and research is joined with a wide array of services to the communities it serves, including outdoor education for area schools, meeting spaces for environmental organizations, native plant production, environmental conflict resolution, and assistance to faithbased communities. An example of the last of these is illustrated in *Between Heaven and Earth*, a public television film account of faith-based stewardship on Tangier Island in the Chesapeake Bay.

The Au Sable Institute, while faith-based, is not defined by boundaries that set it apart, but instead by its central core of values that are biblically, ethically, and scientifically based. This structure – of a focus without boundary – has resulted in productive relationships with evangelical, mainline, Orthodox, Roman Catholic, and Jewish scholars in particular, and also with Muslim, Buddhist, Hindu, Sufi, Sikh, Navajo, and Oneida scholars. In conducting its work, however, the Institute strongly adheres to its core in biblical evangelical Christianity.

Funding for Au Sable is from tuition and fees and a substantial endowment to which contributions are made by philanthropic individuals and organizations. The endowment provides for a full program of scholarship and fellowship support for college and university students and in other ways supports Institute operations.

Calvin B. DeWitt

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See also: Biblical Foundations for Christian Stewardship; Christianity (7i) – An Evangelical Perspective on Faith and Nature; Christianity (9) – Christianity’s Ecological Reformation; Stewardship.

Aurobindo, Sri (1872–1950)

Sri Aurobindo is recognized in many capacities, as scholar, poet, political leader, philosopher, psychologist, Indologist, literary critic, journalist, mystic and sage. Indian by descent and Western by upbringing and education, Sri Aurobindo moved from being a leading political figure in India's struggle for liberation from British rule to become an indefatigable pioneer of spiritual transformation. He wrote prolifically, from his own experience, setting out a unitive framework in terms of which both to interpret reality and participate creatively in its transformation. His work recognizes the multi-levelled nature of reality and its vastness, as well as the nature of the interrelations between the different levels and gradations, and the pattern of the dynamics by which change comes about. His understanding of transformation includes the integration of polarities which are often regarded as irreconcilable opposites – for instance, consciousness and matter, inner and outer, religion and science, East and West, spirituality and socio-political commitment – in pursuit of a goal that respects the differences and is global in its application. Underlying his work is his principle of coming to knowledge of the truth through investigation, by direct experience. While deeply rooted in Hinduism, he saw himself as transcending all religion, and spoke instead of spirituality, where “spiritual” means “to become divine in consciousness and act, and to live inwardly and outwardly, the divine life.”

The overarching aim of Sri Aurobindo's teaching, as of his spiritual practice, was the transformation of consciousness, mind, life and matter toward divine consciousness and divine life, not in some “religious” otherworldly heaven, but right here in this world. Seeing nature as a whole and everything in it manifoldly interconnected, this transformation of consciousness includes what he calls “the radical and integral transformation of nature.” The principle he consistently worked with is that the outer or lower nature is changed from within and from above. This change is called *integral* because there is no rejection of the lower levels but rather the significant elements in them, the deep structures, are included and integrated in the higher.

Steeped in the traditional philosophical systems of Hinduism, particularly that of *advaita vedanta*, and through practice having largely recapitulated the aims of the traditional yogas, Sri Aurobindo saw his work as both a reconciliation of the achievements of the rishis, seers and yogins up to that time and as an empirical endeavor toward what he considered to be the next stage of evolution, which would be the establishment in human life of the next highest level of consciousness. He called this level the supramental or supermental, indicating that it is supernormal to our present prevalent state of awareness.

In presenting his philosophical framework for this evolutionary transformation (in *The Life Divine*) and the correlative spiritual practice (in *The Synthesis of Yoga and Letters on Yoga*), Sri Aurobindo interpreted “nature” in a wide sense to denote not only nature as environment, or nature as in the natural sciences, but as all of reality, which he saw as evolving integrally toward divinity through the evolution of consciousness. In his map of reality, nature (*prakriti*) comes into being dynamically, moment by moment, through the living consciousness and active power of the Divine. In this dynamic, the higher nature (*para prakriti*) is moment by moment bringing into being (manifesting) the lower nature (*apara prakriti*). Lower nature consists of mind, life and matter separated in consciousness from the Divine and characterized by ignorance. Between the Divine and the lower nature is the creative supraor supermental, which is both a plane of being and a realm of consciousness above the present mental consciousness. Sri Aurobindo held that as long as we are “in ignorance,” that is to say, as long as we have not realized the dynamic presence of the higher nature, we are subject to the lower nature which appears to be mindless and, as it were, working on automatic; life as we lead it according to nature at the moment is only half-conscious. But nature, as he experienced it, has this amazing secret urge to self-transcendence and this urge impels all levels, from nature as sheer physicality to nature as advanced humanity. As we evolve spiritually we become aware of the higher nature and seek to come into contact with it. We can ascend to the supramental consciousness and, most importantly, it can descend into us, and such an ascent and descent can transform the lower nature of mind, life and matter.

In Sri Aurobindo’s teaching, spirit is “involved,” albeit unconsciously, in every aspect and level of matter, life and mind, which is “the lower nature.” In contrast to the materialism of Darwinian evolutionary theory where consciousness is said to have evolved out of matter, Sri Aurobindo holds that consciousness/spirit is evolutionarily prior to matter and is creative of all that is. Physical nature is the material base for the evolution of consciousness and, as consciousness evolves, so the nature of the physical will be transformed, through each of its levels right down to, and including, the cells of the body. Left to itself, nature will evolve spontaneously, naturally and slowly, according to the truth of the energy at work in it. Sri Aurobindo understood his own contribution to be literally an acceleration of the natural evolutionary process. When one person consciously speeds up her or his own evolutionary development, this accelerates the whole process. In his particular case, by his integration of the knowledge and spiritual practice that had been achieved before him, Sri Aurobindo experienced himself as being at a fulcrum in the evolution of consciousness where he was able not only to access the higher supermental consciousness by ascent of his own awareness upwards, which others had done before; he also understood himself to be working specifically and practically with the “bringing down” of this higher consciousness, the aim being not just to experience it but to establish it in human nature.

Mapping reality in this way, Sri Aurobindo includes “nature” and the human person in one interpretative framework, which sets out the multi-leveled interconnections

between them and indicates what has to happen for the transformation of both. Given the vedantic principle that the Self is in everything and everything is in the Self, that we are in everything and everything is in us, Sri Aurobindo explains the meaning of this “in,” in relation to the structure of evolutionary transformation. All things are arising moment by moment and at this moment of their arising either they can come into being according to the old patterns and dynamics of their being and activity, or they can come into being new, transformed. “Nature is complex unity and not a collection of isolated phenomena,” the levels “may be said in a sense to exist in one another” and there is mutual modification going on all the time; change in one level results in potential change in all the others. And because, at the deeper levels of the being, all persons mutually indwell one another, change toward more unitary levels of consciousness in one person can make it easier for change to be effected in others, as well as in the environment. Recognizing that change can be detrimental as well as for the better, he emphasizes the need for each person to undertake the inner work responsibly, in the awareness that inner change and outer eventuate together. Further, Sri Aurobindo holds that when a sufficient number of people are committed to participating consciously in transformation toward the higher “integral spiritual consciousness,” the process will accelerate the natural evolutionary process. The correlative changes in the material base of consciousness entailed in this transformation (the cells and systems of the body, rippling out through the environment in its vastness) are natural and ultimately inevitable since consciousness and matter are not two poles of a dichotomy but rather are two levels of the one reality, arising co-dependently, moment by moment. Such structural interdependence in nature, as well as part/whole mutuality, is currently finding corroboration in aspects of contemporary quantum physics.

In Sri Aurobindo’s work there are incisive promptings for the Western theological enterprise, including clues, for instance, as to how the dangerous dualism between creation and salvation, and that between nature and grace, can be overcome, and along which lines eco-theology needs to be further developed. Sri Aurobindo’s theoretical framework, formulated in the Eastern context, was paralleled in many respects by the evolutionary theology and spirituality of the Jesuit paleontologist, Pierre Teilhard de Chardin, in the West. Sri Aurobindo’s teaching on nature and spirituality, with its vision of a new consciousness, a new person and a new world, prefigures recent developments in transpersonal psychology and transpersonal studies, and his influence is seen in many contemporary writers. Ken Wilber, for instance, is one of the leading transpersonal theorists whose position is influenced by him to such an extent that Sri Aurobindo is now coming to be regarded as one of the pioneers of transpersonal psychology, and this is leading to the recognition of his work as a transpersonal psychologist in its own right.

Sri Aurobindo’s work is being continued in the Sri Aurobindo Ashram in Pondicherry, India and in the international community of Auroville about five miles away, as well as in various communities worldwide. Being transcultural, beyond any one religion, and therefore global in its applicability, Sri Aurobindo’s teaching is taking

shape in a variety of contexts and giving form to new developments. International unity, for instance, he envisioned as the result of the interior urge to unity in what he calls “the will in Nature” (as the next stage on from family and national unity), as well as being the result of human endeavor and organization. This means that work toward international unity needs to be done concurrently on both the interior level in our moving beyond separative, egoic consciousness to deeper, unitary supramental consciousness, thereby extending our sense of self to include the natural world, and also on the levels of the current economic, environmental, technological, political and social realities. All levels are being created and upheld by the same Spirit and the potential is therefore present for all to come into being differently. Working on both the transformation of consciousness and on change in these manifold outer levels, *integrally*, is seen to be what differentiates the Aurobindonian approach from others. Within the Sri Aurobindo Society, which has many branches and associations in India and throughout the world, there are numerous institutions pursuing these goals, including, for instance, the Integral Consciousness Center, the Sri Aurobindo Foundation for Integral Education and Research, the Sri Aurobindo Foundation for Integral Health and Research and the Sri Aurobindo Institute for Applied Scientific Research. The latter pursues innovations in alternative energy sources and appropriate technology projects. The California Institute of Integral Studies in San Francisco, founded by the late Dr. Haridas Chadhuri, is an example of an institution where the influence of Sri Aurobindo’s teaching is being extended and from which it is widening internationally.

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See also: Hinduism; New Age; Yoga and Ecology.

Auroville

Auroville is an international community founded in 1968 in the Indian state of Tamil Nadu. Its 1600 inhabitants representing over 35 nations reside in over 80 settlements spread across 20 square kilometers. It has gained international attention for its work in ecological restoration, and its implementation of low-impact life strategies. Its objective is to realize Sri Aurobindo's vision of human unity.

Sri Aurobindo (1872–1950), the Indian nationalist leader and mystic philosopher, rejected ways of yoga that lead away from temporal existence. The visible world, in his view, is the scene of a spiritual evolution by which the Divine Consciousness is to be progressively realized within material reality. After an active career as a political organizer and writer from 1902 to 1910, Sri Aurobindo arrived in Pondicherry surrounded by a handful of disciples. Gradually others joined. Eventually a community was organized for their maintenance and spiritual guidance. In 1914 a woman, named Mirra Alfassa (born in 1878 in Paris to an Egyptian father and a Turkish mother) arrived in Pondicherry and in time became Aurobindo's spiritual collaborator. From 1920 Mirra Alfassa, who Aurobindo called The Mother, came more and more to direct the material affairs of the community. In 1926, when Sri Aurobindo went into seclusion, he placed her in charge of what had become the Sri Aurobindo Ashram. From then until his death in 1950, Sri Aurobindo devoted himself to his spiritual discipline and writing.

Under the guidance of The Mother, the ashram grew into a many-faceted community. During the 1960s, it attracted many young people from Western Europe and America, who were searching for spiritual meaning and community. While Aurobindo wrote about communities that would practice his yoga, and while the Mother expressed the aspiration for such a community as early as 1954, it was not until 1968 that she founded the community known as Auroville, the "city of dawn." She conceived of it as a laboratory for the materialization of a new consciousness which Sri Aurobindo taught, a place where people of different ethnic, religious, cultural, and national backgrounds could live and work together in the spirit of mutual respect and collaboration, devoted to the discovery and practice of a Divine Consciousness they believed to be seeking manifestation. According to Aurobindo, human unity is to be achieved not by imposition or conformity but through the realization of a divine reality within which all persons are one. He taught that genuine human unity was possible only when people live not from the ego but from their essential being, which is identical with this reality.

The physical layout of Auroville centers upon an impressive architectural achievement called the Matrimandir, a spherical structure 100 feet in height, for quiet reflec-

tion and concentration. Containing at its center a large crystal globe illuminated by natural light and surrounded by meditation rooms and these by gardens, it was for The Mother “a living symbol of Auroville’s aspiration for the divine.” Radiating from the center, four zones are planned, each focusing on an aspect of community life: industrial, cultural, residential, and international. These are to be surrounded by a green belt. While much of the land needed for this plan remains to be acquired, the master plan envisions a population of 50,000.

The Mother guided the development of the Auroville community from its inception until she died in 1973. In December of 1980, after a period of conflict between the Auroville community and the Sri Aurobindo Society, the Government of India temporarily took over management of Auroville’s assets and undertakings. In accordance with the Auroville Foundation Act, passed by the Indian Parliament in 1988, it vested these assets and undertakings in an autonomous institution called the Auroville Foundation.

Following the thought of Sri Aurobindo, The Mother conceived of Auroville as a community that would practice meditative yoga, but also Karma yoga, an active yoga of work. While the thought of Aurobindo and The Mother entails a philosophy of nature that has profound implications for an environmental ethic, the early work of the Aurovilians was ecological by necessity. To realize their vision of human unity, it was first necessary to restore the ecologically degraded environment to productivity. With prodigious effort, the community planted trees, and built and repaired bunds, and checked dams. They learned and implemented traditional methods of watershed and land management. Today the community is embraced by rich forests. It is also home to the largest concentration of renewable energy technologies in India. Aurovilians are involved in research in land restoration, renewable energy systems, organic farming, and appropriate building technologies, as well as in education, health, and the arts. The community has undertaken programs of outreach to some 40,000 people who live in the surrounding area, establishing day and night schools for village adults and children. They are involved in Youth Groups and Women’s Groups in the villages in order to articulate and address local issues. Auroville doctors and workers support healthcare in the region with dental services and medical centers in a number of villages and offer classes in nutrition and hygiene. The Auroville community has addressed the falling underground water level in the area by encouraging water conservation measures and by ambitious projects to repair the massive system of rainwater tanks constructed in the twelfth and thirteenth centuries. They are also learning from local farmers about indigenous trees with which they are replacing the exotic species hurriedly planted in the early years of Auroville.

While Auroville has received international recognition for its achievements, there is no group more critical of the shortcomings of Auroville than the Aurovilians themselves. They point out that Auroville is not yet sustainable, and that with little representation from Africa, East Asia, South America and the Caribbean it is not yet fully international. They suggest that while various nationalities live and work effectively

in Auroville, differences in cultural perspectives remain a challenge. Thirty-five years after its founding, Auroville remains a work in progress.

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See also: Aurobindo, Sri; Hinduism; India; Yoga and Ecology.

Australia

In Australia's national imaginary settler *identification* with the indigenous landscape – a commitment often implicated in *reconciliation* with the descendants of Australia's original human inhabitants – has served to sacralize local place and stimulate cultural identity. While a coterie of interests (e.g., miners, farmers, environmentalists, Aborigines, tourists) continues to compete for definition and use, Australian *landscape* remains complicated territory. Yet, the collaborative concerns for sustainability, reconciliation and reenchantment apparent in the recent discourse and practice of artistic, scientific, religious, activist and regional communities indicate revision of colonialist practice. Despite continuing regimes of unsustainable growth and negligent land management, the last decade of the twentieth century saw the popular acknowledgment of unconscionable historical “truths” and commitments to the adaptive, ecological and spiritual sensibilities perceived necessary in the quest for settler legitimacy and the apparent fashioning of a “new Dreaming.”

From British settlement of Sydney Cove in 1788, Australia's landscape had been peripheral to the imperial centre, wild to the civilized, an empty, often cruel, wasteland. Claiming a land without owners, an apparent *terra nullius*, settlers were committed to *occupying* the continent: exploring, “discovering” and mapping its interior; “improving the landscape” through domestication strategies, acclimatization societies and other incidences of ecological imperialism documented in Eric Rolls' classic *They All Ran Wild* (1969) and William Lines' *Taming the Great South Land* (1991). As the newcomers “settled” the land with domesticated animals, pests, pathogens and weeds, committing to rampant resource extraction through land clearing and grazing, triggering severe salination and the decline in biodiversity in a land possessing poor soils, a stressful and unreliable climate and a fragile and interdependent ecosystem, much of Australian history post-1788 is a story of settler triumph and despoliation. From outback to alpine country, the battling bush pioneer is celebrated in this history. For instance, the cattleman, as depicted in Banjo Patterson's 1895 *The Man from Snowy River and Other Verses*, became lionized as the archetypal noble frontiersman. That the bush hero's exploits happened to displace and dispossess Australia's indigenes, often through brutal and oppressive measures, is largely elided in this history.

Postcolonialist perspectives have emerged amid a shifting consciousness, wherein, for instance, white “settlement” became reenvisioned as “invasion,” resource frontiers have been made into protected “heritage” sites, and the narratives of “noble” stockmen made subject to revision in the wake of conservation, native title and reconciliation movements. Such approaches have been triggered by a growing awareness, not only of

postsettlement history, but also of the “deep time” of prehistory. Thus while Stephen Pyne’s *Burning Bush: A Fire History of Australia* (1992) and Tim Flannery’s *The Future Eaters: An Ecological History of the Australasian Lands and People* (1995) attend to the reality of landscape, occupied, exploited and carefully managed for millennia, Rolls’ *Australia: A Biography* (in two volumes – 2000 and 2002) popularizes the geological genesis and even cosmological origins of *Gondwana* (The Great South Land). Such work, Tom Griffiths writes, recognizes nature as “an actor in history, as more than a static, physical base, as more than a cultural construct” (2000): “For 45 million years Australia has wandered in isolation across the Southern Ocean, carrying with it an ark full of ancient life forms” (Flannery, Australia Day 2002 Address). Geological and archeological findings provided evidence of human antiquity on the continent, through, notably, the uncovering of the world’s oldest known human cremation at Lake Mungo (NSW) in 1968 (the “Mungo Woman’s” remains subsequently returned to indigenous authorities). By contrast to the unoccupied “margins of the empire” to be subdued, peopled and modeled on England, or the “wilderness” championed by urban conservationists, the perception that Australia is (and was) a “humanised realm saturated with significations” (Stanner in Rose 1996: 18), a landscape already *imprinted* by those recognized as Australia’s “First People,” flourishes amidst competing perceptions. This growing consciousness has led, for example, to historian Greg Denning’s estimation that 42,000 years ago “our first people reached the southernmost point of the continent we call Australia” and, furthermore, that:

For 42 millennia all parts of this land – its rivers, its desert, its coastal plains, its mountains – have been imprinted with the human spirit. It has been filled, I would like to say, with language. Language encultures the land. Language brushes the land with metaphor. Language gives the most deserted place a history. A litany of names on the landscape beats fast, beats slow, dances in the dust, whispers in the silence (Denning 1999: 11).

Amidst the celebration of the continent’s human antiquity, we find an acknowledgment of continuing Aboriginal occupation, of living practice, and, moreover, of the requirement for intercultural exchange in the responsible management of landscape. Though far from dominant, dialogue with Aboriginal authorities is perceived as critical in establishing appropriate relationship to place. Aboriginal (and Torres Strait Islander) peoples not dispossessed of their cultural and religious heritage have, over several decades, imparted an awareness of what earlier anthropologists had referred to as a “spiritual kinship with the land,” of the celebration of life, connectedness and continuity constituting *The Dreaming*, which has been ultimately linked to “Law,” “holding” rights to country, and to that which anthropologist Deborah Rose calls an “ecological poetics of connection.” While in Aboriginal cosmologies, ancestral Dreaming beings created animals, coastal systems, deserts, forests, Alpine ranges, etc., ancestral power inheres in the natural environment, and is indeed actualized in the daily lives of Aboriginal people: in their patterns of health and sickness, in “totemic” relationships, implicated in rituals, such as “increase” and “mortuary” ceremonies, in a network of

sacred “sites,” and in the songs, painting and rock-art that maps and brings to life mythological land and seascapes.

For Aboriginal people, country is intimately connected to personal and cultural identity. Thus, for the Yolngu, Lardil and Yangkaal peoples of northeastern Arnhem Land, and North Wellesley Islands of the southern Gulf of Carpentaria, flora and fauna, bodies of water, and particular places, embody deceased ancestors and reflect genealogy and family obligations. Introducing their concept of *kanyininpa* (“nurturance”), Fred Myers has commented that for the Pintupi of the Western Desert, the practice of “looking after country” is inseparable from “growing up” people, as places “contain the vital essence and identity of human beings” (Myers 2000: 97). Based on her research of the Yarralin in the Victorian River District of the Northern Territory, Rose (1996) suggests that the prevailing message in the Aboriginal worldview is that country is a “nourishing terrain.” Those who neglect country (land and sea) may upset structures of interdependence, risking the well-being of those who depend on it for their physical and cultural survival. This understood framework of responsible placemaking is suggestive of the wealth of indigenous ecological knowledge.

The continuing history of dispossession notwithstanding, a curious historical dynamic has manifested amounting to cross-appropriation. For instance, while the “indigenization” of Christianity has revealed a process of accommodation on the part of Aboriginal people of settler society and lifeways, the contemporary adoption of indigeneity (Aboriginal religious beliefs and practices) reveals legitimacy strategies undertaken by settler Australians as part of that which Rose identifies as a “revitalization” movement, also referred to by Morton and Smith (1999) as “eco-nationalism,” whereby the land is perceived to be the source of spiritual authenticity and cultural redemption.

The remainder of this overview fleshes out this redemptive “movement.”

In recent history, “movement” commentators like historian Peter Read, author of *Belonging: Australians, Place and Aboriginal Ownership* (2000), have documented the desire for a “deep relationship” to country, a legitimate sense of *belonging* apparent in the contemporary landscape practices of non-Aboriginal Australians. In his *Hunters and Collectors: The Antiquarian Imagination in Australia*, historian Tom Griffiths (1996: 5) documented processes by which settler Australians have come to “foster emotional possession of the land,” whereby harboring respect for preexisting Aboriginal associations was the condition for *becoming* Australian. In recent decades, there has been much engagement with the capacity of local place to shape, to *nativize*, to render its settlers *chthonic citizens*, who, like indigenes past and present, adapt, or are assimilated to, the conditions of country – a country which, as eco-philosopher Freya Matthews suggests, literally “infiltrates” identity. Making an important contribution to local environmental philosophy, for Matthews, in the metaphysics of “letting things be,” place becomes interwoven with the identities of settler Australians. Moreover, in time “a place can, if we commit to it, come to accept us. We become its people. The land, or place, claims its own . . . we become native to our world” (Matthews 1999: 125). Furthermore:

Born into this intimately companionable land that has for so long been singing along, humming along, with its inhabitants, non-Aboriginal Australians might also, if we collectively pause to feel the resonance of the endlessly poetic communiqués that surround us, rediscover, in a contemporary context, some of the fundamental aspects of the Aboriginal relation to the world (Matthews 1999: 135).

Amounting to *resacralization*, the poetics of such inhabitation is a feature of the Australian arts. According to Janet Dyne (1998), exploring and articulating their place in a vast and ancient country, various poets (notably Judith Wright, Francis Webb and Les Murray), novelists, and other artists came to highlight “the overwhelming *presence* of the land, writing a humility before it.” In their “radical openness” to it, non-Aboriginal artists have been “written” by the land. And while such “openness” might parallel that evident in the work of Aboriginal writers and poets like Kath Walker (Oodgeroo Noonuccal) and Bill Neidjie, the language channeled by non-Aboriginal artists is rudimentary (1998: 123). Thus, while the Australian arts demonstrate that the poetics, politics and techniques of “loving the land” have long begun, “reconciliation will require a poiesis, a Dreaming” (Dyne 1998: 130) which remains in its infancy. In his impassioned Australia Day 2002 Address, zoologist and historian Tim Flannery exclaimed that the nation stood to grow through its adaptation to country:

Australia – the land, its climate and creatures and plants – is the only thing that we all, uniquely, share in common. It is at once our inheritance, our sustenance, and the only force ubiquitous and powerful enough to craft a truly Australian people . . . [A]fter 214 years of exposure to Australian conditions, the supposedly dominant Anglo culture is no longer truly “Anglo.” Instead it has been steeped in the dye of Australia and it is beginning to transform into something else (http://www.australiaday.com/au/tim_welcome.html).

Flannery’s inspired narrative suggests that recognizing the errors of the past and reconciling with landscape affords settler *indigeneity*. Indeed, settler-Australian reconciliation with a complex of landscape (especially the outback), indigenes and the unconscious, is regarded by the prominent Australian proselytizer of reenchantment, David Tacey, as a process of *indigenization*. In his popular *oeuvre*, *Edge of the Sacred: Transformation in Australia* (1995) and *Re-enchantment: The New Australian Spirituality* (2000), Tacey argues that while the arrogance of the dominant masculine ego ensures settler Australia’s separation from the land (ultimately “huddled” in cities built “on the edge of the sacred”), the potential for “unsettlement” nevertheless remains. As non-Aboriginal Australians become “more sensitive to place . . . psychospiritual traffic starts to move from the land towards us” (2000: 137). The “indigenizing project” identified by Tacey manifests in contemporary practices, organizations and events mediating connectedness, identity and purpose. It is detectable, for example, in committed activist organizations, electronic “Trance Dance” events and Raves, Australian Paganism, where adaptation to seasonal variations and indigenous biota sees local Pagans countering imposed myth cycles and ritual symbolism relevant to the northern hemisphere, and in urban spaces such as Melbourne’s CERES which promotes “urban reinhabita-

tion,” and is the site of the spring “Return of the Sacred Kingfisher” festival where European and Aboriginal mythological elements are adopted in a poetic and practical dialogue with the land, in a performed “commitment to home place” led by Aboriginal custodians. And the sensibility is hardly marginal as indigenization is detectable in the growing identification with native flora and fauna among urban dwellers, in regional land rehabilitation projects like Landcare, or in the mass pilgrimage to natural heritage sites and national icons like The Great Barrier Reef, Uluru or the Tasmanian southwest wilderness.

While efforts by non-indigenous Australians to “get closer to nature” often rely on a essentialized and primitivist Aboriginality not dissimilar to that endorsed by New Age spokespersons, the different projects advocated by Tacey and Matthews advance in concordance with recognition of the suffering of land and people, admitting of a sense of shame and a desire for reconciliation. In much discourse or “dialogue,” sacralization is consequent to *sacrifice*. It is perceived that a restoration of sacrality to *both* Aboriginal and non-Aboriginal people will be consequent to giving indigenous caretakers “some of our moral and legal authority over land” (Tacey 2000: 125). For the Jungian, Tacey, the sacrificial project is one of individuation, the process by which Australia will achieve spiritual maturity, a *national ensoulment*.

But the sacrificial “fight for country” of the present is a revision of earlier commitments where “king and country” were defended by loyal subjects of empire. In the work of Flannery and Tacey, the first steps toward antipodean legitimacy, toward “individuation,” and the nation’s potential to adapt and grow, is greatly assisted, if not dependent upon, the wider acknowledgement of past and present injustices experienced by Aboriginal people and local ecology. A solemn ecological awareness is being raised on the belief that, as in the poetry of Judith Wright, “[t]he wounds we have inflicted on the land and on its first peoples have also wounded us” (Brady 1998: 6), and in the perception that, as the shameful acts of the past persist in the present, Australia remains diminished as a nation. If one experiences kinship with place, with country, then one will mourn its passing, and, moreover, will be moved to sacrifice; to care for country. The process of identification is thus a powerful catalyst for altering relationship to place, for assuming custodial duties, adopting caretaking practices constituted in part by Western ecological philosophies and management practices borrowed from and endorsed by Aboriginal authorities.

In recent history, a shift in the consciousness of Australia’s non-Aboriginal population has occurred, with evidence of atonement for social and economic behavior long signifying foreignness to, and detachment from, country. Assisted by the raising of an ecological consciousness and the emergence of the “era of reconciliation,” evidence of deep identification and dialogue with local place can be found in variegated acts to conserve, reclaim and defend landscape, and in the adoption of custodial sensibilities by non-indigenous Australians. Knowledge of the simultaneous “suffering” of indigenous people and place has, in contemporary Australia, inspired a nascent cultural, political and spiritual commitment to inhabiting landscape, to belong to this place.

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Australian Poetry

The task facing people settling into a hitherto unknown place is not merely economic. They also need to imagine themselves into existence, to transform “chaos” into “cosmos,” as Mircea Eliade puts it. This task was particularly challenging for the European newcomers to Australia. Its First Peoples had lived intimately with the land and celebrated it in song, story and dance for thousands of years. But to the settlers it appeared strange, even weirdly frightening, unlike anything they had known. With flora and fauna long extinct elsewhere, it seemed to hark back to primordial times and somehow seem “contemptuous” of the “trim utilitarian civilization” they had brought with them. Here the Book of Nature seemed closed and they saw only “the strange scribblings of Nature learning how to write” (Clarke in Turner 1968: 101–2).

They believed then that they must “tame” the land and turn it into “a New Britannia in another world” (Wentworth in Turner 1968: 12). With its emphasis on order and reason, the culture the settlers brought with them lacked the impulse to explore its strangeness. So the first poets wrote in the Augustan mode, imposing its style on the unfamiliar landscape and it was not until the 1840s that, empowered by Romantic notions of the sublime, poets like Charles Harpur and, in the next generation, Henry Kendall, responded to what was actually before their eyes: the vast plains, the primeval forests, and the wild splendor of storms and bushfires. Naming this new world, however, was still a way of asserting dominance over it. Thus Kendall’s “Bell Birds” sees “the silver-voiced bell-birds” in terms of an English spring, singing “in September the songs of the May-time” (in Heseltine 1972: 69).

Essentially their concern was with reportage and, as Rodney Hall remarks, “a camera prevents miracles from happening” (Plunkett 1994: 6). Nature was to be conquered and rendered fruitful, not revered. Where its otherness was registered as in “The Creek Of The Four Graves,” part of Harpur’s unfinished epic of settlement, it brings death and is associated, significantly, with the Aborigines, “hell’s worst fiends burst howling up / Into the death-doomed world” (in Heseltine 1972: 59) who set upon an exploring party as they sleep around their campfire.

In the ballads, the folk poetry of settlement were even more determinedly secular. Their focus was on the human struggle to subdue the land, which far from being sacramental, figured as an antagonist or as a backdrop to this heroic struggle. On the one hand, the galloping rhythms of ballads like “The Man From Snowy River” exulted in triumphing over its dangers, while on the other, the interior could be seen as the

place of death and defeat: “Out on the wastes of the Never Never / That’s where the dead men lie” (Boake in Heseltine 1972: 92–4).

The gap between the human and natural worlds was widening. As it did, so the poetic imagination at the end of the nineteenth century looked to the future, turning its back on the “Dreaming” of the ancient land and the cultures of its First Peoples. The task, as Bernard O’Dowd put it in his sonnet celebrating Federation in 1901, was to transform this “last sea-thing dredged by sailor Time from Space” (In Heseltine 1972: 95) into a prosperous society in which, in Henry Lawson’s words, “there ain’t no fore and aft” (Lawson 1967: 261).

At the beginning of the twentieth century, however, Christopher Brennan struck a metaphysical note. His work had little influence at the time and his personal life was a disaster, but later poets like Judith Wright saw him as a seminal figure: “last Symbolist, poor hero / lost looking for yourself, / your journey was our journey” (in Heseltine 1972: 403).

He saw “Man . . . [as] the Wanderer on the way to the self and believed that his/her task was to take up into himself the whole world that is outside . . . and the whole world that is within” (Prose in Heseltine 1972: 45–6).

In the 1920s, Hugh McCrea, influenced by the painter Norman Lindsay, explored a vein of Nietzschean Vitalism, populating the bush with the nymphs and satyrs of Greek legend. At first Kenneth Slessor, the major poet of the 1930s, followed. But as he matured he confronted the actual rather than an imaginary landscape, sensing in it the traditional menace – “[S]omething below [pushing] up a knob of skull, / Feeling its way to air” (Slessor in Heseltine 1972: 149) – and his elegies, “Five Bells” (156–8) and “Beach Burial” (159) explore the No-Thing-Ness which had haunted the colonial imagination. R.D. Fitzgerald took a similar direction, writing about the horrors of the convict era in “The Wind At Your Door” (In Heseltine 1972: 178) and of primordial time in his long “Essay On Memory.” A.D. Hope, too, rejected the complacencies of “secondhand Europeans,” “Whose boast is not, ‘we live’ but ‘we survive’ / A type who will inhabit the dying Earth,” setting out a journey into “[t]he Arabian desert of the human mind” (in Heseltine 1972: 190) which he pursued throughout his long career. The Jindyworobak Movement led by Rex Ingamells also turned inwards attempting to draw on Aboriginal culture. But their poetry did little more than attach Aboriginal names to non-Aboriginal feelings about the land.

World War II, however, marked a transition. For the first time, non-Aboriginal Australia was threatened with invasion, and poets, such as David Campbell, Douglas Stewart, William Hart-Smith and Roland Robinson, realized how much the land meant to them and wrote about it with affection and ease. But the key figure was probably Judith Wright, managing to articulate what many Australians were feeling as death seemed to “marshal up his armies around them” (279) and the trains thundered north with guns, waking “the young men from a dream, scattering like glass / the old men’s sleep” (12) and awakening in them a sense that the land and its story was their “blood’s country” (280).

Wright was significant also because of the “feminine” feeling she brought to a tradition that had been largely “masculine,” concerned with struggle and conquest. Setting love, pregnancy, and birth in the context of the energies of the natural world, she brought a new sensibility to bear, prepared to listen to the land as to her own body and to let it speak through her. In this way for the first time in poems like “Bora Ring” (Wright 1994: 8) and “Nigger’s Leap, New England” (Wright 1994: 15) the story of the land’s First Peoples, “[t]he night ghosts of a land / only by day possessed” (Wright 1994: 354) became part of the tradition. Later poets like Les Murray were to follow. But even more significantly, Aboriginal poets, led by Kath Walker (later Oodgeroo Noonuccal) began to make their voices heard.

This was to open out areas hitherto taboo, forbidden to profane experience because of the spiritual danger attached to them. James McAuley exulted these dangers in the metaphysical explorations of “The Incarnation of Sirius” (in Heseltine 1972: 291–2) and “Celebration of Divine Love” (293–6), but also in the personal bleakness of “Pieta” (301) and “Because” (302). But the poet who was most extreme and most compelling in this exploration was perhaps Francis Webb. Troubled by mental illness and besieged by images of terror, he forged a language to explore deserts of the mind which matched the physical deserts of the interior which had so long daunted the poetic imagination.

On a less monumental scale, later poets like Gwen Harwood, Randolph Stow, Robert Adamson, Vivian Smith, Rodney Hall, David Malouf, Chris Wallace-Crabbe and Philip Hodgins (who wrote about his progress toward death from leukemia) continued this exploration and, nearly always, nature was part of it. While not formally religious, their work nevertheless is about a discovered homeland of the sacred.

Les Murray is perhaps the best known of these poets, celebrating this discovery by creating a legendary Australia, what he calls a “Vernacular Republic,” which encompasses ordinary people, giving their experience a sacral quality. He also brings to bear on the land a sensibility akin to that of traditional Aboriginal cultures, celebrating its power which many found so frightening in the past. More recently and in similar vein, John Kinsella created and exulted in a savagely powerful landscape which in his case, however, is almost too strong for its human inhabitants.

The history of the exchange between poetry, nature, and the sacred, then, has been a difficult one. For lack of it Australians have made many mistakes in their relationship with the land and perhaps also with one another and themselves. But if, as Heidegger says, it is poetically that we live on Earth, then the poets have contributed in no small measure to bring about a change and achieve the imaginative task of settlement.

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- See also:* Australia; Wright, Judith.

Autobiography

Autobiographical texts offer a fascinating window onto the intersections of religion and nature in the actual lives of individuals. In particular, the autobiographical concern with moments of change and development over the lifecourse allows readers and scholars to explore the particular pathways by which nature comes to shape or to possess personal religious meaning. How does the unique trajectory of each individual's life shape her or his construction of religion, nature, and the relationship between the two? How are religion and nature intertwined with all the other areas of a person's life – psychological development, family, social and cultural influences, historical circumstances, and personal beliefs and values? When and how in a person's life can religious traditions shape environmental experience – and when and how can religious traditions themselves be transformed by particular experiences of nature? Under what circumstances can natural beings and objects themselves function in a religious manner? Addressing these and other questions, the representative autobiographical texts discussed below illustrate the role of nature in selected religiously charged moments across the individual's life-course. (The authors discussed are from the United States except where noted.)

1. *Childhood*. In his “Ode: Intimations of Immortality from Recollections of Early Childhood” (1807), the English poet William Wordsworth provides the *locus classicus* of the idea of a special relationship between religion and nature in childhood. According to Wordsworth, “Trailing clouds of glory do we come / From God, who is our home:

/ Heaven lies about us in our infancy!” Recently present to God, the child can discern God's presence in “meadow, grove, and stream, / The Earth, and every common sight,” and thus is “Nature's Priest.” This special sensitivity to the divine in nature fades as the child grows, but even in adulthood provides the “master light of all our seeing” and the basis for religious strength and artistic creativity. Along with shaping Wordsworth's own autobiographical reminiscences in *The Prelude* (1850), these ideas subsequently have been reflected and reinterpreted throughout English-language culture and memoir. According to conservationist John Muir's recollections of his childhood in Scotland and America in *The Story of My Boyhood and Youth* (1913), “the natural inherited wildness in our blood ran true on its glorious course as invincible and unstoppable as stars”; the book emphasizes the tension between this natural childhood faith and the distorting influence of humanity (especially the repressive childrearing of Muir's father). Similarly, writer Mary Austin's *Earth Horizon* (1932) highlights her childhood awareness of a deeper and truer self, “I-Mary,” encountered exclusively in solitude outdoors or with books. More recently, in an important revision of the Wordsworthian tradition, the

supernatural or divine element has dropped out, leaving a direct religious relationship between children and nature. In her *Ecology of a Cracker Childhood* (1999), naturalist Janisse Ray recounts her family's idiosyncratic "creation story," in which each child was not born of human parents but rather found hidden in the leaves of some domesticated or wild plant; cradled in pine needles at birth, Ray would survive childhood poverty, isolation, danger, and ugliness in part through an intimate connection with the longleaf pine ecosystem that characterized her rural Georgia surroundings.

2. *Education and mentors.* Apart from (or along with) innate divinity, wildness, or ecological connection, many children come to a close connection with nature through education, often under the guidance of special teachers or mentors. Canadian naturalist Farley Mowat's *Born Naked* (1993) recounts the awakening of his sensitivity to natural beings ("the Others") with the crucial help of a long line of companions, teachers, and mentors, from the nameless, outcast "Marsh Boy" to the naturalist uncle who arranged and funded Mowat's first scientific exploration at age 16. For British ethologist Jane Goodall, the romantic and religious influences surrounding a favorite pastor of her teenage years infused her subsequent emotional life in subtle and mysterious ways; moreover, her *Reason for Hope* (1999) emphasizes the importance of mentors during adulthood, from renowned anthropologist Louis Leakey to the chimpanzee she called David Graybeard, who chose

(consciously, Goodall thought) to invite her into a mutual exploration of his world. In non-Western societies, education and mentoring often take place through family and cultural tradition. In *The Names* (1976), writer N. Scott Momaday must tell the stories of his Kiowa, Cherokee, and white forebears as the integral center of his own origin; when he begins to emerge as an individual, beginning at age twelve, Momaday's existence is further shaped profoundly by the landscape and culture of the Jemez pueblo where he then lived, along with the continued presence, stories, and art of his immediate family. Stressing more explicitly intellectual and ethical dimensions, Mahatma Gandhi's *Autobiography* (1927) explores the future political leader's lifelong pursuit of truth, *satyagraha*, in various familial, social, and personal circumstances, with the treatment of animals and other living beings serving at many key points as a challenge and touchstone of his moral and religious development.

3. *Insight and conversion.* In adulthood, the natural world often serves as a setting or object of spiritual insight or conversion. Puritan theologian Jonathan Edwards, recounting his conversion in his "Personal Narrative" (1765), portrays the joy and power of his connection with God as reflected in the "sweetness" of his heightened perception of the natural world. In other memoirs, such as John Muir's *My First Summer in the Sierra* (1911), conversion is understood not so much with respect to God as to the divinity and beauty within wild nature itself: "We are now in the mountains and they are in us, kindling enthusiasm, making every nerve quiver, filling every pore and cell of us." An equally powerful but more ambiguous environmental awakening takes place in writer Jean Toomer's semi-autobiographical *Cane* (1923), in which the Washington, D.C.-born protagonist's encounter with the red dirt and smoky sunsets of

Georgia evokes a visceral sense of connection with his Southern and African blood and heritage. Moving beyond the human, Aldo Leopold's *A Sand County Almanac* (1949) includes the famous autobiographical vignette "Thinking Like a Mountain," in which an encounter with the "fierce green fire" in a dying wolf's eyes crystallizes Leopold's transformation from trigger-happy young hunter to environmentally aware ecologist.

4. *Commitment to place.* With or without such moments of conversion, an adult decision to commit oneself to life in and with a specific place can carry profound religious roots and meanings. The first half of *A Sand County Almanac* illustrates Leopold's increasing awareness of and commitment to a specific patch of land, his "shack" in central Wisconsin, over a full calendar year, in a mutual relationship of education and healing; this genre of the "observation of the country year" constitutes a major tradition within American nature writing, from Susan Fenimore Cooper's *Rural Hours* (1850) and Henry David Thoreau's *Walden* (1854) to Sue Hubbell's *A Country Year* (1986) and others. For memoirists such as Wendell Berry (*The Long-Legged House*, 1969) and David Mas Masumoto (*Epitaph for a Peach*, 1995), a return and recommitment to a family farm allows the possibility of healing soil, self, and society by (in Masumoto's words) "trying to farm in a new way, working with, and not against, nature," grounded in family tradition and local wisdom but open to new knowledge and challenge from the wider world. Less ecological, more aesthetic, poet Kathleen Norris's *Dakota* (1993) parallels the spiritual influence of the harsh, sparse, beautiful landscape of the northern plains with that of ancient and modern monastic life; within both settings, one has a chance to be "alone with the Alone." Whether understood through explicitly religious language and traditions or not, commitment to place offers a spiritual center for life, an opportunity for "making a home in a restless world" (the subtitle of Scott Russell Sanders's *Stay- ing Put*, 1993).

5. *Affliction, death, and healing.* In many lives, religious power and solace emerge with special poignancy at times of affliction and illness, and the natural world can provide both context and content for such encounters. To be sure, in the Christian and Jewish traditions (from Job on), natural events (drought, storm) or landscapes (desert, wilderness) are themselves metaphors or vehicles of affliction at the hands of an angry, judgmental, or inscrutable God; Mary Rowlandson, in her *Narrative* (1678) of captivity by Native Americans during King Philip's War, recounts her trials and hardships in the "vast and desolate wilderness" outside the towns of the English colonists. However, "even as [God] wounded me with one hand, so he healed me with the other," and sometimes this healing comes through the natural world, as she becomes increasingly adept at foraging for food and medicinal herbs. In much recent memoir, the natural world becomes more straightforwardly positive as a place of solace and healing: in Sally Carrighar's *Home to the Wilderness* (1973), as a source of emotional healing from a series of childhood and young adult stresses and traumas. In *Refuge* (1991), Terry Tempest Williams attempts to turn to the beloved birds and landscape of the Great Salt Lake as source of strength and solace in the face of her mother's cancer and eventual death; her quest is complicated, however, because the natural environment is

itself undergoing change and damage as the result of both natural and human processes. Moreover, until the probable radioactive origin of the cancer from atomic bomb tests is revealed, Williams and the reader are led to consider cancer and death as themselves natural processes, to which the spiritual response is conformation, not opposition. As with all these texts (and lives), a brief summary can scarcely capture the complex layers of meaning and mystery of engagement with nature at such personally and religiously charged moments of human existence.

6. *Encounters with environmental damage.* As

Williams suggests, in the modern world nature is not only a cause or context of human affliction but is itself also subject to affliction at the hands of humans, and encounters with environmental damage can serve as moments of religious meaning and ethical transformation in individual lives. Often this takes the form of an awakening to environmental activism, as in Lois Gibbs's *Love Canal* (1982), the near-archetypal account of a regular citizen moved to political action to defend her family and neighborhood from toxic industrial pollution. For Jane Goodall as for Katy Payne (*Silent Thunder*, 1998), unorthodox scientific study of chimpanzees and elephants, respectively, fosters a sense of personal relationship with individual animals and communities; when outside forces lead to the drastic culling of these animals, these scientists' careers and lives are sharply reoriented toward overt activism. By contrast, other activist autobiographies – for example, those of Janisse Ray and David Brower (*For Earth's Sake*, 1990) – do not center on dramatic awakenings but rather on lifelong concern with beloved yet threatened landscapes (Southern longleaf pine forests and Western mountain wilderness, respectively). Whether arrived at through dramatic transformation or gradual development, environmental concern and activism can itself constitute a religious practice or center, giving strength, direction, and meaning to an individual's life. Here as at the other moments of the life-course discussed above, a variety of specific factors – historical circumstance, psychological development, cultural context, individual creativity, and other-than-human presence – merge in the creation of a unique personal and religious reality.

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Ayahuasca

Ayahuasca is a word from the *Quechua* linguistic family of Andean-Equatorial South America. It means “vine of the soul” and refers both to a large forest liana (*Banisteriopsis caapi*), and a strong decoction (tea extract) made from its woody parts, or with one or more other plant admixtures. The most usual addition to the brew are leaves from the shrub *Psychotria viridis*. These plants are endemic to the Amazon Basin, where they are part of a much larger *plantas maestras* or “teacher plants” tradition native to that part of the world. Such plants – many of which have emetic, purgative, cathartic, dream-inducing and/or visionary effects – are used to facilitate states of consciousness that are believed to open into the worlds of spirit.

In the typical *ayahuasca* preparation, the molecular basis for this lies in the betacarboline complex (harmine, tetrahydroharmine, etc.) and the indole dimethyltryptamine (DMT). These are part of a structural group that includes neurotransmitters, molecules used to effect internal communication in the human body. In *ayahuasca*, these dialogues are deepened and expanded to include all manner of elemental, plant, animal, ancestor, and deity. These then appear less as an “other,” and more as participants in the metabolisms of yet larger bodies, such as regional ecosystems, or the Earth itself.

Such organismic cosmologies are common to many indigenous peoples. These often suggest the existence of a reality *a priori* to material existence, one of mythic causality in which all beings are mutually transformative and exist as ontological equals, as “persons.” Dialogues with such a world are effected through imaginal exchanges (dreams and visions), dance, prayer, song, and their attendant feeling states and sensory awareness. These describe the body’s capacity to converse with what is presumed to be the affective life of the natural world. *Ayahuasca* allows access to this generous bandwidth of communication, and its repeated use cultivates familiarity with the ecology of souls that inhabit it.

Sophisticated eco-cosmologies have therefore evolved among Amazonian peoples around the use of *ayahuasca* and other *plantas maestras*. These tend to order such practical activities as healing, divination, procreation, and hunting within the concept of an all-encompassing fertility circuit. This view understands the world to be nourished by a finite supply of vital force that must be equitably shared. Human greed, waste, and disrespect can easily disrupt this flow, and the repercussions are thought to express themselves in personal and social ills. Spirituality and medicine are thereby integrated into various social norms that tend to preserve ecosystem integrity. Examples include food, sex, and hunting taboos, and the cultivation of kinship relations with plants and animals.

The world of nature as revealed by *ayahuasca* typically appears as a society, a culture of spiritual relations. The teachings of *ayahuasca* are acts of healing, remediations in energy flow and balance whereby one “becomes” the lessons. One so healed may then enter into transformative relations with larger organizing forces, with greater ecosystemic intelligences, which in turn tend to increase human self-consciousness, inspiration, revelation, and sense of mission. When these traits are understood within the context of spiritual evolution, *ayahuasca* takes on a religious significance. These traits are often understood as promoting spiritual evolution and thus contribute to *ayahuasca*’s religious significance.

The idea of healing body and soul is often central in religion in diverse contexts, and one can conjecture that the supplication of humans to the healing power of nature is the source of much of what we know as religion. In this regard, the role of plants and fungi in the origins of religions has been explored by a number of authors. Perhaps the most well-known example is *Soma*, the mysterious plant (or fungus) recounted in the Hindu RigVedas as a vehicle of religious ecstasy.

Plant-inspired religions can be understood as acts of guidance by an elder community of species to a younger one, the human. They are concerned with successful cocreative relations within the community of nature and the organismic and spiritual growth that these bring about. Such religions allow the initiate to cultivate an expanded sense of self, whereby one’s actions in the world are reviewed in experiences of right or wrong, heaven or hell. This often results in a greater awareness of, and respect for, the spiritual ecologies that govern the world.

Such understandings were lost to much of religious life as humanity civilized itself into increasingly monospecies (exclusively human) social arrangements and dialogues. Politicizing, intellectualizing, and influences that move divinity off-planet have all played their roles in denaturing the religions that have coevolved with Western industrialism.

However, a reformation of plant-inspired religions has been occurring since the late 1800s. These often come of syncretizing influences in places of sudden and disruptive culture change. Examples include the evolution of the use of peyote (*Lophophora williamsii*) into a pan-Native American religion; and the creation of churches that employ iboga root (*Tabernanthe iboga*) in colonized central west Africa. Similarly, *ayahuasca*-based churches were born in the Amazon basin with the influx of colonists and forest extractivists.

In the late 1920s, a rubber tapper named Raimundo Irineu Serra, or Master Irineu as he came to be called, had a series of visions in the forests near Acre, Brazil brought on by his use of *ayahuasca*. In these he was visited by the Queen of the Forest in the guise of the Virgin of Conception. Through her he received the doctrine of a new religion based on spiritual healing. *Ayahuasca* took on the name of *Daime*, after the invocation *Dai-me Amor, Dai-me Luz . . .* (“Give me Love, Give me Light”), and the religion became known as *Santo Daime*. Master Irineu moved to the nearby town of

Rio Branco in 1930, and there began to cultivate this religion with a small group of adherents.

A number of hymns began to be received by church members in the form of “singing murmurs,” which were considered to be gifts from higher worlds. They invoke an eclectic pantheon that includes Old and New Testament figures and various saints, spirits of sacred plants, forest animals, devic presences, and heavenly bodies. These, along with accompanying musical instruments and formalized dancing, became an important part of church ceremonies and source for doctrinal development.

As the religion grew in Brazil, it spread from rural caboclo (mixed-blood river dwellers) communities into new settings and populations. These include the urban middle class, health professionals, and intelligentsia, as well as more marginalized groups, such as drug addicts (the churches have become well-known for their work in helping people to overcome addictions), counter-culturalists, and the urban poor. This growth stimulated the formation of sects. For example, the *Barquinha* (“little boat”) group emerged in the 1950s; it accommodates aspects of the very heterogeneous *Umbanda* (mediumist) spiritualism.

Yet another rubber tapper, Jose Gabriel da Costa, encountered the use of *ayahuasca* with native Indians in the forests bordering Bolivia and Brazil. In 1961, he founded the U.D.V. (*União do Vegetal*), which soon spread into the urban south of Brazil. Among the more hierarchical and organizationally sophisticated of the *ayahuasca* religions, the U.D.V. stresses a less active service, with long periods of silence interspersed with conversational sharing.

Despite differences, all churches share similarities that derive from the integrative nature of *ayahuasca* itself. It is considered a sacrament, and like its predecessor *soma*, a divinity, both Christ’s blood, and a forest spirit. The replacement of the bread and wine Eucharist with *ayahuasca* brings an eco-spiritual force into communion with Christian saints and their prescriptions of love, peace, charity, and fraternity. By unifying the naturalized and the civilized, it appears to work as a bridge over the 500 years of culture clashes wrought by the colonialist enterprise. In this way, it births new cultural forms of indigeneity, ways of belonging to the land that reflect the needs of the various peoples brought to it.

A notable example is the 1982 founding of a community called *Vila Céu do Mapiá* (Mapia) by *Santo Daime* church members. Located in a large forest reserve in the Brazilian state of Amazonas, Mapia is intended as an ecological-communal social laboratory where the teachings received through the *Daime* can be practiced in daily life.

The world affirmed by *ayahuasca*, and indeed by all teacher plants, tends to run contrary to that enacted by industrial-growth cultures. Hence, those individuals that convert often become less amenable to mainstream mores, values, and ways of life. The media in Brazil and elsewhere have observed this, and in recent years have accused the churches of contributing to the breakdown of society; this by inducing its followers into acts of fanaticism, such as leaving one’s city life and disappearing into the forest.

Antipathy to the forces of change unleashed by sacred plants is likewise reflected in the modern War on Drugs. Under international pressure, Brazil added *B. caapi* to its list of controlled substances in 1985. Following a series of appeals and investigations it was removed from the list with provisions in 1987, and fully exempted in 1992. In that year, its legitimacy was celebrated with *ayahuasca* ceremonies featured as part of the inter-religious vigil of the Global Forum section of the Earth Summit conference in Rio de Janeiro.

As the use of *ayahuasca* spreads outside of Brazil, it continues to run into prohibition policies. In recent years, the churches in Europe and the U.S. experienced a number of seizures and arrests. Many court cases are pending, though a decision on 21 May 2001 in the Dutch court acquitted the *Santo Daime* church under the constitutional right to freedom of religion.

Modern ayahuasca religions are born both of the sylvan cosmos and a humanity sundered from that world. They therefore have great implications during this era of ecological crisis. To reestablish communicative relations with medicinal plants is to reconnect with a perennial source of assistance to humans. What such plants can do for individuals, they can do for communities; in this way they engender healing cultures. This process continues in Brazil (e.g., the Centro de Cultura Cósmica has recently sprouted from both Santo Daime and the U.D.V. influences) and in other areas of the world, where such movements are more covert.

These religions are prophetic in considering themselves microcosmic realities of a future-healed Earth, yet for them, the future is now. They presume that as more people awaken to this reality, a relational indigeneity appropriate for the times will become increasingly accepted as a new cultural norm, and the planetary crisis will then pass. This vision is millenarian in scope, and suggests the inevitable evolution of a heart-opening ecotopia. To this end, a Daime hymn sings of a “new life, new world, new people, new Earth.”

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See also: Amazonia; Andean Traditions; Entheogens; Ethnobotany; Peyote; Rubber Tappers; Radical Environmentalism; Transpersonal Psychology; Umbanda.

Aztec Religion – Pre-Columbian

In accordance with other meso-American traditions, the Aztecs experienced “nature” in all its complexity not as a mere mundane entity out there, but rather as deeply connected with superhuman powers and beings, manifesting themselves in countless aspects of the surrounding world and a sacred landscape. Earth itself, for example, could be viewed as a grand living being, and in pictorial manuscripts it is often depicted as a monstrous caiman with devouring mouth(s); hills are conceived as vessels containing subterranean waters, with caves as sacred entrances. But from the beginning of creation and the origination of life, human activity and destiny is intertwined with an unstable interplay of living cosmic forces, according to the Aztec cosmovision, and human coping had to take place through a variety of ritual forms, since nothing would grow, nothing would endure, if “our Mother, our Father, Lord of Earth and Sun” would not be nourished continuously by ritual and sacrifice.

1) Sacred Topography: From Mythic Origins to a New Center of the World

Narrative accounts from the Precolumbian Aztec tradition trace the history of the “*Mexica*” back into mythic beginnings. As in other mythic records, especially of culturally and linguistically related peoples of the Uto-Aztecan language-family, the creation(s) of human beings – or life, generally – took place in the subterranean bowels of Earth: the Mexica are said to have finally “surfaced” at, or through, “seven caves” (*Chicomoztoc*). Other sources speak about a primordial dwelling on an island called “*Aztlan*” (“White Place”, “Place of Dawn/Origin”), and from this mythic location, probably somewhere in northwestern Mexico, they started a long migration (ca. 200 years) southward in the eleventh/twelfth century. Roughly echoing the traceable history and dissemination of the *Nahuatl*-speaking Aztecs from North to South, these legendary wanderings led them via Coatepec (the mythic birthplace of the important tribal and warfare numen *Huitzilopochtli*, “Hummingbird of the Left” or “South”) and the ancient Toltec City of Tollan finally to Lake Texcoco (Tetzcoco) on the central plateau of Mexico, where they first dwelled near Chapultepec, and then in Tizapan. Upon *Huitzilopochtli*’s divine advice, the new and final residence Tenochtitlan (the center of today’s Mexico City) was established on a small island in Lake Texcoco during the fourteenth century. Within a very short time, this shaky Aztec settlement expanded into a gigantic metropolis absorbing Tlatelolco on the neighboring island, with allied

city-states on the shores, and manifested itself as the center of an impressive empire stretching already from coast to coast in the early sixteenth century.

Especially the culture-contact with the (remnants of the) Toltecs, generally admired as “the” grand culturegiving predecessors, had a major impact on the wandering Mexica, who would now look back on their former lifestyle as that of rough “Chichimecans,” of pure hunters and gatherers. Now, upon their arrival at Tenochtitlan, they applied the construction of *chinampas* (the famous “floating gardens”) for an abundant cultivation of crops on the muddy shores and lagoons, for example, and they adopted the Toltec sacred architecture in building huge pyramidshaped temples. The natural location of Tenochtitlan in the middle of a salty lake also proved strategically safe for the originally small bond of Mexica, especially since the island had fountains supplied with fresh water. But with the fast growth in size, water supply became a problem for the “Tenochca” (another name for the Mexica); accordingly, an impressive aqueduct from the springs of Chapultepec was constructed. On the other hand, dikes had to be built and foundation walls had to be raised, since Tenochtitlan and Tlatelolco had been subject to severe floods every now and then during the rainy season.

2) Cosmology, Divination, and Calendar

The communal life of the Tenochca, as well as the construction of their society, was deeply intertwined with religious and cosmological beliefs. Similar to other Amerindian and meso-American traditions, the Mexica believed that other worlds (“suns”) had existed before this “fifth sun.” Complex ritual strategies on all societal levels had to safeguard life in all its forms from the lurking dangers of chaos and destruction – dangers which, obviously, had already ruined the grand city-states of the past (Teotihuacan, Tollan). Therefore, one finds a strong notion of omnipresent peril, sometimes even pessimism, in Aztec poetry, and a strong sense that the life cycle of this sun and of the rich center of power and life in Tenochtitlan might also come to an end in the near future.

Therefore, divination, astrology and the general interpretation of “frightening omens” (*tetzauitl*) were important means to be warned of possible imminent perils. The famous “Book XII” of Sahagún’s *Historia General* gives an impressive account of such “bad omens” preceding the arrival of the Spanish conquistadors (cf. opening paragraphs of *Broken Spears*). Before the start of any important enterprise, one would consult the “counters of days” (*tonalpuhque*), special priests with sound knowledge of calendars and astrology. With reference to the vigesimal (based on the number 20) system of the *tonalpohualli* (“day count”) calendar, one had to be careful, for example, that the baptismal ritual of a newborn child would not fall into one of the “bad” days: the “sprinkling of the head with water” (*nequatequilitzli*) was postponed, accordingly, until a good combination of one of the 20 day-signs and numbers (1–13) was at hand.

Based on their astronomic tradition, the Aztecs knew the solar year of 365 days (*xihuitl*), but the logical combination of 20 day-signs and 13 numbers led to an artificial *tonalpohualli*-cycle of 260 days (perhaps an allusion to the human period of pregnancy?), which served basically as a divinatory tool as explained in the “Book of the Days.” The synthesis of both *xihuitl* and *tonalpohualli* resulted in 5 “superfluous, useless” (*nemontemi*) days per year – which were strongly associated with misfortune (18 portions of 20 days = 360; plus 5). Shifting 5 days per year, the start of every new year would move only between 4 (out of the 20) day-signs, resulting altogether in a logic period or “age” of 52 years (13 numbers \times 4 day-signs = 52), before another distinct 52-year “cycle” would commence. And at the end of every such “age,” it was always possible that this world might now arrive at its termination and annihilation: this was the fear during the final dark night after the last five *nemontemi* days of an age, when all the fires had been extinguished, and when new lifegiving fire had to be “drilled” on the chest of a sacrificed human with the trembling hope that the sun might eventually have enough power to rise again – for another age.

3) A Pantheon of Life-sustaining Forces and Divine Beings

Life is perceived as continuously endangered in the Aztec cosmos, but as a guidance for coping with the hassles, challenges and dangers of life and nature, the Mexica developed a differentiated, cumulative “way of life” or “religious tradition” (verbal nouns of “to live” and “to be,” like *nemilitztli* or *tlamanitiltztli*, are used to denote the normative tradition of “culture-religion-law”). And their huge pantheon of numina, divine powers or gods (*teotl*) indeed covers all aspects of cosmic forces and powers of nature with its polymorphic and often overlapping hierophanies. Some of the numina have a special, prominent status – like Huitzilopochtli and the important raingod Tlaloc, worshipped together on Tenochtitlan’s huge double-pyramid “Templo Mayor.” Others serve specific functions – like Yacatecutli, “Lord in front,” revered almost exclusively by the wandering merchants. In some cases, the highest source of life seems to transcend the polytheistic pantheon, and it can be addressed with singular or dual names: One striking name is *Ipalnemoa(ni)*, “(the one) through whom one is living” (Life Giver), or *Tloque Nauaque*, “omnipresent one.” In dual form, one can speak of *Ometecutli Omeciuatl* (“Lord and Lady of Duality”), denoting the ultimate ground of life and growth, as well as the great celestial source of the human “soul”: “We, being subject servants, from there our soul comes forth, when it alights, when the small ones are dropping down, their souls appear from there, Ometecutli sends them down” (Sahagun in Lanczkowski 1984: 39). Such a divine source can also be addressed as “old,” “true” or “sole God” (*icel teotl*), or as “Father and Mother” of all gods/numina: “Mother of Gods, Father of Gods, old God, inside Earth you dwell, surrounded by jewels, in blue

waters, between the clouds, and in the sea” (Lanczkowski 1984: 40). A binary aspect of the divine source of being and of natural sustenance is “Lord and Lady of our flesh” (*Tonacatecutli Tonacaciuatl*), bringing forth corn and all life-sustaining food.

Reflecting their prominent status in veneration, some of the more concrete personal numina in the polytheistic pantheon could also be addressed with such predications, be it the Trickster *Tezcatlipoca* (“smoky mirror”) the firegod *Xiuhtecutli* or the famous *Quetzalcoatl* (“feather serpent”). But it is also important to note that the “borders” of the Aztec numina are often permeable, as well as the borders between divine and human nature (i.e., between a god/numen [*teotl*] and its living human representative, the so-called “image” [*ixiptlatli*] or “god-carer” [*teopixqui*; generally translated as “priest”]). In many instances, the *ixiptlatli* is truly *identified* with the god/numen: he not only wears the attributes, but he actually “is” Huitzilopochtli, Tlaloc or Xipe Totec (etc.), he “is” the *numen praesens* – the actual earthly impersonation of god. This so-called “nagualism” (from azt. *nahualli*, “disguise”) implies a simultaneous existence of the human nature with the divine being, power, or person (as well as with certain mythologically important animals, like the jaguar). This becomes apparent in the mythic accounts of the Aztec wanderings under the leadership of the “first” *Huitzilo-pochtli*, where human and divine aspects obviously merge, or in the narrations around the famous (originally Toltec) numen and priest-king *Quetzalcoatl* of Tollan, who had a strong impact on Maya traditions as well. But in the case of captives who were to serve as human sacrifices, it is also reported that they did in fact represent the numen as “true” and “living god” until their ritual death. This becomes most evident in the case of the *Toxcatl*-ritual. In this ritual a captive served as living *ixiptlatli* for *Tezcatlipoca* for a full year. He was actually venerated and adored as “Lord” and living *Tezcatlipoca* during this time, but with the end of the year he was ritually killed and immediately replaced by a “new image” of god.

4) The Preservation of Nature Through Ritual and Sacrifice

Since the cosmic order is “shaky” according to the Aztec cosmovision, humans have to preserve and safeguard this cosmos and its life-sustaining forces by continuous ritual practice. An obvious, worldwide representation of the natural forces of life is blood, and this view is very dominant and consequential in the Aztec case. As in their paradigmatic myth, when the old gods had to sacrifice themselves in the darkness of Teotihuacan, when they had to shed their own blood in order to get the fifth sun moving, in the same way it is necessary for the Mexica to keep “sun” Tonatiuh moving by a repetitive and ceaseless supply with the so-called “precious liquid” (*chalchiatl*) of human blood. Likewise, several individual rituals of repentance or protection implied ritual woundings for the drawing of blood (e.g., in the ears). To be sure, blood sacrifice was not the only

form of ritual; the Aztecs also used flowers, burnt offerings, copal resin (incense), dance and music, but as the term *chalchiuatl* already implies, human blood was supposed to be the most “precious” and efficient life-sustaining offering. The extreme numbers of ritual deaths, handed down via Spanish sources appear definitely exaggerated, but there can be no doubt that human sacrifice was an important, significant and – at least in the beginning of the sixteenth century – quite abundant ritual method to keep the forces of nature alive. For example, a special ritual warfare, the so-called “flower war” (*xochiyaoiotl*) had to be institutionalized on contractual basis between the city-states of the Aztec empire, simply to meet the increasing demand for supply with captives for sacrifice.

As in other cultures, such human sacrifices seem to be dominant in cases of divine beings associated with the powers of fertility, sun, rain and vegetation.

The tribal god *Huitzilopochtli* clearly carries solar traits (apart from warfare), and his myth tells of a primordial sacrifice, when he killed his lunar sister *Coyolxauhqui* and smashed her at the bottom of “serpent hill” (*Coatepec*), a myth which had to be ritually performed and reactualized on *Huitzilopochtli*’s festival (excavations at the bottom of *Templo Mayor* uncovered a huge relief plate with her smashed body).

The distinct sun-god, however, was “Sun” *Tonatiuh*, often depicted with red face and body. Burnt offerings, flowers, and especially human sacrifices were used to keep “Sun” on course. *Tonatiuh* was supposed to dwell in the “house of the sun in the sky” (*ichan tonatiuh ilhuicac*), a paradisiacal place and a very attractive postmortal region. In Aztec faith, the form of afterlife was solely determined by the form of death, and not by any moral behavior. All warriors who died on the battlefield and all the ritually sacrificed ones would be allowed into this solar paradise – as well as all women who died during confinement, since they were looked upon as warriors “acting in the form of a woman.” They accompany the sun daily, and after some time they would be transformed into various beautiful birds or butterflies: like hummingbirds, they would be sucking the flowers in the sky and on the Earth.

Tlaloc is the second most important god of the Aztec pantheon, representing Earth’s fertility through water and rain. Accordingly, his nature – as well as that of his wife *Chalchihuitlicue* – was ambiguous, like the nature of water itself (fertilizing or flooding). As in the case of *Tonatiuh*, another distinct postmortal region was associated with this deity in the rain-cloudy hills (*tlalocan*): All people who died in floods or thunderstorms (e.g., by lightning), or in connection with festering wounds (i.e., liquid), would proceed into *Tlaloc*’s paradise with permanent summer and abundant vegetation.

A Song of Sorrow – *icnocuicatl*

We know it is true that we must perish, for we are mortal men.

You, Giver of Life, you have ordained it...

We wander here and there in our desolate poverty. We are mortal men.

We have seen bloodshed and pain, where once we saw beauty and valor. We are crushed to the ground, we lie in ruins in Mexico and Tlatelolco, where once we saw beauty and valor.

Have you grown weary of your servants, are you angry with your servants,

O Giver font-family:”Bookman Old Style”,”serif”;mso-hansi-font-family: Calibri;mso-hansi-theme-font:minor-latin;letter-spacing:-.6pt’> of Life?

From: The Broken Spears

5) Earth’s Vegetation, Plants and Flowers

Within the agricultural context of Aztec society, the different forms of vegetation – as well as their divine representations – had a prominent status in ritual. The god *Xipe Totec* (“Our Lord Flayer,” “Our Flayed Lord”), generically representing spring and vegetation, was mostly depicted wearing a flayed human skin – a lucid symbolic representation of Earth’s new “skin of vegetation” in spring, but also a clear hint to the ritual flaying of human victims related to this godhead. Such bloody rituals took place on the festival *Tlacaxipeualitzli* (“flaying of people”), where captives were skinned and their hearts were cut out, presented up to the sun in order to “nourish” the sun, while the living “images” or “impersonators” of Xipe Totec, called *Xipeme*, would walk around, wearing the skin of the flayed ones. Among the female deities, those of Earth, fertility, sexuality and destruction are the most important. There are Mother of Earth or “Mother of Gods” (*Teteo- innan*) deities, such as the old (Huastecan) Earth deity *Tlazolteotl* (“Eater of Filth”), associated with procreative powers and lust, and important in rituals for repenting adultery, fornication, etc., *Xochiquetzal*, representing love and desire, and associated with flowers and festivals, or *Coatlíque* (Huitzilopochtli’s mother), with devouring, destructive aspects. *Tlazolteotl* can also be depicted with a flayed human skin (like *Xipe Totec*), and her *ixiptlatli* was ritually flayed in the “thanksgiving” festival of autumn, where she – after meeting with the sun – gave birth to the corn god in a ritual drama.

Several major plants were personified by special numina. The culturally important maize (*cintli*), for example, had male and female divine representations, like “Corn God” *Cinteotl* (or *Centeotl*) and, among others, *Chicome Coatl* (“Seven Snake”), a prominent goddess and generic embodiment of edibles. Goddess *Mayauel* represented agave and, together with other specific pulquenumina, its fermented product, pulque (*octli*). But as a matter of fact, the Aztecs were very rigid in allowing access to alcohol, its abundant use being restricted to elder citizens. Apart from feathers (esp. of the beautiful Quetzal bird) or jade, flowers (*xochitl*) were of special aesthetic and metaphoric significance in the Aztec culture. Cultivated in rich abundance and serving as a common ritual donation, flowers were not only synonymous with “joy,” but also with “songs.” Hence, the flower theme appears in many lyrics (*Cantares Mexicanos*), especially in

the “flower song” (*xochi-cuicatl*) and “bereavement song” (*icno-cuicatl*) dealing with death, impermanence and the re-creation of life through music and dance.

6) Underworld, Death and Tenochtitlan’s Final Destruction According to Aztec cosmology, all the “normal” dead – even the great kings – had to go to Mictlan, a subterranean place of unattractive afterlife with dark and rather frightening features. The inevitable destiny of this “mysterious land,” or “land of no return,” inspired many songs:

No one is to live on earth . . . Will you go with me to the Place Unknown? Ah, I am not to carry off these flowers, singer that I am. Be pleased. You’re hearing my songs. Ah, singer that I am, I weep that the songs are not taken to His Home, the good flowers are not carried down to Mictlan, there, ah there, beyond the whirled ones (Cantares Mexicanos, cf. Bierhorst 1985: 225).

In several of these songs, the vulnerable nature of life on Earth and the inescapable character of death appear, combined with the sense of a deep remoteness of God:

We will depart! I, Neçahualcoyotl, say: “Be cheerful!” Do we truly “live” on earth? Not for all time on this earth, but only for a little while. There is jade, too, but it crushes, even gold breaks, ah, Quetzalfeathers crack. Not forever on this earth . . . What does Ipalnemoa [Life Giver] say? Not any more, in this moment, is he, God, on his mat. He is gone, and he left you behind as an orphan . . . (Cantares Mexicanos, cf. Bierhorst 1985: 185).

With the final destruction of Tenochtitlan/Tlatelolco by the Spanish in 1521, the Aztec empire and “cosmos” was literally coming to an end. Sahagún’s long-lost document on the interreligious “dialogues” (*colloquios*) between twelve Franciscan brothers and several Aztec nobles and priests in 1524 contains a moving paragraph where the Mexica, before entering into a bold response, are putting their own annihilation together with the recent “Death of God”:

What is it now, what should we say now? . . . Are we something? Only unimportant subjects we are, full of earth, full of excrements . . . We are perishable, mortal. Well then, let us die! Well then, let us perish

– even the gods have died as well! (Sahagun 1949: 101).

Andreas Gruenschloss

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See also: Cihuacoatl – Aztec Snakewoman; Virgin of Guadalupe.

B

Back to the Land Movements

American “back to the land” movements and practices span the historical period of the mid-nineteenth century to the present, with notable peak periods occurring at the turn of the century, from the late 1920s through the Depression, after World War II (particularly in the late 1960s and early 1970s) and again in the mid-1990s. The significance of these activities (often too diverse and individualistic properly to be termed “movements”) is best understood, first, in terms of a broader history of the cultural construction of nature that bears briefly noting.

Intellectual History

The idea that a pastoral or wilderness setting can serve as a morally purifying force is an ancient one. In different historical, cultural and religious contexts, the retreat to nature (or wilderness, or “the land”) appears in different forms, is acted out in particular ways (usually through a self-conscious reduction of human needs and a simplification of daily life) and is often understood to be a means of both personal and cultural reform. From biblical texts to Virgil’s *Eclogues* and medieval theological writings, Western religious and philosophical concepts of nature, while ambivalent, have included attention to the natural world as the appropriate context for inner contemplation and, at times, for the creation or reformation of community.

The long-standing theme of nature as the site of spiritual retreat, as a proper place for personal, moral reformation, and as a context for the modeling of new forms of community (over against the social status quo) all reappear in the American context where, from the time of the first colonial settlements, “uncivilized” nature was simultaneously conceptualized as a demonic wilderness to be conquered, an unsullied garden of Eden to be enjoyed and a physical and spiritual testing ground where God’s “afflictions,” as well as God’s grace, could be directly experienced. While the Puritans sought to control nature more than to commune with it, their understandings of their divinely-ordained “errand into the wilderness” helped shape later American responses to nature, including the desire to leave settled environments and live “close to nature” as a form of spiritual challenge and renewal.

Beginnings

Henry David Thoreau can be said to be the first authentic “back-to-the-lander” in two senses. First, although his retreat to the woods was temporary, he was the first influential thinker and writer to advocate (and enact) a retreat to the woods as being *itself* a form of spiritual reformation. Prior to Thoreau’s experiment at Walden, American Christian thinkers had seen pastoral and wilderness settings as appropriate *contexts* for direct, personal experience of the divine presence (although the leaders of Christian institutions emphasized that private retreat into the woods should not replace the communal, public hearing of the Word in official church meeting-places). Thoreau was the first known writer, however, to make a post-Christian argument in favor of dwelling close to the land as an alternative to both the social and religious conventions of his day. In Thoreau’s reading (and experience) of nature, nature is no longer a setting or metaphor for Christian narratives of fall and redemption, but is *itself* interpreted as a means of personal and spiritual growth. Secondly, Thoreau’s retreat to Walden is historically a modern response to the growing threats of industrialization, urbanization and commercialism in the mid-nineteenth century. His own efforts were mirrored by other Transcendentalists and religious liberals of the time, whose communal experiments at Brook Farm (West Roxbury, Massachusetts) and Fruitlands (Harvard, Massachusetts) also praised the moral benefits of living in pastoral settings and engaging in manual, agricultural labor. Such cultural gestures of going “back” to the land or “out” into nature could not resonate meaningfully until American culture had “progressed” sufficiently to be seen as drifting away from its rural roots or, in those settings still primarily agricultural, falling prey to the growing mercantilism of the day. While retreat to nature for moral and spiritual reform has a long history, “back to the land” efforts are distinctly modern and are defined by the very modernity against which they pose themselves.

The Transcendentalist gestures of going “back to the land” – from Emerson’s largely “armchair” call for an original response to the universe to actual ventures such as Brook Farm and Thoreau’s two-year experiment at Walden

– established cultural precedents that have remained highly influential into the twenty-first century. From Thoreau’s time to the present, back to the land practices have carried forward several prominent themes that emerge from *Walden*. Among these are: the phenomenon of conversion to nature, resistance against materialism and consumerism, a vision of nature as being primarily beneficent and advocacy of a life lived close to nature as being crucial for human psychological and spiritual growth. More problematically, one also finds in Thoreau, a certain intellectual and social elitism that enables him to praise voluntary simplicity (because he has the means to embrace it) and to elucidate a range of meanings from nature that are shaped by the intellectual circles he frequented. Back to the land gestures of yesterday and today continue to have a social location that tends to be that of the more economically privileged classes or of the intellectual elite.

Religious Resonances

Among homesteaders from the nineteenth century to the present, recognizably Thoreauvian themes continue to circulate. The decision to go back to the land is often expressed as a post-Christian (or post-Jewish) conversion experience where a previously “meaningless” life in the city or suburbs (often including an unfulfilling religious upbringing) is dramatically left behind for a rural experience involving experiments with self-sufficiency, particularly in terms of food and shelter. Sometimes, as in the case of Wendell Berry (Christian) or Gary Snyder (Zen Buddhist), a religious identity remains important, but is understood or defined in consciously ecological terms.

In creating a new life, back-to-the-landers often understand nature as both the economic and spiritual focus of daily practice. Nature is understood to set the terms for the conduct of life and is given priority as a source of meaning and authority. While back-to-the-landers (or “homesteaders” as they often call themselves) rely on nature as a resource for daily needs – and thus occupy a different cultural space than wilderness preservationists – they tend to pursue means of interacting with nature that have a minimum impact. Many garden organically, some use only hand-tools and materials found on-site, while others take advantage of developments in solar and wind power in order to live “off the grid.” In many homesteaders’ writings (and many homesteaders, like Thoreau, are also writers), attention is paid to the symbolic dimensions of daily labor in nature. Work such as splitting wood or carrying water is valued as a kind of ritual practice, voluntarily pursued for the sake of the personal transformation and the “lessons” (about nature and the self) to be learned. These ways of living also resonate symbolically as a response against the outside culture that has been left behind and is seen as comparatively corrupting and empty of spiritual significance.

Caveats

Some distinctions should be made between back to the land practices where “getting close to nature” is the primary impetus and related rurally located movements. Some Christians also call themselves back-to-the-landers, for instance, and constitute a growing population of partially self-sufficient families that grow their own food and home-school their children. While a reverence for nature – as God’s creation – is often part of daily life, however, the impulse behind Christian efforts at self-sufficiency is the desire for a retreat from the influences of a secular, non-Christian society. While homesteaders share some interesting points of agreement with self-sufficient Christian families (such as a desire for simplicity, an affection for country life and a critique of American materialism) homesteaders’ pursuit of a life lived close to nature recognizes nature *itself* as the primary source of meaning.

Similarly, in both the nineteenth and twentieth centuries, going “back” or “out” to the land has been a persistent aspect of a wide variety of communal experiments.

From the Oneida community in New York and the first Mormon settlements of the reimagined Holy Land of Salt Lake City, Utah in the nineteenth century, to counter-cultural intentional communities such as The Farm and Twin Oaks in the 1960s and 70s, communal experiments have praised country living, adopted self-sufficient agricultural practices, expressed the importance of a commitment to a particular geographical place and have advocated simplicity in diet, dress and social life. Here again, however, these efforts often celebrate rural life as a *context* or *resource* for other kinds of social, religious, or political experiments, rather than pursuing living close to nature itself as a primary goal. Overlap in the goals and practices of various experiments in rural self-sufficiency make the boundaries of “back-to-the-land” practices and movements somewhat blurred, but “back to the land” efforts should not be seen as synonymous with every rural communal or family-based self-sufficiency experiment.

Historical and Sociological Dimensions

The number of contemporary North America back-to-the-landers is difficult to determine, though one estimate suggests close to a million actual practitioners (and as many as fifty million expressing interest in “simpler lifestyles”). More importantly, perhaps, homesteading experiments have had a long history of promotion by intellectuals and cultural reformers who have had a significant impact on American thought, even if they have not produced the hoped for grand transformation of culture.

John Burroughs (1837–1921), who is best known as a bird enthusiast, amateur naturalist and nature essayist, was among the first modern homesteaders who (unlike Thoreau) made a *permanent* shift from an urban, literary life in Washington D.C. to a rural farming life in West Park, New York. Having built his own house on the Hudson and established a grape farm, he later (1896) built a more rustic retreat known as “Slabsides,” in which he practiced the arts of plain living, cooking over an open fire, drawing water from a spring, taking daily outdoor rambles and writing of the virtues of his experiences. At a time of rising industrialism and urbanization, Burroughs’ essays, particularly his praise of the simple life in “What Life Means to Me” helped to draw thousands of visitors to his cabin, seeking a taste of the back-to-the-land experience. Burroughs’ views of nature were scientifically informed (he embraced the theories of Darwin), yet he feared that science would render nature absent of meaning and argued for a “Gospel of Nature” in which nature would be seen a vital, mysterious, beneficent force that could redeem humanity and set the terms for a virtuous life. At times, Burroughs argued that God and Nature were virtually equivalent, while in other, more Emersonian modes, he saw Nature as a book to be read, with divine “lessons” lying behind nature’s physical surface. In either approach, however, he sought to divest God of any supernatural significance, while investing nature itself with a divine, moral and mystical sensibility.

A different kind of back to the land ethic was preached at the turn of the century by Bolton Hall (1854–1938), a prominent lawyer and a follower of the Single Tax program of Henry George, which sought to make land accessible to rich and poor alike. Son of the prominent, Fifth Avenue, Presbyterian minister, John Hall, Bolton Hall mixed progressive Christian thinking with other social and religious movements (including Eastern traditions). While Hall put his religious training to use by authoring liberalized versions of the Shorter Catechism, the Bible and Jesus’ parables, he simultaneously advocated a liberal, rational, pluralist version of Christian social reform that centered on making land available to all for self-sufficient gardening. For the poor, access to the land would be the first step in economic self-improvement, while daily contact in nature would physically and spiritually purify those harmed by city living. For the well-off, the prospect of “a little land and a living” was less an economic necessity, but more a means of renewing the self and escaping the materialism, greed and pace of the city. In Hall’s view, living “naturally” was a crucial antidote to the evils of urbanism. While his particular version of back to the land – articulated in books such as *Three Acres and Liberty* (1907) and *A Little Land and a Living* (1908) – was intended to be not far from the city, Hall’s Vacant Lot Associations and related programs locate themselves on a continuum of back to the land projects that saw self-sufficiency as both an economic solution to class inequity and a psycho-spiritual solution to urban anomie.

A generation after Hall (and with family connections to Hall and his work), the marketing executive Ralph Borsodi (1888–1977) took Hall’s vision a step further in 1920 when he left New York City to establish a seven-acre homestead in Suffern, New York. Like Hall, Borsodi was concerned with the problem of distribution, as well as the physical and psychological health hazards of the city. Drawn to the model cottage industry as a way for rich and poor alike to live healthfully and rurally, Borsodi used his own homesteads and home-based schools as laboratories for self-sufficiency. While praising the spiritual virtues of living off the land, however, Borsodi also embraced technology more than some of his predecessors and heirs. His vision was to use labor-saving devices as tools in the service of homestead efficiency, while other back-to-the-landers shunned technology as interfering with their projects of “getting close to nature.” Borsodi’s experiments were reported in his *Flight From the City* (1933) and his ideas were popularized in Depression Era, federally sponsored homestead resettlement projects, though most of these eventually faltered on political grounds. Together with his protégé, Mildred Loomis, Borsodi founded The School for Living which had several iterations in various locations and now remains in operation at the Heathcote intentional community in Maryland. Mildred Loomis carried on the School for Living projects and became known in the seventies as the “grandmother” of countercultural back to the land projects.

In the same period as Borsodi’s retreat to Suffern, the prominent screenwriter and novelist Louis Bromfield purchased a farm in Ohio in order to fulfill nostalgic longing for a simple, rural life of a kind he had earlier experienced in France. While more

conservative politically than Hall and Borsodi, and working more clearly in the tradition of the gentleman farmer than the self-sufficient retreatant, Bromfield radicalized the agricultural norms of his day by insisting on organic practices and articulating an ethic of “nature knows best.” Like Burroughs, Hall, Borsodi and others, Bromfield articulated a kind of theology of the soil, wherein he conceptualized agricultural work as a more authentic means (when compared to Christian doctrine and practice) of experiencing immortality. Bromfield often spoke of the “religion of the good farmer” who, by virtue of labor in the soil, exhibits the greatest faith in the “Grand Plan.”

Perhaps the most widely known back-to-the-landers are Helen (1903–1995) and Scott (1888–1988) Nearing, prominent vegetarians and socialists who left New York City for Pikes Falls, Vermont in 1932 and later launched a new homesteading project in Harborside, Maine in 1952. The Nearings began their projects without much fanfare, although Scott had once been an economics professor and a lecturer of national prominence, while Helen was familiar in vegetarian, artistic and Theosophical circles. With the publication of their *Maple Sugar Book* (1950), *Living the Good Life* (1954) and, especially, the republication of *Living the Good Life* in 1970, the Nearings became widely known as advocates for “sane living in an insane world.”

Like Burroughs in his time, the Nearings became representative symbols for the spiritual benefits of living close to nature and away from a materialist society. Helen’s Theosophical background (which included a belief in reincarnation and a reverence for the sacred in nature) and Scott’s early Social Gospel convictions (including, like Hall and Borsodi, a concern for social inequity and an interest in Georgist principles) together shaped their back to the land experiments which centered on organic gardening, strict vegetarianism, pacifism, anti-materialism and a staunch work ethic.

Countercultural youth flocked to the Nearings in the sixties and seventies and adapted some of their principles while resisting others. While some back-to-the-land efforts in this period were short-lived or part of broader communal experiments, a core group of “baby-boomer” back-to-the-landers have continued to live rurally and practice relative self-sufficiency through growing their own food and producing local crafts.

From the 1990s to the present, a renewed interest in homesteading has sprung to life, coming in large part out of explicitly environmental concerns and in conversation with broader cultural movements such as efforts in voluntary simplicity. The Nearings’ homestead, now a non-profit organization, The Good Life Center, draws thousands of visitors each year. Publishing ventures such as *The Mother Earth News*, *Countryside*, and, more recently, Chelsea Green Publishers continue to meet a demand for both philosophical and “how-to” aspects of back to the land experiments. Similarly, contemporary writers in the back to the land tradition (such as Wendell Berry, Gary Snyder, Anne LaBastille and Gene Logsdon) continue to attract an enthusiastic audience.

Throughout over a hundred and fifty years of back to the land efforts, hundreds of personal testimonies have been documented in first-person essays and narratives, with many more experiments virtually unreported and unknown. Even those who were prominent in their time have often been overlooked, the result being that “back to the

land” has been associated primarily with countercultural interest in “communing with nature.” The larger story of back to the land movements, however, shows the persistence of this cultural practice in the face of the rise of industrialism and the market in the nineteenth century, and consumerism, ecological degradation and continued social inequity in more recent periods. While individual back to the land practices vary according to the rigor of self-sufficiency pursued, the extent of rural life, the embrace of technology, the practice (or not) of vegetarianism and so on, a reading of nature as an alternative source for spiritual growth and satisfaction is remarkably consistent. Nature is regularly seen as a beneficent force, a source of personal inspiration and as a moral guide for responsible, daily living in the modern world.

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See also: Berry, Wendell; Bioregionalism; Bioregionalism and the North American Bioregional Congress; Brook Farm; Burroughs, John; Emerson, Ralph Waldo; Farm, The; Fruitlands; Hippies; Open Land Movement; Puritans; Radical Environmentalism; Rainbow Family; School of Living; Snyder, Gary – and the Invention of Bioregional Spirituality and Politics; Thoreau, Henry David; Tolstoy Farm; Transcendentalism.

Bahá'í Faith

The Bahá'í faith began as a reform movement in nineteenth-century Islam, but quickly became an independent religion. It has a background in esoteric Shi'ite Islam, especially the Shaykhi school and the messianic Babi movement that roiled mid-nineteenth-century Iran. The Bahá'í faith favors peaceful approaches to resolving social problems and adopts a progressive attitude to modernity. Its founder, Mirza Husayn 'Ali Nuri (1817–1892), known as Bahá'u'lláh (“the Glory of God”), taught the unity of the great religions, the oneness of God, the unity of humankind, greater equality between the sexes, avoidance of virulent nationalism, and the need for global institutions and a world-embracing outlook in the modern world. Despite Bahá'u'lláh's generally favorable view of modernity and technology, he critiqued nineteenth-century European civilization for going too far in its militarization of society and its urbanization. There is a biographical element in his thinking about greenery, since he was an aristocrat whose family possessed extensive estates in the lush Mazandaran province of Iran south of the Caspian Sea, where they vacationed away from their mansion in bustling Tehran. In 1868 Bahá'u'lláh was exiled by the Ottomans for what were seen as his heresies to the pestilential little port city of Akka on the Levantine coast, and he complained of its dusty, desolate aspect. “Bahá'u'lláh loved the beauty and verdure of the country,” his son reported. “One day [in circa 1877] he passed the remark: ‘I have not gazed on verdure for nine years. The country is the world of the soul, the city is the world of bodies’ ” (Esslemont 1980: 35). Thereafter he bought a mansion outside Akka that had greenery and a garden. The prophetfounder of the Bahá'í faith saw nature as theophanic. He wrote,

Nature in its essence is the embodiment of My Name, the Maker, the Creator. Its manifestations are diversified by varying causes, and in this diversity there are signs for men of discernment. Nature is God's Will and is its expression in and through the contingent world (Bahá'u'lláh 1988: 142).

He also laid stress on showing kindness to animals, and placed restrictions on hunting to excess. Bahá'u'lláh was by no means a Luddite, approving of much in modern science, including medicine, but he was appalled by the urban poverty he saw in Istanbul. He wrote,

If carried to excess, civilization will prove as prolific a source of evil as it had been of goodness when kept within the restraints of moderation . . . The day is approaching when its flame will devour the cities (Bahá'u'lláh 1976: 342–3).

He also denounced the “infernal” war engines of the late nineteenth century and warned, “Strange and astonishing things exist in the Earth but they are hidden from the

minds and the understanding of men. These things are capable of changing the whole atmosphere of the Earth and their contamination would prove lethal” (Bahá’u’lláh 1988: 69).

Bahá’u’lláh’s successor as leader of the religion, his eldest son ‘Abdu’l-Bahá (1844–1921), was a product of late nineteenth and early twentieth-century modernity. He laid less stress on nature as the sign of an inscrutable God, and was more prone to speaking of it as governed by laws and as an object that human intelligence and science could master and shape. He contrasted “nature,” which he saw as wild and unruly, with human cultivation of it, which bestows order and harmony. He unreservedly approved of technological advances that allow human beings to master nature.

The third leader of the religion, ‘Abdu’l-Bahá’s grandson Shoghi Effendi Rabbani (1897–1957), began his ministry in 1921 after studies at the American University in Beirut and Oxford. In a letter of the early 1950s to the New Earth Luncheon in London, he spoke of the need for protection of the physical world and of the heritage of future generations, and approved of the work of organizations such as Men of the Trees, which among other things fought desertification in Africa, as “essentially humanitarian.” The British environmentalist, Richard St. Barbe Baker (1889–1982), who had founded Men of the Trees, became a Bahá’í in 1924 and worked for both movements.

From 1963 the head of the Bahá’í faith has been an elected body, the Universal House of Justice. It has praised environmentalism but in evangelical style has stressed that the Bahá’í principle of unity is essential to accomplishing environmental goals. It wrote in 1981 that

Until such time as the nations of the world understand and follow the admonitions of Bahá’u’lláh to whole-heartedly work together in looking after the best interests of all humankind, and unite in the search for ways and means to meet the many environmental problems besetting our planet, the House of Justice feels that little progress will be made towards their solution (Research Department 1989: 14–15).

The Bahá’í International Community, the religion’s nongovernmental organization observer at the United Nations, wrote that the maturation of humankind “will ensure the creation of binding legislation that will protect both the environment and the development needs of all peoples” (Bahá’í International Community 1995: n.p.). Prominent Bahá’í biologist Arthur Dahl has been active in

U.N. environmental forums (Dahl 1990).

Despite these occasional mentions, and despite the devotion of some individuals such as Baker and Dahl, environmentalism is not a principle that the Bahá’í organization especially foregrounds. The Bahá’í authorities in Haifa have been criticized for their extensive building works on Mt. Carmel by Israeli environmentalists who worry about their effect on the Bay of Haifa. On the popular level, environmentalism and apocalypticism are interlinked, since some Bahá’ís expect “cities” to “evaporate” in a supernatural or environmental disaster. Neal Chase, a sectarian Bahá’í “under the Provisions of the Covenant,” predicted ecological and urban catastrophe on a number of occasions in the 1990s.

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See also: Bahá'í Faith and the United Nations; Brown, Vinson; Earth Charter; Men of the Trees (East Africa); United Nations' "Earth Summits"; World Wildlife Fund.

Bahá'í Faith and the United Nations

The Bahá'í Faith has a long-standing relationship with the United Nations, including support of international efforts for the protection of the environment. Since the Bahá'í teachings for world unity and peace, based on the writings of Bahá'u'lláh (1817–1892), include principles of collective security to be implemented by a federated world government with executive, legislative and judicial branches, Bahá'ís have long supported efforts to establish international organizations. 'Abdu'l-Bahá (1844–1921), the son of Bahá'u'lláh and leader of the Bahá'í Faith after his passing, wrote an encouraging letter on Universal Peace to the Central Organization for a Durable Peace in The Hague in 1919. An International Bahá'í Bureau was established in Geneva in 1925. A petition concerning the seizure of Bahá'í property in Iraq was taken to the Permanent Mandates Commission of the League of Nations in 1929 and its decision in favor of the Bahá'ís was adopted by the Council of the League of Nations.

Bahá'ís were present at the founding of the United Nations in San Francisco in 1945, an event that confirmed a prediction in 1912 by 'Abdu'l-Bahá that the first flag of universal peace would be raised in that state. Individual Bahá'ís and Bahá'í communities around the world have been active supporters of events such as United Nations Day and Human Rights Day, often collaborating with local UN offices and other organizations.

The formal relationship of the Bahá'í International Community (BIC) and the United Nations began with its accreditation to the UN Office of Public Information in 1948, after a national Bahá'í organization was accredited the previous year. Consultative Status to the United Nations Economic and Social Council (ECOSOC) was granted in 1970, and accreditation to UNICEF in 1976. The Bahá'í International Community maintains offices in New York and Geneva to oversee its relations with international organizations. An affiliation with the United Nations Environment Programme (UNEP) began in 1974, with the BIC participating regularly as an observer in UNEP Governing Council sessions starting with the first session in 1973. Formal representation with the United Nations Centre for Human Settlements was established in 1985.

As the United Nations increased its involvement with non-governmental organizations, Bahá'í activities at the UN have grown accordingly. The BIC has been active in, and on occasions has chaired, the Committee of Nongovernmental Organizations (CONGO) in New York. With the frequent persecutions to which Bahá'ís have been subjected in Iran and other countries, the Bahá'ís have been particularly interested

in the work of the UN to protect human rights, and active with the Commission on Human Rights, which has passed numerous recommendations concerning the rights of Bahá'ís to practice their religion.

The environment has been another area of interest at the UN. The Bahá'í teachings contain many references to nature as a reflection of divine attributes, and to ecological principles of interconnectedness and reciprocity. Preservation of the ecological balance of the Earth is a major priority for global cooperation. Bahá'í International Community delegations therefore participated actively in the UN Conference on the Human Environment (Stockholm, 1972) and its NGO Environment Forum, as well as the World Population Conference (Bucharest, 1974), the World Food Conference (Rome, 1974), and the Conference on Human Settlements (Vancouver, 1976). Active involvement with the UN in the economic and social areas has continued across a wide variety of issues from narcotic drugs and crime prevention through youth and women to the law of the sea, and numerous statements and reports have been presented to the UN as contributions to its consultative processes. With the major round of UN conferences in the 1990s, Bahá'í participation grew accordingly, and the BIC established an Office of the Environment for this purpose. Both the Bahá'í International Community and various national communities were active in the preparatory process and at the UN Conference on Environment and Development (Rio de Janeiro, 1992), with the BIC as one of 13 NGOs selected to present a statement at the

Earth Summit itself. A large delegation also participated in the World Social Summit (Copenhagen, 1995). At the World Summit on Sustainable Development (Johannesburg, 2002), the BIC again sent an active delegation and distributed a statement. In addition, two Bahá'í-inspired organizations, the International Environment Forum and the European Bahá'í Business Forum were also accredited to the Summit and organized various parallel activities. The International Environment Forum, a professional organization founded in 1996 with members in over 40 countries, organized seminars on Indicators of Sustainability (as part of the Science and Technology Forum), Education and Values for Sustainable Development, Integrating Science in Local Communities, and Multiple Dimensions of Globalization.

The Bahá'í International Community has issued many statements for UN conferences and on other occasions giving the Bahá'í perspective on topics relevant to the UN. These are widely appreciated for the substantive contributions they make to international debate. Some of the most significant concerning the environment and sustainable development are “A Bahá'í Perspective on Nature and the Environment” (1986), “The Bahá'í Statement on Nature” (1987), “Environment and Development” (1990), “The Prosperity of Humankind” (1995), “Valuing Spirituality in Development” (1998), “Sustainable Development: The Spiritual Dimension” (2001) and “Religion and the United Nations: Convergence or Divergence?” (2002). Two have been specifically concerned with needed reforms in the United Nations itself (“Proposals for Charter Revision,” 1955, and “Turning Point for All Nations,” 1995). The international governing body of

the Bahá'í Faith also issued a declaration to the peoples of the world on “The Promise of World Peace” in 1985.

The Bahá'ís have long tried to demonstrate the positive contribution that religion can make to the work of the United Nations. They participated in the Summit of Spiritual Leaders at the UN held as part of the Millennium Summit in 2000. The Bahá'í statement to the World Summit on Sustainable Development (2002) specifically calls on the UN to stop ignoring the religions in its work, both because of the positive contribution they can make to sustainable development, and because religious fanaticism is a major threat to world peace. It proposes that the UN create a formal consultative structure similar to that for indigenous peoples, to which all religions that renounce fanaticism would be invited.

Arthur Dahl

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See also: Bahá'í Faith; United Nations’ “Earth Summits”.

Bahuguna, Sunderlal (1927–)

Sunderlal Bahuguna is one of the best-known leaders of the Chipko Movement of Northern India, a peasant movement for the protection of local forest resources from outside contractors. For his articulation of environmental values he is recognized as India's first guru of environmental consciousness. In recent years he has been associated with the protest against the construction of the Tehri Dam, in the Indian State of Uttar Pradesh.

In early 1973, in the Chamoli district of Uttar Pradesh, an organization concerned with local employment made a request to the state forest department for an allotment of ash trees for the production of agricultural implements. The forest department denied their request but permitted an outside contractor to fell a nearby forest to produce sporting goods for the export market. The local people resolved to hug the trees in order to stand in the way of the axe intended to cut them down. Here, the movement known as Chipko (meaning "to hug") was born. Sunderlal Bahuguna underlined the moral foundation of this movement with foot marches, fasts, and discourses on the religious significance of the forests. He argues that his ecological vision of a harmonious relationship with nature is rooted in the soil of Indian religion, in which mountains, rivers and trees are the objects of worship. In 1981, accompanied by a small group of followers, Bahuguna undertook a *padyathra* (or foot march) of 4870 kilometers through the foothills of the Himalayas. Reminding the people of an understanding of nature embedded in their religious heritage, he shared the Chipko story at every stop and raised awareness of the exploitation to which their forests and their own lives were being exposed.

During his involvement with the Chipko movement, Bahuguna was repeatedly arrested and jailed. His nonviolent strategies (*satyagraha*) reflect the influence of Mahatma Gandhi. Born in 1927, Bahuguna was imprisoned at age 17 for his involvement in India's freedom struggle. After independence he became general secretary of the local unit of the congress party. Eight years later, he doubted whether party politics could bring about the social changes needed for the well-being of the hill people. While organizing adult education for untouchables and protests against the sale of liquor, he came to know Sarla Behn, one of Gandhi's two European disciples. She introduced him to her co-worker Vimla Nautiyal, who later agreed to her marriage to Bahuguna on the condition that he renounce political life.

After their marriage in 1956 they settled in the village of Silyara, where Bahuguna saw the wealth of the forests in the form of timber logs being carried to the plains. He began organizing labor cooperatives to prevent loss of local income to outside contrac-

tors. In 1977, with the visit of Richard St. Barbe Baker, Bahuguna came to recognize the global dimensions of the loss of forest resources, and that labor cooperatives would not in themselves prevent the destruction of forest wealth. In May 1978, he took a pledge to devote himself to the protection of the Himalayan environment in all aspects. In August of 1981, he arrived at the UN World Energy Conference in Nairobi with a load of firewood on his back to draw attention to the precarious state of the world's forest cover.

There has been no cause with which Bahuguna has been more identified than the struggle against the Tehri Dam, a hydro-electric power project located in a seismically active region of the Himalayan foothills. If completed, it will displace about 100,000 people from land they have worked productively for many generations. For Bahuguna, the project is a desecration of the Himalayan environment. He states that when the Ganges flows in her natural course she benefits all, irrespective of caste, creed, color, poverty or wealth. When she is dammed, she loses her social character.

Bahuguna has led acts of nonviolent protest that have sometimes halted construction on the dam. Best known are fasts of up to 74 days. He insists that a fast is not a hunger strike. Its motivation must not be anger or manipulation but only devotion to God. Arguing that we have identified progress with affluence for the few, he states that his duty is to warn that this promise stands on a mistaken view of reality. With a review of the project still pending, Bahuguna now lives in deliberate *satyagraha* in a small *kuti*, or hut, on the banks of the Bhagirathi River, not one hundred yards from the site of the proposed dam. If the waters rise, Bahuguna's *kuti* will be the first human dwelling to be submerged.

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See also: Ahimsa; Chipko Movement; Gandhi, Mohandas; Hinduism; India; Jainism; Jataka Tales; Sarvodaya Shramadana Movement (Sri Lanka); Tehri Dam.

Baltic Indigenous Religions

The indigenous nature-oriented religion of the Baltic peoples – the Latgalian, Latvian and Lithuanian, as well as the extinct Old Prussians and Yotvingians – survives today partially under Christian auspices. In the Baltic worldview, people, animals, plants and life are interconnected. Humans are not separate from nature. Spirit or divinity dwells in everything. The belief in *darna* (Latvian *saskan*, *a*) seeks life in harmony with oneself, society, and nature. Following a historical overview, this entry tracks current beliefs and practices, some of which received a Christian veneer while others continue as ethnic customs: the deities, reverence for nature, and the holidays. Lithuanian names are used, except as indicated.

The record of the Baltic Old Religion before the introduction of Christianity is fragmented and incomplete due to the lack of internal historical documents. Information that is available comes from archeological records and foreign chronicles, the latter of which are often prone to superficial knowledge, misunderstandings, and misinterpretations. The Balts practiced two recorded variants of an animistic pantheistic religion. The peasantry focused on the Earth, farming, hunting/fishing, and the cycles of nature, while the knights, nobility, and royalty centered on the sky, hunting, and on martial powers. The peasant oral traditions preserved *dainas* (songs and hymns), myths, and traditions. Old Prussia and Lithuania both had medieval kingdoms that officially professed their pagan traditions.

Christianity was introduced and officially adopted on a different time-line in each part of the Baltic region, from as early as the tenth century to as late as the fourteenth century. Compared to the rest of Europe, this happened very late: Lithuania was, in fact, the last European country to accept Christianity. Proclamation of Christianity as the state religion did not include the conversion of the peasant population. In Lithuania, Latvia and Prussia, the popular form of Baltic religion survived until the sixteenth century when Reformation and Counter-Reformation missionaries began to proselytize the peasantry.

This belated development allowed many popular religious traditions to survive until near-recent times. The peasant religion gradually contracted, losing its public communal character in favor of a narrower family focus. The churches occasionally campaigned against and even persecuted “Pagan” practices. In the eighteenth century, many sacred groves in Latvia were felled and the last oak shrine in the Lithuanian capital Vilnius was closed. At the same time, reliable internal and external records of the Old Religion were produced and grew in number as time progressed.

Various autochthonic beliefs and practices were incorporated into Christian traditions in the eighteenth to nineteenth centuries while others survive to this day as folkloric or cultural traditions. The proliferation of parishes and churches in the nineteenth century (they more than doubled, disproportionate to population growth) indicates that the peasantry accepted Christianity in this era, without abandoning pre-Christian practices. The national awakening movements of the late nineteenth century revived and propagated the then extant elements of the Old Religion which have, as a result, endured to the present. In the twentieth century, the Latvian Dievturi, Lithuanian Romuva, and Baltic Byelorussian (Yotvingian) Krywya established themselves to profess Baltic religion. Latvia officially recognizes Dievturi as a traditional Latvian religion.

The Christian Godhead assumed and retains many attributes of the Baltic heavenly god Dievas (Latvian Dievs, Prussian Deywis), whose name he also borrowed. He raises magnificent twin white steeds and grows rye. He has created many features and inhabitants of the Earth. He is readily invoked directly, without an intercessor, in contrast to Christian practice.

The weather and justice god Perkūnas (Latvian Pērkons, Prussian Percunis) lives in the clouds between the heavens and the Earth. Throwing his ax causes thunder and lightning. Anything struck by lightning as well as natural stone bullets and axes are sacred amulets. Large hills and oak trees are revered as sacred to Perkūnas and many geographic phenomena bear his name. Under Christianity, his characteristics transferred to the prophet Elias and St. George, yet he also retained a popular independent stature as well. People still pray to him for good weather. His wooden statues are very popular and are sometimes blessed by Christian clergy.

The golden solar Divine Mother goddess Saulē (Latvian Saule, Prussian Saûlê) bears light and life. The moon, the planets, and the stars live in her home. Out of respect for her rising and setting, work stops at dawn and dusk. Saulē rides in a carriage pulled by the twin steeds of Dievas in summer, a sleigh pulled by nine-horned reindeer in winter, and sails by boat at night. Folk art is resplendent with solar imagery and Saulē is celebrated at the Solstices. Under Catholicism and Orthodoxy, Saulē' s characteristics merged with the Christian Mother of God.

The silver lunar god Mēnulis (Latvian Mēness, Prussian Mêniks) protects orphans, the oppressed, and the dead that travel the Milky Way. He rides his own white steed. The rising moon, especially the new moon, is respectfully greeted. The lunar calendar determines many agrarian, fertility, and social practices. Mēnulis and Saulē were once married, but Perkūnas divorced them because of Mēnulis' infidelities with the morning star. Saulē protects their daughter the Earth by day, and Mēnulis by night. In folk art, Mēnulis always accompanies Saulē. Under Catholicism, Mēnulis coalesced with the Lithuanian Catholic patron St. Casimir.

The Mother Earth goddess Z̄emyna (Latvian Zemes

Māte) was the main deity of the Baltic peasants. The Earth bears humans, nourishes them, and embraces them at death. The word for "human" literally means "earth-

ling” in several Baltic languages. Morning and evening devotions still include praying to and kissing the Earth, which – even under Christianity – is popularly believed to forgive sins. The Roman Catholic Pope John Paul II, who has a Lithuanian grandmother, kisses the ground whenever he disembarks from a plane. Farms are blessed in the name of the Earth and offerings of bread and harvest fruits are made to her, also under Christianity. No one may hit the Earth or spit on her. Large hills and boulders are especially revered, serving as pilgrimage destinations, and have sacred names. Megalithic ritual circles are scattered throughout the Baltic. Closely related to the Earth, the protective hemp and linen god *Vaiz̄gantas* transformed into the Lithuanian *Rūpintojēlis*, the worrying Christ, after the conversion to Christianity.

The Latvian *Jumis* represents naturally occurring twins, such as double grains, fruits, nuts, etc. He and the Lithuanian *Rugys* (Prussian *Rugis*) propagate fertility, living outdoors in the summer and in the granary in winter. Both appear as an old linen-clad man carrying a bushel of grain ears, wearing yellow or golden boots and a crown.

Laima (Latvian *Laima*) is the human Divine Mother goddess. Her tree is the linden. In cultural traditions, she accompanies human life from birth to death, and is invoked at name-givings, weddings, and funerals. *Laima* sometimes has a single sister, the fate goddess *Dalia* (Latvian *Dēkla*), and a second sister, the death goddess *Giltinē* (Latvian *Kārta*). *Laima* has a Latvian and Latgalian bovine counterpart, the cow and milk goddess *Māra*.

The fire, hearth, and home goddess is *Gabija* (Prussian *Panike*) and her fire altar is the *aukuras* (Latvian *ziedoklis*). Fire rituals are a national rite and the flaming *aukuras*, with or without attendants in folk costume making offerings, is a national symbol for both Latvians and Lithuanians. In the countryside, hearth fires are put to bed at night, woken in the morning, prayed to, and fed at every meal time. Fire is reverently handled; mistreating fire is considered a sin even under Christianity. Traditional name-giving, wedding, funeral, house-blessing, and other ceremonies still involve hearth-fire rituals. Folk and modern art frequently depict *Gabija*, fire symbols, and the *aukuras*. Under Catholicism, *Gabija* merged with St. Agatha, also known as St. *Gabija*.

The chthonic god *Velnias* (Latvian *Velns*, Prussian *Pickuls*) propagates agricultural fertility and animal husbandry, as well as raises wild animals. His element is water, his tree is the evergreen fir, he lives in low-lying wetlands, and many places are named after him. Due to his Shamanic origins, *Velnias* is part-human and part-animal and can transform into many animals. He participates in the creation of the world and interferes in the creativity of *Dievas*. He constantly struggles with *Perkūnas*, defending himself with large boulders that are scattered throughout the Baltic. He is a very popular character in folklore and art. Christianity unsuccessfully tried to conflate *Velnias* with its own Satan.

Velnias and *Perkūnas* control earthly and heavenly waters, respectively. Water is holy, and many springs, rivers, and lakes have sacred names. Groves bordering such bodies of water are also hallowed. Bodies of water may not be polluted. Deep, large

lakes are gateways to other worlds. Amber comes from a destroyed castle in the Baltic Sea. Rainwater collected from boulders is currently used for blessings as natural holy water, even under Christianity. Springs with healing abilities are pilgrimage destinations. The Aglona church in Latvia, with its miraculous Mother of God icon, is built at such a spring in a Latgalian sacred pine forest.

The human being has three parts: the body that returns to Earth, the life-force that returns to life, and the spirit or *ve'le'* (Latvian *velis*). Unembalmed corpses in wooden caskets and cremated remains in clay urns are buried directly in the Earth, typically in forests and atop hills. The goal is to enable the body to return to nature as quickly as possible. Life continues for the *ve'le'* in this world. The living pray to *ve'le's* and converse with them, even under Christianity. The Baltic version of Catholic purgatory has been conflated with Baltic beliefs about wandering *ve'le's*. A *ve'le'* can migrate into a tree or another plant, an animal, a bird, or wander around lost. Brothers become oaks, fathers poplars, grandmothers linden, and women birches. Trees that grow on graves bleed instead of ooze sap when cut. The *ve'le'* eventually travels to Dausos (Latvian Aizsaule, literally beyond the sun), which is on a high hill beyond seven fields, forests, and lakes. Dausos has become the Baltic form of Christian heaven.

Trees and plants are living beings that feel pain just like people and animals. Forests were dedicated to deities. Trees are still worshipped, and wooden shrines – now with Christian statues – are placed in trees. Traditional homes are wood cottages. Sacred trees (oak, linden, ash, fir, pine, rowan, juniper, absinth, and elder) have specific ritual as well as secular uses, in addition to prohibitions. The poplar is the world tree, uniting the underworld with the Earth and the sky, the dead with the living and generations to come, and the past, present and future. Lithuanian multi-tiered totems of the world tree called *koplytstulpis* dot the countryside. These were Christianized with the addition of Christian symbols and statues.

Snakes represent the endless renewal of life. The Lithuanian word *gyvate'* means poisonous snake, life, vitality, and vital capacity. The Latvian black snake goddess Melna C~ u~ ska lays the cosmic egg. Her male counterpart is the grass-snake god Z~ altys (Latvian Zalktis). The Vilnius Perku~ nas temple kept grass-snakes in underground chapels, even after it was converted to a church.

Grass-snakes are household gods and pets. In folklore, maidens breast-feed grass-snakes, while cows nurse snakes. Killing a grass-snake brings bad luck; dead grasssnakes have to be buried. The snake dance of traditional weddings blesses the newly-weds, even under Christianity. Ophidians are particularly vivid in folk art. Z~ altys always accompanies Saule'. In Christian art, ophidians decorate crosses and lie at Mary's feet.

The myth of “Egle', Queen of the Grass-Snakes” is enormously popular and has inspired numerous art works, including opera, drama, ballet and movies. The king Z~ altys fell in love with Egle', forcing her into marriage. They had four children and spent many happy years together in his kingdom at the bottom of the sea. When Egle' visited her parents, her brothers learned the secret of her return from her youngest daughter and killed Z~ altys. Egle' transformed herself into a pine tree, her sons into an oak, an

ash, and a birch, and her remorseful daughter into a weeping willow. Winter solstice eve *Ku- cios* (Latvian *Kuc'u* or *Bluka vakars*, Yotvingian *Kutia*) has become Christmas Eve. It is the most important Lithuanian folkloric and religious holiday. As in ancient times, families make amends, bless their fields and themselves, commemorate the dead, and share a ritual meal of rebirth once the evening star shines. Solstice day *Kale'dos* (Latvian *Ziemassve'tki*, Yotvingian *Kaliady*) has split into Christian Christmas and secular New Year's. Baltic cosmological straw "gardens" have become Christmas tree ornaments. Relatives and friends visit with blessings, a Yule log is burned, tears of the past are eaten, and a ritual meal is shared.

The summer solstice *Rasa* (Latvian *L'igo*, Yotvingian *Kupalle*) has melded with St. John's Day. It is the most important Latvian folkloric and religious holiday. Herbs are collected and herb poles are erected to protect gardens and fields. People disguise themselves with wreaths of oaks, lindens, and flowers, seek the magical fern blossom, and light as well as set adrift bonfires to accompany *Saule's* midnight sailing. In the morning, people bathe in the dew for health and prosperity, as well as herd their livestock over the embers of the bonfires. The dew is collected and saved as medicinal water.

Both equinoxes involve several holidays. Pre-spring *Uz'gave'ne's* (Latvian *Meten, i*) includes the symbolic burning of winter in the effigy of a witch. People dress as animals, ancestors and supernatural beings. Spring culminates with *Velykos* (Latvian *Liieldiena*), now Christian Easter. *Ve'le's* are invoked for blessing and protection. People ritually hit the Earth with poles to wake her up. Wands called *verbos*, made of medicinal herbs and flowers, as well as pussy willow sprigs are exchanged. These replace palms on Palm Sunday. *Margutis* eggs (Latvian *liieldienu ola*) are skillfully and complexly decorated. They depict cosmological and natural imagery, especially *Saule'*, the Earth, evergreens, and snakes.

Fall holidays give thanks for the harvest. The rye represents the endless renewal of life. It is treated as a longexpected and honored guest. Bread from the first shafts of the harvest is baked and ritually shared. *Jumis* dolls and crowns are made of the last shafts and carried in procession. Yotvingians hold a candle-lighting ceremony with prayers and offerings to the fire. Fall culminates with *Velines* (Latvian *Ilgi*, Yotvingian *Dzyady*), which commemorates the dead. Cemeteries blaze in candlelight.

The autochthonous worship of and reverence for nature in her many forms is a living tradition for the Baltic peoples. Many underlying customs and beliefs have successfully retained their Baltic characteristics and identity under Christianity. This specifically includes reverence for nature and the belief that nature is sacred, which starkly contradicts Christian teaching. Baltic forms have also received Christian explanations (i.e., new meanings). Baltic symbols have been used to both replace and enhance Christian ones. For these and similar reasons, the question of Baltic-Christian syncretism is still open in the scholarly literature. Many more Baltic religious elements persist as folkloric or cultural customs, enhancing the national ethnic identities of the Baltic peoples.

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See also: Russian Mystical Philosophy; Slavic NeoPaganism.

Bartholomew, Ecumenical Patriarch (1940–)

The spiritual leader of the over 300 million Orthodox Christians worldwide, Ecumenical Patriarch Bartholomew

- who has widely become known as the “Green Patriarch”
- has assumed unique and challenging initiatives among religious leaders in environmental concern and care, proclaiming that degrading or destroying the biological diversity of God’s creation is no less than sinful.

Bartholomew’s tenure has been characterized by international and inter-Orthodox outreach, as well as by ecumenical and environmental commitment. Born in 1940 on the island of Imvros, Bartholomew graduated from Halki Theological School near Constantinople, received a doctorate at the Pontifical Oriental Institute of Rome, and served as personal secretary to his predecessor Patriarch Dimitrios.

In 1989, Patriarch Dimitrios established September 1st as the annual day of prayer throughout the Orthodox world for the protection of the environment. Since his election in 1991, Patriarch Bartholomew has undertaken several innovative ecological projects, organizing an *Inter-Orthodox Conference* in Crete (1991) and *five eco-logical seminars* held at the Theological School of Halki (1994–1998) to raise awareness among Orthodox leaders and institutions.

In 1997, Patriarch Bartholomew became the first worldwide religious leader to denounce environmental abuse as a sin against God, humanity and nature. In 2002, he proclaimed the refusal to treat creation properly as a gift of communion with God and one another as humanity’s original sin (see excerpts).

In 1994, Patriarch Bartholomew also formed an international *Religion, Science, and Environment Committee* to raise public awareness and to promote dialogue on an interdisciplinary, an interconfessional, and an interreligious level. Together with the World Wildlife Fund for Nature and the European Commission, the Committee has to date organized *four sea-borne symposia*: in the Mediterranean Sea (1995), in the Black Sea (1997), along the Danube River (1999) and on the Adriatic Sea (2002) with the participation of scientists, theologians, journalists, and politicians. The Halki Ecological Institute was an educational workshop launched in 1999 and resulting from the second symposium. A future international and ecumenical symposium is scheduled for the Baltic Sea (2003).

Bartholomew in his own words

I. Excerpt from the address by His All Holiness Ecumenical Patriarch Bartholomew at the Environmental Symposium in Santa Barbara CA (8 November 1997)

If human beings treated one another's personal property the way they treat the environment, we would consider that behavior anti-social. We would impose the judicial measures necessary to restore wrongly appropriated possessions. It is therefore appropriate to seek ethical and legal recourse, where possible, in matters of ecological crimes.

To commit a crime against the natural world is a sin. For humans to cause species to become extinct and to destroy the biological diversity of God's creation; for humans to degrade the integrity of earth by causing changes in its climate, by stripping the earth of its natural forests, or destroying its wetlands; for humans to injure other humans with disease; for humans to contaminate the earth's waters, its land, its air, and its life, with poisonous substances: these are sins.

In prayer, we ask for the forgiveness of sins committed both willingly and unwillingly. And it is certainly God's forgiveness which we must ask for causing harm to his own creation. Thus we begin the process of healing our worldly environment . . . as persons making informed choices in both the integrated whole of creation, and within our own souls...

We must be spokespersons for an ecological ethic that reminds the world that it is not ours to use for our own convenience. It is God's gift of love to us and we must return this love by protecting the world and all that is in it . . . Let us renew the harmony between heaven and earth, and transfigure every detail, every particle of life . . . Amen.

II. Excerpt from the address by His All Holiness Ecumenical Patriarch Bartholomew during the award ceremony for the Sophie Prize in Oslo, Norway (12 June 2002)

Our original privilege and calling as human beings lies precisely in our ability to appreciate the world as God's gift to us. And our original sin with regard to the natural environment lies – not in any legalistic transgression, but – precisely in our refusal to accept the world as a sacrament of communion with God and neighbor. We have been endowed with a passion for knowledge and wisdom, which opens before us boundless worlds of the microcosm and the macrocosm, and presents us with boundless challenges of creative action and intervention. The arrogance that destroyed the Tower of Babel, through the misuse of power and knowledge, always lurks as a temptation. The natural energy wrought by the sun as a blessing on the earth can prove perilous when profaned by the hands of irresponsible scientists. The interventions of geneticists, which arouse

enthusiasm in their potential, have not been exhaustively explored with a view to their side effects.

We are not opposed to knowledge but we underline the importance of proceeding with discernment. We also stress the possible dangers of premature intervention, which may lead to “the desire to become greater than the gods” (Euripides), which the classical Greeks described as “*hubris*.” Such discord destroys the inner harmony that characterizes the beauty and glory of the world, which St. Maximus the Confessor called “a cosmic liturgy.”

In 2002, the Ecumenical Patriarch also co-signed the joint Venice Declaration of environmental ethics with Pope John Paul II. In the same year, Patriarch Bartholomew was awarded the prestigious Sophie Prize in Oslo, Norway, for his pioneering environmental vision and initiatives.

John Chryssavgis

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See also: Christianity(6b) – Christian Orthodoxy (and adjacent “Common Declaration on the Environment”); Christianity(6b2) – Greek Orthodox; Christianity – Eastern versus Western.

Bateson, Gregory (1904–1980)

The work of Gregory Bateson, anthropologist, psychiatrist, biologist, sociologist, and philosopher, is a highly original and thought-provoking contribution to the interface of a number of different academic disciplines. While psychologists use his concept of “double-bind” (a kind of communicative entanglement of two persons), New Age authors refer to his philosophical and ecological concepts as testimony for their own thoughts. The latter is due to Bateson’s time at the Human Potential Center, Esalen, in the last years of his life, where he developed as a leading light for New Age science debates (Bateson himself never accepted his being associated with the New Age, though).

As far as the issue of nature is concerned, Bateson’s most important ideas can be seen in his concept of mind and substance, which is part of a larger systems theory. Making use of C.G. Jung’s notion of the two worlds, *pleroma* and *creatura*, Bateson argues that the former is the realm of undifferentiated causal relations, whereas the latter views the same phenomena in a contextual way that makes visible the differences. The *creatura* is analogous to “mind.” It is the world, seen from a certain perspective. If mind in general is characterized as such, the question arises, what does its relation to individual “minds” look like? Here, Bateson introduces a cybernetic model. The individual “me” is not limited to body or sensual perceptions, but must be addressed as a subsystem of the encompassing mind system. It is a unity set up by an analysis of the circumstances and not explainable by intrinsic characteristics. Furthermore, the individual mind’s unity is identical with the unity of evolutionary survival; it cannot be separated from the surrounding lifecosystems.

This perhaps is the most radical consequence, because it puts the relations between humans and nature in a context of mutual dependence. When “mind” is immanent to the ecological system, human thought and action have a decisive impact on the whole of nature. Conversely, humans are totally dependent on nature, and human survival is linked to the survival of nature. Therefore, Bateson advises a fundamental new orientation in several disciplines: ecology and psychology have to acknowledge that the human mind transgresses the borders of its body and is present in ideas and artifacts that can even survive the physical death of a person (Bateson here talks of an “ecology of ideas”). Theology, likewise, has to overcome the dichotomy of transcendent versus immanent deities and can approach humans as part of the gods, who need the human mind just as humans need the gods.

In sum, Bateson calls for a substantial shift of paradigm, because otherwise humans will be destroyed within a short span of time. It is this claim that made Bateson an

influential thinker in contemporary nature discourse, environmentalism, and the New Age.

Kocku von Stuckrad

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See also: Complexity Theory; Ecopsychology; Esalen Institute; New Age; Transpersonal Psychology.

Beat Generation Writers

Although the expression “Beat Generation” refers to a literary avant-garde and aesthetic sensibility which roughly extended from the late 1940s to 1973 in the United States, the high point of Beat writing coincided with the decade of the 1950s: not only was it in those years that the novelists and poets concerned produced some of their most groundbreaking works, but it was also in that decade that, as marginal bohemians, they developed a countercultural stance which would pave the way for the anti-war protests and youth rebellion of the 1960s. As precursors, the Beats participated in the shift from modern to postmodern sensibilities, a shift contributing to the reemergence of an ecological consciousness in postindustrial societies and to the growth of hybrid religious forms like Western Buddhism and the New Age.

Historically speaking, “Beatness” has been presented as a literary and sociological reaction against the moral strictures of the anti-communism of “McCarthyist” society (i.e., that of the famous anti-communist crusader Sen. Joseph McCarthy), as well as a rejection of the “sanitized” and conformity-oriented forms of religious practice that prevailed in the early 1950s at the expense of personal mysticism. Defying the traditional socio-economic stratifications and religious divisions of American society, the Beat Generation brought together a number of individuals who had no chance of fitting into the middle-class, heterosexual, Protestant, family-oriented, and consumerist mainstream of the United States immediately after World War II. The first core of Beat Generation writers emerged in New York in the mid-forties and initially revolved around authors like Jack Kerouac, Allen Ginsberg, and William Burroughs. A second center for the Beat avant-garde developed in parallel on the West Coast; originally coinciding with the so-called San Francisco Poetry Renaissance which had formed around poets like Kenneth Rexroth and Robert Duncan. This second group included

Gary Snyder, Philip Whalen, Michael McClure, and Lawrence Ferlinghetti as core figures. The two wings of the Beat Generation merged around 1953, when Kerouac and Ginsberg moved to the San Francisco Bay Area. In the process, the Orientalism and ecological awareness of the California-based writers fused with the urban sensibility and the experimental, “spontaneous” literary form of the East Coast Beats. Toward the end of the fifties, the group started to fragment, in part due to some of its members’ voluntary exile from the U.S. for several years.

Despite the wide range of temperaments in what appears on the surface to be a fairly heterogeneous group, the Beats were linked by their rejection of the growing technocratic and technological orientation of American society and of the post-war affluence based on the cycle of work, production, and consumption. As defined by Kerouac, the

oppositional stance of “Beatness” was nevertheless a combination of despondency and optimism, of feeling “beaten down” and “beatific.” On the one hand, these writers felt defeated and marginalized by the materialism and social conformism of their society, while on the other, they also reaffirmed the sanctity of the individual and his/her ability to break through the socially and linguistically conditioned self to a more “authentic” kind of being and mode of perception. Hence the Beats developed a *subjective religion* which denied any gap between the sacred and the profane as well as between the immanent and the transcendent. Beat spirituality at times bordered on a kind of monism in which every phenomenon could be seen as the manifestation of a non-theistic Ultimate Reality. Beat writers therefore non-judgmentally immersed themselves in the material world and in the present moment as gateways to the sacred. Besides subjectivity and immanentalism, another main characteristic of Beat mysticism was the redefinition of the ideal of the American Frontier as a “Frontier of the Mind”: in their attempt to explore more “authentic” forms of perception. Any avenue likely to help the individual transcend the barriers of the socially and linguistically conditioned self deserved to be tested: hallucinogenic drugs, experimental writing, jazz improvisation, Buddhist meditation, and reconnecting with the ways of archaic societies still in touch with their agrarian roots or shamanic heritage. The Beat approach to the sacred resulted in a *hybrid* and *detraditionalized* religiosity which was not only situated at the intersection between modernity and postmodernity, but which also contributed to a reassessment of the concepts of “n/Nature” and “s/Self.”

In their refusal of the regimentation and hyperrationality of post-World War II society, most Beats continued to uphold the values of so-called humanistic expressivism and to believe in the perfectibility of the individual toward his/her “authentic” nature. They thereby failed to embrace the relativism of postmodernity. However, the Beats also seriously distanced themselves from the various forms of dualistic thinking inherited from modernity, especially the ones positing a rigid divide between subject and object and between the One and the many. Although they did not reject all forms of essentialism, the Beats nevertheless seriously questioned the Enlightenment paradigm of the stable self at the center of Nature, a nonhuman world which just exists to be appropriated and mastered by the human subject. Three important influences led them to transgress this view and to posit a fluid self which could harmoniously fuse with its environment: 1) their experimentation with hallucinogenics; 2) their interest in Buddhism – Zen most especially

– and in its fundamental concept of “e/Emptiness,” which sees any phenomenon, the human self included, as devoid of substance and permanence, and which fundamentally postulates a dynamic interrelatedness between all the components of reality; and 3) the pre-industrial ecological awareness found in First Nations myths and cultures, which equate the natural with the sacred and emphasize the underlying unity between different types of creatures, thereby lifting the duality between the human and the nonhuman, the sentient and the nonsentient.

In their attempt to transcend “inauthentic” perception, the Beats’ exploration of various sources of “non-dual” consciousness would lead them to collapse the boundary between self and nature in two – often complementary – ways. On the one hand, these writers would try to investigate the “self” in its natural state by observing the unfettered activity of the naked mind, an activity bespeaking the fundamental “Emptiness” of a subject amounting to nothing more than the sum total of perceptual fragments. This first avenue would especially be pursued by authors like Kerouac, Ginsberg, and Whalen, who, to use the phrase coined by the latter, attempted to produce a “graph of the mind moving” on the page and to record perceptions registered in both their simultaneity and discontinuity. On the other hand, instead of privileging the contemplation of the “naked mind,” certain Beats would favor the observation of “naked Nature” on the basis of the fundamental interconnection that exists between the self and all other biological systems. This synthesis between environmental and mental ecologies – a synthesis which partly intersects with animism – finds its strongest expression in Snyder’s and McClure’s work. By attributing a non-central position in the universe to the human subject and by replacing the notion of “class solidarity” with the one of “solidarity between species,” Snyder and McClure include the concerns and transhumanism of the Deep Ecology movement in their writing. McClure focuses on the self as biological organism and on its lowest common denominator with the most elementary forms of life. Snyder equates the “mirror of the mind” with the “mirror of Nature” in a poetic practice which deems that the self can find a reflection of its inner wilderness in the actual one of the natural world. His verse often presents the subject dissolved in nature recorded in its very suchness and minute particulars.

Whether they preferred to redefine the link between self and “Nature” by immersing themselves in “naked perception” or in the “completely Other,” the Beats developed an *ecopiety*, to borrow a term borrowed from Snyder scholar Patrick D. Murphy, which stresses nonduality and experimented with writing techniques capable of rendering the insubstantiality of the self as well as the field of energy of which both the human and the nonhuman partake. As heirs to the American Transcendentalists, the Beats could not leave the subject entirely behind, but they nevertheless seriously questioned the view of the individual inherited from the Enlightenment. As important transition figures between the modern and postmodern moment, the Beat writers cultivated a vision which progressively merged Romanticism and Orientalism with ecocritical writing.

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See also: Bioregionalism; Buddhism – Engaged; Buddhism – North America; Deep Ecology; Earth First! and the Earth Liberation Front; Radical Environmentalism; Rexroth, Kenneth; Snyder, Gary – and the Invention of Bioregional Spirituality and Politics; Zen Buddhism.

Bennett, John G. (1897–1974)

John G. Bennett was a research scientist who discovered more efficient methods for burning coal, thereby enhancing productivity and reducing pollution. He also was an intellectual who in the four-volume *The Dramatic Universe* formulated a “cosmic context” for integrating the discussion of environmental ethics. This cosmic context required, he believed, two additional dimensions to explain the natural world: a fifth dimension of eternity (unlimited potentiality) and a sixth dimension of hyperaxis (repetitive natural processes which science calls “knowledge”). He also postulated an ideal hidden seventh dimension of values beyond nature which is the source of meaning, purpose, beauty, goodness and obligation. These ideal values are difficult to define because they can only be apprehended by *feeling*. He believed that the purpose of life is to reconcile the natural world of facts with the ideal spiritual world of values through conscious healing actions which create harmony and realize the true purpose of history. Decisively influenced by George Ivanovitch Gurdjieff and his doctrine of reciprocal maintenance, Bennett believed that all entities exist to serve a larger whole. Moreover, humanity exists to serve the evolution of the Biosphere, the planet Earth, and the solar system.

Bennett’s thought appeals to those who appreciate his attempts to integrate all knowledge and experience through a consistent use of terms. His detractors consider his work to be unempirical, divisive, and unduly abstract. His primary life-work was a prolonged effort to express the need for “work on oneself” in order to facilitate personal and social evolution. This effort took the form of many books and tapes that explained the intricacies of such work. This work did not seem to be directly related to environmental issues, however, although Bennett did lament contemporary attitudes of materialistic exploitation and endeavored to demonstrate an intimate evolutionary relationship between human beings and all other species. His thought provides a ground that some today are using as a basis for environmental concern and action. For example, the passionate efforts of deep ecologists such as John Seed anticipate a radical reformulation of moral philosophy in the twenty-first century – ideas that Bennett anticipated in volume two of *The Dramatic Universe: The Foundations of Moral Philosophy*.

Bruce Monserud

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See also: Gurdjieff, Georges Ivanovitch; Seed, John.

Berman, Morris (1944–)

Trained as a historian of science, Morris Berman's wideranging work explores what he considers "the basic fault" in human life: an experiential dualism that has crippled human beings and resulted in the destruction of the natural world. Through three closely reasoned volumes – *Reenchantment of the World*, *Coming to our Senses*, and *Wandering God* – he developed an analysis of this dualism and the many failed attempts to escape it, and proffered a way out.

Berman began with the Scientific Revolution in *Reenchantment of the World*, arguing that its distinction between meaning and value on one hand, and facts on the other, consolidated a much deeper schism between body and nature, and the mind and reason. He contrasted the worldview of alchemy out of which modern science was born with the scientific worldview. Alchemy, he argued, was not just the search for gold, but for grace. It was, he wrote, an effort to unify the mind, emotion, the erotic and the spirit through the practice of transforming metals; in alchemy there was always a material and psychic equivalent. Not so in science, where the transformation of metals was eventually achieved through application of a mechanical worldview, but without the spiritual practice and psychic integration. Berman argued that this disembodied science – rejecting inner experience as "merely subjective," the body as mechanical but also the source of irrational passions, and nature as something dead – rationalized and enabled human suffering and the degradation of living systems. The wedge driven between subject and object is not new, he argued, but with the Scientific Revolution it was assumed to be a fact of the universe, not culturally imposed. This denial of the imposition makes it invisible, Berman concluded, obscuring it as the source of the many problems it causes.

Building on the work of Wilhelm Reich, Karl Polanyi, and to some extent Freud, and anticipating the views of neurobiologists such as Antonio Damasio, Berman asserts that the cognitive and intellectual always rests on the affective. Denying this relationship does not only mean that we are unaware of the centrality of our emotions, but means also that our emotions are devalued and denied; and when our emotions cannot find their natural expression they re-emerge in distorted forms. Our emotions may be out of mind, Berman noted, but our body knows what our mind does not. The Cartesian view holds only the conscious to be real. Freud, according to Berman, sees the unconscious as real, but the source of the irrational – it must be made conscious and thus brought under the control of consciousness. Following Reich and Bateson, Berman believes that the solution to the split between mind and emotion (body, unconscious) is to make the boundary permeable and thereby the personality whole.

Religion cannot solve the problem, Berman argued in *Reenchantment of the World*, because it has become part of it. Protestantism, he believes, has settled for secular salvation, a kind of Cartesian grace ultimately based on transforming nature into commodities. Catholicism and some other denominations are hostile to the body and the erotic and thus cannot accept the whole personality. Mysticism, though it embraces the unconscious, rejects critical thought, and therefore cannot accept and integrate the whole person. Humans are left alienated from themselves and nature.

In *Coming to our Senses* Berman further refined his analysis of the nature of the basic fault, or dualism, and traced its origins to the Neolithic. Building this time on the work of D.W. Winnicott and other object relations theorists, he argued that a near universal narcissism pervades all civilized cultures. Narcissism arises, according to object relations theory, when the human infant is not valued for itself. This gives rise to the creation of a false self as the infant tries to entice care givers, and thus to a profound personality split. The split is repressed, and the false self, unable to meet the organism's needs, is condemned to an endless compensatory quest. For Berman the failure of human parents to provide adequate nurture is part of a larger process. As humans try to control nature as the result of the transition from hunting and gathering to agriculture and pastoralism, he argues (following Paul Shepard) that we lose wild nature's nurture. A domesticated nature cannot nurture, and without adequate nurture we cannot find our real selves.

From the neolithic down to the present, Berman argued, that which has been lost and repressed but always carried in the body – the repository of the unconscious – continually reemerges. This periodic reemergence is not part of any ideological heritage, though it finds historically specific expression. Rather it is simply the longing for wholeness that asserts itself again and again, often through heresy. Berman argues that heresy is often an attempt to reclaim experience (the body) in the face of the dominant, mind-focused orthodoxy.

It is in *Wandering God* that Berman offered a way to overcome the “basic fault”: we must resacralize our perception of the world and learn to “live in the question.” We must live without ideology and formula, including religion. Berman pointed to the intense (and sacred) experience of everyday life of the Mbuti pygmies. At home in the benevolent forest, magic and ritual are seen as egotistical and anti-social. The Mbuti do not cling to things and they do not fear death. The movement of the hunter-gatherer assuages the anxiety of self-awareness.

Berman recognized that we cannot simply return to a hunter-gatherer existence. “Living in the question,” he argued, means living with the tension of universalizing thought and the tribal particular. It means reestablishing the material basis for resacralizing the Earth by lowering human population, living in smaller groups, actively controlling those who aggressively strive for power, and improving childrearing. For Berman it is the institutionalization of accumulation that breeds social hierarchy *and* the vertical conscious that separates heaven and Earth, which causes us to lose our home in the world.

David Johns

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See also: Ecopsychology; Pygmies (Mbuti foragers) and Bila Farmers of the Ituri Forest; Radical Environmentalism; Shepard, Paul.

Berry, Thomas (1914–)

From his academic beginning as a historian of world cultures and religions, Thomas Berry grew into a historian of the Earth and its evolutionary processes. He sees himself not as a theologian but as a “geologian.” Berry began his career as a historian of Western intellectual history. His thesis at Catholic University on Giambattista Vico’s philosophy of history was published in 1951. Vico was trying to establish a human historical science of the study of culture and nations comparable to what others had done for the study of nature.

Influenced by Vico, Berry gradually developed a comprehensive historical perspective in periodization and an understanding of the depths of our contemporary crisis due to the ecological destruction caused by humans. Eventually he saw the need for a new mythic story to extract humans from their alienation from the Earth. Berry described this alienation as pervasive due to the power of the technological trance, the myth of progress, and human autism in relation to nature. With his books, *The Dream of the Earth*, *The Universe Story*, and *The Great Work*, Berry aimed to overcome this alienation and evoke the energies needed to create a viable and sustainable future.

After completing his graduate work, Berry spent 1948–1949 in Beijing studying Chinese language, philosophy, and religion. There he met Columbia professor and Confucian scholar, Wm. Theodore de Bary. Upon returning to the States they founded the Asian Thought and Religion Seminar at Columbia. Berry taught Asian religions at Seton Hall (1956–1960), at St. John’s University (1960–1966) and at Fordham University (1966–1979). He founded a Ph.D. program in the History of Religions at Fordham and wrote books on *Buddhism* (1966) and on *Religions of India* (1971).

What distinguished Berry’s approach to world religions was his effort not only to discuss the historical unfolding of each of the traditions, but also to articulate their spiritual dynamics and contemporary significance. Confucianism has had special significance for Berry because of its cosmological concerns, its attention to nature and agriculture, its interest in self-cultivation and education, and its commitment to improving the social and political order. With regard to Confucian cosmology Berry has identified the important understanding of the human as a microcosm of the cosmos. Essential to this cosmology is a continuity of being between various levels of reality – cosmic, social, and personal. Berry sees this as similar to the ideas of Pierre Teilhard de Chardin, Alfred North Whitehead, and other contemporary process thinkers.

Berry also drew extensively on Native American and indigenous traditions for rethinking the dynamics of human–Earth relations. Berry’s appreciation for indigenous traditions and for the richness of their mythic, symbolic, and ritual life was enhanced

by his encounters with the ideas of Carl Jung and Mircea Eliade. Jung's understanding of the collective unconscious, his reflections on the power of archetypal symbols, and his sensitivity to religious processes made him an important influence on Berry's thinking. Moreover, Mircea Eliade's studies in the history of religions were influential in Berry's understanding of both Asian and indigenous traditions.

In formulating his idea of the *New Story*, Berry is particularly indebted to the thought of Pierre Teilhard de Chardin. During the 1970s Berry served as president of the American Teilhard Association. Berry derived from Teilhard an appreciation for developmental time. As Berry observes, since Charles Darwin's *Origin of Species* we have become aware of the universe not simply as a static cosmos but as an unfolding cosmogenesis. The theory of evolution provides a distinctive realization of change and development in the universe that resituates the human in a vast sweep of geological time. With regard to developmental time, Teilhard suggested that the whole perspective of evolution changes our reflection on ourselves in the universe. For Berry, the *New Story* is the primary context for envisioning the immensity of cosmogenesis.

Berry also derived from Teilhard an understanding of the psychic-physical character of the unfolding universe. For Teilhard this implies that if there is consciousness in the human and if humans have evolved from the Earth, then from the beginning some form of consciousness or interiority is present in the process of evolution. Matter, for both Teilhard and Berry, is not simply dead or inert, but is a numinous reality consisting of both a physical and spiritual dimension. Consciousness, then, is an intrinsic part of reality and is the thread that links all life forms. There are various forms of consciousness and, in the human, self-consciousness or reflective thought arises. This implies for Berry that we are one species among others and as self-reflective beings we need to understand our particular responsibility for the continuation of the evolutionary process. We have reached a juncture where we will determine which life forms survive and which will become extinct.

Berry's approach is comprehensive in terms of cultural history and world religions, while Teilhard's is scientifically comprehensive. These two approaches come together in Berry's book, *The Universe Story*, written with the mathematical cosmologist Brian Swimme. Together they relate the story of cosmic and Earth evolution along with the story of the evolution of *Homo sapiens* and the development of human societies and cultures. While not claiming to be definitive or exhaustive, *The Universe Story* sets forth an important model for narrating the Epic of Evolution.

The Universe Story was based on Berry's ideas first articulated in 1978 in an article titled "The New Story." As he pondered the magnitude of the social, political, economic, and ecological problems facing the human community, Berry observed that humans are in between stories. The coherence provided by the old creation stories was no longer operative, Berry asserted, proposing instead the new evolutionary story of how things came to be and where we are now as a comprehensive context for understanding how the human future can be given meaningful direction. Berry stated that to communicate values and orient human action within this new frame of reference

we need to identify basic principles of the universe process itself. These, he suggested, are the primordial intentions of the universe toward differentiation, subjectivity, and communion. Differentiation refers to the extraordinary variety and distinctiveness of everything in the universe. Subjectivity is the interior numinous component present in all reality. Communion is the ability to relate to other people and all life forms due to the presence of both subjectivity and difference. Together these create the grounds for the inner attraction of things for one another. For Berry these are principles that can become the basis of a more comprehensive ecological and social ethics that recognizes the human community as dependent upon and interactive with the Earth community. This new ecological orientation suggests that humans are a subset of the Earth, not dominant controllers. In light of this perspective, nature is here not solely for our use but as grounds for communion with the great mystery of life.

This *New Story* arose from Berry's own intellectual formation as a cultural historian of the West, who also studied and wrote about Asian religions and indigenous traditions. His intellectual journey culminated in the study of the evolution of the universe and the Earth, which he saw as an epic story. Berry suggests that this story provides a comprehensive context for orienting human life toward the "Great Work" of our time, namely, creating the grounds for the flourishing of the Earth community.

Berry's idea of the universe story has been critiqued by those influenced by post-modernism as having the potential to be a dominating or hegemonic metanarrative. Their concern is that such a story may not allow for the inclusion of diversity. In particular, they feel that creation stories from various cultures will be lost within such a large-scale narrative of evolution. Berry's own studies and writings on other religious traditions suggest that he is sensitive to this issue; he suggests that the new story context gives a new validity and even more expansive role to earlier stories. Another critique arises from those concerned about using science as a basis for a unifying story inspiring human meaning. They see science (in combination with technology) as creating an objectifying view of nature, which robs nature of its sacred qualities and is thus partly responsible for creating the current environmental crisis.

On the other hand, Berry's influence has been widespread and diverse both within academia and beyond. This ranges from scientists such as mathematical cosmologist Brian Swimme, cell biologist Ursula Goodenough, animal behaviorists Marc Bekoff and Barbara Smuts, and geologists George Fisher and Craig Kochel. It includes ecological economists like Richard Norgaard and David Korten and ecodesigners such as Richard Register and David Orr. In the field of racism and environmental justice Carl Anthony and Barbara Holmes cite the importance of Berry's unifying vision of the story of the Earth. The deep ecologist John Seed, and others promoting the universe story as the "Epic of Evolution," such as the ecologist

E.O. Wilson, also draw inspiration from Berry.

Berry has had a particularly strong influence with a large number of Catholic nuns and their religious orders. There is now an organization called "Sisters of Earth" which serves as an umbrella group for these nuns. One who has spearheaded Berry's ideas

among these nuns is Sr. Miriam Therese MacGillis, the founder of Genesis Farm, a community-supported organic farm in Blairstown NJ based on the universe story. Various educational institutes have been established which have also been inspired by his ideas. These include two in Oakland, California; one directed by Matthew Fox and one by Jim Conlon. A journal called *EarthLight* also focuses on key aspects of Berry's ideas. For nearly 20 years at the Cathedral of St. John the Divine in New York, Dean James Parks Morton was deeply influenced by Berry's perspective and invited

Berry to serve as a Canon at the Cathedral. At the same time, Paul Winter began to perform his Earth Mass and his solstice celebrations at the Cathedral also with enormous inspiration from Berry's writings and talks. Thus the range of people and institutions influenced by Berry's ideas is already significant and continues to grow as people seek a larger context for grounding their own work for the environment.

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See also: American Indians as "First Ecologists"; Back to the Land Movements; Cathedral of St. John the Divine; Confucianism; Council of All Beings; Epic of Evolution; Fox, Matthew; Genesis Farm; Religious Studies and Environmental Concern; Seed, John; Swimme, Brian; Teilhard de Chardin, Pierre; Whitehead, Alfred North; Wilson, Edward O.; Winter, Paul.

Breakout Box: SP Thomas Berry on Religion and Nature

Religion, we might say, is born of the awakening of human consciousness to some numinous presence experienced throughout the natural world, a presence that brings the world into being, sustains the world in existence, and enables the world to unfold in all its magnificence. In the midst of this florescence we awaken with an overwhelming sense of wonder as we look out over the landscape. There we see the meadows with their flowers, the forests with all their woodland creatures. We listen to the singing of the birds and feel the flow of the wind as it strikes our faces. All this is freely spread out before us for our delight and understanding even while it sustains and nourishes our physical well-being.

The awe we experience in our awakening consciousness is the beginning of the religious reverence and gratitude we experience for that abiding Presence that brought all this into being. From that primordial moment until the present, humans have understood this inner Presence as the guardian, the teacher, the healer, the source whence humans were born, were nourished both physically and spiritually, were protected and guided. It was the destiny to which we returned.

Over the centuries, human communities, from the tribal level to the great classical civilizations, have dedicated their high intellectual efforts to providing some understanding of, and some intimate relation with this Presence, in what we refer to as their “religion,” the “binding back” or relating of all phenomenal reality to the origin and sustaining power whence it came.

These civilizations have dedicated their architecture, their arts, and their literature to providing rituals whereby we integrate our human activities into that great cosmic liturgy expressed in the daily and seasonal transformations of the natural world. Everywhere we find the human project validated by its intimate relation to this comprehensive context.

The meaning world of American Indians in a special manner revolved around nature rituals developed to bring this numinous Presence ever more profoundly into their lives. With the Plains Indians, their primary initiation ceremonial was the vision quest whereby the young person would fast and pray for four days at some isolated place, pleading for the understanding and the strength needed to deal with the challenges of adult life. At this time, the one fasting would receive some sign or some guiding vision that would determine the manner in which the difficulties of life should be dealt with throughout the future.

With the Iroquois, the Great Thanksgiving Ritual at harvest time was the high moment of their year’s celebration. This occasion celebrated the covenant of the Great Peace in a ceremonial that confirmed the bonding together of the original five tribes of the Confederation. In this ceremony, expressions of gratitude were offered to the various natural forces at work in their lives: the Earth Mother, the Waters, the Fish, the Plants, the Trees, the Animals, the Birds, the Winds, the Sun, the Moon, the Stars. Then, at the end, final thanks were offered to the Creator whose benign Presence brought all things into being and sustained them throughout their existence.

With the Omaha peoples, the new-born child would be taken out under the sky and presented in turn to the Powers of the Heavens, the Powers of the Atmosphere, the Powers of the Earth, and the Powers within the Earth. In each case, the Powers would be addressed and then the birth of the infant would be announced with the petition that the Powers would protect and guide the child throughout the course of the child’s life. In North America, the universe was a sacred space recognized by the Pipe Ceremony. In this liturgy, the Pipe was offered to the four directions, to the heavens above, and to the Earth below, a process establishing a sacred center where authentic community affairs were carried out.

While such religious intimacy with the natural world found consistent expression with earlier tribal peoples, it was also found in classical civilizations: in the Near East, in the Asian world, and in the American civilizations of the Maya, Inca, and Aztec. In each case, the natural world was addressed, not as an “It” but in personal terms – as “Thou.” In China, court rituals required that the emperor alter the color of his garments with each seasonal change. The music of the court was altered to suit the seasons. The emperor moved to the appropriate room in the palace. So we could outline the ceremonial sequence whereby the various communities integrated their human affairs with the daily and seasonal changes in the natural world.

Such integral association with the natural world is found also in the Christian world up through the medieval period. From the decline of Rome to the brilliant medieval civilization, the transition was carried out successfully by dedicated religious persons who integrated Christian belief and ritual with the great cosmic liturgy of the natural world. This was the force that created Western civilization from remnants of the Classical Mediterranean world combined with the energy and the traditions of incoming tribal peoples of central Eurasia.

Few civilizations have been so totally integrated with the great cosmic liturgy as was Medieval Europe. This integration we see with total clarity both in the architecture and symbolism of the great cathedrals and in the colorful rituals that were enacted there almost continuously. It is seen especially in the great poem of Dante Alighieri (1265–1321), *The Divine Comedy*. Here the natural world is seen as primordial scripture, a scripture predating the Bible. The opening language of the Bible itself repeats the creative words that brought the natural world into being. Only when there is a natural world can communication pass between the divine and the human. Indeed humans have no conscious interior spiritual world unless it be activated by the outer world of nature. The natural world and the divine, these were mutually explanatory. Thus the great medieval teachers began their writings with observations on how these two scriptures, the natural and the verbal, explain each other. This we find with special clarity in the brief essay of Saint Bonaventure entitled *The Mind’s Road to God*. So, too, the daily ritual was coordinated with the diurnal cycle of the sun’s rising and setting. Dawn and sunset, the rise and setting of the sun, the passing from night into day and day into night, these were recognized as moments of special presence of the divine and the human to each other. These are the intimate moments of the day when, as individuals or as families, we offer prayers of thanksgiving and petition to that primordial divine source whence all things come.

In the evening parents and children are especially intimate with each other.

The Christian liturgy, referred to as the “Divine Office” or the “Divine Worship,” was considered the framing context for daily life. The word itself “liturgy” is derived from two words meaning “public work” or “public activity” because such recognition of the divine was considered society’s primary daily activity. The carrying out of this “primary public work” was assigned principally to monks, men who, since early Christianity, had daily ritually chanted the psalms of the Bible and sung sacred hymns, composed later

by persons such as Saint Bernard (1090?–1153) and Saint Hildegard (1098–1179). In this context, the term “work” has more affinity to artistic or musical production than to the activities of an ordinary day-laborer.

Besides the daily insertion of the human project into the day–night sequence, there was the even more dramatic seasonal cycle whereby the springtime renewal of life after the winter quiescence was celebrated throughout the society. This festival, known in the Western world principally as the Easter Resurrection festival, was determined in its time of celebration as the first Sunday after the first full moon after the spring equinox. The religious calendar of Christians depended on these dates determined by the position of the sun and the moon in relation to the Earth. The other most solemn Christian festival, known as “Christmas,” was celebrated at the winter solstice, the time when the sun was lowest in the sky. The date celebrated is 25 December because that was considered by the Romans as the solstice moment. This was the time for celebrating the meeting of the divine and the human in the person of Christ.

While such moments of the diurnal and seasonal cycles in the natural world determine the larger context of religious celebration in much of the world, there are other more intimate aspects of personal spiritual life developed in intimate association with nature. In the Western world, for example, we find personalities such as hermits living in uninhabited regions regarded as sacred. In India, their counterparts are forest dwellers or homeless wanderers. In Buddhism there are also monks living in the depths of the natural world.

Even earlier shamanic personalities entered psychically into the profound depths of the natural world and there obtained guidance and healing for tribal communities in moments of stress, when they are hunting or when they are ill. While this activity of shamanic personalities is more primordial than the activities of later religious personalities such as the priest or sage or yogi or guru or prophet or saint, it does carry a deeply religious aspect.

Few things stand out more plainly in our secularbased industrial civilization than the diminishment and neglect of both the religious life and the natural world. Religion is reduced largely to social work and personal pieties. Nature is reduced to decoration or vacationing or tourist entertainment. The natural world is swallowed up in big gulps by monstrous mechanized shovels that can lift an immense quantity of soil in a single scoop, all to do away with the natural contours of the land and prepare it for some building project or for laying down great quantities of asphalt for highways and parking lots. Wildlife is diminished both in its diversity of species and in its numerical count.

When we inquire as to just how such a situation antagonistic to religion could have arisen, we must go back to the fourteenth century, to the Black Death, a plague that struck Europe in the years 1347–1349, a period when, it is said, a third of Europe’s population died in two years. The difficulty was that the people had no idea of germs. Since they had no idea of what was happening, they considered that some great moral fault had occurred. The world had become wicked. God was punishing the world. The great urgency was to do penance and be redeemed out of the world.

A penitential spirit spread over Europe. Spiritual preaching insisted on detachment from the natural world. New themes appeared in art, scenes where Christ is depicted with right arm raised, condemning began preaching the need for repentance for sin, for detachment from the natural world, a turning toward a spirituality of severe interior discipline. Then, the sixteenth century saw the rise of Protestant Puritanism. In the seventeenth century, Jansenism, the Catholic phase of Puritanism, appears throughout France and then throughout Europe.

An even more devastating assault on the natural world came with René Descartes (1596–1650) and his teaching that the world is divided between mind and matter. What is not mind is simply matter, to be known by mathematical measurement. In this manner, the entire natural world was desouled. The song of the birds became simply mechanism. The entire planet became a vast soulless edifice. The numinous Presence, formerly perceived throughout the natural world, disappeared. Biologists turned against any teaching of “vitalism” – the view that the natural world is an ensouled world, a world of living realities, a world of spontaneity and communication, a world of numinous Presence.

This situation set the stage for the industrial, technological, commercial, financial world to identify planet Earth as a vast natural resource to be used, not as an intimate presence to be communed with. Nothing remained of nature that could provide a basis for religious experience. The Great Cosmic Liturgy with its daily elevation of life to sublime levels of participation has now been gone for four centuries. Even so, Western religious traditions have survived throughout, if in a diminished role. Ancient liturgies still proclaim the magnificence of the divine Presence throughout the universe. Yet now, in the opening years of the twentyfirst century, as industrial civilization collapses on itself, we see that its amazing success has been more fragile, and its survival more transient than we expected.

The powers of nature begin to reassert themselves. Human communities everywhere are protecting remaining wilderness regions and fostering a return to the primordial world of nature. The saying of Henry Thoreau (1817–1862) is now heard more often: “In wildness is the preservation of the world.” This return to the natural world is at the same time a manifestation of the survival of religion and a support for the renewal of religion throughout the Earth.

Even in the officially secular society of America there remain two moments when official recognition of a religious or some higher power is required in the public life of the society: the moment of induction into public office when the official must swear on the Bible, or to some higher power in the natural world, to faithfully administer the laws of the state. The second moment is in court when a witness must swear in reference to some transhuman reality to tell the truth in the witness to be given.

One other moment occurs here in America when we return to nature in its wilderness form, go to it for the healing of our inner world. Always there seems to remain in the human soul an awareness of some divine presence in the wilderness regions of the

world, a presence that can provide relief from the anxieties of existence in an industrial dominated society.

Perhaps the person in America who best personifies the religious tradition of Western civilization in its most intimate relation to the natural world is John Muir (1838–1914). He spent the greater part of his life after 1860 wandering through the fields and woodlands of Northern California and recording his experiences there. Brilliant compositions, his writings can be considered so many songs to the indwelling sacred presence of the Yosemite Valley along the Merced River.

In 1892, this region was set aside, in the tradition of Yellowstone National Park, as too precious a region to endure the intrusion of developers. Along with all the devastation inflicted on the North American continent these, and some two hundred other natural regions of this continent, have been set aside to be kept in their natural state forever in recognition of the absolute need that humans have for such experiences of the natural world.

Thomas Berry

Berry, Wendell (1934–)

Perhaps Wendell Berry's greatest contribution to contemporary discussions about the significance of nature in American culture is his refusal to be subjected to easy categorization. While thoroughly Christian, he is an outspoken critic of institutional religion and while his ethics are biblically based, his writing embraces the wisdom of Buddhism and other religious traditions, especially when such wisdom may be put to use in keeping human hubris in check. Though "liberal" in his ecological thinking, his emphasis on the virtues of the small community and on the importance of marriage (in both family structure and as a guiding metaphor for responsible agricultural work) strike some as "conservative." His defense of traditional gender roles and the practice of tobacco farming disarms some critics, while his clarion call to "eat locally" has helped push interest in organic foods and small-scale agriculture beyond the early dominant tendencies to dismiss these growing movements as minor, countercultural concerns.

Born in 1934, Wendell Berry grew up in Kentucky and received both his undergraduate and master's training at the University of Kentucky. He subsequently taught in the English department at Stanford University, traveled to Europe on a Guggenheim Fellowship and later joined the Faculty at New York University. In both California and New York he became acquainted with the Beat Poets and formed a particularly strong friendship with Gary Snyder. While pursuing his writing career where it took him, Berry also began to feel the pull of his native region. In 1961, on the eve of departing for a literary fellowship in Paris, Berry started to reflect on the value of developing a commitment to a particular place, which began with time spent at a rustic outpost, known as "the Camp," near his boyhood home. Here Berry first articulated to himself, and later to his readers, the virtue of "belonging" to a particular natural locale, a virtue and goal he explicitly conceptualized as a "spiritual ambition." Berry's developing ethic and aesthetic of "staying in place" soon led him to prioritize a bioregion over a potentially nomadic literary life. In 1965, at the age of 31, Berry moved to his farm in Port Royal, Kentucky where he has farmed ever since.

Several of Berry's essays speak directly to the relationship between Christianity and ecology in particular, as well as to the complex interweave of religion and nature more generally. In his 1990 essay, "God and County," Berry asserts one of his fundamental religiously informed principles for ethical living: that we are "unrelentingly required to honor in all things the relation between the world and its Maker and [that] . . . we ourselves, as makers, should always honor that greater making" (Berry 1990: 95). Berry sees in the Christian tradition the theological roots for responsible Earth stewardship, but fears that the institutional Church, because of its dependence on what

he elsewhere calls “the little economy,” is necessarily (and negatively) implicated in the very economic and institutional structures that threaten the health of the planet and the flourishing of small, local communities.

Berry extends some of these ideas further in his (1992) “Christianity and the Survival of Creation” when he acknowledges that historically “the evangelist has walked beside the conqueror and the merchant” (Berry 1993: 94) in the intensive exploitation of land and indigenous cultures that has marked the last five centuries of American history. In one of his characteristically blunt statements, Berry proclaims that “The certified Christian seems just as likely as anyone else to join the military-industrial conspiracy to murder Creation” (1993: 94). At the same time, Berry insists, a genuine reading of the biblical tradition reveals a clear injunction that the Earth belongs to God and that destruction and abusive possession of the land is a violation of the biblical principle that humanity is a temporary “sojourner” on the land, which is divinely created. Destruction of nature, in Berry’s reading, is “not just bad stewardship, or stupid economics . . . [but] the most horrid blasphemy” (1993: 98).

While Berry’s consistent elucidation of the notion of a genuine “economy” lends a strong sense of moral gravity and urgency to his work, the other most prevalent theme in his writing is the concept of pleasure, rooted in the divine injunction to take pleasure in God’s creation. In essays such as “The Pleasures of Eating,” “Economy and Pleasure,” “Getting Along with Nature,” “Going Back (or Ahead) to Horses,” and “An Excellent Homestead,” Berry leavens his more direct moral injunctions with exempla (often clearly modeled on the genre of the biblical parable) taken from his daily life on the farm or in the company of like-minded friends and neighbors. Turning the individualistic concept of the pleasure-principle on its head, Berry argues for the “simple” pleasures that can be found in dissenting from the dominant, consumerist culture through work close to nature and dedicated to local communities.

Berry’s extensive body of fiction and poetry can be seen as extensions and elaborations of his prose essays, though set in a different key. The novels shift in historical setting and in the characters that occupy center stage, but are linked by tradition and bioregion with the majority of the stories focusing on the fictional community of Port William, which borrows extensively from Berry’s observations and experiences in and around Port Royal. Of particular note is the revised version of *A Place on Earth* (1983), in which the main character of the drama is Port William itself. Berry’s poetry is especially evocative, revealing his rich mining of the biblical tradition and his creative blending of that tradition with his own experiences of work and play upon a particular piece of land. His *Farming: A Handbook* (1967) and *Sabbaths* (1987) are especially important in this regard.

The scholarly work on Berry (primarily coming out of literary disciplines) has tended to be more laudatory than critical. As mentioned above, Berry’s writing was negatively received (beginning with a series of exchanges in *Harper’s Magazine*) when he defended his choice to avoid computers (and thus, the power companies on which they rely) by relying on his wife Tanya to type and finalize his manuscripts. Both feminists

and defenders of technological innovation criticized Berry for being neo-Luddite in his outlook on tools, as well as patriarchal in his view of women. Berry countered these criticisms with a strong defense of the intimacy with nature that a cultivated resistance to technology affords, as well as an argument for intimacy in marriage which is nurtured by the sharing of household labor, which, in Berry's context, includes both farming and writing.

Berry also came under fire in the 1980s from deep ecologists who (following the arguments of Lynn White Jr.) tended to categorize Christians as necessarily "shallow ecologists" who participated in a tradition whose legacy toward nature was a destructive one. Berry's fiction, poetry and essays all argue against this critique, sometimes subtly, by example, and sometimes directly, as when Berry makes distinctions between institutional Christianity (which he sees as often implicated in capitalism and industrialism) and the ideal Christian life (which he argues rests on a model of stewardship and a vision of sustainability for future generations). Berry also draws on key concepts in the Hebrew Bible/Old Testament, such as the Sabbatical and Jubilee years, which speak directly to divinely ordained principles of rest and renewal for the land. These concepts, while utilitarian in some respects, also emphasize that land cannot be "owned" by humans, but only borrowed, a concept that (without using theological language) is also upheld in the writings of deep ecologists.

Beyond deep ecologists in particular (who in their early writings were particularly hostile to Western religious traditions), Berry's work has not been warmly received by a larger collection of ecocentric (also called biocentric) writers and activists. The complaint, not always directed at Berry *per se*, involves a long-standing tension between environmentalists who uphold the intrinsic value of all species and who rail against anthropocentrism and utilitarianism, and agriculturalists who defend human interests in theory and who, in practice, interact with nature in "instrumental" ways.

Berry's reply to this critique is to emphasize the way that work on the land, the pleasure gained from such work and the knowledge of biological processes that emerge from daily contact through agriculture all contribute to the farmer (or related workers) developing an ethic of responsibility for and sense of mutuality with the natural world. For Berry, this sense of interdependence with the land ultimately involves not only biological knowledge, but also relational knowledge and spiritual knowledge. For Berry, while the practice of farming may appear "anthropocentric," responsible farming that contributes to the health of both land and people is ultimately a communitarian act, good for people and good for the long-term health of the planet. Again, Berry's stance is ultimately theocentric, rather than biocentric. While taking a position that places comparatively more emphasis on human values, he shares with the ecocentrists a view which ultimately deemphasizes human interests in the face of the health of "Creation," which includes both human and natural communities.

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- See also:* Back to the Land Movements; Deep Ecology; Jackson, S. Wesley “Wes”; Shepard, Paul; White, Lynn – Thesis of.

Bestiary

The Bestiary is a medieval catalogue of animals that thoroughly entangles categories of the natural and the supernatural. The fabulous phoenix resides alongside the mundane pelican, yet both are emblems of Christ: the phoenix for the resurrection (the phoenix is immolated, then rises from its ashes), and the pelican for the passion and compassion (the pelican tears at her own breast to feed her chicks with her blood). The Bestiary evokes the worldview of its time, presenting nature as a book, or code, which reveals society, psyche, and the divine.

It would be anachronistic to look into the Bestiary for a description of nature as conceived in modern terms. It is not simply that the Bestiary applies moral lessons to nature, rather, it is that nature is intrinsically and radically a book that spells out the human and divine encounter. Consider the Orphan Bird, who lays her eggs on the water to determine which egg will produce the best chick to be flown joyfully to their father. The bad eggs sink, hatching on the floor of the sea, where they live in darkness and grief. This fanciful description is allegorical theology: one shall be saved and taken up to God, while all the unworthy sink into Hell. Bestiaries are not rudimentary natural histories or preposterous biological texts, although they contain information, observed or fabulous, about animal behavior. In the Bestiary, however, correspondence to biblical text and traditional tales carries more authority than does empirical observation. Folk etymologies unveil the secrets of nature; language itself enfolds nature. Bestiaries record mainly mammals (what is generally meant by *beasts*), but also reptiles, fishes, and birds, insects, an occasional tree or stone, sometimes humans, even a mermaid (or siren). Numerous editions begin with a version of the Genesis creation narratives and fall of humanity.

The primary source for the Bestiary is the *Physiologus* (“the naturalist”), a late Classical compilation of animal behavior and attributes presented as Christian allegory. Aristotle’s and Pliny’s zoologies, fables such as Aesop’s, and especially Isidore of Seville, whose encyclopedic *Etymologies* (ca. 600), influenced the formation of the Bestiary. Most consistently, scriptural references give weight and authority to these animal characterizations.

A number of commentators have worried about the naturalism problem: “there seems every reason to believe that the Bestiary represented secular learning as well as homiletic device, and that it was, for the most part, taken very literally, at least until the twelfth-century revival of popular preaching” (Cronin 1941: 194). Early in the twentieth century, the influential and learned M.R. James complained,

But for its pictures I do not think the Book could possibly have gained or kept any sort of popularity. Its literary merit is nil, and its scientific value (even when it had been extensively purged of fable and reinforced with sober stuff) sadly meagre (1931: 1).

(Actually, no illustrated Bestiary had been located until it was well on its historical way; in the eighth or ninth century, its worthiness came before its illuminators.) James condemned the Bestiary for failing to conform to his own vision of nature (and literature); and despite his admiration for what he thinks of as the factual world, he could not resist in a public presentation comparing a marmot-type animal – the voracious, fat, deceitful female

– and the abstemious, skin-and-bones male, to married couples known to him (James 1931: 7). For the sake of his misogynist humor, he falls back on the medieval method of type over test, that is, the exemplary over the empirical. In contrast to James, Brunsdon Yapp has claimed, “bestiaries are not, as they are generally held to be, merely compendia of old wives’ tales and religious symbolism, amusing or boring according to your taste, but documents that are important for any serious history of medieval science” (George and Yapp 1991: 28). If the focus of the Bestiary might have been literal, well, then, it would be wise to apply the most prevalent device of the Bestiary itself – the etymological: *literal* derives from *letters*, not mere factuality. To ask the Bestiary to be principally a zoological investigation is to ask the wrong questions of it.

Bestiaries were copied, translated, conflated, and embellished for a millennium. Their pages were rendered into stone, window, and sermon: the lion sleeps with its eyes open; the hare changes sex at will; the hedgehog rolls on the ground, spearing fruits to carry home to its young. The beaver (*castor*), whose testicles make excellent medicine, bites them off and throws them down before the hunter, who then leaves him alone. If another hunter appears, the beaver stands upright to show the hunter he is wasting his time.

The Christian task was to return to the Paradise that the first couple lost. After all, the prelapsarian condition is true nature and the fallen condition is against nature. The Bestiary calls out from the two sides of nature – that of Eden and that of corrupted time. This catalogue, without narrative or chronology, emblematically recapitulates the entire sacred history: that humans were there with the beasts, in collusion with the beast they fell, and in consequence they all suffer the curses of work, pain, and death, and through these, find redemption.

The Bestiary came to be one of the most copied, translated, illuminated, preserved, and disseminated manuscripts of medieval Europe. The nature of nature in the Bestiary is allegorical, a guidebook to theological meaning. The *Physiologus* was the naturalist’s compendium with a theological vision. With Isidore’s encyclopedia of origins, the Bestiary’s world moved more decidedly toward word. Book upon book, the beasts travel by means of false etymology and fable and analogy, over language barriers and sense, and end up being much more than mere references to the natural. There is an equation among these figures of beast, soul, sex, and text.

When a tiger's cubs are snatched from the lair, the tiger, in a rage, pursues the hunter. About to be caught, the hunter throws down a glass ball. Catching her reflection in the ball, the tiger mistakes it for her child, and stops to pick it up. Furious, she goes after the hunter again, and he throws down another glass ball, and again she is fooled by the mirror, "because the memory of deception is overcome by her maternal instinct" (in Barber 1993: 29). She circles the sphere and tries to nurse her image, as if to suckle her cub. (Social construction prevails over biological imperative in the Middle Ages!) The story is for those who can distinguish between a glass ball and a tiger cub, between a tiger's reflection and a tiger. Yet the medieval reader took the text of a tiger as a reflecting globe of the animal, and the animal – nature – as a mirror of divine reality.

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See also: Animals; Animals in African Legend and Ethiopian Scriptures; Christianity (5) – Medieval Period; Elephants; Hyenas – Spotted; Nile Perch; Serpents and Dragons; Snakes and the Luo of Kenya; Women and Animals.

Bhagavadgita

The *Bhagavadgita* (200 B.C.E.–200 C.E.) constitutes chapters 23 to 40 of the sixth book of the great Indian epic the *Mahabharata*. The *Mahabharata* tells the story of the conflict between two groups of cousins of the Bharata clan, the Pandavas and Kauravas, the war between them and the aftermath of the war. The *Bhagavadgita*, meaning "Song of the Lord," is a conversation between one of the Pandava brothers,

Arjuna, and the god Krishna. The conversation takes place just as the great battle is about to start. Arjuna, recognizing relatives, friends and teachers in the army of the enemy, finds himself unable to fight, but Krishna convinces him that to fight is a moral duty

(*dharma*). Krishna explains several central doctrines of Hinduism to Arjuna: the idea of the eternal separation of the self from the mortal body and the repeated rebirth of the embodied self; the three paths to salvation (*jnanayoga*, *karmayoga* and *bhaktiyoga*); devotion to Krishna; the doctrine of *svadharma*, that is, the performance of one's duty for duty's sake; the doctrine of the fourfold *varna* system; the world as part of Krishna/Vishnu; and the doctrine of *avatara*.

Even though the Vedanta schools of Hinduism considered the *Bhagavadgita* one of its three foundations (the others being the *Upanishads* and the *Brahmasutra*), and many of the Hindu philosophers and theologians wrote commentaries on the text, the *Bhagavadgita* does not seem to have been widely popular before the nineteenth and twentieth century. That several of the leading figures of the Indian freedom struggle wrote commentaries on the text and applied its teaching to contemporary political problems, might have contributed to its popularity. Such modern interpretations often contrast sharply with the classical understanding of the text. Many Hindus now consider the *Bhagavadgita* their most important religious text. The first translation into English, by Charles Wilkins, was published in 1785. Westerners' affection for the *Bhagavadgita* has made it the most translated text after the Bible.

Environmentalists have found several ecological themes in the *Bhagavadgita*: The world as the body (*deha*) of God; the duty of preserving the world (*lokasamgraha*); the simple and non-materialistic lifestyle of the ascetic (the *sthitaprajna*); and the idea of the unity of all living beings. The *Bhagavadgita* narrates that Krishna allowed Arjuna to see his transcendent form. Arjuna then saw "the whole world with all beings" (11.7), the universe itself, in Krishna's body. This vision of the world as God's body was the inspiration for the famous theologian Ramanuja (1017–1137) who made the image of the world as the body of God a central element of his theology, and has recently been evoked by environmentalists.

The expression *lokasamgraha* (3.20, 3.25) has also been reinterpreted in an environmental context. This expression was favored by modern political Hindu thinkers such as Bal Gangadhar Tilak (1857–1920) and Sarvapalli Radhakrishnan (1888–1975) and interpreted in a political fashion to mean that one should act for "the welfare of the world." An environmental interpretation of *lokasamgraha* means that one should act for the preservation of the ecosystem.

The *Bhagavadgita* was Mahatma Gandhi's favorite book. Gandhi repeatedly stated that the last twenty verses of chapter two constituted the core of the *Bhagavadgita*. These verses describe the *sthitaprajna*, "one whose mental attitude is disciplined." He is the ideal person, since, according to Gandhi, control and non-attachment constitute the essence of religion. A *sthitaprajna* is free from greed, is calm and non attached. Attachment is the cause of desire and anger, while the withdrawal of the senses from the

objects of the senses leads to the abandoning of all desire and to peace, argues Krishna in the *Bhaga- vadgita*. The *sthitaprajna*, at peace with his surroundings, living a simple life with insignificant material consumption, has inspired environmental thinking. The *sthitapra- jna* can function as a critique of the materialistic lifestyle based on greed and suggest a style of life that is “simple in means, rich in ends,” as it is stated in deep ecology. The founder of deep ecology, Arne Naess, often quotes *Bhagavadgita* 6.29 in his writings, a verse he believes expresses the ultimate goal of his ecosophy. *Bhagavadgita*

6.29 tells about a person who sees himself in all beings (*sarvabhutastham atmanam*) and sees the same everywhere (*sarvatrasamadarshana*). Self-realization writes Naess, “insinuates a philosophy of oneness as does chapter 6, verse 29 of the *Gita*,” and this verse expresses, according to Naess, self-realization in its absolute maximum. Traditional commentaries on the *Bhagavadgita* 6.29 give a quite different interpretation, because the traditional salvific goal of Hinduism is freedom from the world (*samsara*) and not merging with *samsara* as favored by Naess’ ecosophy.

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See also: Dharma – Hindu; Gandhi, Mohandas; Hinduism; Hinduism and Pollution; India; Jainism; Naess, Arne; Tantra; Yoga and Ecology.

Biblical Foundations for Christian Stewardship

As one of our earliest texts, and one that is ethically based, the Bible contributes to stewardship of the most robust kind – stewardship that is developed interactively between people and changing environments over long periods of time. A number of foundations or principles for stewardship can be gleaned from the Bible. These have often guided Christian people. The following are particularly prominent and important.

Reciprocal Service Principle

Service by creation to people must be reciprocated with service back to creation. Stewardship does not allow taking without giving back. Instead it returns creation's service with returned human service that is given in appreciation, gratitude, and care. This principle comes in part from Genesis 2:15 where Adam is expected to *'abad* and *shamar* the garden. The Hebrew word *'abad*, usually translated *cultivate, tend, or till*, literally means *to serve* and is translated as such in *Young's Literal Translation*. Interestingly, the Bible does not state that the garden serves people. Instead, it stresses that human beings must serve the garden. Thus, the garden's service to us must be returned with service of our own. Ours is a con-service – a service *with*. It is *reciprocal service* between people and other creatures: it is con-service, *con-servancy*, and *con-servation*.

Earthkeeping Principle

Earth and its provisions for the great variety of living creatures must be respected and maintained as God's provisions, even as they sustain us. The biosphere is a remarkable system whereby the Creator sustains human beings and all of life. It therefore must be recognized by people as a great household that must be the subject of "housekeeping." It must be kept in good order, intact and functioning well. The second Hebrew word cited above from Genesis 2:15 is *shamar*, a word used also in the blessing of Aaron (Numbers 6:24): "the Lord bless you and *shamar* you." This word means *to keep*, not in a preservationist sense (for which there is another word, *natsar*), but in a dynamic sense; it is not the kind of keeping done for pickles in a jar or animals in

a zoo, but the kind of keeping one does when maintaining a long-distance runner or animals in nature. Keeping in the *shamar* sense of keeping means that the runner is kept by “putting it through its paces,” and the animal is kept by preserving its habitat.

Fruitfulness Principle

Human beings may take of the fruit of creation but not destroy the capacity of creation to be fruitful. The capacity of living things to be fruitful is the basis for all life and it must be preserved, even as the produce of creation might be consumed. The best-known biblical passage on this is “the world’s first endangered species act” of Genesis 6 through 9. Noah’s faithful action preserves the lineages of creatures by preserving their capacity to reproduce. This principle is powerfully expressed in Ezekiel 34:18, “Is it not enough for you to feed on the green pastures, must you also trample them under your feet? Is it not enough for you to drink the pure water, must you muddy the rest with your feet?” The plants of the pasture may be eaten and the pure water may be used to quench thirst, but the capacity of the pasture to produce good forage and the stream to produce pure water must be preserved.

Sabbath Principle

Human beings must provide for creation’s and every creature’s sabbath rests; creation and the creatures must not be relentlessly pressed. Every creature, animate and inanimate, must have its regular times of rest so they, in their own peculiar ways, can “enjoy” their being, refresh themselves, and recuperate from having to give and to get. The reason given by the Bible is that after creating the heaven and Earth, God rested (Genesis 2:2–3). As people and their animals are to take their Sabbath rests one day in seven, the land must do so one year in seven (Exodus 23; Leviticus 25 & 26).

Peaceable Kingdom Principle

Human beings must first of all seek the peaceable kingdom that incorporates every creature, rather than seeking selfinterest. All the blessings that flow in creation and human society should be the products of seeking the integrity of creation and society as the number one priority. Seeking creation’s integrity and social integrity first is the real route to society’s and creation’s fulfillment. If this is done as a matter of priority, the other things people need will be provided (Matthew 6:33).

Practice Principle

Human beings must put knowledge of what is right and good into practice, rather than confining such knowledge to human minds and publications. It does absolutely no good to know what is right and good if people do not put this knowledge into practice. The creation and human society benefit not from sequestering such knowledge but by applying this knowledge to achieve and maintain creation's and society's integrity (Ezekiel 33:31–32).

In its commentary on the failure to put biblical teachings into practice, the Bible observes that people often do not do the good they would like to do, and end up doing the bad things they really do not want to do. This is “the human predicament” and comes from human arrogance, ignorance, greed, and aggression. It is to these that the Bible offers a comprehensive solution taught by the Bible and summarized in the concept of *stewardship* (cf. Russell 1994).

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See also: Christianity (7i) – An Evangelical Perspective on Faith and Nature; Creation Story in the Hebrew Bible; Creationism and Creation Science; Evangelical Environmental Network; Restoring Eden; Sabbath - Jubilee Cycle; Stewardship; Wise Use Movement.

Bigfoot

At the boundary between civilization and nature, between the known and the unknown worlds, stands a shaggy giant. Bigfoot, Sasquatch, the abominable snowman. Whether unknown primate or mythological beast, this creature's presence in our imaginations raises sensations of fear, curiosity, and holy awe. To some, an alleged sighting of Bigfoot would show merely that not all secrets of the natural world are known. To others, such an apparition would be an irruption of other dimensions of existence into everyday life, a supernatural message from a potent protector of wild lands.

Stories about large, shaggy ape-like creatures have been reported in the Americas, Europe, and Asia over many centuries. For example, the monster Grendel in the Anglo-Saxon epic poem *Beowulf*, a huge "wild man" living in a desolate swamp, can be seen as a sort of Bigfoot (Wallace 1983: 100). Typical reported contemporary encounters involve fleeting glimpses of a huge but shy shaggy giant with a nauseating odor. Bigfoot is often said to make whistling and crying sounds that cannot be confused with those of coyotes, mountain lions, owls, or bugling elk.

The alternate name "Sasquatch" comes from *saskeha-vas* in the Salish language family of the Pacific Northwest. In the Klamath language of northern California, the mysterious giant is called "Omah." In the Himalayas, a similar creature is called the "yeti" or "abominable snowman." The giant has been compared to and equated with Bukwus and Dzonuqua, the Wild Man and Wild Woman of the woods for the Pacific Coast Kwakiutl tribe. Puget Sound tribes told of the Seehtlks, a group of reclusive and hairy people living in the Cascades, inhabiting the border between the human and animal worlds. Elsewhere in North America, the Algonkian Indians told of Windigo, a wild cannibal giant, while indigenous residents of Alaska's Kenai Peninsula have stories of Nantiinaq, who can change from its Bigfoot shape into those of other creatures. Other shaggy giants have been reported in Nepal, Tibet, Mongolia, and Siberia. Europeans also had "Wild Man" stories, not to mention the half-animal Pan and the satyrs, all living on the margin of civilization and embodying the energies of surging life, vegetation, and wild-animal reproduction.

Alleged sightings of live creatures or discoveries of their footprints have been made in most wooded areas of North America. In a 1924 incident, miners working near Mount St. Helens in southwest Washington state said they had shot at a giant ape-man and then had been attacked by its companions. The dead creature was said to have fallen into a gorge, which has since carried the name Ape Canyon. Perhaps the most famous claim of a Bigfoot encounter came on 20 October 1967 when two freelance Bigfoot searchers, Robert Patterson and Roger Gimlin, reported encountering a solitary giant

along Bluff Creek in Del Norte County, California, in the state's northwest corner. The 952 frames of 16 mm film that Patterson shot have been extensively analyzed without a definite conclusion whether they show a person in Bigfoot costume or an actual unknown North American primate. The name "Bigfoot" originated in the same locale, after huge footprints were found in a logging road bulldozed into virgin forest in 1958.

The greatest collection of Bigfoot sightings comes from the area between Northern California and Alaska, particularly the Cascade Mountains, where a variety of native tribes told stories of hairy giants in the forests. A nineteenth-century paleontologist, Othniel Marsh, described carved stone heads with ape-like features, found in the Columbia River basin, predating contact with American settlers.

Washington State University anthropologist Grover Krantz, after examining the "Patterson film" and hundreds of casts of purported Bigfoot footprints and other evidence, concluded that an unclassified primate lives in the Cascadia bioregion of North America. He placed it within the genus *Gigantopithecus* and suggested that it was identical with *G. blacki*, a giant prehistoric primate known from fossil remains discovered in China and India that date back roughly 500,000 years to the Middle Pleistocene era. Based on the size of the jawbones found,

G. blacki was half again as large as a gorilla, with males weighing about 350 kg (770 lbs) and females about 250 kg (550 lbs). Based on its teeth, *G. blacki* was probably omnivorous but primarily vegetarian. Likewise, Krantz argued, the generally solitary and nocturnal Bigfoot would eat much the same foods as a black bear, being primarily vegetarian but scavenging meat when it could. In his view, it probably does not hibernate, however.

If Bigfoot were proven to exist in the United States, it undoubtedly would be protected as an endangered species. Some, such as Peter Byrne, have insisted that, if found, no Bigfoot should be killed, even for scientific research (Pyle 1995: 193). In 1969, Skamania County, Washington, passed an ordinance defining the "Wanton Slaying of [an] Ape-Creature" as a felony (later changed in 1984 for legal reasons to a misdemeanor). Although it has been suggested that the ordinance was something of a joke, it remains in effect.

More recently, Gordon Krantz suggested that the more bizarre Bigfoot hunters have been secretly financed by timber companies. If the timber companies can thus discredit all Bigfoot researchers, serious wildlife biologists would not waste their time looking for an unknown animal. For if Bigfoot were discovered to exist, large areas of public land would probably be declared off-limits to lumbering and mining in order to protect its habitat (Krantz 1992: 233).

Bigfoot can also be seen as an embodiment of wilderness and as its guardian. In the words of naturalist David Rains Wallace, "Giants seem to have originated as a way of giving human form to all that is titanic and inchoate in nature" (1983: 137). As guardian of wilderness, Bigfoot is more potent than the bureaucratic Smokey Bear. To tell stories of even a mythical Bigfoot is to admit to the sacred and uncontrollable powers of nature. Perhaps Bigfoot's association with loggers in the Pacific Northwest

represents our moral ambivalence toward cutting trees (or hunting or mining), even when such activities are described as economically or spiritually necessary.

While there is no “religion of Bigfoot” (although some New Age thinkers connect outbreaks of sightings with prophesied “Earth changes”), Bigfoot dwells permanently in the contemporary spiritual landscape. Both fierce and protective yet gentle and reclusive, Bigfoot personifies our own ambiguity about the sacrality and nature of wilderness.

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Biocentric Religion – A Call for

Throughout the history of the human species, there has been a need for, and a continual quest for, a philosophy to rely upon, to have faith in, something to provide meaning, comfort, and answers to questions that have no answers.

When there is a need for a philosophy to justify existence it is called religion. It can be defined as a collection of ideas designed to give the appearance of substance to an illusion. All the religions of humanity are nothing more than a mask covering the face of nothingness.

Thus all religions are merely masks. A quest for meaning can never move behind the mask without negating the meaning of the mask.

Another way of describing religion is as a socially acceptable collective mass psychosis.

Gertrude Stein once remarked, “The answer is that there is no answer and that is the answer.”

We are finite creatures living in a universe of infinite space, time, dimension and undiscovered realities. The finite mind is incapable, and will always be incapable, of comprehending the infinite. We cannot finite the infinite.

Religion throughout human history has been the attempt to interpret infinity in finite terms. Since this is an impossibility, religion as a means of truly understanding the nature and meaning of existence is doomed to failure. The most that religion can accomplish is to provide a crutch for the weak or lazy-minded to absolve guilt or to negate inquiry, and to serve as justification for the exercise of baser instincts like aggression, territoriality, ethnic cleansing, bigotry, or sociopathic perversions.

An examination of all the world’s major religions presents one very obvious flaw. They are all anthropocentric in structure. In a world populated by tens of millions of species of living things, all of humanity’s major religions focus exclusively on the superiority and divinity of the human species. All of them center themselves on a human being, be it a Christ, a Mohammed, a Buddha, or gods whose forms are human. For example – Yahweh, Allah, or Krishna. Even the Hindu and Egyptian gods with the heads of elephants, jackals, and other animals still utilize the human form as the basis of the body concept. Extra arms, animal heads, or the addition of wings are merely attachments to the human form.

It is understandable that religion emerged with the evolution of primates and hominids. Primates are social creatures and tribal by nature.

The hominid primate became successful by building upon the tribal social structure and perfecting it through the introduction of a hierarchy that molds, rewards,

and punishes its members. Tribal identification manifests itself primarily in aggressive territoriality. Territoriality breeds hostility to those outside the tribe and conformity fosters allegiance of the members within the tribe. Failure to conform is punished by being ostracized, banished, imprisoned, or killed.

The entire history of humanity is made up of offensive and defensive confrontations between tribal entities. This has evolved to the situation in the present day where the entire planet has been carved up into territorial domains ruled by tribes. In fact there is not one square inch of land on Earth that is not claimed by a human tribe. This obsession has become so extreme that, as an example, even a tiny remote uninhabitable outcropping of rock in the Southern Ocean is claimed by Great Britain and named Scott Island. People have even attempted to establish countries on abandoned oil platforms.

Thus it should not be a surprise to see an established religion having its God promise specific areas of land to a particular tribe. Such territorial establishment in the name of the divine is justification for the eradication of another tribe that disagrees with, or is ignorant of, the specific religious proclamation. The adherents of this particular philosophy see the genocide of the Canaanites by the Israelites under Joshua as legitimate murder.

Joshua was absolved of any guilt because he acted under the orders of a mythical being created for the express purpose of supporting tribal organization and expansion. This trend has continued through the centuries.

We saw German soldiers in World War II wearing belt buckles emblazoned with the words "*Gott mit Uns.*" In the present, we see suicide attacks in the name of Allah with the call of Jihad answered by a call for a Christian Crusade by the President of the United States.

Christians absolve themselves of guilt by proclaiming that their God was a man in mortal form who died for the "sins of humanity." This is all well and good, but what exactly are the sins of humanity?

Christianity does not examine what the sins are, choosing to ignore them. But having had Christ die to have these vaguely defined sins forgiven, Christians have continued to wage war on both humanity and nature for two thousand years. Christianity brilliantly fabricated a belief system to forgive all transgressions thereby absolving the human conscience of blame for tribalistic expansion. The genocide of the American Indians was justified and rationalized because these were unbelievers who had sinned by not believing in a Middle Eastern thunder god.

Christianity has itself split into numerous different tribes like Catholic, Protestant, Mormon, Methodist, and so many more.

Islam, Judaism and Buddhism have also splintered into tribes, as have all other religions. The reason for the splintering is primarily to justify a tribe's change of direction on political or ethical grounds. Anglicanism was created to justify the divorce of a British King. Reform Judaism was created to justify Zionism. Existing religions are sometimes altered or new religions created to accommodate what is essentially a per-

sonality cult. Examples are the Mormons under Joseph Smith, the Branch Davidians under David Koresh, or Scientology created by L. Ron Hubbard.

The one thing however that has been consistent and unchanging has been that all of humanity's religions are based on monkey-god spirituality. They all revere the anthropocentric concept, and the gods are all of human form. This is not surprising because humans created all the gods. What is surprising is that we still have not evolved out of this anthropocentric quagmire. And it is this failure to let go of the anthropocentric that will be our undoing. Even the belief in humanism, while denying a god, still projects humanity as central and looks for salvation through human science and logic.

Upon the altar of our monkey gods, we have been sacrificing species of plants and animals, and we have sacrificed our own children. For this reason, it is fitting that the foundation of the three great religions of Judaism, Christianity, and Islam begin with the Sumerian patriarch Abraham, who was willing to sacrifice his son Isaac to his God.

The adherents of these three religions continue to this day to sacrifice the living for the benefit of their belief systems.

For this reason we are in the midst of the largest mass extinction of species to occur in the last sixty-five million years. For this reason, we have stolen the carrying capacity of all other species and placed it under the domination of one species – ourselves. For this reason, we pump chemical pollutants into rivers, lakes, and our oceans. For this reason, we thoughtlessly expand our own numbers like lemmings racing toward the cliff of ecological disaster.

If we step back and look at ourselves objectively, what do we see? What I see is an overly self-glorified, conceited, naked ape that has become a divine legend in its own collective mind.

We exist in a world where we have collectively dismissed practically every other species, giving thought only to those species that we have enslaved and labeled domestic. Our domestic cattle now outnumber all other ungulates combined. Our domestic dog and cat populations are greater in number than all the world's seal, wolf, lion, tiger, and jaguar populations combined. We have destabilized practically every ecosystem on Earth with the introduction of exotic species and the sheer weight of our ever-expanding human populations. We have created environments for the mutation of viruses by strengthening viral immune systems and removing natural limitation factors. By removing traditional hosts for some species of virus, we have offered ourselves as a new host for them to infect, and thus we have viral species jumping from species to species to survive, and many are attracted to our great numbers.

Our myths, religions, philosophies and beliefs have failed us. We forget that if the planetary ecosystem is weakened, we humans are also weakened. We forget that we are hominids, and hominids have not been overly successful, we being the last surviving species of hominid primate.

Our species possesses a great ability to forget and to adapt, and our selfishness allows us to ignore the consequences for the future of our actions in the present.

We have adapted to impure water. In 1970 clean water usually still came from a tap. Today we buy it in bottles and its value per liter is nearly four times that of gasoline. As fish species decline, we utilize advertising to make what was unappealing two decades ago into something worthwhile today. For example, the turbot was a fish with no commercial value when cod, haddock, and halibut were in abundance. Today it is turbot, mussels, or Pollock on the menu of Parisian or New York ritzy restaurants, and the traditionally more valuable fish have been forgotten. We are adapting to diminishment.

In 1950 the world's human population was three billion. It is today over six and a half billion, having doubled in a generation. The majority of these six and half billion are now under the age of twenty-five and this means another doubling by 2050 to thirteen billion and by 2100 to twenty-six billion. Yet the consequences of this are not even mentioned in the mass media because our religions call for the sanctity of human life and preach continued expansion as we replace quality of life for all species on Earth with quantity of human life to cover the planet. And despite the call for the sanctity of human life, we continue with the global mass slaughter of other humans through warfare, famine, disease, and civil strife.

What we need if we are to survive is a new story, a new myth, and a new religion. We need to replace anthropocentrism with biocentrism. We need to construct a religion that incorporates all species and establishes nature as sacred and deserving of respect.

Christians have denounced this idea as worshipping the creation and not the Creator. Yet in the name of the Creator, they have advocated the destruction of the creation.

What is true however is that we can know the creation; we can see it, hear it, smell it, feel it and experience it. We can also nurture and protect it. We cannot and we will never know the true story of the creation, most likely because there never was a creation. There is, always has, and always will be the infinite.

I reject the anthropocentric idea of custodianship. This is an idea that once again conveys human superiority, and quite frankly, we have always been lousy custodians.

Religions are based on rules, and we already have the rules in place for the establishment of a religion based on nature. These are the basic Laws of Ecology. It is a fact that throughout the entire history of the Earth, all species that have not lived within the bounds of the natural ecological laws have gone extinct. Those that have lived within the bounds have flourished with the exception of interference by other species that have upset the balance for all.

The first is the Law of Diversity. The strength of an ecosystem is dependent upon its diversity. The greatest threat to the planet's living species in the present is the escalating destruction of biological diversity. The primary reason for this can be found in the next three laws.

The second law is the Law of Interdependence. All species are interdependent upon each other. As Sierra Club founder John Muir once said, "When you tug on any part of the planet, you will find it intimately connected to every other part of the planet."

The third law is the Law of Finite Resources. There are limits to growth in every species because there are limits to carrying capacity of every ecosystem.

The fourth law of ecology is the Law that a Species must have Precedence over the interests of any individual, or group of individuals of any other species. This means that the rights of a species to survive must take precedence over the right of any individual or group to exploit the species beyond the law of finite resources.

What does this mean for humanity? It means that every human action must be guided by what potential consequences it will have on diversity, the availability of resources to all other species, relationships with all other species, and the rights of all other species.

The protection, conservation, and preservation of the Earth should be the foremost human concern. We must look upon the Earth, her ecosystems and species as sacred. Anthropocentric culture has taught most of us to look upon anthropocentric beliefs as sacred. Thus it is considered blasphemy to spit upon the Black Stone in Mecca or to vandalize the Wailing Wall in Jerusalem or to desecrate a marble statue in the Vatican. If any person were to do any of these things, they would be dealt with quickly and violently, and anthropocentric society would applaud their murders or punishment as justifiable. Yet when loggers assault the sacredness of the forests of Amazonia, humanity says very little. When the Taliban destroyed two 800-year-old manmade Buddhist statues in Afghanistan, the world was outraged, yet there has been relatively little protest over the wanton destruction of 3000-year-old living redwoods and sequoia trees in California.

We must develop a philosophy where a redwood tree is more sacred than a human-made religious icon, where a species of bird or butterfly is of more value and deserving of more respect than the crown jewels of a nation, and where the survival of a species of cacti or flower is more important than the survival of a monument to human conceit like the pyramids.

With the laws of ecology as a foundation for a new biocentric, ecocentric worldview, we can then look at providing a sense of identity. Religious identity has been primarily tribal, dividing people into groups or cults at odds with each other. A biocentric identity is something completely different because it is all-encompassing.

An acceptance of interspecies equality allows a sense of planetary belonging. To be part of the whole is to be free of the alienation caused by an individual species like our own becoming divorced and alienated from the biospheric family of life.

With this revolutionary approach to forming a new religion, we have rules and we have a sense of belonging. Since the membership is multi-species and encompasses all ecosystems, there is no need for a church. The planet becomes its own church and the philosophy is uncontainable.

One thing however is left to make such a new story possible. That is a legacy, a reason to live and a reason to create and nurture.

That reason can be found in the Continuum.

The Continuum is a biocentric concept, understood by many indigenous cultures. It is living within the understanding of the connectedness of all things. All that came before and all that will come later are also one and the same. Past, present, and future are different stretches of the same river. Like the molecules of water in a river, the living beings of the past remain connected to the living beings of the future through the living beings of the present.

Anthropocentrism has taken humans out of step with the flow of time. There is no longer a connection to their ancestors nor do they feel kinship with their own children of the future. Kinship with all other species has virtually disappeared.

The Continuum is the guide for navigating the river of life. Without the Continuum, life has no direction and runs counter to the Ecological Laws guaranteeing ecological disorder.

A biocentrically oriented human naturally takes an interest in the people and species of the past. Anthropocentric people give little thought to the deeds and lives of their grandparents or in many cases, even their parents.

A biocentric perspective allows a vision into the future for it conveys an understanding of the connection to tomorrow. Thus thought is given to the consequences of actions for generations to come because the knowledge of consequences is real. What we do today will determine the state of the planet a thousand years, ten thousand years, and a million years from today. The biocentric person loves not only the child of his or her own loins but also the baby, child, and adult who is birthed by the woman, who is reality by virtue of a direct link between the now and tomorrow.

Born of the Earth, we return to the Earth. The soil beneath our feet contains the material reality of the ancestors of all species. Without the collective, expired lives of the past, there would be less soil. For this reason, the soil itself is our collective ancestry, and thus the soil should be as sacred to us.

The water of the Earth is the blood of the planet and within its immensity will be found the molecules of water, which once enlivened the cells of our ancestors of all species. The water you drink once coursed through the blood of the dinosaurs, or was drunk by Precambrian ferns, or was expelled in the urine of a mastodon. Water has utilized the lives of all living things as part of its planetary circulatory system. All life contains water. Therefore water is sacred.

The air that we breathe has passed through countless respiratory systems and thus has been chemically stabilized by plants and animals. Without the lives that have gone before, there would be no air to breathe. The life of the past has nurtured the atmosphere. Therefore the air is sacred.

In fact, the air, the water, and the soil form the trinity of sacredness in a biocentric perspective.

Our lives in the present should be sacred to the living beings of the future.

I am advancing this idea of a new religion because we need to return to the garden of the natural world. We need to revolt against anthropocentric thought, this matrix-

like cloak of homo-oriented values that mold our perceptions of our world in such a complex and perverse manner.

It is anthropocentric religious beliefs that have shaped us for nearly ten thousand years. But ten thousand years is nothing compared to the history of our species. Yes, these ten thousand years have given us technology, comfort, and superiority. It has also given us genocide, specicide and ecocide. The price has been high.

But now we are in a unique position to retain the positive discoveries of our venture into anthropocentrism and to reject the negative. The negative is primarily anthropocentric religious beliefs.

If we remove tribalism and anthropocentrism and if we adopt the guidance of the Continuum and live within the Laws of Ecology, we will find ourselves on a planet living harmoniously with millions of other species who we can, and should, call fellow Earthlings.

Captain Paul Watson

See also: Earth First! and the Earth Liberation Front; Greenpeace; Radical Environmentalism (and adjacent entry “Rodney Coronado and the Animal Liberation Front”); Watson, Paul – and the Sea Shepherd Conservation Society.

Biodiversity

The scientific concept of biodiversity has revolutionized biology, conservation, and related arenas in Western society since the 1980s. Biodiversity refers to the variety, variability, and processes of life at all levels from the genetic to the biosphere. However, usually the focus is on the number of species in an area or biome. (Biome refers to similar types of ecosystems, such as tropical rainforests.)

Many biologists, although operating mainly if not exclusively within the framework of Western science, variously recognize the mutual relevance of biodiversity and religion. As David Takacs writes:

By activism on behalf of what they call *biodiversity*, conservation biologists seek to redefine the boundaries of science and politics, ethics and religion, nature and our ideas about it. They believe that humans and other species with which we share the Earth are imperiled by an unparalleled ecological crisis, whose roots lie in an unheeded ethical crisis. *Biodiversity* is the rallying cry currently used by biologists to draw attention to this crisis and to encapsulate the Earth's myriad species and biological processes, as well as a host of values ascribed to the natural world. An elite group of biologists aims to forge a new ethic, in which biodiversity's multiplicity of values will be respected, appreciated, and perhaps even worshipped (1996: 9).

Takacs identifies spiritual value as among the several different kinds of values of biodiversity, based on interviews with numerous prominent biologists (1996: 254–70). Most of them, speaking as scientists, would not admit to being religious in the sense of ascribing to any particular religious tradition or organization. However, many of them admitted to having extraordinary experiences during their field research in nature that they variously identified as a sense of wonder, awe, joy, exhilaration, tranquility, reverence, mystery, or spirituality. (Most distinguish between religion as a social institution and spirituality as an individual experience.) Takacs concludes:

Some biologists have found their own brand of religion, and it is based on biodiversity. The biologists portrayed here attach the label *spiritual* to deep, driving feelings they can't understand, but that give their lives meaning, impel their professional activities, and make them ardent conservationists (1996: 270).

Closely related is the phenomenon of biophilia, a profound affective bond with nature.

The above approach is a radical departure from the nearly exclusive emphasis of most environmentalists for some two centuries on material factors for sustainable natural resource and environmental use, management, and conservation, including science, technology, economics, government, politics, and education. Since the late 1980s, how-

ever, there has been a growing realization that, while material factors are necessary to consider, they are not sufficient. Increasingly, many biologists and others add spirituality as the most important factor of all, because it can generate a far more profound appreciation and respect for nature. For example, Takacs notes that most of the biologists he interviewed think that: “If the value of biodiversity were felt not merely in the pocket or in the brain but in the *soul*, then the most effective, permanent conservation ethic imaginable might result” (1996: 256; cf. Wilson 1992: 343–51). Although recent, this approach is not completely new. The writings of pioneer naturalists and environmentalists, like Henry David Thoreau (1817–1862), John Muir (1838–1914), and Aldo Leopold (1887–1948), clearly reveal that their communion with nature was spiritual. Yet any spiritual approach appears to have been suppressed, if not eliminated, from the work of most naturalists and environmentalists until recently.

Arguably scientific concepts like biodiversity and biophilia are a Western rediscovery of the ancient ecological wisdom and corresponding practices of many traditional cultures. In many ways, and to varying degrees, most indigenous societies have developed worldviews, attitudes, values, institutions, and behaviors that usually promote sustainable use of biodiversity and often enrich it as well. The sustainability of most indigenous societies is evidenced by the fact that they and the ecosystems in their habitats survived for centuries or even millennia.

Religion, when an integral component of the sociocultural system, can serve as a mechanism for symbolically and ritually encoding the uses of biodiversity for sustainable subsistence and conservation practices. Religion may reinforce behaviors that variously limit the harvesting of plants and animals by species, stage in the life history of individual organisms, time, and/or space. For example, among Aborigines in Australia, traditionally the societies of humans and other beings are integrated, as are the natural and supernatural components of their world. This is reflected in their practice of totemism, a socio-religious system of beliefs, values, attitudes, and rituals regarding nature in which individual and/or group ancestry is believed to derive from certain animal or plant species. Behavior toward these totemic species is accordingly reverential, rather than exploitative and destructive. Totemism extends kinship to nonhuman species with affective bonds (biophilia), spiritual obligations, and reciprocity.

Similarly, in Amazonia, traditional indigenous cultures each developed a set of faunal prohibitions or food taboos on a somewhat different combination of animal species. Logically, the net result of hundreds of cultures each prohibiting a somewhat different combination of species as totems or taboos probably resulted in a widespread and long-term system of species refuges. In effect, even if inadvertently, this would promote biodiversity conservation by relieving human predation pressure regionally.

In addition to taboos or restrictions on particular species, most traditional indigenous societies and many others set aside whole areas as sacred places. These merited special reverence and rules for any use, and consequently, many most likely functioned as nature reserves or biodiversity refuges for a multitude of species. Among other natural phenomena, sacred places range from single trees and their surroundings to

groves of trees and even entire forests, the latter often coinciding with mountains also considered to be sacred.

While the mutual relevance of religion and nature, or more specifically spirituality and biodiversity, is often asserted with only logical arguments, textual interpretations, and/or anecdotal evidence from library research, a growing number of field studies are systematically and empirically testing and verifying specific hypotheses. For instance, a recent report by Bruce Byers, Robert Cunliffe and Andrew Hudak (2001) demonstrates that in the Zambezi Valley of northern Zimbabwe in southeastern Africa, deforestation in sacred forests is at least 50 percent less than that in their secular counterparts. Some 133 species of native plants occur in these sacred forests, whereas they are threatened, endangered, or extirpated elsewhere in Zimbabwe. In this case, spiritual values have helped to protect biodiversity as Byers et al., succinctly explain:

In the Shona language the word sacred, *inoera*, is an adjective describing a thing or place. Sacredness has the connotation of being life sustaining, such as providing food, fruit, or water. The concept is closely linked with rain, and the fertility of the land. A sacred place (*nzvimbo inoera*) is a place where spirits are present; it has certain rules of access, as well as behaviors that are not allowed there (taboos) (2001: 193).

While Byers and his colleagues only examined sacred forests, they allude to the sacred geography of the Zambezi Valley landscape by noting that many other kinds of sacred places also exist, including certain trees, pools, rivers, mountains, and even mountain ranges. They conclude that biodiversity conservation strategies which link the conservation of culture and nature are more likely to be effective than top-down government and/or international approaches which ignore traditional beliefs, values, and institutions.

The diversity principle recognizes the general geographic coincidence between high concentrations of both biological and cultural diversity, usually in the tropics and especially rainforest areas. (Cultural diversity includes diversity in languages and religions.) The countries that biologists and environmentalists identify as megadiversity countries also have high concentrations of cultural diversity: Mexico, Brazil, Congo, Indonesia, and Papua New Guinea. Such regions of high diversity are, however, increasingly threatened by external forces, eroding both biological and cultural diversity.

One cause of biodiversity erosion is economic, stemming successively from European colonialism, industrialization, economic development, and more recently, globalization. The impoverishment of the wealth and vitality of nature is in no small measure caused by the progressive objectification and commodification of biodiversity, ecosystems, and landscapes as economic resources with the concomitant desacralization of nature.

Another source of biodiversity erosion is rampant and coercive missionization, especially from Christianity and Islam. Because religion is often the single most important force providing cohesion in a sociocultural system, changes in religion can precipitate changes elsewhere in the system, and even its disintegration, which in turn impacts on ecological relationships. Christians and Muslims, when fanatics, have usually sup-

pressed, if not destroyed, the sacred beliefs, practices, and places of people they considered to be pagans or infidels.

Such considerations lead to the conclusion that the historical ecology of the transformation of Animism by Christians, Muslims, and others – when they consider their own religion to be the exclusive truth and become expansionist and destructive – is part of the history of biodiversity erosion. A correlate is that the promotion of biodiversity conservation depends to a considerable extent on genuine respect for religious freedom together with the maintenance or restoration of traditional spiritual ecologies including sacred places in nature. Greater tolerance and appreciation for other religions as humankind's wisdom can be facilitated by increasing all of the following – knowledge about them, recognition of their commonalities, and interfaith dialog. Of course, the history of inter-religious conflicts and violence from ancient times to this day in many parts of the world indicates just how great the challenges are. There is also the obstacle of the frequent discrepancy between professed ideals and manifest actions of adherents to any religion.

The above discussion is not intended to leave the impression that all indigenous cultures and religions are always in some kind of benevolent harmony with their natural environment, although clearly, to varying degrees, most have been and many continue to be. Also this is not to imply that religions such as Christianity are necessarily detrimental to biodiversity conservation. For instance, the exemplary biophilic ideas and actions of Christians like St. Francis of Assisi (1182–1226) and Albert Schweitzer (1875–1965) in their reverence for all life are noteworthy, albeit exceptional. Also, the Shona provide an example wherein those who are Christian may still respect traditional sacred places. My main argument is that there are multifarious connections between biodiversity and religion which really need to be explored in a far more systematic and penetrating manner for practical environmental as well as scientific, intellectual, and spiritual purposes. Whether those connections are positive or negative, adaptive or maladaptive, also needs to be assessed as holistically, objectively, and empirically as possible in specific cases. The future of humankind and biodiversity depend on such explorations and understandings.

Leslie E. Sponsel

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See also: Amazonia; Animism; Biophilia; Bioregionalism; Brazil and Contemporary Christianity; Conservation Biology; Leopold, Aldo; Muir, John; Papua New Guinea; Rainforests (Central and South America); Restoration Ecology and Ritual; Schweitzer, Albert; Shona Women and the Mutopo Principle; Thoreau, Henry David; Zimbabwe's Matopos Hills.

Biodiversity and Religion in Equatorial Africa

Biodiversity is a concept used to describe the variety (in terms of species or genetic variability) that exists among living organisms and the environments (ecosystems or biomes) in which they are found. Equatorial Africa is known for being one of the most biologically diverse regions on the planet, due to its tropical climate and high rainfall. Of particular interest are the rainforests: from the Congo basin to the coastal forests of western Africa, the rainforests are teeming with life. It is estimated that there are over 8000 different plant species within the rainforests of equatorial Africa, of which 90 percent have not even been identified by scientists. Central Africa gave rise to many species that are endemic to that particular region, for example the Okapi (an animal related to the giraffe family), one of 52 species endemic to the Democratic Republic of the Congo (DRC); and Okoumé, a type of tree found only in Central Africa. These habitats, be they rainforest or savannah, that house these diverse species have long been the reservoirs of water, fuel and food to the humans that have lived around them and survived from the resources found there.

Fossil evidence indicates that humankind lived in Africa as long as 120,000 years ago. How has this rich and varied landscape with its flora and fauna shaped human concepts and responses to our own role in this realm of biodiversity? Africans in the countries that comprise equatorial Africa have affected the rainforests of today and the rainforests have shaped Africans' religious responses to the wildlife inhabiting them. This is apparent in myths which explain their environment; in terms of resources in medicinal uses of plants and animals; in taboos against hunting and eating of certain animals; in reverence or veneration of certain sacred sites or plants and animals; and in ritualistic and sacrificial use or symbolic representation of certain types of plants and animals.

Animals and plants are venerated and feared in a rich tapestry of folklore and myths. Some myths seek to provide an explanation for the existence of an animal, the way an animal behaves or has certain characteristics. In many African belief systems incorporated into myths, a common character that appears is the trickster, who is variously thought of as being in the form of the hyena, spider or jackal. In Cameroon, there is a myth that seeks to provide a reason for elephants' intelligence by explaining that one day a human was transformed into the form of an elephant, and thus created a new species that still had the intelligence of a human. Elephants' behavior is used

to back the story up: elephants wash themselves with their trunk as humans do with their hands.

Muti (variant *muthi*) is a Zulu word meaning traditional medicine. In Muti parts of plants and animals are used as ingredients, either for their actual medicinal properties or symbolic properties. Despite the Zulu etymological derivation, Muti practices are found right across equatorial Africa. Even the word itself has in some cases been adopted to refer to these practices. In the case of animals, this may include using hair, teeth, meat, bones, tail, fat, feces and glands. These parts are often ground up and applied to the body or imbibed by the person seeking the spiritual or physical cure. Similarly, all conceivable parts of plants are put to use in Muti practices. These particular parts of plants and animals will be specifically chosen as they will be thought of as possessing the desired attributes or qualities. An example of a medicinal use of Muti is the African potato (*Hypoxis hemerocallidea*), which has long been used in traditional medicine as a cure for illnesses such as tuberculosis and sexually transmitted diseases. This particular plant has been verified by scientists as having curative properties. An example of a spiritual or magical use of Muti is the use of the horn of a black duiker, which has been known to be used in order to pinpoint the identity of thieves. Animals are also ritually sacrificed for ancestral veneration or placation of a deity. Different deities may require a certain type of animal to be sacrificed to them, or the purpose may dictate the choice of animal. While in itself morally neutral, cases of humans being murdered for Muti parts, and rarely as sacrifice to a deity, are known throughout sub-Saharan Africa.

Many taboos against hunting or killing of certain animals exist. For example, the bonobo in the DRC up until the 1980s was mostly protected because there existed a taboo held by many, including the people in the village of Wamba. The villagers believed that they must not eat bonobo meat as bonobo had once been their brothers that had become separated from their human relatives and had gone to live in the forest. Unfortunately, since the 1980s, starvation has taken precedence over religious taboos and this creature is now being hunted prolifically for meat. The way an animal is associated with particular powers or forces in traditional folklore has in some cases had a powerful effect on the way that species is treated, and whether it thrives or strives in equatorial Africa.

The rainforest is often thought of as a sacred place, which is revered and feared equally in traditional belief systems. It may be a place where the long dead, the unknown spirits, are believed to live. This concept of the rainforest as an object of fear may have been generated because of the dangers humans face when inside it. In the rainforest, humans may hunt and may be hunted. In remote places, such as the forest, the desert and savannah, where humans may feel disempowered, fear is accounted for partially by the presence of other forces inhabiting these places. Quite often, the dead would be buried in sacred groves in the forest. This gave the rainforest a sense of otherness and made it a natural boundary between the living and the spirit world. In some Ghanaian traditional beliefs, the lesser gods and ancestors dwell in the

forest amongst the trees. Some of the Bantu tribes believed that the dead came back in animal form; the Atonga tribe of Malawi, for example, thought that the chiefs of the tribe came back as lions.

There is no word or concept for “nature” in any African language that doesn’t include humans within that framework. For example the word *bomoi* in the equatorial language Lingala translates as “life” and is used to describe all human, animal and plant life, just as the term “biodiversity” includes all variety of life forms. Africans, naturally, are themselves an intrinsic part of “nature.” They are not separate from it, as they belong to it. Respect for, and fear of, biodiversity permeates their belief system to the core. It is shown in abundance in their practices, in their stories, myths and day-to-day existence.

Faith Warner Richard Hoskins

Further Reading

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See also: African Religions and Nature Conservation; Animals in African Legend and Ethiopian Scriptures; Congo River Watershed; Kenya Greenbelt Movement (with “Wangari Maathai on Reforesting Kenya”); Muti and African Healing; Muti Killing; Rubber and Religion in the Belgian Congo.

Bioneers Conference

Kenny Ausubel launched the Collective Heritage Institute and the Bioneers conference in New Mexico in 1990, moving it to the San Francisco Bay area three years later. In partnership with his wife Nina Simons, Ausubel has created a respected forum for the exploration and dissemination of practical solutions to the global, social and ecological crisis, each grounded in and informed by indigenous and other forms of green spirituality. By their definition, “bioneers” are any of the many “biological pioneers” dedicating their lives to the healing and restoration of self, society, and the intricate fabric of life.

Their stated purpose has been to (1) optimize effective action by building bridges among diverse communities and cultures that otherwise operate separately, enhancing collaboration on a variety of culturally appropriate approaches to restoration; (2) develop an active faculty of bioneers, introducing them to each other’s work to foster cross-pollination of ideas, strategies and networks; and

(3) disseminate environmental solutions to the public, to professionals and to the media to cultivate grounded optimism, encouraging and equipping people to take action and engage more effectively in ecological restoration.

The presenters are visionaries and practitioners from diverse cultures and fields: authors, activists, conservation biologists, ecocentric economists, innovative organic gardeners, designers and educators. Their common emphasis is on the interrelatedness of all things, and the responsibilities of conscious kinship. The audience is inspired and empowered to act by the powerful personal stories of humanity’s physical and spiritual connection to the rest of the living world. Bioneers believe that individual, social and environmental imbalance are inseparable; and that any successful technical and legislative remedies must be accompanied by a change of heart, a shift in societal values, and a deepening holistic or ecocentric spirituality on the part of the larger population.

Bioneers was cited by the popular U.S. publication *Utne Reader* as one of “Fifteen Ideas to Shake Up the World,” and since 2000, a public radio program entitled “Bioneers: Revolution From the Heart of Nature” has aired worldwide on New Dimensions Radio.

Jesse Wolf Hardin

Biophilia

A flicker of movement catches the corner of my eye as I tap electronic letters on the computer screen. I sit before the desk, facing the large window looking east, on the third floor of the tall house. It always feels a little like being in a tree-house, perched high among the tall oaks marching from the neighbor's house through mine on to the next. The first tree lords over the others – four hundred years old, twenty feet around, branches resembling entire trees. The pistils hang like tassels in the brisk morning air, leaves barely emergent, and I can still see between the tangles of branches out onto the horizon. In the distance looms the large vertical trap rock. Along its base a meandering river winds a path to the nearby ocean.

I struggle to keep my mind on the shimmering light of the monitor's glow. Deadlines and commitments draw me back into the screen's reality. But, a second flicker passes among the branches, distracting me again. Glints of animation on the move, dancing within and between the flowering tassels. I cannot resist the temptation to look, and rushing for my binoculars, I remember the time of year. Warblers on the move. Reproductive fever urging tiny birds northwards in great waves, irresistibly seeking their ancestral breeding grounds. Returning to the desk, I scan the canopy, frustrated now by the absence of movement. Then, remembering their diminutive size, far smaller than the symbol of spring they occupy in my mind's eye, I slow down.

Again I catch the flicker of movement. Skipping along new leaves and branches among treetops. Closing in, I find and then capture my visual prey. A chestnut-sided warbler! Then another. A third. A magnolia and a blackburnian! Restless spirits of arresting color and exuberant life ceaselessly on the move. Absent yesterday, they take possession of the trees today as if the forest can hardly exist without them.

I stare at the colors and glorious patterns. A motif of rich sienna arches along the white body of the chestnutsided, a brilliant yellow capping its head. The blackburnian blazes in brilliant orange, edged by an emphasizing black; the magnolia in bright yellow and black striping, calling for attention.

But these warblers signal much more than beauty to me. The motion, the eruption of energy, the ghostly specter

– all suggest the restless and expansive character of spring, a time of fresh creation. I welcome, too, their practical role in the cycling of nutrients, their complicated contribution to the continuity of associated plants, their place in a stream of ecological functions and processes on which all life, even my own, ultimately depends. From a more immediate perspective, I am reassured by their contribution to protecting trees of the northern forest, sources of timber and paper, from insect damage and disease.

These migrating wonders also rekindle an elusive youth. Seeking them indulges my passion for discovery, excites my curiosity, feeds my desire for adventure. Today I pursue the feathered storm from the window, but tomorrow I will be in the forest and along the river. There might even be, as there has been, risk and danger in probing where I should not, and sometimes entering the dark forests will call forth a foreboding I never can entirely mute. Their quick beauty represents a fundamental element of their appeal, but they also engender an inquisitive impulse, a competitive urge to find, locate, and identify, a willingness to confront the uncertain and the unknown.

I thrill at their reappearance, but an underlying lament lingers about a future lacking this spirited reminder of the glory and wonder of the returning spring. Great gaps of cleared and converted forest already fragment vast swaths of wintering, migratory, and nesting grounds. Annual counts suggest population declines of various species. Ecological adages from the past echo inside my head: Rachel Carson (1962) and the specter of a “silent spring,” Aldo Leopold (1966) and the reminder to “think like a mountain.” A world without warblers would be mute and barren, lacking the richness of sound, color, the promise of hope, rebirth, and transcendence. Their exuberant passage reaffirms connections with the miracle of tenuous life. Their diminution contracts our tiny world of organized and purposeful matter and spirit; without them, the edge of a more universal deadness and dissolution advances.

The red cliff, the winding river, the spreading floodplain, lacking the wonder of life the warblers signify, offers but a stony silence. The warblers transform this deadness of rock, soil, and water into a fountain of energy and animation. Through them I discern a living essence in the forest and the mountain and the river. Through them I recognize a vibrant core that converts this heap of inanimate matter into an ecological super-organism, not exactly alive, but organized and, most of all, giving rise to life. The warblers represent one tiny thread among the many countless chords of relationship that bind the human experience to the great tapestry of life amidst and joining non-life. Standing at the pinnacle of creation, we should have recognized by now that the apex is only as strong as its base.

As I shut down the computer, my eye catches another flicker of movement. A black and white warbler, less obviously colorful than the others, but striking contrasts nonetheless seductive. I am drawn in. Along with the bird my eye skips from tassel to branch to flower. Among the branches, I am carried by the wind, my self taking wing. My backyard becomes a place of enchantment. My bounded universe becomes an entire world. Along with the warbler, my mind and spirit soars among the treetops. Like the warbler I bathe in the warmth of the early spring. Blazing a trail to the north woods, dissipating remnants from the winter’s weariness, reigniting hope for another year, the warblers lift and inspire me.

This story recounts a brief moment, like many such epiphanies, when the invisible processes of creation became fleetingly revealed in a passing moment of brilliance and exuberance. Embedded within this anecdote is the idea that human physical and mental well-being is nurtured and enhanced by the quality of our experience of the natural

world. Such experiences, both personal and informed by scientific inquiry, suggest that an ethic of regard for nature can be found at the intersection of an empirically based science and a deeply held spiritual faith in the value of creation. They have also led me to conclude that an environmental ethic can be identified based on an expanded understanding of human evolutionary selfinterest that connects human spirituality and morality with physical and material well-being, each indicative of the human dependence on the health, beauty, and integrity of the natural world. Stories like those of the warbler intimate an environmental ethic derived from an aesthetic appreciation, emotional connection, intellectual challenge, spiritual reverence, and more, for nature, and that each perspective is related to human evolutionary fitness.

The idea that people possess a genetic inclination, grounded in the quest for individual and collective fitness, to attach physical, emotional, intellectual, and moral meaning to nature, has been labeled “biophilia” (Wilson 1984; Kellert and Wilson 1993). From my perspective, this affinity is reflected in nine basic values of the natural world (Kellert 1997), each connected to the anecdote of the warblers and illustrative of an instrumental ethic of care and responsibility for nature.

An aesthetic value underscores the physical attraction and beauty of nature. This perspective has been instrumental in developing the human capacities for recognizing and promoting order and organization, developing ideas of harmony, balance, symmetry, and grace, and in evoking and stimulating curiosity and imagination. Few experiences in human life exert as consistent and powerful an impact as the beauty and physical attraction of nature. Even the most hardened criminal when suddenly exposed to a beautiful sunset or even a blackburnian warbler would likely be unable to resist some degree of aesthetic appreciation. This largely involuntary response has developed and persisted because, like all human biological tendencies, it fosters a range of adaptive benefits linked to its consistency and intensity. Beauty in nature inspires and instructs, providing a prototype and a template for action. Through mimicry and ingenuity, people capture analogous expressions of excellence and refinement in their lives. The spring warbler provides a glimpse of perfection in a world where chaos, frailty, shortcoming, and death are far more pervasive and normative. People also favor landscapes that enhance safety, sustenance, and security (e.g., ones with water, which foster sight and mobility; and that have bright flowering colors and other features that, over evolutionary time, have proven instrumental in human survival). The human aesthetic for nature is fundamentally an act of attraction, of being drawn to the most “information-rich” environment people will ever encounter. In being so attracted, people nurture their tendencies for wonder and curiosity that lead to exploration, imagination, creativity, and discovery. And, in this recognition of beauty, they become ethically inclined to defend and protect this source of wonder and inspiration.

A dominionistic value reflects the inclination to master and control the natural world. Adaptive benefits include an enhanced sense of independence and autonomy, greater safety and security, and a willingness to take risks, show resourcefulness, and cope with adversity. People hone their physical and mental fitness through subduing

and mastering nature. We no longer rely on besting prey or eluding menacing predators or surviving in the wild, but the strength and prowess derived from physical and mental competence in confronting nature remains instrumental in our physical and mental well-being. By demonstrating the capacity to function under difficult and challenging circumstances, we emerge surer and more confident of ourselves. Seeing and observing warblers hardly constitutes a test of survival, but by finding, locating, and “capturing” this visual prey under somewhat novel and demanding circumstances, one affirms the ability to persevere, succeed, and master challenge and the unknown. Self-confidence and self-esteem develops through demonstrating the ability to succeed in the face of adversity. And, the object of this enhanced well-being can become the recipient of greater appreciation, admiration, and ethical regard.

A humanistic value reflects strong affection and emotional attachment to the natural world. The development of such feelings enhances the human capacities for intimacy, companionship, trust, relationship, and the giving and receiving of affection. The natural world has always been a focus of human affection, especially bonding, affiliation, and companionship with other creatures, but also by the occasional identification with certain plants and landscapes. These subjects of pronounced affection provide the chance for closeness, connection, and the expression of feelings that suggest at times even a sense of love and kinship. Isolation and aloneness constitute heavy burdens for a highly social species like our own. People typically crave companionship and affiliation, and emotionally identifying with elements of nature can provide a valued means for establishing strong relationships and expressing and receiving affection. We covet responsibility for others and, in turn, gratefully welcome their seeming devotion and allegiance. This feeling of connection is powerfully evident in our ties to domesticated animals, but also to charismatic wild species like elephants, bears, and sometimes with familiarity and cultivation, even warblers. And, we cherish and protect these subjects of affection and attachment, extending to them ethical standing and a willingness to defend their interests and well-being.

A moralistic value reflects a spiritual and moral affinity for the natural world. Benefits associated with this perspective include a sense of order, meaning, and purpose, a feeling of shared moral conviction, and an enhanced inclination to treat nature with kindness and respect. Nature is a source of deep and persistent spirituality and religious inspiration, in part, due to a sense of underlying and fundamental connection of nature with humanity. Despite incredible variability in the natural world – 1.7 million classified species, an estimated 10–100 million extant species, the disappearance of nearly all species that ever existed – most people are astonished by a fundamental commonality uniting most of life as we know it. The great majority of creatures share common molecular and genetic features, analogous circulatory and reproductive structures, and parallel bodily parts. This and more, much intuitively grasped, suggests a remarkable web of relationship connecting a fish in the sea, a warbler in the treetops, and a human in the modern metropolis. This unity and relation provides a sense of meaning and order, and a cornerstone of spiritual and religious belief in a world where disorder and

disconnection are far more common. When we discern universal pattern in creation, we give shape to our existence. Through shared moral conviction in an underlying harmony and purpose in life, we acquire strength, a sense of cohesion, and feelings of mutual commitment. These spiritual and moral sentiments prompt the view that, at the core of our existence, lies a fundamental logic, worth, and even goodness. Faith and confidence emerge through the recognition of a unity transcending one's individuality, separateness, and aloneness. This perspective fosters an inclination to protect and preserve the natural world. We conserve nature as much because of moral and ethical belief as because of any calculated materialism or regulatory fiat. When people discern a fundamental relation between themselves and creation, they inevitably temper their tendencies to harm and destroy its constituent parts. Even a tiny warbler can become the means for discerning the splendid and sublime, a pathway for divining harmony, meaning, and grace. A naturalistic value emphasizes an interest in close and direct contact with the natural world. Adaptive benefits include enhanced tendencies for exploration, discovery, and imagination; increased self-confidence through demonstrating skill and competence; greater calm and peace of mind by heightened awareness and spatial and temporal immersion in nature. Intimate relation with the many rhythms and details of the natural world engender curiosity, imagination, and an interest in exploration and discovery. Every creature is like a "magic well," the more one explores and draws from it, the more is revealed in an endless flow of wonder and curiosity. People mine physical, emotional, and intellectual ore from deep and detailed immersion in nature's rich tapestry of shapes and forms. In the process, they achieve physical fitness and mental acuity, an expanded inclination for adventure, and an enhanced capacity for reacting quickly, resolving new and challenging situations, and exploiting and consuming with efficiency. This intimacy with nature can generate a clearer sense of priorities, a greater strength and resolve, and improved feelings of self-confidence and self-worth. Pursuing warblers offers a chance for deep and timeless involvement, a respite from the modern temper that all too often is marred by transience, tenuous relation, and conflicted identity. One feels, as a consequence, gratitude, appreciation, and an ethical inclination to defend and protect this source of physical and mental security.

A negativistic value reflects the tendency to fear, avoid, and sometimes disdain aspects of nature. Adaptive benefits include avoiding harm and injury, minimizing risk and uncertainty and, more positively, nurturing a sense of awe and respect for nature's power. The natural world has always been a persistent source of some of our deepest fears and anxieties. Sharks, snakes, swamps, fierce storms, large predators, and more, often elicit much anxiety and fright. Avoidance and fear of nature can provoke irrational and highly destructive acts although, more typically, these inclinations are moderately and rationally expressed. Avoiding certain creatures and environmental circumstances can prevent harm, injury, and even death. When reasonably manifest, advantages accrue in isolating and on occasion eliminating threatening aspects of the natural world. Human well-being has always depended on skills and emotions acquired

through a healthy distancing from potentially injurious elements in nature. Lacking this awareness, people often behave naively, constructing structures where they do not belong or ignoring their inevitable vulnerability before uncertain and powerful forces. We should not presume our fears and aversions of nature always provoke contemptuous or destructive tendencies. Deference and respect for nature can arise as much from appreciating and recognizing its capacity to defeat and destroy us as from feelings of affection and allegiance. Awe and respect combine reverence and wonder with fear, a knowing recognition of the “luminescence of power” in nature. The natural world stripped of its strength and prowess often becomes merely an object of amusement and condescension. Species and habitats utterly subdued rarely provoke much admiration, humility, and respect. Warblers in an aviary evoke little of the meaning and admiration as do ones spied in the wild even at some personal risk.

A scientific value of nature underscores the knowledge and understanding people derive from the empirical study of nature. Functional advantages include increased intellectual and cognitive capacity, enhanced critical thinking and problem-solving abilities, and greater appreciation and respect for maintaining natural process and diversity. People possess a universal need to know and understand their world with authority, a tendency independent of culture and history where intellectual prowess is facilitated through the study and observation of nature. What the natural world offers all humanity is a varied and always stimulating context for developing critical thinking skills, problem-solving abilities, and analytical capacities. Observing and comprehending natural diversity avails countless opportunities for acquiring knowledge, developing understanding, and honing evaluative aptitudes. These cognitive capacities develop in other learning contexts, particularly in a modern world of advanced electronics and communications. But, the natural world provides an especially accessible and engaging source for pursuing intellectual competence, especially for the young and inquiring mind. Moreover, over time and simply by chance, the knowledge and understanding obtained from studying and observing nature yields practical and tangible gains. Examining any portion of the natural world expands the realization of how much we can learn from even obscure organisms and natural processes. The more we know and understand these creatures and environments, the more astonished we are by the extraordinary ingenuity of the biophysical enterprise. Knowing warblers well increases not only our knowledge but also elevates our ethical regard for them and ourselves.

A symbolic value reflects nature’s role in shaping and facilitating human communication and thought. Adaptive benefits include enhanced capacities for language acquisition and taxonomy, psychosocial development, and the ability to communicate through image and symbol. People employ nature as raw material for expediting the exchange of information and understanding among and between our kind. We accomplish this through metaphor, analogy, and abstraction, and by employing language, story, myth, fantasy, and dream. Nature as symbol is especially instrumental in language acquisition. Learning language depends on the developing capacity to render ever more refined distinctions, categories, and taxonomies. The young encounter in

nature numerous, readily available, emotionally salient, and especially distinguishable objects for learning to differentiate and classify. When young children's reading materials are, thus, examined, we encounter a world replete with animal characters and images of nature. Symbolizing and fantasizing nature further assists in confronting difficult maturational dilemmas of identity and selfhood, authority and independence, order and chaos, good and evil, love and sexuality in a disguised yet tolerable and often instructive manner. We do this through children's stories and fairy tales, legends and myths, totems and taboos, fantasies and dreams. These images use metaphor and narrative to confront and address enigmatic, complicated, and often painful issues of conflict, need, desire, meaning, and purpose. People also employ natural imagery in the language of the street, in the metaphor of the marketplace, and sometimes in great oratory and debate. Moral discourse exploits the imagery of nature for powerful and evocative communication. We argue abstractly but we often depend on natural images and symbols to advance forcefully our ethical and moral discourse. Nature provides a substrate for symbolic creation analogous to how genetic variability offers a biochemical template for laboratory discovery. Each uses nature's clay to mold and fabricate solutions to life. Warblers may be mere birds, a speck of animate matter here today and gone tomorrow. But, at a much deeper level, they are the coda for capturing ineffable moments of unity and connection with the rest of creation.

Finally, a utilitarian value underscores the material and commodity benefits derived from nature. Advantages include enhanced physical security associated with agricultural, medical, and industrial productivity, various ecosystem services such as pollination and decomposition, and the self-confidence and self-esteem obtained from demonstrating craft and skill in exploiting the land and its resources. Despite this utilitarian significance, modern society often prides itself on having achieved material independence from the natural world through domesticating the wild, eliminating natural competitors, and converting untamed land into cultivated and artificial landscapes. This belief is an illusion, however, as even today, people rely on natural process and diversity as an indispensable source of basic food stocks, medicines, building and decorative supplies, and other commodities. Moreover, healthy ecosystem functioning sustains all life, including our own, through basic life support functions such as oxygen and water production, nutrient cycling, seed dispersal, etc. This utilitarian dependence on nature will likely greatly expand in the future due to rapid developments in molecular biology, genetic prospecting, and bioengineering, allowing people to exploit countless genetic solutions to survival fashioned over millions of years of evolutionary trial and error. Even in the absence of necessity, people continue to exercise their utilitarian dependence on nature as a wellspring of physical, mental, and spiritual well-being. We reap practical benefits from these activities, but as importantly, nourish our passion for extracting with skill a portion of our sustenance from the land. Beyond the obvious practical gains, we also harvest physical and mental fitness, and affirm our connection with ancient cycles of energy, matter, and spirit. Warblers help us see how soil,

stone, water, air, and matter are a “super-organism” of flowing and related nutrients, including ourselves.

The nine values of biophilia – the biological inclination to affiliate with nature – reflect the richness of the human reliance on the natural world for physical, emotional, intellectual, and spiritual sustenance and security. They intimate how by degrading the natural world we diminish our capacity for experiencing beauty, meaning, and significance in our lives. Ethical regard for nature derives not just from feelings of moral concern and compassion or from a recognition of ensuring human material wellbeing, but from a broader recognition of how nature shapes the human body, mind, and spirit. As Henry Beston once suggested:

Nature is a part of our humanity, and without some awareness and experience of that divine mystery man ceases to be man. When the Pleiades and the wind in the grass are no longer a part of the human spirit, a part of very flesh and bone, man becomes, as it were, a kind of cosmic outlaw, having neither the completeness and integrity of the animal nor the birthright of a true humanity (1971: vi).

Stephen R. Kellert

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See also: Biodiversity and Religion in Equatorial Africa; Carson, Rachel; Conservation Biology; Environmental Ethics; Geophilia; Leopold, Aldo; Restoration Ecology and Ritual; Wilson, Edward O.

Bioregionalism

Human beings cannot avoid interacting with and being affected by their specific location, place or bioregion. Despite modern technologies, we are not insulated from the natural world. Bioregionalism is both a philosophy and social activism that favors a small-scale, decentralized, and place-based approach to life. As a diverse movement, bioregionalism celebrates the organic interconnectedness of Earth systems – from wetland to creek, from creek to watershed, from watershed to river basin. Bioregionalism has also been influenced by a diversity of voices in social and ecological movements that support the spiritual, sacramental, psychological, and biophysical connections between human beings, the human awareness of place and community, and the understanding of nature as part of a larger circle of animals, plants, and insects.

Contemporary bioregional thinkers include Peter Berg, Gary Snyder, Freeman House, David Simpson, Doug Aberley, Jim Dodge, David Haenke, Stephanie Mills, Kirkpatrick Sale, Daniel Kemmis, among others. It is important to note that the movement is not limited to a circle of intellectuals, academics or visionaries. The movement is first and foremost a call for action or activism in support of a renewal of civic responsibility and ecological stewardship with respect to communities of place. There are scientists, poets, nature writings and community activists who support place-based economic and political relationships. Imaginative works of all kinds have emerged that focus on the importance of place, the region, and community in human relationships that shape political, economic, and religious practice. One's region of nearness, the ecosystems and social institutions that we depend on for survival and well-being, can be understood as a bioregion whose boundaries are defined by a combination of ecological and cultural factors. A bioregion is often reflected in indigenous or aboriginal religious practice, such as the celebration of the return of *totem* salmon in dance and story, the language spoken and songs of important places and landmarks, or in the form of mimetic rituals of animism or nature writing.

As a lifestyle, bioregionalism stands in stark contrast to the command-and-control structures that we have placed on the landscapes. Political, economic, and administrative structures of the state or county do not often reflect the ecology of organic systems of relationships, such as the ecosystemic relationships between native species, their habitats, the transboundary nature of pollution transported by the currents or winds, and the changing of the seasons. Instead, bioregionalism focuses on the emerging and organic forms of human relatedness, ecological design and the patterns and interdependencies of living systems, and the need for regional economies that support place-based inhabitation.

Critics of bioregional theory often point to the heavy emphasis in natural laws and the general reductionist approach to political power in human society. Critics charge that bioregional thinkers are ecological determinists who put too much faith in the laws of nature to change social institutions. Political power, for example, is not defined in terms of the limits of nature or the boundaries of place and community. War and other human realities rarely take into account the importance of diverse places to people or the general ecology of violence over a region's resources.

Yet, critics often fail to understand the diversity of the movement – the movement is as much a sensibility as it is a science. It combines spiritual practice with ecological understanding and local knowledge of places, animals and watersheds. To be bioregional means to respect and care for the natural world that exists in a place, such as a watershed or mountain range or river basin. Bioregionalism is not a new idea but can be traced to the aboriginal, primal and native inhabitants of the landscape. Long before bioregionalism entered the mainstream political and social lexicon, indigenous peoples practiced many of its tenets. The place-based lifestyle of bioregionalists is first and foremost found in the ancient and native traditions that embrace the poetry, storytelling, mythmaking and religious practice of a sacred bond and common heritage that human beings share with specific landscapes, seascapes, and regions. In indigenous practice, the region of nearness, which is the place inhabited, includes a broader circle of animals and plants that are part of the language spoken, religious and cultural practice, and local or regional knowledge of ecosystems. This knowledge of the ecology of a place is passed on from one generation to another by various mimetic practices or oral traditions. Indigenous culture is a result of a system of primordial connections with others.

The significance of place and the region is found in the voice of the sacred landscape, which is culturally manifested in a totem, song, dance, or ceremony of earthly renewal and the human homecoming. There is no separate life; we must learn from the other inhabitants of our distinct places and communities.

Unfortunately, this early bioregional knowledge is threatened today. Nearly 90 percent of the indigenous languages and knowledge systems will be lost by 2020. The stories of place, the local knowledge of plants and animals, the sacred and spiritual dances and songs of a region that have been practices for thousands of years may be lost soon. It is the hope of contemporary bioregionalism that social justice will prevail, and that the bioregional ecology, biodiversity, and local knowledge of the present will not be lost or forgotten.

In the industrial age, the gathering of food, raising a family, and the development of a community have become functions of various nation-states and other large-scale institutions and bureaucracies. Contemporary bioregionalism has emerged as a diverse movement that opposes industrialism and globalism. As both a place-based ecological philosophy and a regionally oriented social movement, bioregionalism is a response to the dramatic ecological and cultural decline that is caused by the prevailing modes of consumption and production in largescale industrial society. It is important to note,

however, that bioregional activism is as diverse as the landscapes we inhabit; the voices of bioregional theory and practice are diverse.

As an ecological philosophy, bioregionalists support local economies of scale, place-based activism, native species protection, social and environmental justice, and rejoice in the interconnections and interdependencies between human beings and the circle of animals, plants, and insects that define a more than human community or home.

As a diverse movement, bioregional activists defend the natural values that are carried by ecosystems, and the relationships, links, and connections between native species that are supported by these ecosystems. For example, the proliferation of watershed-oriented groups in the United States is a reflection of a new movement and ecological identification.

Bioregionalists stress the importance of becoming “native” to the place. Becoming native to a place requires an act of “reinhabitation” to support the self-propagating, self-nourishing, self-governing and self-fulfilling qualities of living-in-place. A self-organizing community is composed of biotic and abiotic entities, such as a common watershed, biota, landform and biogeography. The boundaries of a community are based on the relationship, interaction and connection between human beings, the soils, waters, plants and animals.

The word “community” provides a convenient way of approaching questions of local economy and bioregional ecology. The word community derives from the Latin “munus,” which has an extremely interesting range of meanings, including service or duty; gift; and sacrifice. The word community, in other words, is a metaphor for the practice of the exchange of services. As individuals, we are bound by a community-based relationship that supports mutual obligation and the exchange of gifts.

The goal of bioregionalism is to reimmerge the practices of human community (religion, art, theatre, institutional building) within the bioregions that provide their material support. In this sense, bioregionalism is as much a movement that can be found in rural lands as urban centers. It is a performative, community-based activity based on social learning and cooperation, and can be a therapeutic strategy to expose ourselves viscerally to local ecosystem processes, such as the nature of the watershed or the path of a neighborhood creek, and to foster a human homecoming with other life forms.

Michael Vincent McGinnis

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See also: Bioregionalism and the North American Bioregional Congress; Radical
Environmentalism; Schumacher, Ernest Friedrich; Snyder, Gary.

Bioregionalism and the North American Bioregional Congress

Bioregionalism is a green political philosophy which can be considered a branch of Radical Environmentalism. Rather than stressing or prioritizing direct action resistance to environmental degradation, bioregionalism stresses the development of environmentally sustainable lifestyles and local political action and the development of new, political structures within particular ecoregions. Bioregionalism traces its roots to (1) ecological understandings of different regional types; (2) anthropological studies of the different lifeways that have evolved in such places which show that humans can live together without repressing either each other or nonhuman life forms; and

(3) diverse religious perceptions and traditions believed to be environmentally friendly, especially indigenous ones and those originating in Asia.

Although bioregional ideas began to gather into a social force in the late 1960s, fueled by the publication of Gary Snyder's *Turtle Island* (1969) and a series of articles by Peter Berg and Raymond Dasmann, it was not until 1984, when David Haenke organized the first "North American Bioregional Congress," that a national, institutional form emerged. This initial congress was held in Missouri, with subsequent ones following every two years. Its preamble provides a good sense of this emerging subculture:

Bioregionalism recognizes, nurtures, sustains and celebrates our local connections with: land; plants and animals; rivers, lakes and oceans; air; families, friends and neighbors; community; native traditions; and systems of production and trade. It is taking the time to learn the possibilities of place. It is mindfulness of local environment, history and community aspirations that can lead to a future of safe and sustainable life. It is reliance on wellunderstood and widely-used sources of food, power and waste disposal. It is secure employment based on supplying a rich diversity of services within the community and prudent surpluses to other regions. Bioregionalism is working to satisfy basic needs through local control in schools, health centers, and governments. The bioregional movement seeks to re-create a widely-shared sense of regional identity founded upon a renewed critical awareness of and respect for the integrity of our natural ecological communities (Davis 1986: 12).

From the beginning these congresses expressed affinity with deep ecology spirituality, formally adopting the deep ecology principles of Arne Naess "almost intact," according to John Davis, then an editor of the *Earth First!* journal. Davis's attendance and enthusiastic report shows the natural affinity between bioregionalism and radical environmentalism. Davis noted a similar affinity between bioregionalism and

ecofeminism, citing as evidence feminist author Judith Plant's assertion at this first congress that deep ecology and ecofeminism were fully compatible. Plant would soon edit or co-edit a number of books fusing bioregional, deep ecological, and ecofeminist ideas.

During the second NABC, held in northern Michigan in July 1986, a proposal from MAGIC, "the Committee for . . . Mischief, Animism, Geomancy, and Interspecies Communication" was adopted by consensus. It was drafted primarily by David Abram who would later write the influential animism-promoting book, *The Spell of the Sensuous* (1996). At that time Abram also wrote periodically for *Earth First!* The proposal was to have nonhuman representatives at the next Congress: "one for the four-legged and crawling things, one for the flying people, one for our swimming people, one for our swimming cousins, and one (very sensitive soul) for the myriad plant beings." The statement affirmed, in a way that underscores the belief in interspecies communication shared by some prominent bioregionalists:

It is a very delicate, mysterious process whereby these representatives are recognized . . . we hope that the four representatives will be chosen not just by human consensus but by non-human consensus (Abram, Hannon, and Wells 1986: 9).

Abram also asserted, further illustrating the mystical perceptions animating some involved in this movement, that

Bioregionalism is inevitably, unavoidably, involved in magic processes. Many individuals . . . are beginning to feel strange sensations, sudden bursts of awareness, communications from other dimensions, [indeed,] The body itself [is] waking up [and these] communications from other embodied forms of sensitivity and awareness [have been] too long ignored by human civilization (Abram, Hannon, and Wells 1986: 9).

The Third NABC was held in British Columbia, Canada, in 1988. It began with ceremonies drawn from Native American cultures (a friendship dance) and the wiccan/pagan tradition (a spiral dance, which had been popularized and on this occasion was led by Starhawk). Abram, who previously was the driving force behind the resolution to recognize four participants representing our "non-human cousins," afterward described how this process went leading up to the 1988 Congress: "Several of the intermediaries had prepared for months beforehand," he wrote, "through both study and empathy, to begin to identify with other species, at least to the point of being able to keep faith with these other modes of awareness while still listening . . . to the human bioregionalists" (Abram 1988: 12). During the meeting, he recalled,

. . . standing, or crouching, in each of the four directions, these individuals acted as potent witnesses . . . when the needs of their fellow species were violated. At one strong moment, a woman speaking eloquently . . . for fluid beings angrily interrupted a compromising proposal by the water committee, startling the assembled circle into momentary silence, and moving us all toward deeper mindfulness (Abram 1988: 12).

This kind of process resembled the Council of All Beings, which was itself influenced by Buddhism, and which by 1988 had been spreading widely around the country, mostly sponsored by radical environmentalists. Indeed, the third bioregional congress

ended as these newly invented rituals sometimes do when, “The gathering culminated with a rollicking masquerade dance, an ‘all species ball,’ under the full moon on the last night . . . in a full moon ritual [with] chanting” (Abram 1988: 12). Abram also noted “creative friction” as Native Americans and their ceremonies “collided and then jived with wiccan and pagan” ones. This understated but hinted at the tensions that oftentimes result from the divergent ritual practices found among practitioners of nature-based religions. Indeed, despite enthusiasm for the presence of nonhuman intermediaries and newly created ritual processes designed to summon them, during NABC II and III, a spirituality committee could not agree on bioregional spirituality. David Haenke, for example, after the second Congress, complained about the “contrived” character of some of the ceremonies and of the “tendency for some to impose pagan pomp” upon others. He expressed worry that such insensitivity could hinder “bioregionalism’s ability to reach out beyond its hippie and back-to-the-lander base” (in Zuckerman 1989: 7). Such concerns intensified after the 1996 “Turtle Island Bioregional Congress” in Mexico (the acronym had changed temporarily from the NABC to the TIBC). Haenke and Phil Ferraro, who had invented an “Institute for Bioregional Studies” in Canada, both agreed in an email discussion group devoted to bioregionalism that the biocentric and practical ecological lifestyle issues central to it were in danger of being overwhelmed by pagan, “rainbow,” and New Age spirituality and ritualizing, as well as by a naive belief that such ceremonies could themselves effect Earth healing. Ferraro, who had studied Social Ecology with Murray Bookchin in Vermont, then expressed an additional criticism obviously influenced by Bookchin’s understanding of deep ecology:

This is something that has always concerned me with bioregionalism’s ready acceptance/allegiance to deep ecology, which is a self-described religion, highly anti-intellectual, that relies more on intuition than history and more on ritual than political action (in Taylor 2000: 68–9).

While many who consider themselves social ecologists share neither Ferraro’s simplistic caricature of deep ecology and still others embrace its overtly spiritual forms, these reactions show the contested nature and difficulties inherent in constructing new forms of earthen spirituality and politics. This is to be expected given the plural religious and social milieu from which these forms both emerge as well as struggle to find suitable habitat.

Bron Taylor

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- See also:* Bioregionalism; Council of All Beings; Deep Ecology; Depth Ecology; Earth First! and the Earth Liberation Front; Ecopsychology; Indigenous Religions and Cultural Borrowing; Left Biocentrism; Magic, Animism, and the Shaman's Craft; Radical Environmentalism; Rainbow Family; Social Ecology; Snyder, Gary.

Biosphere Reserves and World Heritage Sites

Many of the most special places on our planet enjoy the status of UNESCO-listed world heritage sites or biosphere reserves. (Established in 1946 to promote global educational and scientific cooperation, UNESCO is the United Nations Educational, Scientific and Cultural Organization.) While neither international system of protected areas systematically employs the religious dimensions of these places as criteria for their designation, positive steps are being taken to recognize and protect the sacred places valued by indigenous and traditional peoples that lie within their boundaries. Unfortunately, the dominant interpretative framework assumed by the national and international agencies responsible for administering the world heritage and biosphere reserve networks neglects their more contemporary religious meanings. This suggests that a fertile field of research awaits practitioners of religious studies and the humanities with more critical and symbolic approaches to the relations between nature and religion.

We owe the biosphere reserve and world heritage systems of protected areas to the creativity with which UNESCO, and other United Nations agencies and member organizations set about the task of addressing the global ecological crisis in preparation for the 1972 Stockholm Conference on the Human Environment.

UNESCO's Man and the Biosphere (MAB) Program, launched in 1971, early decided to make one of its major themes an international network of "biosphere reserves" that would "conserve for the present and future use the diversity and integrity of biotic communities of plants and animals within natural and semi-natural ecosystems, and to safeguard the genetic diversity of species on which their continuing evolution depends." A creative aspect of the new system was the decision not to use conventional methods of segregated landscape protection, but to pursue preservation, scientific research and education in close cooperation with local communities so that they might have a constructive role in environmental protection and in return grow in their capacity for regional sustainable development. The ideal biosphere reserve is organized by a pattern of three concentric zones: a strongly protected core area, consisting of minimally disturbed and freely evolving ecosystems characteristic of one of the world's terrestrial or coastal/marine regions; a buffer zone surrounding the core in which traditional land use, recreation and research activities can take place; and an outermost transition area where the work of the biosphere reserve can be related to the needs and resources of local communities. As of December 2001, there were 411 biosphere reserves in 94

countries. Many of the world's great national parks, such as Amboseli in Kenya, have been incorporated into biosphere reserves in order to facilitate more sustainable relationships with their surrounding human communities. The biosphere-reserve concept is dynamic and continues to evolve. Recently it has been suggested that the world's first "urban" biosphere reserve be established in Chicago with a reversal of the typical pattern of concentric zones – the highly urbanized central core would be encircled by envelopes of natural and restored environments.

The Convention Concerning the Protection of the World Cultural and Natural Heritage, generally known as the World Heritage Convention, was adopted by UNESCO in 1972. It established an international system of protection for architectural and other cultural artifacts, physical and biological formations, and natural habitats of "outstanding universal value" from the point of view of history, art, science, or conservation. Thirty years later the Convention had 167 States Parties, and 730 properties (563 cultural, 144 natural, and 23 mixed) from a total of 125 countries inscribed on the World Heritage List. World Heritage sites include such outstanding historic and natural areas as the center of Florence, Italy, Ngorongoro Conservation Area in Tanzania, and Machu Picchu in the Peruvian Andes. As in the case of the Galapagos Islands, where international concern made a decisive difference in Ecuador's determination to sustainably manage the park, World Heritage listing aspires to be not only "words on paper" but also a useful instrument for action by international and local agencies to preserve threatened sites and species.

While cultural sites associated with ancient religious traditions – such as Lumbini, birthplace of Lord Buddha in Nepal, or the Vatican City in Italy – have long qualified for World Heritage status under the criterion of "places directly or tangibly associated with events or living traditions" of universal significance, not until recent years has serious attention been paid by UNESCO to natural areas that are perceived as "sacred" or otherwise religiously significant to indigenous local communities. The way was opened for this development by the addition of "cultural landscapes" as a category for World Heritage status, and by the growing recognition in both systems of the beneficial effects that certain mythic and ritualistic meanings have had on the preservation of biodiversity. Examples include the Kaya sacred forests in Kenya, which have long enjoyed the protection of tribal ritual practices and as a consequence hold up to 75 percent of Kenya's endemic species, now being considered for World Heritage listing; and the Changbaishan Biosphere Reserve in China, whose forest ecosystem retained its integrity for centuries because of the legendary belief that it is the place of origin of the Korean people. Policies are now in place to encourage attention to the role of traditional religious and knowledge systems in sustaining healthy ecosystems and modeling sustainable ways of life.

This attitude is now widely shared throughout United Nations agencies with environmental missions, and it has helped advance the cultural survival of indigenous peoples. Nonetheless, the anthropological perspective that has helped facilitate the shift in policy assumes a gulf between the worldviews of "premodern" and "modern"

societies. Non-Western, indigenous and traditional local communities are perceived to live by communally shared “intangible” religious, aesthetic and moral values, many of which involve practices and perceptions affirmative of nature’s sacrality or cosmic importance. Westernized secular and urban cultures are judged to live by “tangible” economic, scientific and other material values and these are the prominent reasons advanced for protection of these special natural areas. Most positive evaluations of the ecological role of traditional beliefs in preserving sacred places are advanced for scientific and social purposes that are extrinsic to the beliefs themselves.

This dualistic perspective does not do justice to the humanistic and naturalistic religious qualities that have played a critical role in motivating the establishment of the biosphere reserve and world heritage systems, nor to the confessional religious beliefs – Christian, Muslim, Ba’hai, and Buddhist, among others – that have motivated some of their most ardent advocates.

There are a number of ways of thinking about the contemporary religious meanings of these areas. First, the modern wilderness movement, which has inspired the protection of many core areas of biosphere reserves and spectacular World Heritage natural areas, perceives wilderness as sublime “sacred space.” Wilderness is typically associated with mountains, deserts and oceans, but with the coming of the modern ecological consciousness, there has been a growing perception of a variety of relatively undisturbed natural landscapes, from rainforests to natural preserves in close proximity to urban settlements, as “sacred” in quality. Interpretations among the world religions of wilderness as a place of contact with transcendent powers have contributed to these more contemporary meanings, as have a variety of old and new interpretations of the extraordinary spiritual qualities of wild animals.

Second, many of the UNESCO-protected areas, such as South Africa’s Robben Island, set aside to commemorate the “victory of the human spirit, of freedom, of democracy, over oppression,” are associated with the civil religions of the host countries. In the case of the United States, where both Yellowstone National Park and the Statue of Liberty are world heritage sites, there is an integration of natural and cultural civil religious values. Mount Kenya biosphere reserve merges indigenous tribal perceptions of a sacred mountain with twentieth-century civil religious perceptions of the mountain as a shrine of national independence.

Finally, if we interpret religious perspectives as those that symbolize comprehensive visions of creation, alienation and redemption, then it is possible to see the outlines of a global religious vision in UNESCO’s effort to transmit to future generations the “universal values” of our evolutionary origins (Galapagos World Heritage site), the worst of human history (Auschwitz Concentration Camp World Heritage site) and the promise of world justice, peace, and ecological sustainability (Amistad International Peace Park in Central America). When UNESCOMAB publishes a book entitled *Man Belongs to the Earth*, and when the signatories of the World Heritage Convention pledge themselves to “hold in trust for the rest of mankind” those parts of the world heritage that are found within their boundaries, we are being presented with an emergent

global ideal very much in keeping with the spiritual vision portrayed in such twenty-first-century declarations as the Earth Charter.

In this light, UNESCO's definitions of biosphere reserves as "demonstration sites of harmonious longlasting relationships between man and the natural environment," and World Heritage sites as "standardsetters for the conservation of the environment as a whole" suggest an interpretation of these areas as anticipatory fulfillments of a transcendent coevolutionary destiny for humankind, sacred centers to which all the world's peoples can make pilgrimage.

J. Ronald Engel

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See also: Earth Charter; Religious Studies and Environmental Concern; United Nations' "Earth Summits"; World Heritage Sites and Religion in Japan.

Birch, Charles (1918–)

Dr. Charles Birch (1918–) is an Emeritus Professor of Biology, having been previously Challis Professor of Biology at University of Sydney, Australia. He has authored nine books, including his influential collaboration with John Cobb, and sixty publications on science, religion and human existence, and in 1990 he was a joint recipient of the Templeton Prize for progress in religion for 1990.

Birch has been described as “Australia’s leading thinker on science and God.” He describes himself as a panexperientialist, holding a monistic doctrine claiming that the mental and the physical are two aspects of the same phenomenon. Using a Whiteheadian process interpretation of biology, he rejects a solely mechanistic model of life and biology for an ecological model. “There is an ecology of God which we can think of as God’s internal relations with the creation” (Birch 1993: 62). Reality is not merely things, but relationships and these relationships involve subjectivity. If every living creature is a subject, then each has intrinsic value to itself and to God, in addition to any instrumental value. The difference between entities is one of degree. Since there is a difference in degree, there is a hierarchy of intrinsic value and a corresponding hierarchy of rights. Furthermore, “internal relations are tied up with the idea of feelings” (Birch 1990: 76).

God is the supreme synthesis of these feelings, which are nature at any moment, and is no spectator. The implication of this is the extension of compassion, justice and rights to nonhumans.

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See also: Australia; Christianity(7f) – Process Theology; Cobb, John; Process Philosophy.

Bishnoi (Rajasthan, India)

The Bishnoi of Rajasthan, India, have lately come to the attention of diverse scholarly and activist communities as an example of an ecologically aware people who for generations have been practicing environmental conservation, holistic science, and what today would be termed wise resource management. The origins of this community, found largely in the region around the city of Jodhpur and neighboring districts of western Rajasthan, go back to the fifteenth century; there are smaller communities of Bishnoi in Uttar Pradesh, Madhya Pradesh, and Haryana.

The boy who would later be known as Bhagwan Jambheshwar, the presiding deity of the Bishnois, is said to have been born around 1451–1452 to a Rajput family in the village of Pipasar in the Mawar area of Rajasthan. According to folklore, local traditions, and vernacular literatures, Jambaji (as he is popularly known) had an uncommon attachment to nature. Some say that he was disenchanted by the struggles over political power between Hindus and Muslims, and sought ways not only to reconcile them but also to put before them an example of a heightened moral sensibility; others say that a long period of drought moved him to seek protection for all animals and plants.

Over time Jambaji articulated twenty-nine principles of morality and conduct, and the sect of Bishnoi (*Bish*= twenty; *no/noi*=nine) takes its name from those principles, rather than, as some have erroneously supposed, from attachment to the god Vishnu. Jambaji stipulated that no trees were to be felled, and hunting was forbidden. His followers, some of whom may have thought of Jambaji as an incarnation of Vishnu, were also enjoined to have compassion for all living beings, give up all intoxicants, swear by the tenets of *ahimsa* (nonviolence) and *satya*

(truth), and adhere to a vegetarian diet. Legend has it that flora and fauna flourished wherever Bishnois were to be found, and that even in times of severe hardship and drought, the black buck and the Indian gazelle could count upon food and water. Moreover, the customs of the Bishnoi point to an attempt on the part of Jambaji to forge a more syncretic movement, characteristic of the wave of *bhakti* (devotion) sweeping India at that time: thus, though the Bishnois worshipped Vishnu, they adopted the Muslim practice of burial of the dead. Jambaji could not countenance the idea of felling a tree to obtain wood for the funeral pyre.

Jambaji passed away in Mukam in Bikaner district, most likely around 1537. His profound humanity, spiritual sincerity, and dedication are believed to have earned him a large following; temples in his honor sprouted over large parts of western Rajasthan. The Bishnois grew in strength, and stories of their relentless, even aggressive, dedication to the preservation of animals and plants, even at the cost of their lives, were

widely circulated. In 1604, two Bishnoi women from Ramsari village, Karma and Gora, are believed to have sacrificed their lives in an effort to prevent the felling of *Khejri* (*Prosopis cineraria*) trees, which in Rajasthan are treated with the reverence that the banyan and *peepal* (*ficus religiosa*) command elsewhere in India. In the Bishnois' embrace of trees can be found the precedent for the famous Chipko movement in contemporary India, where again women hugged the trees to resist the depredations of loggers and contractors.

A number of later episodes in the history of the Bishnois similarly point to their fervent reverence for trees. Around 1643, the Bishnoi Buchoji is thought to have given his life in protest against the felling of trees for the purpose of propitiating the goddess Holi. Most famously, as almost all narratives are agreed, scores of people from the Bishnoi village of Khejreli were killed in 1730 as they clung to the trees that were being axed at the orders of Maharaja Abhay Singh of Jodhpur. The ruler was apparently in need of wood for the lime kiln for his new palace; led by the Bishnoi woman Amrita Devi, the villagers attempted to resist by hugging and encircling the trees. But, like soldiers elsewhere, the king's men were determined to follow orders. Three hundred and sixty-three Bishnois had given up their lives before, drawn by their cries, Abhay Singh came to the scene of the massacre and had it halted.

In the martyrdom of the Bishnois can be read a narrative of resistance to Rajput or upper-caste domination, though the story is far more often adduced as an illustration of the conservational ethic and wisdom of the Bishnois. Bishnoi villages have been described as oases in the desert: trees abound, and deer roam around with abandon. Each village has a stock of millet and water for the use of deer in time of drought. The Bishnoi are said to believe that they will be reincarnated as deer, which may in part explain the sanctity extended to animals; certainly

Jambaji, according to folklore, is thought to have instructed his followers that the black buck was to be revered as his manifestation. But whatever the particular association between nature and divinity in Bishnoi thinking, the pragmatism of the Bishnois must not be overlooked. The much-revered *Khejri* tree, in particular, plays a crucial role in the desert ecology: it provides food, fodder, and building materials. Thus, in the cosmology of the Bishnois, though trees are viewed as intrinsically venerable, their (what might be termed) reasonable usevalue is not overlooked.

It is probable that the worldwide attention lavished upon the Chipko movement has also had the effect of recalling earlier chapters in India's environmental history. Bishnoi narratives themselves suggest that environmental awareness and activism were first pioneered by women. Though no one is prepared to suggest a continuous and unbroken history from the Bishnois to the Chipko movement, ecofeminists might reasonably argue that in India at least the Earth has traditionally been viewed as the receptacle for all living beings, and that an assault upon nature is nothing less than an attack upon the dignity of women. Wherever women have been custodians of nature, ecofeminists argue, there the principles of fecundity and the sanctity of life have been upheld. Doubtless, the history of the Bishnoi points to other interpretations: thus some might

locate the reverence for the forest in India's traditions of retreat and the valorization of the hermitage as a place for the acquisition of philosophical learning and spiritual insight, while others might see in the story of the Bishnois a morality tale about the ecological knowledge and wisdom of societies which have not been contaminated by the ideologies of growth and profit. Whatever view one might adopt, the Bishnois of India furnish a striking instance of a people whose relationship to nature seems marked by intimations of an admirable and not so easily emulated conviviality.

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See also: Chipko Movement; Gandhi, Mohandas; Hinduism; India.

Bison Restoration and Native American Traditions

Buffalo (the popular name for *Bovidae bison*) have been important to humans in North America since the latter first populated these lands 12,000 to 30,000 years ago. Ranging originally from the eastern woodlands to the desert southwest and northward into the subarctic, buffalo made human life possible – serving as both food and the source of raw materials for clothing and tools. Humans hunted them on foot using various techniques based on the opportunities offered by culture and landscape. Effigies in the shape of bison have been discovered that are thousands of years old, which are evidence for their use in religious ritual. Written records becoming available after the European colonization provide numerous accounts of the importance of buffalo, economically and spiritually, to many tribes across North America, and include detailed descriptions of ceremonies and social events dependent upon the buffalo. Some native languages highlight the animals' practical and symbolic importance by emphasizing the etymological links between the animals and the sacred, as in the Lakota terms for buffalo, *tatanka*, and the mysterious powers animating the world, *wakantanka*.

The importance of buffalo to the Indians of the Plains thus cannot be overstated. For thousands of years it was the most important prey animal upon which humans depended, to the point that their basic material culture can be described as hide-based rather than wood or vegetal-based. This means that hide was used as the basic material to create goods produced from alternate materials in other regions of North America. The return of horses – following sixteenth-century Spanish incursions into the southern plains – and their diffusion across the region over the next two hundred years, enabled native peoples to become even more efficient hunters, enlarging their lives and enriching their cultures from the success of the hunt. Their population increased because food was more abundant and people were better fed. Horses made transportation of goods easier and buffalo-hide teepees became larger to house bigger families. The strength of the buffalo economy was also its eventual weakness, however, as overhunting and a deliberate post-Civil War U.S. military policy of bison extermination drove Plains tribes to succumb to their confinement on prison-like reservations in the 1870s and 1880s.

The dislocation of Plains tribes from their original lands, the forced imposition of Euro-American culture and the aggressive proselytization of Christianity, disrupted the linkage between land and the sacred that has shaped all Indian religions. On the Plains, the death of the buffalo, for many Indians and certainly for the land-hungry

whites, meant the death of a form of culture. Lakota holy man turned tribal police officer and deacon George Sword, for instance, spoke for a significant portion of his generation, when he said in 1896 that he chose a new name and determined to adopt the new white ways after it became clear that the whites could not be moved. However, the fundamental sense of connection with the land and its nonhuman inhabitants that underlay buffalo culture did not completely vanish from Plains communities. During the oppressive decades of the reservation era, some tribal members – Christian as well as traditionalist – retained that knowledge of land–life connection and the multiple ways in which it can be celebrated and respected in religion or moral code.

Thus, despite the negative consequences of colonization (i.e., social disorganization, kinship fragmentation, and the loss or transformation of many religious and cultural practices) today the buffalo remains a strong image and icon for many tribes, particularly in the Plains and Southwest. Images of the buffalo appear as art, posters, school logos, sport team names, sweat shirts, etc. Legal surnames still incorporate the word for some families in a system created during the early reservation period, and personal names that include the word in a native language are still acquired either by inheritance as a family name, clan name, by accomplishment or in a religious experience such as a vision quest or sun dance. The buffalo as a source of religious power and reverence remains important for many tribal peoples, whether reservation or urbandwelling families, and possession of tanned buffalo robes or items from buffalo products are prized possessions. Some contemporary ceremonies require buffalo items for efficacious performance such as the use of a buffalo skull and/or tanned hide in sun dances, hide headdress and cuff in Pueblo buffalo dances, and skulls in many private rites that are performed by families outside public view. Buffalo religious power is always positive and usually expressed in terms of health, fertility, success or healing in various combinations of importance in different tribal settings. A few families who own sufficient acreage even acquired small numbers of buffalo for their own use or enjoyment, although this is not commonplace. Some individuals express a sense of loss because there are no longer free ranging buffalo and make trips to public parks where they can visit herds. The birth of white buffalo calves to Indian and non-Indian families is interpreted by some as a sign of positive change and returning strength to native traditions. Individuals make trips to visit these animals, to pray and leave offerings as religious acts.

A gradual reassertion of Indian identity began in the 1960s and has remained on the upsurge for over four decades; the buffalo has been part of this cultural and political resurgence. Many native people felt it was time to establish tribally owned buffalo herds on Indian land and bring the animals and the land back to health and by extension the well-being of tribal people. By 2003, 47 Indian tribes had established tribally owned and managed herds on reservations for the use and welfare of tribal members with a collective number of over 8000 animals. Buffalo meat and hides are available at no cost to tribal members for community events that require communal meals. The ability to serve buffalo at feasts completes cultural practices in ways that serving cow

does not. Native American participants believe that the spirit of the buffalo is present at the event and bestows its health and wellbeing on those who partake of the meal. Participants report they feel better nourished and healthier after eating meals in which buffalo meat is a major part. Tribal artists use buffalo products in their work, which is given to others or sold to generate income. Some members of the Lakota, Crow, and Kiowa and probably others as well visit the herd privately and can be seen in meditative repose, watching them. Buffalo shed their winter coat in the spring and the “shed hair” falls to the ground or is caught in bushes on the grazing lands where it is gathered for use in rituals or domestic purposes. Some use it as padding in their pipe bags or for small pillows. As in the past all parts of the buffalo are used for food, hide and tools.

Environmental degradation on the Plains is commonplace due to overgrazing by cattle and sheep, which are more destructive to the grasses and the land than buffalo unless kept at a proper carrying load per acre. Teachers on the reservation grapple with changes in the landscape by taking school groups to visit the buffalo herd to learn about its traditional cultural and ecological importance. They learn about other animals that used to be common there such as prairie dogs, black-footed ferrets, and other grassland native creatures. Many contemporary Plains Indians believe that the restoration of the buffalo will aid in the recovery of the land to its original healthy condition before the advent of Euro-Americans. Indian communities have been impacted by a dramatic increase in diabetes and heart disease due to high-fat diets, overweight and sedentary lifestyles over the last 40 years. As a result a healthy diet has become an important community issue and the buffalo is part of this discussion. Buffalo meat is lower in saturated fat than cattle and is being marketed nationally as a healthier food choice for those who want a low-fat diet but still want to eat meat. Some Indian tribes are raising buffalo in part as a commercial venture and selling to food suppliers who market it nationally. Simultaneously, Indian medical professionals encourage native people to take the same advice and switch to eating buffalo instead of cattle as well as other aspects of the traditional diet. Some EuroAmerican ranchers are raising buffalo commercially as a substitute for beef in response to new concerns about high-fat diets, and Indian tribes are taking advantage of this new market and selling meat nationally. Some contemporary Native Americans interpret the obvious link between modern diets and lifestyles and resultant disease as another sign of the failure of contemporary life and the superiority of traditional values and lifestyles.

Many communities have established summer culture camps for their youth where they learn about traditional values and ways and are taken to visit the tribal buffalo herd. Where possible the herd is kept in distant pastures with no paved roads, so it takes some effort to reach them and discourages casual visitors. When approaching the herd, prayers are said to honor and appease the animals and to remind humans of their reliance on these animals in the past and the present. While many of these children are from Christian families, the linkage between the natural world and humankind, often expressed in terms of respect, is stressed as the proper way in which to approach

all of the landscape and its inhabitants. The inherent sacred nature of the Earth is believed to be manifest in these visits and it is hoped that the children will take this away with them and observe it in the rest of their lives, no matter what religious faith they may observe. Practitioners of traditional Plains religions are usually sanguine about simultaneous participation in Christian faiths although the reverse is not true. Nevertheless, the land–human relationship found in all native religions, and embodied so clearly for Plains people in the buffalo, is intact and being taught in subtle but deliberate ways to future generations of Indian people. In the words of a Lakota song – “Buffalo Nation, the People are depending upon you, so we pray you will be healthy” (www.intertribalbison.org).

JoAllyn Archambault

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See also: Lakota; Native American Spirituality; Yuchi Culture and the Euchee (Yuchi) Language Project.

Black Elk (1863–1950)

Nicholas Black Elk is the most famous American Indian religious thinker of the twentieth century. He was a member of the Oglala tribe of the Lakotas (popularly known as the Teton or Western Sioux). In his childhood and youth he participated in the traditional buffalo-hunting way of life, then witnessed the wars of the 1860s and 1870s between the Lakotas and the U.S. Army and the destruction of the buffalo herds by the early 1880s. In 1881 he settled on the Pine Ridge Indian Reservation in southwestern South Dakota.

Outwardly, Black Elk's life differed little from his contemporaries and may serve as representative of the experiences of the first generation of reservation Lakotas.

In other ways, however, Black Elk was exceptional. His life was shaped and guided by powerful and transcendent visions that placed on him a spiritual burden to serve his people as a holy man (called "medicine man" in English) and a healer. He is the only Lakota holy man of his generation to preserve a detailed record of his life and thought. In 1931 he told his life story to John G. Neihardt, who fashioned the material into a book, *Black Elk Speaks, Being the Life Story of a Holy Man of the Oglala Sioux* (1932). In 1944 Neihardt interviewed Black Elk again concerning tribal history and traditions, using the material in a historical novel, *When the Tree Flowered* (1951). The full transcripts of both sets of interviews, representing as closely as possible Black Elk's own words as translated into English, then written down by Neihardt's daughters, were published as *The Sixth Grandfather: Black Elk's Teachings Given to John G. Neihardt* (DeMallie 1984). During winter 1947–1948 Black Elk related to Joseph Epes Brown an account of Lakota religious rituals that was published as *The Sacred Pipe: Black Elk's Account of the Seven Rites of the Oglala Sioux* (Brown 1953). In short, the documentary record dictated by Black Elk is unparalleled for American Indians, and his teachings, embodied in these books, have come to stand as representative of American Indian spirituality.

Black Elk told Neihardt that at the age of nine he had received a vision from the Thunder-beings, the powers of the West, and was taken to meet the Six Grandfathers, the spiritual embodiments of the powers of the natural universe – the four directions, the sky, and the Earth. The vision embodied a Lakota concept of ecological relatedness, including Earth and sky, land and water, fourleggeds and wingeds, all enclosed in a great circle of life at whose center stood a flowering tree, a symbol of regeneration, at the point where two roads crossed the circle: the red road from south to north representing life and harmony, and the black road from west to east representing warfare and destruction. The vision gave Black Elk the complementary powers of the circle,

powers both to heal and to destroy. As a child, he made no use of these powers, but, at the age of seventeen, he felt himself called by the Thunder-beings to enact his vision publicly in order to validate and activate the vision powers. In 1881, while his people were refugees living at the U.S. army post of Fort Keogh, Montana, Black Elk sponsored a Horse Dance, in which riders on variously colored horses dramatized his vision of the Six Grandfathers. That winter Black Elk settled on the Pine Ridge Reservation, the only place where the daybreak star herb that he saw in his vision, a primary source of his healing power, was to be found. The following spring he fasted and sought another vision. Again the Thunder-beings came to him, after which he began his career as a healer.

Changing times led Black Elk to question his religious practices. In 1886, when Buffalo Bill came to the Pine

Ridge to recruit a group of Oglalas for his Wild West Show, Black Elk decided to join in order to learn about Euro-Americans. He was gone for more than three years, traveling first to New York, then to Europe, including England, France, and Italy. During the trip he became a Christian and began to read the Bible as translated into the Dakota language. Far from home, he felt no connection to the spirits that had formerly given him his power and he found value in Christian teachings. But when at last he returned to Pine Ridge in 1889 he learned that some of his people were practicing a new ceremony, the Ghost Dance, which originated with the Paiute prophet Wovoka. The Ghost Dance was a millenarian movement promising that the Lakota dead would return to life, the buffalo would be restored, and the non-Indians would be destroyed. It was the ritual itself that attracted Black Elk to the new religion. The sight of the circle of men and women dancing around a sacred tree seemed to Black Elk the embodiment of the flowering tree of his great vision. He turned back to his vision powers for guidance, finding them once again strong after his return to Lakota country.

The Ghost Dances ended the next year with the unprovoked massacre of two hundred or more Lakota men, women, and children at Wounded Knee Creek by members of the Seventh U.S. Cavalry on 29 December 1890. The Ghost Dance shirts worn by participants failed to deflect the soldiers' bullets as the ritual leaders had promised. Hope for the millennium ended.

Black Elk continued to perform healing ceremonies using his vision powers. In 1904, however, he put them aside and joined the Roman Catholic Church, in which he was baptized Nicholas. His decision to join the Church was likely pragmatically motivated, since churches provided access to money, goods, and services. At the same time, Black Elk's earlier experience with Christianity may have led him to choose this as the better path for his family. He served as a catechist and for a time as a missionary to other Indian tribes.

Beginning in 1961 with the paperback reprinting of *Black Elk Speaks*, the book was adopted by the environmental movement as an exemplar of American Indian spiritual and ecological sensitivity. Younger American Indians of many tribes, particularly in

urban settings, turned to *Black Elk Speaks* for spiritual guidance, to such an extent that Vine Deloria, Jr., writing a foreword to the 1979 reprint edition, characterized the book as an American Indian bible. Because of the universality of Black Elk's vision in which he perceived the world as a great circle, and his characterization of the holy as embodying all living things, the vision has spoken to many different audiences.

Black Elk's teachings have had a profound influence on late twentieth-century thought, particularly at the juncture between environmentalism and spirituality. But they have also engendered controversy, particularly concerning the relation between Black Elk's characterizations of traditional Lakota beliefs and religious rituals and his acceptance of and participation in Christian religion. Neihardt and Brown made no mention of Black Elk's Catholicism. In publishing the interview transcripts, DeMallie (1984) discussed Black Elk's life as a Catholic catechist, and in telling her life story, *Lucy Looks Twice*, Black Elk's daughter gave her perspective on her father as a Catholic religious leader (Steltenkamp 1993). A critical literature has developed that attempts to disentangle Christian and traditional elements from Black Elk's religious teachings. However, Black Elk can best be understood as an individual who spent his entire life seeking religious knowledge to benefit his people. As a young man he found it in traditional religion, and later, when he traveled in Europe, he found strength in Christian teachings. After the failure of the Ghost Dance, Black Elk apparently relied more and more on Catholic teachings until he finally stopped the practice of traditional rituals altogether. But this should not be confused with lack of belief. Black Elk's descriptions of Lakota religion incorporated more and more Christian symbols and values as his life progressed, revealing an increasing syncretism of Lakota tradition and Christianity. In old age he performed traditional Lakota religious rituals for the edification of tourists, not merely for amusement, but to demonstrate that there was goodness and value in the old ways, different as they were from Christianity.

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See also: Lakota; Lakota Sun Dance.

Black Mesa (New Mexico)

In the autumn of 1969, I spent a month in the Huichol Indian village of San Andres de Coahimiata in a remote region of the Sierra Madre Occidental of western Mexico. I was conducting field recordings of Huichol music and documenting their annual peyote fiesta, as well as their construction of musical instruments. It was during this time that I realized that traditional cultures are endangered by the spread of industrial monocultures whose paradigm is dominated by an economic imperative and growth for its own sake.

On returning to the United States, I resigned as music director for the Center for Arts of Indian America and co-founded the Central Clearing House in Santa Fe, New Mexico. The Clearing House was committed to gathering and providing information about threats to the natural environment occurring throughout the American Southwest. In early April 1970, National Park Service historian Bill Brown informed me of a massive coal strip mine to be situated atop Black Mesa, a land formation located in northern Arizona bearing the largest coal deposit in that state. Black Mesa is sacred to both Hopi and Navajo Indians. The ancient Hopi villages are situated on the three southern promontories of Black Mesa, a land form considered to be the body of the female mountain by the Navajos.

Brown and I explored the surface of Black Mesa from both truck and airplane. We learned that the coal from Black Mesa was to be delivered to two electrical generating stations, one to be located on the banks of Lake Powell near Page, Arizona, the other already constructed in Laughlin, Nevada.

Subsequently, I visited my old friend and Hopi elder David Menongye who resided at Hotevilla on Third Mesa. David had heard nothing of this and asked if I would speak before an assembly of Hopi elders, to which I agreed. Sixty-three elders gathered in the Second Mesa village of Shungopovi in mid-April. I presented the few facts that I had at my disposal. The Hopi Tribal Council chaired by Clarence Hamilton, and represented by John Boyden, a Salt Lake City attorney who served as the Hopi Tribe's legal counsel, had signed a lease. It allowed the Peabody Coal Company of East St. Louis to strip-mine Black Mesa. Coal would both be hauled by special railway to the power plant at Page, and be transported by water drawn from wells tapping the ancient Black Mesa aquifer, then pumped through a slurry pipeline for 273 miles to the Mojave power plant in Laughlin.

The coal commanded a very low price, and the Hopis were to be paid \$1.67 an acre foot for some of the purest water in America. Three acre-feet is the equivalent of

approximately one million gallons, or a one acre pool three feet deep. This water was to be pumped at the rate of two thousand gallons per minute, twenty-four hours a day.

The traditional Hopis were enraged that these negotiations had taken place without their knowledge. Many of these elders spoke little or no English. After a discussion, David Menongye asked if I would help serve as a bridge to the world of the Bahannas, or white people, to end this mining, which violated the Hopi's spiritual relationship to Mother Earth. I agreed, and on 17 April 1970, my friends Jimmy Hopper, Bill Brown, John Kimmey and I founded the Santa Fe chapter of the Black Mesa Defense Fund. We were soon joined by Terrence Moore, Philip Shultz, Caroline Rackley, Tom Andrews, Hannah Hibbs and a host of volunteers. For the next three years, we did everything in our power to stop what we considered to be the rape of Black Mesa, but to little avail. We worked closely with the Native American Rights Fund of Boulder Colorado, a law firm devoted to serving Native Americans. We also worked with traditional Navajos and many others throughout the American Southwest and beyond to try to thwart the juggernaut of corporate America as they ravaged the land making every attempt to convert Black Mesa into money.

Research revealed that the underlying purpose for the Black Mesa strip mine was to fuel the Navajo Generating Station capable of a 2000 megawatt generating capacity. About 25 percent of this electricity was to be used to pump water from Lake Havasu downstream on the Colorado River to the central valleys of Arizona. This massive public works project is known as the Central Arizona Project (CAP). The water was ostensibly to be used for agriculture, but over time became far too expensive for farmers, and is now used for development in Phoenix and Tucson.

It should be recalled that the original proposal for supplying the electrical needs for the CAP would require that two dams be constructed near either end of the Grand Canyon to generate hydro-electric power. David Brower and the Sierra Club called on the American public, and public opinion indeed thwarted the proposed dams. The obvious alternative was to mine coal from Black Mesa to fuel the Navajo Generating Station near Page, Arizona.

In the meantime, traditional Hopis were being represented in the world at large by Thomas Banyacya with whom I traveled throughout the United States on speaking tours wherein Banyacya revealed his interpretation of the Hopi prophecy of coming disaster in the face of "the march of progress." In his lecture, Banyaca referred to a cloth rendering of the ancient petroglyph situated near Old Oraibi that bespeaks of the Time of Purification. The rendering portrayed the tools given to the Hopi by the Great Spirit, Massau. This was followed by two roughly parallel paths. The upper path was that of the White Man and revealed two white men and one Hopi that had assumed the ways of the White Man. This path finally peters out. The lower path reveals the way of the traditional Hopi and is strong and enduring. Both World Wars I and II are represented, as is the coming of World War III followed by the time of purification. Banyacya said that the White Man was doomed because of his faith in technology

over that of the way of the Great Spirit. Only those would survive who followed the traditional Hopi way and the path of the Great Spirit.

In my own lecture, I spoke of the necessity for understanding the facts surrounding the strip-mining of Black Mesa, and attempted to rally university students to protect endangered environments using whatever means were available short of harming fellow humans. I called the Central Arizona Project the perfect model of total environmental degradation, which included:

- the polluting of aquifers with seepage from strip-mined Earth;
- devastation to landscape through massive strip-mining of coal;
- marring of landscape by the construction of the coalbearing railroad across the once pristine Kaibito Plateau;
- the befouling of the air of the American Southwest with smoke emanating from the coal-fired power plants;
- the depleting of the Navajo aquifer beneath Black Mesa;
- the march of the electric powerlines extending from Page to Lake Havasu;
- providing water from the Colorado River to Phoenix and Tucson, cities located in the fragile ecosystem of the arid Sonoran Desert.

All of this would result in the utter disruption of both Hopi and Navajo traditional cultures which would bear the brunt of devastation to air, land and water in their sacred homelands in the heart of the Colorado Plateau.

In early 1971, my wife Katherine and I were invited by traditional Hopis into the *kiva*, or subterranean sacred ceremonial chamber at Hotevilla on Third Mesa. Present were twenty or so male elders including David Menongye, Thomas Banyacya and John Lansa, husband of Mina Lansa, then the *kikmongwi* or traditional leader of Old Oraibi. Throughout the day, they related their collective point of view, which they asked me to write down and publish. The following two quotes are excerpted from what was published in *Clear Creek Magazine* in 1972:

The Black Mesa area is a sacred place. The Hopi knew it to be the spiritual center of the whole continent that contained the heart and soul of the Earthmother. The Great Spirit had granted them permission to live in that sacred place, to pray for balance and harmony, and to live within the life plan that the Great Spirit had taught them. The Hopi people still live there in the Black Mesa area, and the traditionalists still follow the teachings of the Great Spirit.

The Hopi look to the Earthmother for food and nourishment, for it was from the womb of the Earthmother that the Hopi and all living creatures emerged in the beginning. The animals and plants, the eagles and people are all kept alive through the power of the flow of Nature. The inter-action between all living things – the relation of rocks to the land, the flow of water, the dance of yellow butterflies in the cornfields – all this marks the balance of Nature.

The Hopis are stewards of the land. In their *kivas*, they perform rituals and ceremonies so that Nature will work in balance with people. These ceremonies are reflections of the teachings of the Great Spirit, which the Hopi received at the time of

emergence from the lower world. They achieve a state of mind through which they perceive that those early beginnings and the present are all the same, that time is not just a linear passage from the past to the future, but rather a continuum in which the annual cycles with their ceremonial events touch each other in reaffirmation of meaning.

In the words of Hopi elder John Lansa as translated by Thomas Banyacya,

There is a spiritual seeing of things that can't be explained. There are shrines in the spiritual center, which are markers for spiritual routes which extend in all four directions to the edge of the continent. Through our ceremonials, it is possible to keep the natural forces together. From here at the spiritual center, our prayers go to all parts of the Earth. Our prayers maintain the balance that keeps all things well and healthy. This is the sacred place. It must not have anything wrong in it. It must never be defiled. We want it organic the way it has always been. Leave the land in the hands of the Hopi to take care of everything for all the people. We know how to farm. Only people who know how to grow things will survive. Through prayer, people can develop in their own way as the Hopi have.

On the one hand, Black Mesa was seen as an enormous coal deposit, the strip-mining of which would result in great economic gain to resource extractors, land developers, politicians, and other corporate beneficiaries. On the other hand, the sacred heartland of an ancient traditional culture was to be utterly desecrated and defiled. The Hopi deity Massau was in direct conflict with Mammon, the hidden deity of corporate America over the fate of the precious landscape of the American Southwest. A hidden villain in this scenario was the Hopi's general counsel, John Boyden who was suspected of and later revealed to be quietly representing the Peabody Coal Company of East St. Louis at the same time.

Within their cultural milieu, the Hopi are sophisticated and knowledgeable with regard to subsistence farming in one of the continent's most arid landscapes. Hopi spirituality and ceremonial practices help them remain aligned with the seasons and allow them to recognize that which is sacred within the flow of nature. The presence of the Black Mesa mine has greatly disturbed the natural balance of both Hopi culture and the ecosystem.

In the spring of 1972, David Menongye, Thomas Banyacya, two younger Hopis, Katherine and I were scheduled to attend the first United Nations Conference on the Human Environment in Stockholm, Sweden, in an attempt to bring the Black Mesa debacle to global attention. The Hopis had refused to secure United States passports on the grounds that they were citizens of the Hopi Independent Nation, not the United States of America. My wife and I fashioned passports bound in tanned deer hide that bore the inscription, "The bearer of this passport is a citizen of the Hopi Independent Nation. This passport is valid as long as the Sun shines, the water flows, and the grass grows." David Menongye blessed the passports with corn pollen and affixed an eagle feather to each one. It took a fair amount of time at LAX, but finally a pilot from Scandinavian Airlines agreed to take us to Stockholm. Ultimately, the passports

were stamped by Swedish authorities, thus validating them in the eyes of international bureaucracy. They were later stamped in Denmark.

In Stockholm, Hopis and Navajos met with members of other traditional cultures from around the world establishing a network that continues to today.

But the strip-mining of Black Mesa was begun and continued into the twenty-first century. Water continues to be pumped out of the Black Mesa aquifer. A new generation of Hopis and Navajos use every legal means at their disposal to thwart this pumping as Hopi springs and Navajo wells run dry. This environmental catastrophe now fosters growth in the major cities now located in the Sonoran Desert, a fragile landscape ill-prepared to absorb so many humans. The Central Arizona Project, originally conceived as an irrigation project, has become the means by which population centers in Arizona continue to metastasize over the land.

In the meantime, Hopi and Navajo culture-bearers fight so that their home habitat and their spiritual values may survive.

The human species is an invasive species. The mining at Black Mesa has many parallels globally. Traditional cultures that have evolved within habitat are gravely endangered by invading outsiders intent on extracting non-renewable resources located in homelands native to others. Peoples whose sensitivities and sensibilities are finely honed to home habitat are being displaced not only by extractors, but more also by the dominant monoculture which attempts to reeducate people native to place into a paradigm commensurate with that of the more dominant culture. Thus cultural diversity is disappearing. As cultural diversity and its attendant affiliation with the spirit of place disappear, the intuitive ability to perceive the sacred quality of the biotic community seems to atrophy. Finally, the perception of reality is restricted to a “nuts and bolts” point of view that excludes the mystery, the *numen*, the meaning.

Imagine a collaboration between indigenous peoples whose understanding of native habitats is contained within their lore, music and ceremony, and biological scientists who well understand that extermination of species tolls the knell for habitat. Imagine thinking in terms of watershed boundaries rather than geopolitical boundaries. Or that the Earth is a living organism rather than a body of real estate to be divided among the most powerful humans. Or that we are honored to be members of the biotic community of our planet Earth rather than considering ourselves to be dominant and separate. The result could combine knowledge and wisdom of specific homelands in such a way as to foster reciprocity between humanity and habitat, and thus reinvoke the Spirit of Nature in our daily lives.

Jack Loeffler

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See also: Abbey, Edward; Brower, David; Earth First! and the Earth Liberation Front; Holy Land in Native North America; Hopi–Navajo Land Dispute; Hopiland to the Rainforest Action Network; Indigenous Environmental Network; Law; Religions and Native American Lands; Radical Environmentalism; Snyder, Gary.

Blackfoot Cosmos as Natural Philosophy

Our ancestors were strong, powerful and were well equipped with survival skills. They taught us to live in harmony with nature, the animals and the birds. They taught us that the land belongs to the Creator and that we belong to Mother Earth. Our legends teach us lessons (Rufus Goodstriker (Piinakoyim) in Zaharia and Fox 1995: 97).

The group of closely related nations of the Algonquin linguistic stock known as the Blackfoot Confederacy is comprised of four divisions: the Southern Piegan, or Blackfeet, of Montana; the Northern Piegan, or Blackfoot, of Alberta; the Kainah, or Bloods; and the Siksika, or “Blackfoot” proper. Loosely organized in mobile social units described as “bands” in the anthropological literature and relying on the buffalo as its economic base, the Blackfoot Confederacy controlled a vast terrain stretching from northern Alberta and western Saskatchewan in Canada down into the high prairies of Montana in the United States. In 1833, their numbers were estimated to be nearly twenty thousand people (Maximilian 1906). Devastated by epidemics and unequal military struggle with colonial powers, the Blackfoot Confederacy suffered a steep demographic decline at the turn of the twentieth century, which was partially offset by a gradual postWorld War II population increase that brought the confederacy’s numbers to about fifteen thousand enrolled members in 1990. Deprived of a bulk of their territorial possessions, the present-day Blackfoot resist a high unemployment rate, lack of proper medical care and bureaucratic interventions through an intensive focus on communal values, personal integrity, local knowledge, and cultural revival, including that which represents a strengthening of the Blackfoot philosophical universe.

Throughout the world, Native peoples seek to be aware of, in communication with, and hopefully synchronized with, the rhythms of the natural world. In the Blackfoot context, spiritually “knowledgeable” or “powerful” people are those who know how to do this. The purpose and structure of stories, teachings, and practices emphasize this point. *Mokakssini*, the Blackfoot word that approximates *epistemology* – referring also to notions of awareness of total being, and knowing – is founded upon deep knowledge of the environment, the cosmos, and all of life, and is rooted in spirituality. Blackfoot teachings consider humans to be part of a delicate harmonious relationship with both the Earth and the heavens, wherein the Sun, Moon, the planets and stars – called *Spumatapiiwa* (“*Sky People*”) – have spiritual as well as physical properties. The natural

harmony of the Blackfoot universe is easily disrupted unless humans remember their responsibility to maintain it.

The spiritual practices that are related and relayed to humans in Blackfoot stories hold valuable lessons for seeking deeper knowledge via awareness of the interrelationships between humans and the rest of their environment. Preparations to increase one's awareness during a vision quest or by participation in the Sun Dance, for example, are not simply about the preparation of the mind (i.e., psychological), but rather to bring into harmony, to synchronize the whole human, with the "whole," the "multiverse." Blackfoot vision traditions are central awareness-seeking sources contributing to the rich body of Blackfoot knowledge. This tradition survives as an immensely systematic, purposeful, adaptable, creative, holistic, strong teaching format that is a viable format for achieving its ends of knowing oneself and one's relationship to the rest of the world.

Dynamic movement, interaction, and interdependence grounded in reciprocal relationship, responsibility to oneself, to one's family and relatives and culture are intricate webs of reciprocity tying together all facets of one's life, and continuity of "the people" are major themes in traditional stories. The stories connect the land and the Blackfoot spirit through transfer, awareness, and transformation that are the root of *mokakssini*. Philosophically, the oral tradition shows the importance of the way Blackfoot story traditions speak to the sacredness of place at the level of dialogue with all members of the universe, extending to the stars and planets. Such exploration of the role of imagination in traditions is a continuation of native intellectual and philosophical traditions, where metaphor and analogy have primary roles in the formulation of adult learning and human cognition. Similarly, creative cognition is described as recurring thinking that incorporates ongoing symbolic constructions, affective images, and nervous signals within an immutable pattern of traditional teachings. Its main constituent, however, is so sophisticated that it is refined to schemata – customary ways that indigenous peoples organize, perceive, and think about the hallowed environs that envelope and convey sacred reality: a separate way of being, a different way of observing the world, and an altered perception of time, space, and image. This reality incorporates in its structure of knowledge the metaphysical principles of the subjective experience most often denounced as superstition and ignorance by non-native lay people, Christian dogmaticists and positivist scholars. For example, native dreams, visions and ritual observances have been under discursive, psychological and institutional attack since the time of the first missionaries in the New World. In this reality, learning and consciousness are circular, which addresses the timelessness of human spirit and the constancy of the inexpressible, as revealed in the transformations between the source of life and all those who share that life, including humans (Standing Courage 1995).

A first step in seeking knowledge/power is to thoroughly cleanse oneself, spiritually, physically, and mentally, to be ready to be "open" to receive knowledge/power/awareness. Mails (1973: 61) describes this as a process of opening oneself up, to help oneself be as receptive as a "channel." One significant purification ceremony given to the Blackfoot from the Star People is the sweatlodge. Another is burning sweetgrass

incense. The sweatlodge prepares one to receive teachings (power), and is a mechanism of transformation with the goal of enabling communication between the different realms of existence. It is for this reason that the sweatlodge is part of a larger process of preparation for learning.

The vision-seeking component of the quest is part of a long process of preparation, of opening oneself up to knowledge of the world and the universe. A vision quest is not taken lightly and requires much meditation and preparation, which is designed to prepare the seeker to tolerate the demands of such an effort and thereby assist in a successful outcome. The educational process this follows teaches that every single step of the preparation for seeking a vision must receive as much attention and goodwill as the actual quest. The follow-through on visions also requires much concentrated effort. In a testimony given by Smoking-Star to anthropologist Clark Wissler, sweatlodge and vision-seeking experiences appear as parts of a coherent ceremonial whole still found among Blackfoot religious practitioners:

My uncle told me it was time to seek power. This meant that I must fast and sacrifice, seeking a vision. So I took my other Crow horse to old Medicine-bear, a shaman, offered him a pipe, and made my request. My instruction took many weeks. I was introduced to the sweathouse and other ceremonies, learned how to make the pipe offering, to cry for power and so forth. At last all was ready and old Medicine-bear left me alone on a high hill to fast, dance, and pray. Each evening and morning he came and, standing far off, exhorted me to greater efforts. By the third day I was too exhausted to stand. That night I lay on my back looking up at the sky. Then I saw the Smoking Star [the star who smoked my pipe]. And as I gazed it came nearer and nearer. Then I heard a voice, "My son, why do you cry here?" Then I saw a fine warrior sitting on the ground before me, smoking my pipe. At last he said, "I will give you my power. You are to take my name. You must never change it. Always pray to me and I will help you." The next morning when old Medicine-bear came and stood afar off I said, "Something has been given me." Then he prayed and took me home. In due time he heard my story, composed a song for me, gave me a small medicine bundle and announced my new name. I was now a man of power (in Wissler 1922: 51–2).

Blackfoot traditions such as the sweatlodge, incense burning, pipe smoking and vision quests recognize the role of transformation of elements (between rock, water, air, etc. in the sweatlodge), like the transformation of the people involved, for change and release of spirit. The mutual contributions by rock and water and people in this process reaffirm the unity of physics and the spiritual relationship that exists between all that is.

The native interpretation of nature converges with Western dialectics in its emphasis on struggle, variety, and creativity (Simon 1990). The indigenous conception of the cosmos as oriented in all directions, rather than simply above, places emphasis on bringing humans together with all of nature (which includes the "supernatural"). Blackfoot stories, and their lessons about a way of life, demonstrate a fundamental order to the cosmos that contains necessary balancing elements of disorder or noncompliance

with Blackfoot ideals (for example, cycles of Twins bear this out in every stage of creation). Humans do not control the energies of the universe, and while these energies are very powerful they are influenced by our action or inaction, as the case may be. Blackfoot stories relate concepts of time, space, and distance that are uniquely tailored to the Blackfoot sense of belonging and relatedness to the landscape and all in it, and to a unity with the universe and events in it. Humans share a role in creation because we can, and should, interact with and renew these energies, *natoyi* (Creator's energy), every day.

The ontological relatedness shared by humans and the rest of the universe emphasizes the caretaker role of humans. Stories emphasize unity, a sense of belonging and give purpose to life through community-oriented action and growth. This is demonstrated in myriad ways, ranging from the structure of the Sun Dance to lodge encampment tipis and sweatlodges, and in the centrality of the circle in the traditional Blackfoot social life. The stars and planets and Earth are round, as are living things on Earth. The path the sun travels is a circle, the seasons comprise a circle, as do the four stages of life: babyhood, childhood, adulthood, and old age.

The Sun Dance is the largest annual renewal ceremony of the Blackfoot, with preparations running throughout the year and involving the coordination of the sacred and other societies and the Blackfoot community at large. The expression Aka-wah-kiapik-sis-tsiko ("the sun is going home") refers to the sun's movement up the horizon as summer progresses. Traditionally, the Sun Dance was held when the sun arrived "home" during the summer solstice. Blackfoot tradition requires that a woman must first vow to sponsor the Sun Dance, and it cannot take place without this initial step. She must be considered a "good" woman – honest, loyal, kind, and willing to sacrifice for the community, her "children." Her commitment and honesty are crucial, for if she is dishonest and vows to sponsor the Sun Dance, she puts the entire community at risk. Dancers also make vows and prepare at length to participate. Other community members participate at various levels, including praying for those who are sick, fasting, and giving thanks for another year. Some participate by getting painted or by simply observing. At all levels of participation, the organization and function are infused with spiritual expression found in dreams, visions, and teachings from stories. These are replicated in language, social and geographic organization (e.g., organization of clans and societies in encampment circle), manifestations of sacred beings in various forms (e.g., paint, clothing), dance, and song. There is much significance in every act at every level of the ceremony. The center pole, for example, to which offerings are tied, is called the "enemy," and war songs are sung during its construction. In giving thanks for another year of life, the Blackfoot "conquer" death, starvation, sickness, etc., and live to see another year. Offerings are made to the sun in appreciation and in prayer for another year of health, happiness, and safety.

The role of caretaker or responsible keeper of the relationship among the members of the various levels of the world belongs to humans in various indigenous creation cycles. Stories create a connecting link; they support the ideology of balance and oneness

with nature and oppose the ideology of separation, dichotomization, manipulation, or domination of nature. Learning about the environment and maintaining existence is part of a circular order. Hence, it is a strong sense of place and homeland, an intellectualism rooted to the knowledge received from nature, a holistic approach to survival, strong kinship relations, and great diversity in reaction to the physical and metaphysical worlds that form distinct national identities (Fixico 1993).

Blackfoot stories, ancient and modern, are replete with references to the pity and gifts that are granted by spirits who *reside in nature*. This is the key to understanding *mokakssini*: awareness of *pii-tsa-tap-tsi*, all the “magical,” “mysterious,” “powerful” forces in all of nature, including the stars and planets, and of our relationship to them. Attention to and respect for their powers, together with humility and responsibility, help humans survive. Humility in the face of so many forces more powerful than humans, and the responsibility to attend to these powers helps humans to respond to the web of relationships that already exist (in nature – the land and sky) into which humans are born. To grow as human beings, to mature in accordance with the circle of development, is to follow patterns of development outlined by the stars and planets, especially the sun. The reciprocal nature of this responsibility is that in order to grow spiritually, and to mature as a human being, one must know the patterns of the universe and make oneself available to learn from them by following their example.

By modeling human growth and interaction on the patterns of the cosmos, patterns of sharing, generosity and honesty are reinforced because of the context that we all share the same breath, universe, energies, etc. These assist the survival of the people because we must care for each other as we care for ourselves. The metaphysical communion demonstrated in the Blackfoot stories influences the social life in that it: promotes awareness of social interdependence; is inconsistent with exploitation; and teaches the wisdom of living close to the Earth that is replete with life and meaning if we can tap into it. This respect for life includes, for individuals, a combination of mind, soul, body, and spirit, the four components of ontological dependence; and responsibility is about recognizing and taking care of the interdependence.

The intervention of the Canadian and American colonial powers into Blackfoot life is interpreted by the Blackfoot as the disruption of the natural order to be counteracted and healed through several major collective actions: the repatriation of sacred objects from museums and private collectors, the education of the young in the Blackfoot language, the perpetuation of ceremonial cycles, and the protection of the land against the encroachments of large-scale industries. During the 1990s, several types of ceremonial bundles (beaver, medicine pipe, and sundance related objects) were unconditionally returned, as in the case of the United States’ museums such as the Smithsonian and Peabody, or lent, as in the case of some Canadian museums, to the Blackfoot Confederacy. One motivation for recovering bundles and other articles is the importance placed on the wholeness of the community, which is unlikely without the complete sets of bundles. The traditions given to the Blackfoot by the visions, stars, original people, and animals are disjointed, missing parts, sets, songs, or sections; their continuation is

further complicated by the death of knowledgeable elders. The nonphysical elements (i.e., spiritual) are believed to come back to the community through more traditional means such as the language, or by truly believing in and practicing the traditions, and through prayer. The traditional teachings are fading away as younger generations propose changes to them and knowledgeable elders pass on. Suggested changes to ceremonies occur, which have to be corrected by elders, and fewer and fewer young people know the songs. Recognizing the difficulties of maintaining the Blackfoot traditions includes acknowledging that younger generations have a crucial role in maintaining the teachings. Elders and younger learners of the traditional Blackfoot way have hope that the teachings will continue; as tribal societies gain new members, elders continue to participate in their traditional role as teachers and transfers take place. The longevity of Blackfoot traditions is often explained by elders with reference to the power of their structure and their “spirit” or “shadow”: as long as the Blackfoot persist in practices that unite these two aspects of their traditions, the teachings will survive. The oneness of spirit and matter is demonstrated by the struggle that the Blackfoot have waged over the years protecting one of their beloved vision-quest areas in the heart of the Montana reservation, known as Badger-Two Medicine, against its use by oil-drilling companies. The beauty of these grasslands can also be appreciated outside of religious contexts by the enthusiasts of hiking, fishing, horse packing, camping, hunting and cross-country skiing.

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See also: Lakota; Lakota Sun Dance; Sauna.

Blake, William (1757–1827)

William Blake was born in London on 28 November 1757 to a well-established hosier and his wife. Blake's childhood was filled with visions of wonder; as a boy, he often saw throngs of angels and spirits in trees and throughout London. When Blake was four years old, he looked at the window of his childhood room and saw a vision of God looking back at him. Four years later, he reported to his father that he had witnessed a tree full of angels on one of his sojourns in London. His father threatened to punish him severely for lying, but the young Blake determined to maintain these visions as the basis for his own developing theology.

Prior to his career as a published poet, Blake received training in the visual arts both at drawing school and as an apprentice to a master engraver. The skills acquired during this period appear in the many engravings he created to accompany his poems. These illuminated manuscripts radically changed the face of publishing in the late eighteenth century, and they also opened new doors for Blake to express his prophetic vision.

Blake is perhaps best known for his two-volume collection of poems, *Songs of Innocence* and *Songs of Experience*. It is here, also, that he best articulates his own religious ideology and its relationship to the natural world. Though the two books were published several years apart (1789 and 1794 respectively), Blake intended that the illuminated manuscripts be read together, as they reveal what Blake called the "two contrary states of the human soul." In the first volume, Blake's personae are small children motivated by love and peace. Because these children maintain an immediate and unmitigated relationship with the natural world, Blake contends, they use their imaginations more freely and actualize the divine within the natural world. Adults, he argues in *Songs of Experience*, lose the ability to appreciate nature and, thus, are further from God.

To understand this triangulation of the natural world, the child-like perceiver, and the divine, we need first to understand Blake's own theology. Blake began his adulthood as a devout follower of Emanuel Swedenborg, a Swedish scientist and theologian. Blake eventually came to reject Swedenborg's doctrine, however, as it deemphasized the epistemological and theological merits of sensory experience and the role of the imagination. He determined, then, to create his own mythology based on an egalitarian idea that salvation can be arrived at through the human imagination.

Blake's account of the imagination is one based in the philosophies of Locke and Hume. Like these modern philosophers, Blake held that the only reality is one created through perception. The imagination, then, is our ability to manipulate or synthesize

these perceptions into thought. Blake's theory stipulates that the degree to which we use our imaginative powers is the degree to which we are able to achieve the divine within this lifetime.

Like other Romantic poets, Blake held that nature is an imperative component of this construction. In the wellknown introduction to *Songs of Innocence*, Blake reveals that the inspiration for his poems and their underlying theology comes from an encounter with an angel in the verdant valleys of England. The angel, a metaphoric embodiment of Blake's deceased brother Robert, tells Blake to pipe a song of love and rural tales. The poet responds by making a "rural pen" from a reed and sitting down to tell the story of children's unadulterated love of the natural world. Other poems in the collection expand upon this connection between a child's perceptions of the natural world and the divine. The poems of *Songs of Experience* reveal the darker side of nature without imagination and, thus, without God.

The culmination of these ideas appears in one of

Blake's last poems, *Jerusalem*. Here, he argues against the materialism of society by suggesting that we return to a more edenic life and connection with the natural world. His powerful illustrations reify this message through whimsical accounts of angels resting on sunflowers and god-like figures at once harnessing celestial fire and relying upon the natural world for their power.

Though critics of Blake – both past and present – often accuse the poet of relying upon overly simple meter and reductive Christian imagery, much of Blake's writing evinces a far more sophisticated spirituality, albeit one taken from the pages of the Old and New Testament. Part of this criticism stems from Blake's sometimes uneasy alliance with other Romantics: while his account of the self and its ability to find inspiration in the natural world allies him nicely with other Romantics, his commitment to articulating a mythology based on a biblical God and celestial hierarchy differentiates him from many of his pantheistic contemporaries.

Kathryn Miles

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Blavatsky, Helena Patrovna (1831–1891)

Helena Patrovna Blavatsky (née Hahn) was a writer, spiritual teacher, and co-founder of the Theosophical Society. Of aristocratic Russian background, Helena Petrovna married Nikifor Blavatsky in 1849, but soon left him to wander the world in search of spiritual truth. According to her own account, she spent several years in Tibet studying under Mahatmas (highly evolved teachers) who remained her guides thereafter. She came to America in 1874, settling in New York and becoming a U.S. citizen. There, in conjunction with Henry Steel Olcott and others, she founded the Theosophical Society in 1875. In 1877 her first book, *Isis Unveiled*, was published. Then, in 1878, she and Olcott departed for India, where she remained until 1885. Those were years of rapid growth for the Theosophical movement, but also of much controversy related especially to a critical investigation of her by the Society for Psychical Research, published in 1884. Returning to Europe in 1885, she resided in London after 1887. Despite failing health, she published several more major works before her death in 1891: *The Secret Doctrine* in

1888, *The Key to Theosophy* and *The Voice of the Silence* in 1889.

The fundamental theme of Blavatsky's teaching and writing was recovery of what she often called the Ancient Wisdom: primordial lore about the emergence of the universe and the interaction of material and spiritual aspects of the world and human nature. She believed that in recent centuries this wisdom has been largely obscured by dogmatic religion and as well as doctrinaire materialistic science, being preserved only in a scattering of esoteric groups and in reservoirs of ancient truth like Tibet. However, certain adept teachers, also called Mahatmas or Masters, were prepared to instruct select candidates in the path toward this almost forgotten learning. These adepts, in Blavatsky's eyes, were largely real persons living in out-of-the-way places on Earth but able to communicate psychically with one another and with students like herself.

Blavatsky's theosophy centers around what might be called an enhanced naturalism. The universe, she said, works by law and evolves naturally out of original oneness from within. But, in contrast to the prevailing scientific view, as she understood it, the scope of that process includes consciousness, which has coexisted with matter eternally and is evolving with it. Thus, in more picturesque terms, the essential "core" of each individual is the monad or pilgrim, an entity of refined consciousness traveling from life to life,

world to world, and state to state as it descends into the realm of experience and ascends upward again toward unity.

The influence of Blavatsky and her Theosophical Society is difficult to assess precisely, but is being increasingly recognized as a significant element within twentieth-century modernism. The tribute she paid to Eastern and other suppressed religions and cultures in the heyday of European imperialism by describing them as important custodians of ancient wisdom played a role in subsequent spiritual revivals and national independence movements from Ireland to India and Sri Lanka. Theosophy was no less important in popularizing Eastern religious concepts such as karma and reincarnation in the West. Some aspects of her philosophy hinted at forthcoming insights in relativity, quantum, and evolutionary theory. More narrowly, her work has had a powerful impact on all later occult, esoteric, and “New Age” ideologies. So far as nature is concerned, Theosophical emphasis on the coevolution, and so kinship, of all life has tended to counter the privileging of humanity alone, though Blavatsky herself did not develop nature-oriented aspects of the teaching as much as other, later Theosophists.

Robert Ellwood

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See also: New Age; Theosophy; Western Esotericism.

Boff, Leonardo (1938–)

Leonardo Boff is the first Latin American liberation theologian to situate social and political liberation within a broader ecological framework. Although liberation theology did not begin with concern for the environment, but rather, as Boff himself phrased it, with “concern for the oppressed sons and daughters of the Earth,” his works of the early 1990s express his reconception of liberation around ecological models. Boff argues that the logic leading dominant classes to oppress the poor also results in the exploitation of nature. Reflecting on the Latin American experience, Boff discerns an interrelatedness between the ecological, human, social, and spiritual aspects of life.

Leonardo Boff was born 14 December 1938 in Concórdia, Santa Catarina, Brazil. Following philosophical and theological formation, he entered the Order of the Friars Minor (Franciscans) in 1959 and was ordained to the priesthood on 15 December 1964. In 1971 he obtained his doctorate in Munich, Germany, writing a dissertation on the Church (supervised by Joseph Ratzinger). On his return to Brazil he served for 22 years as professor at the Franciscan institute at Petrópolis. He has also served as visiting professor at numerous universities, including Lisbon, Basel, Salamanca, Heidelberg and Harvard, and holds honorary doctorates from Turin and Lund. Boff pioneered the development of Brazilian liberation theology, was active in the formation of ecclesial base communities, and has consistently defended human rights. From 1970 to 1985 he was senior editor of *Editora Vozes*, and coordinated the publication of the collection *Theologia e Libertação* and of the Portuguese edition of the *Collected Works of Carl G. Jung*. He also served as editor of *Revista Eclesiástica Brasileira* (1970–1984), *Revista de Cultura Vozes* (1984–1992), and the international journal *Concilium* (1970–1995).

Boff gained worldwide attention in 1985 when he was summoned to the Vatican to explain sections of his book, *The Church: Charism and Power*, which questioned certain teachings of the Roman Catholic Church. His subsequent silencing eventually led to his resignation from the priesthood in 1992. He was Professor of Ethics, Philosophy of Religion, and Ecology at the State University of Rio de Janeiro (UERJ), from 1993 until his recent retirement.

Boff’s liberation theology took an ecological turn in the late 1980s and early 1990s. According to Boff, just as conventional ecology developed unrelated to social context, liberation theology had been articulated without reference to the natural world (Boff 1994: 245). Boff’s early environmental writings show the influence of Latin American social ecology that grew following the United Nations first international conference on the environment in Stockholm in 1972. Following the work of Carlos Herz and Eduardo Contreras of Peru and Eduardo Guaynas of Uruguay, he argued for a “social ecology

that is capable of articulating social justice” (1994: 239). According to Boff, theologians must speak of “ecological sin.” The commandment “Thou shall not kill” for example, refers to biocide and ecocide as well as to direct killing (1994: 245).

Ecology and Liberation, published in Portuguese in 1993 and English in 1995, was Boff’s first book articulating an ecologically oriented liberation theology. Although he still claimed that the “social project is social ecology,” in *Ecology and Liberation* he argued for a “holistic ecology” because it is “theological by nature” (1995: 7, 11). In this and following works, he showed the influence of the South African philosopher Jan Smuts as he articulated a holistic ecological model. Drawing on the spiritual traditions of Francis of Assisi, Teilhard de Chardin, as well as Augustinian, Bonaventuran, Pascalian and existentialist traditions and the “new physics,” he called for a merging of ecological and theological concerns. Elements of a liberation theology that protect the poor and the Earth, according to Boff, include Christian panentheism (“everything in God, God in everything”), a sacramental view of creation, and a doctrine of the Holy Spirit that provides a model of reality as energy. Boff further articulated this theological and ecological holism, focusing on the Amazon of Brazil as a concrete case, in his 1995 book, *Cry of the Earth, Cry of the Poor* (English translation 1997). In this volume he articulated an ecology-based cosmology, rooted in evolutionary processes, in which sin is defined as “breaking connectedness” (1997: 85). Influenced by Brian Swimme, Thomas Berry, Meister Eckhart, and Teilhard de Chardin, Boff finds God within the “cosmogenic process of the universe” (1995: 146). According to Boff, without a spiritual revolution, the new paradigm of connectedness is impossible, resulting in further damage to the Earth, including the

Amazon, “temple of the planet’s biodiversity” (1995: 87).

As a founder of liberation theology, Boff’s concern has always been with the poor and oppressed of the world. In his early writings, the oppression of the poor was exposed through social scientific (Marxist) analysis, evaluated in the light of faith, and then actively opposed. In Boff’s later writings he articulated an “ecospirituality,” claiming that the plight of the oppressed and the Earth are connected.

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See also: Berry, Thomas; Christianity(7c) – Liberation Theology; Swimme, Brian; Teilhard de Chardin, Pierre.

Bohm, David (1917–1993)

In the 1980s, recognized physicist David Bohm presented the so-called “holographic paradigm,” which was the result of thirty years of research into quantum mechanics and its philosophical implications. While his early work had been focused on the strictly scientific aspects of quantum mechanics – although from the beginning he refused to separate science and philosophy – Bohm’s perspective changed when he met the Indian thinker Jiddu Krishnamurti in 1961. His *Wholeness and the Implicit Order*, although presented as a “work in progress,” became highly influential in the modern philosophy of nature and the debates on holism. In this book, Bohm presents a theory that describes the phenomenal world as the “unfolding” of a more fundamental “implicit” order. This implicit order is characterized by an unbroken dynamic wholeness – a “holomovement” – that comprises both matter and consciousness.

In later publications, Bohm expanded his theory, describing a hierarchy of orders beyond the implicit (the super-implicit order, the generative order, etc.) and presented a theory of “soma-significance,” which intends to reconcile the domains of matter and meaning. As can easily be recognized, his later thought carries strong metaphysical and mystic connotations. This led to a kind of alienation from the “traditional” physicists and, simultaneously, to a broad appreciation by those in philosophical, theological, and esoteric fields of discourse. While Bohm did not engage in direct political or environmental activities, his influence is nevertheless important because he provided those endeavors with a theoretical holistic framework that can easily be attached to environmental concerns.

Kocku von Stuckrad

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See also: Complexity Theory; Holism; Krishnamurti, Jiddu; Science.

Bon (Tibet)

Tradition relates that the Bon religion was introduced from heavenly realms by a Buddha-like figure, sTon-pa gShen-rab, some 20,000 years ago. It spread into the Kingdom of Zhang-zhung (western Tibet) and then into Tibet itself. Bon was embraced as the national religion until its position was usurped by the introduction of Buddhism, which coincided with the collapse of the Tibetan empire during the eighth–eleventh centuries. As Buddhism established itself in Central Tibet, Bon consolidated in the eastern provinces and border regions, where it continues to this day.

Recent scholarship suggests that such traditional accounts err by using the word Bon to describe what are really two quite distinct religious entities: the preBuddhist religion of Tibet, and the religion of sTon-pa agShen-rab, and that careful differentiation needs to be made between the two.

The Bon of dynastic Tibet pictured the natural world as populated by countless deities and entities, the most powerful of whom, the bTsan (“Mighty”) gods were linked with the monarchy and were perceived as being largely remote from mundane activities. Of more immediate concern to humans were the lesser entities that were held responsible for disasters such as crop-failure and disease. Thus a major role of the Bon priests of this period was to mediate between the people and these many “lesser” gods and demons. This mediation typically involved identifying the spirit involved and the reason for its actions, and then determining the measures necessary to persuade it to desist. Such measures might entail the offering of food and prayer, although in ancient times it frequently required an animal sacrifice (on rare occasions human sacrifices were apparently also undertaken).

The historical origins of the Bon of sTon-pa gShen-rab remain obscure, but one theory suggests that it was a genuine – if unconventional – Central Asian form of

Buddhism (flavored with Indo-Iranian religious beliefs) which was introduced to Tibet at about the same time as “conventional” Buddhism entered from the south. Naturally its introduction to Tibet required that it reach some accommodation with the autochthonous religion. This was largely achieved by subsuming it: as in “conventional Buddhism” many of the significant local deities were “oath bound” (dam-can) to defend and protect the new religion and merged into its pantheon.

As Bon and Buddhism evolved in Tibet their similarities increased, and many of their religious aims and practices became all but identical. In larger Bon monasteries monks are educated in a way reminiscent of the dGe-lugs-pa sect of Buddhism, and follow the Vinaya (monastic code), which abjures the taking of any life and espouses the practice of vegetarianism. Practitioners of both religions aim to achieve byang-chub

(“awakening”) and to attain liberation for all creatures from the cycle of suffering and rebirth.

The relationship between contemporary Bon religion and the natural world therefore largely mirrors the experiences of the dGe-lugs-pa, although the ancients’ respectful fear of their surroundings continues to inform the more popular aspects of their religion. Again, as in Buddhism, there is often a considerable difference between the highly sophisticated type of religion taught and practiced at the main monasteries, and that of the village lamas who, like their forebears, continue to play a mediating role between the common people and the gods and spirits around them. Encounters with the “village” form of Bon, coupled with confusion between contemporary Bon and the preBuddhist religion of Tibet, have caused many commentators to describe Bon as fundamentally “shamanistic.” Common though it is, this appellation is highly questionable and has been rejected by senior Bon clerics. There is no doubt that contemporary Bon includes practices which may be called “shamanistic,” but it must be said that similar practices are equally evident in other forms of Tibetan Buddhism to which the term “shamanistic” is never applied as a blanket label.

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See also: Buddhism – Tibetan; Shamanism – Traditional; Tibet and Central Asia.

Book of Nature

“The Book of Nature” refers to the Christian concept of nature as a book, written by the hand of God and serving as a companion volume to the book of Scripture. With reference to this concept, the devout Christian is understood to be a faithful, attentive reader, studying both creation (the physical world made and sustained by God) and the Word (the Christian Bible, understood as the revealed word of God). For traditional Christian thinkers, the book of the Bible takes precedence as the source of revealed knowledge of God which serves as a means of grace for the faithful. The book of nature is secondary, a source of natural knowledge of God, available to human reason, but lacking a means of knowing the transcendent aspects of the divine. The art of reading the book of nature also lacks the requirements of faith and the possibilities of spiritual transformation that comes through divine revelation. Contemplation of nature may lead to the growth and refinement of one’s knowledge of God, but it is only God’s active work of self-revelation and grace that can perform the work of redemption on human beings. Studying the book of nature, however, has a certain democratic function because it is available to lettered and unlettered, churchd and unchurchd alike. Thus, attention to the book of nature may lead one to grow closer in knowledge and love of God, the Creator, and thus can spiritually prepare an individual for God’s redemptive work.

The importance of examining creation to understand the character and attributes of God is an ancient religious theme that informally reaches back to Rabbinic Judaism, as well as to earlier Ancient Israelite religious expression. The concept of “thinking back” from nature to God also draws on the Greek Platonic and Aristotelian traditions of reasoning by starting with the order of nature in order to then establish the character of divine beings or, in Plato’s case, of ideal forms. The traditional Christian view of creation builds on its Jewish heritage and its Hellenistic context, while also elaborating the concept of the Word (*Logos*) as the means through which physical creation is brought into being. The *logos* of scripture is thus conceptually linked to the physical world, which is also interpreted as a form of divine speech or divine text.

In the history of Christian thought, the notion of nature as a “book” finds vivid expression in the writings of Augustine of Hippo (354–430) who claimed that reading the book of nature directly was a more valuable means of knowing God than reading theological texts (though not more valuable than reading scripture itself). The metaphor of the book of nature persists into the twelfth century where the notion of nature as a book is reinvigorated by

Alain de Lille (1128–1202) and Thomas Aquinas (1225–1274) who both emphasized the inherent orderliness in and purposive aspects of nature. For Aquinas and Lille, nature is a system of fixed laws and secondary causes that reveal an intelligent creator and “Unmoved Mover” (God) who sets the forces of nature in motion.

Medieval scholastic theological discourses on creation and the “argument from design (in nature)” for the existence of God were complemented by more popular theological and literary traditions that emphasized each aspect of nature as having symbolic significance with respect to God’s character or the aspirations of virtuous Christians. Medieval emblem books and bestiaries described the natural world through a Christian theological lens, with animals representing particular vices, virtues or doctrines, such as the goat representing the sin of lust, the glow worm symbolizing the light of the Holy Spirit and the caterpillar representing the resurrection of Christ. In sixteenth- and seventeenth-century Europe, the popularity of emblem books grew such that texts about the (symbolically Christian) natural world developed side by side with ever more popular representations of nature as a Christian text. In this same period, natural theology reached new heights of popularity, influencing the development of natural science, first as a means of acquiring greater knowledge and understanding of God and later as a discipline in its own right, with or without reference to a divine creator.

In the American setting, the view of nature as God’s book flowered in the context of a new environmental setting that was both bountiful and frightening to European colonial eyes. This new physical surround, coupled with a long-standing intellectual tradition of “reading” nature, led to a rich theological and literary production emerging from the contemplation of nature’s meanings. The tradition of the book of nature persisted in both liberal and orthodox Protestant thought. The Puritan leader Cotton Mather urged his readers to walk in the “Publick Library (sic)” of nature in order to read about the character of God, and Jonathan Edwards saw in nature “images and shadows” of the divine, interpreting thunderstorms and rainbows symbolically, as had the emblemists before him. Later, in liberal theological contexts, the tradition of interpreting nature slowly became divorced from traditional Christian theology. The rise of deism in the seventeenth and eighteenth centuries fostered attention on nature itself with a concept of God as a great Architect or Watchmaker, and nature as a building or machine that, once set in motion by God, contained laws and processes that could be independently understood and, ideally, controlled. Deism itself created a precedent that led some to a wholly atheistic reading of nature’s book, with the hope and expectation of discerning nature’s own laws and processes and nothing more. This intellectual shift may have led to a greater scientific knowledge and appreciation for nature, but also established the groundwork for the intellectual and physical control of nature that has led to technological innovation, but also ecological destruction.

In the late eighteenth and nineteenth century, and in partial reaction to the Enlightenment view of nature’s book, philosophers and writers participating in the rise of Romanticism in Germany and England also propagated the notion of nature as

a “book,” revitalizing the notion that nature contained hidden messages and meanings, though no longer those of Christian doctrine. For the European Romantics and the American Transcendentalists, nature could be “read” for insight into the (often post-Christian) divine, but was also studied for knowledge of the self and as a means of cultivating the imagination. The Romantic ideal of the Poet-Seer posited a visionary who was specially equipped to “read” nature and then, through use of the Imagination, transform the messages of nature into literature that would bring “nature’s book” to the attention of other readers. In this context, nature still served as a kind of cryptogram, but the message was no longer strictly theological, but more broadly metaphysical, existential and psychological.

The Romantic tradition has played a vital role in developing a legacy of nature appreciation in Europe and America, although the legacy is a complex one and not wholly positive. Among the negative legacies are the connections made (particularly in the nineteenth and early twentieth centuries) between Romantic nature appreciation and certain forms of European nationalism. The Fascist movement in Germany is the darkest example of the ways in which pastoral themes in the art and literature of German romanticism were exploited to nationalistic purpose. The pursuit of a redemptive and “pure” rural Germany was linked to the concept of establishing a pure German race. German Romanticism was one of many “background theories” in the growth of National Socialism, but it is undeniable that anti-Semitism developed hand-in-hand with popular celebrations of German country life. The concept of the book of nature, then, was not always beneficent.

Contemporary eco-theology has revived interest in nature as a “book” to be studied. Twenty-first-century eco-theologians recognize, however, that too much attention to nature’s book without attention to divine creative forces historically played a role in the rise of Enlightenment science that fostered a mechanistic and sometimes destructive attitude toward the natural world. Aware of this history, writers such as Sallie McFague, James Nash, John Cobb and Calvin Dewitt argue for the careful study of nature as a way to foster both knowledge and reverence for nature, but they also rearticulate modern versions of older Christian theological themes in which nature as “text” must always be seen in reference to its divine author. At the same time, these theologians also welcome a certain closing of the distance between the author and the book. Their collective emphasis on divine immanence and action in creation suggests an author who is still producing and revising the text, a stance which resonates with – rather than stands against – much modern scientific thinking.

In the realm of ecological activism, also, the concept of “The Book of Nature” continues to be employed. The Religious Campaign for Forest Conservation, for instance, sponsors “Book of Nature” retreats that invite Christians and Jews to spend time in wilderness settings and discern what the wilderness might teach, as mediated by the religious traditions and orientations of participants. Such retreat experiences build on earlier American traditions of “open air” religion, including the founding of organizations (such as the Boy Scouts, the YMCA and Jewish camping associations) that use

outdoor settings to foster religious insight and moral character. More recent experiential workshops, however, are often explicitly directed not only at gaining religious insight *through* nature study, but also at harnessing such insights for the sake of environmental protection. While the concept of nature's book is an ancient one, it clearly continues to be revitalized and reinterpreted (particularly with ecological emphasis) in religious thought and practice today.

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See also: Deism; Ecofascism; Fascism; Natural Theology; Romanticism – in American Literature; Romanticism – in European Literature.

Boston Research Center for the 21st Century

The Boston Research Center for the 21st Century (BRC) is an international peace institute established in 1993. Its founder, Daisaku Ikeda, is a Buddhist peace activist and President of Soka Gakkai International (SGI), an association of Buddhist practitioners active in 163 countries. The Center brings together scholars and activists in dialogue on common values across cultures and religions, seeking in this way to support an evolving global ethic for a peaceful twenty-first century. Human rights, nonviolence, environmental ethics, economic justice, and women's leadership for peace are focal points of the Center's work.

The BRC has actively supported the development of the Earth Charter, a people's treaty with Earth that would effectively expand the moral community to include all living beings. Through published consultations on early drafts of the Charter with environmental lawyers, women leaders, and Buddhist scholars, the BRC helped to strengthen Charter language on such issues as demilitarization, gender equality, family protection, and the interdependence of all beings.

When Daisaku Ikeda founded the Center in 1993, he envisioned an institution drawing inspiration from three particular features of the Buddhist approach to life. These philosophical commitments have been at the heart of the BRC's educational mission: a commitment to dialogue as the most effective means of creating peace, a belief in awakening the inner resources of the human being in order to transform society, and a view of the natural universe that works against anthropocentrism by emphasizing the relatedness and interdependence of all life.

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See also: Buddhism–Engaged; Earth Charter; Religious Studies and Environmental Concern; Soka Gakkai and the Earth Charter.

Bougainville (Papua New Guinea)

Bougainville (Papua New Guinea) is the easternmost island of Papua New Guinea (PNG) to the north of Australia. Its people are part of the wider Melanesian cultural area, but they have close cultural and ethnic ties with the neighboring Solomon Islands. Bougainville was first colonized by the Germans in the late nineteenth century, but after World War I it was ceded to Australia and became part of the wider nation now known as Papua New Guinea. Bougainville came to world attention in the 1970s with the extraordinary open-pit Panguna mine operated by CRA, a subsidiary of the Australian mining company, Rio Tinto. With the independence of Papua New Guinea from Australia in 1975, the new government creamed off over half the mine's profits for the nation as a whole, leaving Bougainvilleans dissatisfied. Since 1990 the mine has stopped due to a civil rebellion (1990–mid-2001), which began with the destruction of the mining machinery by the local people reacting against environmental damage by severe pollution, destroying the life system for all those who lived downstream from the mine along the Jaba River.

Like most indigenous peoples, Bougainvilleans have a strong sense of spiritual affinity with nature and the interrelationship of all its parts. Also, with their matrilineal societies, Bougainvilleans have an added sense of kinship to nature and its resources. Therefore any development that damages these foundations is felt as deep sacrilege.

During the civil rebellion, Ona was the front man. Outwardly supported by the Marist-oriented Catholic community, but in reality strongly influenced by Damien Damen, Ona was a revered elder figure who believed in and promoted Bougainville as a sacred island called M[e']jekamui, and so he stood for the protection and rights of its people and environment. Little known during the years of unrest (and associated with "cargo cult" activity), Damien emerged as a final figure in contributing to the peace process.

As distinct from the effects of the mine, the war on Bougainville has resulted in despoliation of garden lands and town environments, but not so much on forests. The displacement of people to offshore atolls has also caused problems. On the Cateret Islands east of Bougainville the land area has seriously diminished, these developments amounting to the first United Nations-observed swamping of arable atoll land by rising sea levels. If global warming was here having its effects, this was mainly because protective reefs were dynamited for fish to feed extra mouths

– those of the displaced persons.

Hitherto, religious bodies in the post-rebellion context have concentrated on the handing over of weapons, peacemaking ceremonies, and a general peace with justice. But PNG's granting of autonomy to Bougainville (2002) has allowed the island's government, along with NGO and church agencies, to attend to environmental questions. The Panguna mine, policed by remnants of the Bougainville Revolutionary Army (backing Ona and Damen), is still closed. Current political consensus in Bougainville is that it should remain so.

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See also: Papua New Guinea.

Brazil and Contemporary Christianity

Brazil, with over 170 million people, is one of the geographically largest countries in the world. It is a country made up of considerable regional, ethnic, and economic diversity. This diversity is clearly reflected in the plurality of religions found in Brazil. This plurality of religions in Brazil includes several African-Brazilian religions, Judaism, Islam, Spiritism, Pentecostalism, Historical Protestantism, and Roman Catholicism. Although the religious make-up of Brazil is changing rapidly, as for example Pentecostalism and charismatic movements of various sorts grow in leaps and bounds, Roman Catholicism remains the dominant religious group in the country. Indeed, the Roman Catholic Church in Brazil is the largest Roman Catholic Church in the world.

Well known in recent decades for its many excellent theologians who were instrumental in the development of the theology of liberation, for its thousands of popular Base Christian Communities, and for the defiance of the military dictatorship in the 1970s and 1980s by much of its hierarchy and many church members, Brazilian Catholicism is not well known for its environmental thought. And yet the country of Brazil contains a precious and vast array of natural habitats and wild spaces well known to environmentalists around the world. Such places include the Amazon River basin with its incredible diversity of plants and animals, the Pantanal, and the coastal rainforests which are now almost entirely destroyed.

The environmental thought of the Catholic Church has developed largely in relation to other social and ethical themes which are prevalent in daily life and dominate Brazilian consciousness. Such themes include the landtenure patterns in Brazil which result in a relative few owners of large pieces of land and millions of rural peasants who have no land to farm at all, and many millions of urban poor who endure substandard housing and sanitation, poor or nonexistent health and education provisions, and who often can find no employment. Another ethical theme is that of the plight of Brazil's indigenous populations which are steadily dwindling through violence and disease as their lands are encroached upon by loggers, ranchers and farmers, and as what were once remote areas come under the embrace of significant capitalist expansion.

Because environmental thought has developed largely in relation to such themes, Christian environmental thought in Brazil means not only and often not even primarily the flora and the fauna of the Pantanal or the Amazon, but open sewers and cardboard houses, deforestation-caused mud slides that cause many deaths in the rainy season, dengue fever and polluted water. This approach is characteristic of Brazilian popular

social movements with interest in the environment, and also of those organizations of the Roman Catholic Church which work with them. Thus environmental issues are often embraced not merely on their own merits but also as directly linked to the well-being of the urban and rural poor of Brazil.

An example of an organization that takes this integrated approach is the CPT (*Comissão Pastoral da Terra* or the Pastoral Land Commission). The CPT is a Catholic organization which was established some decades ago by the Brazilian Council of Roman Catholic Bishops. The CPT was established as an organization to work with issues of land and the peasants who work the land. The CPT deals directly with peasants and the questions that concern them. Those environmental issues which are integrally related to other issues such as justice for landless peasants, their ability to earn a sustainable living off the land, rural violence against them, and their political rights, are the issues with which the CPT may become involved. Thus, for example, it may become involved in the protection of the sustainable fishing practices of the poor against the voracious and unsustainable capabilities of large commercial fishing fleets. Or, the CPT may become involved in teaching sustainable farming practices to farmers who have recently gained access to land to farm, and who will quickly exhaust their land if they do not learn sustainable habits. Or again, the CPT may be active in educating rubber tappers in the Amazon so that they do not destroy the trees which produce the rubber. Similarly, the wellknown secular mass social movement in Brazil – The MST

– (*Movimento Sem Terra*, or the Movement of the Landless), which is supported by the CPT as well as many other organizations, some of which are also related to the Roman Catholic Church, deals with environmental issues which emerge as part of its efforts to secure, through a wide variety of methods, land for the landless.

Several theologians well known specifically as liberation theologians, who have for many years related Catholic theology to the political and economic justice concerns of the poor in Brazil, began in the 1990s to turn their attention to environmental issues and to theologies of creation. Two such Brazilian liberation theologians, Leonardo Boff and Ivonne Gebara, are now doing very creative theological work which addresses directly the environment. They do not let go, however, of the classical themes of liberation to which each has contributed so much. Each of these authors also continues to enrich his or her theological thought about the natural world, and the human place within it, with significant methodological innovations.

Of course while the dominant themes of the Brazilian context – both the social and the environmental – shape to a considerable extent the theological reflection on the environment, the larger context also shapes this reflection. Thus the importance of human care for the natural world as care for God's creation, often expressed by the Pope, and the environmental interests of other parts of the Catholic Church from contexts beyond Brazil may play a role in shaping Brazilian Catholic environmental thought. A similar role is played by Brazilian participation in the larger arena of international Christian theological conversations, as well as interaction with secular thought and participation in secular social movements.

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See also: Amazonia; Ananda Marga's Tantric NeoHumanism; Boff, Leonardo; Christianity (6a) – Roman Catholicism; Christianity(7c) – Liberation Theology; Gebara, Ivone; Rainforests (Central and South America); Rubber Tappers.

Breathwork

The term “breathwork” refers to a broad array of practices and exercises that work specifically with the process of respiration. Practical techniques to intensify, control, or withhold the breath have been utilized for centuries in many cultures to awaken deeper levels of consciousness and spiritual awareness. Although breathwork has traditionally been practiced in a spiritual, religious, or therapeutic context, it has a strong capacity to awaken insights and awareness about nature, the Earth, and the mysteries of life itself. Hence, applications of breathwork are rapidly growing in ecological contexts.

Breathwork has a vast history in religious practice. Nearly every spiritual and religious tradition around the globe has utilized breathing exercises in one form or another. Examples of traditions that emphasize breathing practices include Kundalini Yoga and Siddha Yoga (*bastrika*), Raja Yoga and Kriya Yoga (*pranayama*), Tibetan Vajrayana Buddhism, Sufism, Burmese Buddhism (*tummo*), and Daoism. More subtle forms of breathing disciplines are also found in Theravadan Buddhism (*vipassana*), Zen, and certain Daoist and Christian practices. In all these cases, skillful breathing exercises serve to awaken interior levels of conscious awareness in the practitioner, and some practices activate powerful healing energies in the psyche.

In contemporary Western culture, Wilhelm Reich was perhaps the first to recognize the power of breathwork practices, and his clinical work revealed that psychological defenses and physiological tensions are often closely associated with restricted breathing. Since Reich’s pioneering work, breathwork has emerged in a variety of contemporary forms. Numerous professional associations have been formed to promote and facilitate various forms of breathwork, including the Association for Holotropic Breathwork and the International Breathwork Foundation. Over the past two decades, breathwork has experienced growing application in ecological circles. Australian rainforest activist John Seed began utilizing breathwork in his retreat programs for activists in the early 1990s. The Satyana Institute in Colorado has introduced breathwork to environmental activists in many regions throughout the United States, holding annual breathwork programs for environmental leaders in Colorado and Idaho. As one environmental leader Matt Baker characterized his breathwork experience, “it allowed me to let go of preconceptions, to root myself, and to experience deeply who I am” (Baker 2001: 3). William Blake once observed that “The tree, which moves some to tears of joy, is in the eyes of others only a green thing which stands in the way” (1906: 259). The latter perspective is epitomized in a timber executive’s remark that trees are nothing but stumps with stacks of money on top. Breathwork and similar transpersonal or shamanistic practices have an uncanny power to transform such mechanistic perceptions of nature, and

awaken in the breather a lived experience of the sacred mystery that inheres in every life form. In breathwork, trees are frequently experienced as Blake perceived them: a living embodiment of the unperturbed, centered, timeless consciousness of life itself, far beyond the turmoil of the world.

Readers unfamiliar with breathwork may understandably find it difficult to imagine that merely working with something as seemingly simple and ordinary as the breath could have much effect. Yet breathing practices are powerful methods for awakening deeper dimensions of consciousness and awareness, which is why they have been employed extensively in spiritual traditions. In the words of psychiatrist Stanislav Grof, “Unless one has witnessed or experienced this process personally, it is difficult to believe on theoretical grounds alone the power and efficacy of this technique” (Grof 1988: 171).

Breath is intricately fundamental to life, and thus to work with breath is to work with the intimate spirit and mystery of life itself. In many languages this is reflected etymologically, where the word for “breath” and “spirit” are the same, or have the identical root. *Prana* in Sanskrit means both spirit and the energy of breath. *Pneuma* in ancient Greek has the same double meaning, as does *ruach* in Hebrew. The Latin *spiritus* also meant both breath and spirit, and has come down to us in English as the root of spirit and respiration.

Western Breathwork: Holotropic Breathwork

Perhaps the most clinically developed and tested mode of breathwork in the West today is known as Holotropic Breathwork, developed by psychiatrist Stanislav Grof and his wife Christina. The Grofs and their colleagues experimented for several years at Esalen Institute in California with many different kinds of breathing practices – drawn from ancient spiritual traditions as well as contemporary psychology. From this foundation, the Grofs developed the Holotropic methodology, and they have trained hundreds of practitioners around the world. The term “holotropic” means moving toward wholeness or totality of experience (derived from the Greek *holos*, “whole,” and *trepein*, “to move toward”).

The Holotropic technique combines sustained rhythmic breathing with evocative music and focused bodywork. The practice typically activates an “inner journey” in the breather, a form of introspective exploration in which breathers become aware of deeper dimensions of their own consciousness, often evoking experiences of tremendous insight, healing, or psychological or spiritual significance. As usually practiced, Holotropic breathwork is generally done in pairs in a group context, supported by carefully selected music. Each “breather” has a designated “sitter” who gives undivided attention to the breather, and provides logistical or emotional support as needed. The sitter’s role is crucial, and often proves to be a powerful and moving experience in its own right. Trained facilitators oversee the process, and provide focused body work and

other individual interventions when necessary. Breathers lie on mats with their eyes closed and breathe intensively, and the sessions generally last between two and three hours.

Outwardly, the process of breathwork may at first seem to be a deliberate activation of the respiratory syndrome known as “hyperventilation.” Yet among the Grofs’ key findings – after conducting intensive breathwork sessions with more than 30,000 people – is that this traditional clinical understanding of rapid breathing is fundamentally mistaken. The Grofs conclude, faster breathing extended for a long period of time changes the chemistry of the organism in such a way that blocked physical and emotional energies

. . . are released and become available for peripheral discharge and processing . . . It is thus a healing process that should be encouraged and supported, and not a pathological process that needs to be suppressed, as it is commonly practiced in mainstream medicine (Grof 2000: 192).

Two principles are of central importance in Holotropic Breathwork. First, there is no “correct” or prescribed experience that breathers are supposed to undergo. The innate wisdom of each individual is recognized as the authority or guide for the breathwork session, so that each participant’s inner process is honored and supported in its natural unfolding as non-directively as possible. The second principle is that emotional and physical expression is encouraged during the breathwork session, including the release of painful or negative emotions that normally might be repressed or avoided. A sense of spontaneous psychological and/or physical healing often occurs naturally as a consequence of full experience of such emotions or unconscious material that had been previously blocked. After breath sessions, people often report a sense of expanded awareness, fresh insights, an open heart, and renewed creative energy.

Breathwork Experiences

Participants’ experiences in breathwork are often quite vivid and psychologically impacting, spanning a broad spectrum of personal, psychological, archetypal, spiritual, and mystical dimensions. These experiences may include unresolved personal issues, past traumatic physical or emotional experiences, birth memories and experiences, death and rebirth sequences, awakening of compassion or ecological consciousness through identification with other beings or life forms, and a wide variety of transpersonal and mystical experiences that touch mythological, archetypal, and universal dimensions.

Grof has mapped out a general classification of these diverse experiences into what he calls a “new cartography of the human psyche” (Grof 1988: 1). Breathwork experiences are grouped into three broad domains of qualitative character: biographical, perinatal, and transpersonal realms. The biographical realm refers to the breather’s personal life history, the perinatal realm refers to experiences relating to birth and

death, and the transpersonal realm relates to experiences that transcend ordinary space, time, and personal identification, including mythological and spiritual experiences. Of particular interest is a whole category of experiences relating to ecological consciousness and the natural world. Experiential identification with animals is not uncommon and can be extremely authentic, including direct insights into physiological sensations, instinctual habits and drives, and detailed perception of the natural environment from within the animal's perceptual framework. Some of these insights have been later verified in the research literature by people who had no prior knowledge of them. Identification with plants and trees are also common, as well as rivers, mountains, oceans, and the Earth itself.

The rich breadth and depth of breathwork experiences is analogous to what emerges in deep meditation, dreamwork, and contemplative spiritual disciplines, all of which entail non-ordinary states of consciousness. Such experiences can have a profound potential healing or transformative effect on consciousness. Grof emphasizes that modern Western society is the only culture in the world that has held the view that people can transform their limited consciousness and psychological or spiritual perspectives by simply thinking about or analyzing them. All other cultures – both ancient and contemporary – recognize that some form of non-ordinary state of consciousness is essential to catalyze the development of expanded awareness and authentic spiritual insight.

When done in groups, breathwork serves as a powerful catalyst for the dynamics of group process, and often opens the group to deeper shared perceptions of life and nature. This happens in several ways. First, breathwork facilitates deep inner work within each individual, often characterized by new insights or healing experiences. Second, the process naturally cultivates a unique form of bonding and intimacy between the breather and sitter, which often becomes a powerful dimension of the overall experience. Third, the breathwork process creates a subtle field of collective presence and “healing energy” in the group – often quite palpable – that enables all participants in the group to bear compassionate witness to one another and to the larger context of which they are a part. This intensified bonding experience often extends beyond the immediate human community to include larger circles of life, including ancestors, other life forms and ecosystems, and a palpable sense of interconnection with the Earth and the cosmos.

Breathwork and Nature: Some Examples

Three examples are given below to illustrate how breathwork can awaken ecological insights and profound experiences of the natural world.

1) A scientist had been intensively researching the habitats of elk for an ecological protection campaign, and attended a retreat where he experienced breathwork for the first time. During his breathing session, he suddenly experienced himself transformed

into an elk. He vividly felt himself as a large elk, galloping across a high mountain meadow amidst a herd of fellow elk. This experience was so uncanny and viscerally compelling, he reported, that in some real sense he had somehow actually become an elk during that time, and he described feeling “elkness” as his own very being. In this non-ordinary state of transpersonal identification, he had a flood of insights into what elk actually experience living in the wild. Similar experiences of identification with animals and plants and even the entire Earth are widely documented in breathwork literature.

2) A woman experienced herself in breathwork as the Great Mother Goddess, Mother Earth, and then from this shifted into the following experience of planetary consciousness:

The experience of being Mother Earth then changed into actually becoming the planet Earth. There was no question that I – the Earth – was a living organism, an intelligent being trying to understand myself, struggling to evolve to a higher level of awareness, and attempting to communicate with other cosmic beings.

The metals and minerals constituting the planet were my bones, my skeleton. The biosphere – the plant life, animals, and humans – were my flesh. I experienced within myself the circulation of water from the oceans to the clouds and from there into little creeks and large rivers and back into the sea. The water system was my blood and the meteorological changes – the evaporation, air currents, the rainfall, and the snow – ensured its circulation, transport of nourishment, and cleansing. The communication between plants, animals, and humans, including modern technology – the press, telephone, radio, television, and the computer network – were my nervous system, my brain.

I felt in my body the injury of the industrial insults of strip mining, urbanization, toxic and radioactive waste, and pollution of air and water. The strangest part of the session was that I was aware of rituals among various aboriginal peoples and experienced them as very healing and absolutely vital for myself. It seems somewhat weird and bizarre to me now, when I have returned to my everyday rational thinking, but during my experience it was extremely convincing that doing rituals is important for the Earth (in Grof 1988: 66–7).

3) The final example illustrates how breathing practices have the potential to open the heart, and release the practitioner from ordinary consciousness into the vast expanse of mystical or spiritual rapture:

It felt like I was on a ride as I twisted and turned, always pushing forward. I heard the music but did not feel connected to the group or the room. Then it began to feel like birth. I pushed and pushed – through this small narrow tunnel, with much effort. After what seemed like a long time I finally pushed through this place. And then I just exploded out – into the most love I have ever felt. I cried and cried in love and profound gratitude. It felt very sacred. Here I relaxed into expansiveness and love. There was no sense of body, no me. Only love. (This account of the breathwork experience, as is the first one, is drawn from the author’s client files.)

Breathwork provides a profound vehicle for in-depth exploration of the spectrum of human and ecological consciousness. Breathing practices span a vast array of specific techniques that have not been touched upon here. The literature on breathwork is extensive and profound, yet no words can substitute for actual experience, and readers who wish to experience breathwork are advised to seek instruction and guidance from competent practitioners. The sages who developed breathwork maintain that the deepest secrets of breathing practice can never be conveyed in words or concepts. As the Indian mystical poet Kabir muses:

What is God?

He is the breath inside the breath.

Will Keepin

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See also: Art of Living Foundation; Blake, William; Council of All Beings; Esalen Institute; Gaia; Harner, Michael – and the Foundation for Shamanic Studies; New Age; Radical Environmentalism; Re-Earthing; Seed, John; Shamanism – Neo; Transpersonal Psychology; Yoga and Ecology.

Breeding and Contraception

The natural environment has always set the outer limits for human fertility. Archeologists and anthropologists who examine Cro-Magnon, Neanderthal and early Neolithic artifacts suggest that concern for fertility, both in animals and plants as well as in humans themselves, was central to early human religions. Following the agricultural revolution, as human settlements became larger and more complex, religions also became more complex, with rituals and deities connected with a broader range of human productive activities. Specific deities were worshipped as guardians of human fertility, others as mistress or master of animals, some as the embodiment of natural forces such as storms, rivers and springs, and yet others as goddesses and gods of grain and other crops. Virtually all religions until relatively recently in human history have tended to pronatalism as a result of human insecurity during millennia of fairly substantial fluctuations in human population levels. Until the modern period, human population expanded and then contracted in response to famines, epidemics and wars, increasing only incrementally over long periods of time. While some religious cults of the late Neolithic prescribed castration for the priests of some individual deities, pronatalism was the standard for the masses, though of course specific groups and families periodically limited fertility to the level of resources available.

Evidence for deliberate human control of fertility begins in societies with written records. The most common ancient practice of fertility control around the world was certainly infanticide. Many local religious traditions accepted infanticide, though under circumstances that varied from group to group. Among Vikings, for example, newborns were formally presented to fathers that they might decide whether the child would live or die; weak or defective children were frequently exposed, and the necessity for their deaths was legitimated in religious myths. In some societies such as ancient Arabia, female infanticide was common, both as a way of limiting the population of some nomadic bands, and to spare families the expense of raising daughters. The story of Onan in the Hebrew Torah demonstrates that primitive contraceptive practices such as *coitus interruptus* were used in the ancient world. Some parts of the ancient Gnostic movement espoused celibacy in the belief that incarnation, and materiality itself, corrupted the soul and prevented it from unity with divine energy. Buddhism and, later, Christianity introduced the idea that monastic celibacy, in order to devote one's self totally to the pursuit of salvation, was the most perfect vocation. Neither religion expected all to take up this superior path; for both religions, those who chose the secular path linked to materiality had chosen limited (and in Buddhism, illusory)

goods over ultimate good; in both traditions, reproduction and supporting monks/nuns were among the highest goods in the householder path.

Of all world religions, Christianity has been most involved in and divided over how excess fertility should be treated, in part because the Christian West faced the demographic transition around industrialization first. By the beginning of the first millennium, the Romans, with the subsequent approval of Christianity, had largely replaced infanticide with child abandonment as more civilized and moral than infanticide. Both infanticide and abandonment had clear practical advantages. They did not endanger the health of mothers as did all the known forms of abortion (e.g., ingestion of poisons, insertion of sharp objects into the uterus, and trauma to the woman), they allowed for sex selection as abortion did not, and they were much more effective than either *coitus interruptus* or the contraception potions, sponges and condoms of the day. Parents abandoned children at higher rates in times of famine, war or other disasters, but the poor regularly abandoned unwanted children, as did rich families who did not want a surplus of heirs to divide the family resources. For the first millennium and a half the rate of abandonment in Christian lands was estimated as between 10 and 20 percent of live births.

Christianity never condemned the practice of abandonment, but rather embraced it as the moral way of dealing with excess fertility within the domestic household. Christian bishops and theologians consistently taught that the celibate vocation of priest, monk or nun was the superior path, but took for granted that most lacked the moral discipline for forgoing sex when they desired no more children, much less for total celibacy. Clergy sometimes criticized families with means for their unwillingness to share those means with latter-born children, but were generally understanding of the desire to safeguard family legacies. In contrast to Church acceptance of abandonment, abortion and contraception were consistently treated as sinful, as murder, and as the fruit of earlier sin. They were understood as practices of prostitutes, adulterers and fornicators because abortion, necessary to back up undependable methods of contraception, was so dangerous that only those most desperate to avoid public notice of pregnancy would resort to it when abandonment offered an easy escape from parenthood.

By the eighth century, Christianity offered an alternative form of abandonment by taking into its monasteries and convents children (oblates) donated by their parents to the Church. Oblation became formalized by the Middle Ages. Child oblates generally took vows as monks and nuns when they reached adulthood. Between the ninth and the sixteenth centuries, around 10–15 percent of the population of Europe were celibate monks, nuns and priests, a significant percentage of whom had been oblates.

Oblation began disappearing between the fifteenth and sixteenth centuries, but even at its zenith it never replaced abandonment. By the late Middle Ages, beginning in Italy, European municipalities (often assisted by religious institutions) operated foundling hospitals that took in abandoned children. Records of these foundling hospitals indicate that few foundlings lived to adulthood. In many, fewer than a quarter survived their

first year. A prominent feature of foundling hospitals was the wheel, which offered the abandoned child protection from the elements and the abandoning parent anonymity. The parent placed the child in the bed between two spokes of the horizontal wheel outside the building, and rotated the wheel until the child was brought to the attention of the staff inside.

By 1700, urbanization (often forced by the displacement of rural workers), the rise of industrialization and its terrible working conditions, and the beginnings of the demographic transition (due to improved nutrition and epidemic control) together all served to increase poverty and family size, at the same time that the Church ended oblation. Consequently, by the early nineteenth centuries many cities of Europe saw 30 to 50 percent of their live births abandoned to foundling hospitals, where the majority died.

The modern movement to control fertility through contraception in Christian Europe began in Catholic France. Birth rates began falling in the late eighteenth century among French middle and upper classes. The most popular contraceptive method was *coitus interruptus*, though a series of refinements in condom design increased condom appeal and effectiveness. By the twentieth century, the contraceptive movement had spread to the French working class and to middle/upper classes throughout Europe. In response, both Protestant and Catholic authorities intensified their invective against both contraception and abortion. For the first time, they clearly distinguished between abortion and contraception, instead of treating both as sins against life. Contraception became a sin against nature, and abortion a (mortal) sin against life. Clerics condemned both acts as selfish crimes against God. Beginning in the 1930s, one Christian church after another approved contraception for an ever-expanding list of circumstances, both personal and social; by 1990 many churches had approved recourse to abortion in hardship cases. By 2000, even the Catholic Church had significantly reduced pronatalist rhetoric, urging smaller families in recognition of environmental crises and the need to share resources, though it retained its ban on both abortion and artificial means of contraception, which greatly complicates implementation of fertility control.

There are no explicit teachings on contraception or abortion until late in the Buddhist tradition. As elsewhere infanticide and abandonment were widely practiced throughout Buddhist Asia but not explicitly religiously approved. Buddhist teaching on the interrelatedness of all aspects of reality and the need for compassion for all living things supported condemning abortion as denying fetuses the opportunity to pursue the path to nirvana, making their souls await another incarnation. Thus many Buddhists have seen abortion as creating bad karma for the aborting woman. Few Buddhist authorities today discourage contraception, though in the past, religious awareness of souls awaiting rebirth was one factor in promoting pronatalist attitudes. At the same time, today as in the past, religion is only one factor in voluntary decisions for contraception, and seldom the determining factor. Despite Buddhist teaching, Buddhist Japan has had for half a century one of the highest abortion rates in the world; some Buddhist shrines even provide rituals which reconcile aborted fetuses with their par-

ents. But widespread recourse to abortion in Japan was initially a response to living conditions following Japan's defeat and occupation in 1945. Lack of natural resources, high population density and economic prosperity today have helped Japan's fertility rate sink to 1.2 children per woman; fertility rates in other Buddhist countries have also decreased rapidly since 1970. The Chinese, whose Buddhism was integrated with Daoism and Confucianism, have strongly supported the very successful One-Child Policy (which brought the total fertility rate to 1.8 children per woman) as not only an expression of civic responsibility, but also, for some, a reflection of Buddhist respect for the interrelatedness of all things.

In Islam, the prophet Mohammed banned the common practice of female infanticide and established a pronatalist policy that supported the expansionist early Muslim state and eventually characterized the Muslim tradition. Most Muslim authorities today forbid abortion, but some only forbid abortion after the fourth month, following Qur'anic treatment of damages for causing miscarriage, in which loss of a fetus is only accounted loss of a person after the fourth month. Islamic authorities today support use of contraception for purposes of family planning, and some in recognition of environmental crisis. There are no religious objections to specific contraceptive methods, but many religious authorities are leery of both Western pressure for population control, which they see as neocolonialist, and possible connections between contraceptive use and both sexual immorality and changes in women's familial role. Dramatic fertility drops in most Muslim nations over the last forty years indicate that historic pronatalism is giving way to new situational pressures.

While Hindu philosophy provides the same basis for prohibiting abortion (delaying the reincarnation of waiting souls) as Buddhism, abortion has not been seriously problematic in Hinduism. High rates of infanticide due to extreme poverty cast abortion in a comparatively benign moral light. Contraception has had a great deal of religious support, especially among the educated, where the status of women is less linked to fertility. As in China, one problem resulting from success in lowering fertility rates under pressure from traditional son preference is widespread use of sex-selective abortion, and the resulting shortage of females in the population, which Hinduism has done little to address. Government support for general access to both contraception and abortion both reflects and influences Hindu religious thought on the matter.

Judaism has traditionally taught that males have a duty to reproduce, but the most common ideal of family size has been one son and one daughter. Contraception is not problematic except for a few politically motivated pronatalist Orthodox since the Holocaust. Abortion is accepted by Reform and Conservative Jews, but not generally by the Orthodox.

In the twentieth century, all religions were challenged to shift from inherited pronatalist traditions to more socially responsible contraceptive traditions in an ecologically-threatened world overpopulated with humans, some of whom overconsume and many of whose welfare requires expanding their level of consumption. That shift, well advanced but not complete, has not been easy.

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See also: Abortion; Fertility and Abortion; Fertility and Secularization; Judaism and the Population Crisis; Population and Consumption – Contemporary Religious Responses; Population, Consumption, and Christian Ethics.

Brigit

Across Ireland, hundreds of springs issue from nearbedrock sources, providing a constant flow of clean water that has, from prehistory to the present, been associated with spiritual and physical healing. Many of these springs are named for Saint Brigit. There is scholarly contention about the historicity (indeed, even the existence) of the saint, said to have been born of a pagan father and a Christian mother at the start of Ireland's Christian era (ca.

450) and to have become abbess of the important clerical center of Kildare after being accidentally ordained to the priesthood by a God-intoxicated St. Mel. Many symbols connected with Saint Brigit – an endlessly abundant cow, self-igniting fires, ogham script – originally were associated with a Celtic goddess of the same name, while the name of her city includes the syllable (-*dara*) for a pagan sacred grove. Yet a number of early texts describe an abbess who brought acclaim to Kildare through her saintliness. The figure of Brigit appears a prime example of what Irish archeologist Proinsias MacCana calls the “extraordinary symbiosis” of paganism and Christianity in Ireland.

Holy wells dedicated to other saints (some unknown except for at the site that bears their name) are similarly believed to have carried pre-Christian nature worship into the common era. Most wells are dedicated to feminine figures, although a few are named for Saint Patrick, famous for bringing the word of Christ to Ireland, whom folklorist Máire MacNeill contended was a substitute for an earlier male divine hero. Whether the well divinities were originally Celtic or derived from the deep pre-Celtic strata of Irish culture is impossible to tell. Evidence suggests holy wells were sites for inauguration by the Celtic *tuath* (a word that means simultaneously a people and its territory); drinking the waters of the holy well symbolically wed the king to the regional goddess. That Celtic water-worship is known from other parts of Europe does not disprove pre-Celtic ritual use of the holy wells, suggested by the connection of some to the shadowy prehistoric hag goddess, the Cailleach.

Folklore surrounding Irish holy wells emphasizes the necessity of keeping the water source clear of refuse. Should anything impure be thrown into the water – legends often name cattle viscera as the offending substance, although filthy laundry was another culprit – the well would disappear. Usually, the well moved over to a competing district, its departure marked by lighted processions of invisible companions. Such folklore has a strong ecological message, for a region's most reliable pure water source was thus appropriately hedged about with prohibitions against pollution. Similarly, anyone who dared to fence off a holy well from public use was subject to punishment by the well

itself, which would thereafter poison any member of the family or herds of the offender who drank its waters.

Wells were honored in various ways, most especially in the “pattern” or yearly ritual visit. Each site required specific actions that might include walking a specified number of circuits, hanging rags called clooties on nearby trees, or placing a pebble at a specified place. These patterns were held on various dates, often corresponding to the old Celtic feasts of winter’s end (Imbolc, 1 February) or harvest (Lughnasa, 1 August). Dawn visits to the wells on these days brought the faithful into contact with numinous power, which could be trapped in the well water gathered at that time. A fish seen within the well or leaping out of it on these ritual days betokened good fortune.

Although during the mid-twentieth century, some holy wells fell into disuse, a contemporary revival has focused attention on their maintenance. Especially significant has been the influence of the Sisters of Saint Brigit (Brigidines) in Kildare. Since returning in the 1990s to the site of their historical formation more than 1500 years earlier, the Sisters have worked to draw the devout back to the ancient holy wells, of which there are more than thirty in the Kildare district. Defining Brigit as a bridge figure – both pagan and Christian, neither Catholic nor Protestant – the Sisters have worked with local ecological and civic organizations to revive old customs like the plaiting of Brigit-crosses from green rushes and the keeping of vigils on Brigit’s feast day at the Kildare wells. Working with local environmental groups, the Brigidine Sisters and their lay associates, the Cháirde Bhríde (“heart of Brigit”), have assisted in the reclamation of several wells covered over by developers. The annual Kildare festival of Lá Féile Bhríde, Brigit’s 1 February feast day, includes ecological awareness lectures and demonstrations as well as rituals and arts events.

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See also: Celtic Christianity; Celtic Spirituality; Faerie Faith in Scotland; Ireland; Scotland.

Britain (400–1100)

The various post-Roman inhabitants of Britain – British, Pictish, Anglo-Saxon, Viking – practiced versions of “nature religion,” in that they held polytheistic beliefs focused on diffused, often undeveloped cult sites in the landscape. These beliefs, unlike similar ones in recent traditional societies, have left only the most tenuous physical traces or written comment, the latter by ecclesiastics concerned not only to blot out remnants of paganism, but even to downplay the assimilation of traditional rituals into popular Christianity. This is not evidence that allows some of the central questions of this encyclopedia to be answered or even asked. Yet a careful piecing-together of the fragments, guided by judicious use of comparative anthropology, takes us some way toward setting the early religions of Britain in a wider context.

The religions of Celtic Britain (ca. 200 B.C.E.–350 C.E.) involved cults of natural, especially watery places, with widespread archeological evidence for sacred springs and wells and for ritual deposits in rivers and pools. During the Roman occupation, many cult sites were of course monumentalized by temples and shrines (and eventually churches), but after 400 these often-massive stone buildings had reverted to a state of dereliction, which made them more akin to natural features. Although it is conventional to envisage only contrast and conflict between the native British populations and the Germanic invaders, Romano-Celtic cults (which may often have survived within the nominally Christian societies of the West) had much in common with those of the Anglo-Saxons who settled eastern and central Britain during the fifth and sixth centuries. Around 550 the British monk Gildas observed contemptuously that Romano-Britons had “heaped divine honours on mountains, hills and rivers,” (Gildas 1978: 17, 90), and so probably did the AngloSaxons. In English place-names, the element *hearg*, “shrine,” usually occurs on hilltops, and the Germanic gods Woden, Thunor and Tiw tend to be associated with earthworks, woods and groves. As elsewhere in north European mythology, ash-trees were often sacred. Some domesticated animals such as horses or goats may have had a totemic function, which may explain the placenames (Swineshead, Gateshead, etc.) suggesting animalheads set up as landmarks. Occasional references in texts to ravens as birds of augury or ill-omen may be reminiscences of their association with Woden. Occasional wells and springs have names suggesting paganism or magic, such as the “augury (*freht*) well” of Fritwell (Oxon.). All this suggests a religion of natural places, and the few plausibly identified cases of humanmade shrines all come from the last decades of Anglo-Saxon paganism.

As sites of “nature religion,” genuinely natural features should probably not be distinguished too sharply from ancient monuments. The people of post-Roman Britain

lived in an environment articulated by varied landmarks, which we can classify either as geological features or as the remains of prehistoric and Roman structures. These distinctions, obvious to us, would have been much less so in early medieval perceptions. A hill or rock might have been set down by a god or giant; a barrow might be the tomb of a primordial hero-ancestor or the lair of a dragon; one Anglo-Saxon poet described the colossal ruins of Roman Bath as “old work of giants.” Any such features could have been the foci of legends, magical beliefs or religious cults that took little or no account of our own boundary between the natural and the archeological. For dwellers in an old landscape, “nature” embraced all its perceived former users – natural or supernatural, human or monstrous.

The first literary sources present a dichotomy between the safe, welcoming core of human habitation and its ominous, untamed peripheries. The latter (as for instance in the Mexican communities studied by anthropologists) seem to have contained a range of access-points to the underworld and to supernatural states of existence. Some were unequivocally negative. The conception of the desolate mere or pool which houses demonic beings, and leads down to the infernal regions, is widespread in later folklore and is classically described in the eighth-century English epic *Beowulf* (lines 1355–72):

They are fatherless creatures, and their whole ancestry is hidden in a past of demons and ghosts. They dwell apart among wolves on the hills, on windswept crags and treacherous keshes, where cold streams pour down the mountain and disappear under mist and moorland.

A few miles from here a frost-stiffened wood waits and keeps watch above a mere; the overhanging bank is a maze of tree-roots mirrored in its surface. At night there, something uncanny happens: the water burns. And the mere-bottom has never been sounded by the sons of men. On its bank, the heather-stepper halts: the hart in flight from pursuing hounds will turn to face them with firm-set horns and die in the wood rather than dive beneath its surface. That is no good place.

Ancient burial-mounds – perhaps lairs of dragons such as that described again in *Beowulf* (lines 2210f) or implied by such place-names as Drakelow – might be no better places. But we should qualify the Christian branding of all autonomous supernatural forces as necessarily evil. It seems very likely that the elves, goblins, and spirits (*ælf*, *shuca*, *puca*) occupying such sites as Ailcy Hill, Shuklow, or Pug Pit were ambiguous powers capable of being propitiated and enlisted as well as angered. Norse mythology offers the positive conception that the dead man or spirit in a burial-mound can give strength, wisdom or understanding to the living. This belief may be reflected in the widespread re-use of ancient burial-mounds as late Anglo-Saxon sites of assembly and judgment, and in reformers’ attacks on magic at unhallowed graves where “the dead man will rise up and speak.”

The clearest sign that the inhabitants of post-Roman Britain saw prehistoric barrows in a positive sense, as sites of supernatural power or ancient authority, is the widespread and deliberate use of them for new, sometimes high-status burials. Among the native British, this seems to have been a continuous practice (known for instance

from several sites in Wales); in the developing society of the immigrant Anglo-Saxons it was only common during the late sixth and seventh centuries, a transitional phase between their adoption of monument-building and their conversion to Christianity. At Yeavinger (Northumberland), a ritual and royal complex of ca. 590–630, a Neolithic stone circle and a Bronze Age barrow were adopted as the west and east foci of the site, and both were used for burials. Some barrows of seventh-century Anglo-Saxon warriors, set on crests overlooking large tracts of territory, recall Irish and Welsh references to a belief that the dead can be guardians or sentinels over the lands of their kin, ready to repel encroachers.

While these practices were not in any direct or conventional sense Christian, it is just as misleading to call them unequivocally pagan. In the British west, they existed in a nominally Christian culture, and the AngloSaxons adopted them precisely when kings and aristocrats were on the threshold of conversion. This was an age of political consolidation, in which great kingdoms took shape and great lineages emerged. Monument-building, whether pagan (as at Yeavinger), territorial (as with the crest-sited barrows), or Christian (as with royal monastic foundations), was the work of new elites aiming at more centralized power and a tighter grip on the landscape and its resources, and to whom the hierarchical structures of the Church must have seemed correspondingly attractive. It was certainly Christian institutions which now began, with their church buildings, their complex monastic sites and their hierarchies of authority, to erode the religion of natural places, but it is arguable that they only did so to the extent that broader social and political changes pushed in that direction.

“Since Anglo-Saxon times the Christian Church in England had stood out against the worship of wells and rivers,” wrote Keith Thomas in his *Man and the Natural World*, “the pagan divinities of grove, stream and mountain had been expelled, leaving behind them a disenchanting world, to be shaped, moulded and dominated” (Thomas 1983: 5). There is some truth in this statement, but it oversimplifies. If in theory Christianity was inimical to “nature-religion” by insisting on a rigid binary contrast between good and evil, it was in practice flexible enough to, for example, attach a biblical rationale to indigenous supernatural forces: *Beowulf*’s identification of monsters with the tribe of Cain, and with the giants mentioned in Genesis 4, is a case in point. And if it claimed a monopoly in mediating divine power through officially designated people and places, it could (as many anthropological studies have again shown) be remarkably assimilative and inclusive of traditional beliefs and rituals.

In the case of Britain, understanding has been clouded by the myth of a “Celtic Christianity,” in tune with the spiritual qualities of the natural world, to be contrasted with a more hierarchical “Catholic Christianity” which was unresponsive or hostile to them. In so far as this is based on more than post-Reformation polemic, it reflects differences between the conventions of Irish/Welsh texts and English ones, and between the later folkloric cultures of the British and the English zones. Whereas the experiences of ascetic saints in the wilderness bulk large in early Irish texts, the earliest English ones are dominated by didactic and prescriptive works keen to suppress all deviance;

whereas Ireland, Wales, and the Western Isles preserved a rich culture of vernacular belief into the era of folklore collectors, only pale reflections survived in England. We can, however, piece together enough fragments to see that these contrasts are to a large extent the effects of convention and survival.

It is certainly true that mastery over the natural world figures largest in the lives of Irish and Welsh saints, who ward off the rain, drive back the sea, command wild animals as tame ones, give sanctuary to hunted beasts, and use the elements to punish their adversaries. But the English material employs similar motifs. The stories of St. Cuthbert's command over birds, fishes and sea-beasts around Lindisfarne doubtless reflect his and his hagiographers' Irish background, but in another sense are simply reflections of the wild geography and fauna amidst which he passed his life. The Kentish princess-saint Domne Eafe wins as much land for her monastery as her pet hind (deer) can run around; mowers who mock the Sussex ascetic Cuthmann are punished by perpetual rain in their meadow, and a woman who curses him by being blown into the air and dashed to Earth. And our few traces of English religious folklore are not so different from the Welsh. As late as the 1680s, for instance, a naturalist could observe casually of a Staffordshire village:

I come at length to the Trees; amongst which some will needs have St. Bertram's Ash, that growes over a spring which bears the name of the same Saint, in the Parish of Ilam, to be of a different undescribed species from all others; and indeed it has a narrower sharper leaf, than ever I saw any; but whether this may not be ascribed to the age and decay of the tree,

I much suspect. However it be, 'tis certain the common people superstitiously believe, that 'tis very dangerous to break a bough from it; so great a care has St. Bertram of his Ash to this very day (Plot 1686: 207).

Different parts of Britain experienced basically the same course of development, though at different times and speeds: the partial assimilation of traditional dispersed sites to vernacular Christian ritual, followed eventually by their eclipse in the face of an official religion focused more and more on church buildings. The first islands of bounded and controlled sacred space were therefore the earliest church sites, though their character varied between regions. In the west, little communities of British clergy or monks (characteristically with place-names in Llan) became thick on the ground during the sixth and seventh centuries, but would coexist for more than a millennium with a landscape of natural cult sites. In the Anglo-Saxon kingdoms, the process was slightly later and more centralized, producing during ca. 670–730 a more spaced-out network of relatively wealthy monasteries founded by kings and nobles. Monastic rhetoric set up a contrast between the pollution of the untamed wilderness and the holy civilization of monasteries founded within it. Bede describes how, in the 650s, the missionary Cedd: chose himself a site for a monastery (Lastingham in the North York Moors) amid some steep and remote hills, which seemed better fitted for the haunts of robbers and the dens of wild beasts than for human habitation, so that, as Isaiah says, "In the habitations where once dragons lay shall be grass with reeds and rushes,"

that is, the fruit of good works shall spring up where once beasts dwelt or where men lived after the manner of beasts (in Colgrave and Minors 1969: 286–7).

In a similar vein, the founder of an early eighth-century Northumbrian minister was urged by a learned ascetic to site it on a small hill:

This hill thorn bushes cover on top with thick leaf. Cut these away with scythes, O brother, and remove them with all their seed from the expanse of the smooth top just mentioned, and then found in that place a fair church for God . . . An evil band [i.e., of demons?], an object of wrath, rushing this way and that in their fleetness, often approached and hid in the thick bushes . . . But thanks be to the Lord, that in our time these places have through him deserved such great joys, and to exchange new inhabitants for their former ones (Æthelwulf 1967: 12–13).

But if the holy monastic core had to be purged of unregenerate nature and lurking demonic forces, the

British and English churches seem in practice to have been remarkably accommodating of the traditional ritual periphery. The complaints of eighth to eleventh-century reformers should be read less in terms of Christian versus pagan than of central versus local, or metropolitan versus vernacular: reading between the lines, it is clear that many local priests collaborated with their flocks to build a rich and syncretic Christian popular culture. Thus a complaint in 747 that the Rogationtide processions to bless the young crops were being celebrated “mixed with vanities

. . . or levities or vulgarities, that is in games and horseraces and huge feasts,” (Haddan and Stubbs 1871: 368), shows that this imported ritual had already fused into indigenous rites of spring. In the 790s, objections to “false prophets” inducing people to “leave the churches and seek hilly places where they worship not with prayers but with drinking-bouts” (Dummler 1895: 448–9) suggest a popular Christianity operating in the open landscape. The repertoire of amulets found in seventh-century graves ranges from the presumably magical (such as wolf-teeth and cowrie-shells) to crosses and cross-marked metal capsules. As late as the tenth century, the recipes known as “elfcharms” and “leechdoms” show an extraordinary fusion of traditional magic and herbal remedies with mainstream liturgy, sanctioned by at least some ecclesiastics.

In the wider landscape, “natural” cult places could be made acceptable by a Christian rebranding. Crosses standing at focal points such as hilltops, crossroads or near houses were the obvious and sometimes direct successors of tutelary trees or standing stones: the name of Rudstone in Yorkshire, where a huge prehistoric menhir [standing stone] still stands in the churchyard, means “cross-stone.” Innumerable holy wells (in English as well as British areas) were associated with St. Mary, St. Helen, or local saints. Hagiography was a vehicle for myths attaching saints to landscape features which could “still be seen to this day”: wells which sprang up where saints prayed or wept; ash-trees which sprouted where they planted their staves; the stone where St. Cuthmann sat to tend sheep; the hair which grew from the turf where St. Wigstan was killed. Many such features, however, remained unincorporated, surviving for centuries in a folkloric limbo that was neither Christian nor pagan. The “ash-tree which the foolish call sacred” stood

on the boundary of Taunton (Somerset) as late as ca. 1000; many holy wells seem to have been “holy” just because they were used for cures or auguries rather than through any overt Christian connection.

What made the first real inroads into British “naturereligion” was not Christianity as such, but the Christian dimension to changes which transformed the face of Britain, as of much of Europe, during ca. 900–1100: a strengthening of local lordship, a coalescence of agrarian communities and settlements, and a demarcation of landrights which left less and less space for cult detached from social and legal obligations. One manifestation – notably in the British west – is the “development” of open-air foci such as wells and cemeteries by building chapels over them; another – notably in the English south and east – is the building of new churches by manorial lords next to their own manor-houses, with graveyards where all tenants were obliged to be buried. Just as Christian burial became restricted to authorized sites, so ancient earthworks on the margins were now further demonized by being used for the unhallowed burials of executed criminals and other outcasts. The late Anglo-Saxon poem *The Wife’s Lament* seems to describe the plight of a damned spirit pent in a desolate barrow: “among a thicket of trees under an oak-tree is this earthen dugout.”

Thus – though the process was a very gradual one, uncompleted even at the Reformation – the religion of untamed nature gradually gave way to a religion of buildings that were always someone’s property. It is emblematic that when, around 1080, Bishop Wulfstan of Worcester went to dedicate a new church, he ordered its owner to fell a luxuriant but overshadowing nut-tree, the only proper course where “nature had not provided enough room” (Winterbottom and Thomson 2002: 94). The future lay with those who, like the homilist Ælfric around 1000, were outraged that people should bring their offerings to an earth-fast stone, and also to trees and to well-springs, just as witches do, and will not understand how foolishly they act, or how the dead stone or the dumb tree can help them, or give them health, when they themselves never stir from the place (Skeat 1881–1885: 372–4).

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See also: Celtic Spirituality; Christianity (5) – Medieval Period; Faerie Faith in Scotland; Paganism; Roman Britain; Scotland; Stonehenge.

Brook Farm

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John Blair

New England Transcendentalism was an intellectual movement that had a strong social dimension, and the

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Transcendentalists’ love of nature was given concrete shape by several experiments in rural communal and reclusive living. The largest, longest-lived, and best known of the Transcendentalist-oriented intentional communities was Brook Farm, founded by George Ripley at West Roxbury, Massachusetts, then several miles outside of Boston, in 1841. Ripley’s chief goal was to combine intellectual and manual labor in a cooperative setting involving simple and fulfilling living. The experiment attracted some of the greatest creative minds of the day, including Nathaniel Hawthorne, whose *Blithedale Romance* is based on his communal experiences there, and Isaac Hecker, who later founded the Paulist Fathers as a Catholic religious community. Other notable Transcendentalists, including Ralph Waldo Emerson, Margaret Fuller, and Henry David Thoreau, were visitors.

Rural romanticism was strong at Brook Farm. The general expectation was that residents would divide their time between physical and intellectual tasks, as would the young students at the school that the residents operated.

Although farming and animal husbandry were practiced on a daily basis, the intellectual and cultural interests of the members dominated communal life.

In 1845, after a reorganization, residents built a large “phalanstery” as a single dwelling for all members, but it was destroyed by fire just as it was being finished in 1846 and the following year the community was disbanded.

Timothy Miller

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See also: Back to the Land Movements; Bioregionalism; Burroughs, John; Transcendentalism.

Brower, David (1912–2000)

In 1966 the American magazine *Life* described David Brower, then the executive director of the Sierra Club, as the “country’s No.1 working conservationist” (27 May 1966). When Brower died at age 88, he was widely regarded as the most influential environmental leader of the twentieth century.

Born in Berkeley, California, Brower became a Sierra Club member in 1933 and witnessed a growing and significant alteration of the Western landscape. His skill at rock climbing – he made seventy first ascents of peaks in the Western United States – took him to remote and beautiful areas that permanently impacted his crusade for environmental protection. Brower remarked in *Let the Mountains Talk, Let the Rivers Run* (2000) that “the mountains first talked to me through poets,” but later, he would hear the talk directly. Not too sonorously from the thunder, cascading water, or falling stone, but musically enough from the jay’s complaint, the kookaburra’s laugh, the coyote’s howl, pines answering the wind, fallen leaves answering our shuffling feet, and the lilting notes of a stream, hermit thrush, or canyon wren completing the symphony (2000: 139).

Brower, like John Muir before him, believed the answers to life’s questions lay in wilderness, even echoing Muir’s famous line that everything in the universe is “hitched” together: “Darwin discovered that all life on the planet, from people to plankton, was part of a complex blanket spread over the globe. There can be no pulling of one thread in that blanket, without nubbing the weave, or worse, unraveling the fabric” (2000: 53).

Brower was elected to the Sierra Club board in 1941 and became the Club’s first executive director in 1952. In a decade and a half, he built its membership from 7000 to 70,000 and propelled the Club into greater political activism, especially in the fights against big dams proposed for Dinosaur National Monument and the Grand Canyon. In his role as editor and publisher of the Sierra Club’s exhibit-format books, he also put the breathtaking landscapes of America on countless household coffee tables, allowing people to own in book form an iconography of wild places in need of protection.

For any given battle, Brower had a knack for choosing the appropriate phrase or sentence to characterize what was really at stake and to effectively undermine an opponent’s best arguments. Sometimes he did so by employing sacred imagery in order to awaken public consciousness. Such was the case in one particularly memorable advertisement that was published in the *Scientific American*. The ad likened the Bureau of Reclamation’s desire to build two massive dams in the Grand Canyon to a plan to flood the Sistine Chapel in order to get tourists closer to the ceiling.

After being fired as executive director of the Sierra Club following disputes with the board of directors, Brower founded Friends of the Earth in 1969; two years later, he initiated international partnerships in environmental activism by establishing Friends of the Earth groups abroad. Never slowed by controversy, Brower also founded Earth Island Institute in 1982 after being forced to resign from Friends of the Earth due to internal financial difficulties.

With unparalleled dynamism and a flare for the oneliner, Brower traveled the world, stumping for the environment with an eye always directed toward the future. He playfully referred to one speech that he frequently gave as The Sermon. In it, he articulated an evolutionary narrative by utilizing the creation story common to the Abrahamic traditions. Dividing the six days of Genesis into 660-million-year blocks of time, Brower would reach the climax of his narrative's "sixth day" with a challenge to the hubris of human beings:

At three minutes before midnight, man appeared. At one-fourth of a second before midnight, Christ arrived. At one-fortieth of a second before midnight, the Industrial Revolution began. We are surrounded with people who think that what we have been doing for that one-fortieth of a second can go on indefinitely. They are considered normal, but they are stark, raving mad (McPhee 1971: 79–80).

John McPhee, in *Encounters with the Archdruid*, compared Brower to an environmental Billy Graham, concluding that "Brower's crusade, like Graham's, began many years ago, and Brower's may have been more effective . . . [Brower] thinks that conservation should be 'an ethic and conscience in everything we do, whatever our field of endeavor' – in a word, a religion" (1971: 83).

Depending upon his audience, Brower sometimes employed other metaphors drawing on Judaism and Christianity. In a video statement to the San Francisco Conference on Christianity and Ecology, Brower admonished his listeners to lead the way in the common task of bringing "peace on earth" through "peace with the earth." He continued:

One of my standard comments that I like to make when I talk about religion is that I would like to see Moses go back up the mountain and bring down the other tablet. The Commandments he brought down deal with how we should treat each other. They say nothing about how we should treat the earth. The other tablet should be there, and if it is not, let us try in the Church to imagine what it should say (Brower 1990, www.creationethics.org).

Brower inspired thousands of people worldwide and showed how well-articulated, well-publicized, hardhitting campaigns to protect nature could triumph over well-financed development schemes. Two of his most significant achievements were to expand the environmental movement globally and to challenge some modern technologies. His criticisms, for example, contributed to the

U.S. government's refusal to finance a supersonic commercial aircraft.

Brower's uncompromising outlook was criticized by some. "I have been called a druid enough, even an archdruid," Brower once said (2000: 22), referring to McPhee's book

in which developer Charles Fraser used the term in a pejorative manner to dismiss certain conservationists that he believed sacrificed people's interests for the sake of trees (1971: 95). While Brower never appeared upset by the moniker, he countered the blanket characterization, saying in an oft-quoted quip, "I do not blindly oppose progress. I oppose blind progress" (2000: 78).

As great a visionary and environmental advocate as Brower was, his major weakness was lack of management skills and financial discipline. Managerial and interpersonal dynamics played a role in his leaving both the Sierra Club and Friends of the Earth.

One of Brower's greatest regrets was his failure to stop construction of the enormous Glen Canyon Dam on the Colorado River, a project that inundated under Lake

Powell what he later considered to be some of the most spectacular scenery in North America. The hard-earned lesson he took from the loss stayed with him the rest of his life: "Never give up what you haven't seen (unless they be chlorofluorocarbons). And don't expect politicians, even good ones, to do the job for you. Politicians are like weather vanes. Our job is to make the wind blow" (2000: 27). In 1996, Brower helped build a coalition effort, institutionalized in the Glen Canyon Institute, to drain Lake Powell and allow the great river to flow freely once again.

Brower left a strong message for the twenty-first century as he likened the Earth to a patient on an emergency room table needing CPR – conservation, preservation, and restoration. At Brower's memorial service, one of his four children, Kenneth, fondly recalled that growing up in the Brower family meant that their religion was wilderness. In the last years of his life, Brower articulated this explicitly:

To me, God and Nature are synonymous, and neither could wait the billions of years before man arrived to decide what to look like . . . I like mystery, the unending search for truth, the truth of beauty. I would have no use for pearly gates and streets of gold if canyon wrens were not admitted (2000: 176).

Gavin Van Horn Brent Blackwelder

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See also: Abbey, Edward; Black Mesa; Deep Ecology; Epic of Evolution; Muir, John; Radical Environmentalism; Sierra Club; Wilderness Religion; Wilderness Society.

Brown, Vinson (1912–1991)

Vinson Brown of California was a naturalist and anthropologist, a publisher and author of 37 books, with a lifelong interest in and appreciation for Native American cultures and beliefs. In addition to writing a number of nature guides, science handbooks, and works on science and religion, he collected and published legends, dreams and stories of the spiritual quests, values, prophesies and visions of different Native American tribes. As a member of the Bahá'í Faith, he was particularly attracted to visions of a future world of peace and unity, and he worked to revive and encourage Native American beliefs and spirituality. He inherited from his father the pipe bag that was supposed to have belonged to the famous Lakota (Sioux) chief, warrior and holy man Crazy Horse (1842–1877), and was its keeper for forty years. With another Bahá'í of Inuit background, William Willoya, he wrote *Warriors of the Rainbow: Strange and Prophetic Dreams of the Indian Peoples* in 1962, including his own childhood dream of proud Indian warriors marching into the sky like a multicolored rainbow, symbolizing the revival of Native American cultures. This book was taken by the first Greenpeace activists on the old fishing boat they chartered to protest nuclear testing in the Aleutians, and it so marked them that it helped to form the Greenpeace philosophy and vision, symbolized by the naming of one of their ships the *Rainbow Warrior*.

Arthur Dahl

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See also: Bahá'í Faith; Greenpeace.

Buber, Martin (1878–1965)

Martin Buber was one of the twentieth century's leading Jewish philosophers and theologians. He is known primarily for his seminal existential work *I and Thou* (1923), where he defines the world based on two primary words, or relations, "I–Thou" and "I–It." The world of the I–It is the everyday world of unequal human interaction; the world of the I–Thou is the encountered world of relation between persons characterized by mutuality and openness. This later relation is possible not only between humans but also with God and other natural entities.

Though sometimes opaque, the possibility of an I–Thou relationship with nature was fundamental to Buber's ontology of human existence. From the perspective of I–It, a natural object, such as a tree, is a mere object of inquiry. But, "It can, however, also come about, if I have both will and grace, that in considering the tree I become bound up in relation to it. The tree is no longer It" (Buber 1958: 7). Buber claimed however that the possibility of an I–Thou relationship with nature did not necessarily imply some form of animism.

Buber's work has been most influential on those environmental thinkers concerned with a redescription of human ontology (or being) as part of rather than apart from nature as key to forming a new environmental consciousness. Arne Naess has drawn inspiration from Buber's work claiming that the deep ecological approach ". . . also entails a transition from I–It attitudes to I–Thou attitudes

. . ." (Naess 1989: 174).

Andrew Light

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See also: Deep Ecology; Judaism; Naess, Arne.

Buddha

The Buddha lived more than two thousand years ago in northeastern India. The religion he established spread throughout all parts of Asia and is now widely practiced in Europe and North America as well. The biographies of the Buddha include the *Jataka Tales* and the *Buddha Carita*. The reception and transmission of these stories shaped the later Buddhist tradition. By examining key elements of the life-story narratives and select examples of tales about his past-lives, themes can be examined that serve to underscore how the life of the Buddha might be perceived as providing a paradigmatic example of a lifestyle attuned to ecological sensitivity. We must keep in mind that the pressing issues that have prompted the modern environmental movement did not exist at the time of the Buddha, particularly the threat of global warming, increases in cancer rates due to chemical pollution, and diminishing biodiversity worldwide. Furthermore, it could be argued that the ascetic emphasis within Buddhism would tend to ignore social problems of this nature. However, the Buddha did deal in his teachings with illness, with the need to ensure a clean water supply, and did note that increased agriculture and urbanization was in the process of radically altering India's once-pervasive forest environment. By examining these aspects of Buddha's life and teaching, as well as discussing his emphasis on compassion, the life of the Buddha might be seen as providing the beginnings of an ecologically friendly fable.

The *Buddha Carita* of Ashvaghosha, which dates from about 100, includes a marvelous story of the pre-birth existence of the Prince Siddhartha Gautama, who would grow up and eventually become the Buddha. Having endured countless births in preparation for this auspicious role, he took the form of a white elephant and lived in the Tusita Heaven, a realm that intersects with the earthly realm high in the Himalayas. On Earth, his mother, Queen Maya, had been married for quite some time to Sudhodhana, the chieftain of Kapilavastu, a town in the foothills. She reclined during the midsummer festival, fell into a dreamy sleep, and awakened in the Tusita heaven where the white elephant entered her side. This story contains the seeds of several environmental themes. Continuity between animal and human life can be seen in the future Buddha's incarnation as an elephant. An attention to place bears great importance, with the sacred Himalaya Mountains taking on the important role of joining heaven and Earth. A third sensitivity to nature can be found in the importance of the seasonal festival, indicating an attunement with the rhythms of nature.

Although the birth of the future Buddha was greeted with great excitement, 21 days later his mother died. In an effort to heed the advice of his Brahmin advisors,

King Sudhodhana exerted great effort to shield his son from any pain or suffering. Sudhodhana married Maya's sister, making certain that Siddhartha received the best of care and love. He also protected his son from the heat of summer by bringing him yearly to the summer palace in the mountains, and from the cold of winter by moving to the winter palace at a lower elevation. Only once in his childhood, during an agricultural festival when he was seven years old, did Prince Siddhartha receive a glimmer of the grimmer aspects of life. He witnessed a farmer commandeering a plow pulled by some exhausted oxen. As the man wiped his brow, Siddhartha felt sorrow at his exhaustion. He saw that the yoked beasts were thirsty and uncomfortable. He also watched as the plow ripped apart the squirming bodies of worms and, given these three conditions, great compassion arose within him. This formative childhood moment, arising from a feeling of connection with other forms of life and the Earth itself, established a pattern of concern and compassion that came to characterize his later teachings as the Buddha.

At the age of 29, after a prosperous career as scholar, soldier, husband, and father, the young prince encountered the realities of old age, sickness, and death. He also learned about the life of world renunciation, having observed the graceful demeanor of a wandering mendicant. He opted to give up the life of royalty and embarked on a successful six-year quest in search of life's ultimate meaning. The transition from palace to subsistence entailed a lifestyle totally dependent upon the kindness of strangers, who provided food to itinerant seekers. Siddhartha learned to live on a minimum of food offerings, and for a period of time nearly starved himself to death. After recovering his strength and regaining the legendary 32 marks that portended his imminent perfection (lustrous skin, long ear lobes, and so forth), he took resolve one night to achieve his goal of totally understanding and eradicating the source of his discomforts (*dukkha*). Through the various watches of the night, his past karma assaulted him, with his inner demons taking the outer form of a nemesis named Mara. A host of animals came to Siddhartha's aid, cheering him on as he battled Mara's weaponry. Finally, a legion of hundreds of thousands of elephant-mounted soldiers marched on Siddhartha from all four directions. A tremendous tumult arose while Siddhartha meditated under the Bodhi Tree, the tree of enlightenment, frightening away all the deer and rabbits and birds and other animals who supported him. Left utterly alone, the soon-to-be-Buddha reached out to Mother Earth herself, who heaved forth with a tremendous earthquake, swallowing the numerous enemies. Amid the joyous cries from his animal companions, Siddhartha attained a state of omniscience, fully comprehending the origin of his woes and escaping forever the clutches of ignorance.

The Buddha's quest for liberation placed him in raw intimacy with nature. His wanderings from town to town afforded him first-hand knowledge of the geography and topography of northeast India. His ultimate spiritual victory took place within the context of a tree, under which animals of all varieties urged him onwards in his inner struggle. The Earth itself bore witness to his resolve to gain full self-understanding. After his enlightenment, the Buddha maintained his wandering lifestyle, moving from

place to place to give teachings to thousands of people throughout northeast India. His teachings emphasized a philosophy of interconnectedness (*pratit- yasamutpada*) that espouses a causal relationship between our current state of life and our past actions (*samskaras*). The present depends upon the past and sets the conditions for the future. By understanding our place in this web of causality, we can move toward self-knowledge and transcendence. Key to this process is the taking up of vows to improve oneself and seeking to benefit others through loving kindness (*maitri*).

Having gained *nirvana* at the age of 35, the Buddha wandered and taught for 45 years. Starting with his first sermon in Sarnath, across the Ganges River from the sacred city of Banaras, he espoused four great truths: the world is suffused with suffering (*duhkha*); this suffering has a cause in the form of past *karma* linked to desire (*trishna* or thirst); this desire can be stopped (*nirodha*) by meditation and ethical behavior; and that if one follows the eightfold path (*marga*) of right thinking, right action, right livelihood, right effort, right concentration, and so forth, one can gain release. During his lifetime, 500 individuals (*arhat*) are said to have successfully achieved *nirvana*.

One of the primary tools employed by the Buddha in his teachings was the telling of parables based on his past lives. After his death, these were gathered together in the form of 550 birth stories known as *Jataka Tales*. More than half of these include times when the Buddha had taken nonhuman births, including the story of when he was a hungry tigress who fed her own flesh to her starving cubs, when he was a clever bird who advised the cuckoo to stop making such a fuss, and when he was a clump of grass who saved a noble tree and the plants and animals it sheltered by making the tree appear diseased and disfigured, sparing it from the king's axmen who planned to harvest the tree as the center pole for a new palace, and many other stories. This extensive and remarkable literature operates on three levels. First, it spins fascinating tales about times long ago. Second, in the telling, the Buddha would relate the story to the present moment, identifying the past lives of his various associates as other characters in the stories. Third, he would use these stories to encourage moral behavior. Building on his knowledge of the habits of animals as well as human behavior, he would expose the foibles of the human condition, and provide an antidote for misinformed or ignorant behavior.

The death story of the Buddha has long prompted controversy about his dietary habits. Two accounts have proliferated. Both stories claim that he succumbed to a stomach ailment prompted by bad food. One account says he ate pork; another claims he was poisoned by a mushroom. One group of Buddhists, particularly in Southeast Asia, ascribe to the bad-pork theory, saying this practice would be consistent with the Buddha's refusal to reject food offered in good faith. This would indicate his solidarity with people from all walks of life, regardless of caste, a key point in his rejection of the Brahmanical social hierarchy. Another group of Buddhists, now found primarily in China, assert that the Buddha was a strict vegetarian, in keeping with his repeated remarks decrying the excesses and cruelty of animal sacrifices performed by

the Brahmins. Regardless of the cause of death, the Buddha's final words of wisdom affirm the need to be attuned to the evanescent nature of nature: "All conditioned aspects of reality perish; strive diligently for liberation." This persistent insistence on the changeability and by extension emptiness of phenomena inspires in the mind of the Buddhist compassion for living beings. Knowing that all things will eventually perish, the

Buddhist seeks to provide comfort to all beings through correct behavior.

Though the dates and particulars of the Buddha's life are shrouded with some uncertainty, with scholars placing his dates as early as the sixth and as late as the fourth century before the Common Era, the Buddha has served for more than two thousand years as an archetype for the meditative life. In his teachings, he assesses the human condition in relation to the continuum of life forms, past and present. He urges his followers to abide by precepts that respect the human body by urging people not to take intoxicants or engage in inappropriate sexual activity, and to respect the lives of others by abstaining from killing, lying, and stealing. He developed a radically simple lifestyle for his monks and nuns, requiring his followers to live frugally with only one change of clothes, taking only two meals per day. His monastic disciples renounced all luxuries, while his lay disciples were urged to abandon their attachments to material wealth. The examples of the Buddha and the other renouncers of India set forth what might be construed as an inherently eco-friendly lifestyle. The minimal consumption modeled by the Buddha can be interpreted as a calling for doing with less, being content with the bare necessities, and seeking truth through the cultivation of self-understanding rather than the accumulation of material possessions. If applied with thought and consideration in a modern modality, these very principles could be enacted in such a way as to reduce harmful emissions into the atmosphere, to commit oneself to eating health-inducing foods, and to protect endangered life forms.

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See also: Buddhahood of Grasses and Trees; Buddhism (various); Creatures' Release in Chinese Buddhism; Hinduism; Jataka Tales; Vegetarianism and Buddhism.

Buddhadaṅsa Bhikkhu (1906–1993)

Until recently, Thai culture has been entwined with streams, rivers, forests, and rice fields. Born in 1906, in a small rural town of southern Siam (as Thailand was then known), young Ngeum Panich (later Buddhadaṅsa Bhikkhu) grew up with nature permeating his life, learning its secrets as a temple boy when sent into the forest to collect medicinal herbs.

Later, when he sought to express how the Dhamma, that which the Buddha honored above all else, is much more than teachings and doctrines, Buddhadaṅsa Bhikkhu did so in terms of nature (*dhammajati*). This made perfect sense to him living in a forest monastery and to most of his compatriots, not yet alienated from nature by modern industrialism.

In his expression, Dhamma is nature, encompassing everything without exception. There is no “supernatural.” Even God, should s/he/it exist, would be part and parcel of nature. Humans and our productions are nature, too. All of these are governed by the Law of Nature (Dhamma as natural order), the fundamental impermanence, conditionality, and selflessness (essencelessness) of all things (dhammas). Within the orderliness of Dhamma-Nature, all things have their duty (or function) of the moment, which is Dhamma, too. With humans, Dhamma-Duty becomes conscious and moves toward transcendence. Finally, how each momentary duty is carried out brings natural fruits. When humans misconceive, resist, or turn natural duties into selfish pursuits, the result is suffering (*dukkha*). When we carry out such duties conscientiously and unselfishly, the result is well-being (*sukha*). Duty on the highest level, when the momentary duties are subsumed in the fundamental duty of our lives, bears fruition in *Nibbana*, the ultimate Dhamma or nature, experienced as liberation from all egoistic states.

Nature is thus intimately linked with the core of Buddhist teaching and practice. Nature is “sacred” (*saksit*) and most powerful. However, it is not trivialized as benign or always good. In each moment, nature can be stressful or relaxing, pleasant or painful, clinging or liberated, depending on how the mind performs its duty of seeing things as they really are (Dhamma as Truth) and letting go of any clinging to them as “me” or “mine.”

This perspective on nature is not mere wordplay or idealism. Buddhadaṅsa Bhikkhu saw in the Buddha’s life an ongoing intimacy with the physical dimensions of nature that nurtured and expressed his realization of Dhamma or nature in the spiritual dimension (not that linguistically distinguished dimensions are actually distinct). All the major events of the Buddha’s life took place outdoors. He was born in a park

(Lumbini), had an experience of profound contemplative tranquility and insight into impermanence beneath a tree at his father's plowing ceremony, left home and experimented with spiritual practices in the wild margins of the Ganges valley, was awakened in a solitary place beneath a tree next to the Nerañjara River, usually taught outdoors, wandered throughout the Ganges watershed over his renunciate lifetime, and died in a grove of Sal trees on the way to Kusinara. Further, the Buddha *is* Dhamma both as intimate inseparability with nature and its highest conscious expression.

Thus, Buddhada-sa Bhikkhu saw a vital role for undomesticated forest wats and "wild monks" (*phra theuan*). The institutional and customary forms of Buddhism found in cities and villages are entangled in economic and political forces, thus mixed up with greed, hatred, and delusion. The original bhikkhus of the Buddha's time lived on the margins between society and wilderness, regularly visiting both. This ideal lives on in the forest wats not yet domesticated by Bangkok's rich and powerful. Throughout his life (he died in 1993), Ajarn Buddhada-sa skillfully avoided such entanglements.

His teaching included regular commentary on science as it developed in his lifetime. He raised and carefully observed fish, chickens, birds, and dogs, leading to discussions on the instincts. In the 1950s, he predicted that Thailand's forests would disappear (unfortunately he was right) if modern development policies continued. Local monks heard his message and began to work with villagers to set aside bits of forest for conservation. Later, monks and their villagers in other parts of the country were also inspired by his Dhammic ecology message and calls for spiritually based development.

In the 1970s, as US-backed military dictators killed thousands of alleged "communists," Buddhada-sa Bhikkhu asserted that Buddhism was fundamentally "socialist." While his understanding of socialism critiqued the "bloody-minded" versions of Marx, Lenin, and Mao, Buddhada-sa Bhikkhu was adamant that nature was a "cooperative" and argued for "Dhammic Socialism" for the rest of his life. This helped create more social space and safety for advocates of socialism and progressive social change.

In the forests and other natural places where the impact of human desire is weak, we can begin to listen to the truths that the leaves whisper and rocks shout.

The Silent Mind Can Listen to Grass Speak

Lord Buddha, once enlightened, with silent mind hears revelations from the myriad things,

As if clamoring to report through themselves that there is nothing at all worth grasping

And clinging to as "I," "myself," or "mine."

Never dream of owning any of them – what foolishness!

Taking these selfless things to be "I" or "me" brings only sadness, soreness, and sorrow.

Even the rocks, sand, soil, trees, and grass sound this song through every nook and cranny;

Yet, the busy-minded don't understand or suspect that everything sings out Dhamma's lesson.

With silent mind one hears even the leaves of grass counseling each other with this beautiful, witty fact:

“All beings may dance at ease in the breeze with minds left silent by laying to rest all things.”

(Verse accompanying a wall painting in the Spiritual Theater at Suan Mokkh, Chaiya, Surat Thani, Thailand.)

Santikaro Bhikkhu

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See also: Buddhahood of Grasses and Trees; Buddhism – Engaged; Siam's Forest Monasteries; Thai Buddhist Monks.

Buddhahood of Grasses and Trees

The doctrine about the attainment of Buddhahood by insentient beings such as grasses and trees (*caomu chengfo* in Chinese; *so^o moku jo^o butsu* in Japanese) was originally developed within medieval Chinese Buddhism as an extension of the Buddha-nature theory. By removing essential distinctions between sentient and insentient objects, the doctrine expands the universality of Buddhahood by affirming that even plants partake of the perfection of Buddhahood, thereby valorizing the phenomenal realm and highlighting the inherent worth of mundane things that comprise the everyday world. The belief that all “sentient beings” are endowed with Buddha-nature implies that every creature in the universe inherently possesses a seed or potential for the attainment of Buddhahood. By the Tang period (618–907) that became an established tenet of the Chinese Buddhist worldview. Some exegetical traditions even went further by interpreting the Buddha-nature as an enlightened essence endowed with all spiritual perfections and sublime qualities that are characteristic of Buddhahood. According to such a point of view the intrinsically enlightened essence constitutes the true nature of each person, which implies that fundamentally everybody is already enlightened even though he/she/it might not be aware of that.

In both India and China it was widely accepted that the general category of sentient beings incorporates other forms of life in addition to humans, including animals and various classes of beings that populate the different realms of existence described in Buddhist cosmologies. The inclusion of members of the plant kingdom to the category of those who can attain enlightenment was a distinctive Chinese development that was an upshot of intricate philosophical reflections on the nature of reality. In formulating the theory of Buddha-nature of insentient things (*wuqing foxing*) Chinese Buddhist thinkers drew on doctrinal tenets derived from canonical texts, such as the true character of all things (dharmas), the universality of Buddha-nature, and the pervasiveness of the Middle Way. Although that became an established doctrine within certain circles in East Asian Buddhism, by and large most Buddhists retained the traditional understanding of Buddha-nature extending to all living beings, but not necessarily to plants.

The idea that insentient objects such as plants possess Buddha-nature appeared for the first time in the writings of Jizang (549–623), the reputed founder of the Sanlun school and a leading Chinese advocate of the *Madhya-maka* (Middle Way) doctrine of emptiness. According to his writings on the subject, the Buddha-nature of insentient objects comes into play when perfected sages view the objects in their environment in light of their all-encompassing wisdom and enlightened vision of reality. From that

perspective all things are nondual in terms of the subject/object distinction, and it is thus possible to assert that grasses and trees, along with sentient beings, possess Buddha-nature, without presuming that insentient objects can actually practice Buddhism and manifest the traits of a Buddha. A similar line of reasoning was adopted and further developed by Zhanran (711–782), a major thinker of the Tiantai school. In his writings Zhanran called for dissolution of the sentient versus insentient distinction, and asserted that in time all beings will reach the precious realm of Nirvana. This issue was also debated within other Buddhist traditions, most notably by the Chan/Zen school and by Esoteric/Tantric Buddhism.

The notion of enlightenment for grasses and trees also exerted notable influence on Buddhist thought in Japan, where it effected the shaping of positive attitudes toward the natural world and found lyrical expressions in numerous works of art. Echoes of it can be found in the writing of Do^o gen (1200–1253), the famous Zen patriarch, who argued that even insentient beings preach the Buddha's Dharma. In a poetic voice, Do^o gen's writings maintain that mountains and rivers realize completeness and actualize the ancient Buddhist path, and that nature is sacred and a source of precious wisdom. According to Ku^o kai (774–835), the founder of the esoteric Shingon school, the cosmic Buddha Maha^o vairocana and the six elements that constitute the world (which also implies plants) are perfectly interfused, and Mahavairocana and the universe coexist in a state of non-dual harmony. Similar sentiments are echoed in some of the classical Noh dramas and the poems of Saigy^o (1181–1190), which reveal a profound sense of nature appreciation and a tendency toward leveling of distinctions between the world of nature and the human realm.

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See also: Buddhism (various); Creatures' Release in Chinese Buddhism; Jataka Tales; Zen Buddhism.

Buddhism

The Buddha and Early Buddhism

The most elaborate source for our knowledge of the early Buddhist attitude toward nature are the so-called canonical texts. To what extent the earlier layer of the canonical texts (sermons of the Buddha, code of monastic discipline, certain verse collections) actually goes back, in substance, to the Buddha himself (whose lifetime is now, by most scholars, situated somewhere between 500 and 350 B.C.E.) is controversial. It is, hence, preferable to take these texts as documenting norms, attitudes and conceptions concerning the natural world that were current among Buddhists during the first few centuries of Buddhism. But before doing so, it may be appropriate to throw a glance at the role nature plays in the biography of the Buddha, which, to be sure, consists of legendary elements to an extent that is difficult to determine precisely, but even so tells us something about the Buddhist view of nature.

Nature in the Biography of the Buddha

The best-known facet in this connection is probably the bo-tree, the tree (*Ficus Religiosa*) under which the Buddha (“the Awakened One”) attained awakening (*bodhi*), which became an object of veneration in Buddhist countries and represents the awakened one in early Buddhist art. Trees figure in other crucial moments of the Buddha’s life as well: under a tree he was born, under a rose-apple tree he had, in his youth, his first experience of deep meditation, and under twin *sal* trees (*Shorea Robusta*) he passed away. This role of trees is not surprising since trees were the easiest available shelter from sun and rain for wandering ascetics. But perhaps one should also not lose sight of the fact that trees, especially big trees, were regarded as numinous beings, or as inhabited by powerful spirits, nor should reminiscences of pre-Buddhist mythology and symbolism lightly be excluded. What is perhaps still more instructive is that the rose-apple tree under which the Bodhisattva (i.e., the Buddha before his awakening) had his first experience of deep meditation is in some versions (Taisho vol. 3: 467b24 and 475b26) stated to have bent its twigs in order to protect the meditating Bodhisattva from the burning sun. The twin *sal*-trees under which the Buddha passed away burst into blossom out of season. The soteriologically important events in the Buddha’s life are accompanied by an earthquake, and the Earth goddess testifies to his spiritual achievements. Thus, even the vegetable kingdom and the elements are

depicted as paying homage to the (prospective) savior of the world and testifying to his superiority. No wonder that even sentient beings act in a similar way: not only the gods but, for example, also the mythical snake king Mucilinda who protects the Buddha from a thunderstorm by surrounding him with his body and covering him with his hoods. Even dangerous animals like the furious elephant Na^ṭla^ṭgiri, who was released in order to kill the Buddha, are tamed by his benevolence or miraculous power. In the Mahayana version of the Great Sermon on the Buddha's Passing Away, the audience present at the Buddha's death-bed comprises not only men and gods but also all kinds of animals, wailing at the decease of the protector of the world, as can be seen in Far Eastern pictorial representations of the scene.

While these examples may suffice to show how the legendary biographies exalt the Buddha or Bodhisattva by depicting nature, even insentient nature, as paying homage to his charisma, there are also passages describing how the Bodhisattva's awareness of suffering in nature, especially in the animal kingdom, arouses his compassion. In his youth, he heals a goose wounded by his cousin Devadatta. When watching a ploughing ceremony, he perceives how the worms thrown out of the ground are swallowed by frogs, how these are then devoured by snakes, which in their turn are seized by birds of prey (Taisho vol. 3: 467b18–23). On the other hand, the place where the Bodhisattva is going to attain awakening is described as a lovely spot with a beautiful grove and a transparent river. According to yet another text (Papanicasudani II, 80–1), the Bodhisattva was careful to avoid emotional involvement in both the lovely and the horrible aspects of nature.

Nature in Early Buddhism

The central concern of early Buddhism is, according to the canonical texts, the attainment of liberation from suffering, both in this life and thereafter. Future suffering is looming in view of the idea of recurrent rebirth (*samsara*), which means that after death one will, directly or via a stay in heavenly or dismal world spheres, be born again and again in this world. The main cause for rebirth is “thirst” (i.e., attachment, or greed, hatred and delusion). Liberation is thus achieved by complete detachment, by abandoning all unwholesome emotions. The path leading to detachment comprises morality (*siḷa*), meditation and insight. Its practice is considered to be at least considerably facilitated by becoming a mendicant (monk or nun). Lay followers were mostly content with improving the prospects of their rebirth, for which morality is equally essential.

The first moral “precept” is abstention from killing animate beings (*paṇa*). Since animate beings include not only men but also animals, the first precept is a strong basis for *animal ethics* in Buddhism. The disciplinary code for mendicants explicitly states that even small animals up to ants or borderline cases like minute creatures in the drinking water should not be injured. As for lay followers, in the majority of the

tradition the precept lacks such a specification. It is mostly persons who make a living by killing larger animals that are criticized – butchers, hunters, fowlers or fishermen – or persons who perform bloody animal sacrifices. To be sure, even in the case of lay followers the precept is not qualified, and hence ideally means not to kill *any* animal. But it seems that at least part of the early tradition did not want to insist too much on this in the case of lay followers in order to keep the precept practicable for them, leaving it to the individual to decide to what degree he or she could observe it.

In some contexts, the person observing the first precept is characterized as one who is embarrassed (at violence?), full of sympathy (*dayapanna*), and concerned with the welfare of all animate creatures, and the person counteracting the precept is qualified as cruel, with no sympathy for animate creatures. This makes clear that the precept is not just abstention from killing, but presupposes, at a certain level at least, a mental attitude of empathy and concern. The precept therefore does not merely preclude the killing of animals but also all kinds of injury and torture. A similar attitude is cultivated, by mendicants and also by lay people, in connection with the so-called “unlimited” (*appamana*) meditations, which start with a boundless radiation of friendship or benevolence (*metta*) and compassion (*karuna*). Though the primary function of these meditations is to purify the meditator’s mind from ill-will and cruelty or to entail heavenly rebirth, it is natural that they can also manifest themselves in spontaneous acts of help, as feeding hungry animals or freeing a trapped animal out of compassion. Still, the basic attitude is rather to leave animals in peace and cultivate a mental attitude of compassion and benevolence toward them.

The precept to abstain from killing is not inculcated by a personal God. In the canonical texts of early Buddhism, it is often motivated by the *karma doctrine*, according to which those who keep the precepts are automatically rewarded by a desirable rebirth, whereas those who counteract it run into a dismal state. A different motivation is by reference to the *Golden Rule* (i.e., that just as oneself dislikes being killed and suffering, so also the other animate beings).

Violation of the precept not to kill or injure animate beings is considered karmically or spiritually detrimental only if committed *deliberately*, for only in such cases is killing conditioned by an evil drive. Still, mendicants are not allowed to wander about in the rainy season because they would, even unintentionally, trample small animals to death. On the other hand, a mendicant is not prohibited from eating *meat* provided that he has not seen, heard or suspected that the animal was killed particularly for him.

In contrast to Jaina sources, the earlier layer of the Buddhist canon is fairly reticent regarding the status of *plants*. There is no explicit discussion of the question whether they are to be included in the realm of sentient beings or not, nor are they expressly excluded. There are even a few passages, especially in old verse texts, which speak of mobile and stationary animate beings that should not be killed or should be treated with benevolence. One verse text (Suttanipata 600 sqq.) expressly lists herbs and trees among the classes of animate beings (*pana*). Mendicants are expressly prohibited from injuring plants and seeds. Hence, plants may have been regarded as a kind of borderline

case, and mendicants were enjoined to treat them with care in order to be on the safe side and because, as the canonical code of monastic discipline states, people considered plants to be living creatures. A similar reason is also given for the prohibition to dig in the Earth. At any rate, plants, let alone the elements, were hardly understood to be included in the animate beings envisaged by the first precept, especially as far as lay followers were concerned. Yet, even the latter may not damage plants without motivation because Buddhism has incorporated the idea that at least some plants, especially large trees, are inhabited by deities or spirits. The tree deities have to be asked for permission before the tree may be felled. Similarly, other areas of nature like rivers or the Earth (but also cities, etc.) are sometimes believed to be inhabited by local deities.

Buddhist animal ethics is concerned with animals as sentient individuals, not with the protection or conservation of species, ecosystems or biological diversity. It is thus to be distinguished from *ecological ethics*, which does not seem to have been much of an issue at the time of early Buddhism. Still, the acceptance of the protective presence of deities in trees and other forms of nature may, perhaps, be called a “mytho-ecological” conception. And since Buddhist animal ethics implied preventing Buddhists from wanton killing of wild animals and (perhaps less successfully) from fishing and hunting, protection of wild species may well have been a collateral effect. In the case of the emperor Asoka, the moral exhortation not to kill animals actually ended up in the legal protection of certain species. Other Buddhist virtues too, like curbing greed, being content with little, or mindfulness, may well have contributed, somehow or other, to counteracting ruthless exploitation of natural resources.

In connection with ecology, many modern authors point to the principle of *paticca-samuppada*, which is often rendered as “interdependent co-origination.” But one should be careful not to interpret later developments or modern patterns into early Buddhist concepts. Originally, the term hardly means anything but “origination in dependence,” in the sense that things that arise do so on the basis of specific conditions, not at random. The primary purport of this principle is to clarify the basic conditions of suffering, both in this life and on account of rebirth. Still, already in the canon we find the idea that human spirituality and moral behavior may entail fundamental changes in the external world. According to the *Aggañña-sutta* (Sermon on Things Primeval), in the beginning of the world period, the increasing greed of the primeval beings triggers a deterioration of the primeval state of the world, which again entails a further corruption of those beings. According to other passages, immoral behavior of people and especially of kings entails drought and hence famine.

Even if these processes are interpreted in ecological terms, it would still be important to know what kind of state is regarded, by the sources, as ideal or as deterioration. To be sure, in the context of a spirituality of radical detachment from the world, *any* state would have to be considered unsatisfactory (*dukkha*) simply on account of its impermanence, which ultimately pervades even the most stable forms of nature, like mountains, rivers and oceans (Theragatha 1133). In the highest goal, *nirvana*, all

mundane phenomena are transcended (Udana 8.1). But this does not exclude that from an intramundane point of view there is a gradation of more or less agreeable situations. Actually, the primeval, ideal state in the *Aggannya-sutta* is not a colorful paradise but an as yet undifferentiated state of darkness covering a uniform mass of water, with auto-luminous uniform beings hovering in the air and “feeding on joy” – a state reminiscent of the heavenly sphere from which those beings had descended.

In other texts, however, the ideal state is often described, in a more realistic perspective, in terms of a thoroughly civilized world: densely populated, one village so close to the other that one can hear a cock crowing, with eighty thousand big, wealthy cities full of people. And wilderness is frequently characterized as dangerous, weird and disagreeable. What is appreciated is rather cultivated nature: groves, gardens, wells, artificial ponds (the construction of all of which is declared to be meritorious). In this connection, one may occasionally even come across a description in which beautiful plants and innocuous animals form part of the ideal surrounding, and sometimes there is even an explicit appreciation of diversity of species. This predilection for a domesticated world is not confined to Buddhist scriptures and may have been the current ideal of the majority of people at that time. But it was not the only one. For the sake of meditation and the attainment of spiritual perfection, Buddhist mendicants are frequently advised to resort to the wilderness (*aranna*), as a place of solitude and “undisturbedness.” To be sure, in this context, too, the texts do not ignore the fact that life in the wilderness may be dangerous and full of hardship. But this is now taken as a challenge to intensify one’s effort. And there are passages, especially in the Elders’ Verses (*Theragatha*), where the mendicant in the wilderness, having become free from fear and desire, describes himself as truly happy and even enjoying the beauty of his natural surrounding. Thus, in this strand of the early Buddhist tradition, wilderness is evaluated positively because it is the most suitable place for spiritual perfection. Besides, in more popular texts like the *Jatakas* (legendary stories of the Buddha’s earlier incarnations) the abode of the hermit living in solitude is, just as in Hindu sources, sometimes described as an idyllic place of natural beauty and biological diversity, similar to the abovementioned description of groves and gardens.

The ambivalent evaluation of the natural environment has a certain parallel in the evaluation of *animals*. Though as sentient individuals they must not be killed or injured, existence as an animal is largely regarded as unfortunate, as one of the evil forms of rebirth (*duggati*), in contrast to rebirth as a human. Animals are, on the whole, subject to much more suffering; in the natural world, the weaker is devoured by the stronger, and domestic animals are exploited and tortured by man. Besides, animals are mostly regarded as morally and, especially, intellectually inferior to man, to the extent of not being capable of attaining liberation unless they happen to be reborn as humans. One of the reasons for this kind of emphasis on the wretchedness of animals (which is common-place in non-Buddhist traditions as well) was obviously to deter people from committing immoral actions that might entail rebirth as an animal. In more popular texts like the

Jatakas, however, animals are described quite differently: as being both unhappy and happy, stupid and prudent, bad and good, thus more similar to humans, just as in fairy tales. In this strand, animals are even capable of self-sacrifice or may impart moral admonition. Under the influence of holy persons radiating benevolence, they abandon their natural enmity and aggressiveness, not only toward the holy man but even toward each other: a utopian vision of peace with and within nature. This strand is not specifically Buddhist either, but it was buddhized by identifying protagonist animals with the Buddha in his former births. In this form, it permeated Buddhist-edifying literature and art and exercised a considerable influence on the feelings and attitudes of lay Buddhists.

Postcanonical Developments in Mainstream Buddhism (“Hinayana” Schools)

In the various schools developing from canonical Buddhism, the conceptions and attitudes concerning nature do not seem to have fundamentally diverged from those of the canonical period, but several aspects were clarified or elaborated. Thus, in the canon of the Sarvastivada school (which had its center in northwest India) even lay followers are expected to expressly resolve not to kill *animals* even up to ants, and we hear of an officer who just like monks carried a strainer in order to avoid killing animalcules when drinking water. In later texts of the same school it is explicitly stated that one should not even kill noxious animals. Later sources also discuss such questions as the relative gravity of killing a human or an animal, and a big animal or a small one. As for motivation, there are passages where an attitude of benevolence or even affection toward all animate beings is based on the idea that in the course of the beginningless *samsara* every sentient being has already been one’s father or mother or another close relative (an idea already found in the canon but not used there for this purpose).

An important development is that *plants* are now expressly excluded from the realm of sentient beings. Hence, there is no rebirth as a plant. According to the Vinaya (code of monastic discipline) of the Sarvastivadins (tr. into Chinese in the early fifth century), the rule that mendicants should not injure plants was nevertheless justified because plants are inhabited not only by spirits but also by animals (i.e., plants are understood as microecosystems, the destruction of which would kill the animals they harbor).

In Sarvastivada texts, origination in dependence (*pratitya-samutpada*) was elaborated in such a way that everything is regarded to be dependent on everything else, though most entities are conditions of most other entities merely in the very weak sense of not obstructing their origination. Another explanation is by taking into account even remote, indirect connections.

In the post-canonical period, the ideas of the canonical period about the structure of the world and about its cyclical dissolution and reemergence were systematically

elaborated. Actually, our earthly, natural world is just a small segment of a mainly mythological cosmos. The Sarvastivada school aptly distinguishes between the “world” consisting of sentient beings (*sattva-loka*), comprising humans, animals and mythic beings, and the world as a receptacle (*bhajana-loka*), comprising the material environment including plants. The “receptacle world” is produced by the common karma of sentient beings. When their karma, periodically, improves, they gradually all ascend to higher, heavenly realms, and the earthly, natural world dissolves. When the good karma of sentient beings is exhausted and they are about to return to lower spheres, the natural world reemerges. Hence, it does not seem to be highly valued. This is clearly true of animals. Since animals are a lower, unfortunate form of existence, the presence of many animals on Earth and few humans is an indication of a period of deterioration. On the other hand nature can also be helpful for spiritual practice. Contemplating the growth, flowering, fruiting and decay of plants, or the sprouting, withering and falling of leaves, is suitable for strengthening insight into impermanence.

Early Indian Mahayana

Roughly around the beginning of the Common Era, a new movement appears to have formed, the most important characteristic of which was to praise or recommend the career of a *bodhisattva*, a person who is not content with his own liberation from *samsara*, but aspires to becoming a Buddha in order to reestablish the Doctrine after it has gotten lost, thereby saving innumerable beings from *samsara*. The resolve to strive for Buddhahood is said to be motivated by compassion and benevolence.

These attitudes also strongly inspire a *bodhisattva* to succor sentient beings, including animals, even in mundane difficulties. Thus, the *bodhisattva* Jalavahana (“Water Bringer”) is praised for having organized a transport of water to a pond where ten thousand fish were threatened by desiccation (*Suvarnabhasottama-sutra*, ch. 17). In line with the stories of self-sacrifice in the *Jatakas*, a *bodhisattva* may even feed starving animals with his own body (*Suvarnabhasottama-sutra*, ch. 18). On the other hand, his liberality should not extend to giving away, on request, animals for slaughtering, or land inhabited by many animals if this would lead to their being injured (*Bodhisattvabhumi*, ch. 9).

Some texts offer a metaphysical foundation for universal compassion and benevolence by pointing out that the true nature of all beings is one and the same. According to others, Buddhahood is, in a hidden form or as a latent disposition, present in all sentient beings, including animals. This implies that even animals must be treated with respect, just as the Buddha. Several texts of this current proclaim abstention from meat eating. One of these texts actually uses the presence of hidden Buddhahood in animals as an argument. Another argument adduced in this connection is the idea that in the course of beginningless *samsara*, even animals have formerly been one’s own close relatives, yet another reason is the incompatibility of meat eating with the

attitude of benevolence (or affection, just as for relatives or one's own children) toward all sentient beings.

Though, on the whole, the old precepts remained valid in Mahayana as well, according to some texts a *bodhisattva* was, under certain circumstances, allowed or even expected to transgress the precepts and even to kill. Yet, in contrast to some strands of Tantric Buddhism, early Mahayana sources seem to contain little or no evidence for a killing of *animals* out of compassion, making sure that they are reborn in a more favorable form of existence.

As for the natural world as such, Mahayana texts, too, do not exhibit a particular interest in it. They are rather concerned with fantastic visions of myriads of world systems, housing innumerable Buddhas. Besides, there is a strong tendency to regard the phenomenal world as void and illusory, or as nothing but a representation in the minds of sentient beings. The emphasis on mutual dependence in Indian Madhyamaka ("Teaching the Middle Way," one of the two prominent schools of Indian Mahayana) hardly intends to lay bare the structure of the natural world in the sense of modern ecology, but rather aims at deestablishing the alleged (ultimate) reality of the entities envisaged. And the vision of universal interpenetration in the *Gandavyuha-sutra* seems to point to an "experience of a higher, expanded reality" (Ph. Granoff) quite different from our natural world with its imperfections and limitations. In Mahayana Buddhism, too, the ideal world, like *Sukhavati*, the "paradise" of the Buddha Amitabha, is depicted as densely populated and full of palaces, with trees and flowers being made of jewels, and with no animals except artificial birds. It is of no importance whether such descriptions are to be understood literally or metaphorically; in any case they reflect people's conceptions about the ideal world and the belief that animal existence is something unfortunate. Still, we can also find instances of the view that the wilderness is suitable for meditation (e.g., *Bodhicaryavatara*, ch. 8). Besides, *bodhisattvas* are said to adopt, intentionally, rebirth as an animal in order to direct their congeners toward a better destiny and, finally, liberation. According to some texts, mere listening to their message, or to the name of the Buddha Amitabha, is sufficient to place even insects on the way to salvation.

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See also: Ariyaratne, Ahangamage Tudor; Buddha; Buddhahood of Grasses and Trees; Buddhism (various); Caves – Sacred (Thailand); Creatures' Release in Chinese Buddhism; Dalai Lama; India; Indra's Net; Jataka Tales; Ladakh Buddhism; Macy, Joanna; Mongolian Buddhism and Taimen Conservation; Mountains and Rivers Sutra; Sarvodaya Shramadana Movement (Sri Lanka); Siam's Forest Monasteries; Soka Gakkai and the Earth Charter; Thai Buddhist Monks; Tibet and Central Asia; Vegetarianism and Buddhism; Yoga and Ecology; Zen Buddhism; Zhuangzi.

Buddhism – East Asian

Buddhism in East Asia began to take root in China after the fall of the Han Dynasty (206). After centuries of influence by Chinese thought and values, especially Daoist, new Chinese Buddhist schools developed, such as Huayan and Chan (Japanese: Kegon and Zen). These schools spread to Korea and Japan (as well as Vietnam), where other important schools and movements arose, such as the esoteric sect of Shingon in Japan. The result was forms of Buddhism that differed in substantial ways from South Asian Buddhism (even in its Mahayana forms).

The ecological significance of East Asian Buddhism is wide-ranging and profound. But that significance is also ambivalent because Buddhist doctrines, values, and practices can undercut as well as support ecological concerns. Here we will limit ourselves to a few major aspects that are important to a philosophy of nature and ecological practice: the nature and value of the phenomenal world, the self and its relationship with nature, and moral feelings and action in response to the world.

Before we do so, it is worthwhile to point to one very general trend of East Asian Buddhism: nondualism. Earlier Buddhism, especially Indian Mahayana, had nondualistic tendencies, but East Asian Buddhism tended to emphasize it and apply it more broadly and consistently. Nondualism became more a general approach applied to various doctrines rather than one particular doctrine.

Obviously, one of the aspects of greatest ecological significance is the view of the reality and value of the natural world. While it is inaccurate to describe Indian Buddhism as “world-denying,” it did not tend to cultivate a strong valorization of the phenomenal world. The Chinese tradition, on the other hand, has tended to emphasize the reality and value of the natural world, and this is true of Chinese Buddhism as well.

Huayan Buddhism developed the most comprehensive

– and intellectually challenging – metaphysics, one that is particularly significant for an ecological philosophy of nature. One aspect of this significance is its view of the relationship between phenomena and absolute reality. Huayan insists that there is in actuality no difference between the absolute and phenomena. Ultimate reality is not some transcendental One but this very world, and phenomena are themselves the absolute. The Huayan master Fazang (643–712) attempted to explain this aspect of reality to the Chinese Empress Wu with his analogy of the golden lion. We can intellectually distinguish the lion shape from the gold, but in actuality there can be no such shape without the gold that is shaped. Similarly, gold always has a shape, whether it is a lion, a temple, or a blob. So too, the phenomenal world is the ever-shifting form

of the absolute. Huayan thus offers a fully nondualistic view of the relationship between the absolute and phenomena.

A similar argument was made concerning the relationship between the whole of phenomena and the parts. In a conventional view, there can be a whole (let's say a barn) separate from the parts (rafters, paneling, etc.). From this perspective, there are pieces of wood, nails, etc., and then there is a barn and each part can be replaced and still have the "same" barn. Huayan, however, says that there is no whole separate from the particular parts. A rafter is the barn, just the same as my arm or leg is my body. Each part *is* the whole. If a rafter or my arm were replaced, says Huayan, we would have a new barn and I would have a different body. Nothing is relegated to the status of being "merely a part" that the whole can do without. Thus Huayan spoke of *li shi wu ai*: the mutual non-interference of the absolute and phenomena.

Huayan is most famous for its views of the relationships among phenomena. The Chinese term that summarizes the Huayan view is *shi shi wu ai*, the mutual "non-interference" among all things. The basic point is an emphasis on the unqualified interdependence and interpenetration of all things. The classic image used to represent interpenetration is Indra's net, which is described in the *Gandavyuha Sutra*. In this image, the universe is considered to be a vast web of many-sided and highly polished jewels, each one acting as a multiple mirror. In one sense each jewel is a single entity. But when we look at a jewel, we see the reflections of every other jewel, each of which contains the reflections of other jewels, and so on in an endless system of mirroring. Thus in each jewel is the image of all other jewels, as well as the entire net as whole. The jewels interpenetrate each other. Yet each one contains the others in its own unique way in its distinctive position, and so they are distinct.

Another way that East Asian Buddhism analyzed the world was in terms of Buddha-nature. In Indian Mahayana Buddhism there developed the idea that all sentient beings have the Buddha-nature. In East Asia this perspective was expanded in three principal ways. The first was to increase the range of what was included. Over time, plants were seen as having Buddha-nature: the dualism between plants and animals was dropped. In the case of the Japanese Shingon master Ku^o kai (774–835) and Zen master Do^o gen (1200–1253), even inanimate objects such as rocks and roof-tiles were included – any other view would be dualistic between biotic and abiotic phenomena.

The second development concerned the level of realization. The original view was that all beings had Buddhanature in a latent or germinal form. In East Asia the idea of "original enlightenment" developed, which meant that everyone's Buddha nature was actually fully developed. The problem was that we do not realize this Buddhanature because it is obscured, like clouds covering the full moon. In line with such a view, the world was conceived of as fully realized, perfect just as it is. The point is not that the world satisfies our notion of the good and beautiful. This "perfection" is nondualistic: all things and conditions are of unqualified reality and value, even those that involve suffering.

The third development is the relationship between Buddha-nature and beings. Traditionally things were said to possess Buddha-nature, as they would other qualities. For Do⁻ gen, such a view involved a dualism between the being and Buddha-nature. Instead, all things *are* the Buddhature. There is nothing that is not Buddha-nature.

Such a radically positive valorization of the world was put in other terms as well. The world is seen as the very body of the Buddha. Mountains and rivers were considered a sutra (Buddhist scripture) and the birds sing the dharma (Buddhist truth). Particular regions, especially mountains, were seen as mandalas (a symbolic representations of the cosmos). While Buddhist metaphysics are universalistic, often it is the natural world that is thought of principally as the unsullied embodiment of ultimate reality. Theoretically cities were included, but they are also sites of craving, aversion, and delusion, something not found in nature.

Two main results of such a radically nondualistic metaphysics have particular bearing on ecological philosophy. One is that the world is conceived of holistically as a net of relationships, rather than as a collection of individual things. This is not a monism in which the reality of individuals disappears but rather a relational holism in which individuals are distinct but interrelated within a whole. The second result is that this world and each individual thing in it is given unqualified reality and value. There is no transcendental world and no abstract One separate from this world of redwoods and woodpeckers. There are no independent parts that we can devalue for the sake of other parts or the whole: everything has unlimited value.

But such a radical nondualism also seems to undercut ecological concern because it apparently invalidates any type of distinctions. Is toxic waste Buddha-nature the same as a redwood tree? If the rainforests are completely destroyed, would not what remained also be the body of the Buddha? This issue is too complex to respond to fully here, but it would involve the recognition that the nondualism of Buddhist metaphysics does not stand alone. There is also the Buddhist analysis of the *effect* of actions, involving the acute realization of suffering, along with the Mahayana tradition of combining compassion with wisdom. Similarly this metaphysics needs to be joined with the Buddhist analysis of the *motive* for actions, including the Buddhist critique of craving, aversion, and delusion: the distinction between enlightened and unenlightened motivations remains. The combination of nondualism, compassion, and psychological critique can form a powerful and complex basis for an ecological ethics.

In addition to metaphysics, East Asian views of consciousness and the self have substantial ecological import. The Indian Mahayana school of Yogacara spoke in terms of “consciousness only.” This does not refer to subjectivism or idealism, which would involve an acceptance of the subject–object duality and then a one-sided erasure of the objective world. Instead, there is a dissolution of the subject–object split. This perspective of nonduality between subject and object was developed more fully in China, both as a metaphysical claim about reality and as a psychological ideal for the practitioner.

Metaphysically, our dichotomy between a subjective consciousness and an objective reality is false. So what is there? Because our thought patterns and language assume a split between them, even Buddhists tend to speak either in subjective or objective terms (the “One Mind” or “reality-as-it-is”). It would be more accurate to say that there is only “reality-consciousness.” This is the True Self: the universe as a whole in this moment of experience.

Psychologically, the subject–object split is a delusion that leads to cravings and aversions. If we believe that there is a world separate from our self, there will be things “out there” we desire and things we fear and hate. The ideal is to attain a state of mind in which this delusion falls away and one experiences reality directly. Meditation techniques seek to cultivate “concentration and insight,” an intense focus on the world that leads to a sense of absorption in what we experience; there is no longer any sense of an “I” separate from what is being experienced. The ideal of direct perception and the practice of concentration and insight resonated with certain practices and ideals in Daoism and Confucianism, and they greatly influenced the poets and painters of East Asia. They also have significant appeal to contemporary people seeking a way to become more intimate with nature and transcend the sense of alienation from the natural world.

Another sense of the self is at work in East Asian Buddhism. We are Buddha-nature, although it is covered up by greed, hatred, and delusion. As we come to realize our inherent Buddha-nature, we naturally feel compassion toward those who suffer. And that compassion naturally leads to action in response to suffering. Buddhism, especially Zen, borrowed from the notion of spontaneity (*jiran* and *wuwei*) earlier developed by the Daoist Zhuangzi (ca. 300 B.C.E.). Zhuangzi held that we have an innate disposition to respond to the world in a harmonious way, and this is only short-circuited by intention and reason. To this idea Chinese Buddhism added the concern for suffering and the feeling of compassion.

Such a complex sense of the self can form the basis of an unqualified valorization of the natural world and a context for moral emotions and action. Rainforest activist John Seed has famously said that he is not an altruist attempting to help something out there; he is the rainforest naturally responding to its own destruction. Such an idea is an authentic extrapolation of this East Asian Buddhist perspective. This clearly is not a form of conventional Western ethics, based on moral reasoning about how the individual ought to respond to the world. It is an intuitive and spontaneous ethic of identification with the world. However, an eco-Buddhist taking this approach would need to explain how such an ethic could deal with complex ecological issues in a sufficiently informed and sustained way.

On the level of feelings, the bodhisattva ideal of compassion for all beings has been a hallmark of East Asian Buddhism and is a potentially rich source for ecological ethics. However, compassion can be interpreted in various ways, including some that are not conducive to environmental concern. Compassion could be limited to spiritual suffering and not include physical pain or emotional distress, let alone social injustice

or environmental degradation. It has been argued that if Buddhists focus on such “non-spiritual” suffering (e.g., hunger or homelessness), their compassion will be ineffective. Even those living in comfort are burdened with cravings and aversions, attachments and dissatisfactions. The goal, this argument holds, should be to develop Buddhist wisdom, in which case physical pain will no longer cause aversion, emotional distress will not arise, and one will not be attached to the ever-present ills of the world. To be ecologically and socially relevant, a Buddhist would need to insist that the range of compassion includes pain, deprivation, and fear.

Similarly, the issue of the range of compassion is crucial. Even if one were to feel compassion for conventional suffering, if the scope is limited the significance of compassion will be limited as well. Does compassion refer only to or primarily to humans, or to animals as well? What about an ecosystem such as the rainforest? Does compassion extend to the generations of beings in the future? A “holistic” Buddhist ethics would need to insist – against the actual mainstream tradition of Buddhism – that compassion should be all-encompassing.

Another critical issue in the potential significance of East Asian Buddhism is the role of the social and structural level in one’s analysis and response. Traditionally, Buddhism has focused on the individual, both in terms of the analysis of the problem and the cultivation of the ideal. But in our age it has become evident that the cause of environmental and social problems is not limited to individual psyches; political structures and social forces stimulate and empower cravings, aversions, and delusion, and they cause great suffering for all beings. To be truly meaningful in dealing with environmental problems, the views and values noted above need to be applicable to the social and structural level. The apparently eco-friendly qualities of East Asian Buddhism have not been much of an environmental or social force in part because the religion has tended to either ignore or support harmful social structures. However, East Asian Buddhism’s emphasis on the interpenetration of all things seems to provide fertile ground for an extension of Buddhist critique and compassion to social systems, leading to a holistic and engaged Buddhism.

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See also: Buddhism (various); Japanese Gardens; Japanese Love of Nature; Japanese Religions; Mountains and Rivers Sutra by Japanese Soto Zen Master Dogen Kigen; Shinto; Zen Buddhism.

Buddhism – Engaged

The genesis of the term “engaged Buddhism” can be traced to Vietnam in the 1960s. As the Vietnam War escalated, many of the Buddhist monks and nuns did not know what to do.

“Should we continue to practice in our monasteries,” they asked themselves, “or should we leave the meditation halls in order to help the people who are suffering under the bombs?” One of the monks, Thich Nhat Hanh (b. 1926), tells what happened: “We decided to do both – to go out and help people and to do so in mindfulness. We called it engaged Buddhism” (1991: 91).

Today, engaged Buddhism is practiced by adherents of disparate backgrounds in many parts of the world. There are Asian, Western, and global forms of expression. Rather than shun mundane existence (*samsara*), engaged Buddhists seek to bring the teachings and practices of traditional Buddhism to bear upon the problems of this world. They believe that it is possible to advance along the spiritual path – and to help others advance – in the midst of the conditions and travails of this life. True liberation must include the social and political dimensions of freedom as well as the spiritual. True awakening cannot be for oneself alone.

One of the most important streams of engaged Buddhism is ecological Buddhism, which reinterprets Buddhist concepts and practices in light of the present environmental crisis. Perhaps the greenest of the great world religions, Buddhism affirms interdependence as an essential attribute of reality, a vision that resonates deeply with an ecological worldview. Practices such as mindfulness, compassion, and restraint acquire new meanings in a time of ecological peril. The principal goal, enlightenment, yields an experience of oneness that dissolves the boundary between “self” and “environment.” Although green Buddhism is not yet a coherent movement, it shows considerable promise. As the search for ways to live more lightly on the Earth intensifies, Buddhism may contribute significantly to the shared task of reshaping human–Earth relations.

Some form of engaged Buddhism can be found today in nearly all of the Buddhist and formerly Buddhist countries of Asia. A leading example of a Buddhist-inspired rural development program is Sarvodaya Shramadana in Sri Lanka. Founded in 1958, the program supports education, agriculture, health measures, and local industry in over 10,000 Sri Lankan towns and villages. The spiritual merits of voluntarism and self-help are emphasized: Sarvodaya Shramadana literally means “all awaken through volunteer service.” A.T. Ariyaratne (b. 1931), who founded the organization, continues to serve as its president.

Thailand has produced two internationally recognized leaders of engaged Buddhism. The scholar-monk Buddhadaṃsa (1906–1993) asserted the relevance of time-honored Buddhist doctrines in the modern world, and he opened his forest monastery, Suan Mokh, to all arrivals. Sulak Sivaraksa (b. 1932), a layman, founded the International Network of Engaged Buddhists in 1989. Thai monks have devised a method of forest protection, “ordaining” endangered trees into the monastic community (*sangha*), a practice that has become an important expression of Buddhist environmentalism. Thai women have taken the lead in a movement to rebuild the Buddhist order of nuns and restore full ordination for women. Although it seems paradoxical to call a movement to strengthen monasticism “engaged,” in a patriarchal culture the demand for equal treatment of nuns becomes a form of social activism.

Tibetan Buddhists were thrust involuntarily into the political realm when China occupied Tibet in 1959. In 1960 the Dalai Lama (b. 1935) established a government-in-exile in India. Since then he has become a leader of Buddhists worldwide and an exemplar of engaged Buddhism. The Dalai Lama advocates compassion and universal responsibility as means of social transformation, and he extols peace of mind as the key to world peace. He has also urged the protection of Tibet’s natural environment. In 1989 he was awarded the Nobel Peace Prize in recognition of his principled adherence to nonviolence.

Although Buddhism disappeared from India nearly a thousand years ago, in the twentieth century millions of former “untouchables” embraced Buddhism as a vehicle of religious and political emancipation. Initially led by

B.R. Ambedkar (1891–1956), this movement has had its greatest impact among the urban poor. In Taiwan, the leading engaged Buddhist organization is the Tzu Chi Compassion Foundation, launched in 1966 by the nun Shih Cheng-yen (b. 1937). Mobilizing several million volunteers, Tzu Chi operates a hospital, a medical school, a nursing school, and a university. The group also sponsors medical and social relief efforts in more than twenty countries around the world. In Japan, Buddhist sects founded in the nineteenth and twentieth centuries have generally been more engaged than long-established schools such as Zen. Soka Gakkai and Rissho Koseikai have been active internationally in the areas of education, peace, and the environment.

In the West, aspects of engaged Buddhism have been embraced by people from all walks of life. Most Western Buddhists are lay people with a preference for flexible institutional affiliations, so patterns of participation vary widely. Many contemporary Buddhists regard the family and the workplace as valid arenas of engagement, a notable development in a tradition that originally emphasized monasticism. Poet-activist Gary Snyder (b. 1930) states, “The natural unit of practice is the family” (1980: 136). The Vietnamese monk Thich Nhat Hanh, who now has an international following, asks, “If you cannot serve your wife or husband or child or parent, how are you going to serve society?” (1987: 75)

The most representative engaged Buddhist organization in North America is the Buddhist Peace Fellowship (BPF), founded in 1978 by Zen teacher Robert Aitken (b.

1917) and others. Based in Berkeley, California, BPF serves as a network for Dharma centers, affiliated chapters, and individuals. Contributions from about 4000 members support an office, a modest staff, and *Turning Wheel*, a quarterly journal. In 1995, BPF inaugurated the Buddhist Alliance for Social Engagement (BASE), in which small groups of volunteers endeavor to integrate service, social action, study, and Buddhist practice. BPF members typically favor a non-sectarian, non-proselytizing approach, sometimes called “Buddhism with a small b.” Just as Buddhists often become active in non-Buddhist organizations (such as the Sierra Club), non-Buddhists are welcome to participate in ostensibly Buddhist forms of engagement (such as meditation at a nuclear site).

The stated goals of the Buddhist Peace Fellowship are:

- Provide BPF members and the wider community an opportunity for socially engaged Buddhist practice.
- Alleviate suffering and promote human rights internationally.
- Participate with activist communities in vigils, demonstrations, and other actions.
- Develop resources and guidelines to address issues of misconduct and discrimination within Buddhist communities.
- Promote the development of Buddhist social analysis.
- Network among Buddhists, social justice workers, faith groups, and other allies.

No single issue has consistently dominated the agenda of engaged Buddhism in the West. Western Buddhists have aided communities of Tibetan exiles in Nepal and India, financed mobile medical teams on the Burmese border, and conducted campaigns to free unjustly imprisoned monks in Vietnam. Within their own countries, Americans and Europeans have established hospices for the terminally ill, conducted “street retreats” to deepen understanding of homelessness, and spoken out against the excesses of consumerism. The plight of people in jail has drawn increasing attention in recent years. Activists representing virtually all of the major streams of Buddhism work for prison reform, oppose the death penalty, offer chaplaincy services, and help inmates set up meditation groups. In 1967, a prisoner in Texas was put in solitary confinement for expressing interest in Buddhism. He filed a lawsuit, and ten years later the Supreme Court ruled in his favor, thereby affirming freedom of religion for prison inmates.

Nuclear weapons and nuclear waste have prompted responses ranging from participation in watchdog groups to acts of civil disobedience. Buddhists have demonstrated regularly at the United Nations, the Nevada Nuclear Test Site, and the Concord Naval Weapons Station in California. One of the planks of the Dalai Lama’s peace plan for Tibet (1987) is “the abandonment of China’s use of Tibet for the production of nuclear weapons and dumping of nuclear waste.” Scholar-activist Joanna Macy (b. 1929) developed a vision of nuclear guardianship in which radioactive waste would be monitored with utmost care, generation after generation, rather than buried in ecologically harmful ways. Thich Nhat Hanh has declared, “Nuclear waste is a bell of mindfulness” (in Badiner 1990: 220).

The relation between traditional Buddhism and engaged Buddhism can be framed in various ways. Some participants and observers contend that Buddhism has been engaged throughout its history; they cite, for example, the vital role of temples in Asian villages. Others hold that the contemporary turn toward engagement is indeed a directional shift, yet it remains authentically grounded in Buddhist tradition. A handful of critics, rejecting both of these views, argue that engaged Buddhism is an *inauthentic* departure from traditional Buddhism.

With few exceptions, present-day engaged Buddhists embrace cardinal Buddhist teachings such as the Four Noble Truths, the goal of awakening, and the necessity of actual practice. Insight into no-self (*anatta*) is considered the true foundation for selfless action in the world. The traditional vow to save all beings has acquired new urgency and concreteness as ecological degradation becomes more obvious. Building on this base, several groups have composed additional sets of precepts or intentions. One such document, the Buddhist Peace Fellowship's statement of purpose, can also be read as a declaration of the key tenets of engaged Buddhism:

- Recognize the interdependence of all beings.
- Meet suffering directly and with compassion.
- Appreciate the importance of not clinging to views and outcomes.
- Work with Buddhists from all traditions.
- Connect individual and social transformation.
- Practice nonviolence.
- Use participatory decision-making techniques.
- Protect and extend human rights.
- Support gender and racial equality, and challenge all forms of unjust discrimination.
- Work for economic justice and the end of poverty.
- Work for a sustainable environment.

Kenneth Kraft

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Buddhism – North America

During its 2500-year-old history, Buddhism has evolved across a wide range of physical and cultural geographies. From the Theravada traditions in tropical South and Southeast Asia, to the Mahayana schools in temperate and climatically diverse China and Japan, to the Vajrayana lineages in mountainous Tibet – the Buddhist teachings have been received, modified, and elaborated in many ecological contexts. In the twentieth century, these teachings have been transplanted to North America where they immediately encountered the Western environmental movement and American attitudes toward nature. Across time, Buddhist understandings about human–nature relations have been based on different teachings, texts, and cultural views. In North America the teachings toward nature are still evolving. Yet even in this brief history some trends are apparent.

Buddhist Environmental Philosophy

American Buddhist environmental teachers and writers at the beginning of the twenty-first century have emphasized five primary arenas of practice and philosophy in relation to nature and an environmental view: interdependence, nonharming, mindfulness, nondualistic views, and detachment from self.

The *law of interdependence* or mutual causality promotes an understanding of nature as relational, dynamic, and constantly changing. Each phenomenon in nature is seen as dependent on a multitude of causes and conditions. These causes include not only physical and biological factors, but also historical and cultural factors (i.e., human thought forms and values). The *Avatamsaka* or Flower Ornament Sutra uses a teaching metaphor, the Jeweled Net of Indra, to communicate the infinite complexity of the multicausal universe. This cosmic net contains a multifaceted jewel at each of its nodes, with each jewel reflecting all the others. If any of the jewels become cloudy (toxic or polluted), they reflect the others less clearly. Engaging interdependence in an environmental context includes examining conditioned beliefs and thought patterns regarding the natural world such as objectification of plants and animals, the impacts of materialism, and environmental racism.

Buddhist ethical guidelines are based at the core on *nonharming* or minimizing the suffering of others. The first precept, “not killing,” has been discussed in relation to environmental dilemmas regarding food, land use, pesticides, pollution, and cultural economic invasion. The second precept, “not stealing,” has been applied to global trade

and corporate exploitation of resources. “Not lying” brings up issues in advertising and consumerism. “Not engaging in abusive relations” covers a broad realm of cruelty and disrespect for nonhuman others. Nonharming thus applies to environmental abuse of plants, animals, rivers, rocks, and mountains as well as to human abuse based on race, class, or gender discrimination. This teaching of ahimsa is congruent with Western schools of ecophilosophy which respect the intrinsic value and subjective experience of each being.

Mindfulness practice, a natural support to Buddhist environmentalism, is being taught in a range of ecological contexts. Walking and sitting meditation are used to cultivate a sense of centered presence and alertness. Such mindfulness generates appreciation and respect toward the natural world, with practices related to food and eating, time and place, and personal well-being. Mindfulness students are encouraged to make every effort not to cause suffering to others, including plants and animals.

Buddhist texts emphasize a strong relationship between intention, action, and karmic effects of an action. Most political battles play out as confrontations between apparent enemies: loggers versus tree defenders or housewives versus toxic polluters. From a Buddhist perspective, such dualistic polarizing destroys spiritual equanimity. A *nondualistic* or inclusive perspective, offering kindness to all parties, is seen as more effective, even while defending firm moral boundaries against harmful actions. A Buddhist orientation to nondualism can help to stabilize a volatile situation and establish new grounds for negotiation.

A Buddhist approach to environmental activism tends to be nonheroic or detached (i.e., not motivated primarily by the need for ego identity or satisfaction). One does what is necessary in the situation, not bound by the need to reinforce one’s ideas or to have it turn out a certain way. Small “b” Buddhist environmentalists have been able to act as bridge-builders in hostile or reactive situations by toning down the need for personal recognition. Buddhist teachers emphasize the power of *kalyana mitta*, or spiritual friendship – acting together in mutual support to help others practice the Dharma and take care of this world.

American Buddhist environmental ethics are often seen as virtue ethics, developing consciousness and a sense of responsibility to act compassionately for the benefit of all forms of life. Mahayana schools in North America emphasize the path of the *bodhisattva*, one who vows to serve others until all the world’s suffering is extinguished. Tibetan schools reinforce this vow by encouraging people to treat all sentient beings as possibly having been their mother in a former life. Environmentally oriented Buddhist teachers encourage students to be ecologically accountable for their actions, from eating food to using a car to buying new clothes. Through following the fundamental precepts, environmentally oriented Buddhists can practice moderation and restraint, simplifying needs and desires to reduce suffering for others.

Brief History

In the last few decades, Buddhism in North America has engaged environmental issues drawing on principles of Buddhist philosophy and practice. Inspired by forest monks in Thailand and resource exploitation in Tibet, American Buddhists have taken up environmental campaigns as spiritual practice. Various individuals and centers have initiated actions as well on behalf of animals, wilderness protection, and reducing consumption.

In the 1970s, as the environmental movement grew, a number of Buddhist centers became established in the West. Some confronted ecological issues in their own backyards. Zen Mountain Monastery in New York faced off with the Department of Environmental Conservation over a beaver dam and forestry issues. Green Gulch Zen Center in northern California developed water-use agreements with Golden Gate National Recreation Area and its farming neighbors. At a time when vegetarianism was rare, many new centers refrained from meat eating, often with awareness of the associated environmental problems, and some made efforts to grow their own organic food. Zen student Gary Snyder, among other early voices for Buddhist environmentalism, used his writing to popularize the connections between Buddhist training and ecological activism.

In the 1980s Buddhist leaders explicitly addressed the environmental crisis and incorporated ecological awareness in their teaching. In his 1989 Nobel Peace Prize acceptance speech, His Holiness the Dalai Lama proposed making Tibet an international ecological reserve. Vietnamese peace activist and Zen monk Thich Nhat Han spoke to thousands of Americans about “interbeing” using ecological examples. Zen teachers Robert Aitken in Hawai’i and Daido Looi in New York examined the Buddhist precepts from an environmental perspective.

In North America, the topic of Buddhism and Ecology was picked up by Buddhist publications, conferences, and retreat centers. The Buddhist Peace Fellowship produced a substantial packet and poster for Earth Day 1990. The first popular anthology of American Buddhism and ecology writings, *Dharma Gaia*, was published by Parallax Press that same year. Buddhist magazines such as *Tricycle*, *Shambhala Sun*, *Inquiring Mind*, *Turning Wheel*, and *Mountain Record* devoted whole issues to the question of environmental practice. These were followed a decade later with the comprehensive anthology *Dharma Rain: Sources of Buddhist Environmentalism*.

In 1990 Middlebury College in Vermont hosted a conference on “Spirit and Nature” in which the Dalai Lama stressed his commitment to protection of the environment. At the 1993 Parliament of the World’s Religions in Chicago, Buddhists gathered with

Hindus, Muslims, pagans, Jews, Jains, and Christians from around the world to discuss the role of religion in responding to the environmental crisis. Parallel interest in the academic community generated ten major conferences (and subsequent academic volumes) on religion and ecology at Harvard University; the first, convened in 1996, focused on Buddhism and Ecology.

The practice of Buddhist environmentalism has been explored by socially engaged Buddhist teachers including the Dalai Lama, Sulak Sivaraksa, Thich Nhat Hanh, and American abbots John Daido Looi, Philip Kapleau, and Bernie Glassman. To cultivate motivation for environmental work, activist Joanna Macy developed experiential teaching methods based in meditation techniques and the Buddhist law of co-dependent arising. Working with John Seed, a Buddhist rainforest activist, they created the “Council of All Beings” to engage people’s imagination on behalf of all beings. Thousands of councils have now taken place in the United States, Australia, New Zealand, Germany, Russia, and other parts of the Western world.

Buddhist Environmental Activism

Examples of green Buddhism in North America are uncommon yet inspiring to many and proliferating. More and more American environmentalists have taken up Buddhism and more students of Buddhism have become concerned about the environment. In northern California, a group named the “Ecosattvas” has been protesting the logging of old-growth redwoods. For one event, they created a prayer flag covered with human handprints as a testimony of solidarity with resisters. Some members made a pilgrimage into the Headwaters Forest to bury a Tibetan treasure vase with gifts and prayers on behalf of the redwoods.

Moved by the suffering of animals in research cages and factory farms, Zen students in the San Francisco area formed a Buddhist animal rights group. Drawing on principles of nonharming, they educated Buddhists about the plight of lab monkeys, beef cattle, and endangered parrots. A Berkeley-based study group protested the storage of nuclear waste below ground, creating instead a model based in Buddhist spiritual practice of “nuclear guardianship” for above-ground storage containers. Zen student and artist Mayumi Oda organized Plutonium-Free Future to stop shipments of deadly plutonium to Japan.

Some Buddhist environmental activism has focused on structural analysis and the creation of alternative visions. In 1997 the Soka Gakkai-affiliated group, the Boston Research Center for the 21st Century, held a series of workshops on the people’s Earth Charter and published a booklet of Buddhist views on the Charter’s principles. Members of the Buddhist Peace Fellowship and the International Network of Engaged Buddhists started a “Think Sangha” to undertake systemic analysis of global consumerism. They collaborated on conferences to promote “Alternatives to Consumerism” such as moderation and lifestyle simplification.

Green Gulch Zen Center and Spirit Rock in northern California, and Zen Mountain Monastery in New York, have already demonstrated a serious commitment to the environment through land and water stewardship efforts, vegetarian food practices, and ceremonies which include the natural world. Zen Mountain Center in Southern California has been carrying out resource management practices such as thinning for fire breaks, restoring degraded forest, and limiting human access to some preserve areas. Zen teacher Bernard Glassman has developed environmentally oriented small businesses which employ local street people, sending products to socially responsible companies such as Ben and Jerry's.

A number of Buddhist centers have offered lecture series, classes, and retreats based on environmental themes. Zen Mountain Monastery holds "Mountains and Rivers" retreats featuring canoeing, nature photography, and haiku. Ring of Bone Zendo at Kitkitdizze leads backpacking sessions in the Sierra Nevada mountains. Green Gulch Zen Center co-hosts the "Voice of the Watershed" series with Muir Woods National Monument. Manzanita Village center in southern California teaches mindfulness through deep ecology practices, gardening, and nature observation.

Individual Buddhists as well are taking small steps to align their actions with Buddhist practice. Many are turning to vegetarianism and veganism (refraining from consuming any animal-produced food) as compassionate eating choices for animals and ecosystems. Others are committed to eating only organically grown food to support healthy soil and farming. Some Buddhists have joined support groups for reducing credit card debt and car dependence. Many students find that environmental awareness and personal change flow naturally from a Buddhist practice commitment.

Conclusion

Is there a Buddhist ecospiritual movement in North America? Not in any obvious sense, at least not yet. No organizations have been formed to promote Buddhist environmentalism; no clearly defined environmental agenda has been agreed upon by a group of self-identified American Buddhists. However, environmentally concerned teachers are emerging, and Buddhist students of all lineages are drawn to their writings and ideas. There is a strong conversation developing among Western and Eastern Buddhists, asking both practical and philosophical questions from this emerging perspective. With environmental issues as a mounting global concern, Buddhists of many traditions are creatively adapting their religious heritage to confront these difficult issues.

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Buddhism – Tibetan

Two generalizations characterize Tibetan Buddhist attitudes regarding nature. First is the conviction, common to all forms of Buddhism, that ordinary perceptions and conceptions regarding nature and all other elements of the phenomenal world are not accurate; in fact they are highly misleading and spell doom for those who do not know better. Second is the teaching, characteristic of Vajrayana Buddhism as practiced in Tibet and elsewhere, that to one who is thoroughly trained, the phenomenal world appears as it is – a sacred universe filled with divine beings. In Vajrayana thought, “nature,” as such, cannot be found independent of how it appears to sentient beings who perceive. Thus, one cannot really talk of a Tibetan Buddhist view of nature, but must talk instead of some of the ways in which nature appears, dependent on the relative skill of the meditator.

To many who follow Tibetan Buddhism, whether ordinary people or advanced meditators, nature appears as a splendid display of mountains, sky, and streams, filled with delightful wild animals and flowers. Tibet’s awesome landscapes easily foster such impressions. Many a Tibetan meditator has spent years living in isolated caves, delighting in the solitude and beauty that are said to enhance the difficult meditation practices typical of Tibetan Buddhism. The most beloved records of such experiences are found in the songs of Tibet’s greatest poet, Mila Repa, who was one of the most important figures in the history of Tibetan Buddhism as well. Many Westerners, partly influenced by such Tibetan writings and partly influenced by travelers’ reports and photographs, also imagined traditional Tibetan culture to be especially reverential toward nature.

Such uncomplicated appreciation of nature and its virtues is not, however, the whole story for Tibetan Buddhism. Simply because the phenomenal world appears to be so attractive, peoples’ attitudes toward it are often deluded and dangerous. Though the predominant form of Buddhism in Tibet is Vajrayana Buddhism, which teaches that it is possible to experience the phenomenal world as sacred, more basic Buddhist teachings are considered to be a necessary foundation for that experience. These more basic teachings emphasize that the phenomenal world is a complete and total matrix of interdependence; nothing stands outside that interdependent matrix and everything within it is interconnected. This central Buddhist concept has been taken up with enthusiasm by some environmentalists because it presents a more realistic assessment of humanity’s status in the natural order and of the impact of human actions upon the environment.

In and of itself, interdependence, as understood in Buddhism, is neutral; it is simply a description of how things work. The usual human reaction, however, is to defy the

implications of interdependence. Instead of appreciating the flow of interdependent forces in the cosmos, humans conventionally want to control and direct that flow based on self-centered desires for personal security, pleasure, and permanence. Because of this mistake, this desire which cannot possibly be fulfilled, the phenomenal world becomes the arena for suffering. Much classic Buddhist teaching (the four noble truths) crystallizes around these few simple sentences, which are said to go so much against the grain of usual human hopes and desires that they are extremely difficult fully to comprehend and accept. Regarding a Tibetan Buddhist understanding of nature, the implication is that humans experience a great deal of frustration and unhappiness in their relationships with the world of nature, but such frustrations do not occur because of a problem with how nature works. Much Buddhist literature is filled with discussions of how unsatisfactory human life is conventionally, but those discussions are not meant to express lack of appreciation for nature, for life as it is given to us. They are meant to criticize conventional human attitudes toward nature, which make it impossible to appreciate nature because the phenomenal world does not conform with the usual human desires for pleasure, permanence, and security in any way.

Buddhist philosophical and meditative disciplines are meant to counteract such conceptual and perceptual mistakes about our own place in the scheme of things and our own ability to control how the phenomenal world behaves. On the one hand, conventionally, we wish to be at the center of the interdependent matrix of the phenomenal world, which brings nothing but sorrow and fruitless attempts to escape that phenomenal reality. Because of these Buddhist teachings, some commentators have seen Buddhism as largely “pessimistic,” regarding nature. On the other hand, if we accept interdependence and its implications for our individual projects, the phenomenal world explodes with brilliance and sacredness, which can now be appreciated. Herein lies the passage from experiencing nature as the arena of our suffering to experiencing nature as sacred world. Vajrayana teachings about the possibility of bliss in our present lives are all bound up with being able to effect this subtle transformation. Without the possibility of this transformation, Vajrayana Buddhist meditative and analytical disciplines would be meaningless.

In Vajrayana Buddhist understanding, the phenomenal world is “the palace of the deities” and all its inhabitants are “deities.” Furthermore, they have always been so; only an enormous conceptual mistake fosters a perception of the phenomenal world that results in the pursuit of personal security within that world. To say that the phenomenal world is the palace of the deities, and that its inhabitants, all sentient beings, are deities is not to say that mountains, sky, and streams change into buildings filled with immortal, powerful beings. It is to say that shorn of very common mistaken perceptions and conceptions, the phenomenal world is perfect as it is. Nature can easily be misperceived and misunderstood, but it cannot be improved upon, no matter how much human desires may lead us to think that nature would be better if it afforded us security, permanence, and ease. Furthermore, in its perfection, it is ungraspable

by word or thought and does not need to be declared beautiful, ugly, or anything else. This is what Mila Repa meant when he sang his songs of delight in his mountain caves.

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See also: Bon (Tibet); Buddhism (various); Dalai Lama; Tantra; Tibet and Central Asia.

Burial Practices – Prehistoric

It is difficult to know when humans began to dispose purposefully of their dead, because the chances of archeologists discovering or recognizing the earliest such practices are slim indeed. However, in recent years, what appears to be the earliest known evidence for some kind of funerary ritual has come to light in northern Spain. The Sierra de Atapuerca, near Burgos, comprises a wide variety of early dwelling sites, dating back about a million years. Some 1600 feet inside the Cueva Mayor, an enormous cave, there is an extraordinary site called the Sima de los Huesos (Pit of the Bones). Excavations in the pit since 1990 have recovered hundreds of bones belonging to humans dating to the Middle Pleistocene period, between 200,000 and 300,000 years ago. In fact, this pit contains more human remains from that period than all other sites combined. What is particularly remarkable is that all the bones of the body are present – including small hand and foot bones, while sieving of the sediments even recovers the tiny bones of the inner ear.

This pit has revolutionized knowledge of *Homo heidelbergensis* (archaic *Homo sapiens*), a transitional species between *Homo erectus* and Neanderthals. Although only about 2 percent of the pit's deposits have so far been excavated, almost 2000 bones have been found, which come from at least 33 individuals, and perhaps 50. Males and females are equally represented, and most are adolescents and young adults aged between 13 and 22, with more than 30 percent between 17 and 19; the youngest is about 4 and the oldest 35. Since less than a quarter of these individuals lived beyond their early twenties, they cannot represent a full population, and it is likely the older people were disposed of elsewhere. It appears that over several generations bodies were carried into the cave from an entrance, now lost, near the pit, and tossed into the shaft in a form of mortuary ritual that may point to some embryonic religious belief. The absence of herbivore bones and stone tools indicates that this was not a dwelling site, and the lack of carnivore damage suggests that the bones were not left there by predators.

The subsequent early humans, the Neanderthals, who occupied parts of Eurasia from ca. 200,000 to 25,000 years ago, are generally recognized as having carried out the first true burials – mostly, but not exclusively, found in caves and rock shelters. Debate still rages about whether some Neanderthal burials are not better interpreted in terms of natural processes such as rockfalls, but the vast majority of specialists are sure that the Neanderthals did bury some of their dead. As far as one can tell, they rarely placed objects with the dead, although one famous burial at Shanidar cave, Iraq, is thought to have been accompanied by flowers.

The appearance of anatomically modern humans (*Homo sapiens sapiens*, or Cro-Magnons) – in Africa by 150,000 years ago, and in Eurasia after ca. 35,000 years ago – is eventually marked by an abundance of clearly deliberate burials, often associated with red ochre, and accompanied by grave goods such as implements, ornaments and portable art objects. They occur in caves, rock shelters and the open air, while the newly discovered decorated cave of Cussac, in the Dordogne (France), dating to ca. 25,000 years ago, has human skeletons laid out on its floor.

Naturally, the earliest burials do not necessarily denote any kind of religious belief, or a concept of an afterlife; some may simply have involved the disposal or concealment of the deceased for convenience or to avoid odors or the attentions of nature's scavengers. However, once grave goods appear, it is fairly clear that such beliefs are probably present in some form.

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See also: Death and Afterlife in Jeffers and Abbey; Green Death Movement; Zoroastrianism.

Burning Man

Burning Man is a festival started in 1986 as a small gathering of friends on a San Francisco beach. Before long it became too large and chaotic to escape the attention of city police, necessitating its move to the desert. It began when Bay Area artist Larry Harvey burnt a wooden effigy at the end of a relationship and the “Burning Man” soon became an important rallying point for a small community of artists, musicians and interested onlookers. In 1990 Burning Man moved to the Black Rock Desert about 100 miles north of Reno, Nevada, near the tiny town of Gerlach. Black Rock Country, a small portion of the Great Basin, is surrounded by the Granite, Calico, Black Rock, and Selenite mountain ranges. Every year the festival attracted more participants, and as this happened, the organizers began to describe their vision for this event and established a few rules. While many observers understand Burning Man to be an art festival and an experiment with alternative forms of community, it is also a religious event for many participants and includes religious icons, altars, temples and shrines.

Burning Man is conducive to powerful religious experiences because it is imagined as a blank canvas, a frontier of possibilities and unrealized potential. On

Burning Man’s official website, Larry Harvey instructs festival-goers to “Imagine the land and the looming lakebed of the playa as a vast blank screen, a limitless ground of being.” And *Piss Clear*, one of Black Rock City’s newspapers, reminds festival-goers: “all that lays before us is the wide open playa floor. It is our palette and canvas, to create the world we can’t enjoy at home.” The land is thought of as something passive that must be shaped and given meaning by human hands, and at the same time as a living force to struggle against as well as to protect. In “Burning Man and the Environment,” an essay that is featured on the Burning Man website, Harvey explains the relationship between Black Rock Desert and the festival: “We have discovered a new land; it is a place, a home, a living Earth we can possess. And just as surely as our sweat will saturate this soil, it will possess us.”

By the year 2002 Burning Man had become a weeklong gathering of nearly 30,000 people that involved months of advance preparation and weeks of clean-up afterwards, most of the work done by volunteer crews. Every year a “Public Works” crew creates “streets” that mark out the half-moon-shaped city – “Black Rock City” – that comes to life as festival-goers arrive with camping gear, art cars, pavilions, art installations, and a range of temporary desert structures. The city borders the “playa” (a pre-historic lakebed), as a real city might develop along a lakefront. Out on the playa are large sculptures, including the Man, a forty-foot tall abstract wooden figure, and art installations, but no campers. Sculptures, shrines, altars, and installations are focal points

for ritual performances, usually scheduled at night. In 2001 the Temple of Tears was one of the most impressive examples of religious art at Burning Man and was constructed for rites of mourning and then burnt at the end of the festival. Concerts, performance art and other events are scheduled every day and night of the festival, but most festival-goers spend their hours wandering around the temporary city looking at art and costumed people, protecting themselves from the heat and sun, and visiting “theme camps,” which are a blend of campsite and interactive art installation. Most, but by no means all, participants were white, middle-class, “twentysomething ravers, fiftysomething hippies and thirtysomething computer whizzes,” as one participant described the community on the Burning Man website’s official “e-playa” bulletin board.

Burning Man organizers promote the notion that their community is impacted by and impacts the natural world. Nature is both a force to protect oneself against and an inspiration for creative activity. Much Burning Man literature details survival strategies for the desert environment where sand and rainstorms, scorching sun and intense winds are common occurrences. Storms wreak havoc on campsites and art work at the same time that they bring together participants in the common project of keeping their tents up and sheltering each other from the elements.

Many participants stress the inspiration they experienced being away from their urban homes and immersed in a world so obviously shaped by natural forces. The relationship of the Burning Man community to the desert environment has also been highly politicized, as some observers believe the impact of thousands of campers is detrimental to the desert. Consequently, organizers urge participants in every festival communication to “Leave No Trace.” Recycling camps, an alternative-energy camping area and clean-up crews encourage environmental awareness. Participants say they leave the desert feeling rejuvenated and transformed. But they also leave their marks on the landscape where clean-up crews spend weeks scouring every inch of the event site for debris and burn scars.

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See also: Hippies; Pagan Festivals; Rainbow Family; Raves.

Burroughs, John (1837–1921)

John Burroughs was an American author, naturalist and farmer of the late nineteenth and early twentieth centuries. He is best remembered for his essays based on rambles in and around his home in West Park, New York, including such works as *Wake Robin* (1871), *Locusts and Wild Honey* (1879) and *Signs and Seasons* (1886). Burroughs wrote one of the first biographies of Walt Whitman and maintained a close friendship with him throughout his life. As Burroughs' popularity grew so did the attention of various luminaries of his day, which included friendships with Ralph Waldo Emerson, John Muir, Theodore Roosevelt and Henry Ford.

In literary terms, Burroughs was a lesser essayist than both Emerson and Thoreau. On the other hand, Burroughs took the Transcendentalists' writings and worked them through the sieve of his own pastoral experience, memories of his farming childhood, and reflections on his adult experiences on his own farmland. What emerged was writing that was second-hand in terms of intellectual influence but first-hand in terms of capturing the spiritual, aesthetic and practical dimensions of farming life.

In his youth Burroughs rebelled against farming, which he felt interfered with his desire to cultivate a literary life.

Once this writing life was safely launched, however, Burroughs felt increasingly restless in his Washington,

D.C. literary world. He found himself gripped with nostalgia for rural living, as well as captivated by a growing sense that to write about nature accurately he needed not only to go on extended rambles, but also to work on and in the soil itself. In 1872, Burroughs left his Washington home. Experiencing an almost mystical premonition of the appropriateness of a certain site on the Hudson, he purchased land and began to establish himself as a small-scale commercial farmer, while continuing to write and publish pastoral essays. It was this new Burroughs, not simply the biographer of Whitman, but the genuine "man of the soil" that began to attract a popular following.

Burroughs' conversion to a life lived close to nature led to an explosion of interest in the writing and person of Burroughs, from whom an increasingly urbanized middleclass culture could vicariously experience the spiritual refreshment of rural living. By 1905, Burroughs had made himself known (along with Theodore Roosevelt) as the voice of scientific realism in the "nature faker" controversy (involving the tendency of nature writers to wildly anthropomorphize animal characters in their writings). Burroughs' Darwinian stance enabled him to maintain credibility at a time when the first wave of "nature writing" was finding an audience, as well as occasionally losing its way.

But Burroughs was most celebrated as a man who practiced what he preached, who not only wrote, but farmed, camped out, walked for miles and lived a kind of early “back to the land” life in which Thoreau (according to Burroughs fans) had only dabbled. In the years after 1896, when Burroughs retreated to a rustic cabin known as “Slabsides” several miles from his larger home on the Hudson, his reputation grew as a “man of simplicity,” representing to the industrial world (and especially New Yorkers) the moral virtues of living close to the land. By the first decade of the twentieth century, John Burroughs Societies were springing up all over the country and Burroughs had to contend with thousands of visitors making the pilgrimage to Slabsides to see this prophet of simplicity in the flesh. In his best-known commentary on “the simple life” Burroughs wrote:

When I depart [from the simple life] evil results follow. I love a small house, plain clothes, simple living

. . . How free one feels, how good the elements taste, how close one gets to them, how they fit one’s body and one’s soul! To see the fire that warms you, or better yet, to cut the wood that feeds the fire that warms you; to see the spring where the water bubbles up that slakes your thirst, and to dip your pail in to it; to see the beams that are the stay of your four walls, and the timbers that uphold the roof that shelters you; to be in direct and personal contact with the sources of your material life . . . these are some of the rewards of the simple life (Burroughs 1908: 261).

Burroughs’ love of nature and his quest for simplicity were at the heart of his spiritual sense of self. Unafraid to be controversial, Burroughs’ wrote of his love of nature as a religious affection and once claimed, “I suppose I am an out-and-out pantheist. But I remember that Emerson says pantheism magnifies rather than belittles God” (in Renahan 1992: 298–9). But Burroughs’ religious orientation is a complex one: neither Christian, nor atheist; neither traditionally religious nor scientific in a strictly secular sense. Like other liberal-minded intellectuals of the mid-nineteenth century, Burroughs found himself negotiating a Christian heritage with an emerging Darwinian view of the world. For Burroughs, this negotiation took the particular form of developing a kind of religion of the natural world, one which took nature to be sacred. Sometimes Burroughs defined God *as* nature, while on other occasions he suggested that there is an intelligent force “behind” or “in back of” the natural world, which gives it meaning beyond that of the mere laws of mechanism.

Burroughs’ grew up in a religious household. His father was a fervent Baptist, steeped in the Reformed tradition and the doctrines of predestination. The young Burroughs, however, could not follow suit. While he attended a Methodist church in his youth, his attempt to nurture his own “religious feeling” through seeking salvation were foiled by his own rationalism. Ever the scientist, Burroughs could not affirm a divinity that he could not see, nor a salvation that he had not actually experienced. At the same time, however, Burroughs responded to the world with spiritual intensity. Reflecting in his journals in 1884 (shortly after his father’s death), he drew parallels between his father’s religiosity and his own nature-oriented spirituality. “I reckon it

was the same leaven working in us both,” he recalled. “Father experienced religion, I experienced Nature” (Burroughs 1928/1967: 106). Burroughs’ creative resolution of the tension between his father’s Baptist convictions and his own love of nature was to develop a view of nature that was Darwinian in its scientific realism and yet rich in sacramental and redemptive potential.

Burroughs’ vision of nature included his conviction that his readers should understand God as “a nature God in whom we really live and move and have our being, with whom our relation is as intimate and constant as that of the babe in its mother’s womb [and that this] is the God that science and reason reveal to us” (Burroughs 1920/ 1987: 33).

Burroughs’ vision of nature, of course, goes well beyond that of contemporary science, for in it, Burroughs articulates a kind of “theology of the soil,” which contemporary nature writers and back-to-the-landers often share. Such a working theology may reject traditional Judaism and Christianity, yet it affirms a spiritual continuity of life and indeed a vision of a world to come or everlasting life that science itself does not offer. As Burroughs’ put it, at the time of death, “My elements and my forces go back into the original sources out of which they came and these sources are perennial in this vast, wonderful, divine cosmos” (Burroughs 1920/1987: 172). Ultimately, Burroughs believed, nature itself could provide the redemptive function that so many sought in Christ, but to experience this redemption, a nature seeker needed to overcome the sway of traditional religion and the accompanying fear of the natural world:

This vital Nature out of which we came . . . and to which again we all in due time return, why should we fear or distrust it? . . . It looked after us before we were born; it will look after us when we are dead. Every particle of us will be taken care of; the force of every heart-beat is conserved somewhere, somehow. The psychic force or principle of which I am a manifestation will still go on. There is no stoppage and no waste, forever and ever (Burroughs 1901: 170).

Burroughs’ theology of the soil may seem radical when we consider his nineteenth-century context. His writing sounds more like that of today’s Wendell Berry, or of a modern, post-Christian seeker of life lived close to nature as an alternative to traditional religion. Yet Burroughs’ writing was far more popular in his own time and has enjoyed only a modest renaissance. Of the many things that we learn from Burroughs is that the delicate negotiation of science and religion, of nature and the sacred, of nature writing and of daily living in contact with the land has a long, creative history in American culture.

Rebecca Kneale Gould with Gary Suttle

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Butala, Sharon (1940–)

Saskatchewan native Sharon Butala (nee Le Blanc) has made her home in the Great Plains grasslands near the Montana border since the mid-1970s. Early in the 1990s, she began to speak publicly about a spiritual “apprenticeship in nature” that ultimately transformed her views, her writing, and her life on the prairies.

Although she invites comparison with Annie Dillard and Gretel Ehrlich, Sharon Butala is not primarily a nature writer. When she first turned her hand to writing in midlife, she concentrated her literary energies in novels and short stories about rural women and the physical and psychic landscapes they inhabit. Her own story finally emerges in *Perfection of the Morning* and *Wild Stone Heart*, land memoirs that weave meditations on spirituality, creativity and natural history with frank assessments of western Canada’s political and ecological divides. Generally, autobiography favors historical fact over “the truth of the imagination.” However, Butala’s ultimate allegiance, she confesses, is “to the latter.” That allegiance means she freely critiques standard cultural narratives, using dreams, visions and supernatural occurrences as interpretive tools. Butala’s memoirs, especially, are most compelling when she is attending to those places and moments in time where her inner and outer worlds converge.

For Butala, our rich interior lives are shaped by deep relationships with nature, and this intimacy yields profound changes in our psychic, spiritual and physical rhythms. Yet the authority to write out of her own remarkable experience has been hard won. After her second marriage, to rancher Peter Butala in 1976, and the move to his family’s isolated homestead in southwest Saskatchewan, she began the painful loss of identity as an educated urbanite. Poised between the demanding world of farming and ranching and a rich interior world, she turned to the landscape for solace and instruction. After a long struggle with depression, she emerged confirmed in her vocation as a writer: “I discovered that . . . writing . . . acts as the instrument of integration between myself and

. . . my home in the landscape” (1994: xvi). She likens this struggle to spiritual travail, and the fruits of this travail have nourished her considerably. Raised Roman Catholic, her religious orientation now includes an appreciation for native spirituality, Celtic mythology, Jungian psychology, and a firm grounding in intuitive, place-based knowing.

This award-winning author, former educational psychologist, teacher, mother, divorcee, visual artist, and transplanted rancher’s wife is now most at home in the wild prairie grasslands where sacred history, myth and imagination merge in the search for

truth. This quest for truth has propelled Butala far beyond formal avenues of learning. Inspired by aboriginal peoples who roamed these same fields for generations, Butala has become “an apprentice in the fields,” relying on the land as her guide. Decades of walking contemplation have sharpened her powers of observation and deepened her commitment to exploring truths of the past as well as the present. That commitment may be why Sharon Butala has become a leading voice in the call to balance conventional forms of knowledge with the wisdom and insight of an authentic spiritual life.

Susan L. Scott

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See also: Canadian Nature Writing.

C

California Institute of Integral Studies

The California Institute of Integral Studies (CIIS), located in San Francisco, is a graduate school engaged in scholarship that explores human consciousness, spirituality, nature, and the cosmos. Founded in 1968 (originally as the California Institute of Asian Studies) by the Indian-born educator, scholar, and philosopher Haridas Chaudhuri and his wife, Bina, and accredited since 1981, the School offers doctoral and master's degrees in psychology, philosophy, religion, anthropology, and education, all of which stress holistic, activist-oriented learning focused on questions regarding humankind's relationship to nature and the larger universe.

The work of many of the Institute's faculty focuses on consciousness studies and social transformation. Several faculty members have been highly influential in the "greening" of religious studies and the New Age movement, and their work has fueled activism on the political, social, and environmental fronts for the past three decades.

Among the Institute's best-known instructors are: author Charlene Spretnak, a founding figure in the ecofeminist, women's spirituality, and Green politics movements; scientist Brian Swimme, who has written and spoken widely on the intersection of science and spirituality; Joanna Macy, a scholar of Buddhist philosophy, systems sciences, and ecological and social activism; Susan Griffin, an award-winning poet and author of books on ecofeminism and the relationship between spiritual and social conscience; and psychologist Ralph Metzner, a leader in the field of ecopsychology, ecological and indigenous worldviews, and sacred plant medicine.

A number of the Institute's courses and specialized concentrations focus specifically on the intersection between ecology and religion, exploring questions such as: the problematic split between humans and nature, body and mind, and self and world in Western thought; the interrelatedness among the denial of the sacred feminine, the disempowerment of women, and the violation of nature under patriarchy; the relationship between the domination of nature and the historical dominance of the North over the South in geopolitical relations; and how physical, psychological, and spiritual well-being are related to the health of ecosystems and bioregions.

The School's pedagogical philosophy emphasizes post-mechanistic, expansive new understandings of the evolution of the universe, the Earth as a living organism, and the interconnectedness of all life. The notion of "nature" is broadened to include the human mind and body, the Earth and its biosphere, and the larger planetary, stellar, and galactic realms. The contributions of indigenous wisdom, deep ecology, ecofeminism,

and women-centered spirituality to this emerging ecological, post-modern paradigm are given particular weight. As a part of their scholarly pursuit, students and faculty experiment with a variety of ways of knowing and inquiry methodologies that incorporate but go beyond rational empiricism to include heuristic and phenomenological approaches, and transpersonal methods involving such activities as dreamwork, prayer, intuition, attention to synchronicity, active visioning, and the use of altered states induced by various means, including sacred, plantbased medicines.

On the practical level, a number of faculty, such as anthropologist Angana Chatterji and environmental studies scholar Mutombe Mpanya, maintain active research agendas with numerous international environmental and development agencies around the world. Other faculty, such as religion historian David Ulansey, are spearheading organizations that are exploring innovative ways of creating an ecologically sustainable future. The work of these and other faculty provides opportunities, leads, and inspiration to students who wish to apply their own ecologically based scholarship to real-world settings. Courses emphasizing community-based social action and service learning similarly encourage activism.

Marguerite Rigoglioso

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See also: Berry, Thomas; Buddhism – Engaged; Ecopsychology; Entheogens; Epic of Evolution; Macy, Joanna; Naropa University; New Age; Swimme, Brian; Radical Environmentalism; Transpersonal Psychology; Wilderness Rites of Passage.

Callenbach, Ernest (1929–)

Ernest Callenbach is best known for authoring *Ecotopia*. Born in 1929 in Williamsport, Pennsylvania, he received bachelor and masters degrees at the University of Chicago. His first book, *Our Modern Art: The Movies*, was published in 1955, and he served as the editor of *Film Quarterly* from 1958 to 1991. Inspired by the ecology and counterculture movements of the sixties, he wrote his first environmental book, *Living Cheaply with Style*, in 1971. He founded Banyan Tree Books in 1975 in order to publish *Ecotopia*, after 25 publishers had rejected it. He is married to Christine Leefeldt, with whom he has co-authored two books. Callenbach was a Scholar in Residence at the Elmwood Institute, and is a frequent speaker or consultant on environmental issues.

Replacing a wasteful, ever-growing, overly exploitative philosophy and economy with a human-scale, wholesystems, sustainable model is the overriding theme of Callenbach's work. This is not limited to technology or economics, but extends to politics, business, publishing and communication, community, individual lifestyles, and interpersonal relations. He has written several practical guides to various aspects of Ecotopian living. These include *Living Cheaply with Style* (1972, revised edition 2000), *The Ecotopian Encyclopedia* (1980), *EcoManagement: The Elmwood Guide to Ecological Auditing and Sustainable Business* (1993), *Bring Back the Buffalo: A Sustainable Future for America's Great Plains* (1996), and *Ecology: A Pocket Guide* (1998).

Jim Dwyer

See also: Bioregionalism; Bioregionalism and the North American Bioregional Congress; Ecotopia; Ecotopia – The European Experience; Ecotopian Reflections; New Age.

Callicott, J. Baird (1941–)

Born in Memphis, Tennessee in 1941, John Baird Callicott is one of the world's foremost environmental philosophers. Acknowledged both as a creative and rigorous scholar and as an eloquent stylist, he is also a provocative and sometimes controversial thinker. Callicott is perhaps best known for his work on the philosophical underpinnings of the Land Ethic of Aldo Leopold, the nature of intrinsic value, and the debate over the concept of wilderness, among other more purely philosophical topics. However, Callicott has also contributed significantly to the literature and discussion surrounding the connections between the world's various religious and cultural traditions and their environmental attitudes, ethics, and actions.

In the early 1980s Callicott was already exploring the connections between world religions and the newly emerging sub-discipline of philosophy known as environmental ethics. For Callicott, drawing upon the planet's religious insights offered a means by which to begin to remedy the planet's environmental woes. As Callicott himself put it,

Environmental concerns cross not only political boundaries, they also cross cultural boundaries. Hence, we need to articulate ecologically correct environmental ethics in the grammars of local cultures if conservation values and ethics are to be everywhere intelligible and agreeable (1999: 169).

Although Callicott views himself “as a quick-study, armchair scholar, mucking about with this sacred text and that, trying to conjure out of each an environmental ethic” (1999: 170), in many ways, his approach to unpacking the “grammars of local cultures” has come to typify much of the discussion surrounding the connections between religion and nature. The core of Callicott's contribution is a discussion of the links between the worldviews of various traditions and their environmental philosophy and ethics. This focus is demonstrated most completely in his *Earth's Insights*, a book Callicott fully expected to “incense” religious studies scholars “more expert and internally situated than I . . . to do a better job” (1999: 170). In general, Callicott gives us a model with which to begin to understand ethics and the connections between someone's or some group's worldview, values, ethics, and eventually their actions. Our various senses of the nature of reality and our place in it – or, our worldviews – inform our sense of value and hence our manifold ethical commitments. According to Callicott,

In sum, ethics are embedded in larger conceptual complexes – comprehensive worldviews – that more largely limit and inspire human behavior. And although idealistic, ethics exert a palpable influence on behavior. They provide models to emulate, goals to strive for, norms by which to evaluate actual behavior (1994: 5).

Hence, the various environmental ethics of individuals and groups is revealed through a careful examination of their metaphysical presuppositions.

Callicott operates under the conceptual exemplar which suggests that the inclusivity of a group's social commitments bespeaks the depth and breadth of their ethical commitments. Since the sense of social inclusion is correlative with the sense of ethical inclusion and commitment (*ala* the moral theory of Charles Darwin, David Hume, and Adam Smith), a group's environmental ethic is revealed not by focusing on the actions that they do or do not engage in, but by concentrating instead on how they construct their communities. Callicott's approach, then, moves us away from an unfruitful discussion and assessment focusing on the actions of various peoples and toward one centering on an unpacking and articulation of their worldview as a measure of their environmental commitment.

The application of this basic model is perhaps seen most clearly in the work Callcott has done in American Indian and Asian traditions of thought. While the dominant Western European worldview "has encouraged human alienation from the nature environment and an exploitative practical relationship with it," according to Callicott, "the world view typical of American Indian peoples has included and supported an environmental ethic" (1989: 177). In short,

The implicit overall metaphysic of American Indian cultures locates human beings in a larger *social*, as well as physical, environment. People belong not only to a human community, but to a community of all nature as well. Existence in this larger society, just as existence in a family and tribal context, places people in an environment in which reciprocal responsibilities and mutual obligations are taken for granted and assumed without question or reflection (1989: 189–90).

According to Callicott, disparate Asian religious traditions – from Daoism to Hinduism to Buddhism – also harbor and manifest environmental ethics: "Eastern traditions of thought represent nature, and the relationship of people to nature, in ways that cognitively resonate with contemporary ecological ideas and environmental ideals" (Callicott and Ames 1989: 279).

But how, then, do we explain the appearance of environmentally negligent behavior in many parts of the world where supposedly environmentally inclusive and ecologically resonating traditions dominate? Again, Callicott applies the basic model of connecting ethics with worldview to answer. To the extent that these traditions have been influenced or infiltrated by the Western worldview – whether it be via the infusion of Western technologies or ideologies – they manifest Western patterns of environmental indifference. The "massive and aggressive disruption of their belief systems" allowed for, even promoted, the acceptance of European technologies by American Indians. And, as Callicott argues, "to adopt a technology is, insidiously, to adopt the worldview in which the technology is embedded" (1989: 205).

The appearance of environmentally malignant activity in the Eastern world is *not*, according to Callicott, an indication that certain Asian traditions lack a social continuity with the nonhuman world or conceptual continuity with a basic ecological

framework; nor is it proof that there exists only a tenuous connection between worldview and ethic. Rather, for Callicott, it is an indication of the alteration of the Eastern worldview by Western thought. As Callicott (and Roger Ames) assert,

Technology is not culture-neutral any more than it is value-neutral. To adopt a technology is to adopt, like it or not, the matrix of presuppositions in which the technology is embedded . . . Asian environmental ills . . . are either directly caused by originally Western technology (e.g., heavy metals pollution) or aggravated by it (e.g., soil erosion) . . . contemporary environmental misdeeds perpetrated by Asian peoples today can in large measure be attributed to the *intellectual* colonization of the East by the West (Callicott and Ames 1989: 280).

Moreover, perhaps more deeply and universally, if there does exist a distinction between ethics and actions, between ideas/ideals and descriptions of behavior, then the ideas/ideals may serve not to *determine* behavior but to either accelerate or dampen the innate human tendency to exploit and transform nature. And, according to Callicott, there does exist in the East other, less naturefriendly worldviews such as anthropocentric Confucianism, militarism, and bureaucratism which vie for the ethical soul of the populace.

Finally, perhaps Callicott's most intriguing, and controversial, project within the realm of discussions about religion and nature is his search for coherence, uniformity, and monism in environmental ethics across the globe – both geographically and culturally. Callicott attempts to employ the land ethic of Aldo Leopold as the exemplar of a good environmental ethic. He often compares and contrasts the world's sundry religious and cultural traditions with the land ethic in an effort to generate what he refers to as a "grand narrative," a reconstituted and scientifically informed postmodern environmental ethic to help guide our environmental decision making and policy around the globe:

To construct a genuinely postmodern environmental ethic – an ethic that respects diversity and the wonderful variety of past human culture – we must try to bring the intellectual elements of the earth's many indigenous cultural traditions into a complementary and concordant relationship with those of postmodern international science (1994: 210).

This attempt, however, has met with resistance from various quarters. For example, Lee Hester, et al. refer to Callicott's approach as an "intellectual *coup d' état*," not properly respectful of the world's various cultural and religious traditions (2000: 274).

It is Callicott's hope, and his life's work, to attempt to forge a unified ethical vision; a standard of ethical behavior that will not only motivate a proper respect for nature, but that will at the same time also respect and tap into both the diversity and the uniformity of the Earth's various religious and cultural traditions.

Michael P. Nelson

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See also: American Indians as "First Ecologists"; Conservation Biology; Darwin, Charles; Environmental Ethics; Ethics & Sustainability Dialogue Group; Leopold, Aldo; Natural History as Natural Religion; Restoration Ecology and Ritual; Wilderness Religion.

Campbell, Joseph (1904–1987)

During the second half of the twentieth century, Joseph Campbell was a major influence upon the New Age consciousness which focused upon spirituality and often led to ecological activism. He was a valuable resource to those of a primarily mystical bent, positing a vast spiritual continuity across the eons and promoting a transhumanity such as has been imagined in many works of speculative fiction and progressive ecology.

Precisely when anthropology and religious studies moved away from universalizing concepts, Campbell was coming into prominence (along with, say, historian of religion Mircea Eliade) as a writer who trafficked less in the specific, ordinary, banal details of the current day, than in the non-ordinary and transcendental spirituality of perennial philosophy. He found continuity rather than differentiation, and commonality (universalism) rather than difference among world populations, and so set forth an ideal of a common world culture that was highly attractive to many. (*The Power of Myth* video series, produced in the United States by Bill Moyers, and released just after Campbell died, became one of American public television's most frequently repeated offerings.)

With respect to nature, Campbell was adamant about the direct influences of the physiological aspects of human existence, understanding rituals such as initiation to have life-shaping influences upon human development, the intimate touch of the baby at the mother's breast to influence just how the developing child might be responsive to the idea of a female creator figure or supreme goddess. Or how the image of the "cosmological human body" – my term (Doty 2000: 319–22) for the articulation of segments of creation from an aboriginal deity's bodily parts – might guide a culture in articulating its hierarchy of societal and natural roles. And of course the distinction between hunter-gatherer versus agriculturalist societies structured his earliest works (the four-volume *Masks of God*) as well as some of his latest (the *Historical Atlas*, volume 1 of which is entitled *The Way of the Animal Powers*, versus volume 2, *The Way of the Seeded Earth*). Today ethnographers tend to emphasize the overlapping of the two types of society.

"The natural" represented something strongly imprinted lastingly upon most cultures: it tended to merge with Campbell's own personal Republican conservatism, of the type in which a sort of social-Darwinian developmental model gets allied with capitalism. As opposed to the independent creation of cultural patterns within various separated societies, for instance, Campbell was enchanted with what anthropologists call "diffusion of styles." (See, for example, Campbell's *Historical Atlas*, where he capitalized upon studies tracking the influence of South Asian ceramics upon west-coastal South American civilizations.)

But perhaps the most lasting influence of Campbell's works is to be found in his delight in the new contours of possible future spiritual life demonstrated by outer-space explorations: he repeatedly treated "Earthrise" – the experience of seeing Earth from outer space – as the most important instance he'd ever known of, regarding all the cultures of the Earth as somehow integral to each other:

We are the children of this beautiful planet that we have lately seen photographed from the moon. We were not delivered into it by some god, but have come forth from it. We are its eyes and mind, its seeing, and its thinking (Campbell 1972: 266, and see "Earthrise" in Campbell 2001).

With the new view of the planet comes a hint of what's to come in religion (the "New Mythology") as well: "Our mythology now . . . is to be of infinite space and its light, which is without as well as within" (Campbell 1972: 266), and it "is to be of the whole human race" (Campbell 1986: 18). The need for ongoing care of the planet, the relativizing of human importance within such a framework, expressed by the late Campbell in *Myths to Live By*, became part of the New Age bible. Perhaps few other modernists (although of course Nietzsche, perhaps Kafka and Joyce) realized how many sea-changes had decimated traditional Western models of domination and technologization of nature, although Daniel C. Noel (*Approaching Earth*) did so in his generative reflections.

Campbell also anticipated the threat to traditional religious cosmology that "Earthrise" represented, and the subsequently reactive nationalism and xenophobia that developed toward the end of the twentieth century. Rather than looking for divine intervention from the stars, Campbell suggested, "We should see that the Earth and heavens [are] no longer divided but that the Earth is in the heavens . . . We can no longer look for a spiritual order outside our own existence" (Campbell 2001: 106–7). Indeed, "The Kingdom [of God] is here; it does not come through expectation" (107). In this way, Campbell contributed significantly to the emergence of this-worldly nature religion during the last decades of the twentieth century.

William G. Doty

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- See also:* Astronauts; Ecopsychology; Eliade, Mircea; Huxley, Aldous; Jung, Carl Gustav; New Age; Perennial Philosophy; Space Exploration; Transpersonal Psychology.

Canada

In Canada, the relationship between religion and nature has been troubled and uneasy. Lengthy, difficult winters in a sparsely populated land dominated by an immense wilderness of granite rock have meant a country more promising for resources such as furs, minerals, forestry, or water than for the development of agriculture. The assessments of the religious possibilities of the natural – to say nothing of what might be termed a full-blown “religion” of nature – have been fraught with dualities and contradictions. The natural world has been regarded, from the general viewpoint of European immigrants at least, as more hostile than benevolent, and the prevailing Christian valuations, particularly if one considers the foundational myths as developed through Cartesian egocentricity and technological culture, have been typically negative or doubtful.

Various estimates still place Christianity as the religion of 80–90 percent of the people of Canada, though that proportion is dropping with the increase of those professing “no religion” and with the growth of other religions, especially through immigration. The effects of the combined factors of secularization and religious pluralism (especially with the influence of traditions having Asian roots) will doubtless alter what has been the customary Christian view of nature in Canada. And, of course, that Christian view will itself undergo alteration either internally or through adjustments to new cultural factors. But it was probably the general historic stance of Western monotheism toward nature that Northrop Frye had in mind when he declared: “The Bible is emphatic that nothing numinous exists in nature, that there may be devils there but no gods . . .” (1991: 26). From this negative perspective, the natural world stands in opposition to, rather than facilitates, the established religious outlook, especially the ordered rationalities of the European Christianity imported into Canada. Christianity has generally tended to look to history, not nature, as the principal domain of revelation.

The realm of nature, if not precisely regarded as the abode of the demonic, is inhabited by powers frequently suspected of being antagonistic, chaotic, or indifferent. Canada’s natural environment has remained vast and forbidding, capricious and unpredictable, standing in opposition to humanity’s projects and aspirations, dwarfing and defeating the efforts of puny human beings to tame, domesticate, or impose their marks. Far from being an Edenic garden arranged for the habitation and enjoyment of human beings, the Canadian wilderness has been represented as “the land God gave Cain.” Even when Canadians have permitted themselves to regard the natural world as living rather than dead, more vitalistic than mechanistic, then the Canadian landscape

has often been conceived more as the realm of an “Ice Goddess,” rather than that of an Earth Mother.

Of course, the effect of European Christianity on Canadian views of nature has by no means been uniform throughout all denominations, across all regions of the country, nor even through all of the successive eras and stages of settlement. In addition, even many Christians have found their religion’s authorized stance toward the created order of nature to be something that they could not fully embrace. Here, as in so many other areas, a church’s stated position is not the final or sole arbiter of people’s outlooks and attitudes. Though the Bible as record of the mighty acts of God might be more reliable as a source of divine disclosure than the book of nature, nonetheless, romantic or even deistic views of a revelatory natural world have also had their place.

Among all of the possible religious influences shaping the Canadian view of nature, the greatest alternative to Western monotheism comes from the religions of First Nations peoples. Theirs is an outlook that sees the entire world filled with “persons,” some of them human beings and some other-than-human. The Aboriginal worldview, apprehending spiritual presences throughout the interpenetrating worlds of humans, of animals, and even extending to what others refer to as “inanimate” nature, tends to see the sacred as a living presence throughout the whole of reality. Indeed, “nature” as an isolable phenomenon capable of being analyzed (or even “appreciated”) from without is contrary to the Aboriginal modes of being in the world. John Badertscher rightly points out that First Nations peoples neither romanticize nor worship nor love nature, attitudes that make of nature a construct and requiring a distancing from it. Such views are based on the modern objectification of the nonhuman realm, an alienation then overcome through personification and reverence. Accordingly, contemporary pan-Indian spirituality is praised by environmentalists and feminists and neopagans alike for its high regard for the Earth and for giving a religious basis to a more harmonious way of living.

This “indigenous” religious outlook, says Northrop Frye, presents itself as an alternative to the “imported” religion of the Europeans. Frye claims that the possibility of understanding nature as “home” rather than merely as “territory” sets up other creative options. For example, the settler might develop a sense of belonging here rather than emerging as a potential colonizer or conqueror. Even more, if there is a fit between humanity and the rest of creation, then the natural environment can become something other than a setting for exploits, a storehouse of resources to be developed, or an emptiness to be filled with the objects of human manufacture and industry. Nature, that is to say, may have the potential to nurture and sustain humans. For if nature itself is conceived of as sacred then humanity need not look beyond the Earth for salvation or for hope.

Author Margaret Atwood, in this instance functioning as critic rather than novelist or poet, has proposed an influential summation of the typical Canadian attitude toward the natural, one that is implicitly religious because of the seldom articulated cultural ideologies originating and sustaining it. A generation ago Atwood published

her controversial examination of Canadian culture entitled *Survival*. What she was arguing there, in a manner both heuristic and polemical, was that “survival” – which Atwood reduced to the need just to endure and remain alive – is the central motif of Canadian culture. Furthermore, it happens that this struggle for survival ends more often in defeat than in triumph, so that failure has been felt to be the appropriate ending in Canadian literature. Simply put, the natural world as setting for this doomed struggle was unyielding and unreceptive. If the American organizing myth of the frontier generates feelings of excitement and adventure, and if in England the ideal that one’s home is one’s castle occasions contentment sometimes bordering on smugness, in contrast Atwood maintained that the Canadian symbol of survival created anxiety and disquiet.

Part of the angry reaction aroused in some quarters by Atwood’s account was no doubt because her portrayal seemed to cast Canada as a pathetic nation of victims and losers. Some argued that the struggle to survive, to retain one’s individuality, and to persevere against overwhelming odds are characteristic modern themes in the arts and cultures worldwide, and not just in Canada. Though not without gesturing toward the imagination of hopeful possibilities in the form of “jail-breaks and re-creations,” the note sounded in *Survival* nonetheless was at jarring odds with the growing Canadian pride and optimism after the centennial year of 1967 and in the midst of the era of Prime Minister Pierre Elliott Trudeau.

For all that, nature, and in particular climate, landscape, and geography, impinges powerfully on the Canadian consciousness, constitutive of character and values and other aspects of a national mythology. One Canadian scholar, Peter Slater, has persuasively advanced the case that nature, not history, is the source of whatever Canadian counterpart there exists to American “civil religion.” For there is no great political event of defining national and historical significance to be located within the story of Canada: none, that is, more or less equally accepted everywhere by all groups. As might be expected in a country of such pronounced regional divisions, the events celebrated in one place are ignored in others. The heroes of one group are the villains of another. That lack of a unifying foundational legend befits a nation whose fondest image of itself is a multicultural mosaic or kaleidoscope, rather than a melting-pot. The quest for a national identity, and for unity at the federal level, has been an ongoing national preoccupation.

The sacred story of Canada, Slater states, especially if one looks to the foundational informing patterns of biblical myth, is to be sought in setting rather than plot. What unites Canadians, therefore, is the land itself as domain and backdrop of this national experiment and not particular historical figures, whether generals, politicians, statesmen, or legislators. There is for Canadians no Moses who led a people out of slavery to the promised land. Nor any prophet who denounced the forces of Babylon. Nor a messianic savior whose sacrifice won redemption for faithful followers. Formed neither in the fires of military revolution nor even in less dramatic ways of throwing off the yoke of a foreign conqueror, Canada’s political history remains unexceptional and

unexciting. What stirs Canadian patriotic fervor are songs and images of rock, lake, and tree, or wide prairies and snowy fastnesses, of freely roaming wildlife, and of rocky seascapes and mountains.

It is perhaps no coincidence that the symbols by which Canadians represent themselves to one another and to the world are drawn from nature. The Canadian flag, brought in during the early 1960s, meant replacing the British Union Jack (of uncertain status and not universally approved) with a single stylized maple leaf having no political origins and no associations with any other nation. While a monarch domiciled in the United Kingdom still appears on all currency (and some stamps), her visage shares space on most coins (including the recently added one and two-dollar denominations) with wildlife such as the beaver, caribou, loon, polar bear, and a pair of maple leaves on the lowly penny. The Canadian national anthem, "O Canada," while it has undergone alteration and retranslation confusing to older singers, makes no reference to any historical event and person. Any debates surrounding it have focused on the repetition of "stand on guard," or whether "God keep our land" is too exclusively monotheistic, or on the sexism of "in all thy sons command." But its capacity to stir Canadian hearts surely resides in the opening line's reference to "our home and native land" or the nordicity of "the true North strong and free."

Canada has no alternative anthem to compare with "America the Beautiful" (unless one counts the Canadian version of "This Land is Your Land" with its substitution of Canadian place names, from Vancouver Island to Bonavista). But the Province of Quebec does have its own sacred song in the form of Gilles Vigneault's "Mon pays": "Mon pays ce n'est pas un pays, c'est l'hiver" ("My country is not a country, it is winter"). And, in fact, to single out winter as the defining ingredient of Quebecois consciousness, as if to suggest that a very season is the most salient characteristic of the conditions of one's homeland, is not so far from what most Canadians suspect is our most common preoccupation. The *Via Rail* magazine provided to travelers on board Canada's national railway system once featured an article suggesting that the national obsession of Canada is simply the weather. Whereas the French speak incessantly about food, and Italians about love, Canadians are fixated merely on the weather. In the late 1990s the top news stories for three years running were about weather: disastrous floods on the Saguenay and Red rivers, and a devastating ice storm in Ontario and Quebec.

Many songs of regional significance invoke geography and nature, as for example Newfoundland's "I see the boy that builds the boat" with its catalogue of island place-names, or the evocation of "the sea-bound coast" and "mountains, dark and dreary" in "Farewell to Nova Scotia," or the summer camp-song engraved on the memories of generations of Ontario teenagers, "Land of the silver birch, home of the beaver / Where still the mighty moose wanders at will." The prairies too have their songs of praise, as for instance Ian and Sylvia's "Four Strong Winds:" "Think I'll go out to Alberta, / Weather's good there in the fall." In the same vein, Gordon Lightfoot's "Alberta Bound" in its opening lines, "Oh the prairie lights are burning bright / The Chinook wind is a-moving in / Tomorrow night I'll be Alberta bound."

If climate, geography, or nature in general are unifying forces in Canadian consciousness, then it is little wonder that possible scarcity of natural resources such as water and natural gas and old-growth forests, the threats to wildlife species, the depletion of fish stocks, loss of sovereignty in Arctic waters, or encroachments on the 200-mile limits of coastal waters, all command large amounts of attention, from politicians to ordinary citizens. Again, it is little wonder that with a comparatively small population spread so thinly across an immense land, Canadians tend to pay special attention to that which unifies people and spans those distances. Asked to name a Canadian hero, most Canadians would be at a loss unless you were to mention the possibility of Terry Fox. This young runner who had already lost a leg to cancer performed the equivalent of a marathon per day during the spring and summer of 1980 in the effort to run, in his gimped one-legged lope, westwards across Canada. He had got almost halfway when the recurrence of the cancer to which he eventually succumbed forced him to suspend his attempt in northwestern Ontario. Since then, annually sponsored runs in his name have raised millions of dollars worldwide for research into cancer.

Alternatively, Canadians are anxious about transportation and communications in the far-flung reaches of their country. When Wilfred Cantwell Smith asked Peter Slater who might be the Canadian “Augustine,” Slater found himself having to name a thing rather than a person, and suggested the Canadian Pacific Railway. The CPR was the foremost achievement of Prime Minister Sir John A. Macdonald’s “national dream,” linking together the western reaches of Canada with the east. Canadians have been known to be the most frequent users in the world of the telephone (itself a Canadian invention), and today rank among the greatest users of the internet. Others might see as inordinate the concerns people in Canada have about any threats to their national airline or railway or broadcasting system, but for them these are the glue that “keep the country together.” With the death in 2002 of the popular Peter Gzowski, for a decade host of “This Country in the Morning,” a national three-hour CBC radio show, a wave of national mourning and reminiscence was set off to rival the death of the most famed sports figure or politician. Speaking of the way his program moved through the time zones from east to west, gathering up guests and stories along the way, Inuit singer Susan Aglukark likened Gzowski’s effect to a particular kind of Arctic wind that picks things up from one place and carries them along to another.

A full comprehension of the relation between religion and nature in Canada involves balancing the relative impact of the major religion’s (or religions’) official estimation of the natural world with the informal “folk” religiosity of people’s reverence for nature held even despite such teaching. Added to that, an interpreter must assess the attitudinal effects of environmentalism and nature mysticism in shaping a different consciousness. And, finally, the incalculable impact of various natural symbols and stories and songs must be factored in. The result, surely, is what might be termed a distinctive Canadian “aesthetic” of nature that is informed at all levels by religions and the religious. At one of these levels at least, most Canadians would understand or assume nature to be sacred, however much formal religious views would purport

the opposite. Their attachment to the geography of their homeland in all of its varied natural beauty, enduring the climatic contradictions of long cold winters and brief hot summers, and understanding the self in the context of nature's infuriating self-presentation of welcoming nurturance and hostile rejection has led to mixed attitudes of insecurity and respect.

William Closson James

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See also: Canadian Nature Writing; Nature Religion in the United States; Traditional Environmental Knowledge among Aboriginal Peoples in Canada.

Canadian Nature Writing

Given the immense importance of nature within Canadian culture, and especially within the literary imagination, many types and genres could be considered to be “nature writing,” from scientific treatises, memoirs, and exploration journals, through novels and short stories, and including all kinds of poetry from the epic to the short lyric. To be sure, a full account must include works of prose and poetry both in French and English, Canada’s two official languages. While this examination of prose written in English might seem unduly restricted, it does reveal broadly applicable trends and motifs. Furthermore, nature writing in Canada may be related to either explicit or implicit religion. If the natural world is comprehended under the aegis of a religious worldview already widely held and promoted by religious institutions, then nature writing in such a context is linked to explicit religion.

In this light older Canadian writing frequently detailed in unambiguous terms a savage and unforgiving natural world inhabited by forces opposed to the order of grace and to the divine transformation of the human. Less common, but equally explicit, was the religion of nature writing that set forth a human realm corrupted by human sin contrasted with an unfallen and benevolent world of nature. Two stories anthologized in *The Oxford Book of Canadian Short Stories in English* illustrate this plain and unambiguous portrayal of nature in the explicit religious context of nineteenth-century Canada. Nature writer Charles G.D. Roberts, in his story “Do Seek Their Meat from God,” contrasts the instinct prompting a panther to stalk a child with the providential urge that leads a father to save that child. In Susie Frances Harrison’s “The Idyl of the Island” a city-weary visitor from a nearby hotel comes upon a woman sleeping on a mossy couch in an edenic island setting, described in the most lyrically romantic terms. Up until a generation or so ago, the explicitly religious context of Canadian nature writing was a supernatural theism that placed the Creator outside of nature. The world of nature was either opposed to or allied with that transcendent realm of grace. At its extreme, nature might be portrayed in negative terms as the realm of darkness and demons.

In 1965 Alec Lucas, contributing a chapter on “Nature Writers and the Animal Story” to *Literary History of Canada: Canadian Literature in English*, set Canadian nature writing in the framework of Western literary history. Lucas showed how writing about the natural world, from biblical and classical texts through the medieval period, inevitably concerned itself with the human relationship to nature, and just as often, with the relationship of both the human and natural to the divine. Accordingly, animal fables amounted to commentaries on people and social relations, often allegorizing and

moralistic, and assuming dominion over nature that was provided for human benefit by God.

Though Renaissance humanism promoted close examination of the whole of nature, and included humans within nature, Cartesian logic and Newtonian physics fostered a rationalistic understanding of a mechanistic world. In the nineteenth century, though Romanticism's discovery of a moral order within nature gave way to Darwinianism, both movements restored human beings to the world of nature. Lucas outlines the contributions of pioneer writers and field naturalists to Canadian nature writing, suggesting that by the twentieth century nature ceased to be a source of moral law or evidence of the divine, but a unity including both people and animals. He traces the Canadian tradition of outdoors and animal stories, sometimes in the pastoral tradition, sometimes through natural history, that often advocated a return to nature to escape the evils of urban life and to refresh the spirit. Within all of the schools and genres that Lucas surveys and details, whatever estimate is given of nature tends to be made against the backdrop of Christianity in its various forms. The religion of nature is subordinated to a Christian worldview, or understood generally within the context of Western monotheism.

In the final paragraph of this informative and detailed essay published in 1965, Alec Lucas concluded that the zenith of nature writing "has long passed." Perhaps, he surmised, it was because the "literary vein has been worked out," or that after two World Wars the public had learned well the lesson that people and animals are "too much alike." In addition, Lucas supposed, urban dwellers were several generations removed from their rural forebears, and the physical sciences had replaced the biological sciences in the public imagination. Of course, from the vantage point of more than a generation later this pronouncement surely has to be reckoned as premature in the extreme. The 2002 volume, *Encyclopedia of Literature in Canada*, gives prominence to the persistent significance of nature in Canadian literature in articles on "Animal Story," "Ecocriticism," "Exploration Literature," "Landscape," "North," and "Science and Nature Writing."

Nature writing in Canada, in particular considered in relation to religion, can be said to have undergone a complete and unqualified renaissance. The obvious Christian use of natural phenomena as a means of evangelization, or of demonstrating a divine order discernable in creation, continues only as a relatively minor aspect of this genre. The materials from the Moody Bible Institute's "Sermons from Science" ministry are one ongoing Protestant evangelical example of nature understood from an explicitly religious perspective. Though "Sermons from Science" was the theme of one pavilion at Montreal's Expo 67, this kind of approach probably has been regarded as "too American" within the Canadian religious context, where "born-again" Christianity is much less prominent than in the United States.

Rather, the dynamism of this literary renaissance lies in the implicitly religious dimensions of nature evident in Canadian writing since the late 1960s. Such factors as the impact of a counterculture with its back-to-the land emphasis, the growth of

feminism stressing the human connection with nature, a suspicion of high technology, and the significance of the environmental movement were incorporated into a newly burgeoning Canadian literature in the 1970s. And, contrary to what Lucas foresaw, the study of the biological (or “life”) sciences returned to prominence over physics and chemistry. This implicitly religious nature writing derives from a nature mysticism or ecological worldview that discovers within the very realm of nature itself a sacred dimension or wisdom that is potentially illuminating or instructive. The watchword of this trend might be Wallace Stevens’ poetic injunction to seek everything within reality and nothing beyond it.

From a vast spectrum of nonfiction, some principal exemplars might be selected. David Suzuki, a geneticist and Canada’s leading environmentalist, is a worldrenowned broadcaster, lecturer, and writer. In books such as *The Sacred Balance and Wisdom of the Elders*, Suzuki proclaims a spirituality of nature that brings science under the auspices of indigenous ways of knowing that retain their cultural validity today. Saskatchewan novelist Sharon Butala in *The Perfection of the Morning* (1994), subtitled “An Apprenticeship in Nature,” explores how in her spiritual journey her soul found its home through daily contact with nature. Though Butala is more literary and less the environmental activist than Suzuki, like him she links her celebration of nature to native wisdom and to feminism. In a subsequent devotional book, *Coyote’s Morning Cry* (1995), she sets forth her “meditations and dreams” in a more direct presentation of her own religious insights as derived from the natural world.

Other literary naturalists, or writers having scientific interests, have similarly advanced a spirituality of nature through the medium of their nonfictional and semiautobiographical writing. Barry Lopez (*Arctic Dreams*), Harold Horwood (*Dancing on the Shore*), Richard Nelson (*The Island Within*), or the books of Farley Mowat might be cited as examples. Outdoor educator James Raffan in several books about canoeing relates the inner and mythic meanings of landscape to the Canadian spirit, as has Canadian Literature specialist John Moss whose *Enduring Dreams: An Exploration of Arctic Landscape* (1994) might be said to be a work of literary ecocriticism.

Because fiction, and especially the novel, has become the preeminent literary genre, the presence of nature writing of religious significance in the Canadian context must be highlighted in its various manifestations there. One great example is W.O. Mitchell’s *Who Has Seen the Wind* (1947), a novel that contrasts the explicit religion of a prairie town with the mystical aspects of a boy’s experience of nature as he grows up. Here implicit religiosity emerges as more vital, in terms suggestive of

C.S. Lewis’ account of *sehnsucht* in *Surprised by Joy* or Rudolf Otto’s *Das Heilige*. Margaret Atwood (*Surfacing*) and Marian Engel (*Bear*) in two novels of the 1970s portrayed the initiation of a woman in the Canadian wilderness, replicating a feminist version of an Amerindian vision quest. As in the case of nonfiction writings, novels that significantly render a spiritual vision of nature have often drawn upon the worldviews of First Nations peoples. A prime example is Rudy Wiebe’s *A Discovery of Strangers*, winner of the Governor-General’s award for English fiction in 1994, whose first chapter

represents the world as it appears to the northern animals in the nineteenth-century “Barren Grounds” that are its setting.

In this way contemporary Canadian fiction embarks on an aesthetic of nature that interrogates human nature as well. As religion in Canada has moved away from an older understanding of divine transcendence that places the locus of the sacred beyond the world, so Canadian literature has found within the immanent dimensions of nature a more proximate source of meaning. Northrop Frye has well described, in his comments on the Canadian cultural context, the deep ambivalence of Canadians toward nature, attitudes alternating between the extremities of terrified revulsion and warm devotion. In the last generation, Canadian writing has moved conclusively toward affirmation of nature as the matrix of human life, the fundamental context of our being in the world, and as a sacred source of knowledge about ourselves as part of the web of life.

William Closson James

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See also: Butala, Sharon; Canada; Christian Nature Writing; Lilburn, Tim; Memoir and Nature Writing.

Candomblé of Brazil

During the course of the Atlantic slave trade, roughly ten million forced African immigrants were brought to the Americas. As chattel slaves, Africans were no more encouraged to introduce their modes of subsistence and systems of belief than were cattle. Nevertheless, in spite of the horrific conditions of the Middle Passage, the brutal and dehumanizing conditions of plantation life, and the imposition of an oppressive social and political structure, Africans managed to transplant the foundations of their religions in the Americas. Haitian Vodun, known variously as hoodoo, juju, root work, and conjure in North America, has spread from its eighteenth-century introduction to New Orleans to the northeastern and southwestern United States. Bahamian Obea men, purveyors of magic and medicine, are found throughout the Caribbean, the southeastern United States, and Panama. Cuban Santeria, a New World Yoruba belief system that is particularly rich in African ethnobotanical knowledge, has diffused to Florida, New York, and California, and even as far as Venezuela and Spain. In Trinidad and northern Brazil, adherents to Shango sing the praises of a pantheon of nature gods introduced from Yorubaland. And Brazilian Umbanda, a syncretic belief system that draws considerable elements from Amerindian and spiritualist sources, is estimated to reach thirty million largely white, middleclass followers.

Among the list of diaspora religious introductions, none was more successful than Candomblé in Bahia, Brazil. The Candomblé religion represents a set of beliefs, practices, and cosmological traditions introduced by Yoruba slaves and freedmen to colonial and later imperial Brazil. Although African-derived religious ceremonies were reported throughout the nearly four centuries of Brazilian slavery, the first Candomblé *terreiros*, or temples of worship dedicated to the Yoruba deities, were not established until the early nineteenth-century in Salvador,

Bahia. Persecuted during most of their history, these humble shacks came to constitute islands of sacred space for the African *diaspora*; structured communities within which African spiritual traditions could survive and prosper in the new land. Just as importantly, Candomblé *terreiros* came to represent houses of healing – fertile habitats wherein African herbal medicine and magic could take root and, in time, hybridize with complementary Amerindian and European traditions.

Candomblé is loosely divided among various sects, or nations, each maintaining a unique sacred lexicon; chants, deities, offerings, liturgical plants and animals, and other traditional knowledge link them to their particular West African source area. Those encountered today include Candomblé de Ketu, Candomblé de Angola, Candomblé de Jeje, Candomblé de Congo, Candomblé de Ijexá, and Candomblé de Caboclo. With

a New World starting- point in the city of Salvador, Bahia, Candomblé ultimately diffused to most of Brazil's major and minor cities.

Candomblé cosmology represents an adaptive filtering of Yoruba oral traditions. Adherents recognize the existence of a supreme god, Olórun, the unknowable creator of all things. Olórun does not manifest during possession trance, nor is he worshipped by devotees. It is rather the *orixás* of the Yoruba pantheon, nature gods and goddesses serving as the earthly ambassadors of Olórun, who are directly linked to the everyday world of mortals. Roughly a dozen *orixás* are well developed and find devotees in the various *terreiros*. These include Xangô, Ogun, Oxalá, Oxóssi, Omolu, Ossâim, Iroko, Yemanjá, Oxum, Iansã, Nanã, and Oxumarê. Each is associated with distinct provinces of the natural world – water, atmosphere, vegetation, and Earth – and it is from these primary sources that they gather and impart their *axé*, or vital energy. The properties of their physical domain, in turn, correspond with a suite of personality traits. The *orixás* thus serve as archetypes for the range of behaviors exhibited by their mortal followers, embodying the strength and foresight of their adherents, as well as their weaknesses. Oxóssi, for example, is the masculine god of the hunt, whose temperament, as well as that of his adepts, is characterized by keen intelligence and curiosity. The female deity Yemanjá, on the other hand, is the warm, maternal, and emotionally stable goddess of the sea, as well as the patron saint of fishermen. Each archetype, in turn, is complemented by an appropriate array of taboos, offerings, sacred foods, preferred time of worship, icons, liturgical plants, and geographical locations. Oxalá, for example, the masculine god of creation and peace, is clothed in white from head to foot, prefers lofty locations, requires the sacrifice of chickens, doves, and female goats, and assiduously avoids horse meat, crabs, and salt.

However distant from the known world of the Yoruba, coastal Brazil nevertheless presented an array of physical and biological features similar to those to which they had previously attached cosmological significance. Oxum, goddess of fresh water, found a home in the region's deep perennial streams. Frequent thunderstorms suggested the presence of Xangô, god of lightning, while the accompanying rain and winds indicated the presence of his mythological wife, the unpredictable Iansã. Oxóssi and Ossâim, the hunter and the herbalist, found refuge in Bahia's broadleaf evergreen rainforests. Devastating smallpox epidemics, which swept across Brazil from as early as 1562 until the early 1800s, testified to the New World existence of Omolu, god of infectious disease. At least for the Yoruba pantheon, Brazil's tropical forest landscape presented nearly all the physical ingredients necessary for spiritual correspondence and substitution.

One of the striking processes that occurred in Candomblé was the syncretism of Yoruba *orixás* with the deified saints of the Catholic Church. For example, Oxalá is identified with Jesus Christ, Omolu with St. Sebastian, and Iansã with St. Barbara. On the one hand, since Catholic conversion had been going on in West Africa since the dawn of slavery, it is likely that the spiritual association between *orixás* and saints had begun centuries earlier. However, in nineteenth-century Brazil this spiritual blending process was amplified and codified. It appears to have represented both an intentional

strategy on the part of early religious practitioners to deceive their European masters, and a calculated tolerance on the part of Catholic authorities to lull Africans into conversion.

Candomblé *terreiros* are directed by the *pai* or *mãe-de-santo*, infrequently referred to by the Yoruba terms *babalorixá* or *ialorixá*. Literally translated as the father or mother-of-saints, the *pai/mãe-de-santo* represents the principal line of communication between the material world of mortals and the spiritual world of the deities. They also serve as community *curandeiros*, or healers, divining the source of medical and spiritual problems and prescribing culturally acceptable solutions. Trained in the arts of sorcery and conjure, the *pai/mãe-de-santo* can likewise negate the nefarious effects of black magic and, if called upon, employ the occult arts for their own ends or those of their clients. Other temple roles are occupied by *filhas* and *filhos-de-santo*, the Yoruba *iaô*, literally sons and daughters of the saints. In addition to doing most of the physical labor in the *terreiro*, one of their most important functions is to incarnate the deities during ceremonies via possession trance. This action, allowing the Yoruba gods and goddesses once again to dance and sing in the mortal world, serves to instill the individual as well as the *terreiro* with the elevated *axé* of the *orixás*.

The Candomblé religion is mostly focused on practical issues. It revolves around the resolution of the everyday trials and tribulations of human existence. Unlike religions of salvation, Candomblé is largely unconcerned with the afterlife. Although their cosmology clearly distinguishes between the world of mortals (*aiê*) and the world of spirits (*orun*), the focus of energy goes into solving earthy issues – prosperity, fecundity, spiritual well-being, and physical health.

Candomblé medicine, as practiced by the *pai/mãe-de-santo*, is characterized by a well-developed medical etiology. Practitioners are able to associate symptoms with specific illness, defined in the broadest possible sense, as well as prescribe culturally acceptable treatments. Although it is recognized that medical problems can “just happen,” illness episodes are often ascribed to a state of disequilibrium with the spiritual realm. Adherents and clients who fail to make timely offerings to their guardian deities, who indulge in excesses, and who neglect the preferences and prohibitions of the gods, chart a spiritual course that is fraught with health hazards. While healing ceremonies include a variety of approaches – spiritual cleansing, leaf whipping, teas, leaf baths, animal sacrifice, and others – the feature that ties them together is reliance on a sacred plant pharmacopoeia.

The sacred leaves of Candomblé are comprised of roughly two hundred species, native and exotic. They are gathered from kitchen gardens, leaf houses, disturbed habitats, and surrounding tropical forests. The African diaspora faced the obvious dilemma of continuing African-based herbal healing in an alien floristic landscape. They solved this biogeographical puzzle by various means, all related to the flexibility of their belief system. On the one hand, they were able to import a limited number of sacred African medicinal and spiritual species. Where this was not possible, they substituted taxonomically similar South American species for those that were left

behind in Africa. Most importantly, ethnobotanical flexibility was facilitated by the Yoruba medicinal plantclassification system brought from Africa, in particular, the belief in Ossâim, guardian of the sacred leaves and medicine.

Ossâim is the deity most intimately involved with health and healing. His domain is the forest and the field, wherever curative plants grow. Often in the company of Oxóssi the hunter, with whom he is said to trade medicine for meat, Ossâim is the dedicated but reticent steward of the vegetal realm. Among the Yoruba and their New World diaspora, his image is one of absurd physical disability – one eye, one leg, one enormous ear, and a humorous highpitched voice. Ossâim’s possession of the sacred leaves, according to Yoruba legend, was coveted by other deities who sought to share in his secrets.

There is a legend of rivalry between Ossâim, the *orixá* of medicine and leaves, and Iansã, the *orixá* of stars, winds, and storms. Everything began as a result of jealousy. Iansã went to visit Ossâim. Ossâim is very reserved, quiet, silent. Iansã wanted to know what he was doing. When Ossâim has the opportunity, he explains things. But Iansã is always rushed, she wants everything done immediately. She is always asking questions, and she needs to know everything that’s going on. When Iansã arrived at the house of Ossâim, he was busy working with his leaves. It happens that there are certain types of work with leaves that you can’t talk about, you need to remain silent. Iansã started asking, “What are you doing? Why are you doing this? Why are you doing that?” And Ossâim remained silent. “Alright, if you don’t want to tell me what you’re doing, then I’ll make you talk.” That’s when Iansã began to shake her skirt and make the wind blow. The house of Ossâim is full of leaves, with all of their healing properties, and when the wind began to blow, it carried the leaves in every direction. Ossâim began to shout “*Ewe O, Ewe O!*” [my leaves, my leaves!]. Ossâim then asked the help of the *orixás* to collect the leaves, and the *orixás* went about gathering them. And it happens that every leaf that an *orixá* collected, every species, he or she became the owner of that leaf (Voeks 1997: 117–18).

Scattered by the winds of Iansã, the sacred leaves drifted into the provinces of the other deities. Oxum collected leaves near her rivers, Yemanjá by the sea. Oxalá gathered white leaves, Exu those that burned and pierced the skin. Although Ossâim retained the mysterious power of the vegetal kingdom, each deity came to possess his or her personal healing flora.

The resultant correspondence of gods and leaves represents a fundamental element of Candomblé ceremony and ritual. For devotees who belong to one or another deity, healing may be mediated through recourse to the inherent *axé* of his or her guardian’s leaves. A healing tea or leaf bath for one of Oxum’s followers, for example, will usually include three or seven of Oxum’s personal species. A leaf whipping intended to clean the negative fluids from a devotee of Ogun will include some of Ogun’s leaves. As earthly embodiments of the Yoruba pantheon, the sacred leaves exhibit one or more features that link them with their corresponding deity. Most of these features are clearly evident; some are obscure or lacking entirely. For example, the archetypes

of the deities are divided according to temperament – masculine *orixás* are hot tempered and volatile, feminine *orixás* are cool and balanced. This opposition of hot and cold finds ready association among the healing flora. Some leaves maintain perceived heating properties; they are thin, hard, and if taken internally tend to produce sweat or increase blood pressure. Cool leaves are fleshy, moist, and produce cooling medicinal influences; they reduce blood pressure, break a fever, or calm anxiety. Further possibilities for correspondence are provided by the symbols, preferences, and prohibitions of the *orixá's*, their choice of color for clothing and sacred beads, offerings of food, icons, and geographical locations. The end result was that Yoruba priests and their descendents were able to incorporate a mostly alien New World flora into their medicinal and spiritual pharmacopoeia.

During the course of nearly four centuries, Africans were brought unwillingly to toil in the plantations and mining operations of their Portuguese captors. But in spite of the horrific conditions of the Atlantic crossing, the dehumanizing influence of slave existence, and the imposition of an alien and oppressive social and religious structure, Africans managed to transplant the roots of their indigenous belief system in New World soil. Although a host of features contributed to this diffusion, it was in the end cultural flexibility and adaptability that allowed Africans and their descendents to forge a novel African-derived belief system in the Americas.

Robert Voeks

Breakout Box: P Orixá Iroko

I went to Salvador de Bahia to learn about a tree, a tree that grows not up but down, a sacred tree. My interest in sacred trees has developed out of a desire to explore the cultures and traditions of people who still live with, and relate to, nature in a spiritual way. This tree, the *game-leira*, is sacred to the Candomblé tradition, a prominent religion in northeastern Brazil. I had not been in Brazil long when an invitation came to attend a ceremony for the *orixá* Iroko which manifests through the *gameleira* tree. It was to be held at a *terreiro*, a house of Candomblé on the outskirts of the city of Salvador. That evening I stepped onto the leaf-strewn floor of the *terreiro* and watched a Candomblé ceremony unfold. As the participants and attendees filtered into the room, this unfamiliar place filled with an air of warmth and kindness. When the rhythm of the drums picked up and the ceremony began, I understood immediately that even if what I witnessed that night passed outside the realm of my usual reality, the experience would be a positive one.

Through the rest of the evening and in fact throughout my stay in Bahia, the presence of this kindness and that rhythm pervaded my experiences. That evening I listened to the drummers and their complex change of rhythm. I watched the swirl and sway of the dancers, barefeet below dresses and drapes of yards and yards of beautiful material, feet bared and in contact with the Earth. I felt the building of

energy as the *pai de santo* (the spiritual leader of the *terreiro*) sang his call and the dancers responded as they moved around and around the room. This energy, the force in Candomblé they call *axé*, was everywhere.

Understanding Candomblé is all about understanding what *axé* is and how it is accessed to maintain right relationships within one's entire universe – person to person, person to community, person to nature, starting with the conduit of all these relationships: person to *orixá*. While the structure of Candomblé with its pantheon of *orixá*, associated entities and rituals can seem very complex, its central concept, *axé*, is not. *Axé* is the vital force that exists in all things; it animates all things. It is the energy of “being.” This vital force is found everywhere, but in everything it is not the same. Each different type of energy has a different lesson. For instance, every plant has *axé*, and understanding the different healing properties of each plant is to understand the *axé*. Leaves and plants are of tremendous importance in Candomblé. They are used to heal the physical body but there is also a plant-*orixá* association that comes into play in the proper maintaining of the spiritual self. When there is a disruption, an imbalance spiritually or physically, what has been disturbed, displaced or disregarded needs to be brought back into balance. The *orixá* are necessary to help human beings access the forces around them.

Asking questions and questioning a belief system are two different things – but the first is sometimes mistaken for the last. People are often sensitive about discussing religious beliefs. The day after the ceremony I interviewed Pai Valtinho, the *pai de santo* of the *terreiro* Axé Ibá Faromin. I thought my inquiries into this religion would not go easy but I was wrong. Although Pai Valtinho noticeably stiffened when the word “interview” came up, his whole persona changed when it was explained that I was interested in religions that have a strong relationship to nature. What I learned quickly in my conversation with Pai Valtinho was that all *orixá* are associated with elements of nature. Each *orixá* has different characteristics associated with an elemental force. These forces have different lessons to teach, and each can help an individual in need of guidance in a different way.

It is important to pay attention to these forces, Mãe Detinha instructed me. “It is important to keep your two feet in contact with the earth,” she looked at me intently, “feel the earth.” We were sitting in one of the houses incorporated in the compound of the *terreiro* Axé Opô Afonjá, one of the older *terreiros* in Salvador. It was founded in 1910 and now sits in a beautiful spot on a small hilltop in the district of São Gonçalo. The compound is not just a *terreiro* but a school where they educate children from the local community. Aside from their lessons, the children learn the Yoruba language and they learn about Candomblé. In the compound each *orixá* has a small house or temple, freshly painted in the colors associated with that *orixá*. All except Iroko, the place of Iroko is a huge tree, the gameleira. The tree has an *Oja* tied around it, the same wrap of white material that is worn by the human initiates of the *orixá*. Mãe Detinha made sure I understood that not all gameleiras were sacred. They do not venerate the tree as a tree but as a vehicle for the manifestation of the sacred. Likewise when

an orixá manifests through an initiate, that person does not become a deity, just a conduit for a sacred force. To try to explain or commit to paper what any of the *orixá* represent is to enter into a situation where a thousand asides would not quite cover the variations of language, the variations in Candomblé traditions, the variations that continually evolve in a culture of oral traditions. After reading the fieldwork of many anthropologists, all with varying descriptions of Candomblé, the *orixás*, their characteristics and the practices associated with each, I understood exactly what Pai Valtinho meant when he said to me at our meeting – “I can only tell you what I know.” The variations in myth and the mutations of the *orixá* might cause confusion to those outside the religion but this complexity has much to do with the room this religion gives to adaptability, progression and the changing reality of its followers and their oral tradition. What does not change is the basic tenet of maintaining a “right relationship” with one’s world, and the concept of *axé*, these are a constant. In regards to Iroko the constant amid the varying details and descriptions seems to be that Iroko is time universal. Mãe Detinha addressed my confusion regarding Iroko sometimes being referred to as Loko or Tempo in different traditions. She explained that Iroko, Loko and Tempo are really the same *orixá*, their identity only slightly different, as human beings are one from another, but the same as all humans are the same. Iroko holds the awareness of each person’s destiny, understands the justice in destiny, sees what is not seeable on a human scale. Iroko represents, so to speak, the “big picture.” To look to Iroko for guidance one must understand that the resolution that comes might not be the one sought but it will indeed be the correct unfolding of one’s destiny. Pai Valtinho explained to me that the force of Iroko, or any *orixá*, is not positive or negative. How someone reacts to that force, however, can result in a negative outcome if that person disregards the *axé* of their *orixá* because in doing so that person is acting against his or her own true nature.

The tree of Iroko is never planted. A *terreiro* can be built around or near an existing gameleira, but Iroko is not brought to a place chosen for it – destiny places this tree. Destiny is to be respected. The telling of the origin myth of Iroko will vary in detail but the premise is the same. Iroko did not originate from the earth but started life as a seed dropped from the sky; Iroko grew from the heavens down to the earth. Mãe Detinho, after telling me her idea of the myth, explained that the gameleira does, in fact, grow not up but down. The gameleira is what is called a strangler fig. A strangler fig usually sprouts in another tree as an epiphytic vine. As it grows it often encloses the host tree with its roots, ceasing the growth of the tree or eventually killing it. Wherever it germinates, whether in another tree, on a ledge or atop a humanmade structure, the roots will search for the earth and keep growing downward until they reach the ground. Once rooted, affixed to the earth, the tree will proceed in its growth upward, often becoming a rather massive and beautiful tree.

There are endless lessons to be found in nature, and the orixá’s representation of these forces is a way to access these lessons. The gameleira, like nature as a whole, is powerful, destructive, though at the same time benign and life giving: both pre-

dictable and unpredictable, constant and yet never the same. In looking to the wisdom of Iroko or one of the many other *orixá*, the emotional impact the natural forces have on us as human beings becomes an everyday awareness. There is Ossain who is associated with leaves, herbs and healing; Xango, fire, justice, the warrior; Iansã, wind and storms, strength; Oxum, fresh waters, beauty/vanity; Iemanjá, the ocean, motherhood. Acknowledging this energy, this *axé*, spiritually integrates us into our world, our surroundings, instead of separating us from them.

On one of my last days in Bahia I attended a program at the *terreiro* Axé Opô Afonjá that brought together people from other Candomblé terreiros around Bahia. One man, in expressing the importance that Candomblé held for him, ended his testimony with a word of caution saying “If we destroy our forests, pollute our waters, there can be no Candomblé.” In this statement the understanding of what is at stake, what is to be lost in a spiritual way, is strong. No matter who our god or gods are, this valuation of nature in a spiritual sense, this emotional connection, might be what is lacking for those on this planet who do not take seriously the more pragmatic lesson of nature.

The lessons of science are not sinking in; we know that we cannot survive as a species unless we still have oxygen to breathe, untainted soil to till and clean water to drink, yet, being fully aware of this, we continue to do damage to our only life-support system. It is possible that the lack of emotional connection to the rest of nature, as Carl Jung suggests in *A Man and his Symbols*, that causes us to feel lost in the cosmos will lead us to being lost *to* the cosmos – permanently. Or perhaps there will come a moment in time when nature once again becomes sacred to us all and our spirituality brings us back to being one entity, showing us how to have a right relationship with our surroundings, with our community, with one another.

Jane Coffey

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See also: Brazil and Contemporary Christianity; Caribbean Cultures; Ethnobotany; Santeria; Trees in Haitian Vodou; Umbanda; West Africa; Yoruba Culture (West Africa).

Cannibalism – Paleolithic

Cannibalism – the eating of human flesh by humans – has often been claimed to exist in different periods of the human past, usually on the flimsiest of evidence. In recent years, a better understanding of taphonomy (i.e., what happens to bones between being buried and being unearthed by archeologists) as well as greater familiarity with the huge variety of funerary rituals around the world, and a more objective assessment of the facts, have helped to weed out many claims for prehistoric cannibalism, while at the same time new claims have been put forward which rely on more plausible evidence than before.

At the northern Spanish site complex of Atapuerca, near Burgos, the recently discovered bones of a human ancestor called *Homo antecessor*, dating to perhaps a million years ago, bear abundant cutmarks which have been interpreted as evidence for cannibalism, and it is difficult to disagree with this inference. It is known that cannibalism can occur in other species, including the chimpanzee, our closest relative, and it is also known that among humans it occurs today in cases of starvation or lunacy, so there is no reason to deny its possible existence at times in prehistory. And at such a remote point in prehistory, when we have little idea what our ancestors were like or how they lived, there is no reason to doubt the presence of this practice, and there is absolutely no evidence for any kind of funerary rituals or other secondary treatment of the dead, so no alternative explanation for the cutmarks is conceivable in the present state of our knowledge. They are most likely butchery marks, and hence an indication of consumption of human flesh by other humans.

However, Atapuerca also presents the earliest evidence in the world – ca. 200,000 to 300,000 years old – for some kind of funerary ritual. Ethnographic and ethnohistorical records all over the globe show clearly that a huge variety of often bizarre funerary practices has existed, some involving cutting, smashing and burning of bones, either shortly after death or long afterwards when bodies are exhumed and subjected to this kind of phenomenon. The archeological record contains many instances from different periods, stretching back into prehistory, which can plausibly be attributed to such practices. And Atapuerca demonstrates that all human remains from 300,000 years ago onward therefore need to be interpreted with great circumspection, since funerary rituals are henceforth an ever-present possibility, and indeed are one of the distinctive marks of humanity. Naturally, in such a remote and early period, when one is dealing with beings so utterly different from ourselves in many ways, yet also so similar to us in others, it is impossible to be sure whether the Atapuerca disposal of the dead was

definitely ritual – nevertheless, it is one of the most enduring features of archeology that anything which is difficult to explain in more mundane terms must be “ritual.”

In order to decide whether human remains were produced by cannibalism or by funerary activities (or warfare, etc.), there are two main categories of argument. The first is the presence of human bones with marks of cutting, smashing or burning, and fruitless attempts have been made to isolate specific criteria by which one might recognize cannibalism, but none of them is truly diagnostic, and alternative explanations are always available. The second is the presence of human bones mixed with animal bones, with similar marks and treatment; since the animal bones are obviously the remains of food, the same must apply to the human bones – this argument has recently been presented in new claims for Neanderthal cannibalism in Europe. However, things may not be so simple, since the people who left the archeological record were humans, capable of all kinds of complex and odd behavior patterns. The human and animal bones are not necessarily the results of the same phenomenon, so one must avoid jumping to simplistic and “obvious” conclusions.

The data are always ambiguous, as can be seen clearly in a couple of Neanderthal examples. At Krapina, a cave in Yugoslavia, the hundreds of fragments of Neanderthal bones unearthed in 1899 were first attributed to a cannibal feast; but modern reanalysis of the bones showed that most of the damage to them could better be explained by roof falls, crushing by sediments, and the use of dynamite in the excavations; while cutmarks on some bones most resembled those made during funerary practices.

At the Guattari Cave at Monte Circeo, Italy, the skull and jawbone of a Neanderthal were found in 1939 in a ring of stones on the cave floor. The hole in the skull’s base was enlarged, and there were fractured areas around the right temple. This was seen as a clear case of ritual cannibalism, with the brains being extracted through the hole. However, modern analysis suggests that the “ring of stones” was natural, caused by a landslide, while other remains in the cave indicate that it was a hyena den. The marks on the skull are fully consistent with being caused by hyenas, which may have taken the head from a buried body in or near the site.

Therefore, many early claims for cannibalism have been effectively debunked. The possibility remains that the practice may have existed occasionally, not merely in the remote times of *Homo antecessor* but much later among Neanderthals and even modern humans, but the evidence is always ambiguous, and must be assessed very carefully and objectively, rather than with wishful thinking and a love of melodrama, as has so often been the case in the past.

Paul G. Bahn

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See also: Muti Killings; Paleolithic Religions.

Capra, Fritjof (1939–)

Theoretical physicist Fritjof Capra is one of the most influential protagonists of “New Age science.” His *Tao of Physics* made the issues of global environmental crises and the requirement of a “new thinking” in science and society known to a wider public. In this book, Capra dwells on the parallels between quantum mechanics and Oriental mysticism – a parallelism that became almost canonical in New Age discourse, regardless of its validity. Furthermore, he refers to physicist Geoffrey Chew and his so-called “bootstrap philosophy,” which appears to be very similar to Leibniz’s “monadology.” Using the concept of selforganized individual entities, Capra develops a philosophy of nature that comprises both science and the humanities, leading from theory to action, from fundamental laws to dynamic events, and from separateness to mutual connect- edness.

In the following years, Capra was heavily influenced by the systems theory of Gregory Bateson and he adjusted his former concept accordingly. In *The Turning Point*, it was no longer the bootstrap philosophy or the model of quantum mechanics that grounded his argument, but the holistic and ecological “systems view” of reality, which he presents as the common denominator of both modern science and ancient mysticism. According to Capra, Western society is in need of a new paradigm, because the old mechanistic Newtonian and Cartesian paradigm has led modern society to an alienation from, if not a total destruction of, nature. This old paradigm is in a state of decline and the global crises are reaching their culminating point. At the same time the new holistic paradigm is emerging rapidly, bringing forth a society that is “holistic,” open to spiritual dimensions of life, and healthy for all its members. The juxtaposition of those two paradigms serves as a master key to interpret almost every part of contemporary culture.

Generally speaking, Capra’s books are an easily accessible compilation of two authors’ more complicated ideas, namely Ilya Prigogine’s and Gregory Bateson’s. While he interprets their thinking in great detail (and sometimes eclectically), he omits references to the “founders” of systems theory, like Ervin Laszlo. This is also true for his latest major book *The Web of Life*. Here, he establishes what he calls the “Capra-synthesis,” consisting of his former contributions and an additional application of H. Maturana and F. Varela’s so-called “Santiago Theory,” which Capra describes as a parallelism of learning and living, of knowledge and creativity. He also includes concepts of deep ecology and sustainability.

Capra’s impact on New Age discourse, on environmentalism, and recently also on the countermovement against uncontrolled globalization has been decisive. Actively

supporting political and economic efforts to arrive at a “holistic” and sustainable culture, he is founder and president of the *Elmwood Institute* and the *Center for Ecological Literacy* (founded in 1995) in Berkeley, California, an ecological think-tank dedicated to fostering new concepts and values for a sustainable future. Furthermore, he is lecturer at the influential Schumacher College in Dartington, Devon (United Kingdom), an international center for ecological studies. His course titles include “Life, Mind and Society” (2002) and try to integrate deep ecological concerns into a general systems theory of culture.

Kocku von Stuckrad

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See also: Bateson, Gregory; California Institute of Integral Studies; Complexity Theory; Deep Ecology; New Age; Prigogine, Ilya.

Caribbean Cultures

Beginning in the late fifteenth century, Europeans (mainly Spanish, French, British, and Dutch) colonized the Caribbean in order to exploit its natural resources. First they unsuccessfully mined for gold, and later massively cultivated sugar and other cash crops for self-enrichment. They also established Christianity as the dominant religion in the islands. The native peoples of the region, mainly Tainos and Caribs, succumbed to disease and other horrors wrought by the European conquest, such that within three generations of Columbus' first visit in 1492 their numbers had dwindled from several million to a few thousand. With the demise of the indigenous population, Europe turned to Africa for a replacement labor force, and over the next 350 years, nearly five million Africans were enslaved and brought to the Caribbean.

The Caribbean Basin consists of more than 7000 islands, most of which are part of the West Indian Archipelago. The Archipelago stretches from the Straights of Florida nearly to Venezuela, and separates the Caribbean Sea and Gulf of Mexico from the Atlantic Ocean. Roughly one-fourth of these islands are inhabited, with the majority of the region's forty million people presently living in the Greater Antilles (Cuba, Haiti/Dominican Republic, Puerto Rico, and Jamaica). Most Caribbean people are of African descent, while European languages and religions have also largely shaped the region's living cultures. With the twentieth-century influx of Chinese and Indian indentured laborers, the Caribbean has become a region of even greater cultural and religious diversity, a region wherein every major world religion has either carved out a niche or gouged out a crater.

Nature in Taino Myth and Ritual

The Taino migrated to the Caribbean from what is today Venezuela as early as 300 B.C.E. and were the first native Americans encountered by Europeans in the late fifteenth century. Their religion was based upon a rich mythology and shamanistic interpretations of nature and divinity. As José Oliver notes, "Taino were keen observers of the rhythms of nature . . . [and] strove to maintain harmony, or at least coordination with the motion of nature . . ." (Oliver 1997: 140). In Taino myth, Yaya's (the godhead's) first act of creation was to crack open a gourd out of which spilled an ocean teeming with fish. A mountain grew out of the sea, and humans, animals, and vegetal life lived with the fish in a primordial realm in which they all communicated in a sacred language. Because of this, and because fishing was central to material Taino sustenance, fish came

to symbolize the vital force within nature. This force was understood by the Taino to be either creative or destructive, and they sought to tap it through the creation and worship of *zemis*, or smooth triangular stones or bones. Besides zemi cults, Taino religion also featured cults of deities who were associated with various forces in nature. The very word “Hurricane” in English derives from the name of the Taino god of one of nature’s most awesome displays of force, Huracan. Among the religion’s most popular deities was Atabey, the fertility goddess who also rules the seas. Maintaining as best as possible harmony with such spirits and the forces of nature was the core of Taino religion. The means to this harmony were often determined and prescribed by shamans, or *zemichis* (“seers of zemis”). Shamanic trance and possessions were induced by meditation, chanting, and the ritual smoking of hallucinogenic cohoba seeds mixed with tobacco leaves. So important was this practice in Taino religion that archeologists have uncovered a great variety of ritual smoking paraphernalia in the Greater Antilles.

Despite the disappearance of Taino people from the Caribbean, Taino culture lives on in the islands more vibrantly than scholars usually acknowledge. For one thing, Taino lived with Africans in the sixteenth and seventeenth centuries’ maroon communities that emerged in mountains throughout the Caribbean in resistance to enslavement. This is an essential fact in Caribbean religious history because maroon communities were the site of religious activity that has been as influential as any other in shaping Caribbean identity and consciousness. For two illustrative examples of this legacy, we may turn to Boukman’s experience at Haiti’s Bwa Kayman in the late eighteenth century, and Leonard Howell experience at Jamaica’s Pinnacle in the mid-twentieth, which have indelibly marked Vodou and Rastafarianism respectively. Herein the refuge of nature, and especially the wilderness, cooperated with indigenous and African resistance to colonial and post-colonial oppression, and contributed forcefully to the creation of Caribbean religious culture. Wilderness, resistance, and religion are thus deeply intertwined in the Caribbean imagination, and the Taino deserve recognition as the founders of this tradition of *Marronage*.

Christianity, Slavery, and Sugar

The European conquest of the Caribbean benefited from Christianity’s sanction, first in Catholic and later in Protestant form. Enjoying the papal legitimization of a series of fifteenth and sixteenth-century papal bulls, the Spanish and French monarchies vowed to baptize unchurched Africans in exchange for the God-given right to enslave them. The presumption that God wills Christians’ domination of nature and of other peoples was reflected in the symbolism and mythology of post-Reformation Iberian Catholicism. To the Spanish, for example, it was the Virgin Mary who brought them to the Americas, hence Columbus’ arrival on a boat christened “*Santa María*.” The Virgin Mary had long been European Catholicism’s ruler of the seas (e.g., *Stella Maris*;

Our Lady of the Navigators), thus making her the logical patroness of the European conquest of the Caribbean and all of Latin America.

Yet, it was not so much European religious zeal as capitalistic greed that fueled the colonization of the “New World.” Initially the Spanish hoped to extract massive amounts of gold from the Caribbean Earth, but they failed. So, instead they aggressively exploited the rich soil of Caribbean plains to produce sugar. In the French colony of Saint-Domingue alone, there were over 2000 plantations on the eve of the Haitian Revolution in 1789, most of them over 1000 acres in size. In all, colonial Caribbean sugar plantations received more than 40 percent of all African victims of the transatlantic slave trade, and were providing well over half of all sugar consumed in Europe.

Nature in Afro-Caribbean Religions

West and Central African slaves and their descendants managed to preserve the spirit of traditional African religion despite Europeans’ administrative measures to prohibit them. In adopting Christian symbolism and belief, Africans and their descendants established a rich, diverse, and still-thriving culture of religious syncretism in the Caribbean. In Catholic colonies like Saint-Domingue and Cuba, where French and Spanish missionaries baptized and evangelized slaves, Africans took saints like the Virgin Mary and Saint James to be manifestations of spirits from their homeland, whose New World cults were transformed accordingly. Because the Catholic “pantheon” was so structurally congruous with African pantheons (each consisted of a single distant creator God and lesser, yet more familiar, spiritual beings or the living-dead) Catholic colonies proved the Caribbean’s most fertile soil for the growth of African-derived religions like Haitian Vodou and Cuban Santería.

Nowhere is African culture more vibrant in the Caribbean than in Haiti, where West and Central African religious traditions mated with Iberian and French Catholicism to breed the religion of Vodou. In Vodou, spirits (*lwa yo*) and ancestors (*lemò yo*) live in nature, and many of them embody natural features and forces. Maintaining or restoring harmony with them is Vodou’s primary concern, and nature provides the best media and mechanisms to ensure this harmony. For instance, spirit-embodying trees surround temple compounds and provide the material for sacramental drums used in communal possession ceremonies. Also, leaves are essential to the religion because herbalistic healing is one of Vodou’s primary functions.

Vodou is thus firmly rooted in nature, and many *lwas* are associated with natural phenomena. The serpent-rainbow *lwa* Dambalah Wedo, for example, lives in waterfalls; Ogun is the spirit of metals; Agwe is the *lwa* of the sea, and so on. The dead are also forcefully present in nature, being understood as living either under the ground, across the water, or in the forest. Trees and the forest (like the sea, animals, and other natural beings or forces) have “*nam*” (soul) and are thus prominent in Vodou’s rich symbolism and mythology.

Santería likewise focuses upon spirit and ancestor cults and is deeply sensitive to nature. For humans, harmony with such deities (*orishas*) and the dead (*los muertos*) is essential to a life full of *ashé*. Olodumare, the single creator god, infused *ashé* (vital force) into all of creation. *Ashé* is the healing force of herbs, the animating force of the wooden and animal-skin drum, and the whirl of the possessed dancer: The ocean's *ashe* is present, for instance, in ritual dance for Yemaya, the beautiful goddess of the sea.

Like Vodou, Santería teaches that the spirits and the dead live in the natural wilderness (*el monte*) and that we can best communicate with them through possession, sacrifice, and divination. The West African divination system known as *Ifá*, which is identified with the *orisha*

Orunmila, has been marvelously preserved in Santería. In *Ifá*, nuts, shells, and chains, are cast, read, and interpreted by ritual specialists called *babalawos*. *Babalawos* commit thousands of myths (*patakis*) to memory and use them, as directed by *Ifá*, to communicate their interpretation and advise believers on life. *Patakis* are replete with nature symbolism and often prescribe offerings or sacrifices (*ebó*) that require animals, plants, music and dancing for the *orishas*.

Beginning in the seventeenth century, British and Dutch colonialism established Protestantism as a major religion in the Caribbean. African religious traditions on mainly Protestant islands did not survive as intact as Haitian Vodou and Cuban Santería. There is nonetheless a distinctly African spirit that pervades West Indian Christianity, especially in Pentecostal and Revivalist forms, whose spirit possession, drumming, dancing, and speaking in tongues are clearly rooted in traditional African religion. Also rooted in Africa, belief in sorcery (*obeah*) and in ritual specialists who combat it is widespread in the Protestant Caribbean.

In twentieth-century Jamaica, Ethiopianist interpretation of the Bible found scriptural prophecy of the return of God to Earth as an African king. This inspired the African focus of Jamaican Rastafarianism, which emerged from a confluence of Ethiopianism, Garveyism, and Revivalist Christianity. As a result, Rastas believe that Jah (God) has returned to the Earth in the person of King Hailie Selassie I, who was crowned King of Ethiopia in 1930.

Rastafarianism reveres nature as Jah's self-expression and gift to humanity, and thus as sacred. Rasta's symbolic color triad of red, gold, and green reflects this, as green represents the vegetation of Africa and Jamaica. The religion is strongly influenced by this reverence for nature, as Rastafarian biblical exegesis demonstrates. For example, the ganja herb was first grown on the tomb of King Solomon, and its use for communion with Jah is encouraged in the Book of Genesis ("And the Earth brought forth grass, and herb yielding seed after his kind

. . . and God saw that it was good" [1:12]) and in Psalms ("He causes the grass to grow for the cattle, and herb for the service of man" [104:14]). Besides its uses in healing, ganja is smoked for meditation and communal rituals called Nyabingi, and

thus the ganja herb, along with the Lion of Judah (Hos. 5:10–14), is a dominant symbol in Rastafariansim.

Conclusion

In spite of the wide diversity of Caribbean religious cultures, taken as a whole the region's people generally share a deep sensitivity to nature as an expression of and gift from God. From the Taino to the Rastafarians, Caribbean believers have always viewed God, spirits (or the Holy Spirit, the *lwas* or the *orishas*) and the dead as manifest in nature. Understanding, communing with, and living in harmony with the sacred is thus only possible because of nature and the eternal living force, or *ashe*, that inhabits it.

This rooting in and respect for nature of Caribbean religious cultures has not, however, ever inspired broad environmental activism anywhere in the Caribbean. Deforestation, one of the region's most pressing environmental concerns, is the result of poverty, a force that overpowers Caribbean people's deep reverence for nature. At the local level, trees considered to be the homes of spirits in African-derived religions like Vodou and Santería, are spared the axe, while Rastafarians decry the exploitation of nature as another crime committed by Babylon, or the White oppressor. Yet these religions are generally made up of the region's poor, whose daily struggle for survival makes any threat to Caribbean ecosystems (though obvious to everyone) seem a tertiary concern at best. Christian missions, meanwhile, have throughout the islands financed soil conservation and reforestation projects, although their efforts have had a relatively weak impact overall and cannot atone for Christianity's economic sins that have for five hundred years underlied the Caribbean's environmental degradation.

Terry Rey

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See also: Candomblé of Brazil; Mother Earth and the Earth People (Trinidad); Rastafari; Santería; Shamanism – Traditional; Trees in Haitian Vodou; Umbanda.

Carson, Rachel (1907–1964)

Rachel Carson certainly deserves the title, “Mother of the Environmental Movement.” Her book, *Silent Spring*, published two years before her death in 1962, was a clarion call to the world to balance the needs of humans with the needs of the Earth.

Born in rural Springdale, Pennsylvania, Carson had a life-long interest in the natural world. Her mother taught her a love for nature that informed all her writing, from her first book, *Under the Sea Wind* (1941), to her last, *Silent Spring* (1962), a work that started a global movement to save a planet that was well on the way to being destroyed by industrial and governmental policies that ignored the delicate balance required in humans’ dealings with nature. In only twenty years between her first and last book, Carson explored and translated the oceanic world for millions of readers around the globe, challenged the most powerful corporations and the male-dominated scientific community, and laid the groundwork for an ecofeminist movement that highlighted the interconnectedness of every part of the natural world. Her theories about nature and about the obligations of the scientific community undermined long-held beliefs about linking the control of disorderly nature and the control of women.

In 1925 Carson began her scientific training at Pennsylvania College for Women (later renamed Chatham College), under the mentorship of Mary Skinker, a biology teacher. Skinker’s influence on Carson was tremendous; it was she who encouraged Carson’s scientific interest, helped her get a place in graduate school at Johns Hopkins, and mentored her in her struggle to enter the maledominated scientific community.

In the summer of 1929, before Carson entered Johns Hopkins, she received a scholarship to work at the Marine Biological Laboratory at Woods Hole in Massachusetts. Living on the ocean was not only a thrill to the young scientist, but that summer focused her graduate studies on marine biology, the subject of *The Sea Around Us* (1951) and *The Edge of the Sea* (1955). Her enduring interest in, and reverence for, the sea was as close as Carson came to a philosophy of life. She saw in the oceanic world what she referred to as “material immortality,” the slow accretion of new life from the old.

After finishing her Masters of Arts in Marine Zoology in 1932, Carson taught briefly at the University of Maryland. The death of her father and the Depression forced her to look for more financially secure employment, and she began working for the U.S. Bureau of Fisheries (later the Fish and Wildlife Service). After a brief stint in Chicago during World War II, Carson returned to Washington and became General Editor of *Conservation in Action*, a series of pamphlets put out by the Fish and Wildlife Service. She also had begun to study the effects of DDT on the environment and suggested to

Reader's Digest an article on the deleterious effects of the chemical on the environment. The magazine rejected her proposal, and it took another ten years before Carson was able to focus on DDT. Before becoming engaged with research on the use of pesticides, Carson focused on two books about the sea, *The Sea Around Us* and *The Edge of the Sea*. These two books, especially *The Sea Around Us*, illustrate the most powerful themes in Carson's work: a religious reverence for the sea, the womb of life, and a belief in the connectedness of all living things. The sea, she believed, was the generator and the grave for all: the alpha and omega of the planet. The life of the sea controls the life of the land and thus human life, an axiom that Carson believed should humble human beings.

After the enormous success of her two books about the sea, Carson turned once again to the issue of the chemical poisoning of the environment. During the late 1950s, the *New Yorker* had a weekly column called "These Precious Days," a "fever chart of the planet Earth, showing Man's ups and downs in contaminating the air, the sea, and the soil." Carson collected all these columns and noted the rise in Strontium 90, the rise in pesticide use, and the rise in cancer rates around the world. Humans were, she concluded, poisoning the Earth and themselves.

While universities around the United States were doing studies that showed alarming consequences from the use of pesticides, the U.S. Department of Agriculture insisted that, with precautions, the chemicals would have no adverse effects on humans or wildlife. Into this conflict Carson brought her skill as a researcher and her passion as an environmentalist. She also experienced the ways in which government controlled the truth. The Department of Agriculture and several chemical companies that had large governmental contracts set out to destroy Carson's reputation when *Silent Spring* came out and when the book was widely heralded as "a plea for reason and balance in the use of pesticides." Vesicol Chemical Corporation tried to have Houghton Mifflin suppress the book before publication, and Monsanto chemical company questioned Carson's credentials as a scientist and discounted her as a "hysterical woman." When CBS showed "The *Silent Spring* of Rachel Carson," Carson was attacked on air by Robert White-Stevens of American Cyanamid, claiming that her book was a series of gross distortions. On the contrary, even today no one has been able to document an error in *Silent Spring*.

In the opening chapter of the book, the reader is returned to a pristine rural landscape that experiences sudden death and decay. From there the book begs for a considered and selective approach to the use of pesticides. Carson questions whether any civilization can wage relentless war on life without destroying itself, and without losing the right to be called civilized.

Carson's concern for the balance of nature, for the respect for the wilderness, and for the place of humans in the magnetic chain that binds all life, made her deeply conscious of the ways in which seemingly minute causes produce mighty effects that no human being can escape.

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See also: Environmental Ethics.

Cartesian Dualism

– See Descartes, René – and the Problem of Cartesian Dualism.

Casas, Bartolomé de las (1485–1566)

Bartolomé de las Casas was a Dominican friar, born in Seville, Spain, who after an experience of conversion in 1514 spent the rest of his life defending the rights of the indigenous peoples of the New World. His devotion to justice, expressed in pointed, indignant, and prodigiously documented critiques of the Spanish colonization, as well as numerous crusades to the canonical courts, and court hearings on the conquest, earned him the name “defender of the Indians.” He was also a major theologian of peace, and arguably one of the founding fathers of anthropology, ethnography, and what can also be called “nature writing,” for his works abound in anthropology and ethnographical descriptions of the natural world of the Indies.

He wrote extensive and passionate histories of the inequities committed by the Spanish in their conquest of the new world. Both his *History of the Indies* and the

Apologetic History, totaling six hefty volumes, still constitute the wealthiest sources of information about the culture and society of the Indians of the New World. Yet, these works were only published three hundred years later. A summary, however, was published during de las Casas’ lifetime under the title of *Very Brief Account of the Destruction of the Indies* (1552). This became a sixteenth-century best seller, translated into six European languages and undergoing many editions shortly after its publication. Such was the fervor and vivid nature of de las Casas’ descriptions of the devastation of the Indies that it is alleged that this book became the source of the so-called “black legend” imputed on the Spaniards, who having suffered defeat in history were haunted by a divine curse because of their sinfulness, savagery, and unjust treatment of the Indians.

His treatise *De único vocationis modo* (*The only Method of Attracting All people to the True Faith*) (ca. 1534–1537) became the inspiration for Pope Paul III’s encyclical *Sublimus Deus* (1537), in which the rationality of the Amerindians is proclaimed as a manifestation of God’s sublimity. Because of his defense of the Indians’ right to be treated on the same terms as the other European nations of his day, de las Casas’ work is also thought to be a precursor of the international declaration of human rights and the idea of an order of law that applies to all human beings regardless of race, class, gender, or religion. In chapter 48 of his *Apologetic History* we find the rudiments of an international declaration of human rights.

In a famous debate with Juan Ginés de Sepúlveda in Valladolid, de las Casas confronted and refuted the Aristotelian-derived “right” to wage war and enslave the Indians. In the treatises prepared for his encounter against Sepúlveda, de las Casas developed and defended a prophetic, Christian, and theological humanism that laid down the foundations for a radical and pacifist democratic ethos that enshrined the unity of all humanity. The publication of his complete works in a critical edition, numbering thirteen volumes, made available for the first time in complete and unabbreviated form carefully crafted treatises and legal briefs on behalf of the Indians.

De las Casas’ work is characterized by its tenacity and unwavering nature. His defense of the Indians was a vocation and calling. Above all, his work reveals his active advocacy for pacifism. Furthermore, it is a theologically grounded pacifism (i.e., to wage war is contrary to the gospel and the Christian teachings, notwithstanding the long tradition of using Aristotle, Augustine and Aquinas to develop a theory of “just war”). Both the tenacity of his vocation and commitment to pacifism are rooted in his boundless love for the Indian.

This love in turn led de las Casas to give himself over to a prophetic activism that was guided by Christian utopianism. Being a witness to the plight of the Indians, he was an engaged advocate and he clamored for justice on their behalf. These elements gave shape to what has been called a “Lascasian” prophetic humanism. As the “protector of the Indians” he is also considered the father of Christian humanism, witness to the inhuman violence of the conquest and sinful extermination and exploitation of the *encomienda*, the Spanish institution by which Indians were given over in care to the Spanish conquistadors.

Along with the priceless documentation of the “destruction” of the New World that detailed extensively a then unknown, voluptuous, and unique fauna and flora, de las Casas has bequeathed humanity a gospel of prophetic humanism that is framed by five tenets. First and foremost, de las Casas consistently departed from popular Christian doctrine regarding the dignity of the human being, a dignity that was, for him, enshrined and exemplified in human rationality. *De hominis dignitate* describes human beings’ irreducible and unalienable capacity to reason, to persuade and to be persuaded. Second, in de las Casas’ view, the Indians were not the least of humanity and creation, but rather its exaltation. The Indian was a superlative human, the exemplar of God’s humility and magnificence, and so was their environment and surrounding world, which de las Casas compared with paradise. Most of his major treatises and histories of the New World contained descriptions of the mountains, rivers, trees, fish, fruits, bays, etc., because de las Casas thought that the cultures of the Indians could not be separated from their environment. De las Casas argued on behalf of the Indians’ basic human condition, and this included defending the world that they tended and in which they lived in dynamic relationship. In de las Casas, then, we find an explicitly articulated theology and missiology that for the first time combines reverence for the dignity of human beings along with their “natural environment,” without which human beings

would not be able to live and flourish. At the same time, this natural environment is seen as the expression of the creative and nurturing culture of the Indians.

Thus, the chronicling of the destruction of the Indies was not just a narrative about the devastation of the Indians but also of their habitat. De las Casas' work also stands in a critical and contentious relationship to the works that engaged in the so-called "debate on the nature of the New Indies," a debate among sixteenth-century theologians, historians, and evangelizers, which tried to establish the immaturity and incompleteness of the new world, and consequently, the need for European Christians to intervene and take over a continent they argued was being wasted. It is this aspect of de las Casas' work that has made him the supreme apostle of the poor for liberation theologians, as Gustavo Gutiérrez has argued. The third pillar of Lascasian prophetic integral humanism is his unequivocal and unqualified defense of the freedom of all human beings, a freedom that cannot be sullied by or mortgaged to the promise of salvation or task of evangelization. Rationality as the supreme expression of human dignity, as well as the freedom to pursue that human vocation, culminate in the right of selfdetermination for all peoples. This right is complemented by the realization that evangelization can only be undertaken peacefully and by way of rational persuasion of the peoples to be evangelized. After five hundred years of critical reception, in many cases skewed by the ideological struggles about the right of Spaniards to colonize and evangelize the New World, and only after the appearance of his complete works during the last decade of the twentieth century, a richer and more comprehensive understanding of his prophetic work can now be undertaken. He is the patron saint of the Indians, but also the father of a thoroughly Christian universalism and pacifism that remain unsurpassed and that still projects a utopian vision worth witnessing.

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See also: Christianity (7c) – Liberation Theology; Mayan Catholicism; Roman Catholicism in Latin America.

Castaneda, Carlos (1925/31?–1998)

Carlos Castaneda is a “father” of the New Age movement through his series of books detailing Yaqui Indian shamanism. Castaneda remained an enigmatic figure who avoided being photographed, interviewed or recorded. His autobiographical information is also controversial with conflicts concerning his place of birth (Cajamarca, Peru or São Paulo, Brazil) and other details of his early life. In 1951, however, he moved to the United States and began studies in anthropology. He received his Ph.D. from the University of California, Los Angeles in 1973.

Allegedly meeting Don Juan Matus in a Nogales, Arizona Greyhound bus station in the early 1960s, Castaneda described him as a *nagual* or master sorcerer (a “man of knowledge”) of mixed lineage: a Yuma Indian mother and a Yaqui Indian father from Sonora, Mexico.

When he was ten, Don Juan was taken to Mexico by his parents who were subsequently killed in the YaquiMexican wars. He then grew up with relatives in southern Mexico. According to Castaneda, at the age of 20, Don Juan met Julian Osorio, a son of European immigrants, who had himself been initiated by *nagual* Elias Ulloa into a lineage of *brujos* that reputedly went back 25 generations. Becoming part of this tradition, Don Juan eventually acquired four disciples: Taisha Abelar, Forinda DonnerGrau, Carol Tiggs and Carlos Castaneda. He taught a series of body movements described as “magical passes.” Castaneda claimed that Don Juan bequeathed to him everything he knew about his lineage of sorcerers. Toward the end of his life, Castaneda developed the “magical pass” of Don Juan into a modern practice dubbed “*Tensegrity*.” In this blend of meditation and movement exercises, the individual is depicted as a “luminous egg” that contains about 600 “assemblage points” or places where awareness shift can occur. As a process of depersonalization, *Tensegrity* seeks to break through the restrictions of ordinary cognition to understand the dynamics of pure energy.

Critics have insisted that Castaneda writings are essentially fictions, and many have doubted that such a person as Don Juan ever existed. Nevertheless, Castaneda’s first book about his alleged experiences, *The Teachings of Don Juan: A Yaqui Way of Knowledge* (1968), in which he vividly describes the spiritual and pharmaceutical adventures he had under Don Juan’s tutelage, proved to be an enormous success by answering to an emergent subcultural desire to employ non-rational approaches to reality. He pursued these portrayals of “non-ordinary reality” with a series of further works: *A Separate Reality: Further Conversations with Don Juan* (1971), *Journey to Ixtlan: The Lessons of Don Juan* (1972), and another half-dozen books in which he promoted Don Juan’s interpretation-free *seeing* or “stopping the world” as a replacement to belief

without experience. The huge success of his books (8 million copies in 17 languages) caused Castaneda to become increasingly reclusive. Even his death was not revealed until two months afterwards.

The importance of Castaneda's works, however, lies in their shamanic stress on the need to be inaccessible and elusive and, as a "spiritual warrior," for a person to become completely one with his or her environment. From this perspective, it is incumbent upon the individual to be flexible and unencumbered by sentimental emotions or past history. The message of Don Juan and Castaneda is perhaps best summed by Alan Watts' evaluation: "By not separating ourselves from nature, we return to a position of dignity."

Michael York

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See also: Anthropology as a Source of Nature Religion; Harner, Michael – and the Foundation for Shamanic Studies; New Age; Religious Studies and Environmental Concern; Shamanism – Neo; Shamanism – Traditional; Yoeme (Yaqui) Ritual.

Cathedral Forests and the Felling of Sacred Groves

“Cathedral forest” is becoming a commonplace reference to ancient or old-growth forests, from the ancient rainforests of South America and the “Cathedral Grove” of Vancouver Island to the giant Redwoods of the Pacific Northwest and the great Hemlocks of Cathedral State Park in West Virginia. Old-growth forests are, of course, highly valued for their great biological diversity. They are also prized as well for their aesthetic and spiritual values. The enormous trees of cathedral forests are often described as “majestic,” offering an ancient beauty distinguished from secondary-growth forests and tree farms. The light that filters down through the branches and leaves has been likened to the light pouring through the stained glass windows of the great medieval cathedrals. Conversely, the pillars and branchlike vaults of the gothic cathedrals also convey the grandeur of old-growth forests.

The term “cathedral forest” reflects a widespread contemporary and ancient experience of forests as sacred. As Bryant’s poem “Forest Hymn” describes, “The groves were God’s first temples” (in Schama 1995). Indeed, for millennia trees have been a location for prayer, worship, and divine revelation. In Shechem, Hebron, and Beersheba, altars were built to Yahweh under sacred oak trees. Pillars called Asherim were used in the ancient Isrealite worship of Yahweh and his consort Asherah, a tree and fertility goddess. Pillars also harbored the souls of sacred trees in the Mycenaean cult. Furthermore, Vitruvius wrote that the columns in Greek and Roman temples were modeled on tree trunks. The temples of Greece were thick with columns, and oftentimes possessed an adjacent, sacred grove. The forest origins of temple architecture are portrayed in the tree-trunk tapering of the classical column. Robert Pogue Harrison discusses the symbolism of Greek and Gothic columns and suggests “if a single column once symbolized a sacred tree, a cluster of columns may well have symbolized a sacred grove” (1992: 178).

From the eighteenth and nineteenth centuries, many texts argue that Gothic architecture was modeled on the forest, with its “ribbed vaults” depicting interweaving tree branches, the aisle down the nave of the cathedral resembling the path in a forest of ancient trees. Consider the story of Chartres Cathedral, built in 1194. Medieval tradition says it was built upon the site of a Druidic sacred grove, explaining the ceiling’s name – “the forest” (in Branner 1969: 104). In this way, Gothic cathedrals involve worship in stylized groves.

As Chartres Cathedral was built upon the site of a Druidic sacred grove, the Christianization of the empire meant countless cathedrals and chapels would replace sacred groves destroyed in the forced conversion of Earth-revering peoples. Yet, this violence did not begin with Christians. The book of Deuteronomy prescribes the cutting of the Asherim (Deut. 7:5; 12:3) in its assertion that Yahweh alone was God. The historian Tacitus gives an account of the Roman takeover of the island of Mona, a Celtic Mecca for British Druids. The Romans cut down their sacred groves and broke their altars.

The Christian empire reenacted the tradition of destroying sacred groves. Hagiography describes legends of monks working to root out paganism by forcing newly converted Christians or outraged pagans to decimate their sacred trees and groves (Glacken 1967: 310). On Monte Cassino around 525, St. Benedict cut down a sacred grove and destroyed the temple to Apollo in order to convert the people in the surrounding area to Christianity. In place of the grove, he built the first monastery. In 772, Charlemagne felled a popular Irminsal (giant column) representing the Anglo-Saxon tree of the universe. The most recounted story is that of St. Boniface, who sometime shortly after 722, cut down the Oak of Thunor (also referred to as Thor or Geismar) located on the top of Mount Gudenberg, near Fritzlar, Germany. Upon the first few blows, the sacred tree of the Saxon thunder-god split into four parts. Described as a miracle, many in the crowd were converted since the feared god did not respond with any great power or harm. Boniface used the tree to build a chapel to St. Peter on the same spot.

In spite of this violent past, naming these forests “cathedral forests” now exalts the few old-growth forests left on the planet. This history of cathedral forests nonetheless reveals a continual tension between disrespect and reverence for ancient forests. The desacralization of the forests provided an avenue for economic exploitation.

Many of the trees in Ireland were cut down to eradicate Celtic worship, which also justified using the wood to build the imperial fleet. The imperial habit continues into the present as conservative religious groups, such as the Acton Institute for Religion and Liberty, refer to the “anti-idolatry” actions of St. Boniface as a champion for today’s capitalist venues of deforestation. In contrast, other religious groups, such as the Religious Campaign for Forest Conservation, follow a Christian and Jewish tradition that loves and honors forests as the creation of God. In this view, sacrality need not imply idolatry. As religious studies scholar Belden Lane has emphasized, “for every story about saints who cut down trees . . . there are two stories of saints living in hollow oaks.” The ancient and continued sense of the sacred in such groves and the allusion to these ancient forests in architecture of Gothic cathedrals inspires Christians, Jews, and Pagans to work to save the few remaining cathedral forests.

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See also: Religious Campaign for Forest Conservation; Wise Use Movement.

Cathedral of St. John the Divine

More visibly perhaps than any of other religious institution, the Episcopal Cathedral Church of St. John the Divine in New York City has been at the forefront of the greening movement in American religion. The world's largest gothic cathedral, the mother church of the Episcopal Diocese of New York and the seat of its bishop, the Cathedral has created vanguard programs to bring together scientists and diverse religious leaders to address environmental problems, while promoting experiments in green liturgy and congregational sustainability, and introducing green architecture and creation-affirming aesthetics into traditional worship space. In the last three decades of the twentieth century and into the twenty-first Century, the Cathedral as an institution has provided solid leadership on environmental issues and sent a strong message to Christian and non-Christian faith communities alike about the pressing need to prioritize the Earth's ecological problems.

The strides the Cathedral community has made toward greening theology, worship, and institutional infrastructure, fostering institutes and conferences, commissioning ecospiritual artwork, developing learning programs, and implementing recycling programs, are largely attributed to the leadership role played by the former Cathedral Dean, The Very Reverend James Parks Morton. When he began his 25-year tenure as Dean of the Cathedral of St. John the Divine in 1972, Morton set about cultivating an intellectual community of what he called "cultural evolutionaries" – philosophers and futurists such as environmental author William Irwin Thompson and John and Nancy Jack Todd, the co-founders of Ocean Arks International, an organization that develops natural purification systems for contaminated water (Ausubel 1997). By 1975, Morton's encounters with microbiologist René Dubos and Passionist priest and "geologist" Thomas Berry, in particular, had helped fundamentally shift Morton's views on "man's relation to the Earth as it had been spelled out in the Judeo-Christian traditions" (AtKisson 1990: 16).

Morton began to make major changes at the cathedral in accordance with this new shift in thought. Morton held that, like the great holy places and sacred centers of the world, the Cathedral ought to be a great microcosm of the community – but the whole life community, not just the human community. An "Earth Shrine Habitat," which included the flora and fauna from the local bioregion (blue crabs, striped bass, and mussels) as a "tapestry of sacred biodiversity," was installed in the Cathedral's nave (Naar 1993). An "ecology trail" was put into place, which wove together various sacred sites inside and outside the Cathedral and which celebrated the wonders of creation, honored humanity's sacred connections with the planetary community and promoted

good stewardship. Innovative liturgical experiments and artistic expressions devoted to what Morton called “sacred ecology” flourished. The Cathedral of St. John the Divine soon became popularly known as the “Green Cathedral.”

What is more, throughout the decades of the 1970s to the 1990s, Morton invited a steady stream of environmental and scientific leaders to be guest speakers in the cathedral pulpit. Figures such as physicist Amory Lovins (founder of the Rocky Mountain Institute, which is dedicated to the development and implementation of alternative renewable energy sources), British scientist and Gaia theorist James Lovelock, and *Earth in the Balance* (1992) author, former Vice President Al Gore.

In 1990, with direction from Paul Gorman, the former Vice President of programs at the Cathedral, and led by the now-deceased astronomer Carl Sagan, a collective group of senior religious leaders and prominent scientists formed the Joint Appeal by Religion and Science for the Environment (JARSE) “to put forward a scientifically informed theological and moral response to the global environmental crisis” (Logan 1992). In 1991, the JARSE organization took up residence at the Cathedral of St. John the Divine and convened a summit meeting on the environment to foster collaboration between religious and scientific communities on addressing environmental concerns. In the fall of 1993, again under Gorman’s direction, the National Religious Partnership for the Environment evolved, which placed four major religious groups (the National Council of Churches, the U.S. Catholic Conference, the Evangelical Environmental Network, and the Coalition on the Environment and Jewish Life) into conversation with one another about issues such as environmental stewardship, eco-justice, and sustainability.

The Cathedral at St. John the Divine is also headquarters for numerous other organizations and programs working on environmental issues. The Gaia Institute (founded in 1984), for instance, works to translate Gaian theory into “on-the-ground” ecological practice and is responsible for the Cathedral-based “Urban Rooftop Greenhouse Project,” which promotes sustainable urban living and the greening of cityscapes. The Cathedral has become home to a recycling center for the Upper West Side of New York City and has hosted programs that help congregations conduct “Earth audits” to determine their level of resource use or “ecological footprint” and to find ways to reduce the size of that footprint.

Ecological consciousness is even being built into the very structure of the Cathedral, which increasingly reflects its stated “architectural commitment to sacred ecology.” Completion of construction at the Cathedral has been painstakingly slow (the building has been under construction for over 100 years) and has been set back at various times by capital shortages and a fire that occurred and was contained in 2001. Nevertheless, the commissioned south transept will take the form of a greenhouse “bioshelter” which has been designed to embody a “profound communion between nature and humanity.” Plans also include the addition of a solar tower to the Cathedral’s green architectural plan.

Inside the building, the Cathedral's "Ecology Trail" brings the outdoors in and honors creation as a living part of the worship space. The trail begins at the west end of the Cathedral at the "Creation Window," where images of the sun and its planets evoke the cycles of birth, death, and resurrection from the dawn of time. In the north side of the Cathedral hangs a Native American medicine wheel dedicated to healing the land of the Americas and giving thanks to the continent's "First Peoples." (An annual Native American Thanksgiving service of reconciliation is held at the Cathedral.) In the nave, there is a fallen walnut tree that has been split in two and rejoined, forming the "Peace Altar." A banner created by artist Frederick Franck hangs above the altar and depicts humankind in all its diversity. Other stops along the trail include the "Religious Life Bay" or the "Earth Bay," which features a fossil of a giant mollusk shell. The spiral or nautilus configuration of the mollusk shell represents the unfolding sacred history of creation. Here, pilgrims along the Ecology Trail are invited to meditate on their relationship to the Earth and its creatures.

The Cathedral has become perhaps most famous in recent years, however, for its innovative liturgy, in particular its annual Festival of St. Francis Animal Blessing and the accompanying "Gaian Mass." During the Gaian/Earth Mass, first performed by Cathedral artist-in-residence Paul Winter and his Consort in 1981, clergy bless everything from family dogs and cats to monkeys and llamas, even birds and bluegreen algae. The giant doors at the front of the Cathedral are opened for the occasion, and a great African elephant leads the procession of creatures down the nave to the altar. Participants sing hymns of praise to the Earth and liturgical dancers perform to celebrate and honor creation. Like the Day of St. Francis, the winter and summer solstices are also recognized as "Earth holy days" or festival days within the Cathedral's liturgical calendar and are celebrated with concerts featuring Paul Winter's music. These celebrations consistently draw more than 3000 participants.

Despite these successes, being on the "cutting edge" of sacred environmental work has not been easy. The Cathedral and its deanship (Morton left in 1997 to found The Interfaith Center of New York) have faced various accusations from within and outside the Church that the community's programs promote "paganism," "animism," or "New Age" worship. Still, the Cathedral's innovative green liturgies and environmental programs have stood the test of time. As the "greening" of theology, worship, and ministry has become more mainstream and accepted within a diverse range of denominations and religious communities across the U.S., Canada, and beyond, much of this early criticism has faded (except from the most conservative of sectors). The Cathedral-based National Religious Partnership for the Environment, for instance, now represents over 100 million American church and synagogue members who have acknowledged a moral and ethical responsibility to the care of creation. The Cathedral is thus operating today in a very different context than it was during the 1970s – one in which inspiring an ecological consciousness among the faithful and their leaders is not the uphill battle it once was. In any survey of the "greening movement" in American religion, it is critical to note that this more receptive and Earth-conscious climate among congre-

gations largely exists now precisely because of the watershed effects of the Cathedral of St. John the Divine's early programming and policy risks on the larger religious landscape.

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Caves – Sacred (Thailand)

Buddhist monks and nuns dwelled and meditated in caves in northern India some 2500 years ago. Subsequently this practice spread with Buddhism to other parts of Asia. The sacredness of a cave usually discourages, if not completely excludes, the human use of the animal species in it, and to some degree, around it. Bats are usually the most important fauna in caves. They are also keystone (critical) species in forest and other ecosystems as pollinators, seed dispersers, and insect predators while they forage widely at night. An ecological connection between Buddhist practices in sacred caves on the one hand, and on the other, the conservation of bats and the maintenance of the ecosystems in which they forage seems not only plausible but quite likely. Given the antiquity, multitude, and widespread distribution of such sacred caves in many parts of Asia, they are probably a significant force in environmental and biodiversity conservation, even if previously unrecognized as such.

The use of caves for religious practices by individuals and groups goes back in time for millennia in India. The Buddha dwelled and meditated in caves, forests, and other kinds of sites, practices which became common for Buddhist monks and nuns during his lifetime and beyond. Whenever Buddhism expanded into other parts of Asia, this use of caves spread as well.

Thailand provides a good example of this phenomenon. The earliest known use of caves by Buddhists in Thailand dates back to at least the sixth to seventh centuries. At least 112 Buddhist sacred caves have been identified in Thailand by Christophe Munier (1998). Furthermore, it is likely that there are many more caves in Thailand, hundreds if not thousands, given the combination of several limestone mountain ranges which run from north to the south through the western portion of the country, together with the heavy tropical monsoon rainfall with some acid content that can slowly erode these soluble carbonate rocks over long periods of geological time.

Caves serve monks and nuns as a secluded, quiet, and peaceful place for monastic life, meditation, and chanting. They may also be used as reliquaries and tombs. A holy person occupies a cave for only a few days or for months or even years. In Thailand and elsewhere, sacred caves typically contain rows of several sizes of seated statues of the Buddha in the meditation posture, and often a huge reclining statue of him as well. In some caves, stalactites are also worshipped when they resemble figures associated with Buddhism. Bat colonies also inhabit many caves. Bats (Order *Chiroptera*) are one of the largest and most widely distributed groups of mammals (Class *Mammalia*) in the whole world and also in Thailand. There are nearly 1000 species of bats in the world comprising about one quarter of all mammalian species. Like other mammals, including

humans, bats are warm blooded, hairy, give birth to live young, and nurse their young with milk. Bats are found on every continent except Antarctica. In Thailand, 107 species of bats have been identified thus far, 38 percent of the 280 species of mammals in the country. Bats are common in most terrestrial ecosystems in the nation.

Bats roost in a variety of places, depending on the species, and some roost mainly or exclusively in caves. Some bat colonies are the largest concentrations of mammalian populations on Earth with thousands or even millions of individuals. In Thailand, at the minimum,

27 species of insectivorous bats and four species of frugivorous bats roost in caves, although not necessarily exclusively.

Keystone species, like bats, play a disproportionate role in an ecosystem and the extirpation of a population or extinction of a whole species would precipitate farreaching ecological changes. Frugivorous bats are especially important in pollination and seed dispersal, while insectivorous bats are significant in controlling insect populations. Distances flown in foraging vary with the type and availability of the preferred resources. In tropical forests, bats fly over long distances to locate and feed on trees with appropriate fruit, some making nightly roundtrips of 40–50 kilometers between their cave and fruitforaging areas.

The majority of the species of bats worldwide (70%) and in Thailand (83%) are insectivores. Bats are the only major predator limiting the populations of nocturnal insects like rice-hoppers and mosquitoes. Insectivorous bats consume large quantities of insects; a single colony of bats can consume hundreds of tons of insects annually.

Bats are especially vulnerable. They are the slowest reproducing mammal in the world for their body size, most species producing only one offspring annually. Many bat species are rare, occurring in few habitat types and with restricted geographical ranges. Major factors threatening or endangering bat populations and species include: habitat destruction (roosting locations and depletion of critical food resources); poisoning from chemical pesticides; and human overexploitation (for food, tourism, and other economic uses).

On the other hand, there are economic uses of bats that do not harm them. For example, bat droppings accumulate on the cave floor of large colonies. This guano is a highgrade fertilizer that is gathered for sale by some villagers who are therefore concerned with protecting the bats. Indeed, the temple of Khao Chong Pran, in Ratchaburi, has a cave housing more than two million free-tailed bats (*Rhinopoma hardwickei*). Every two weeks local villagers are allowed to collect the guano, and the income earned is used by the monks to support a school and various development projects.

Sacred caves usually discourage, if not completely exclude, the molestation or exploitation of the fauna therein and nearby, thus effectively promoting the conservation of roosting bats. This in turn helps guard their role as keystone species in forests and other ecosystems which may be a long distance from the caves. Sacred caves are a component of a very ancient, widespread, and diverse system of sacred places through-

out Thailand that have far-reaching significance for environmental and biodiversity conservation.

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See also: Biodiversity and Religion; Buddhism (various); Hinduism; Siam's Forest Monastaries; Southeast Asia; Thai Buddhist Monks.

Celestine Prophecy

The *Celestine Prophecy* is a 1993 adventure novel by New Age author James Redfield (1950-) that spent over three years on the *New York Times* bestseller list, establishing itself as the most widely read spiritual novel of the 1990s, rivaled only by Tim LaHaye's evangelical Christian apocalyptic "Left Behind" series. The book tells the story of the discovery in Peru of an ancient manuscript that provides a series of nine insights that transform the lives of those who learn about them, presaging an era of heightened spiritual awareness, promising, in turn, a utopian New Age. Following the stunning commercial success of *The Celestine Prophecy*, Redfield followed up with a number of other books, including two novelistic sequels, *The Tenth Insight* (1996) and *The Secret of Shambhala* (1999).

The main worldview elements in these novels are conveyed through the experiences and words of their characters, who increasingly develop their spiritual acumen. In the following sections these themes are briefly summarized and then illustrated in the words of the characters in the novels.

Humankind's Destiny and the New Age

The universe has both an earthly and a spiritual "afterlife" dimension. Both are interdependent and coevolving, connected by divine energy which makes positive evolution in both dimensions possible and mutually dependent. This energy travels between the earthly and spiritual dimensions through "portals," which people consciously working on consciousness evolution can increasingly perceive. Through these portals it is possible to receive teachings from ancestors and other loving presences, and empowerment for the divine, human mission. This mission is to raise positive, loving energy to such an extent that heavenly and earthly dimensions come into alignment, inaugurating a utopian New Age. Realizing this mission is nothing less than the human destiny. As put by various characters:

Our destiny is to continue to increase our energy level. And as our energy level increases, the level of vibration in the atoms of our bodies increases . . . we are getting lighter, more purely spiritual . . . Whole groups of people, once they reach a certain level, will suddenly become invisible to those who are still vibrating at a lower level. When humans begin to raise their vibrations to a level where others cannot see them . . . it will signal that we are crossing the barrier between this life and the other world from which we came and to which we go after death. . . . At some point everyone will

vibrate highly enough so that we can walk into heaven, in our same form (Redfield 1993: 241–242).

The human destiny is, therefore, “to realize that we’re all here to bring the Earth dimension into alignment with the Heavenly sphere” (Redfield 1996: 183). To do this we must open the portals between these dimensions. One way to do so is through human love making:

The act of lovemaking itself opens up a portal from the afterlife to the Earthly dimension . . . Sexual culmination creates an opening into the Afterlife, and what we experience as orgasm is just a glimpse of the Afterlife level of love and vibration as the portal is opened and the energy rushes through, potentially bringing in a new soul . . . Sexual union is a holy moment in which a part of Heaven flows into the Earth (Redfield 1996: 80).

Another way is through especially powerful natural sites, namely, those that have not been destroyed through unconscious human enterprise. This possibility was signaled early in *The Tenth Insight* when a Native American indicated that his ancestors “believed this forest was a sacred midway between the upper world and the middle world here on Earth” (1996: 8). Another character later confessed that forests and other “natural areas are sacred portals” between the afterlife and earthly dimensions, and asserted that it is critical to keep “majestic, cathedral forests” with their irreplaceable “diversity of life, and [the] energies, inherent in a hardwood forest that had matured for centuries” from being converted to tree farms (1996: 208).

Spiritual Consciousness Change and Biocultural Diversity

There are diverse spiritual tributaries to this emerging New Age, including “Franciscan Spirituals,” Gnostics, and mystics in the Western world, Eastern religious avatars of enlightened consciousness, Native Americans, those striving to reduce human suffering, such as participants in the human potential movement (a recent book Redfield co-authored with Esalen co-founder Michael Murphy [Redfield, Murphy and Timbers 2002]), and environmentalists and others sensitive to nonhuman life. The flourishing of both biological and cultural diversity is not only an end, in the Celestine worldview. The envisioned consciousness change is dependent upon both biological and cultural diversity, for both contribute insights and critical energies to the awakening of the human species, upon whom the unfolding New Age most depends. This provides a strong rationale for environmental activism and solidarity with indigenous cultures, the latter of which, in the Celestine worldview, are often more attuned to animals and nature, one of the key sources of spiritual insight.

In part because natural sites are portals between worlds, it is in the spiritual interest of humankind to protect such places and biological diversity. We need these species “not

because they are part of the balanced ecosphere, but because they represent aspects of ourselves that we're still trying to remember" (Redfield 1996: 221), including our ultimate destiny. Redfield believes that one of the obstacles to the envisioned transformations is that "few of us have experienced the mysteries of the wilderness" (Redfield 1996: 222). For consciousness to awaken, humans must continually refine their spiritual sensitivity, and the prospects for this depend on nature. Healthy forests, for example, provide more dynamic energies and greater potential for transdimension communication and thus need reverent protection. Moreover, "the truth is that evolution is the way God created, and is still creating" (Redfield 1993: 236), and since consciousness change is an aspect of evolution, it is logically dependent on the protection of natural habitats.

Oracles, Intuitions, and Dreams

Critically important for the evolution of human consciousness is the development of our intuitive capacities. To the spiritually perceptive person, people and animals are oracles, continually crossing our paths, pointing out the proper direction for us, or otherwise providing important lessons to enhance our own spiritual evolution.

People can certainly be oracles, for "the Manuscript says we will learn that sudden, spontaneous eye contact is a sign that two people should talk" (Redfield 1993: 208), for "if we are observant about who we talk with, then we get the messages we desire as a result" (Redfield 1993: 208). The ability for others to be oracles for each other is especially powerful "in a group when all of the participants know how to interact in this way" (Redfield 1993: 212).

In their own ways, nonhuman animals are oracles too, for "When an animal shows up in our lives, it is a coincidence of the highest order" (Redfield 1996: 218), and in *The Tenth Insight* the reader learns the symbolic meanings and lessons to be learned from a number of animals encountered during the story.

The spiritual epistemology also requires that we develop and trust our own dreams and daydreams, another intuitive pathway through which spiritual insight appears. "Compare the story of the dream to the story of your life" (Redfield 1993: 164), the Prophecy declares, for dreams are to guide us, they "come to tell us something about our lives that we are missing" (Redfield 1993: 166). Moreover, not only dreams, but also everyday "thoughts or daydreams guide" the spiritually intuitive individual (Redfield 1993: 168). To recognize such things as messages "we must take an observer position. When a thought comes, we must ask why?" (Redfield 1993: 169)

Within the Celestine worldview, then, there are few if any coincidences – for the divine dimension is always trying to break through to us, awakening our consciousness. Of course, the healthier the energetic lines of communication are between earthly and heavenly realms, which is in truth dependent on the health of the natural world, the greater potential there will be for the full flowering of our intuitive capacities.

Additionally, according to *The Tenth Insight*, it is critical to maintain an optimistic and hopeful outlook, “so that we [can] finally remember the truth that our life experiences are preparing us to tell, and bring this knowledge to the world” (Redfield 1996: 234).

Between the Times

As with most millennialism, there are difficult to resolve internal tensions and ironies. It is not easy, for example, to reconcile the strongly stated value of the Earth’s living systems with an envisioned mass “ascension” from the physical realm into a spiritual one. It is interesting that, despite taking significant steps toward a nature-related religiosity, the *telos* seems to be more about transcending this world than living fully in it, unlike some nature religions. Indeed, one does not find prevalent here the language of “belonging” and “connection” to the Earth that is found in many other religions that consider nature sacred in some way, including much of the spirituality that inheres to environmentalism.

Those who postulate that nature has intrinsic value would likely complain that Redfield views nature as valuable only in an anthropocentric, instrumental way, as natural resource, to be used to promote human spiritual well-being. They might conclude that consequently, such a worldview cannot provide a strong rationale for environmental protection efforts, for personal evolution trumps all other concerns.

Redfield would likely view such complaints as typical of the kind of polarizing thinking that must be overcome with positive, conscious energy. He certainly would argue, on the contrary, that the health of the planet depends on the kind of consciousness change envisioned in his novels and promoted in his nonfiction books, and rejoinder that personal and collective evolution are mutually dependent. He might well also quote one of his characters to the effect that a spiritual approach, producing human consciousness change, is *the* way to save the planet’s biota:

Once we reach the critical mass . . . and the insights begin to come in on a global scale . . . we’ll grasp how beautiful and spiritual the natural world really is. We’ll see trees and rivers and mountains as temples of great power to be held in reverence and awe. We’ll demand an end to any economic activity that threatens this treasure (Redfield 1993: 224) . . . And we’ll understand . . . that the natural areas of the Earth have to be nurtured and protected for the sources of the incredible power that they are . . . As the human race evolves spiritually, we will voluntarily decrease the population to a point sustainable by the Earth. We will be committed to living within the natural energy systems of the planet. Farming will be automated except for the plants one wants to energize personally and then consume. The trees necessary for construction will be grown in special, designated areas. This will free the remainder of the Earth’s trees to grow and age and finally mature into powerful forests. Eventually, these forests will be the rule rather than the exception, and all human beings will live in close proximity to this kind of power (Redfield 1993: 227).

Here then is the Celestine's vision of transformation and the reharmonization of life on Earth, one that is ultimately optimistic about humans and their technology. Cross-fertilized with environmental and personal existential concerns, the result is a powerful earthen spirituality that resonates with millions of people largely unconnected with mainstream religions. Others involved in green religious production are critical of or suspicious of such New Age ecospirituality – radical environmentalists, for example, are generally critical of New Age anthropocentrism, optimism and technophilia, and would dislike these aspects of Redfield's thought. Nevertheless, his books suggest that New Age spirituality may well be turning a darker shade of green, encouraging rather than hindering environmental activism.

Redfield himself has been actively engaged in a number of environmental causes, working with the Washingtonbased environmental group Save America's Forests, and has participated in the Global Renaissance Alliance (GRA), a New Age organization devoted to peace and positive social change. Such works have earned him a number of humanitarian awards since 1997.

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See also: Earth Mysteries; Esalen Institute; Harmonic Convergence; Harmonic Convergence and the Spiritualization of the Biosphere; New Age; Sacred Space/Place.

Celtic Christianity

God be with me, God within me, God behind me, God before me, God below me, God above me,

God where I rest, God where I rise...

(from the Old Irish prayer, “The Cry of the Deer”).

The term “Celtic Christianity” is generally used to describe an approach to the sacred that developed in Celtic lands from around 500–800. Its philosophy is often said to include a perception of Deity immanent in creation, and consequently, a reverence for nature and reluctance to accept the doctrine of original sin. Some scholars, such as Mary Low, believe that these elements result from a high degree of “cross-pollination” between Christianity and paganism in Celtic lands (Low 1996: 4–22). The distinctiveness and very existence of Celtic Christianity continues to be hotly debated by Celticists, theologians and laypeople alike.

The most detailed sources on Celtic Christian theology are Irish, because most of the oldest native written sources on Celtic traditions are Irish. While we cannot be sure that this distinctive Irish theology reflects that of Celtic Christianity as a whole, later traditions found in works such as Alexander Carmichael’s collection of prayers and invocations from Scotland, *Carmina Gadelica*, seem to reflect similar cosmological views.

One early Irish manuscript described a wondrous tree with “its upper part above the firmament, its lower part in the Earth, and every melody in its midst.” It grew down from a single root, with innumerable roots coming from it below. There were nine branches full of singing white birds, “every branch more beautiful than that above” (Low 1996: 102–3).

The tree is Christ, who is above all beings, yet born of the Earth. The tree’s melody is perfected bliss in the depths of divinity. Its single root is the Godhead, the roots described branching from the single root are the apostles, disciples, and saints. The nine branches are the nine angelic orders, “with each order more noble than that before it.” The birds are the souls of the just. After his description, the writer invoked God’s mercy, that “those of us who dwell together here . . . may dwell among the branches of that tree” (Low 1996: 102–3).

The cosmological symbol of the “World Tree” linking creation’s realms from the heavens to the underworld appears in many cultures. The downward-growing tree, rooted in heaven, appears in the *Upanishads*, the *Kabbalah* and Norse tradition, so while this is a Christian text, the idea of God as a downward-growing tree is much older (Low 1996: 103).

This archaic cosmological symbol depicts a God who is *in* his creation, as well as above it. The Irish theologian, John Scotus Eriugena (d. 877), said that God is Essence, but transcends essence, he is Intellect, but beyond intelligence, he is Substance but above substance. Creation is the emanation of God into form. All created things, from humans to plants to thoughts are *theo-phanies*, or manifestations of God. Creation *ex nihilo* is actually creation *ex Deo* (Moran 1989: 236).

The idea that God created the universe from itself is completely logical. After all, if there was only God in the beginning, what else did it have to use? While the logic is simple, the implications are complex.

The first is that God is immanent in all form. This is an extension of *animism*, the belief that all things have spirit. But it goes beyond that. God is compassionate in the literal sense – a co-sufferer *with us* in all we experience. God's sacrificial role is vast.

In this view of creation, life is not something God *did to us*. Rather, it is something we did to ourselves, since we were one with God when the decision to create the universe was made. There is risk on all sides. Even God doesn't know how it will turn out. Eriugena called the doctrine of predestination, the idea that God knows who will go to heaven or hell, "stultifying, crude and insane," in part because any being that can fully comprehend itself is finite – and the minds of God and humanity are infinite (Moran 1989: 189).

The view of creation *ex Deo* also goes some way to explaining the often noted Celtic discomfort with the idea of original sin. The British or Irish theologian, Pelagius (d. 418), asserted that Adam's sin harmed only himself and that human nature is indestructibly good. If we are made from God, how could our essence be sinful? Evidence of this view is also found outside theology. Some tales place figures from the pagan past such as the Tuatha Dé Danann in a sinless Otherworld, classifying them as "neutral angels," or branches of humanity who avoided the fall.

John Carey noted that this rapprochement between Christian and pagan traditions represents only one strand in a complex culture, but "is a notably interesting strand, reflecting a mentality for which I know of no close parallel in medieval Christendom." The Irish scholars and bishops sought to create a hybrid culture "both wholly Irish and wholly Christian" (Carey 1999: 10–11).

The points above show clear *qualitative* differences between fifth-century to medieval Celtic Christianity and Christianity elsewhere in this period, despite some scholars' opinions to the contrary.

Just as it seems that the Irish in particular would simply not accept a faith in which all their gods and ancestors were either demonic or damned, it seems that the Celts would also not accept a "fallen" world. Animistic cultures see matter as the densest level of spirit, not something separate from it. If all substance is made from God, then it cannot be profane.

It also follows that God can be experienced through nature. Eriugena, in his *Aulae Siderae* said: "If anyone with pious heart raise the wings of his mind . . . Entering the

harmony of things with wisdom as his guide / He will perceive with the clear sharpness of reason / All places, all times, filled with the God-Word” (O’Meara 1988: 185).

The experience of God through form can also lead us beyond form. Eriugena said that we can experience *theosis*, or deification, through contemplation (Moran 1989: 148, 253). In *theosis*, we experience the melody within the great tree, “the perfection of bliss in the mystic depths of divinity.”

The experience of God with us and *within us* means that the physical world is not “lower” than the spiritual world. Remember that the nine branches of the great tree are the nine heavenly orders, “with each order more noble than that before it.” The single root of Absolute Deity is in heaven, but the tree grows downwards. Therefore, the loftiest of the divine orders *is that which touches the Earth*.

Geo Athena Trevarthen

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Celtic Spirituality

It is widely assumed that Celtic spirituality epitomizes and promotes a particular reverence for, understanding of, and relationship with nature. Many conceptions of Celtic spirituality are predicated upon the image of the Celt as inherently spiritual and intuitive guardian of that which is “lost but longed for” in contemporary society in a respectful, symbiotic and sacred relationship with nature. This characterization may be contested, but it is hugely influential. Any blanket pronouncement on the nature of Celtic spirituality is fraught with difficulty, due to the potential breadth of understandings of the term Celtic. If linguistic evidence is taken as the basis of defining the extent of Celtic culture, it stretched from Scotland in the north to Tuscany in the south, from Portugal in the west to Galatia (Turkey) in the east. Many involved in Celtic spirituality now prefer to concentrate on those areas where the “insular Celtic” language group (including Breton, Cornish, Irish, Manx, Scottish Gaelic and Welsh) survived into the nineteenth century and continues in both traditional and revived usage.

The term “Celtic spirituality” in twenty-first-century parlance covers a huge variety of belief and praxis and involves a wide range of contemporary spiritual seekers – Christian, New Age, (Neo) Pagan, Druid and non-aligned. Current Celtic spirituality looks back to two main forms of “historic” Celtic religiosity, pre-Christian Celtic religion and Celtic Christianity. On the assumed basis of a common Indo-European heritage, some link pre-Christian Celtic religion (particularly Druidry) with Hinduism and Buddhism, while those who regard Celts as Europe’s “native peoples” look to contemporary indigenous religions for inspiration. In contemporary Celtic spirituality, Celtic Christianity is generally characterized as gentle, tolerant, meditative, egalitarian, world affirming and holistic, and it is assumed that many of “the old ways” survived either overtly or covertly within it.

Leaving aside the provocative views of some archeologists and anthropologists who question the existence of an identifiable, self-aware and coherent Celtic culture prior to the eighteenth century, Celtic spirituality – both preChristian and Christian – is regarded by many as identifiable in form and substance across many centuries.

Sources and Speculation

Most sources of evidence do not come handily labeled with the precise intent and worldview of their originators and subsequent users, allowing for a great deal of interpretive flexibility.

Written sources in relation to pre-Christian Celtic spirituality are problematic, for as oral tradition was central to Celtic-speaking peoples at this time, no contemporary “insider” literature exists. The earliest accounts of Druidry (regarded by many as Celtic nature religion *par excellence*), for example, come from classical authors rather than practitioners. It is only after Christianization that Celtic myth, history, story cycles, poetry, etc. go into written form in various languages, and it is thus difficult to gauge the age, authenticity and original purpose of much of this material. The presence of pre-Christian material in literature produced in a Christian context has also been used as evidence to suggest the continuance of older ideas and ways (such as reincarnation and reverence for nature) alongside the new religion. The Arthurian myths, powerful sources of inspiration for many modern spiritual seekers, are seen to epitomize such blending, with Merlin as Arthur’s Druid, and the physical condition of the land being closely connected to the moral and spiritual state of the nation.

There is a tendency to regard all “Celtic literature” (whether early to late medieval written material or oral tradition collected in the eighteenth, nineteenth, and twentieth centuries originally in a variety of Celtic languages) as uniformly “ancient” and pan-Celtic in provenance. It thus provides rich sources of speculation and extrapolation in relation to belief and practice. In Celtic myth and poetry people see evidence of a special relationship with and awareness of nature, a detailed knowledge of the natural world (expressed, for example, in herbal lore) and a blurring of boundaries between the human and nonhuman.

Art and Artifacts

Celtic art is frequently seen as instructive of Celtic relationships with nature. Artifacts such as jewelry, weapons, mirrors and metal vessels from various European archeological sites, and the distinctive high-quality artistry of manuscripts, stonework and metalwork in the early Christian period can be analyzed for clues to the worldview of their crafters. In the unbroken lines of Celtic interlaced knot-work patterns some see evidence of holism, the continuous cycles of nature, and possibly reincarnation. In the spectacular zoomorphic ornamentation of manuscripts (crafted by Christian scribes) some see evidence of shape shifting and interconnectedness between the human and nonhuman world. However, there is obviously scope for a variety of interpretations and inferences. On the Gundestrup Cauldron (dated to the first century B.C.E., found in a Danish peat-bog), for instance, there is a horned human-like figure sitting surrounded by animals and grasping a snake in one hand, a torc (metal collar or armband) in the

other. Whereas this has often been interpreted as the Celtic horned god Cernunnos, some are now more inclined to see the figure as a shaman.

Sacred Sites

The precise purpose, significance and date of prehistoric structures such as Stonehenge and Avebury are uncertain, as is the extent to which they were made or used by Celts or “proto-Celts.” However, many feel that the symbolic significance of the stone circle as eternal, egalitarian and encompassing, and the idea that worship is appropriately conducted outside in communion with nature accords with their understanding of Celtic spirituality. Whether temples, sacred (and in warlike times, neutral) space, or sophisticated solar and astrological observatories, the stone circle (ancient or newly constructed) has become a significant focus for modern Celtic ritual.

Archeological evidence indicates highly localized deities connected with specific places, springs and rivers. Some regard contemporary Celtic spirituality’s topophilia (strong attraction and attachment to particular places) in relation both to pre-Christian and Celtic Christian sites as a continuance of that tradition. In the pre-Christian period there was much activity connected with water, and certain trees were revered. It is widely assumed that many such Celtic sacred sites were Christianized; holy wells, for example, continued to be a significant feature of Celtic Christianity. Thus, in self-conscious restoration or continuance of Celtic tradition, offerings are frequently left at what are considered sacred sites and natural features such as springs and trees, with tree and well dressing an increasing activity. While some modern Pagans continue to revere local Celtic gods and goddesses (such as Sul in Bath), many now regard the various ancient Celtic deities simply as aspects of the universal sacred female; to this extent there may be a tension between the local and the global, the ancient and the modern. Burial mounds are now regarded by some Celtic practitioners as representations of the womb of Mother Earth, and used in rituals specifically for women, or used seasonally for remembering and relating to ancestors, death and rebirth.

The Celtic Calendar

Many Celtic spirituality practitioners observe the so-called “Celtic” or “eight-fold” calendar of Samhain/Hallowe’en (31 October), Imbolc/Candlemas (2 February), Beltane/ May Day, Lughnasadh or Lammas/Harvest (1 August), summer and winter solstices, and spring and autumn equinoxes; the belief that the Celtic year started on November 1st is widespread. Following this “Wheel of the Year” is thought to foster awareness of nature and the seasons, and the cycle of life, death and rebirth; customs have been “revived” or invented and rituals are frequently performed in relation to

it. Although the veracity and antiquity of the “Celtic calendar” are questioned and practitioners of Celtic spirituality in the Antipodes and elsewhere have to reverse or remodel it to suit local conditions, patterning and celebrating the year on this model is regarded as a significant means of expressing a Celtic closeness to the natural world.

Celtic Spirituality and Environmental Action

Celtic spirituality has been utilized both to foster and give expression to environmental concern. Some Celtic practitioners have felt impelled to act as protectors and protesters, particularly where ancient sites and landscapes have been under threat. In the British “Road Protest” movement, for example, some protesters (predominantly Pagan or non-aligned) self-consciously drew on Celtic myth and music for inspiration, and constructed rituals around the eight-fold calendar. Certain trees within protest camps were named and particularly honored, their well-being closely identified with that of the activists. While some Druids felt disinclined to be involved in political matters, others visited and held rituals at the protest sites to lend moral support.

Conclusion

Contemporary Celtic spirituality owes much to Romanticism and primitivism, as well as late twentieth/early twenty-first-century religious trends and environmental concerns. Nevertheless, by drawing on sources such as sacred sites, folk custom, Celtic art and artifacts and myth and literature from a variety of Celtic languages and periods, many spiritual seekers are today (re)constructing models of respectful, self-aware and appropriate engagement with nature in the contemporary world.

Marion Bowman

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Centre for Human Ecology (Edinburgh, Scotland)

The Centre for Human Ecology originated with the Centre for the Study of the Future founded in 1972 by the biologist Professor C.H. Waddington in the University of Edinburgh. In the early stages of the Centre's history, pioneering attempts were made to secure a cohesive view of the implications of environmental policy and research for the global ecosystem in the face of the exponential growth and fragmentation of biological and environmental sciences. These concerns consolidated around human ecology-defined systemics of resources, environment and development (PRED), and later, as the relationship between the social environment and the natural environment, and as the study of human community.

The Centre for Human Ecology gained greater political prominence during the last decade of the twentieth century under the joint leadership of its Director, Ulrich Loening, and its Teaching Director, the radical Scottish community activist, Alastair McIntosh. While the interdisciplinary methodology was developed and applied in the teaching and research of both tutors and students in the core programme offered by the CHE, the Master of Science degree in Human Ecology of the University of Edinburgh, the personal, political and, above all, the psychospiritual implications of this holistic approach shifted increasingly from theory into practice with controversial consequences. A series of high-profile campaigns, in particular the action which eventually led to the inhabitants' buy-out of the Isle of Eigg and the Harris super-quarry public inquiry, in which the Teaching Director played a leading role, increased tensions both within the CHE, and between the latter and its host institution. McIntosh employed Celtic shamanic and bardic techniques in the empowerment of his Quaker commitment. Members of the

CHE continue to represent many shades of religious opinion and practice, ranging from Christian Episcopalian, Findhorn Foundation-affiliated "New Age," Western Buddhism, and radical ecofeminism, to Scottish and Irish "Nature Religion" centered on reverence for the God/Goddess.

Throughout the late 1980s and 90s successive British governments sought through the 1988 Education Reform Act and the subsequent *Dearing Report on Higher Education* to bring all aspects of education under ever tighter centralized control. Educational aims and objectives were required to accord a central role to generic marketable skills and "total quality" management systems applied to the production of graduates

with uniform, programme-specified skills and competences. This rationalization of education does not easily tolerate innovative and opened shamanic teaching methods directed toward the informed and critical interrogation of the commercial forces accelerating global degradation; such teaching became deviant and institutionally suspect. In addition, British universities were obliged to seek out commercial and industrial sources of funding for their core teaching (and not solely their research activity). The consequence was a tendency in universities to ensure that nothing was sanctioned which might damage income flow.

In the period from 1990 to 1996 the struggle between the CHE and the University of Edinburgh attracted international attention, and a *New Scientist* leader of 4 May 1996 described the University as “a narrow kirk” and the CHE as “a tradition of fearless inquiry.” Within the CHE itself a parallel and passionate discussion took place between advocates of radical resistance and of compromise. Whilst Principal Sir David Smith sought to defend the freedom and continued existence of the CHE, his successor in 1995, Sir (later Lord) Stewart Sutherland presided over its closure in 1996 in a blaze of publicity. In effect, radical epistemology won out, but at the ultimate price. Such, however, was the loyalty and commitment of a number of the graduates that the organization was relaunched as an independent organization with charitable status and its MSc degree validated by the Open University (Britain’s largest higher education provider). The core elements in the CHE MSc Programme in Human Ecology comprise scientific ecology, the social and psychological aspects of ecological thinking, and the motivation of human ecological activism, with particular emphasis upon the role of communities in relation to place and environment, including the spiritual underpinning of human community. The CHE now experiences an unavoidable creative tension between nationally enforced criteria of “Quality” built around the practices of efficiency, uniformity, predictability and control (demanded as the price of official validation), and a teaching programme that incorporates aspects of deep ecology and ecofeminism, and which also draws upon Scottish and Celtic spiritual traditions.

The struggle of the CHE to survive is recorded with poignant intensity in Alastair McIntosh’s book, *Soul and Soil*. The role of the CHE as a pioneering organization is indisputable; many of its original analytical insights and practices have become part of the widely distributed armory of the informed environmental movement. Indeed this very success now poses intensified questions as to the future of human ecology with which the CHE is now fully engaged.

Richard H. Roberts

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See also: Celtic Christianity; Celtic Spirituality; Ecofeminism (various); Fairie Faith in Scotland; Ireland; Paganism; Scotland; Shamanism – Neo; Shamanism – Urban.

Cetacean Spirituality

In the last part of the twentieth century, human perceptions of cetaceans (large whales, dolphins and porpoises) went through a sea-change. These mammals have always been special. They are a part of creation myths of indigenous people on ocean coasts; singled out for special notice in the Old Testament; celebrated in song, story, ritual, and art from Ancient Greece to Hollywood; and greedily hunted over centuries for human food, oil, whalebone and other products. Twentieth-century whaling technology had led to large reductions of numbers of whales, and even the endangerment of many species.

Then the tide began to turn.

In the 1960s, John Lilly's investigations revealed the extraordinary structure of the brain of the Bottlenose dolphin (*Tursiops truncatus*), leading him to speculate that the species was highly intelligent in ways that humans could measure. While still controversial, his ideas encouraged communication studies with dolphins, which are still ongoing.

In the decades between 1960 and 1980, a series of events occurred which caused a reversal from the hunting of whales and dolphins to the celebration and protection of them. These events – communication studies, the discovery of whale songs, a worldwide whale conservation effort, and whale watching – led, by century's end, to a belief held by many people that some cetacean species are spiritual beings with a message for humanity. A belief system is in the making.

During this time, Bottlenose dolphins began to be displayed in aquaria, principally in the United States, where they were trained to accomplish a repertoire of tricks for delighted audiences. The same species then was used as the star of a long-running, popular television series, "Flipper," which further influenced the general public to accept Lilly's claim of their special intelligence.

In 1972, at the United Nations Stockholm Conference on the Human Environment, a resolution was passed calling for an end to commercial whaling. It took another 14 years for that event to occur. Though incomplete, and challenged by a few nations where whale and dolphin hunting still occurs, from 1986, a worldwide moratorium on commercial whaling was agreed upon by countries signatory to the international whaling treaty. The impetus for an end to commercial whaling came from members of environmental groups in their millions who supported a "Save the Whales" campaign.

Also in the early 1970s, scientists Roger Payne and Scott McVay published their findings on the mysterious songs of the humpback whale (*Magaptera novaeangliae*). The eerie but beautiful music of this species caught the public imagination and led to

its incorporation into popular and classical music, and to further speculation about intelligence in large whales.

Another watershed event happened in the 1960s and early 1970s. In the United States, in California and Massachusetts, fishermen began to take tourists out to sea to watch the whales that moved through or fed and bred along their coasts. Whale watching grew exponentially, and, by the end of the century, had spread widely around the world. In 1991, approximately four million people watched whales every year. By 2002, an estimated ten million whale-watchers would spend an estimated US\$1 billion on tours, travel, food and hotels in 87 countries and overseas territories.

Whale watching is now a thriving business from the Arabian Sea to the bays of Ireland, from the Mediterranean off Gibraltar to the Bahamas, from the frigid waters of Iceland to South Africa, from Japan and the Philippines to Ecuador, Argentina, Belize and the Caribbean islands.

Interacting with great whales at sea touched many people profoundly. Jonathan White interviewed Roger Payne who mused:

. . . when you encounter a large species like a redwood or a whale, it introduces awe into your life. And awe is a very rare but very important experience. It's what started the major religions. Experiencing awe in the hands of the wild can cause you to feel the same essential ecstasy (in White 1995: 296).

So remarkable is this awe that guidelines drawn up for whale-watch tour operators specifically suggest that in the first close-up approach to whales, a guide or naturalist should stop talking and "encourage silence so that each watcher can have a personal encounter with the cetacean" (IFAW, WWF and WDCS 1997: 11).

Perhaps it is this "awe," coupled with continuing investigation into and speculation about cetacean's intelligence and complex societies, which gave rise to the idea that some whale species and most dolphins are sentient, even wise, beings from whom humans can learn much. Those who feel a kinship with cetaceans imbue them with a spiritual dimension. Books, films, television programs, websites, and spiritual tourism expound on the notion that whales, and dolphins especially, can and will teach humans meaningful things about life, if only we are open to the message. (An internet search in 2002, using the keywords whales+spirituality, yielded 8870 websites.)

Researcher and musician Jim Nollman studies communication with dolphins using sounds and music, recording and sorting through the messages, seeking a rebus, a language interface. In *Dolphin Dreamtime* he speculates:

...a period of time spent with free-swimming cetaceans can provide a transformational experience for human beings. This is the concept we call: the dolphin as benefactor . . . Such an experience has already proved itself . . . [and] . . . serves as an intellectual provocation, a source of joy, and, especially, a profound connection with the natural world . . . We transcend the power of dolphins as flesh and blood animals, and so, engage them as metaphor: a bridge capable of returning us to the ways and means of Gaia (Nollmann 1990: 205).

Besides whale watching and viewing cetaceans in aquaria and oceanaria, there are hundreds of other ways to interact with cetaceans. There are meditation retreats, places to swim with wild dolphins (really and virtually in cyberspace), and study tours to attempt communication. One such program, WildQuest Tours, based in the Bahamas, raises expectations in their internet brochure:

Many people have experienced that contact with these sentient beings has therapeutic effects on our physiology and our spiritual/emotional state. When they interact with humans in their native environment, dolphins seem to revel in obvious joy. Swimmers often report a feeling of deep relaxation, even bliss...

Millions of people annually chase the whales simply to be in their presence: to watch. The whales have, in general, responded by being watchable, making friendly approaches to boats, even allowing physical contact. There is sincere concern that this new form of 'hunting' for the whales disturbs some groups during mating and calving seasons, and may disrupt their migratory patterns. The emerging cult of whale/dolphin spirituality will doubtless need to establish guidelines for ethical interaction.

Award-winning author Suzy McKee Charnas could be speaking for millions of people when she eloquently describes her spiritual encounter with a humpback whale in Alaska:

I remembered Kit [a channeler] telling me that golden light projected from the mind and heart is a gift and a blessing that every sentient being can receive . . . All my energy, all my will boiled into a fierce longing to communicate that image, that recognition of the gift of joy that had been given to us with such exuberant liberality. I focused this visualized globe of light and tried my best to drive it across a half-mile of water and straight to the heart of the invisible giant swimming somewhere . . . And up he came, shooting almost entirely clear of the surface, a curving, living blade of jubilant energy. In a suspended instant I saw – with my eyes, with my mind? – something like a long, low-arching rainbow spring into being between him and us, a tensile curve of brightness hanging suspended not far above the sea, streaming slanted sheets of brilliance down the quivering air (Charnas 2001: 181).

Phoebe Wray

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See also: Channeling; Dolphins and New Age Religion; New Age; Watson, Paul and the Sea Shepherd Conservation Society; Whales and Japanese Cultures; Whales and Whaling.

Channeling

Channeling is an increasingly popular form of extrasensory perception (ESP) and one of the most controversial expressions of alternative spirituality. It has been defined as “the use of altered states of consciousness to contact spirits – or . . . to experience spiritual energy captured from other times and dimensions” (Brown, 1997: viii). Following J.B. Rhine’s parapsychological experiments at Duke University in the 1930s, four basic types of ESP have been recognized. Each, moreover, has biblical precedents: telepathy or mind-to-mind (subconscious-to-subconscious) communication (1 Samuel 28, Matthew 17:1–9), precognition or seeing into the future (Matthew 2:1–2, Acts 1:15–26, 11:28, 21:1–13), clairvoyance or perception of the world beyond the senses and without the aid of any other recognizable mind (John 4:16–29), and psychokinesis or mind over matter – including spiritual healing (2 Kings 5:1–27, Acts 3:3–11). Consequently, the existence of psychic experience is not a recent phenomenon, but is detectable throughout the ancient civilizations of the Fertile Crescent and Greece. We also witness it in the Puritan and Wesleyan counter-reactions to late seventeenth-century Deism that denied the validity of any intercourse with spirit entities. Apart from astral travel, which relates to the experience of the conscious self outside the body, mediumship in particular appears to be a form of clairvoyance and/or telepathetic communication with beings not of the empirical world.

Two figures have been instrumental to the pursuit of parapsychology in contemporary times: Emmanuel Swedenborg (1688–1772) and Franz Anton Mesmer (1734–1815). Although an established scientist in Sweden, following a series of conversations and visions concerning angels, Swedenborg abandoned his career to publish sixteen works based on his paranormal discourses. He denied the Lutheran doctrine of physical resurrection and argued instead that the soul passes directly into conscious spirit existence upon death. He also promulgated an exact “law of correspondence” between the physical and the spiritual. His teachings have been preserved and promulgated by the Church of the New Jerusalem, first established by disciples in London. Overlapping with Swedenborg, Mesmer was a Swiss-Austrian physician who practiced in Paris. He developed a philosophy of magnetic healing and hypnotism for which he was denounced by the French Academy in 1784 – eventually dying in disgrace. Students, however, brought mesmeric ideas to America where the clairvoyant, Andrew Jackson Davis (1826–1910), under their influence, not only claimed visionary conversations with Swedenborg and the Greek physician Galen but also developed the propensity to perform magnetic healing.

Unlike Mesmer who explained the “law of correspondence” as mediated by a universal magnetic fluid, Davis abandoned belief in animal magnetism and concentrated instead on the power of mind and mental suggestion. He is considered the seminal influence behind the emergence of American Spiritualism in the nineteenth century, although the phenomenal popularity of the séance as a religiosocial gathering developed with the “Rochester Knockings” – the alleged communication through rapping sounds by Margaretta, Catherine and Leah Fox with the ghost of a murder victim in their Hydesville, New York home in 1848. Despite the ensuing Spiritualist movement “scandal” of 1888 and Margaretta’s recantation of her recantation the following year, the movement continued to flourish and produced such “channeled” works as John Newbrough’s *Oahspe* (1881/2) and Levi H. Dowling’s *Aquarian Gospel of Jesus Christ* (1908), fostered the establishment of the Society of Psychical Research (London, 1882) and the American Society of Psychical Research (1884), and culminated with the formation of the National Spiritualist Association of Churches in 1893. One of the more renowned figures to emerge in the Spiritualist wake is Edgar Cayce (1877–1945), the “sleeping prophet,” whose messages concerning health and spiritual metaphysics were alleged not to derive through an intermediary “spirit guide” but by direct access to the akashic dimension in which all events of the cosmos are recorded.

The New Age development of the concept of channeling, however, begins with the publication by Jane Roberts (1929–1984) of *The Seth Material* (1970) and *Seth Speaks* (1972) – Seth reputedly being “an energy personality no longer focused in physical reality” (*vide* Newport 1998: 163). Apart from such Theosophists as Helena Petrovna Blavatsky, Alice Bailey and others, Roberts opened the way for the channeling renaissance and the likes of Ruth Montgomery, Virginia Essene, Mrs. J.Z. Knight (Ramtha), the “receiver” of the *Urantia Book*, Helen Schucman (*A Course in Miracles*), Ken Carey, Pat Rodegast, Penny Torres, Jach Pursel, and those who channel the collective entity known as “Michael.” Following theosophical influence, New Age channeling differs from the mediumistic enterprise of Spiritualism that seeks contact with deceased but previously known humans (friends or kin) and concentrates instead on what it considers more evolved discarnate forms such as deities, ascended masters, bodhisattvas and/or extraterrestrials. New Age channeling is more universally concerned with personal identity and growth unlike Spiritualism’s preoccupation with “proving” the existence of an afterlife and seeking personal reassurance that it will in all essentials be similar to life on Earth. Both movements, however, have been dominated by women, and both express a willingness to suspend disbelief in order to open the self for spiritual insight. Analytic reasoning is rejected in preference for the emotions and bodily centering. Moreover, both Spiritualistic mediums and New Age channels tend to cherish democratic improvisational spirituality over formal religious hierarchy and control.

Critics argue that channeling is simply a means of contacting, extracting and developing subliminal constructions and understandings from the deeper, hidden recesses of one’s self. Indeed, Roberts herself always questioned whether “Seth” was not merely an aspect of her own psyche. Viewing the contemporary development against the an-

tiquity of the prophetic and oracular tradition, channeling may represent a natural technique of harvesting the output inherent between multiple selves or parts of the individual. For the channel and the audience of adherents to his or her “transmitted wisdom,” it is ultimately incidental from where the information derives – the medium’s unconscious mind, a discarnate entity, spirit, deity or space brethren. It is the message itself that is important – perhaps giving the lie to Marshall McLuhan’s assertion that the medium *is* the message, because, despite the huge numbers of channels that have appeared in the late twentieth and early twenty-first centuries, there is a remarkable similarity between their individual messages – leading one to conclude that channeling is a nonlinear social response to lacunae perceived on one level or another within the collective milieu.

While most channeled messages have been saturated in the Gnostic and New Thought transcendentalism of the “American metaphysical movement” of which New Age is a derivative constituent, not all channeled entities need be ethereal thought forms from “higher dimensions” but can include nature spirits as well. Among the more famous instances of these last concerns, there was the channeling of Dorothy Maclean and Eileen Caddy, two of the founders of the Findhorn Community on the north coast of Scotland, with *devas* – various plant, species and landscape spirits – and the advice received that resulted in the successful production of enormous vegetables (both in size and numbers) from what had originally been the inhospitable terrain of their caravan park. In general, the forces worked with in nature religion, pagan and goddess spirituality contexts are more therapeutically emotional than the safer and kinder entities of New Age channeling. New Age nature spirits are allegedly encountered in what is known as a “vortex” sites – places such as Mt. Shasta, the Tetons or Sedona as magnetic attractors of spiritual energies from other parts of the planet or universe. Nevertheless, New Age comes close to Neo-paganism when it embraces nature mysticism in the name of Gaia and seeks to communicate or channel the Earth as a conscious, living organism.

Michael York

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See also: Blavatsky, Helena; Eden and Other Gardens; Findhorn Foundation/Community; New Age; Swedenborg, Emanuel; Theosophy; Western Esotericism.

Chaos

Chaos appears in many mythologies, including the Greek from whom the word is derived, as an undifferentiated primordial state or an abyss of mystery. Although mythic chaos was not necessarily disordered, that meaning fixed itself upon the word by the European Middle Ages when it emerged as an antonym for order and clarity. Enlightenment science, seeking to eliminate the confusion associated with chaos, did not see it as an object of study. But that changed in the mid-twentieth century, when mathematician Benoit Mandelbrot articulated a geometrical order that stressed erratic self-similarity and scale over the cleanly abstract forms of Pythagoras. Then the non-linear equations of Edward Lorenz showed that minor variations at the beginning of a process could through interaction create large differences at the end (the so-called “butterfly effect”).

From these two theories, the science of chaos was born. Now more often called dynamical systems or complexity theory, chaos theory has proven useful in discussion of turbulent systems (weather, earthquakes) as well as of periodic or cyclical events (the stock market, population growth). Challenging Newton’s theory that large effects can only be created by large causal forces, chaos theory shows that small effects, iterated through a system, can have stunningly large effects.

At the same time that chaos was emerging as a subject of serious scientific inquiry, it was also reappearing as a theme in the arts, most notably in the trilogy of novels by Robert Shea and Robert Anton Wilson called *Illuminatus!*, in which followers of Chaos and of the goddess Eris (the Greek goddess who threw the golden apple that led to the Trojan War) were pitted against fanatically orderly (but ever-elusive, conspiratorial and therefore also chaotic) opponents. Together the two forces made up the “sacred chaos,” the universal balance that demanded both order and disorder.

Shea and Wilson were inspired in part by the satirical pseudo-sect called the Discordians, who claimed to worship Eris. Although often described as a neo-pagan religion, Discordianism is rather a form of social commentary that derides conventional religion without offering any ritual or organizational alternative. Early Discordian associations were the Erisian Liberation Front and the ParatheoAnametamystikhood of Eris Esoteric, the first invented by Kerry Thornley (“Ho Chih Zen”), the second by Gregory Hill (“Malacypse the Younger”). Both were inventive writers of “tracts” that promoted anarchic Romanticism, complete with ecstatic experience, often brought about through drug use. The tradition continues in the popular Church of the Sub-Genius that alleges to worship J.R. Dobbs (“Bob”) and derides conventional religion for interfering with nature’s order, especially anarchic and unconstrained sexuality.

More seriously, chaos theory has been embraced by those seeking spiritual metaphors based in contemporary science. Notably, literary scholar John Briggs and physicist David Peat have articulated “life lessons of chaos” that resemble religious principles. Change, they argue, comes about through small actions iterated through a system; thus something as apparently inconsequential as recycling can have great ultimate results. The application of systems thinking to ecology has also been articulated by physicist and religious theorist Fritjof Capra, who describes a “web of life” of which humankind forms a part; unlike early Christian apologists who interpreted the Garden of Eden story as describing humanity dominating nature, systems thinkers envision humans as both effecting and affected by nature.

Recently, “chaos magic” has been offered as a way of linking the discoveries of science with the precepts of ceremonial magic. At its simplest, chaos magic means creating spontaneous rituals that draw from multiple symbolic sources (Western magic, Chinese Daoism, Tibetan Buddhism), interpreting the magical precept of “nothing is true, everything is permitted” to mean that creative effort makes meaning from the flux of possibility. The philosophical influence of post-war existentialism here combines with an acknowledged focus on the Dionysian worldview articulated by Frederich Neitzche, whose comment that “you must have chaos within you to give birth to a dancing star” is often cited by chaos magicians like Phil Hine. This fusion of nihilism and creativity brings contemporary chaos magicians back to the original mythic meaning of the word, for to the Greeks formless chaos was the birthplace of the universe.

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See also: Complexity Theory; Peat, F. David.

Chaos, Creation and the Winter Garden

The gardening life reveals many secrets about beginnings, endings and our existence in between. From December's descent into dark (and the blankness that comes after revels and shopping sprees), chaos arises, battles of gods and elements, the primordial stew out of which order and disorder separate while Being and non-being unify. This is the unity we call "holy." Across the months, we reel along nature's rhythms from infinite to finite and back again.

In winter, massive, dramatic weather recalls the first creation, reenacted year after year, chaos marking the first bubbles of beginning. A Chinese primordial myth as old as 200 B.C.E. tells us, "In the beginning there was Chaos. Out of it, pure light built the sky . . ." Then the dimness shaped the Earth and together, sky and Earth, yang and yin, bred the Thousand Creations. In his *Metamorphoses*, Ovid (43 B.C.E.–18 C.E.) wrote, "Before the ocean, or Earth, or Heaven, Nature was all alike, a shapelessness, Chaos, all ruse and lumpy matter . . ." This, like the frozen, then mucky, thawing garden, is "land on which no one can stand." Echoing a Pelasgian creation myth, ca. 3500 B.C.E., Ovid speaks of how the fundamental forces for life are polarized and out of control.

The Tungus, native to Siberia, saw creation as "Fire on the primordial ocean. In time the fire vanquished the power of water and burned part of the ocean . . ." The oldest Japanese chronicle, the *Kojiki*, or "Records of Ancient Matters," compiled in 712, and including the earliest Shinto nature worship, outlines the lengthy, wondrous process of creation: "When Chaos began to condense, but force and form were not yet manifest, and nothing was named, who could know its shape?"

The Hindu Rig Vega questions the origins of all things long before material life was so much as a gleam in the creators' eyes. Buddhism speaks of the universe, like the days of the year, expanding, contracting, dissolving, then re-evolving, again and again, forever. All existence depends upon this marvelous, indescribable cycle. The Chinese sage, Lao Tzu, who taught that quietism and nonaction is action in accordance with nature, wrote, "The Tao, the way, stands alone / never changes . . . / Mother of the World . . . / The way that can be named is not constant." In winter, the weather not only mirrors the world's beginnings as it struggles toward new fecundity, but the garden's hibernation demands quietude, indeed endurance, from the gardener, requires patience with the season, which demands careful observance of oneness and eternity and the germination, then ripening of all creatures.

In creation myths worldwide, out of chaos, and diverse divine adventures, the forces of nature gradually sort themselves into mountain, ocean, valley, river. Tree, herb, shrub, grass, grain. Fish, peccary, cricket, deer, human, wolf, bird. All are part and parcel of the same Earth, none more or less.

Winter seems to portray the cosmic dance, the universe in flux moving toward an eventual miracle of birth, the trickle of a stream that grows into a river, an infant sliding out from between its mother's legs, a sapling. The Ainu, aboriginal peoples of Japan, describe the world's beginnings in terms any gardener can relate to when confronting the first hints of spring: "In the beginning, the world was slush. Waters and mud were stirred together. All was silence and cold and there was no bird in the air."

The process of conception is accomplished in many ways. Life springs from the limbs and blood of a dead god. It ascends from a god's vomit or from the semen of a masturbating god. It is conceived by the copulation of masculine and feminine, and Father Sun mating with Mother Earth. It crawls – a snake, a dragon, a worm, a spider – up from underground. It emerges from an egg at the bottom of sea, or from a seed in dark, moist soil. It is trial and error, everlasting improvisation.

Creation accomplished, but never completed. Chaos goes on, creating, re-creating, like the turn of the seasons. The weather will change and again change; the elements persevere as warriors in the great primeval battle. Wind combats rain; ocean combats shore. Evolution, ongoing modulation and alternation, the sacred is never static, obeys no rules.

With the creation, flora and fauna establish themselves and discover the systems by which they can survive. First attempts are the subject of folklore worldwide – how the bear lost its tail, how the bird got wings, how mountains were formed, how corn came to the people. In all these tales, and in actuality, each one's life is woven with and dependent on others.

The garden emphasizes the contrast between the outside world and the inner. We work in the garden in order to immerse our souls in the great labor of creation, in order that our spirits, through our bodies, our hands and feet, can embrace soil, root, leaf, loam, flower, bark – all that is present. To garden is be conscious of our place on Earth, in the cosmos, in the eye of the divine. To dance in sync with "now," and therefore grasp and move in unison with "always."

The garden can only mimic that divinity and act as accessible holy ground, which we can attend to and visit daily to remind us of vaster powers. In the garden, it is possible to cultivate, in shelter, a sense of place on Earth.

With our labors – reaping, weeding, watering and harvesting – with ritual, rites of seasons, the building of community around the garden, it is possible to renew a greater sense of place within nature, as did our ancient forbears.

Chaos, the dark, silent abyss from which all things came into existence, is huge and terrifying. In winter, it can be as if we are truly experiencing this time/non-time before the world came into being. The actual, nonmaterial spiritual world lies beyond

the garden walls. It is in wilderness, in sensuous, generous magnitude, in tides and volcanoes, passion and vitality, that perfection – “god,” “Chaos” – exists. Within the garden it is contained, as on a small stage, visible to us, but nevertheless uncontrollable. Within the garden, in safety, we experience the ongoing mystery of creation.

In the spring, the formless matter from which the cosmos was created slowly takes shape above ground again. The offspring of chaos, Eros, the embodiment of nature, harmony and creativity, composes into green, while Eros’ sibling Tartarus, the lowest region of the underworld, cooks up another winter.

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See also: Blavatsky, Helena; Christianity (6c) – Reformation Traditions (Lutheranism and Calvinism); Christianity (7e) – Creation Spirituality; Creation Myths of the Ancient Near East; Creation Story in the Hebrew Bible; Creation’s Fate in the New Testament; Eden and Other Gardens; Findhorn Foundation/Community; New Age; Swedenborg, Emanuel; Theosophy; Western Esotericism.

Chávez, César (1927–1993) – and the United Farm Workers

César Estrada Chávez initiated a dynamic process of labor strikes, demonstrations, and boycott strategies that intertwined religious traditions, civil rights, and environmental justice. His lifelong efforts to address injustices against Mexicano farm workers centered on his founding the first successful farm workers' union in U.S. history: the United

Farm Workers Association, known today as the United Farm Workers Union, AFL-CIO.

From his upbringing as a migrant farm worker, Chávez observed labor organizing. After serving in the U.S. Navy 1944–1946, Chávez married Helen Fabula in 1946, and relocated to the farm-worker barrio of *Sal Si Puedes* (Get Out If You Can) in San Jose. A pious Catholic, Chávez assisted barrio priest Fr. McDonnell, who introduced him to the environmental philosophy of St. Francis of Assisi and the Church's ideas of union organizing; particularly those inspired by the Catholic papal encyclical *Rerem Novarum*, Pope Leo XIII's doctrine on labor justice. Chávez also absorbed Ghandi's teachings on nonviolent organizing and strategies of *moral jujitsu* – always keeping one's opponent off balance. Chávez became further influenced by Ghandi's interpretation of the boycott to achieve nonviolent action en masse. Together, these influences brought the ties of spiritual, ecological, and social justice beliefs, making Chávez one of the foremost historical figures of the environmental justice movement.

In Sal Si Puedes, he met several lifetime-organizing influences like Fred Ross of the barrio-based Community Service Organization (CSO). Ross' tactics and their link to Saul Alinsky's nonviolent tenet throughout the programs sponsored by the Industrial Areas Foundation, including the CSO, appealed to the inexhaustible spirit for social justice that drove Chávez. He became a vital CSO director by the late 1950s; and had become closely tied with his most trusted career associate, the gifted labor-contract negotiator Dolores Huerta. In 1962, Chávez resigned from the CSO, to found the first grassroots farm workers union in the United States. In 1965, nearly 150 farm worker delegates, agreed on the official name the National Farm Workers Association (UFWA).

By 1968, the public had become acutely aware of the danger of pesticides, particularly DDT as a result of the legacy left by Rachel Carson's *Silent Spring*, which decried the agricultural industry's destruction of species and their habitats. Chávez studied the health and ecological impacts of pesticides with deep concern for the farm workers. Carson had focused mainly on the ecological destruction, and contributed a

few chapters to the human impacts, naming the general public and more specifically miners, farmers, scientists, and spray-pilots as the direct human victims of the poisons. Chávez raised greater social consciousness about realities of farm workers who experienced the most intense harms of pesticide use. Chávez drew upon the interconnection of social justice and ecological sustainability. This was pronounced when Chávez and the UFW joined with the California Rural Legal Assistance and the Environmental Defense Fund to ban DDT. Although this united effort has been described as a “marriage of convenience” between labor and environmental groups, it was Chávez who kept the attention on ecological and human impacts and residual dangers in our food, even after the ban on DDT led to less ecologically damaging pesticides and the subsequent easing off by environmental groups. Aldrin, deieldin, endrin, parathion, TEPP, and other pesticides presented extreme dangers to the farm workers despite the impression that they were more environmentally safe than DDT, which often meant a more continuous and extensive application. Pesticide issues have been constantly addressed in the UFW newspaper *El Malcriado*, and the case against pesticides grew into vigorous labor campaigns, such as the 1975 Agricultural Labor Relations Act, a legislative action to ensure collective bargaining, supported by then California Governor Jerry Brown. Later legislative attempts, like California’s Big Green initiative in 1990, the breadth of which extended to protect redwoods and farm workers, displayed the historical pattern of collaborative efforts between the UFW and environmental groups. Today pesticide issues remain a priority for UFW-CIO’s campaigns, not only in the U.S., but also extending to many global locations where farm workers face the same hazards that Chávez addressed.

Chávez must also be recognized for his ability to emphasize the religious significance of human suffering, sacrifice, and penance as a means for lifting the faith of followers. The demonstrations, strikes, and long marches were viewed as spiritual pilgrimages. On 16 March 1966 Chávez led the most renowned of the UFWA pilgrimages in a 25-day march covering 250 miles from Delano to Sacramento. The event began as a UFWA support for Filipino workers against the Di Giorio Corporation, and grew into a fight for Mexicano workers with national media attention and sympathy. Imagine farm workers, clergy, and supporters led by the famous image of the UFWA, the black eagle on a red background (the colors meaning *Huega!* or “strike” in Mexicano tradition) and banners in patronage to The Basilica of The Virgin of Guadalupe: the symbol representing the Mexican religious heritage grounded with pastoral and environmental values. To Chávez, the march was a pilgrimage and union of socio-religious significance: “a trip made with sacrifice and hardship as an expression of penance and of commitment – and often involving a petition to the patron of the pilgrimage for some sincerely sought benefit of body or soul” (Hammerback and Jensen 1998: 40). Soon after the March on Sacramento, when the UFWA engaged a struggle against Perelli-Minetti vineyards, which contracted with the Teamsters as a strikebreaking strategy, Chávez began his signature of long fasts, an expression of his devotion to *La Causa*, his life of sacrifice and penance.

Chávez's career involved many close ties to individual clergy and church organizations, such as the California Migrant Ministry. His actions drew dramatic response from the various churches. At times these would be controversial, as in an early experience of his in which while working closely with a Pentecostal preacher in Madera, a

Catholic priest rallied with McCarthyist fervor to have Chávez condemned as a Communist. However, most responses would be historical events like bridging the traditional gulf between the Catholic and Protestant Churches. Influenced by the papal encyclicals and drawn to *La Causa* of Mexicano workers, respectively, the Churches united in support of the farm workers' struggle.

César Chávez inspired people with the affect of a spiritual leader as much as a political one. At a time when Mexicanos lamented the lost *Mexicanidad* ("soul"), Chávez embodied a humility and spirit for social justice in the Mexican religious and pastoral heritage. His strategies appealed across Mexican economic classes, and he introduced a new labor perspective to the civil rights movement, reflecting Mexicano identity in its best light. A testimony to Chávez's personification of the lost *Mexicanidad* is reflected in his genuine appeal to sacrifice, penance, and desire to make a world change toward social justice. On 23 April 1993, during one of these appeals involving one of his many fasts, César Chávez died in his sleep. Of his many accolades for his service to human dignity, in 1991 he received the Aguila Azteca (The Aztec Eagle), Mexico's highest award presented to people of Mexican heritage contributing to its legacy beyond the Mexican borders. In 1994, Chávez posthumously received the Presidential Medal of Freedom, the highest civilian honor in the United States.

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See also: Christianity (6a) – Roman Catholicism; Environmental Justice and Environmental Racism; Gandhi, Mohandas; Virgin of Guadalupe.

Chinese Environmentalism

In recent years the number of non-governmental organizations (NGOs), or social organizations (*shehui tuanti*) as they are preferably called in China, has increased enormously. Non-governmental organizations are a relatively new phenomenon in one-party state China, where the all-pervasive government traditionally used to take care of virtually all aspects of public and private life. The rise of NGOs can be witnessed in several fields, but environmentalism represents one of the most vibrant and dynamic sectors of non-governmental activity. The high interest among certain groups of Chinese citizens in environmental protection as a field for active participation (as compared to other fields) contributes to the growth of green NGOs. Possible explanations for citizen involvement in the environmental field are its alleged political innocence, the occurrence of environmentally induced health risk or the large media attention for environmental topics. A less pragmatic explanation could be that the typical “Chinese” perception of nature, based on traditional religions, encourages environmental activism.

A Chinese Perception of Nature?

Chinese religions have in common their holistic worldview and sense of the cosmos as a unity. Interrelatedness between humans and their environments are at a philosophical level especially emphasized in Daoism and Buddhism. Many Western scholars have studied traditional Chinese religions as potential sources for renewal of the environmental and ecological discourse in the West. The holistic character of Daoism and Buddhism is often thought to encourage respect and care for nature.

But it can be questioned whether a holistic worldview in which nature is an intrinsic part of the wider cosmos actually favors human respect for the environment. The Chinese have always operated with the idea of human life as belonging to the spontaneously self-generating life processes of nature, without beginning or end. According to Ole Bruun, this might have prevented them from assigning an intrinsic, independent value to nature separate from its benefits to humanity. There appears to be some support for this argument. Paolo Santangelo studied literature and paintings of Ming-Qing times searching for the nature conceptions of Chinese artists. He finds two ways of interpreting nature: (1) as a metaphor that expresses human emotions and (2) as an opportunity for aesthetic pleasure and/or religious contemplation. He concludes that the Chinese (artistic) perception of nature is characterized by a “humanization of nature,” bearing hardly any relation to “real” nature and environment.

This is also reflected in the Chinese practice of fengshui, which stresses that the environment should be “harmonized,” but exclusively so for the purpose of personal benefit. Great concern is expressed for the immediate nature; how to bring it to bear positively on human fortune, whereas the distant, the invisible or other people’s nature are not included in Fengshui concerns. Fengshui optimizes the use of natural powers, almost to such an extent that nature does not only contain resources, but is a resource *per se*.

Environmental NGOs and Chinese Religion

The reality of resource depletion and environmental degradation is at the source of NGO-development in China. Research into several environmental groups (mostly located in Beijing) points out that the founders of environmental NGOs judge the negative environmental side effects of human activity not only from pragmatic, but also from moral and ethical points of view. However, the employed moral arguments seem not typically derived from Chinese belief systems. Also in practice, Chinese environmentalists appear not to be typically Chinese in their approach of and view on environmental issues. Environmental concerns that inspire activism all over the world are equally important and evident in Chinese NGOs. An example of this non-typical Chinese framing of issues forms the appeal for an Anti-Animal Abuse Law, published in the August 2002 International Newsletter of “Friends of Nature,” one of China’s most renown NGOs:

In China domestic animals live solely to feed humans. If we use them, we should at least let them lead natural lives and not torture them . . . In the late twentieth century most countries in the world including those in Asia, Africa and Latin-America enacted Anti-Animal Abuse Laws . . . Now it is widely believed that a civilized country should establish humane laws for the benefit of animals; cruelly killing and destroying life is incorrect and human’s basic responsibility is to care and promote life (Author’s translation).

Instead of referring to traditional Chinese culture and religion, global morality is drawn on to question the treatment of animals in Chinese society. In general, it seems safe to conclude that China’s better-known environmental groups are not driven or inspired by typically Chinese or religiously inspired nature perceptions. Perhaps this can be (partly) attributed to the problematic position of religious beliefs and practices during certain periods of the Communist regime. Especially during the Cultural Revolution Chinese citizens were allowed limited space to engage in religious contemplation, which might have driven religiously inspired man-nature perceptions from the practical consciousness.

It is nevertheless true that religious practices sometimes do play a role in environmental protest in China. The social anthropologist Jun Jing, for example, describes two cases in which rural victim interest groups become engaged in direct environmental protest. The first case involved a decades-long protest movement against a fertilizer

factory in Gansu province. The second case involved the first confirmed protest movement against local population resettlement for the Three Gorges Dam project on the Yangzi River. Jing concludes that the interest groups in both cases operated within a traditional “cultural and symbolic life world” in which funeral symbolism, morality tales and cosmological beliefs – such as the worshipping of goddesses and deities – played an important role in mobilizing participants and providing ways for them to express dissatisfaction. In the Gansu case, temples dedicated to the “fertility goddess” were reconstructed as a reaction against the factory’s threat to physical health. The protesters against the Three Gorges Dam Project wore traditional funeral gowns to enforce their claims.

Although religion seems to have little influence on the environmental perception and activities of NGOs, traditional (folk) religion appears of more significance for less formalized environmental interest groups.

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See also: Chinese Traditional Concepts of Nature; Confucianism; Confucianism and Environmental Ethics;

Creatures' Release in Chinese Buddhism; Fengshui; Yunnan Region (Southwest China and Montane Mainland Southeast Asia).

Chinese Traditional Concepts of Nature

Chinese culture encompasses a quarter of humanity and the major part of East Asia. At its heart is the oldest continuous religious tradition for which we have written records, going back well over three thousand years. The religious practices and ideology expressed in these documents are integral with archeological finds of ritual paraphernalia which indicate that this religious understanding was already present in the Neolithic Age of East Asia, long before the development of writing.

Recent archeology indicates that Chinese civilization had at least two centers several thousand years ago: a millet-based culture in the north, and a rice-based culture in what is now central and southern China. The two fused slowly together, and China as a single cultural entity reached its present boundaries around two thousand years ago. (The present political borders maintain those of the Manchurian Empire which collapsed at the beginning of the twentieth century and include a number of autonomous regions in which Chinese culture is not the dominant tradition.) Each region had somewhat different practices surrounding the essential aspects of religion discussed below, although these differences are as yet unclear. But even today, there are minor variations in religious practices, such as grave designs, between northern and southern Chinese culture.

Early Chinese civilization, particularly in its northern homeland, had more than frequent lack of rain to hamper agricultural development. The wide Yellow River (Huangho) which runs through the midst of it is so named because it is thick and turgid with a powdery, yellow soil it picks up at its origin in the west. Northern China is in large part a level plain and the river has a tendency to flood in the spring. People lived along its shores and early began to build dikes, both to contain the floodwaters and for irrigation. Because the large amounts of soil carried by the river settled to the bottom, the river tended to fill its bed between the dikes, requiring them to be raised higher and higher. Eventually the riverbed was higher than the surrounding land. Thus, when the dikes broke, flooding was massive, at one time leading to the mouth of the river moving five hundred miles from where it was before the flood. China's mythic culture heroes are those who oversaw the building of the dikes. Chinese culture did not understand this as conquering nature but working with it. If the dikes failed, this was due to human error, not an errant nature. Nature was understood as numinous and to be propitiated rather than controlled. This attitude toward nature continues to perme-

ate traditional Chinese culture to this day but not those contemporary developments influenced by Western industrial globalization.

The Essentials of Chinese Religion

Chinese religion focuses on family to the degree that some scholars have called it “familism.” The understanding of family exists on two levels: the nuclear family, which in China would be multi-generational and include uncles and aunts; and the clan, which includes all those who understand themselves connected to the clan no matter how distantly in the past the clan can be traced. To put it another way, the clan consists of all of those with the same surname; and there are but a hundred surnames for the billion and a quarter Chinese. Clans are patrilineal; the religious life of a woman lies primarily within the home of her husband’s family. On death, she will be worshipped along with her husband on the altar in the home of her son’s family.

The primary religious ritual consists of the offering of food and wine to the deceased of the family, which is then eaten by the living members of the family. This sacrificial ritual is, in effect, a periodic family banquet to which the dead of the family are the honored guests. The primary locus for this ritual is in the home for the immediate family and the clan temple for the immediate sub-clan founders and most honored of the sub-clan ancestors. The eldest of the family and clan, male and female, function as the chief priests of this religious construct. This pattern, save for details, has remained unchanged for several thousand years to the present. For at least the last two thousand years, this was the religious pattern of all classes of society, from the Imperial family to the lowly peasant. Not only religion, but social and political structures and concepts were also based on the concept of family.

Ideologically, this means that the most important sources of the numinous; the primary spirits to whom religious practices are addressed is the family in and of itself. Traditionally, as well as today, the Chinese do not understand themselves as primarily individuals, as is in the modern West, but members of a social unit, particularly family and clan. Chinese do not put themselves first and foremost, but put primacy on their families, and after family, other social units of which they are a part.

For the last thousand years, similar offerings were also made to non-family dead who have become deified, including Daoist and Buddhist deities. Deities are predominantly ghosts who have been recognized and treated by humans as deities because of their demonstrated benevolence through possessing humans. In China, both ancestral spirits and deities can be spoken to and touched because of their presence through spirit possession when there is need to communicate with them.

There are also a large group of numinous entities that in essence are nature spirits to which sacrificial offerings are also made. Sacrificial offerings are generally of incense, wine and food, which are left in front of the images, whether of the deified dead or anthropomorphized nature spirits, long enough for the spiritual essence to be eaten

by the deities. Afterwards, the material aspect is usually eaten by those making the offering.

Religion and Nature

From 2200 years ago until 1911, China had an imperial government. The theoretical justification for the position of Emperor was that only he and his consort, symbolically the Father and Mother of the People, could sacrifice to the ultimate cosmic parents, Sky-Earth (*tiendi*). This was because the Emperor was the Child of Sky (*tienzi*), for his ancestors, having been the most powerful personages while alive, remain the most powerful spirits when dead. Accordingly, for anyone else to sacrifice to SkyEarth amounted to treason, as such an act was a claim on the imperial prerogative. Imperial lineages tended to trace the clan back to a spirit progenitor, usually a nature spirit.

A second ideological approach to the understanding of Sky-Earth, arising out of early Daoist thought, was stimulated by the ecstatic experience of nothingness (the mystic, zero, void experience): Before anything exists, there is nothingness (an actual experience, not a philosophical supposition). As one returns from the ecstasy of nothingness there is a “somethingness” that is at first singular, termed the “Dao” for lack of a descriptive word. Our minds automatically differentiate, so the perception of the Dao leads to discrimination, to the one becoming many. At first the one becomes two, and these two are the progenitors, through continued division, of all that exists. With regard to cosmogony, the “two” exits in dual modes. As the malefemale pair, Sky-Earth, they are the parents of all physical manifestations; from Sky-Earth, humans receive their bodies. As the female–male pair, Yin-Yang, they are the source of energy; from Yin-Yang, humans receive their life force (*qi*).

Originally, the imperial altar to Sky-Earth was a single one, but nearly five hundred years ago, the altar was divided. One can still visit the imperial altars in Beijing, where they are now public parks. South of the imperial palace, on one side of the straight road leading to it, is the Altar to Sky, a round – the symbol for Sky – altar of three layers made of white marble. North of the palace is the Altar to Earth, a three-layered, large square – the symbol for Earth

– made of Earth. Balancing these two altars, to the east and west of the palace are, respectively, the Altar to Sun and the Altar to Moon. Across the thoroughfare from the Altar to Sky are a complex of altars, including an Altar to Sky Spirits (specific constellations and planets) and an Altar to Earthly Spirits (specific mountains and rivers). To the east of the entrance to the palace was the Clan Temple of the imperial clan and to the west, the Altar to Soil and Grain. The latter is similar to the Altar to Earth with but a single layer, and signifies the imperial rule over the land of China.

In summary, the entire cosmos, all of nature, was understood to be numinous. The various components of the cosmos were perceived to be individual deities: Sky, Earth, Sun, Moon, Stars, Planets, specific mountains and rivers, and fertile Soil. All received

sacrificial offerings in elaborate ceremonies of which the Emperor and his consort functioned as the chief priests. The Emperor, at least once in his reign, almost always made a pilgrimage to Mount Tai (“Great Mountain”) to make offerings to the mountain on its summit, and also directly sacrificed to other geographic deities. Mount Tai remains a favorite pilgrimage and tourist site. Government officials, representing the Emperor, made offerings to lesser mountains and waters.

The ritual sacrifices carried out by the Emperor and government officials were not essentially different from those of the general population; they differed primarily in scale and scope. The most important nature spirit is Earth, who is differently conceived depending on function. Some aspects of Earth are not actually nature spirits, examples being the Lord of Earth, once a female deity, who is now a male bureaucrat in charge of the dead souls residing in the ground, and the Lord of Place, a protecting deity of a locality. But known simply as Mama Earth, she is the Earth itself deified. For farming families, Earth is the generative couple, Grandmother and Grandfather Earth. Their images are found on the family altars in farmhouses and in shrines built on the edge of farmland. Also deified are very old trees and unusual rocks, as well as streams, lakes and waterfalls. It is common to find a red cloth tied around such trees or a simple container for incense at their base.

Aside from offerings to nature spirits, nature plays a major role in religious practices in two further regards: divination and geomancy. Again, divinatory practices in China are as old as we can trace back the culture. Originally, they seem to have been techniques to gain advice from the clan dead, but divination took on philosophical understandings that were based on nature. For the last three thousand years there has been a concept of *tienming* (Sky-pattern). Until recently, the concept was misunderstood in the West, with Sky understood as a male, anthropomorphic, quasi-monotheistic deity on the order of YHWH; hence, *tienming* was interpreted as God’s commands: “the Mandate of Heaven.” But the Chinese understanding of *tienming* is the star-pattern of the Sky, intimately connected to astrology-astronomy. *Tienming* means the way of the cosmos, the way of nature. Humans, to be successful in their endeavors, should attempt to attune themselves to the natural order. Divination can be used to aid in determining the way the cosmos is going. Deities can be appealed to for assistance in these endeavors, but only if success fits within the natural pattern. Nothing can help if what is desired does not fit the natural order.

A second practice relating to nature in these regards is *fengshui* (literally: “wind & water”) or geomancy. The success of a family depends on the comfort and spiritual power of the deceased members of the family. Aside from the offerings made at funerals for the comfort of the dead, equally important is the situation of the grave with regard to the pattern of Earth. Specialists situate graves in a complex process that takes into account direction, slopes and running water. A properly situated grave places the dead into a comfortable and spiritually potent situation, thus increasing their power to assist the family through being in accord with Earth’s power. *Fengshui* is also used to situate buildings for the same purpose, particularly large businesses, such as modern banks.

Fengshui adds a physical harmony with nature along with the behavioral harmony with nature made possible through divination.

Religio-aesthetics

From 2500 years to approximately 1000 years ago, Chinese society underwent a transformation that led to a shift from an elite based on heredity to one based on education. A high degree of literacy has been one of the traits of aristocratic status as far back as we can trace Chinese civilization (the majority of Chinese were functionally literate long before the modern period). Different from eastern Mediterranean civilizations, there was no separate priesthood. The original aristocrats were not only warrior-rulers but priests of the clan-based religion. Hence, the king and later emperor, with his consort, were the chief priests not only of their clan, but also of China itself. Writing, from its inception seems to have been based on the use of brush and ink, rather than a stylus, and the written language never lost its pictographic roots in becoming logographic, rather than alphabetic. In essence, this meant that by 2000 years ago, the elite were highly educated government officials who were not only historians and philosophers, as well as ritual specialists, but masters of the brush.

When the first major Chinese empire, contemporaneous with the Roman empire, collapsed eighteen hundred years ago, one of the failed attempts at reform, a revolutionary, communistic, religio-political movement, continued as a purely religious organization. This was the Daoist Church, consisting of hereditary priests in a hierarchical system who performed auxiliary rituals connected with the ancestrally focused Chinese religion for the population as a whole. It grew literally alongside Buddhism, then becoming domesticated in China. One of the features of this Church was spirit (automatic) writing. This practice arose from a number of factors coming together: spirit possession present in China from the distant past, the concept of *ziran* (spontaneity/nature – to which we shall return) of Daoist thought from at least 2400 years ago, and the long experience with the writing brush. Spirit writing was the source of a religio-aesthetic that was the basis of the Chinese cultural approach to nature thereafter.

Ziran is essentially untranslatable. Literally, it means that which arises out of itself. From the cosmogonic standpoint, it refers to the self-generation of the world (nature), as described above, in a creation that is continually arising from nothingness. On the individual level, it means that we create ourselves from the material of Sky-Earth and the *qi* of yinyang. The term provides the essential understanding of nature, that everything natural (including humans) is self-creating. This is a far different understanding of nature from that of the West, where nature is understood to be created by a monotheistic God for use by human beings. Hence, *ziran* is also translated as “nature.”

The spirit writing of the early Daoist Church was done by a person in trance who was possessed by a deity. It allowed a deity to directly communicate with humans through writing. Writing, since its inception in China, had primarily been used as a means to communicate with the spirit realm. Now it was also a means for the spirit realm to communicate with humans. Since the writing was by a person in trance, it was done in a spontaneous fashion, similar to the then-common quick writing as opposed to a deliberate careful writing (equivalent to our informal handwriting as opposed to formal hand printing). This style of writing stimulated a new style of quick writing based on an aesthetic of spontaneity. The writing ideally takes place without conscious thought. Being spontaneous (*ziran*), it was one with nature (*ziran*) in and of itself.

This aesthetic, which linked the wielder of the brush to nature itself (virtually a possession by nature rather than a deity), became the primary religious activity of the elite when not in office. This accorded with the dual religious orientation of the elite based on a distinction between occupation and avocation that had already been present for several hundred years and continues into the present. When in office, the elite carried out state rituals, similar to the clan ritual practices in clan temples and family rituals carried out in the home; and their ideology was that of *rujia* (the ever-changing ideology of the civil-service system, mistranslated as “Confucianism” in the West). When out of office – whether due to vacation, retirement, or exile – their religious practices were linked to their spontaneous use of the brush, based on Daoist (*dao**jia*, not the Daoist Church, *dao**jiao*) ideology. These activities are called the “Three Treasures”: poetry, calligraphy and painting. Preferably, they took place in elaborate gardens, and the elite surrounded themselves, when possible, with signs and objects of nature.

The focus of these *ziran*-oriented activities is *shanshui* (“mountains & waters,” usually but imprecisely translated as “landscape”). *Shanshui* embodies the Dao; it is the quintessence of nature. Mountains are the solid essence, and rivers the fluid essence, of the Dao. As such, the subject matter focused the mind on the Dao, and *shanshui* is used for that purpose in Daoist and Chinese Buddhist meditation practices. But *shanshui* is not a metaphor for the Dao; it *is* the Dao. Hence, many of China’s poet-artists hiked in the mountains.

One well-known fourth-century poet, Xue Lingyun, involved with early Buddhism, invented a mountainhiking shoe with removable studs. He concluded a poem with the lines: “Observing this [*shanshui*], the realm of humans vanishes; / In a flash of enlightenment, everything falls away” (Paper 1995: 169). This relationship of poetry, nature and mysticism, never ceased. Mao Zidung begins a poem, “Ascending Mount Lu,” where he had his summer home and an old center for Buddhism and Daoism until the monasteries were destroyed by Christian missionaries, with the lines: “Single mountain peak floats beside Great River [Yangtze]; / Briskly ascend fourhundred verdant switchbacks” (Paper 1995: 159). He ends the poem with references to and metaphors for ecstatic religious experiences. Buddhist monasteries and Daoist temples were built on the most scenic mountains where they continue to serve as hostels for those who

seek to immerse themselves in nature, whether or not the traveler is oriented to either of these traditions.

Professional painters also focused on *shanshui*, but their purpose was not to stimulate ecstatic experiences in themselves while painting but to create windows into nature for their urban, elite clients. By a thousand years ago, the elite, given their expertise with the brush, began themselves to paint. Their favorite subject matter was *shanshui*, but their purpose was not to represent nature, as did the professional painters, but to express themselves naturally by relying on spontaneity. This religio-aesthetic is expressed by a contemporary painter, Hong Shiqing, who was commissioned by a fishing commune to create art from the natural shoreline rocks of an island. Hong quickly used his brush on large rocks, following their natural lines, to create images of sea creatures. These painted lines were then deepened by stone-cutters. Hong wrote of these works that he “utilizes spontaneity [*ziran*] to beautify nature [*ziran*],” that his “artistic creations must become a single entity with great nature/spontaneity [*ziran*]” (Paper 1995a: 191–3). Since the end of the Cultural Revolution (see below), calligraphy and painting have become pastimes of ordinary people – factory workers, etc. – with government encouragement.

The understanding of *shanshui* as the manifestation of *ziran* and the embodiment of the Dao was all-pervasive in elite Chinese culture. It not only encompassed literature and the visual artist, but music as well. The musical instrument of the elite, the *qin*, was an archaic, fretless, stringed instrument of thick wood with a tiny soundbox. Never an instrument of performers, it was used for personal meditation, and the favored musical theme was again *shanshui*. Furthermore, the elite created whole environments based on *shanshui*, gardens of all sizes whose purpose was to create an actual atmosphere of mountains and waters. The focus of the garden is extraordinarily eroded rocks whose appearance captures the essence of the fundamental characteristic of the cosmos: change within permanency. The city of Suzhou is famed for its gardens, which are now open to the public and easily visited.

The oldest Chinese text, the *Yi* (Changes), is a divination manual that also, with the addition of appendices, became a philosophical text that emphasized that the only constant in the universe is change itself. Rocks and stones with water-worn holes and contours or interesting striations demonstrate change in permanency. Such stones became icons of nature in all of its religious understandings. Not only did the gardens emphasize bizarre rocks, so also did miniature tray landscapes, and unique rocks were mounted on pedestals and treated as *objets d’art*. Slices of rocks exhibiting remarkable striations were framed as paintings and inlaid into furniture. Bowls of stones under water, to bring out their colors and vibrancy, were placed on tables. And the most intimate objects of the literati, the “seals” with their names, came to be made of special stones that captured the spirit of nature. Although the elite lived in an urban culture, they strived for an environment that intimated nature wherever they turned, and these attitudes became pervasive among the Chinese as a whole.

Conservation and the Impact of the West

The earliest Chinese texts on political philosophy understood that an economy in which all would have sufficiency was essential for popular support of the government, and that the basis of a stable economy includes conservation measures. Two thousand four hundred years ago, Mengzi (Mencius) was writing about regulating the mesh size of nets, so that small fish would have a chance to grow to adult size, that animals should only be hunted at certain times of the year so as not to interfere with reproduction, and that the taking of lumber in wooded areas should be controlled. Mengzi and later political philosophers, not usually successfully, were also concerned that the wealthy did not waste resources through unnecessary conspicuous consumption. They promoted an understanding of socio-economics in which the public weal (*gong*) was the good, and private utilization of resources (*si*) was evil.

Until the mid-twentieth century, Chinese farming tended toward very small plots intensively cultivated, particularly in the wet-rice agricultural areas. The welfare of the farm family was dependent on these plots, so they were carefully tended, with great respect paid to the numinous aspect of Earth.

China's population remained relatively stable until the introduction of indigenous American foods in the sixteenth century by the Spanish, when, as in many places elsewhere in the world, the human population exploded.

These foods included highly nutritious ones such as corn, which replaced millet in the north, beans (save for soybeans which China long had), peanuts and potatoes, as well as condiments, such as hot peppers and tomatoes. In the last three and a half centuries, China's population has increased tenfold. The effects of this enormous population in a large area with but limited arable land always subject to massive flooding, combined with rapid, unregulated industrialization in the second half of the twentieth century, has been disastrous to the natural environment.

A second aspect of relations with the West that led to serious environmental problems has been Western imperialism. Five centuries ago, China was vastly superior to the West in technology, living conditions, health and economics. The last, Manchurian, dynasty was one of foreigners from the Chinese standpoint. As the seemingly inevitable dynastic decline set in after several generations, it was exacerbated by the distance between the Manchurian rulers and the Chinese government officials. China rapidly weakened in every regard at a time when Europe was beginning its imperialistic expansion. By the mid-nineteenth century, European and American powers found it economically advantageous to push opium on the suffering population. When the Chinese government tried to stop the trade, Western powers forced two wars on the Chinese. Each time China lost through the declining government's ineptitude. The resulting peace treaties gave Europeans and Americans ever increasing opportunities to exploit China economically and territorially, with no consideration for the environmental damage they were creating. As well, the treaties exempted Christian missionaries and Chinese converts from both criminal and civil laws, allowing them to run rampant over the people, again

with no concern for tradition or the environment. Ultimately, the Manchurian regime collapsed, leading to a half-century of civil war and a massive invasion by Japan.

The Chinese Communist Party eventually won the civil war against the corrupt Nationalist Party, which was supported by the United States. With China in ruins from a century of warfare, the new government was further handicapped by an embargo that the United States placed on China, not only with regard to its own trade, but also to trade with all the nations it could control. For a while, China was allied with the Soviet Union, also recovering from the massive destruction of the Second World War. But China, which had an indigenous understanding of Communism far different from that of Stalin, eventually broke with the Soviet Union. China was left entirely to its own resources to rebuild its economy and militarily resist the United States and the Soviet Union, with which it fought on both its eastern and western borders.

China attempted to pull itself up by its own bootstraps in the “Great Leap Forward” of the late 1950s, which resulted in a major industrial and agricultural disaster, massive starvation, and extreme environmental degradation. After a few years of improvement, the attempt to end corruption in the government with the Cultural Revolution, from the late 1960s to the late 1970s, led to a collapse of all aspects of the culture. Worse, it left a generation of uneducated Chinese, ill-equipped to improve China’s situation in the modern world, and a generation cut off from all cultural and religious roots. The attempt during the Cultural Revolution to eradicate traditional Chinese religion and society simply led to a cultural abyss and a distraught populace. Since that time, with a lessening of governmental planning and the end of the attempt to quickly reform humans into a communist ideal, at first slowly and then ever more quickly, there has been a resurgence of Chinese industry, agriculture, education, culture, and traditional religion.

From the early 1950s, agriculture and industry were formed into larger and larger communes. As large-scale industry was relatively new to China, this was not a major disruption from tradition. For agriculture, it was a different situation. In traditional China, intensive agriculture led to an intimate relationship between farmers and the land, although this often degenerated as landlords displaced farmers owning their own land until socioeconomic collapse led to a new dynasty whose first act was usually to redistribute the land to the farmers. Largescale agricultural communes, along with government sponsored Soviet-style atheism, led to a distancing of farmers from the land. Not only did agricultural production decline, so also did the land itself, as intensive care for the land in combination with treating the land as numinous ended. (The exception is far northern China, where the introduction of large-scale use of tractors and combines in the wheat-producing area led to greater efficiency.) One of the first acts of the government after the collapse of the Cultural Revolution was to break-up the communes and redistribute the land to the farmers.

The doubling of the population from the beginning of the present government in 1950 to the early 1980s gave planners pause. It was realized that continued growth would make economic improvement impossible. The human numbers would simply

destroy the environment. China became the first nation seriously to attempt to solve population growth on a national scale. Indeed, the goal was not simply to stabilize the population, a quarter of the world's, but to reduce it. Thus began the "One-Child" policy that received popular, albeit grudging, support. But the one-child policy is in direct conflict with Chinese religion, with its focus on the patrilineal family, in which the continuation of the family through the male line is *the* religious imperative. The one-child policy thus led to female infanticide or abandonment, which the government has had great difficulty in eradicating. Changes are slowly taking place, such as some people intuitively reconceiving the family as continuing bilaterally (descending either through the male or the female) given the one-child policy, although it is far too early to predict how effective these changes will be. Without stabilizing the population, however, no conservation measure can have any long-term effect.

The aftermath of the Cultural Revolution was a shift from a socialist to a capitalist-type economy with few of the controls and supports now to be found in the West (where these controls have also begun to disappear with globalization). The end of the American embargo has led to investment from Taiwan, Japan and the West. China understands that not only is major development necessary to catch up with the West, but also its only means of competing with the West, given the history of Western imperialism in China, is to become economically as strong as the West. Such rapid economic development means that environmental considerations are outweighed by economic growth. The pollution created by China's massive industrialization is affecting the entire planet. On the west coast of North America, there is frequently a dirty haze that originates in China.

Where traditional Chinese culture continued, as on Taiwan, there is a growing environmental movement, which recently halted the building of a nuclear electrical generation plant. In the industrial environment of the Mainland and the post-industrial environment of Taiwan, while traditional *shanshui* arts continue, its religious underpinnings are harder to find. Globalization and capitalism, with the singular focus on immediate profit for its own sake, leaves no room for environmental considerations, let alone the understanding of a numinous nature. The desacralization of nature on Mainland China is, in effect, deicide, the end of conceiving Earth as a nurturing, female deity on whose bounty human life depends and to whom is due reverence and gifts in recompense for her own. Yet the resurgence of traditional religion has the potential to change these attitudes toward nature, and voices trying to protect the environment are being increasingly heard. Hence, the relationship between nature and religion in China is in a state of flux.

A Note on Chinese Religion

It is necessary to clear up a common Western misunderstanding of religion in China. In the late sixteenth century, Jesuit missionaries created a trinitarian model for reli-

gion in China flowing from a then-recent Chinese term, *sanjiao* (Three Doctrines). The term was found in the expression “the three doctrines are one”; that is, that different ways of thinking in China are harmonious and complementary. The Christian missionaries instead used this term to mean that there are three exclusively different religions in China, with all that would mean in Christian culture: Buddhism, Daoism, and “Confucianism,” the latter a Western fabricated religion based on the ideology of the government’s civil service system (*rujia*). These three so-called religions actually excluded the vast majority of Chinese religious practices, including all of the religious practices discussed above. These practices are now termed in the West “folk” or “popular” religion, implying it is the religion of the uneducated masses, rather than the religious practices of all classes, including the elite. Chinese culture, despite its geographic and demographic size, is uniquely homogeneous, given regional variations. A single culture requires a single religious foundation, and for China, this is Chinese religion.

Jordan Paper

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See also: Astrology; Buddhism (various); Chinese Environmentalism; Confucianism; Confucianism and Environmental Ethics; Creatures' Release in Chinese Buddhism; Daoism; Eden and Other Gardens; Fengshui; Landscapes; Martial Arts; Yunnan Region (Southwest China and Montane Mainland Southeast Asia); Zhuangzi.

Chipko Movement

The Chipko movement evolved in what was then the Uttarakhand region of the Indian state of Uttar Pradesh to fight commercial logging and deforestation in the Himalayan foothills. In Hindi “chipko” means “to cling” or “to embrace,” referring to the “tree-hugging” that has been employed to keep trees from being felled. Accounts of the Chipko movement’s earliest protests differ, but deforestation has a long history in the Himalayan foothills, predating the incorporation of the area into British India in the early nineteenth century. However, under the colonial state commercial logging severely impacted the area; road and railroad construction further deforested the land – the wood was used for railway sleepers, for instance – and led to landslides, erosion, and floods that claimed many victims and caused extensive damage. After India’s independence from Britain in 1947, Himalayan deforestation accelerated under governmental policies that encouraged the extraction of natural resources on an unprecedented level. The deforestation and consequent destabilization of the hill communities have forced men to migrate to the plains to look for work. Women have had to spend more time and travel longer distances to find firewood, fodder, and water.

In 1973, the villagers of Gopeshwar successfully resisted outside logging interests, partly by embracing the trees the loggers were trying to cut down. Notable Gandhian activists Sunderlal Bahuguna and Chandi Prasad Bhatt, leaders of the Dashauli Gram Swarajya Sangh, were instrumental in organizing nonviolent resistance to logging that spread throughout the region. A pivotal event occurred in 1974 when the men of Reni village decided to take their protest against the logging of their forest to the authorities. While the men were in town the loggers tried to cut down the trees, but the women of the village, led by 50-year-old Gaura Devi, forced the loggers to turn back. She is reported to have told the loggers, “This forest is like our mother. You will have to shoot me before you can cut it down.” Subsequent to this protest, the chief minister of the state set up an investigative committee which came to the conclusion that the deforestation of the Alakananda valley had largely contributed to the devastating flood of 1970; a few years later, another committee similarly declared itself in agreement with the villagers, who had long held a grievance that the irregular tapping of *chir* pines for resin, in contravention of the practices which stipulated the nature of the cuts, endangered the trees. On the recommendation of the committee, the forest department soon revoked contracts for all resin-tapping in the forests; and as the nonviolent, grassroots Chipko movement spread to other villages of the Himalayan foothills, the commercial felling of trees was finally banned in 1980. Although men like Bahuguna and Bhatt have been leaders of the movement, women have been the dominant force in the struggle to

resist commercial exploitation of the forests, sometimes going against the men in the villages to save the trees. A number of commentators have even described Chipko as a “feminist” movement, and some see a particular association between the Mother Earth and the feminine principle, especially in Hindu thinking, but these views are described as a form of romanticism by some scholars who also point to the participation of men and children in most of the Chipko agitations. Before the Chipko movement began, women in the Himalayan foothills region had campaigned against alcohol consumption by their menfolk, which causes severe financial and domestic problems. The anti-alcohol agitations were so successful that alcohol was banned in several Uttarakhand districts. Women’s groups have subsequently formed in most of the region’s villages and serve as the educational and activist core of many local ecological efforts. There appear to be many concrete if inexplicable manifestations of women’s involvement: for instance, though the survival rate of saplings in government plantations was about 10 to 15 percent, in the afforestation camps led by Bhatt and his followers this rate was 65 to 80 percent, and showed an appreciable increase following the greater involvement of women. Whether women were more careful in planting the saplings, or did so with greater love, are matters of speculation.

The Chipko movement has spread to other parts of India, and has drawn international attention to indigenous, nonviolent resistance to powerful governmental and commercial forces of environmental degradation. *The First Citizens’ Report* (1982), published by the late Anil Aggarwal, founder of the Delhi-based Centre for Science and Environment, dwelt on land, water, and forests, in a clear acknowledgment of how Chipko had brought these ecological issues to the fore. The world’s attention was never preciously focused on the ecological crises afflicting the Himalayan region. The Chipko movement is commonly viewed as challenging Western notions of economic development that destroys the natural environment and further impoverishes the poor, promoting instead environmentally sound ideas of sustainable development and the empowerment and self-determination of the local people. But many who have studied the Chipko movement have pondered how far the activists and villagers were inspired by the philosophical and religious traditions of Indian thinking, and whether it is productive to think of Chipko as an application of the fundamental ideas of Hindu philosophy. There are some reports, for instance, of verses from the *Bhagavadgita* being recited at the agitations, and of the circulation of stories from the *Bhagavata Purana*, which chronicles the life of Krishna and his exemplary resistance against the tyrannical exploits of the king Kamsa. Some scholars find in the history of the Bishnois of Rajasthan, among whom the veneration for plants and animals is widespread, a precedence for the

Chipko movement, but the resistance to commercial forestry has a long history.

Christ, Carol P. (1945–)

In attempting to understand the religious basis of the Chipko movement, and get a different grip on the continuing debate on whether Hindu spiritual traditions aid or debilitate ecological awareness and activism, it may be useful as well to distinguish briefly between the philosophical views of its two most well-known advocates. Chandi Prasad Bhatt, who is active in the Alakananda Valley, has argued that forest officials, contractors, and their local collaborators represent an ideology of development which is hostile to rural self-empowerment and self-reliance; he also promotes the use of alternative technologies that hold out the promise of self-reliance, ecological stability, and humane development. Sunderlal Bahuguna, who works mainly in the Bhagirathi Valley, is equally critical of commercial forestry but more resolutely opposed to modern industrial civilization. As Ramachandra Guha has suggested, Bahuguna operates mainly in the prophetic mode, and through his marches, speeches, occasional writing, and public fasts he has not only reached wide segments of the population, but resonated with them in ways peculiar to Hindu sages. Bahuguna's own charisma and asceticism recall to mind the nonviolent activism of Gandhi. Though the precise Hindu elements in the moral thinking and conduct of Bhatt and Bahuguna may not always be transparent, that the movement originated in an area held as sacred by Hindus, and was led by those who drew their inspiration in part from Gandhi, created some of the conditions for its success.

Elaine Craddock

Vinay Lal

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See also: Ananda Marga's Tantric Neo-Humanism; Bishnoi (Rajasthan, India); Gandhi, Mohandas; Hinduism; India; India's Sacred Groves; Sarvodaya Shramadana Movement (Sri Lanka).

Theologian (feminized term derived from Theologian) Carol Christ directs courses in goddess spirituality and sponsors pilgrimages to sites of ancient goddess-worship in Greece. She has also held academic positions in the United States. Christ criticizes Christian mainstream traditions as too patriarchal to be reinterpreted from a feminist perspective. As an alternative, Christ constructs a theological perspective reclaiming ancient goddessperspectives as a source of inspiration. Christ also criticizes Western views of nature as characterized by dichotomies that cause the oppression of nature. She claims that modern Western culture lacks roots in a geographical location, thus causing spiritual emptiness. However, in rural Greece Christ noticed a heritage of folk religion centered on seasons and nature. These perspectives, she suggests, help to illuminate the need for alternative rituals that celebrate the interrelatedness between humans and Earth while giving thanks to the gifts of nature manifested by each season.

Christ is inspired by the findings and interpretations of archeologist Marija Gimbutas and understands goddesses of ancient Greek religion as reminders of more ancient gender-equal goddess religion, later deformed by patriarchy. According to Gimbutas, the figurines and symbolic paintings from the European Paleolithic and Neolithic were centered on goddess civilization. Based on this and other findings, Christ emphasizes religious ideas focused on the goddess as giver and taker of life, symbolized by animals such as birds, bears, snakes, fish and hawks, and the female body as a central metaphor for the creative powers of the Earth.

Maria Jansdotter

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See also: Christianity (7d) – Feminist Theology; Ecofeminism (various); Gimbutas, Marija; Goddesses – History of; Wicca.

Christian Art

Since Christianity began as a sect of Judaism, the earliest followers of Jesus of Nazareth met at the Jewish temple in Jerusalem and at synagogues. Finding themselves in theological and ritual conflict with other worshippers at these sites, they began to meet in private homes, which were not constructed or decorated as religious buildings. The first two centuries of Christian activity have thus left little distinctive art. Dating from the third century or later, most of the earliest surviving Christian painting is found in the catacombs of Rome, Italy, and is similar to tomb decorations from non-Christian sites. Christians adopted Hellenistic and Roman iconography, including visions of pastoral calm, for depicting Christian themes, such as Christ as the Good Shepherd. Carvings of grape vines adorn early Christian sarcophagi as symbols of eternal life. The leaf covered human faces (Green Men) associated with spiritual rebirth in the cult of the Greek god Dionysus, later appear on Christian church portals as symbols of resurrection.

Several dominant themes in Christian art have historically contemplated the meaning of nature, including: God's creation of the cosmos, the golden age in Eden, Noah's ark and the rescue of the animals, the coming era of peace in God's kingdom, the spiritual value of solitude in wilderness, the transience of the material world, the passage of time and the seasons, birth and the initiation of life, resurrection and renewal of humans and the universe, God's rule over the cosmos, and God's continuing presence in nature. Early Byzantine art, of the eastern Mediterranean region, for example, often emphasizes God as Creator. The sixth-century Church of St. Catherine at Mount Sinai in Egypt has thirteen beams across the ceiling of the nave (central worship area), six of which bear floral or faunal designs. The carvings depict such varied creatures as peacocks, an antelope, ibexes, a tiger, an elephant, a camel, a turtle, fish, a crab and an octopus. One beam is entirely dedicated to the Nile River, and displays both a wreathwrapped cross and two crocodiles attempting to swallow oxen. Byzantine artists associated the agriculturally productive waters of the Nile with the gathering of the waters described in Genesis.

Byzantine art intentionally portrayed the beauty, complexity, and diversity of the Earth and oceans, thus it encouraged naturalistic rather than abstract depictions of animals and plants, while simplifying to retain the symbolic content of the images. During the fifth and sixth centuries, natural history became a popular theme for floor mosaics in ecclesiastical buildings. The mosaics incorporate a great variety of living forms, ranging from ducks, to lions, to birds of prey, to hares. For Byzantine Christians, even the least important of creatures reflected the mind of the Creator.

As Christianity spread into northern Europe, Christians continued earlier pagan motifs, such as the backwardlooking or entwined animal figures of Celtic art. An extant high cross, from an early Columban monastery at Moone, Ireland, has a row of animals on one face, and the major figure of Christ on the arms of the cross is topped by a dolphin. The Irish *Book of Kells* contains ornamented words formed of animals biting or grasping each other, including an eagle with a mackerel in its talons.

Medieval Christians constructed bestiaries, with illustrations of real and imaginary animals, such as lions and unicorns. Bestiaries present the animal kingdom as a reflection of Christian doctrine, give each species an allegorical significance, and relate animals to biblical texts, such as John 1:29 – “Behold the Lamb of God.” Medieval illuminated manuscripts also depict animal friendships with humans, such as the prophet Elijah fed by ravens or a monk humanely removing a thorn from a lion’s paw. Lacking a developed theory of perspective and purposefully accentuating the size of important figures, like Christ, medieval painters constructed landscapes where humans and buildings are larger than major natural features, such as mountains. The simplified and disproportionate representation of trees, peaks and rivers, should not be interpreted as indifference to nature, but rather as a combination of pre-scientific technique and a focus on the saints and biblical subjects.

In the twelfth and thirteenth centuries, gothic architects increased the “divine” light entering church sanctuaries by raising the height of the walls and windows. Inspired by the liberal arts, Christian artists turned to the fields and forests to study form in nature. Accurate carvings of native flora decorate the capitals and altar screens of gothic cathedrals, such as those in Rheims, France, and Naumberg, Germany. The “root of Jesse,” where Christ originates from a giant twining vine or tree carrying his ancestors as branches, the seven days of creation, Noah’s ark, and Christ symbolically renewing all life by dying on a green cross are frequent themes in gothic stained glass.

Concentrating on perspective and fostering scientific naturalism, Renaissance painters placed religious figures in pastoral, or even mountainous landscapes. Giovanni Bellini surrounded *St. Francis in the Desert* (ca. 1480) with peaceful animals and a productive agricultural milieu. A heavenly light source originating just outside the scene, and reflecting the Christian concept of divine transcendence, illuminates the saint and unites him with the surrounding landscape. The wilderness, rather than being a harsh or forsaken environment, overflows with God’s presence. Geology, the atmosphere, and natural processes fascinated Leonardo da Vinci. In his *Madonna of the Rocks* (ca. 1483) and *Virgin of the Rocks* (1508), a painting intended to elicit solemn meditation, he placed Jesus and John the Baptist as toddlers, the Virgin Mary and an angel in a wet, rocky grotto with stalactites and stalagmites. Leonardo utilized the misty landscape displaying the cyclical processes of evaporation and condensation of water, to reflect the cycle of human emotions involved in prayer and intercession, and the cycle of redemption in human birth, death, and resurrection.

During and following the Renaissance and Reformation, European art diversified, and although Christian patronage continued, explicitly Christian subjects became less

dominant. Natural imagery, however, remained critical to theological expression. Titan's *Noli Me Tangere* (ca. 1510) sets the risen Christ in a pastoral countryside, as he instructs Mary Magdalene not to touch him. The alignment of Christ's body with trees and hills not only adds grace and substance to his form, it also enhances the message of triumph over death by fully incorporating the crucified one in a living landscape. Caspar David Friedrich captures the panentheistic spirituality of German Romanticism in *Cross on the Mountains* (1808) by placing Jesus' cross on a rocky pinnacle supporting scattered coniferous trees and bathed in the red and gold of an intense sunset. Jean-Baptiste-Camille Corot, a major influence on the French Impressionists, caught the moment of divine salvation from earthly trials in *Hagar in the Wilderness* (1835). A master of landscape and light, he paralleled a desperate Hagar and dying Ishmael with succulent desert plants, resisting the droughty environs. An angel, appearing like a small cloud, heralds divine provision of water in the form of a desert spring. American and English painters of the nineteenth century utilized collections of peaceful animals to express Protestant millennial theology and apocalyptic expectations. Edward Hicks in the *The Peaceable Kingdom* (several versions ca. 1840) and Junius Stearns in *The Millenium* (1849) depict children and domestic animals surrounded by wild animals and predators, reflecting the prophecy of Isaiah 11:6 that in God's kingdom the lion will lie down with a lamb and a child shall lead them. Photographer William Henry Jackson captured a natural feature that appears as a cross on a mountain in Colorado in his *Mountain of the Holy Cross* (1873), a subject also painted by Thomas Moran (1875).

Today, many viewers too closely associate Christian art with Madonnas and crucifixions, and miss the Christian intent of many compositions focusing on apparently natural or rural subjects. Peter Paul Rubens' *Landscape with a Rainbow* (1636–1637) is a panoramic view of grain fields, cattle on a road, and waterfowl in a stream backed by a lush forest. A rainbow crowns the wispy clouds in a glowing sky. For Rubens, the peaceful and productive countryside is the fruit of both proper husbandry and God's benevolence. The rainbow is a sign of the continuing covenant between God, humanity and nature.

In the nineteenth century, the American Hudson River Valley School often incorporated Christian allegory in their works, and favored subjects such as Noah's deluge where they could represent dynamic natural processes and God's power in wave-washed rocks, and a storm-tossed ark. Less obvious, however, is the roadside cross nestled among massive mountains and majestic tropical forest in the center of Fredrick Edwin Church's *In the Heart of the Andes* (1869). Church combines scientific accuracy in his carefully painted, recognizable species of tropical plants, birds and butterflies, with equally carefully placed patches of light illuminating the cross and a village church as well as the icy heights of the cordillera. For Church, the scene captures all of God's creation from the wet, lowland tropics to the freezing high latitudes. Divine light diffuses through the landscape, and the high, snow-capped peak in the background represents God's transcendent and ineffable presence. In representing Christian ideals, the Hud-

son River Valley painters often jettisoned all human religious artifacts, and allowed the glory of God to infuse a brilliant red sunset, or divine majesty to emanate from massive blue-green icebergs. Thomas Cole in *The Oxbow, View from Mount Holyoke, Northampton, Massachusetts* (1836) details an actual bend in the Connecticut River and captures both the wilderness and frontier settlement as a rainstorm passes overhead. To remind the viewer that God is present in this harmonious setting, Cole subtly shaped small openings in the forest on background hills into the Hebrew letters for “Noah,” which also spell “Shaddi,” meaning God the Provider, when turned upside down.

Not all artists producing Christian art are Christians, nor are all Christian works European or North American. Marc Chagall, who was Jewish, designed a spectacular series of stained glass windows (1976–1979) for a church in Mainz, Germany, including images of the creation. Modern Japanese and Chinese Christians have adopted the styles of Asian art to present scenes such as Christ stilling the tempest, with the frugal brush strokes and misty backgrounds typical of Buddhist painting. Contemporary carver, Stanley Peters, has utilized the Pacific Northwest Native American eagle totem, with outspread wings, to portray Christ crucified on a large wooden cross. Christian art will continue to borrow from and influence other religious traditions and artistic movements as it pursues the aesthetics and spirituality of nature, and provides thoughtful reflection on the meaning of all life.

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See also: Aesthetics of Nature and the Sacred; Architecture; Art; Bestiary; Christianity (5) – Medieval Period; Francis of Assisi; Green Man; Virgin of Guadalupe.

Christian Camp Meetings

Camp meetings are generally associated with the religious revivalism of the nineteenth century, particularly as manifested in frontier regions immediately west of the Appalachians. They arose from two European sources. Both Presbyterianism in Scotland and Methodism in England developed ritual practices in which great crowds of people came from miles around and gathered for days. For Presbyterians, this took the form of huge sacramental feasts where a sense of sacred immanence was elicited. Methodist orators proclaimed that certainty of salvation was experienced through a direct relationship with God. These practices set the stage for later American developments where huge groups of believers set up temporary residence in natural settings for purposes of worship.

Many Presbyterians and Methodists settled in the American colonies. After the American Revolutionary War, itinerant preachers crossed the Appalachians and Alleghenies. From their western slopes, thick forests stretched to the horizon and beyond. Not surprisingly, images of wilderness filled the religious rhetoric of circuit riders. American forests were compared to the wilds of the Sinai. Experiences of Hebrews in the latter were likened to those of Christian believers in the former. Presbyterian and Methodist evangelicals were not alone; Baptist and Lutheran ministers were active on the frontier as well.

One of the most active and influential preachers of all was a Presbyterian named James McGready. By 1800 the sacramental feasts hosted by him and his colleagues were attracting hundreds of people. Because their numbers exceeded the capacity of churches and barns to hold them, a tradition developed of holding meetings in the woods. These events were characterized by powerful emotional outbursts and by the use of wilderness imagery to intensify religious experience. The famous 1801 Cane Ridge meeting in Kentucky provides an example. As one participant recalled:

In consequence of so great a collection of people, it frequently happened that several preachers would be speaking at once . . . Nor were they at a loss for pulpits: stumps, logs, or lops of trees served as temporary stands from which to dispense the word of life. At night, the whole scene was awfully sublime. The ranges of tents, the fires, reflecting light amidst the branches of the towering trees; the candles and lamps illuminating the encampment; hundreds moving to and fro, with lights or torches, like Gideon's army; the preaching, praying, singing, and shouting

– all heard at once . . . Sinners falling, and shrieks and cries for mercy, awakened in the mind a lively apprehension of that scene when the awful sound will be heard, "Arise, ye dead, and come to judgement!" (Redford 1868: 365).

The description of the camp setting as “awfully sublime” strongly suggests that Romantic ideas were present in addition to biblical imagery. Fitted to the American wilderness environment at places like Cane Ridge, Romantic personal encounters with the sublime were combined with and mediated through the religiosity of Methodism and Presbyterianism.

Word of the Cane Ridge meeting quickly spread. Soon, these events were commonly attracting between three and five hundred strong, with others skyrocketing to ten thousand or more. Recognizing that camp meetings could not remain the haphazard affairs they had been, church leaders began publishing guidelines for camp layouts by 1810. Tents were to form a core, with streets running between them. A place for general assembly was left open, and a pulpit or speaker’s platform erected. Framing and intertwined with the whole were trees. Neither in the tents nor the forest alone, but only through their combined effect, was the environment for religious experience created.

In 1839 the *Western Christian Advocate* compared camp meetings to the Jewish Feast of Tabernacles. Writing nearly twenty years later, Reverend B.W. Gorham also linked the Feast of Tabernacles with camp meetings. Such references continually linked contemporary Christian camp meetings to imagery of Israelites in the Sinai wilderness. Sites by this time were becoming more permanent. Wooden cabins replaced cloth tents. Yet, these structures were still referred to as “tents.” To protect public gatherings from inclement weather, large open-sided buildings called “tabernacles” or “arbors” were constructed. Camps were transformed into villages in the forest. During the late nineteenth and twentieth centuries some became towns in the woods.

Today, permanent encampments exist across the United States. Although camp meetings became almost completely a Methodist phenomenon by the 1840s, now virtually all denominations make use of such retreats. Their layout hearkens back not only to the American frontier and biblical wilderness rhetoric, but also to European beginnings. Christian camp meetings and their emphasis on direct experience of God through nature remain a vital part of America’s religious fabric.

Joel Geffen

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See also: Christianity (6c5) – Methodism (Reformation Traditions); Scouting.

Christian Environmentalism in Kenya

In Kenya, little exploration has been done on the relationship between religious beliefs and environmental matters. Indeed, the religious significance of the environment seems to be sidelined in official development plans and strategies. In ecclesiastical circles, not much has been said or written concerning the Church's social and physical involvement in environmental matters. However, there are cases where churches have become involved in environmental activism, and religion has also been part of the campaigns of Professor Wangari Maathai, a well-known crusader on environmental matters in Kenya. In some of these instances influences from indigenous traditions has been apparent.

The Catholic Church has been at the forefront in fighting environmental degradation and particularly atmospheric pollution in Kenya. This is well demonstrated by the concerted demonstrations and protests that took place in the early 1990s against environmental pollution in Thika town. Thika, one of the three most industrialized urban areas in Kenya, happens also to be one of the most heavily polluted places in the country. Several industries located in Thika threaten the health of residents. They include KEL Chemical, which manufactures various chemicals including Sulphuric Acid and Sodium Superphosphate (SSP) fertilizer, several textile factories, Kenya Leather Industries, British American Tobacco, and Bulleys Tanneries. The factories were generating atmospheric pollution, creating offensive smells, and discharging tons of toxic effluent into the nearby Thika River, harming aquatic life and endangering the lives of water consumers downstream. There was also solid waste pollution from the Thika Municipal garbage sites, the home to hundreds of stray pigs which come to feed on mounds of rotting industrial and municipal refuse. There were also poorly disposed hospital instruments, expired drugs, syringes and needles. These garbage heaps draw all sorts of scavengers including vultures, dogs, cattle, goats and even human beings.

Several Catholic parishes draw their congregations from the lower income housing estates of Thika, which were particularly impacted by the pollution. The Church had raised the issue with the local authorities in vain. In early 1990 parishioners decided to act more decisively. Led by their priests (Father Gregory Macharia, Father Micheal Schrode, Father Ndikaru wa Teresia and Father Max Stater), the parishioners of St. Mulumba and Makongeni parishes staged a peaceful procession to the industrial sites, where they held prayers between two wooden crosses erected to demonstrate their protest. The reaction of the government was momentous. The President of Kenya

(Daniel arap Moi) intervened and ordered the authorities concerned to move in and rectify the problem. An environmental committee was constituted to look for a solution to the problem. The KEL factory was shut down and ordered to fit its workers with protective garments and boots. Scrubbers were also to be installed in the exhaust system in order to minimize the toxic elements that escape into the air. Although other factories have continued to pollute the town's environment, at least they have put measures in place to minimize the level of pollutant elements that find their way into the air and rivers. The priests, particularly Father Ndikaru wa Teresia, have continued to crusade for a safe environment in the town.

The second case is that of Father John Kiongo of Limuru Parish, Kiambu, Kenya. Father Kiongo is a credible Catholic crusader in the battle against environmental degradation. His environmental vision is based on biblical expositions (particularly Genesis 1:29) where humanity is believed to have been commissioned to be stewards of God's creation on Mother Earth. To him, environmental negligence is due to sheer ignorance. He exhorts all categories of people, particularly Christians, to conserve the environment and even perfect it. Having been inspired by these biblical passages, Father Kiongo established a tree nursery in 1990. He bought seedlings from local people and gathered samplings of indigenous trees from the local forests. His aim has been to demonstrate to other people that something positive can be done to salvage the environment. His purpose is twofold. Firstly, through his plans to create awareness and educate fellow Christians on the need to preserve the environment. Secondly, he seeks to preserve the indigenous trees, which he correctly believes are very important to the local community in areas of medicines, fuel, fencing, artistic beauty and human and animal foodstuffs. Besides, these trees are an important component of African traditional culture and heritage, which is threatened by extinction. Christians in Limuru have benefited significantly from this environmental mission by Father Kiongo. Many have become conscious of the need to conserve the environment by planting trees. His nursery has been commended highly by agricultural extension officers, diocesan development coordinators, the forest department and heads of various schools, who have brought students to see for themselves.

The third case is that of Professor Wangari Maathai, who is a household name in the area of environmental conservation in Kenya, with particular reference to the conservation of forests. She has used various church forums to sensitize Kenyans on the need to conserve trees as a natural heritage. She is perhaps best known as coordinator of the Green Belt Movement, which encourages people to plant trees in rows around church and school compounds and plots of farm land. Such planting of trees "dresses up" these naked compounds with belts of green trees, hence the name "Green Belt." Professor Maathai has also led public demonstrations against the excising of forests in Kenya's limited water catchment zones. She is also on record as the most important voice in the protests that effectively stopped construction of a sixty-storied skyscraper in Nairobi at a public utility park. Professor Maathai was also a prominent participant in the joint prayers in Nairobi in 1999, which were called by church leaders of all

denominations to protest peacefully against the allocation of Karura forest to private developers. The demonstrators carried twenty tree seedlings, which had been blessed by the Catholic Archbishop, the Anglican Archbishop and the General Secretary of the National Council of Churches of Kenya at a service held at Uhuru Park, Nairobi. This demonstrated the concerns of the Christian community about the degradation of the forests. In some of the above instances, influences from traditional African heritage are evident. For example, Christian protests against excising of forests by certain greedy politicians echo indigenous traditions whereby nobody owned forests individually since people and animals collectively belong to the forests. There was no dichotomy between the sacred and the secular. Both religious and political leaders were accountable to God in the way they related to his creation at large. Secondly, Christian demonstrations against environmental pollution bear witness to traditional African spiritual wisdom and philosophy, which was based on the maintenance of balance between humans and the environment. The collective community good and sacredness of life provided the moral foundations of human rights and respect for God's creation in general. Thirdly, the ritual blessing of tree seedlings by church leaders is a reflection of indigenous African rituals, festivals and celebrations that were conducted to bless forests, rivers, shrines, land and harvests. There was a close partnership between humanity and nature.

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See also: African Religions and Nature Conservation; Biodiversity and Religion in Equatorial Africa; Kenya Greenbelt Movement.

Christian Fellowship Church (Solomon Islands)

The Christian Fellowship Church is an indigenous Church of New Georgia in the western Solomon Islands. Beginning in the 1950s as a movement of separatism from the Methodist Mission and led by “wayward” Methodist pastor Silas Eto (ca. 1905–1984), the movement was constituted as a separate Church in 1960, the strongly charismatic Eto by then being known as Holy Mama (*mama* being an affectionate term for “father” in New Georgia). With strong doctrines of communalism preached by Holy Mama, to the extent that the Church has overall control over the customary lands and natural resources of several dozen adherent villages, the CFC has maintained the dual face of sectarian isolationism and fierce independence. In the 1970s multinational giant Unilever extended logging operations into CFC-controlled areas; meanwhile Australian conservationists campaigned in the area. Strong opposition to logging arose, ultimately involving CFC leadership and villages in the downfall and departure of Unilever logging from the Solomons in 1986. After the death of Holy Mama, his senior sons J.D. Tausinga and

I. Rove have attained key roles in national politics and in the spiritual continuity of the CFC, acting unpredictably toward nature conservationists and loggers alike. On the one hand, Eto’s fusion of Melanesian custom, old-style Methodism, and concern for local autonomy has kept alive traditional respect for the forests and seas, and newer beliefs about God’s creation. Such respect and a corresponding environmental commitment have been reinforced by Australian input from the Rainforest Action Group. On the other hand, the drive to make the Western Province count in the national Solomon Islands economy, and modernist approaches to development, have pushed politicians representing CFC interests into concession with Korean and other logging companies. CFC, having been an important religious voice for environmental conservation, faces hard choices in the twenty-first century.

Edvard Hviding

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A Christian Friend of the Earth

Editor's Introduction: Dr. Brent Blackwelder, President of Friends of the Earth U.S., which is part of Friends of the Earth International, the world's largest environmental advocacy network with member groups in seventy countries, delivered the following talk at the Marble Collegiate Church in New York City, in February 2003. While there is certainly great religious pluralism within environmental groups such as the SIERRA CLUB, WILDERNESS SOCIETY, and FRIENDS OF THE EARTH, (for another example from a Friends of the Earth activist see the entry SALVADORAN REFLECTION ON RELIGION, RIGHTS, AND NATURE), leaders from such groups increasingly reach out to religious groups as part of their efforts to galvanize support for environmental causes. Blackwelder's talk provides a synthetic example of such efforts.

As the son and grandson of Episcopal ministers, I have always been moved by a spiritual concern for God's great creation. The rampant pollution of air and water in the 1960s convinced me on the first Earth Day in 1970 that the great moral challenge of our time was to reverse the widespread degradation on the Earth. I began writing my doctoral dissertation in philosophy on duties to animals, but I also linked up as a volunteer that year with Friends of the Earth and the League of Conservation Voters. As a result of that volunteering, I ended up doing environmental work, helping to set up new organizations like American Rivers and the Environmental Policy Institute and to expand the effectiveness of other groups.

The involvement of most denominations in environmental issues has increased over the past thirty years, especially during the last ten years. The National Religious Partnership for the Environment, headed by Paul Gorman, has been a great catalyst and a great blessing, bringing together Jewish, Protestant, and Roman Catholic efforts to care for creation. Most recently, the presence of former Congressman Bob Edgar, a great environmental champion, at the head of the National Council of Churches of Christ is welcome news. The increasing involvement of religious organizations is reflected in what some of today's most well-known religious leaders have said:

Faced with the widespread destruction of the environment, people everywhere are coming to understand that we cannot continue to use the goods of the Earth as we have in the past . . . The ecological crisis has assumed such proportions as to be the concern of everyone (Pope John Paul II).

It is not right for us to destroy the world God has given us . . . We Christians have a responsibility to take the lead in caring for the Earth (The Rev. Billy Graham).

Care of the environment constitutes a most urgent question for each and every human person . . . From this, we conclude that . . . to commit a crime against the

natural world is a sin. For humans to cause species to become extinct, to destroy the biological diversity of God’s creation, for humans to degrade the integrity of the Earth by causing changes in its climate, stripping the forests, or destroying wetlands – these are sins (Patriarch Bartholomew II, Eastern Orthodox Churches).

I want to share with you some of the verses I find most inspirational and most instructive about our duties to God’s great creation. One of my favorites is from the Sermon on the Mount where Jesus marvels at the beauty of a flower: “Consider the lilies of the field, how they grow. They toil not; neither do they spin. Yet I tell you, even Solomon in all his glory was not arrayed like one of these” (Matt. 6:28–29).

My central message is that we need all major religions today in order to halt the alarming destruction of all the Earth’s magnificent ecosystems and to begin the challenging process of restoration and rehabilitation. The strength of environmental organizations in the U.S. and worldwide is not sufficient given the rapid pace of destruction. By looking at the Jewish and Christian underpinnings for environmental stewardship, we can see how strong this foundation is and exactly why religious organizations can make such a difference.

Religious Basis for Environmental Stewardship

The Great Creation

The duties of environmental stewardship flow first from the core belief that God has created the universe and, second, from our duty to love our neighbor as ourselves. These two fundamental tenets of our faith mean that caring about the environment is not merely an option, not just one more thing on a list of socially correct behavior or something we discuss about giving a “yes” or “no” to. As the Rev. Steve Huber of St. Columba’s Episcopal Church puts it: “God calls us into a relationship of loving, caring, and faithfulness. The way we fulfill our part is in our relationships to others and the rest of creation.”

The Judeo-Christian tradition calls for strong, active stewardship of creation and places special responsibility on humans. In Genesis 2:15 we read that God put Adam in the Garden of Eden to “tend and keep it.” The Hebrew word for “tend” is *shamar*, which means to guard and watch over. Throughout the creation story in the first book of Genesis, God observes the various stages and calls them not merely “good” but “very good.”

Throughout the Psalms we find exaltations of the magnificence of creation: “The Earth is the Lord’s and the fullness thereof, the world and all that dwell in it” (Psalm 24:1).

You make springs gush forth in the valleys; They flow between the hills, giving drink to every wild animal . . . By them the birds of the air have their habitation . . . The high mountains are for the wild goats; the rocks are a refuge for the badgers . . .

O Lord, how manifold are your works! In wisdom have you made them all; the earth is full of your creatures. Yonder is the sea, great and wide, which teems with things innumerable, living things both small and great (Ps. 104:10, 18, 24, 25).

Saint Paul echoes this theme: “For in him all things were created, in heaven and on Earth, visible and invisible” (Col. 1:16).

In the book of Job there is an eloquent summary of the wisdom and greatness of creation:

But ask the animals, and they will teach you, the birds of the air, and they will tell you, Ask the plants of the earth, and they will teach you, and the fish of the sea will declare to you. Who among these does not know that the hand of the Lord has done this? In his hand is the life of every living thing and the breath of every human being (Job 12:7–10).

The diversity of creation is celebrated in Genesis: the Lord has made all kinds of trees grow out of the ground, trees that were pleasing to the eye and good for food (Gen. 2:9). Let the waters bring forth swarms of living creatures, and let the birds fly above the earth across the firmament of the heavens (Gen. 1:20).

Writers of the Hebrew Bible were particularly impressed by the great sea monsters. “So God created the great sea monsters and every living creature that moves, with which the waters swarm” (Gen. 1:20). “Yonder go the ships, and Leviathan which thou didst form to sport in it” (Ps. 104:26).

The theme of God’s caring for all of his creation is picked up in the New Testament in several places: “Are not five sparrows sold for two pennies? And no one of them is forgotten before God?” (Luke 12:6) “And not one of them will fall to the ground without your Father’s will” (Matt. 10:29).

Some have asked why there is not more discussion of environmental issues in the New Testament. Concerns about environmental destruction do not appear in the New Testament in large part because the New Testament is covering a short period of time in which the fundamental subject concerns the challenge Jesus is making to the Jewish authorities about the hypocrisy of the scribes and Pharisees. The region was not facing ecological collapse. Rather the key matter on the mind of Jesus was the failure of the official Jewish religious leaders of the day. Given the absence of substantial specific scripture on environmental problems in the New Testament, a good way for Christians to seek guidance is to ask the question of what Jesus would do in our circumstances today.

Throughout the last 400 years much of this scripture I have cited was avoided or downplayed by exploiters of natural resources who seized on the King James translation as giving humans “dominion” over creation. George Bernard Shaw observed that the Devil can quote scripture to suit his own purposes, and the polluters and the greedy have certainly done that. The most glaring example used by those who try to assert that the Bible is antienvironmental comes from the use of the word “dominion” in Genesis. “Dominion” is a poor translation of the Hebrew “kivshu” which, although it implies a form of control that humans certainly have over the rest of nature, is more accurately

translated as “steward” and can be thought of in the way a gardener has responsibility for the care, the nurturing, and the survival of his garden. Furthermore, those who cite this verse conveniently overlook the preceding and following verses which extol all of creation. They have taken a verse which provides a responsibility directive and turned it into a green light for exploitation. God’s concern for all animals is manifest in this very story, as he says: “to every beast of the Earth and to every bird of the air and to every thing that creeps upon the Earth . . . I have given every green plant for food” (Genesis 1:30).

A second example comes from those citing the verse “be fruitful and multiply” as giving humans carte-blanche to procreate. These individuals are in for a surprise if they read the preceding verses, because God first gives this blessing to all the animals – the fish, the birds, and the beasts. Thus, the blessing given to humans to flourish is conditional upon our not impairing this very same blessing already given by God to other living creatures.

In Genesis 9 the story of Noah’s ark ends with the covenant being established not just between God and Noah, but with all of the animals on the ark. “Behold, I establish my covenant with you and your descendants after you, and with every living creature that is with you, the birds, the cattle, and every beast of the Earth with you, as many as came out of the ark” (Gen. 9:8–10). We have here the first Endangered Species Act. The choice of how we treat other living things is not optional. They are an integral part of the great creation.

Love Thy Neighbor

Pollution disproportionately impacts the poor and minorities. Around the world major exploitation of natural resources by various oil, mining and timber transnational corporations has left people with ruined fisheries, polluted water and contaminated land. The whole development of the environmental justice movement draws from the biblical message of loving your neighbor, not poisoning your neighbor. We are paying the price for heavy use of pesticides and other carcinogenic material. According to the American Cancer Society, by 2050, some form of cancer is now projected to hit one in every two men and one in every three women,

As we think of our neighbor, we must consider how our actions affect all of those around us. The first biblical example of pollution affecting a neighbor can be found in Ezekiel 34:18–19 where we read:

Is it not enough for you to feed on the good pasture, but you must tread down with your feet the rest of your pasture? When you drink of the clear water, must you foul the rest with your feet? And must my sheep eat what you have trodden with your feet, and drink what you have fouled with your feet?

Warnings of unwise land use can be found in the Old Testament. From Isaiah we have the first message about sprawl: “Woe unto you who lay house to house and field

to field until there is no room in the land” (Isaiah 5:8). A slightly different translation is: “Woe betide those who add house to house and field to field, until everyone else is displaced, and you are left as sole inhabitants of the countryside.”

Churches can provide a powerful counter to the greedy exploitation of natural resources without regard to the consequences for those directly impacted or for future generations who will be living with toxic dumps, degraded water, and depleted fisheries. Let us next look specifically at what churches can do.

What can religious organizations do about the environmental crisis?

Modern life separates us from the consequences of our actions. This is particularly true for city dwellers like myself. We need to ask how our choices for energy, food, and transportation affect other people and God’s creation. Several examples of imaginative action by church groups illustrate the potential for both individual and group action.

In California the Rev. Sally Bingham started a program called Episcopal Power and Light, trying to get churches to consider purchasing their electricity from renewable sources of energy like wind. There is now an Interfaith Power and Light effort underway. This is especially important in the United States because we as a country are the biggest emitters of global warming gases whose climate altering impacts will be felt most harmfully on the poor of the world. As the Rev. Bob Edgar said, “It is only right that those who cause a problem be the ones who rectify it. It is not fair that restrictions be placed on the poor to make up for damage, past and present, caused by the conduct of the rich.”

I have participated with several Roman Catholic orders in protesting the energy policies of Exxon/Mobil which for years has funded efforts to prevent action to curtail emission of greenhouse gases. These orders hold substantial amounts of stock. At one annual Exxon shareholders meeting I attended with them in Dallas, the Chairman and Chief Executive Officer Lee Raymond attempted a propaganda campaign by noting that thousands of scientists had signed a letter saying the science about global warming was shaky. One of our group had to point out to Mr. Raymond that among his highly touted scientists were members of the Spice Girls and some actors from the cast of MASH. Raymond was embarrassed and could only reply that all Exxon’s material for the meeting was supposed to be peer-reviewed.

One of the most creative environmental campaigns initiated by churches is called “What Would Jesus Drive?” Religious leaders have picketed SUV dealerships, run full-page newspaper ads, and led protests. At a press conference in Detroit, a group of nuns parked four energyefficient hybrid cars in a row to spell out the four-word question: “What Would Jesus Drive?”

Separation of urban areas from food production has prevented many Americans from knowing about one of the greatest sources of cruelty to animals and one of the most flagrant sources of pollution. Gigantic factory farms, which also receive substantial government subsidy, sometimes crowd over 1000 pigs into a building and do not allow them to lie down. Massive amounts of manure inevitably break loose from lagoons and kill fish. These unsustainable factory farms with their horrible stench and cruelty to animals are a plague of biblical proportions on rural America.

The whole notion of caring for the land is laid out in chapter 25 of Leviticus where the need for a Sabbath for the land is discussed. “Six years shall you sow your field and six years you shall prune your vineyard, and gather in its fruits; but in the seventh year there shall be a sabbath of solemn rest for the land . . .” (Lev. 25:3–4). The notion of caring for the land is missing in much of industrial agriculture. Of course there have been plenty of individual farmers who have been terrible stewards of the land, but the scale of destruction and poisoning of farmland by chemical-intensive industrial agriculture today is immense.

The industrialization of farming and the unexamined pursuit of “cheaper” food have led to a shocking situation. In Proverbs we read: “A righteous man has regard for the life of his beast.” In Romans, Saint Paul wrote: “If your brother is being injured by what you eat, you are no longer walking in love” (Rom. 14:15).

There are many, many ways organized religion can make a decisive difference in environmental battles. Churches need to be alert to the ways the Tax Code encourages the pollution of creation and the poisoning of our neighbors. The code offers major subsidies to coal, oil, and gas mining operations of far greater magnitude than any subsidies for renewable energy or conservation. Half of the states in the United States exempt pesticides from sales tax. Of special concern are the tax breaks for gas-guzzling sport utility vehicles (SUVs). SUVs cost the

U.S. Treasury more than \$10 billion because they are exempt from the gas-guzzler tax imposed on automobiles. Small business purchasers of very large SUVs are, moreover, allowed to write off much of their cost in the first year. Would Jesus drive an SUV?

Conclusion

Religious organizations can play a decisive role in reversing the desecration of the Earth. First, they bring a large and dedicated group of people into the struggle. The environmental movement does not have sufficient membership and clout to win. Second, churches can provide a powerful moral force and presence. The independent moral voice is especially important because some of the largest polluters have well-financed lobby efforts and make large political campaign contributions. Furthermore, they have funded anti-environmental groups who carry out disinformation campaigns such as Exxon’s attempt to thwart action on global warming. The disinformation campaigns

by major corporate polluters try to portray mainstream environmental organizations as selfish, caring more about animals than people, or as scientifically ignorant. When the churches participate in environmental battles it is harder for the polluters and their front groups to persuade the public and politicians with specious arguments.

In this day and age when there is malicious propaganda everywhere, church participation in the environmental struggle can provide crucial leverage and perspective, while drawing large numbers into the debate providing moral force and clarity. This spells political clout and a chance to restore and heal the Earth. David Brower, founder of Friends of the Earth, had a goal for the twentyfirst century of CPR for the Earth. God's creation is like a patient in the emergency room needing CPR – conservation, protection, and restoration. Christians can and should play a critical role in providing such CPR to this wounded Earth.

Brent Blackwelder

See also: Brower, David; Salvadoran Reflection on Religion, Rights, and Nature.

Christian Nature Writing

Does the art form known as nature writing include distinctively Christian perspectives and expressions? If one means by this a literary genre that espouses Christian doctrines about the natural world, the answer would almost certainly be “no.” If, however, one is referring to writing that attends to and reflects upon the natural world in light of Christian symbols, images and motifs, then the answer must surely be yes. Writers whose work might well be included within this framework include such relatively early figures as Gerard Manley Hopkins, William Blake, John Muir, and Gilbert White. Among contemporary writers, one might include the work of such varied writers as Annie Dillard, Denise Levertov, Thomas Merton, Pattiann Rogers, Norman Maclean, Barry Lopez, Terry Tempest Williams, Czeslaw Milosz, and Wendell Berry. While certainly not uniform in their approach to religious questions, nor simply or easily identifiable as Christian writers, these writers do give sustained attention to Christian symbols and images as part of a larger endeavor of trying to understand the natural world and our place in it. In doing so, they make a distinctive contribution to the more encompassing focus of spirituality that characterizes nature writing as a whole.

Incarnation is one of the motifs arising from the Christian tradition that informs the work of many nature writers. Incarnation here refers to the central Christian mystery of God’s indwelling in human flesh in the person of Jesus Christ. The early Christian tradition quickly seized upon the cosmological implications of this idea, taking the incarnation of God in Jesus to mean that all matter – the entire cosmos – is suffused with God’s presence and therefore holy. To experience the world through the lens of the incarnation is to experience it sacramentally, to see living beings as infused with an inherent sacrality. In Thomas Merton’s monastic journals, kept over a period of 27 years while living at the monastery of Our Lady of Gethsemani in Kentucky, and in occasional writings such as “Day of a Stranger” and “Rain and the Rhinoceros,” one encounters a body of work expressing a profound understanding of the incarnation. One sees this in his lyric descriptions of the landscape surrounding his hermitage (partly influenced by his study of Zen Buddhism); in his sense of the redeeming character of the monastic rhythm of manual labor and monastic prayer (*or et labora*); and in his understanding of the monastery (and the monastic life) as a locus of resistance against the forces of oppression and alienation, whether ecological or racial or social.

One can see a related but distinct sensibility in the work of poets Pattiann Rogers and Denise Levertov. For Rogers, a sensitive and scientifically exacting observation of the life process of particular plants and animals (and of the unfolding universe

itself) informs and is informed by a subtle re-reading of classic Christian ideas such as grace, sin, redemption, and incarnation, creating a fresh, original and compelling “natural theology.” In Levertov’s poetry, especially her later work, one sees an insistent attention to the spiritual significance of attention to and “encounter” with the palpable world. Such encounters can occur, in Levertov’s work, with the wild world – a heron in a lake or the vision of Mt. Ranier appearing and suddenly disappearing behind a bank of clouds. Or it can happen in the ordinary domestic sphere, as in that moment when you pick up an old kitchen knife and unexpectedly find yourself in the presence of your mother, long dead now, who also held and cherished this knife. Here is a profound poetic evocation of sacrament, the experience of ordinary physical reality transfigured, mediating and making present a larger reality, a larger presence, spirit.

A second motif appearing in the work of writers influenced by the Christian spiritual tradition is the importance of cultivating attention – understood as a kind of prayer – as a necessary spiritual practice. In the Christian tradition, it is the practice and discipline of prayer that helps move the seeker from an occasional awareness of incarnational, sacramental reality to a more abiding state of awareness. Here prayer refers not to dialogue with a transcendent and disembodied being, but simple attention to the One whose presence suffuses and sustains every living thing. In the nature writing tradition, one often encounters a quality of attention to the natural world that is so rich and encompassing that it seems almost indistinguishable from what Christian mystics would call deep, contemplative prayer. Certainly the Christian spiritual tradition is not alone in asserting the importance of paying close attention to the ordinary (nor has it always lived up to its own ideals in this regard). One notices a similar sensibility at work in the work of writers for whom Buddhism provides inspiration and meaning (e.g., Gary Snyder, Gretel Ehrlich). The same could be said of indigenous writers such as Linda Hogan, Simon Ortiz, and Leslie Marmon Silko. But there is in writers who draw upon Christian images and symbols a distinctive way of thinking about the art of attention.

Consider Barry Lopez’s evocation of icebergs in the far north, pages of delicate description devoted to trying to capture the subtle and shifting color, the shape and texture of these massive structures. And the difficult challenge of trying to talk about the light reflecting off these giant shards of ice, and how it affects one to stand in the presence of such light. The struggle to notice and describe it fully and accurately (the light itself and one’s response to the light) leads, for Lopez, to an unexpected comparison

– between the light radiating off of the icebergs and the light pouring through stained-glass windows in medieval cathedrals. It would not be fair to say that Lopez, in making this comparison, “baptizes” the icebergs. He respects their mysterious presence too much to allow any such reduction of their meaning. But he does engage the question of meaning, in particular what it means to us to stand in the presence of these icebergs, with the help of a tradition of art and theology and spirituality that comes from another world entirely, that of medieval Christendom. To really see anything, suggests

Lopez, one must be prepared to risk an imaginative leap, an unexpected metaphorical association – in this case, the association between the theology and spirituality through which medieval Christians expressed the wonder and beauty and magic of light and the luminous light of icebergs. Such a rhetorical move can be understood, I think, as part of a discipline of attention and imagination aimed at cultivating a sense of mystery, of the sacred in the natural world. That Lopez uses Christian images and symbols to grasp the presence of mystery in a northern landscape does nothing to limit or circumscribe the meaning of this landscape. Rather, it opens it up to be discovered anew. In turn, given the reciprocal manner in which metaphors always work, such a meditation on those cathedrals of ice may well lead readers to reflect differently on the Christian spiritual tradition that gave rise to the medieval cathedrals. Here we see a process of reflection that has the potential to fire the imagination to see and encounter the natural world and the world of Spirit with new eyes – not unlike the process of contemplative prayer described by those who stood gazing up at the light of the medieval cathedrals.

Still, the natural world is not only light and beauty. Nature writers and poets who have been shaped by the Christian tradition reveal an extraordinary sensitivity to the reality of suffering and evil in the cosmos. Annie Dillard’s famous description in *Pilgrim at Tinker Creek* of a frog being devoured alive by a water bug is more than a casual allusion to “nature red in tooth and claw”; it is an entrée into a sustained and harrowing inquiry into the moral shape of the universe, into the question of God’s justice. When toward the end of *A River Run’s Through It*, Norman Maclean asks about the meaning of his brother’s sudden and violent death, his love affair with Montana’s Big Black Foot River takes a turn toward a question as old as it is intractable: What kind of world is this, where death and suffering crush us with such seemingly random and careless power? The work of Czeslaw Milosz, a native of Lithuania who has long struggled with the Catholic tradition in which he was raised, echoes similar concerns in his work – the undeniably sacramental beauty of the world vying in the poet’s imagination with the darkness and sheer weight of nature (and history) upon our existence, the tension between them being (finally) irresolvable.

To see and experience the living world through the lens of the Christian spiritual tradition is, for writers and poets such as these, a continuous moral, aesthetic, and spiritual struggle. It is an opportunity to see the world transfigured; but it also imposes certain obligations, the most important of which may well be to bear the wounds of a broken but still luminous cosmos.

Douglas Burton-Christie

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See also: Berry, Wendell; Canadian Nature Writing; Dillard, Annie; Levertov, Denise; Lopez, Barry; Quaker Writers in Tasmania (Australia); Williams, Terry Tempest.

Christian Theology and the Fall

The Christian doctrine of the Fall, heavily inscribed onto the text of Genesis, first exalts and then denigrates nature. Many find the garden itself a positive image of earthly existence: God plants Eden with an abundance of beautiful trees, good food, and rivers; humans are created out of the Earth to tend to the Garden. After Adam and Eve eat the forbidden fruit, however, nature becomes corrupt and humans sinful, as they are introduced to hardened labor, shame of their nakedness, and knowledge of their eventual death. The original harmony between nature, humans, and God is broken, leaving a transcendent God, a sinful humanity, and a degraded Earth in a state of mutual alienation.

As there is no concept of “the Fall” in the Hebrew scriptures, there remains a question as to its origin. The “Fall” interpretation of Genesis first appeared during the intertestamental period, an era of political oppression and internal conflict for the Jewish people which contributed to the apocalyptic belief in a corrupt world. In the apocalyptic Jewish text 1 Enoch (2 B.C.E.–1), a tale of angelic “watchers,” based on Genesis 6:1 is invoked to describe a cosmic descent into sin. The watchers, or satans, are angels who rebel against God and literally “fall” to Earth from heaven. They mate with women who give birth to the nephilim, “fallen ones,” who bring evil into the world. Enoch claims that humankind was created immortal, pure and righteous, but because of human knowledge, taught to them by the leader of the satans, Azazel, humanity became unrighteous and subject to death (54:6; 8:1).

The Jewish conceptions of fallen angels emerging at this time hint of a Hellenistic dualism that valued heavenly immortality over mortal earthly existence. In the *Phaedrus*, Plato describes immortal heavenly beings who lose their wings, falling to the Earth into mortal bodies.

The Christian Jew Paul blends both apocalyptic and Platonic conceptions into his cosmic Fall based upon a dualism of flesh and spirit, physical and spiritual, Earth and heaven. “The first man was from the Earth, a man of dust; the second man is from heaven” (1 Cor. 15:46–47). Paul directly couples Adam’s sin with death; from the human capacity for evil stems all mortality (Rom. 5:12–21). Ultimately, the cosmos as a whole is “subject to its bondage to decay” while awaiting its liberation into the immortal celestial body (1 Cor. 15:35–50).

Church Father Irenaeus avoids a cosmic Fall, limiting Pauline sin to the human realm. Irenaeus suggests that nonhuman creatures continue to obey God’s will: nature retains its goodness even after the Fall. Augustine further intensifies an anthropocentric interpretation of the Fall that indirectly exonerates the nonhuman creation. For him,

the creation is full of goodness and beauty which demonstrates the nature of the Creator, who is beauty itself. Human choice is the origin of the Fall. The curse blemishes human life alone: suffering and death are inherited by all humans (original sin) as punishments from God.

Throughout rabbinic literature, the notion of any original Fall remains only peripheral. Nor does Islam espouse original sin: the expulsion, caused by Satan's deception, was pardoned, having no ramifications for the rest of humanity or the natural world.

By the period of the Reformation, the Christian view of the Fall turned decisively against nature: originally created by God for the service of humanity, nature became cruel, ugly, and painful, after the Fall. Eden was a joyful reflection of God's blessing, for John Calvin, but afterwards "the inclemency of the air, frost, thunder, unseasonable rains, drought, hail or whatever is disorderly in the world are the fruits of sin" (Calvin 1948: 177). Similarly, Martin Luther asks: "And what of thorns, thistles, water, fire, caterpillar, flies, fleas, and bedbugs? Collectively and individually, are not all of them messengers who preach to us concerning sin and God's wrath?" (Luther in Kinsley 1996: 112). Whereas for Luther, the despair of nature can motivate us to seek redemption in Christ, for Calvin, the will of God manifests in all of nature, in each drop of rain, so that despite the fallen aspects of nature, the glories of God's providence rules all things for the benefit of the saved. At the time of the Reformation, belief in the Fall also contributed to early modern attempts to discipline unruly nature. Elaborating on his Calvinist upbringing, Francis Bacon claimed that science and technology can correct nature's fallenness and regain the dominion over creation that humanity had in Eden.

In the twentieth century, the Fall remained an important theological category. In the tradition of Calvin, German Theologian Jürgen Moltmann found a perfect "primordial" knowledge of God in paradise that "now only exists in rudimentary form" due to the problem of sin and a corrupted natural world. However, these "traces of creation-in-the-beginning" anticipate the deathless and sinless perfection of the glory of the world to come. Reinhold Niebuhr rejected his Lutheran tradition by accepting death as inevitable to our status as creatures. Evil is not in nature but results from human freedom, for Niebuhr. The fall of Adam and Eve symbolizes human freedom to wield both creative and destructive powers or good and evil in the world. Sin arises, for Niebuhr, when humankind makes destructive use of its freedom due to self-centered attempts to become godlike and overcome human finitude.

Christian Ethicist Max Stackhouse represents a contemporary strain of the reformed (namely Calvinist) tradition, endorsing the notion of a fallen natural world harboring evil. Though creation does embody an original goodness, all of nature, for Stackhouse, has indeed fallen and requires human constraint. Echoing Bacon, he argues that human intelligence and technology must be used to cure nature's brokenness and bring fallen nature nearer the intent of the Creator. In contrast, eco-theologian John Clateworthy condemns such attempts to "fix" nature, rejecting the idea that it is "fallen," and emphasizing that science and technology have wrought too many destructive consequences.

Hence, contemporary theologians find the doctrine of the Fall problematic in our age of the ecological crisis. For Rosemary Radford Ruether, belief in a fallen nature has permitted neglect of the planet and rejection of our relational intimacy with plants, animals, and the Earth through a disrespect for the death cycle of life. Brazilian theologian Ivone Gebara believes finitude and tragedy has and will always be a part of life on Earth. Hence, original sin, for her, did not cause a fall into mortality. For Gebara, primal sin comes from the organized attempts of humans to escape mortality and vulnerability, through the monopolization of power over animals, the land, and other humans.

Biblical scholar Lyn Bechtel explores the scriptural underpinnings for such an ecological ethic. The *ha-adama/ha-adam* wordplay – “Then Yahweh God formed the Earth creature [ha-adam] from dust from the Earth [ha-adam]” (Genesis 2:7) – demonstrates an “intimate relatedness” between Earth and earthling based upon the land. Originally united with the Earth, humans are separated from the native ground at birth. Adults work with the Earth, produce food, (2:5; 3:23) and eventually will return to union with the Earth upon death (3:19). Bechtel argues that the Hebrew text, far from implying a doctrine of Fall, suggests an earthly transition of maturation through birth and death.

There are other contemporary theologies that also affirm the workings of nature, but through alternative constructions of the Fall. In process theology, every level of reality has a degree of freedom, giving it the power to turn away from the divine will. Nature is fallen due to the occasions in which God’s lure has been rejected.

Process theologian Jay McDaniel, when thinking about how the Fall explains violence and suffering in nature, critiques the anthropocentrism of the traditional doctrine, as well as the assumption that violence and suffering are solely the result of disobedience to divine will. The predator–prey relationship evolved long before humans emerged on our planet. There was no time in existence when the Earth was free from violence. McDaniel gives the example of a grey whale being attacked and eaten by a group of orcas. The death of the grey whale is valuable to the marine ecosystem, giving sustenance to the orcas and other marine creatures feeding off the grey whale’s body. Creatures cooperated with God’s lure, creating the predatory form of sustenance, dubbed by McDaniel the “fall upward.” God lured more advanced forms of life into existence and this involved a risk that creatures would experience increased pain as they increased in opportunities for enjoyment.

A human-initiated Fall, however, does seem to resonate with scholars who liken Eden to the age of the hunters and gatherers. The foraging lifestyle of hunters and gatherers treated nature as home and the Earth as alive and sacred. As there was no sense of separation from the Earth, foraging communities were somewhat innocent, like Adam and Eve. Agroecologist Wes Jackson finds “the Fall” in the very transformation from hunting and gathering to the agricultural mode of life. Human evils such as systematic warfare, patriarchy, slavery, and ecological ruin, arose during this era. Farming, set-

lements, and population growth rapidly displaced animal habitats, alienating human from nonhuman species.

Korean ecofeminist, Sun Ai Lee-Park, also highlights a distinctive human role in the Fall. For her, the destruction of the rainforest represents the tree of good and evil, which signifies the restrictions and limitations imposed upon humanity against the taking of every tree. The transgression takes place not just in deforestation, but also by the World Bank who has been taking the Korean people from their land into factory production. The transgression of the tree of good and evil causes death as eco-death, says Lee-Park.

The concept of the Fall arises as either a human or a cosmic event, in both historical and contemporary scholarship. The Pauline notion of “fallen creation” reappears during the Reformation and in the contemporary reformed tradition. Recent scholarship however, also critiques the cosmic fall for encouraging estrangement from Earth ecosystems. Some scholars reinterpret a distinctively human “fall” from harmony with nature, others deconstruct the Fall altogether, so as to affirm natural forms of death and suffering as integral to the process of nature.

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An examination of the current Eastern Orthodox literature on nature, ecology and the environment will show from the outset a recurrent feature. This concerns the clear demarcation between Eastern and Western Christianity (Roman Catholic as well as Protestant) as entire religious and cultural complexes in relation to these issues. It is believed that the historical development of these two parts of Christendom presented certain differences in theology and ethics, which had an immediate impact upon the way Eastern and Western Christians began to see and to treat nature. Given the fact that monotheistic religions and especially (Western) Christianity have been blamed (L. White) for fostering anti-nature attitudes and for being responsible to a large extent for

the contemporary ecological crisis, many Orthodox thinkers tried to dissociate Eastern Orthodoxy from its Western Christian counterparts.

For these Orthodox, the whole problem is closely connected to the rise of the Western worldview in modern times in the wake of the Renaissance, the Reformation, the Scientific and Technological Revolution, the Enlightenment, and the Industrial Revolution. Western Christianity played, albeit in many cases indirectly, an instrumental role in the appearance of this culture, which later acquired almost planetary dimensions. Two main characteristics of this development were individualism and dualism. Individualism saw humans as self-sufficient and static beings without real communion with one another and respect for the surrounding physical environment. The orientations and the needs of the individual held priority in the values system of modernity. Passing into a utilitarian and egoistic society of self-adoration was the normal consequence of this. Furthermore, dualism provided individuals with several Manichean polarities that created a barrier between the spiritual and the material and between humans and nature. In this context, knowledge of nature was identified with its control and subjection. Nature was desacralized and seen as an inanimate machine working according to standard laws that could be fully explored. Moreover, nature was falsely considered an endless source of wealth for the satisfaction of individual needs and wholesale exploitation. By identifying having with possessing and controlling, and by believing in continuous progress, modern humans began uncritically to exploit natural resources to produce and to consume at a growing rate. This optimism has been largely destroyed in the course of the twentieth century by various serious events including the world wars and the rise of nihilism. The quest for alternative worldviews and more holistic spiritualities (from the Far East) was but only a sign of the many deadlocks of the modern Western civilization.

By contrast, Eastern Orthodoxy offered another understanding of human beings in relation to God and nature beyond individualism and dualism. The ontology of personhood, based on the loving community between the three persons of the Holy Trinity, serves as a prototype for another kind of human existence. The latter is not viewed in a utilitarian and individualistic way, but as a harmonious coexistence with nature, which is the gift of God to humans. The person signifies relationship, nearness and unity, while the individual stands for distance, separation and alienation. From this holistic perspective, humans are the stewards and not the masters of creation. They have to take care of it, to transform it and to give it back to the Creator. This presupposes an eschatological understanding of nature, which is not going to be destroyed but to be transfigured. In this way, humans, as representing a micro-cosmos, are an integral part of creation, which should not simply be subjected to systematic exploitation, utilitarian needs, bare materialism and consumerism.

Furthermore, nature is not an object (i.e., something lying outside of and opposite to humans), which must be thoroughly subjected to human reasoning, power and control. Rather it should be seen as a living organism, the house, in which humans live and work and which deserves particular protection, care and reverence (cf. Gen. 2:15). Knowledge

means in this context a loving and holistic union with nature. In order to achieve a harmonious coexistence with nature and to overcome ecological crisis, humans have to articulate a new hierarchy of values toward nature. This implies the development of a new ethos of self-sacrifice toward nature. The latter suffers the consequences of the original sin too, which has destroyed the previous paradisiacal conditions. In the end, nature must be transformed by humans according to the prototype provided by Jesus Christ during his earthly life and symbolized in the sacrament of the Holy Eucharist. In addition, humans must develop a spirit of ecological asceticism by setting a new agenda of life and their real needs beyond self-centered utilitarianism and consumerism. Human control of nature should not be equated with its domination, but with a responsible *diakonia*, a service for the sake of the whole creation. This is the new ethos, the new stance and the new mentality, which Orthodoxy conveys to the modern materialistic global culture and which cannot be simply codified in legal frames and political programs.

This Orthodox understanding of nature and solution to the modern ecological impasse, based mostly on biblical and patristic sources, raises however the question concerning their applicability, namely the extent to which these ideas have really influenced the attitudes of Orthodox cultures toward nature. This is because if one examines these cultures in Eastern and Southeastern Europe, one will realize – curiously enough – that environmental conscience is usually far less developed among Orthodox than Western Christians. This means also that the above Orthodox ideas, apart from being too theoretical, do not accurately depict historical as well as contemporary reality. Although there is enough truth in the argument that the Western world has historically played a crucial role in the present environmental degradation, the way the whole issue is taken up by Orthodox thinkers is misleading. This is because they usually are apologetic toward Eastern Orthodoxy and intend to show its authenticity and consequently its superiority over Western Christianity. Thus, the existing serious discrepancy between theory and practice in this issue, along with other arguments, show the relativity of the sharp demarcation between Eastern and Western Christianity.

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See also: Christianity (6a) – Roman Catholicism; Christianity (6b1) – Christian Orthodoxy; Christianity (6b2) – Greek Orthodox.

Christianity (1) – Introduction

Christianity has been commonly characterized – indeed, demonized – in recent decades as an anti-nature religion that has contributed to ecological indifference and degradation. This ecological complaint against Christianity has some merit, as many Christian interpreters have acknowledged. An adequate introductory overview of Christianity and nature, however, must also explore evidence for ecological sensitivity in Christian history, and conclude with the prospects for the development of ecological consciousness in this religious tradition.

The gist of the ecological complaint against Christianity is best stated in an influential essay by cultural historian Lynn White, Jr., “The Historical Roots of Our Ecologic Crisis” (*Science*, 1967). White argued that Christianity, “the most anthropocentric” of religions, “bears a huge burden of guilt for our crisis,” and “we shall continue to have a worsening ecologic crisis until we reject the axiom that nature has no reason for existence save to serve man.” Unlike many of his imitators, however, White was “a churchman” who called for a reformed Christianity. This essay not only spurred some environmentalists’ reactions against certain alleged Christian “axioms,” but it also provoked ecologically oriented reexaminations of the tradition by Christian theologians and ethicists.

On the one hand, the bulk of the ecological complaint is essentially true. Throughout Christian history, in diverse places, times, and forms, the dominant theological and ethical strains have been oblivious or even antagonistic to nature, especially untamed nature (as opposed to domesticated nature, such as sheep and olive trees). Anthropocentrism and dualism have been prime features of these interpretations of the faith. Often dichotomizing, rather than integrating, the spiritual and the material, soul and body, grace and nature, humanity and nature, the main strains usually have devalued or disdained “the world” as an alien, even demonic, place, and have sought to transcend it for the sake of spiritual elevation and otherworldly salvation. The biosphere has been perceived generally as theologically and ethically trivial – the stage and scenery for the divine–human drama, which alone has redemptive significance. The focus has been almost exclusively on human history, ignoring the reality that human history is rooted in and continually shaped by natural history. Nonhuman nature has been interpreted mainly as a composite of “things” – “raw materials” or “capital assets” – that have instrumental value for human economic and other needs, without regard for the moral claim that living “objects” are really an astonishing diversity of “subjects” struggling for space and sustenance in complex interdependencies. Humankind has been viewed as an ecologically segregated species, designed for dominion – managerial mastery, including

a divinely sanctioned right to exploit nature's bounty, with the main restriction being the long-term conservation of the resource base for future generations. Indeed, Christians have commonly believed that the Earth – in some versions, the universe – was created solely for “man.” Many also have argued that nature itself is “fallen,” cursed with deformities and asymmetries, not merely abused by the sins of fallen humanity. Consequently, some have suggested, nature should be “converted” to conform to the divine design, which often meant, in effect, technological transformations. These views and values have contributed directly and indirectly to environmental negligence and abuse in Christian history.

On the other hand, the ecological complaint is an overgeneralization. It overlooks the number and significance of dissenting opinions in Christian history, and underestimates the tradition's capacity for ecological reformation. Christianity is anything but a moral monolith; it embodies multiple strains of thought and practice, often with radically different emphases. The signs of what Paul Santmire calls the “ecological motif,” emphasizing human rootedness in nature and celebrating God's presence in the biophysical world, are widespread. The varied voices for ecological sensitivity in Christian history are mainly minorities and are often muted and ambivalent, but they are still present, persistent, and sometimes prominent.

The classical voices for Christian ecological consciousness can be heard in many forms –for instance, in prayers, hymns, poetry, protests, theologies, norms, and legends. They include the opposition of Puritans to cock-fighting and bear-baiting, and the resistance of medieval bishops and people to the destruction of ancient forests and fens. They also include poets such as Gerard Manley Hopkins and William Blake and theologians from Irenaeus to

H. Richard Niebuhr and Hildegard of Bingen to Joseph Sittler. The virtues affirmed by a religion can also be ecologically revealing. For instance, the norm of frugality, which many modern environmentalists advocate as an essential constraint on ecologically destructive prodigality and as an essential component of sustainable lifestyles, has been a central virtue in nearly all the Christian tributaries, Protestant, Catholic, and Orthodox. Some of the legends of the saints – especially the warm relationships with other animals among the Desert Fathers, the Celtic saints, and St. Francis – also illuminate the values of the saints' admirers. St. Francis can be regarded as the epitome of Christian love in an ecological context, but he did not exist in a vacuum. He was the foremost of a cloud of witnesses who preceded and followed him. The heroic figures and their exploits that a people remember and celebrate are not morally irrelevant; they are indicators of the values and virtues to which that people aspire.

Theological affirmations also show some ecological consciousness. For example, the mainstream interpretations of the doctrine of creation have affirmed the goodness of the natural order as the work of a loving God, the imitation of whom requires care for the Earth. In the doctrine of the incarnation, many theologians, especially paradigmatic Orthodox interpreters such as St. John of Damascus, recognized the sanctification of matter. In Christ, God entered into solidarity not only with humanity, but

also necessarily with the whole biophysical world of which humans are representative embodiments, the microcosm of the macrocosm. Similarly, the concept of the sacramental presence of the Spirit was understood to confer dignity on materiality, since it implied that the natural world was the holy habitat of God. The Orthodox, prominently, and some Protestant reformers, including John Calvin, Martin Luther, and John Wesley, peripherally, preserved the ancient hope of deliverance from death for all creatures, thereby affirming the ultimate unity and value of all life. Indeed, the idea of resurrection has been understood as the affirmation of the body, of materiality. The biblical idea of dominion has been used by many in the modern era as a religious rationalization for environmental exploitation and manifest destiny, but it was interpreted mainly through most of Christian history as a divine mandate against the tyrannical abuse of the rest of nature and for benevolent care. Wesley and some other divines, for example, interpreted dominion as the mediation of God's blessings to otherkind. Apparently, not all Christian axioms have been part of the ecological problem.

Contemporary Christian environmentalists contend that there is no major obstacle inherent in the Christian faith to the development of ecologically sustaining theologies and ethics. An ecological reformation of Christianity is necessary and possible, they claim, by reinterpreting Christian teachings in the light of ecological wisdom and other cultural borrowings. These claims seem defensible. Moreover, Christian churches have strong precedents and capacities for reevaluating and reforming theologies and ethics. *Semper Reformanda* – Always to Be Reformed – has been a Protestant motto, and similar ideas can be found in other Christian traditions. Indeed, one of the important characteristics of contemporary Christianity is the emergence of an ecological reformation that is building firm foundations for ecological integrity in Christian thought and practice, as many of the Christianity-related entries in this encyclopedia illustrate.

James A. Nash

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Christianity (2) – Jesus

Since Jesus stressed the authority of the Hebrew Bible (which for Christians became the Old Testament) (Matt. 5:18), he implicitly affirmed its teachings on nature. He did not rescind the ecological ethics of the Law, although he was less strict about ceremonial laws. All foods are clean and do not defile a person (Mark 7:19). He touched the sick to heal them, rejecting ceremonial uncleanness laws found in the Hebrew Bible (Mark 1:40–45; 5:25–34). Jesus appreciated the beauty of nature (Matt. 6:28–29) and showed respect for nature in his parables, which are rich in nature imagery. Through his upbringing in rural Galilee he learned about God’s care for creation by observing fruit trees, flowers, birds and fishermen and by working as a carpenter.

Jesus affirmed the scriptures teaching that God created all things (Mark 10:6; 13:19; Matt. 19:4). The world and matter are not eternal (Matt. 24:21, 25:34; John 17:24). Nature reflects the activity of God and does not operate independently (Matt. 5:45; 6:26–30; Luke 12:6). God is a loving Father who sustains and cares for all creation. God gives life to all beings (John 5:17; 6:33; Luke 24:38) and provides food for animals, birds and plants (Matt. 6:26–30; Luke 12:6). Since he loves all people, he causes the sun to shine and rain to fall on both righteous and wicked people (Matt. 5:45; cf. Ps. 50:11; 104:14, 17). As “Lord of heaven and Earth,” God is worthy of praise and obedience (Matt. 11:25; Luke 10:21). The resurrected Jesus has “all authority in heaven and Earth” (Matt. 28:18).

Nature provides ethical lessons. God’s provision of sun and rain for the wicked is a model for loving our enemies (Matt. 5:44–45). Since God provides for the needs of

What Would Jesus Drive?

“What Would Jesus Drive?” began as a slogan on a protest sign in 2001, and within two years had emerged as a full-fledged campaign highlighting North American religious opposition to global warming, perhaps the largest and most visible Christian environmental drive in history.

In the winter of 2001, Boston-based activists centered around the Harvard Divinity School, the Massachusetts Climate Action Network, and the Coalition for Environmentally Responsible Economies (CERES) began organizing a series of small demonstrations against the proliferation of gas-guzzling sports utility vehicles (SUVs). On Sunday, 3 June 2001, in a driving rainstorm, approximately 100 protesters paraded along an “auto mile” in the Boston suburb of Lynn, led by a number of clergy. Dan Smith, asso-

ciate pastor of Hancock United Church of Christ in Lexington, Massachusetts, carried a sign with the slogan “What Would Jesus Drive?” (Smith and protest coordinator Bill McKibben had concocted the slogan as a play on the widespread admonition among evangelical Christians, WWJD, or “What Would Jesus Do?”). “I hope it will at least encourage folks to think twice, and possibly pray about this decision, as they would about many other hard choices they make,” Smith told reporters. Noting that the parking lot of his suburban church was often filled with SUVs on a Sunday morning, he added “I love the people who drive them, but I feel we could all be better informed about the consequences of our decisions as consumers and Christians” (author’s recollection).

Widespread media coverage, including a full-page account in the *Christian Science Monitor* with the headline “What Would Jesus Drive?” and a feature on ABC News, spread the idea in religion-and-environment circles, and soon it was appearing on handmade buttons. (A protest in western Massachusetts later that summer, convened by the group Religious Witness for the Earth, featured signs reading “What Would Buddha Drive?”.)

A year later, in the fall of 2002, a much larger circle of religious environmentalists embraced the slogan as the centerpiece of their global warming campaign, using the catchphrase in a television organizing campaign that blanketed cities in four midwestern and southern states. The campaign began with a caravan of nuns driving hybrid electric vehicles, each carrying the slogan on a bumper sticker, to a meeting with top executives of U.S. automakers and the United Autoworkers labor union. The campaign included participation from the National Council of Churches and, interestingly, the Coalition on the Environment and Jewish Life. The most significant boost, though, came from organizing by Evangelicals for Social Action and the Evangelical Environmental Network. “We have confessed Christ to be our savior and Lord, and for us that includes our transportation choices,” said the Rev. Jim Ball, organizer of the EEN. “Most folks don’t think of transportation as a moral issue, but we’re called to care for kids and the poor, and filling their lungs with pollution is the opposite of caring for them” (*The Guardian*, 14 November 2002).

In a campaign discussion paper prepared by the two evangelical groups, an array of scripture passages were cited in support of the groups’ stewardship message. Particular attention was paid to the scientific prediction that global warming caused by American consumption of fossil fuels will impact most severely many of the world’s poorest people, particularly those in low-lying areas of the tropics.

Some conservative commentators attacked the campaign – one writer at *Forbes.com* declared that Jesus would drive a “4 ´4 pickup with crew cab” in order to keep his followers safe and negotiate tough Galilean roads. Wags suggested that scripture indicated Jesus might instead favor Hondas (Acts 5:12 – “the Apostles were in one Accord”). But the car companies listened more respectfully than they had to secular environmentalists. The largest impact of the campaign may be simply that it marked the start of more aggressive, scripturally based environmental campaigning by North American Christian activists. After a decade of bureaucratic resolutions from different denomina-

tions decrying global warming and other environmental ills, activists seemed finally to have hit on a slogan that captured the public imagination and crystallized the moral choices inherent in environmental issues.

Bill McKibben

See also: Biblical Foundations for Stewardship; Christianity (7i) – An Evangelical Perspective on Faith and Nature; Evangelical Environmental Network; Jesus and Empire; Restoring Eden. animals and plants, humans should trust God to provide for their material needs and reflect this in prayer for daily bread (Matt. 6:11, 25–33).

Jesus used nature metaphorically. The people of God are sheep that God cares for (Mark 6:34; John 9:36, 10:15) and those who would destroy them are wolves (Matt. 10:16; John 10:12). Jesus is the good shepherd who gives his life for his sheep (John 10). He is the bread that gives eternal life (John 6:25–40). The Holy Spirit is the water that gives life (John 4:14).

Many parables utilize nature to teach spiritual truth. Parables featuring seeds, weeds, wheat, yeast, fish and trees teach about the kingdom of God (Mark 4; Matt. 13; Luke 13:6–9; 21:29–30). Varied results from sowing seed in different kinds of soils illustrate diverse responses to Jesus' message (Mark 4:1–8, 13–20).

Jesus used natural objects to illustrate moral and spiritual lessons. Bread and wine were sacramental symbols of the new covenant instituted through Jesus' redeeming death on the cross (Mark 14:22–25). He made an unfruitful fig tree wither as a visual parable of judgment on people unresponsive to God (Mark 11:14; cf. Luke 13:6–9).

Jesus was comfortable with the material world (Mark 2:16), yet he was not consumed by it. One's priority should be to seek God's kingdom (his reign and presence) and righteous character above money and material possessions (Matt. 6:19–24, 33; 13: 22; John 6:27). Material things are not evil in themselves, but the pursuit of possessions is not the highest good. "What profit is there if a person gains the whole world and loses his soul?" (Mark 8:36). If a person trusts God and pursues God's kingdom and righteousness as first priority, God will provide his basic material needs (Matt. 6:33). We should thank God for providing for our material needs (Matt. 14:19; Mark 14:23).

All created things have worth in God's eyes. Nature has intrinsic value whether it provides human benefits (sheep, Matt. 12:11) or has little utilitarian value to humans (grass, sparrows, Matt. 6:26; 10:29–31). Even rocks glorify God (Luke 19:40). God knows what happens to sparrows and provides for them (Matt. 6:26; 10:29–31). Nevertheless humans have greater value than animals and plants (Matt. 6:26, 29; 10:31; 12:12), since humans are created in God's image (cf. Gen. 1:26). Jesus healed many people, but there is no record of his healing an animal. However, he taught the moral imperative of properly caring for animals (Luke 13:15; Matt. 12:11).

Several of Jesus' teachings have indirect implications for environmental stewardship. Leadership involves service of others, not power over others or an excuse for oppression (Mark 10:42–44). Hence human dominion over nature (cf. Gen. 1:26, 28) should be exercised for the good of creation, not the selfish destruction of nature. The parable of the talents and the parable of the wise steward imply the Earth is a stewardship for

which humanity is accountable to God (Matt. 24:45–51; 25:14–30). The Earth belongs to God not humanity (Matt. 11:25; cf. Ps. 24:1), and humans will be judged on the condition in which they return God’s possessions (Matt. 25:27).

In the Lord’s Prayer, Jesus teaches his followers to pray that God’s kingdom will reign fully on Earth (Matt. 6:10; Luke 11:2). Although God is Lord of heaven and Earth (Matt. 5:13; 11:25), human and demonic evil cause many things not to be as God intended them (Matt. 4:24; 10:7–18; 12:22; Mark 3:20–27; Luke 13:16). The Lord’s Prayer asks that God’s purposes be fulfilled in both physical and spiritual realms.

Miracles show Jesus’ divine power, glory and authority over nature and encourage faith in Jesus (Matt. 8:23–27; 14:22–33; Mark 2:10–11; 4:37–41; Luke 8:22–25; John

2:1–11; 9:30–38). He performed creation miracles such as multiplying loaves and fish to feed the hungry and transforming water into wine (Mark 6:34–44; 8:1–9; John 2:1–12; 6:1–13). Simply by speaking a word, he calmed storms (Mark 4:39–41; Matt. 8:23–27), much as God created with a word in Genesis 1. He healed numerous diseases with a touch or word (Matt. 4:23–24; 8:8) and raised the dead, including a man who had been dead four days (Matt. 9:18–25; 11:5; Luke 7:11–15, 22; John 11:38–44).

The return of Christ will be preceded by cosmic disasters, including earthquakes, plagues, famine, changes in the courses of astronomical bodies and the darkening of the sun and moon (Matt. 24:27–30; Mark 13:24–27; Luke 21:11, 25–27). Heaven and Earth in its present form will pass away (Matt. 5:18; 24:35). This does not imply the destruction of the world, but the transition to God’s universal reign over creation (Matt. 13:37–43). Although Jesus does not explicitly refer to a new or transformed Earth as do some NT authors, there are hints that there will be a perfected Earth after Jesus’ return. The righteous will eat and drink with Jesus in the consummated kingdom (Matt. 26:29; Luke 22:29–30). The humble will inherit the Earth (Matt. 5:5), a broadening of the promise in the Hebrew Scriptures that the righteous will inherit the land of Israel (e.g., Ps. 37:11). The dead will be resurrected bodily to face eternal rewards or punishments (Luke 14:14; John 5:21–29; 11:24–25). This implies the righteous will enjoy some type of physical existence in the eternal age, although different than the present physical life, since there will be no death or need for human procreation (Luke 20:35–37).

Harry A. Hahne

See also: Anarcho-Primitivism and the Bible; Biblical Foundations for Christian Stewardship; Christianity (3) – New Testament; Creation Story in the Hebrew Bible; Creation’s Fate in the New Testament; Hebrew Bible; Jesus and Empire; Stewardship.

Christianity (3) – New Testament

The New Testament (NT) presupposes the Old Testament (OT) teachings on nature and occasionally quotes OT nature passages (Matt. 5:17; Acts 3:21; 7:49; 2 Pet. 3:13; Heb. 1:10; 2:5–8). God created “heaven and Earth,” gives life to all creatures and sustains creation. Nature is not to be worshipped. It witnesses to God the creator who alone is to be worshipped. Nature has value because God created it and sustains it. Jesus’ incarnation and bodily resurrection show that matter is not inherently evil.

The NT focuses on the reconciliation of humanity with God and the resulting ethical implications. Yet it also promises the final redemption of the material creation. Redemption involves the reversal of the damage caused by the human Fall on both humanity and nature.

Synoptic Gospels

God created all things (Mark 10:6; 13:19; Matt. 19:4; 24:21; 25:34). God is Lord of heaven and Earth (Matt. 11:25; Luke 10:21) and the resurrected Jesus shares this authority (Matt. 28:18). God is actively involved in nature. He gives life to all, lovingly cares for animals and plants, and provides sun and rain to meet human needs (Matt. 5:45; 6:26–33; Luke 12:6; 24:38).

Nature has intrinsic worth, apart from its benefits to humans (Matt. 6:26; 10:29–31). The value and goodness of matter is shown by the narratives of Jesus’ birth, which stress his physical incarnation in human flesh (Matt. 1; Luke 1:26–38; 2:1–7; 3:21–37). Jesus used bread and wine as sacramental symbols of his sacrificial death (Matt. 26:26–28; Mark 14:22–25; Luke 22:19–20).

Nevertheless, some aspects of nature are not as God originally intended due to the human Fall and demonic influence. Disease, death and natural disasters are negative aspects of nature that Jesus overcame through miracles (Matt. 4:24; 12:22; Luke 13:16). Jesus’ miracles show his divine power and authority over nature and encourage faith in him (Matt. 8:23–27; 14:22–33; Mark 4:37–41; Luke 8:22–25). He performed creation miracles such as multiplying loaves and fish to feed the hungry (Mark 6:34–44; 8:1–9). He calmed storms by speaking a word (Mark 4:39–41; Matt. 8:23–27), much as God created by speaking (Gen. 1). Many miracles are local reversals of the curse from the Fall that brought death, disease and hardship (Gen. 3:14–19). Jesus healed diseases (Matt. 4:23–24; 8:8) and raised the dead (Matt. 9:18–25; 11:5; Luke 7:11–15, 22). The miracles are a foretaste of the new creation, which will have perfect harmony in nature

and no death or disease. The multiplication of loaves and fish anticipate the super-productivity of nature in the new creation predicted by the OT prophets (Mark 6:34–44; 8:1–9; cf. Isa. 11:6–9; 25:8; 30:23–26; 66:17–25). Jesus’ healings and resurrections of the dead confirm his identity as the Messiah in fulfillment of scripture (Luke 7:18–23; Matt. 8:16–17). By touching the sick, Jesus rejected the Jewish tradition that the diseased are ceremonially unclean (Mark 1:40–45; 5:25–34).

Jesus frequently used nature in his teachings about spiritual truth. He drew ethical lessons from nature (e.g., Matt. 5:44–45; 6:11, 25–33). He used nature parables and metaphors to teach spiritual truth and to call people to faith (Mark 4; 6:34; Matt. 13; 10:16; Luke 13:6–9; 21:29–30). Since God providentially cares for animals, people should trust God for their needs (Matt. 6:25–33; 14:19). Although material things are not inherently evil, they should not preoccupy a person (Matt. 6:19–24, 33; 13:22). The pursuit of God’s kingdom and righteousness is the highest priority (Matt. 6:33).

As in the OT, cosmic signs accompany significant redemptive actions of God in history. A divinely appointed star guided the Magi to the newborn Messiah-King

(Matt. 2:1–11). When Jesus died on the cross, there were earthquakes and some righteous dead were resurrected, affirming that Jesus is the Son of God (Matt. 27:51–54). The resurrection of Jesus was accompanied by an earthquake (Matt. 28:2). The return of Christ will be preceded by cosmic disasters, including earthquakes, plagues, famines, changes in the courses of astronomical bodies, and the darkening of the sun and moon (Matt. 24:27–30; Mark 13:24–27).

Jesus was resurrected with a physical body of “flesh and bones” that could be touched, embraced and eat fish (Matt. 28:9; Luke 24:39–43). Yet his body was transformed (Mark 16:12) so it could pass through doors, disappear and sometimes not be recognized (Luke 24:15–16, 31, 36). Jesus’ resurrected body was a foretaste of the future transformed physical world and the resurrected bodies of believers. Although heaven and Earth in its present form will pass away (Matt. 5:18; 24:35), some type of future physical creation is implied. After Jesus’ return, God’s kingdom will encompass the whole Earth (Matt. 13:37–43; cf. 6:10). The righteous will be resurrected to eternal blessing (Matt. 26:29; Luke 14:14; 22:29–30) and will “inherit the Earth” (Matt. 5:5). There will be physical aspects to the kingdom, such as eating and drinking (Matt. 26:29; Luke 22:29–30), but believers’ bodies will be transformed since there will be no more death or need for human procreation (Luke 20:35–37).

The Gospel of John

Although John’s Gospel and Epistles focus on spiritual life, they do not denigrate the material world. In contrast to docetic and Gnostic views, matter is part of God’s good creation and is not inherently evil. Jesus, the eternal Word of God, became physically incarnated in a human body made of flesh (John 1:14; 1 John 4:2–3). John

stresses the physical, human aspects of Jesus, including fatigue, tears and hunger (John 11:33, 35, 38; 19:28).

Jesus was resurrected with a physical body that could be touched and could eat fish (John 20:17, 20–28; 21:9–14). Yet his body was transformed to transcend normal human limits so he could pass through closed doors (John 20:26). Jesus' resurrected body is a foretaste of the resurrection bodies of believers, whom Jesus will raise physically to eternal life, yet without disease or death (John 5:28–29; 6:40; 11:24–25). This implies a physical dimension to the eternal life of the righteous.

The eternal divine Word of God created all material and spiritual things (John 1:3; 17:24). The Gospel's prologue (1:1–14) echoes the Genesis creation narrative, where God created by speaking, "let there be . . ." (Gen. 1:3, 6, 9, 14, 20, 24). The Father, the Son and the Holy Spirit all give life, both the physical life of all beings (John 1:3–4; 5:21) and the eternal spiritual, resurrection life of believers (John 5:21; 6:33, 63; 20:31).

Nature metaphors abound in Jesus' teachings. Jesus is the bread that gives eternal life (John 6:25–40). The Holy Spirit is the water that gives life (John 4:14). God's people are sheep that Jesus tends (Mark 6:34; John 9:36; 10:15) and those who would destroy them are wolves (Matt. 10:16; John 10:12). Jesus is the good shepherd that gives his life for his sheep (John 10).

Miracles demonstrate Jesus' power, glory and deity and can build faith in him (John 2:1–11; 9:30–38). Miracles met physical needs, such as hunger (John 2:1–11; 6:1–14), and healed diseases, such as blindness and lameness (John 5:1–11; 9:1–41). Jesus overcame death by resurrecting a man who had been dead four days (John 11:38–44). He demonstrated his creative power by changing water to wine and multiplying bread and fish. Miracles also have symbolic significance: the wine points to the superabundant productivity of nature in the new creation (John 2:1–11). The multiplied bread points to Jesus as the manna that provides eternal life (John 6:31–39, 48–51). The resurrection of Lazarus anticipates the resurrection of the righteous to eternal life (John 11:23–25, 43; cf. 5:28–29).

God's values strongly contrast with an earthly, materialistic perspective. The command not to "love the world" (1 John 2:15) does not refer to the physical planet, but evil moral values in rebellion against God (1 John 2:16). References to the "world" as the planet are never negative (John 17:15, 18; 21:25). More often, "world" either refers to all people, whom God loves (John 3:16), or to people and values opposed to God (John 14:17; 15:18–19).

Acts

God is creator of heaven and Earth and everything in them (4:24; 14:15; 17:24). God sustains nature, directs its operation and gives life to all creatures (14:17; 17:25, 28). Nature witnesses to the existence of God and shows that only God the Creator

should be worshipped (14:15–17). He designed Earth as a habitation for humanity and provides human physical needs through nature (17:26).

God is Lord over all creation (7:49; 17:24). Christ ascended to heaven and reigns as Lord over all things (3:21). When Christ returns, all creation will be “restored” as promised in the prophets (3:20–21; cf. Isa. 11:6–9; 65:17–25; 66:22). Nature will not be destroyed but the damage from the Fall will be removed.

The Apostle Paul

Although he never met Jesus during his earthly lifetime, the Apostle Paul wrote many letters to the Churches he was helping promote his understanding of the meaning of Christianity. By so doing, he became the most influential theologian of the biblical writers. His thought is rich with reflection about nature and how it fits into God’s work.

God created all things (Rom. 1:20; 11:36; Eph. 1:4; 3:9; Col. 3:10; 1 Tim. 4:3–4). God gives life to every creature and sustains creation (Rom. 11:36; 1 Tim. 6:13). All things exist to bring glory to God and Christ (Rom. 11:36; 1 Cor. 8:6; Col. 1:16).

Paul’s view of creation, nature and the material world is Christocentric. Christ is the agent of creation, the source of life and the sustainer of all things (1 Cor. 8:6; Col. 1:16–17). Christ, who is the fullness of deity and existed prior to creation (Col. 1:15, 17, 19), created all material and spiritual things (Col. 1:16). All things were created for Christ (Col. 1:16) and his power “holds everything together” (Col. 1:17).

The resurrected and ascended Christ reigns as Lord over all things (1 Cor. 15:25–27; Phil. 3:21; Eph. 1:18–23) and is supreme above all creation (Col. 1:18). One day, all created beings in heaven and Earth will acknowledge the lordship of Christ (Eph. 1:10; Phil. 2:10–11). In the end, death will be destroyed and all creation will be subjected to God (1 Cor. 15:25–28). Paul expands Isaiah’s vision that every knee will bow to God (Isa. 45:23; 66:23) to include the entire created order. There is no barrier between the material and spiritual creation, since everything is under the rule of God and Christ, who sums up all things in himself (Eph. 1:10; 4:10; 1 Cor. 15:28). Paul is not negative about the physical world, including the human body. Through the incarnation, God’s eternal Son took on a real physical body, while fully retaining his deity (Rom. 1:3; Phil. 2:5–8; Col. 1:19, 22; 2:9). This affirms that matter is not evil. Each part of nature, including plants, animals and astronomical bodies, has a unique glory consistent with God’s design (1 Cor. 15:38–41). Nothing is unclean in itself, including all foods (Rom. 14:14, 20; cf. 1 Cor. 6:12). The Lord is for the body and the physical body should be used to honor God, since the Holy Spirit indwells Christians, whose bodies belong to Christ (1 Cor. 6:13–20; Rom. 6:13). Hence fornication, gluttony and other bodily sins dishonor Christ (1 Cor. 6:15; Phil. 3:18–19). Paul’s negative references to “the flesh” do not refer to the material body, but to the sinful nature inherited from Adam, which inclines all people toward evil (Rom. 5:11–21; 7:18; Gal. 5:19–21). Setting one’s

“mind on things above rather than things on Earth” (Col. 3:1–2), means focusing on moral and spiritual values rather than sinful desires (Col. 3:5–17; cf. Phil. 3:19–20). The “earthly members” that believers are to consider dead are evil desires, greed, pride, etc. (Col. 3:5–17; cf. Rom. 6:1–14; 13:14).

Paul asserted that nature reveals the existence of God and basic aspects of his being (Rom. 1:19–20). Reflection on nature suggests that the world was created and that God alone should be worshipped. There is a clear distinction between the Creator and creatures. To worship any created thing is to deny God the glory that is his due as Creator (Rom. 1:21–23). Worshipping any aspect of nature or images of birds, animals or humans is to give created things the place the Creator rightfully deserves in human hearts (Rom. 1:21–32). Nature gods are really demons and should not be worshipped (Rom. 1:23, 25; 1 Cor. 8:5;

10:19–22; Gal. 4:8). When anything is substituted for the transcendent God, the basis for ethics is also undermined (Rom. 1:24–32), Paul believed.

Since God is to be honored above all else, the spiritual takes priority over the physical dimensions of life. Idolatry is more than merely worshipping animal carvings. It includes anything that becomes the supreme focus of life other than God (Phil. 3:19; Eph. 5:5; Col. 3:5). One should discipline the body (1 Cor. 9:25–27) and not be mastered by physical desires (1 Cor. 6:12–13). Material things are not evil, but the love of money and material things should not consume a person, lest they replace God as the basis of security (1 Tim. 3:3, 8; 6:9–10, 17; 2 Tim. 3:2). No food or drink defiles (Rom. 14:2, 6), but preoccupation with food is imbalanced and Christian dietary freedom should be exercised with consideration for others (Phil. 3:19–20; Rom. 14:14–22; 1 Cor. 8:1–13). Sex is God’s good gift to be enjoyed within marriage and practiced with selfcontrol (Rom. 13:13; 1 Thess. 4:3–7; Gal. 5:19). The physical life has value, but it must be subject to the Spirit since people are not merely animals dominated by biological drives.

The Fall brought significant changes to nature. Nature no longer functions as God originally intended, due to human sin. Both physical and spiritual death came from Adam’s sin (Rom. 5:12–14, 17; 8:20–21; 1 Cor. 15:21–22; cf. Gen. 2:17; 3:8ff.). As a result of the Fall, creation was “subjected to futility” (Rom. 8:20), an allusion to the curse on the ground and pain in childbirth (Gen. 3:16–19;). Nature is now in bondage to corruption, decay and death (Rom. 8:21). Nature is not fallen, but it is a victim of human sin. Creation groans and suffers, longing to be set free from bondage to decay (Rom. 8:19–21).

Through his death on the cross, Jesus conquered sin and death so those who believe in him will have eternal life (1 Cor. 15:22, 57; Col. 1:20–22; 2 Tim. 1:10). Yet death will not be finally vanquished from creation until Christ returns (1 Cor. 15:23–26, 53–56). Jesus took away the sting of death (1 Cor. 15:54–56), but neither nature nor redeemed humanity have yet experienced the full implications of Christ’s death. Through the cross, Christ will reconcile both spiritual and material things to God (Col. 1:20–22). The reconciliation of humanity to God is part of God’s larger work of reconciling all

things to himself (Col. 1:20–22). All things will be restored to the proper functioning that God intended (Rom. 8:19–23).

The credibility of the Christian message rests on Jesus' resurrection in a physical body, not as an apparition (1 Cor. 15:4–8, 14–17). Jesus' resurrected body is a foretaste of the redeemed creation and the resurrection bodies of redeemed people (1 Cor. 15:20, 45–49; 2 Cor. 4:14; Phil. 3:21). Since believers are united with Jesus' resurrection, they too will rise from the dead (Rom. 6:5; 1 Cor. 15:21; Phil. 3:11). At Jesus' return, God will transform the bodies of believers into imperishable bodies like Christ's resurrected body (Phil. 3:21; 1 Cor. 15:50–57; 2 Cor. 5:1–5). Like Jesus' resurrection body, the resurrection body of believers will be physical, yet with a spiritual origin and character, glorious and eternal, and not subject to death and decay (1 Cor. 15:42–44; 2 Cor. 5:2, 4; Phil. 3:21; Rom. 8:18–19). This "spiritual body" (1 Cor. 15:44) will be suitable for dwelling in a creation set free from bondage to decay (Rom. 8:21). The eternal state of believers will not be a disembodied soul dwelling in heaven (2 Cor. 5:4). The entire person will be saved, not just the soul (1 Thess. 5:23).

The present form of this world will pass away (1 Cor. 7:31) and a new age will come (Eph. 1:21), in which creation will be perfected. Christian hope includes the deliverance of creation from bondage to corruption and futility (Rom. 8:20–21; cf. Gen. 3:15). The present suffering of creation is like birth pangs bringing a more perfect world (Rom. 8:22). Nature eagerly awaits the resurrection and glorification of the children of God at Christ's return (Rom. 8:19), when the entire creation will be set free from bondage to decay and will share in the glorious liberty of redeemed humanity (Rom. 8:21, 23).

Although believers are a "new creation" in Christ and have a transformed inner character (2 Cor. 5:17; cf. Eph. 2:10; 4:24), the culmination of the new creation is still future. Nature will be transformed (Rom. 8:20–21), believers' will be resurrected to glorious, imperishable bodies (Rom. 8:23; 2 Cor. 5:4), and death will cease (1 Cor. 15:20–24, 54–55). God gives the Holy Spirit to believers now as a guarantee of this glorious future (2 Cor. 5:5).

Paul sees solidarity between nature and humanity. Since God gave humanity dominion over the Earth (Gen. 1:26, 28), nature suffers when humanity is not rightly related to God and nature will be perfected when humanity is redeemed. The human Fall enslaved all creation to corruption and death (Rom. 5:12–14; 8:20). When the redeemed children of God are glorified at the end of history, nature will share in this glory (Rom 8:19, 22–23).

Peter

Since God is the creator of the world (1 Pet. 1:20; 2 Pet. 3:5), he seeks its purification and perfection. The "day of the Lord" will bring a "new heavens and Earth," in which nature will be perfected and righteousness will abound (2 Pet. 3:10–13). "The heavens will disappear with a roar, the elements will be burned up and the Earth . . . will be

laid bare” (2 Pet. 3:10, cf. 12). There are two ways to understand this: (1) This world will be destroyed and God will create a new, perfect world. (2) The present heavens and Earth will be renewed, purified and perfected. Several factors support the second interpretation: Burning is a frequent biblical symbol of judgment and purification (e.g., Matt. 13:20, 40; Luke 3:17). The passage uses similar destruction and re-creation language concerning the Flood (2 Pet. 3:5–7). Both the eschatological fire and the

Flood bring judgment on ungodly humans. In this sense the world was “destroyed” by the Flood and a new world was formed (vv. 5–6). Jewish apocalyptic writings also use similar new Earth/age language to refer to the perfection of creation. The new creation is “new” in its moral perfection and harmonious operation. In either interpretation, nature will be transformed and perfected.

Hebrews

God created everything (1:10; 3:3–4; 4:3; 11:3). He did not fashion the material universe from preexisting matter (11:3). The agent of creation was the Son of God and the word of God (1:2, 10; 3:3–4; 11:3), an allusion to Genesis 1 (cf. John 1:1–3). Jesus sustains and upholds creation by his powerful word (1:3).

Humans are exalted above nature (8:7), although materially they are part of nature. The author cites Psalm 8:4–6 (which echoes Gen. 1:26, 28), to show that God placed nature in subjection to humanity (Heb. 2:5–9). Yet sin corrupts the human relationship with nature and makes the dominion over nature flawed and incomplete (2:8). But Jesus, the first of a new race of humans, was exalted and has subjected creation to himself (2:9). The Son of God became fully human (“flesh and blood”), yet without sin (2:14, 17; 4:15).

Although Hebrews emphasizes spiritual salvation in heaven (11:10, 16; 12:22–23; 13:14), it looks forward to a redeemed nature and a restored human relationship with nature. In the “world to come” (the new Earth), the human relationship to nature will be perfected and the ideal of Gen 1:26, 28 and Psalm 8 will be fulfilled (2:5). In eternity, redeemed humans will not be merely glorified spirits, but will also have resurrected bodies (6:2; 11:35).

Revelation

God created all things in heaven, on Earth and in the sea (4:11; 10:6). God is “Lord of the Earth” (11:4). Every creature was made to glorify and worship God. John foresees the time when all creatures will worship God the Creator and Jesus Christ. Every creature in heaven, on Earth, and in the sea will join humans and angels in worshipping God and Christ (4:11; 5:13). The prophetic promise that all humans will bow before God (Isa. 45:23; 66:23) is expanded to include all creatures.

Nature is frequently used symbolically in the apocalyptic vision to describe Christ, God's presence in heaven, extreme forms of evil, divine judgments, and the eternal blessings of the righteous (e.g., 4:5–7; 5:6; 6:1; 10; 13; 21–22).

Revelation focuses on eschatology. Due to the extreme evil of people who rebel against God in the last days, God will bring judgment through disease and environmental disasters, such as earthquakes, storms, intense heat, plagues and famine (16:1–21; 18:8). The OT shows a similar pattern of divine judgment on sin through nature (e.g., Gen. 6:5–8; Ex. 7–12; Isa. 10:16–18; Jer. 14). Since humanity was given dominion over nature (Gen. 1:26), God's judgment on human sin affects nature.

At the climax of history, the righteous will be bodily resurrected to reign with Christ, never again to experience death (20:5–6). After Christ's return and the Final Judgment, God will create a new heaven and Earth (21:1). He will remove the damage caused by sin to the created order. Although it is difficult to determine whether some aspects of nature in the apocalyptic vision are symbolic (e.g., 21:1, 23), nature plays a part in the new creation. There will be a new Earth with rivers, springs and fruit trees with year-around productivity (21:1, 6; 22:1–2). All creatures will worship God (4:11; 5:13). There is some ambiguity about whether certain aspects of nature will be in the new creation. For example, there will be no sea (21:1, probably symbolic), yet sea creatures will praise God (5:13). God will "make all things new" and perfect nature (21:4–5). Death, disease, pain and suffering will not be a part of the new order (20:14; 21:4), since the curse on nature from the Fall will be removed (22:3). There will be a return to the ideal conditions of nature in the Garden of Eden and redeemed humans will have unrestricted access to the tree of life and water of life (21:6; 22:1–5, 14, 17, 19).

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See also: Anarcho-Primitivism and the Bible; Animals in the Bible and Qur'an; Christianity (2) – Jesus; Creation Story in the Hebrew Bible; Creation's Fate in the New Testament; Earth Bible; The Fall; Hebrew Bible; Jesus and Empire.

Christianity (4) – Early Church (Fathers and Councils)

The early Christian tradition expresses a profound ambivalence regarding the natural world. On the one hand, it affirms continuously the goodness and spiritual significance of the natural world, an affirmation rooted in two central convictions – that the world as created by God is good, and that the Incarnation of God in the person of Jesus Christ has transfigured all created matter. On the other hand, the early Christian tradition expresses genuine suspicion regarding the dangers of the wrong kind of attachment to the things of this world. At times, this suspicion expressed itself as a fear of, even revulsion toward material reality, toward embodied existence, toward the cosmos as a whole. However, there were also times when this suspicion of the world was understood in broader, more symbolic terms, a way of articulating the need to resist values believed to be antithetical to the Gospel. Much early Christian theological reflection, as well as the liturgical and spiritual life of the community, was affected by this deep-seated sense of ambivalence toward the living world.

Early Christian theological reflection unfolded within a highly charged climate of debate in which one's sense of God was directly and deeply affected by one's sense of the world and vice versa. Irenaeus of Lyons, for example, who in the second century articulated one of the early Christian world's most emphatic and systematic expressions of the created world's goodness and value, was responding in part to the work of certain Gnostic thinkers who held to a deeply pessimistic view of the created world and of the malevolent demiurge who was understood to be responsible for having created it. According to Irenaeus, the Christian doctrine of the incarnation allowed no such pessimistic view of the world. For Irenaeus, the incarnation or enfleshment of God in Christ meant that the entire material world had been transfigured and was a kind of sacrament through which the eyes of faith could see the very light of God. In the process of affirming this truth, Irenaeus preserved for Christians not only a sense of the goodness and integrity of the created world, but also the goodness and integrity of God who created and sustains it. Another kind of conversation, between Christianity and Greek philosophy, also affected how the early Christian community viewed the world and God's relationship with the world. For well-educated, philosophically sophisticated Christians such as Clement and Origen of Alexandria, the integration of Christianity into a Platonic philosophical framework was necessary if the Christian faith was to be seen as coherent and meaningful within the Greek-speaking world of Late Antiquity. But

their brilliant synthesis also meant accepting certain aspects of Platonism's hierarchy of values and its de facto dualism (material realities, being corruptible, occupied a lower place in this hierarchy than non-material or spiritual realities, which through their kinship with God, the supreme Spirit, were seen as having eternal value and significance). The result was a profound and creative new articulation of Christian theology and spirituality. But it came at a cost. The suspicion of or aversion toward the physical world that one often senses in these and other writers leaves one uncertain about how successful they were at incorporating a fully incarnational Christianity into their thought-world and practice.

Augustine of Hippo (354–430), writing in Latin, largely accepted this Platonic dualism of matter and spirit as part of his understanding of Christian theology and employed it to articulate two important ideas that had vast influence upon the subsequent Christian tradition. The first was that the spiritual life has to do primarily if not exclusively with the interior life of the human being, an idea that effectively relegated the nonhuman phenomenal world to secondary status. The second was his deeply pessimistic attitude regarding human nature and the physical world (rooted, some have argued, in the influence of Manichean thought and its radically pessimistic attitude toward the physical world), an attitude that made it difficult for him to affirm what for Irenaeus had been axiomatic: that the world and everything in it is good.

This pessimism also manifested itself in Augustine's complex attitudes toward human embodiment and sexuality. As Peter Brown has demonstrated so clearly, this was a pessimism, or perhaps one should say ambivalence, shared by many early Christians. Part of this ambivalence had to do with what one might describe as a failure of the imagination – an inability (from our point of view) to incorporate sexual desire fully into an understanding of a life oriented toward God. Or to use the terms that Margaret Miles employs in her creative re-reading of Augustine's *Confessions*, one could say that this ambivalence had much to do with the way Christians came to understand pleasure. For Augustine, the only “true pleasure,” the only pleasure that lasts, is found in God. This necessitated casting a suspicious eye upon all desires and objects of desire less than God. Augustine was not the first to articulate these ideas. Nor can one lay at his feet all the worst excesses of later Christian ascetic ideas and practices. But his brilliance in articulating a powerful but narrowly circumscribed notion of pleasure became part of the very pulse of subsequent Christian thought for centuries to come, contributing to the Christian tradition's ongoing ambivalence toward “the things of this world.”

The synthesis of Christian and Greek philosophical thought also contributed significantly to the Christian community's ability to articulate how and in what ways God's presence could be felt and encountered in the world, to the development of a distinctly Christian cosmology. Central to this Christian cosmology was the idea of the *logos* or Word of God. The prologue of the Fourth Gospel had already expressed clearly the idea that Christ the *logos* had played a crucial role in the creation of the cosmos: “When all things began, the Word already was. The Word dwelt with God,

and what God was, the Word was . . . Through the Word, all things came into being” (John 1:1). Tertullian (ca. 160–225), Clement of Alexandria (ca. 150– 215), and other early Christian thinkers took this idea and, drawing upon the Stoic’s profound sense of the *logos* as the very animating principle of the cosmos, developed it into a coherent Christian cosmology. Responding to those who claimed that God is remote from the created world, Tertullian cited the Stoics who, he said, remind us “that God [through the *logos*] permeates the world in the same way as honey in the comb” (Tertullian in Colish 1990: 19). Elsewhere, Tertullian addresses the question of how the divine *logos* can be said to permeate the sensible world without losing its divinity: it is like the sun’s relations with its own rays, he says, which are a portion and extension of their source. Both analogies draw upon the idea of *logos* as a generative principle immanent in the cosmos. According to Clement of Alexandria, the *logos* has three distinct but related dimensions. It is utterly transcendent, being identical with the totality of the ideas or powers of God. It is also the principle or pattern of everything that has been created. And it is the *anima mundi*, or world soul, the law and harmony of the universe, the power which holds it together and permeates it from the center to its most extreme boundaries.

Such ideas contributed significantly to the capacity of Christians to believe in and experience God’s presence in the created world. Nor were such ideas limited to the sphere of philosophical and theological reflection. They reached into nearly every aspect of Christian life and thought, including art and architecture, biblical commentary, mystical experience, ascetic practice, music, and poetry. In the *fiat lux* of the Genesis creation account and in the luminous gold background of ancient Christian and later Byzantine mosaics, *logos* comes to expression through light. According to Irenaeus, the word that speaks through the cross also gestures forth across the cosmos: because [Christ] is Himself the Word of God . . . who in His invisible form pervades us universally in the whole world, and encompasses its length and breadth and height and depth . . . the Son of God was also crucified in these, imprinted in the form of a cross on the universe (Irenaeus in Ladner 1995: 99).

One finds exquisite artistic expression of this idea in the Mausoleum of Galla Placidia in Ravenna. There, the cosmic cross appears on a dark blue shallow dome in the midst of stars arranged in concentric circles, an image whose diminishing size toward the center gives one the impression of gazing into a heavenly vault.

The same *logos* that sustains the cosmos rises up to meet us, suggested Origen of Alexandria (ca. 185–254), in the most intimate depths of religious experience. For Origen, one of the privileged places of such encounter was the reading of scripture. Here the *logos* comes as an ardent lover who kindles within us a passionate love for the world: “If a [person] can so extend his thinking as to ponder and consider the beauty and grace of all things that have been created in the Word,” he claims, “the very charm of them will so smite him, the grandeur of their brightness will so pierce him as with a chosen dart . . . that he will suffer from the dart Himself a saving wound, and will be kindled with the blessed fire of His love” (1957: 29). Here is a sensual, palpable

logos, present to us, says Origen, much as touch, fragrance, sound, vision, and taste are present to us.

Within the Christian monastic tradition, tasting and chewing upon the *logos* became a way of life. For the monks of the Egyptian desert, the *logos* arose from the silence as a powerful and numinous presence. To ruminate, digest and absorb such a word into the very marrow of one's being was to be brought into the very presence of the Holy One. Nor was the natural landscape of the desert itself an insignificant part of this process. According to Athanasius's *Life of Antony*, the Word of God not only beckoned Antony to withdraw into the desert, but called him to a particular place – a wild and beautiful spot in the remote Arabian desert known simply as “the inner mountain.” Such a powerful pull did it exert upon Antony's imagination that, upon seeing it for the first time, he “immediately fell in love with the place.” The entire subsequent Christian tradition of monastic stability, or devotion to place, owes much to this early sense that places are alive with the power of the *logos*, that they do indeed speak to us with a particular voice, that rumination upon the word and the spirit of the place are integral elements in the larger rhythms of the spiritual life.

Still, as a whole, the early Christian tradition remained ambivalent toward “the world.” Early Christians clearly lived with a profound sense of the world's goodness and beauty and some of their most creative theological work reflects the desire to understand their relationship to a God who is present to them in and through the things of this world. Yet, they also knew themselves to be “strangers” in this world, not entirely of this world. Clearly the development of this sense of life in the world as a kind of exile owes much to Platonic, Manichean or Gnostic influences; but at its root, it is a principle arising out of the Gospels themselves. And in that context, at least, it had more to do with allegiances than with a sense of the inherent evil of the world. Jesus's disturbing question to his followers, “God or Mammon?” had a lasting effect upon the Christian imagination. To become a disciple of Jesus was to struggle with the question of to what or whom one was to give one's allegiance, to consider carefully what or whom was deserving of that allegiance. It was to raise questions not so much about the inherent goodness of the world (in the sense of God's created order) but about the problematic and deeply compromised character of existence (the order governed by “principalities and powers”). In that sense, the Christian notion of being “strangers” to this world carried within it the seeds of a healthy and necessary skepticism regarding the ordering of power in the world. But it also carried within it the seeds of a different and more problematic orientation: a suspicion of created matter and a commitment to a radical interiority that made it difficult if not impossible to cherish the created order as spiritually significant. The legacy of this problematic denial of the world within early Christianity is still very much with us. Any honest evaluation of the ancient Christian tradition needs to reckon with it seriously. But we must also be prepared to acknowledge the creative cosmological vision found within early Christianity. Whatever suspicions the Christian community may have felt toward the world, it also expressed

a profound and enduring love for the living cosmos and a sense that its sustaining energy was rooted in the Word of God.

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See also: Anima Mundi – The World Soul; Jesus and Empire.

Christianity (5) – Medieval

Medieval Christian thought has been routinely criticized for its pervasive theme of human dominance over nature. A perceived split between nature and supernature results in a sharp dichotomy between biophysical reality and a transcendent, spiritual reality. Furthermore, the latter is identified with the image of God in human beings, often to the exclusion of the body. However, closer attention reveals a tragic ambivalence that begins with Augustine and continues in the scholastic tradition of Thomas Aquinas. Theologians within the Eastern Christian Church, like John Scotus Eriugena, wrestled with the distinction between nature and grace to the extent that they adopted Western premises. Of course, medieval Christianity also includes individual mystics whose piety included an intimate reverence for nature. Francis of Assisi (1182–1226) will be examined as representative, although female mystics like Hildegard of Bingen (1098–1179) and the nuns of Helfta (thirteenth century) deserve to be heard as well. Despite the medieval opposition between creation and Creator-God, the synthesis of God, nature, and man was tenuously retained until the late Middle Ages. What began as an expression of reverence for nature ended in nature's availability for divinely ordained human disposition.

The roots of Western medieval Christianity are found in Augustine of Hippo (354–430) in North Africa. His wonder at the drama of the natural world was interpreted through the Neoplatonic notion of divine immanence. His awe and wonder at the world's beauty was expressed in terms of the Greek notion of the One pouring itself out into the world. Thus, God's presence in the universe affirmed and sanctified nature rather than transcending and negating it. Augustine broke from Origen's heresy (condemned by the Fifth Ecumenical Council in 553) that the natural world "fell" into its physical/material state by the sin of Adam and Eve. Indeed, Augustine writes of the beauty and grace of nonhuman things. Augustine's understanding of nature was not, however, consistent. In an argument against the Pelagians, who thought that good works led to the City of God, he contradicted himself. At stake were the issues of human self-sufficiency and divine omnipotence. Augustine took the position that human nature was wounded by the sin of Adam and Eve, and divine intervention was required to restore right relationship with God. Additionally, Augustine's background in Manicheism (a Persian ascetic sect with strong dualistic tendencies) contributed to an emphasis on the salvation of the human soul alone. Augustine did not posit the dichotomy of pure nature and supernature, which would be prevalent in Christian thought. However, his concept of grace as a cure for sin and his concern for the human soul were enough to initiate this later split.

John Scotus Eriugena (ca. 810–877) combined Augustine’s medicinal notion of grace with an otherwise Eastern Christian theology. (Eastern Christianity tends to see creation and salvation as a seamless movement, unbroken by the Fall. Dualism between nature and supernature is a Western problem.) Eriugena’s text *The Division of Nature* retained the Neoplatonic concept of theophany, God’s self-manifestation in the world. In his detailed discussion of animals, birds, and plants, he evinces an understanding of nature as a wondrous display of God’s very self. However, for him, theophany tends to be formal. Divine selfmanifestation occurs primarily in the eternal reasons or forms of things rather than in their actual material existence. Eriugena echoed Origen in seeing the physical embodiment of all things as a result of human sin. Deification was available only to the human spirit and to the ideal essences of nonhuman things.

Francis of Assisi’s life (1182–1226) was a celebration of nature’s sacredness. The divine presence in nature, including human nature, was best accessed by a life of poverty and renunciation of the self. His *Canticle of the Sun* called on the heavenly bodies to praise the Lord. His sermon to the birds, his “little sisters,” instructed them in God’s abundant love. For Francis, the divine and the natural worlds were not at odds; nature and scripture were one. Nature was infused by divine grace and the idea that the natural world could exist in isolation from God’s fecund goodness was foreign to him. For Francis himself, nature was God made visible.

Yet, Francis is known primarily through Bonaventure and Dante. In their interpretations, the hierarchical overflowing of the divine into the natural world does lead to a privileging of humanity. Bonaventure, especially, views humanity as the exemplar of nature and as alone destined for reunion with God. Nonhuman creatures find their perfection in humanity, whose spiritual nature, alone, will return to God.

Such ambiguity is continued in the scholasticism of Thomas Aquinas (1225–1274) who developed Augustine’s view of nature and the divine as a united reality. Nature is fulfilled by and oriented to God. God’s goodness and abundance is manifested in the natural world. Given his Aristotelian background, it was no accident that Aquinas was the author of five proofs of the existence of God from natural theology. Reasoning from the causality, existence, motion, complexity, and design of the natural world, he believed God’s existence was a rational conclusion. His arguments expressed his conviction that only an omnipotent, omniscient, good God could create such a world. Nevertheless, Aquinas combined the Aristotelian premise that nature could be studied in abstraction from God with the Augustinian interpretation of Christ’s incarnation as a cure for sin. Together, these two themes contributed to the growing distinction between nature as “pure nature” and the supernatural. The biophysical world was, at least in theory, separable from the spiritual world. Later scholastics, such as Duns Scotus (d. 1308), allowed for the possibility of the actual existence of pure nature, distinct from and unfulfilled by supernature.

The nominalist William of Ockham (1285–1349) brought this nascent division to full bloom. Out of reverence for God’s infinite transcendence, he distinguished between God’s absolute power (*potentia Dei absoluta*) and the actual created order as willed

by God (*potentia Dei ordinata*). Because God had the power to create anything and any truth he wanted, nature was no longer anchored by divine rationality. Practically speaking, this meant that knowledge was gained through observation of what was actually there; the presupposition of a harmony between divine reason and the natural order was annihilated. Nature was irrevocably severed from God. For the first time, “pure” nature was seen as a completely separate reality from the divine. With the evacuation of sacredness from nature, Thomas Bacon was able to justify human dominance as God’s original intention for humankind. Thus, medieval theology set the stage for Enlightenment figures like Galileo, Descartes and Newton. These thinkers continued the reduction of reality to extension and its expression to mathematical formulation. Human knowledge of and approach to nature had fundamentally changed. The world only existed insofar as it was forced into quantifiable categories, its meaning dependent on human action.

Medieval wonder at the natural world contains the seeds of the misguided justification of human dominance over nature. Christian theologians like Augustine, Eriugena, Aquinas, and Francis of Assisi articulated the awe they experienced in the only concepts available to them: concepts of creation, hierarchy, and the classical concept of God. The tragedy lies in that the logical development of their thought, particularly in Ockham’s nominalism, resulted in a world devoid of sacredness and available for unrestrained human consumption.

Our contemporary interaction with nature is irrevocably shaped by a religious and cultural history so pervasive that it cannot be simply jettisoned. A deeper understanding of medieval Christianity may allow us to understand ourselves, constructively reinterpret the tradition, and face a future fraught with ecological dangers.

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See also: Apocalypticism in Medieval Christianity; Christianity (6a) – Roman Catholicism; Cusa, Nicholas of; Dualist Heresies; Francis of Assisi; Hildegard of Bingen; Roman Catholic Religious Orders.

Christianity (6a) – Roman Catholicism

With approximately one billion adherents at the turn of the twentieth century, Roman Catholicism is the largest branch of Christianity. Catholicism's history has been marked by shifting emphases regarding God's and humanity's relationships to the natural world. From its Hebraic origins, early Christianity affirmed the goodness of all of God's creation and understood humanity both as a part of the community of creation and as its very apex and crown. However as Christianity spread across the Mediterranean world, it encountered and accommodated itself to potent Platonic and neo-Platonic philosophical systems emphasizing the transcendence of the spiritual realm over the world of embodied reality. The cosmological model of emanation pictured creation coming from God's being and goodness overflowing into a "great chain of being," and dominant streams of early Christian theology adopted this model.

On the one hand, this world-picture affirmed the rich relationality – the chain's "links" – between God, humanity, and the rest of nature. It emphasized that humanity is a part of the community of creation and it affirmed that even the "lower levels of creation" are graced, precious, sustained in being by God, and contribute in their own way to the "perfection of the universe." It affirmed an "ontology of participation" in which God alone is "necessary being" and all of creation is understood as sustained in existence by its participation in, and dependency on, God's energy and goodness. This view helped foster across the centuries Catholicism's rich sacramental sensibility. On the other hand, this world-picture emphasized the hierarchical ordering of the diverse levels of being in the universe and viewed humanity as the apex of creation, enjoying God's grant of "dominion" over the rest of nature. Historically this stress on hierarchy supported affirmations of God's transcendence, humanity's unique creation in the *imago Dei*, and humanity's rights to use the rest of nature to serve its ends. Often the stress on hierarchy became so dominant that balance was lost and the traditional understanding of humanity as a part of creation became attenuated. Nonetheless, because dominant traditions of patristic and medieval theology placed such a stress on God's creation and governance of the universe, a potent creation-centered frame for understanding human life was retained even if the emphasis on hierarchy pulled toward the enunciation of a strong anthropocentric ethical focus.

One can see this ambivalent construal of the natural world in the flowering of Catholic theology in the medieval period. A wide number of theologians, monks, and mystics gave expression to a strong sense of God's presence amidst the world of creation,

and yet this cosmological frame of thought was joined to a strongly hierarchical view of the order of being which in turn supported a stress on the distinct role and value of the human. A wide range of important medieval thinkers placed an emphasis on creation. John Scotus Eriugena (810–880), for example, translated the Pseudo-Dionysian corpus, and in his own work, *On the Division of Nature*, gave an extensive elaboration of the Platonic world-picture. Hildegard of Bingen (1098–1179), a German Benedictine abbess, integrated cosmology, creation and the incarnation, and the Celtic Saints preached extensively about God's grace in nature.

Down through the centuries the Church's monastic orders have functioned as important reminders to the broader church community of God's presence in nature. The monastic orders stretch back to the founding of the Benedictine order by Benedict of Nursia (ca. 480–547). Even though monasticism is popularly associated with austerity, ascetic practices, and an other-worldly ethic, the monks' typical retreat from urban centers often led them to establish their monasteries in rural or wilderness areas. While serfs typically did the bulk of the agricultural work required to sustain the community, the monks themselves frequently participated in agricultural labor.

Indeed, Benedict's Rule, which shaped the practices of his and many other orders, called for integrating prayer and daily labor. This rhythm tended to balance the other-worldly tendencies of monastic spirituality with an inner-worldly appreciation of the gardening, land-clearing, forestry management and sustainable agricultural practices required to sustain the communities. While clearly affirming an other-worldly stance, Catholic monasticism also has sustained a deeply respectful engagement with the fields, woods, gardens, animals, and surrounding countryside – and a sense that humanity and the rest of creation are partners in a common project of honoring the Creator. Many Catholics continue to find inspiration in the strong affirmations of the goodness of the natural world now voiced by many of today's monastic communities.

Two giants of the Medieval Church – Francis of Assisi (ca.1181–1226) and Thomas Aquinas (1225–1274) – deserve special attention because their life work and writings continue to shape Catholic reflection about God's and humanity's relationships to the natural world. The stories of Francis' rejection of his father's wealth and conversion to a life of poverty, of his irrepressible joy, his charity, his preaching to birds and animals, his stigmata, and his founding of the Franciscan Order all continue to inspire. Francis was a nature mystic who felt deeply the intimacy of God's presence throughout nature and stressed humanity's kinship with the animals, fish, and birds. He was committed to a life of preaching and he drew on scripture, especially the Psalms, for vivid and concrete language about birds, animals, stars, and planets. He emphasized the close bonds between humanity and the rest of creation by invoking personalistic and familial terms of address – “Brother Sun,” “Brother Wolf,” and “Sister Mother Earth.” The various orders that have branched off from the original Franciscan trunk have been generally energetic in recent years in promoting ecological responsibility. Pope John Paul II in 1979 called attention to Francis' example by naming him the patron saint of ecology.

Thomas Aquinas' works are also read today with interest by Catholics concerned about ecological degradation. His *Summa Theologia* and other works well display the "chain of Being" model's affirmations that God is manifest throughout the order of creation and that the human and all other living entities participate in the common good of the universe. Thomas' works hold unique authority in modern Catholic thinking because Pope Leo XIII (1878–1903) in his encyclical *Aeterni Patris* (1879) officially adopted Thomism as the foundation for theological education in Catholic seminaries, colleges and universities. Likewise Leo, in his encyclical *Rerum Novarum* (*The Condition of Labor*) (1891), drew on Thomas' understanding of the natural law to address the sufferings of the poor and exploitation of working people occurring in the industrializing countries of Europe and North America. Leo condemned with equal vigor the unfairness and meanness of unfettered capitalism and the revolutionary excesses of socialism's call for the abolition of the private ownership of property. Leo appealed to the natural law heritage to argue for a "middle way" between capitalism and socialism that affirmed both the priority of the common good over that of the individual and the existence of certain natural rights, like the right to own property, to join in workers associations, and to receive a just wage for one's work. *Rerum Novarum* is generally credited as a major advance in the papal social encyclical tradition.

Leo's endorsement of Thomism as the Church's "official" theological vision encouraged a revival of interest in Thomas' works. While neo-Thomists have long focused on Thomas' hierarchical stress of human superiority over the rest of nature, increasing attention is now being directed to his use of a second organizing principle in his thinking, one that focuses on the "whole community of the universe" (Aquinas 1948: 2:996; *ST*, 1a, 2ae, q.91, art.1). Whereas the dominant interpretation has given a human-centered reading of Thomas, his writing on creation develops a second scale of value in which the individual is subservient to the good of the species, and that good is likewise held as subservient to the common good of creation. God is the ultimate common good of all existent entities, but the next highest good is the good of the universe as a whole, a good that surpasses that of any one species including the human. Thomas accepts that the human is uniquely created in the *imago Dei*, but he holds that all other creatures also bear a "likeness" of their Creator (Aquinas 1948: 1:231; *ST*, 1a, q.44, art.3). Thomas rearticulates the neo-Platonic principle of plenitude that holds that because God is maximally good and powerful, God pours out God's being into a maximally rich universe characterized by a maximal diversity of levels of being. For Thomas, the diversity of species is a mark of God's sovereign grandeur and expansive generosity. As he put it: "[T]he principal good in things themselves is the perfection of the universe; which would not be, were not all grades of being found in things" (Aquinas 1948: 1:124; *ST*, 1a, q.22, art.4). Increasingly these passages are being read as providing a theological condemnation of human practices that promote habitat destruction and species extinction. To kill off a species is to tear the fabric of God's creation.

Even as Pope Leo XIII appealed to the Thomistic natural law heritage to affirm a distinctive Catholic social ethic critical of the excesses of both capitalism and communism,

dominant streams of Catholic thinking in the twentieth century became influenced by existentialist and phenomenological currents of thought stressing humanity's unique subjectivity, freedom, and historical agency. Many French thinkers, like Emmanuel Mounier, Jacques Maritain, and Etienne Gilson, and Germans, like Dietrich von Hildebrand, gave shape to an emerging Catholic movement known as "Personalism" which centered ethical reflection in the distinctive worth and unique value of the human person. Likewise Karl Rahner, Bernard Lonergan and others called for a "turn to the subject" and away from Thomistic metaphysics and notions of the natural law. Lonergan called on Catholic thinkers to shift from the "classicist worldview" and embrace "historical mindedness." In rejecting metaphysics and ontology, increasing numbers of Catholic thinkers came to accept a sharp dualism between humanity and the rest of nature. Many Catholic thinkers in recent decades meant that the "turn to the subject" also functioned as a turn away from nature and the order of creation. But in falling silent about nature, much modern and contemporary Catholic thinking too easily accommodated itself to accepting the ruling understanding of nature as a "thing" or a "field or resources" that is sustained by the dominant consumptive and productive practices of industrially advanced society. Pope John XXIII (1958–63) called the Second Vatican Council (1962–65) to help the Church respond more adequately to the "signs of the times." Many wanted the Church to ease its traditional condemnation of artificial birth control and John XXIII called a commission to study the issue. After John's death the commission recommended to Pope Paul VI that he end the condemnation of birth control. Paul, however, sustained the traditional condemnation in his encyclical *Humanae Vitae* (*On Human Life*) (1968) and this triggered an ongoing controversy. The Pope relied heavily on biologically-based, natural law reasoning to condemn artificial birth control as a violation of the natural end or purpose of intercourse and to affirm that the rhythm method of natural family planning is permissible because it involves no impediment to "natural processes" and is in accord with the natural cycles of women's fertility. Many who rejected the Pope's conclusion likewise came to reject the natural law method used to reach that conclusion. They felt it reductionistically read ethics directly from the physical ordering of biology or nature. Many liberal thinkers sought to revise Catholic ethics by centering moral attention on persons in their full relationality with other persons, not on the physical structure of the sex act.

John Paul II became pope in 1978 and his distinctive personalist ethical emphases have long had a powerful influence on Catholic thinking. Before his rise to the papacy he received his doctorate in philosophy and was strongly influenced by Edmund Husserl's and Max Scheler's phenomenological perspectives. While John Paul II continued to appeal to the natural law tradition to justify his continuation of the condemnation of birth control, his main critique of birth control drew its energy from his phenomenological account of the human person. He held that birth control's wrongness lies primarily in the intent to block the "full donation" of persons in the act of love. Its wrongness, then, lies more in its violation of relationality between persons than in some violation of the "order of nature." Thus, while sharp disagreement continues between those

who condemn and those who would accept birth control, many in both camps shifted away from natural law reasoning and embraced a focus stressing God's relationship to persons and their responsibilities to each other.

With both conservatives and liberals "turning to the subject," it is not surprising that there emerged a general turning away from nature and creation. The heightening of the intensity of the focus on the human often was accompanied by an attenuation of an appreciation of our embodied animality as members of a species dependent, like all other species, on the well-being of the Earth's ecosystems. Though some Catholic liberals and conservatives continue to invoke the natural law tradition, they generally see it as based in principles drawn from "human reason," not some "order of nature." In this fashion, the dominant view in the last three decades of the twentieth century understood the tradition as human-centered, not creation-centered.

Pope John Paul II's 25-five year pontificate, for example, marked a clear progression from an early endorsement of a flat-out domination of nature, to an acceptance of a dominion ethic, and finally to an acceptance of a more ecologically informed, stewardship approach. Even if one wished the pace had been quickened, he will be remembered as the pope who first addressed ecological issues. Long accustomed to focusing on social justice issues, the Vatican found it difficult to integrate ecological sustainability into its long-standing social justice agenda. While many environmentalists' voices have been raised in concern about rising global population and its impact on ecosystems, the church hierarchy's response was to argue that overconsumption by rich societies is the key ecological problem and that increased development of poorer societies is the best path toward global population stabilization. While there is some merit in the Vatican's view, still it seems that the Vatican came to ecological issues with hesitation, due both to its controversial position against birth control and because of the Pope's personalist perspectives. By the early twenty-first century, the clash between the United Nations' population agenda and the Vatican lessened, however, as the United Nations began to emphasize the expansion of girls' educational opportunities and the promotion of families' and women's healthcare as the most effective means of achieving reductions in average family size over time. While the Church and the United Nations remained in confrontation over the latter's encouragement of birth control, this new approach, stressing education and healthcare, was one that most in the Vatican could embrace as a matter of social justice.

John Paul II's encyclical *Laborem Exercens (On Human Work)* (1981) illustrates both his personalist philosophical agenda and how it tends to polarize the human sharply from the rest of nature. He celebrated the dignity of human work, but did so by contrasting human agency and subjectivity over against nature's passivity and "objectivity." Through work humanity "subdues" and "dominates" the Earth and thus fulfills the mandate of Genesis. The Pope held technology as an almost unqualified "ally" in humanity's transformation and domination of the natural world. Repeatedly the nonhuman world is depicted as a sphere of resources. John Paul II did acknowledge, however, that "the heritage of nature is limited and that it is being intolerably polluted."

But this was a passing point that failed to check his general celebration of the ongoing domination of nature (Pope John Paul II 1981: 7).

John Paul II's 1987 encyclical *Sollicitudo Rei Socialis* (*On Social Concern*) was the first encyclical to give more than a mere passing reference to emerging ecological problems. In this encyclical his main agenda was to call for the social and economic development of peoples, but he did acknowledge limits to humanity's dominion over the Earth. He noted that we have "a certain affinity with other creatures" and that we were placed "in the garden with the duty of cultivating and watching over it" (John

Paul II 1987: 52 [sec. 29]). But he failed to break out of an anthropocentric focus and repeatedly insisted that the "goods of creation" were meant to serve the good of all of humanity (secs. 39, 42, 76, 86). While this encyclical marked an important turning point, still the Pope repeatedly depicted the natural world as a field of resources waiting for human transformation and use.

The Pope's fullest articulation of concern for emerging ecological threats was promulgated in January 1990 in an address titled: "The Ecological Crisis: A Common Responsibility." In it he moved from a stress on dominion to articulate clearly the importance of recognizing strict stewardship obligations. Catholics have a "serious obligation to care for all of creation" (Pope John Paul II 1989: 13), he stated, adding that the ecological crisis is a moral issue and a "common responsibility" of all peoples. He strongly condemned the overconsumption of the industrialized rich societies and asserted that this is the primary cause of ecological degradation.

Bishops' Conferences in many nations built on the Pope's early steps and promulgated an array of important pastoral letters on ecological concerns. Most move beyond the Pope's generally human-centered ethical perspective and articulate a stewardship ethic rooted more deeply in an acknowledgment of humanity's participation in, dependency on, and responsibilities owed to, creation. In 1988 the Filipino Bishops wrote an important letter that noted many connections between human suffering and ecological degradation. They held that the defense of the Earth is the "ultimate pro-life issue" and called on the Church to overcome its "neglect" of the "ecological crisis" (Bishops of the Philippines 1996: 317). Likewise the American Bishops in 1991 wrote "Renewing the Earth" in which they drew on the Hebrew Scriptures to remind us that we inhabit a "sacramental universe" in which God's presence sustains all creation. They called on Catholics to acknowledge their "kinship with all that God has made" (US Catholic Conference 1996: 229). They sought to expand the traditional notion of the common good to include the "planetary common good" even as they argued that the "love of neighbor" now requires that we "extend our love to future generations and to the flourishing of all Earth's creatures" (US Catholic Conference 1996: 239).

In addition to these magisterial calls for caring for the Earth, there are many other Catholic movements that are focusing on the plight of creation. Most seek to engage the medieval theological heritage and correlate its pre-modern sense of nature as a living community with post-modern ecological thinking about nature. Even many non-Catholics find Francis of Assisi's life and views inspirational. Additionally there is a

fledgling movement referred to by some as “eco-Thomism” that is exploring helpful correlations between Thomas’ stress on conforming human action to the natural law and ecologists’ findings that human communities must likewise conform to the limits and “laws” of the natural ecological order (see LeBlanc 1999: 293–306; and Schaefer 2001: 23–52). Some eco-Thomists fear that the subject-centered turn in theology and the reduction of the natural law tradition to claims drawn from the “order of reason” often constitute a too easy accommodation to the ruling anthropocentric assumptions that dominate modern Western societies. They seek to swim against the stream and recover a natural law approach rooted in an ecological understanding of “order of nature.” Eco-Thomists note that Thomas employed the best science of his day – Aristotelianism – in his theological analyses and suggest that his example should empower the Church to draw deeply from the best scientific account of the world today, namely the one offered by the ecological sciences. Eco-Thomists accept that the concentration on the human subject has enriched Catholic thinking, but they argue that any account of the human person that misses our embodiment, our evolutionary history, and our dependency on natural ecosystems – in short, any account of the person that is not ecologized – is simply inadequate.

Catholicism has long supported distinct traditions of spirituality but in the last three decades Thomas Berry, Matthew Fox, and others have sought to ground spirituality in a celebration of God’s presence in the materiality of the natural world. “Creation-centered spirituality,” as their movement is dubbed, pulls mystical reflection from an other-worldly direction into an engagement with an ecologically sound, sacramental view of nature. Fox aims to draw attention to God’s “original blessing” given in creation. Berry holds that contemporary science offers us the remarkable spiritual gift of a new and inspirational creation story that vividly discloses the grandeur, complexity and beauty of God’s gift of creation. For Berry, caring for the planet must become our generation’s top priority, our “great work” to which we are called.

Liberation Theology is another movement that encourages Catholics to consider the ways that oppression of the poor tends to go hand in hand with the degradation of the Earth. Liberation thinking arose in Latin America and first focused on human oppression and on God’s liberating action in history. Over time, however, many liberationists concluded that environmental degradation hits the poor the hardest and that genuine human liberation requires social justice, sustainable development and the protection of natural ecosystems. Leonardo Boff, a Brazilian and former Franciscan, and Enrique Dussel, an Argentinian, and others have helped many to see these linkages. Liberation thinking is being enriched too as the Church begins to appreciate the popular piety and practices of the laity in a wide range of cultures that draw upon their indigenous cultural heritages. For example, in parts of Guatemala, Catholic ecological sensibility is being enriched by tapping into the peoples’ traditional Mayan reverence for the sacredness of the rain, the soil, and the corn and bean crops that sustain life. Often when Catholicism comes into contact with indigenous peoples, the latter’s sensitivity to nature heightens Catholic ecological sensibilities. The Eurocentric intellectual base of

Catholicism is now engaging and being engaged by important insights and sensitivities from a more culturally diverse, global Catholic community.

Similarly Catholic feminist theology is helpfully exploring the interconnections between the oppression of women and the domination and degradation of nature. Feminist thinkers provide a “hermeneutic of suspicion” that unmasks ideological justifications for sexism and for anthropocentric ethics, which objectify the nonhuman natural world as having only resource value. Rosemary Radford Ruether has been a major Catholic feminist leader who has long promoted an ecofeminist theological vision. She has argued that Christianity contains two distinct traditions – the covenantal and the sacramental – that can help instill an appreciation for the sacredness of the natural world and for our need to care for the Earth.

In conclusion, it must be remembered that the lived piety of Catholicism is rich in a host of embodied liturgical and sacramental practices and that these play a big role in giving shape to the ethos and perspectives of the community. The US Bishops’ Conference and those in other countries are appealing to Catholic parishes around the world to think of ecological concerns when they develop their year-long liturgical plans. The feast days of Saints Francis and Isidore (the patron saint of farmers), and Rogation Days, the three days before Ascension Thursday, are being identified as special occasions where parishes can help people engage theological reflection with ecological concerns. In such ways ancient liturgies, feasts, and sacramental traditions are being reshaped to offer a set of associations to help encourage a deeper appreciation for the sacramental character of the natural world.

Catholicism’s rituals, sacraments, and rich sacred calendar serve to sustain a thick sense of a “sacred cosmos.” These practices and holy days, at their best, function as channels mediating a sense of the sacred into the everyday world of the believer. The sacred calendar with its numerous holy days and seasonal ceremonies offer regular communal reminders of a sacred history that joins individuals into a greater intergenerational narrative. This sense of a community across the generations is also sustained by the ancient belief in the “communion of the saints.” These ritualized remembering of one’s connections to past generations may well be a potent emotional and moral resource for helping to promote greater sense of identification with, and felt obligation toward, our planet’s future generations.

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Christianity (6b1) – Christian Orthodoxy

In a historical exploration of the concept of nature in Orthodox Christianity, there are three preliminary points that must be made: first, the notion of the natural world as distinct from the human part of creation is in fact classical Greek in origin; second, the Judeo-Christian tradition does not consider nature as something separate or subordinated to human creation. Thus, nature is never either “divine” (since it is not God, but merely created by God) or “profane” (since it is always and closely connected to the creation of the human person in the image of God). Finally, the brief outline that follows examines the historical understanding of nature as this emerges in certain key thinkers and certain fundamental principles of Orthodox Christian theology.

An Orthodox Christian perspective on nature begins with the creation of the world through the Word of God, as described in the opening chapters of the Book of Genesis. Following the Judeo-Christian tradition of thought, Athanasius of Alexandria (d. 373) emphasized two particular factors of the creation story in his classic treatise *On the Divine Incarnation*: the creation of the world out of nothing (cf. II Macc. 7: 28) and the creation of humanity in the image and likeness of God (Gen. 1:26). Creation out of nothing implies the creation of the universe by an act of free will and in a movement of love. Creation of humanity in the divine image and likeness implies that we are endowed with similar freedom but that, like the rest of creation, we too are contingent and dependent on God. Both concepts require careful exegesis, inasmuch as the “*nihil*” out of which God made the world is not considered to be something outside of the scope of the divine energies, while the creation of Adam and Eve complements the first concept and underlines the close connection between humanity and the natural world. John Chrysostom (d. 407) describes creation as a form of doctrine. Indeed, in the mind of Anthony of Egypt (d. 356), nature is an open book revealing the truth of God. Indeed, to detach oneself from matter is to cease to be human (Gregory of Nazianzus, d. 390).

A part of the original creative plan, the Incarnation of the Word of God is not perceived simply as a result of human failure but in fact constitutes an essential and natural characteristic of God. In this respect, the Incarnation is to be seen as related to the creation of the entire world and not limited to the creation of humanity. Thus, Gregory of Nyssa (ca. 395) describes the mystery of Incarnation as a normative, and not an exceptional movement in the relationship between God and the world. Thus Christ appears as the center and focus of all things (cf. Col. 3: 10–11), revealing the

original beauty and restoring the ultimate purpose of the world. The entire world is likened to the extended human body, believed Origen of Alexandria (d. 254); and it is especially likened to the Body of Christ.

In the thought of the early Fathers, the Church as the Body of Christ is the experience of a new heaven and a new Earth (cf. Rev. 21:1), whereby the heavenly penetrates and transforms the earthly. In this light, the emphasis in Orthodox thought has been on the “last times,” on the *eschaton* or the kingdom of God. By contrast with Western theologians who underlined the significance of history from the time of Tertullian (d. 225), Eastern theologians have emphasized the role of the metahistorical, the eternal or spiritual in the world. Thus, the world around has always been appreciated in light of the heavens above; and the Eucharist became the criterion by which the value of the natural world was determined. The “last times” expressed the conviction of the early Christian Church about the lasting value of all things. The human person stands, as it were, between two worlds – between heaven and Earth – and serves as a microcosm and a mediator that seeks to manifest and reconcile the spiritual through the material.

Created in the image and likeness of God, the human person is called to bless God for the entire creation as well as to bless the entire creation in returning it to God. In this respect, human beings are performing a royal and priestly function. The vocation of humanity is not to exploit nature but to transform it, not to dominate or destroy it but to cooperate with and sanctify it. The human person is to make connections, to draw bridges between the natural environment and the kingdom of heaven. Leontius of Cyprus (seventh century) noted the way in which we offer worship to God “through all creation visible and invisible,” as well as of the way “the moon and the stars glorify God through us” (*Apologetic Sermon on Icons*: 93). Although the writings of Dionysius the Areopagite (ca.

500) establish a notion of hierarchy within the heavens and the created order, he admits that “God moves outside of the divine realm in an act of extreme erotic love, approaching the world burning with goodness” (*On the Divine Names* IV: 12). Human potentialities are more complex and varied than even those of angelic beings; and the implications of our actions are more manifold and mysterious for the natural environment than we could ever imagine. One of the tasks before us as human beings is to preserve the integrity but also the diversity of God’s creation. No one among us has the right to reduce the scope of God’s presence in the natural world; rather, each one of us has the responsibility to embrace the breadth of God’s grace in every person, every animal, and every plant.

The para-priestly character of the human person in relation to the natural environment raises the concept of the iconic or symbolic dimension of the world. Creation brings us to a vision of God; *physike* leads to *theoria*. For Evagrius of Pontus (d. 399), the contemplation of the physical reality involves the recognition of God’s presence in nature. Each place and each moment is a sacred space and time; each can serve as a window into eternity. Then each human being can discern his or her role within the natural order. Then we are able to move through the creation to the Creator, and

“wherever we turn our eyes, we shall see God’s symbol” (Ephrem the Syrian, d. 373, *Hymns on Paradise* XXX: 2). This does not signify the adoration, but only the veneration of creation. An icon does not imply an idol. John of Damascus (d. 749), the champion of icons, taught that “we do not worship creation in place of the Creator; we worship the Creator who assumed creation for our sake” (*On Holy Images* IV: 4, 16).

By the fourteenth century, the relationship between the transcendent God and the immanent world was described in terms developed by Gregory Palamas (d. 1359) who articulated the earlier teaching of the Church by expounding the doctrine of the distinction between divine essence and divine energies. The fundamental dichotomy in Judeo-Christian thought was not between matter and spirit, but only between the sinful and the redeemed. Through the distinction between essence and energies in God, the Eastern Christian Church defined the relationship between God and creation by affirming that creation was charged with divine energy, that nothing was outside the embrace of God. Thus, the presence of God in the world is neither one of illusion (atheistic) nor one of identification (pan-theistic). Orthodox Christianity would instead espouse a doctrine of pan-en-theism, regarding God as embracing the world and the world as being in God.

In more recent centuries, Christian Orthodox theologians have developed the concept of divine Wisdom in an effort to understand and proclaim the unity of heaven and Earth that is most uniquely personified in Jesus Christ as the eternal creator who assumed creation. A single blade of grass should remind us of God, says Basil of Caesarea (d. 379). And, for the ascetic tradition represented by John Climacus (d. 649), each animal too bears the wisdom of the Creator and testifies to God. Everything is seen to bear the seed, the sign, the reason (or *logos*, as Maximus the Confessor [d. 662] called it) of the divine *Logos* or Word. The wisdom of God is the creative and unitive power in all things (cf. Wisdom of Solomon 9:1).

Now within the doctrine of the creation of the world by God, Orthodox Christianity proposes three fundamental principles that together comprise the vision of nature: (i) The world is good and beautiful. This means that no part of the natural world may be divorced from the loving care of God and the environmental concern of the Christian; (ii) The world is fallen or sinful. As a result of human failure, the process of cosmic transformation is incalculably costly and creation “travails” in expectation of deliverance (cf. Rom. 8: 22). Without freedom, there would be no sin. Yet, without freedom there would also be no love; finally,

(iii) The world is redeemed. This means that nothing is intrinsically evil and everything has received the first fruits of transformation through the crucifixion and resurrection of Christ.

John Chryssavgis

Breakout Box: Eastern Orthodox Monasticism

Given its otherworldly orientation, Orthodox monasticism might at first glance appear – at least to a contemporary mind – as marginal, perhaps even an aberrant phenomenon of minor importance to modern ecological concerns. The etymological origin of *μοναχος* or *μοναχι*, the Greek terms used for monk or nun respectively, is found in the word *μονος* meaning “alone,” separate from all worldly concerns in an unceasing communion with God. The emphasis is indeed on the contemplative, interior life of the individual and his/her personal relationship with the divine, resulting in an extreme spiritualization of one’s own bodily existence and a total renunciation of the material universe as a source of temptation and evil and an obstacle to spiritual ascent.

Yet there is almost always a tension between the ideal and the real in Orthodox monastic life and this can especially be seen when we deal with monastic attitudes toward nature. Such attitudes can be almost perceived as a form of dualism being both positive and negative at the same time. Thus, on the one hand, Orthodox monastics have exhibited a “renunciatory” attitude toward the world and on the other hand a “reverential” one, defending the goodness of nature, which must be loved and restored to a new unity with God. Contrary to the rationalistic and anthropocentric view of Western Christianity stressing the mastery of humans over nature, in Orthodoxy this partaking of the natural cosmos in the universal plan of salvation is achieved only through the mediation of humans, who are themselves the union of material and spiritual elements. The human being assumes, thus, a priestly vocation. The Orthodox view of nature is a “liturgical” one and its foremost expression is found in the Eucharist. In it nature, in the form of bread and wine, is offered to God and is received back transfigured as the Body and Blood of Christ. In this way nature is humanized and humans are deified.

Orthodox monastics from early on have sought this harmonious relationship between humans and nature in the adoption of an ethic of self-offering and self-sacrifice in their effort to achieve a foretaste of paradise on earth. Nature was not seen as fallen, but rather as embodying the image of God. There have been indeed countless cases of early ascetics, but also of contemporary monks, who have developed what may be regarded as an unusual relationship of friendship and mutual understanding with wild and dangerous animals. From Anthony the Great in fourth-century Egypt up to Seraphim of Sarov in nineteenth-century Russia, the true Orthodox saint has treated nothing as alien and hostile in God’s created universe. In this way he recognized that what was offered to him was a gift of God and that one must live following God’s commandment to “till and look” after the Garden of Eden (Gen. 2:15).

This “ecological asceticism” is also, up to a certain degree, apparent in the liturgical and everyday lives of present day Orthodox monks and nuns. Their vigorous fasting and the avoidance of meat eating shows not only a sparing use of resources and respect for other creatures, but also an appreciation of the simplest of foods, which help to sustain the greatest gift of all, that of life. Furthermore, material substances such as

water, oil, seeds of wheat, bread, grapes or certain plants are blessed and thus purified. In this way, they become loci of divine strength conferring grace on the individual. The whole nature through purification is elevated and becomes the *οικος* (house) of God. Moreover, through the old monastic virtues of *φιλοξενια* (hospitality) and *φιλανθρωπια* (charity), offered both to humans and to the animal kingdom, the alienation of humans from the rest of the creation is overcome. Even the monastic virtue of chastity and the voluntary limit of one's own reproductive capabilities may be viewed as contributing to the resolution of the present ecological crisis. Orthodox monastic life follows a cyclical time in accordance with the rhythm of nature, since it follows the sun's cycle and alters with the seasons. Finally, Orthodox monastic architecture embodies this ecological ethos by adjusting and not imposing to the surroundings and by exhibiting a variety and a creativity exceeding functionality, thus creating a mystic effect in which the image of God is revealed in everything present.

Yet, in today's society even monastics did not manage to avoid the effects of modernity, particularly as they relate to the environment. The era of Orthodox monasticism when human beings were said to have lived in innocent harmony with nature tends to be a thing of the past. Nowhere is this more apparent than on Mount Athos (Greece), the spiritual center of Orthodoxy ever since the tenth century. The destructive effects of modern day civilization may be seen in the huge deforestation of the Athonite peninsula resulting from the more intensive use of the physical resources, such as wood, for trade purposes in order to cover the increasing spending costs of the monasteries, as these attempt to modernize their facilities. The opening of roads with no apparent planning for the mechanized transportation of pilgrims has also contributed to this effect. The old paths, which had been used to connect the monasteries a few decades back and formed an integral part of the inward and outward journey of pilgrims, have nowadays fallen into neglect. Pilgrims have been turned into tourists, as Mount Athos became in the last decades a fashionable place to visit among the political elite, intellectuals, nationalists looking for the lost glory of Byzantium and agnostics searching for religious gurus. The introduction of modern technology on Mount Athos in the form of telecommunications, road networks, networks for water supply and construction work have forever changed both the unique flora and fauna of the locality. The disappearance of wolves and of the variety of wild trees in favor of chestnuts for the exploitation of their produce attest to this. The ethos of ecological asceticism is losing more and more ground, endangering also, as many argue, the state of inner spiritual tranquility.

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See also: Bartholomew, Ecumenical Patriarch.

Breakout Box: Orthodox Spirituality

In the Christian Orthodox tradition, there are three particular principles that play a significant role in understanding our role in and responsibility for the environment. These include icons (the way creation is perceived), liturgy (the way creation is celebrated), and asceticism (the way creation is treated). *The beauty of the icon* offers new insights into reality. It reveals the eternal dimension in everything. Icons remind us of another way and another world and offer a corrective to the culture that gives value only to the here and now. The icon articulates with theological conviction our faith in the heavenly kingdom. The icon does away with any objective distance between this world and the next, between matter and spirit, body and soul, time and eternity, creation and divinity. The icon reminds us that there is no double vision, no double order in creation. It speaks in this world the language of the age to come.

In icons, God assumes a face, a beauty that is exceeding (Ps. 44:2), a "beauty that can save the world" said Dostoevsky. In Orthodox icons, faces – whether of Christ, or of the saints in the communion of Christ – are always frontal. Profile signifies sin, a rupture in communication. Faces are eternally receptive to divine grace. "I see" means that "I am seen," which in turn implies that I am in communion.

The entire world is in fact an icon and a point of entry into a new reality. Everything in this world is a seed. "Nothing is a vacuum in the face of God," wrote Irenaeus of Lyons in the second century; "everything is a sign of God" (*Against Heresies* IV: 21). And so in icons, rivers assume human form; the sun and the moon and the stars and the waters assume human faces; all acquire a personal dimension.

What the icon does in space and matter, *the world of the liturgy* effects in praise and time. If we are guilty of relentless waste, it is because we have lost the spirit of worship. We are no longer respectful pilgrims on this Earth; we have been reduced to mere tourists. The Eastern Orthodox Church retains a liturgical view of the world, proclaiming a world imbued by God and a God involved in this world.

Liturgy means dynamism and creativity, not merely ritual. The world is neither static nor eternally reproduced, as the classical worldview proposed. It is movement toward an end, toward a sacred goal. It is neither endless nor purposeless, but relational. In an icon, every part is required for the picture to be complete. If we move (or remove, or destroy) one part of the picture – whether a tree, or an animal, or a human being – then the entire picture is affected. We must always think in terms of connections. All

ecological activities are measured ultimately by their effect on people, especially upon the poor. Anyone who does not love trees does not love people; anyone who does not love trees does not love God.

Liturgy is a celebration of this connection and communion. When we enter this interdependence of all persons and all things – the “cosmic liturgy,” as St. Maximus the Confessor called it – then we may understand and resolve issues of ecology and of economy. In the breadth of the liturgical worldview, we recognize that the world is larger than our individual concerns. The world ceases to be something that we observe objectively, and becomes something of which we are a part personally.

The world in its entirety constitutes the liturgy. God is praised by the trees and by the birds, glorified by the stars and the moon (cf. Ps. 18:2), worshipped by the sea and the sand. When we reduce religious life to our concerns, we forget the function of the liturgy is to implore God for the renewal of the whole cosmos. Our relationship with this world determines and defines our relationship with heaven.

A radical reversal of perspectives and attitudes is required to alter the situation. There is a price to pay for our wasting. The environmental crisis will not be solved simply by expressions of regret. Only *a spirit of asceticism* will lead to the rediscovery of wonder and beauty. Unfortunately, asceticism carries with it the baggage of dualism and denial, developed over centuries inside and outside Christianity. Yet this is not the vision of wholeness that Orthodox Christian spirituality intimates through its ascetic dimension. The connection is intimate between the human body and the environment. In the third century, Origen of Alexandria believed that: “The world is like our bodies. It too is formed of many limbs and directed by a single soul” (*On First Principles* II: 1–3). And if the Earth is our flesh, then it is inseparable from our destiny.

The ascetic person is free, uncontrolled by attitudes that abuse the world, uncontrolled by ways that use the world, characterized by the ability to say “enough.” Asceticism aims at refinement, not detachment or destruction. Its goal is moderation, never repression. It looks to service, not selfishness. Without asceticism, none of us is authentically human.

One important example of asceticism in Orthodox practice is fasting. Orthodox Christians fast from dairy and meat products for almost six months, itself an effort to reconcile one half of the year with other, secular time with the time of the kingdom. Fasting is integrating body and soul, remembering the hunger of others, feeling the hunger of creation itself for restoration, hungering for God, remembering that we live not by bread alone, being reconciled with one another and the world. It is affirming that the material creation is neither under our control nor to be exploited selfishly, but to face or icons, and the earth as the countenance of God.

The discipline of fasting inspires a sense of wonder, of goodness, and of godliness, enabling one to see all things in God, and God in all things.

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See also: Bartholomew, Ecumenical Patriarch; Christianity – Eastern versus Western; Christianity (6b2) – Greek Orthodox.

Christianity (6b2) – Greek Orthodox

Ecological endeavors have been at the heart of Greek Orthodox activities for more than 15 years and are undertaken by various official bodies such as the Ecumenical Patriarchate of Constantinople and the autocephalous Church of Greece. Given the wide attention to environmental issues on the part of many religions across the globe, such an interest is hardly surprising. The greater sensitization of the major world religions for environmental problems was largely effected after the interreligious meeting of Assisi (26 October 1986). In these endeavors, an attempt is usually made to articulate the *differentia specifica* of the Orthodox contribution to environmental issues in contrast to other Christian traditions and religions.

Beginning with the Ecumenical Patriarchate of Constantinople, this interest was manifested by Patriarch Dimitrios I (1972–1991), who intended to render this traditional center of Orthodoxy a place of prayer for the creation. After a relevant proposal issued by an environmental congress held on the island of Patmos in September 1988, he declared in 1989 that each first day of September (i.e., the beginning of the new ecclesiastical year), should be kept as a day for the protection of the environment. In addition, the official hymnographer of the Church, the monk Gerasimos Mikragiannanitis from Mount Athos, was entrusted with the composition of a service for the environment and all creation to be celebrated always on September 1st, which he did in 1990 (published in Thessaloniki 1997). Patriarch Dimitrios was active in many other related endeavors, such as the organization of an inter-Orthodox conference (5–12 November 1991) in the “Orthodox Academy of Crete” in collaboration with the World Wildlife Fund, in which the basic tenets of the Orthodox position toward the ecological crisis were articulated. It is in this Academy that an “Institute of Ecology and Theology” was created too as a concrete response to the related initiatives of the Patriarchate of Constantinople.

But the one who has identified himself fully with the cause of environmental protection is his follower, Patriarch Bartholomew I (since 1991), who rightly has been given the nickname “the Green Patriarch.” During his numerous visits to Greece and abroad he has almost always exhibited publicly his ecological sensitivities. Among his major activities was the founding of a nongovernmental organization “Religion, Science and the Environment” (RSE) in 1994, based in London and in Athens, which seeks to provide common ground between science and religion in order to help local communities to protect their environment and to raise awareness concerning its ongoing degrada-

tion (e.g., the plight of world's waters). Within this framework, some environmental summer seminars were organized at the Orthodox School of Theology on the island of Halki in cooperation with the WWF, as in 1994 ("The Environment and Religious Education"), in 1995 ("The Environment and Ethics"), and in 1997 ("The Environment and Justice"). Since 1999 a special "Halki Ecological Institute" has been active there too.

Further activities of RSE, which have achieved significant outcomes for some regions of Europe, include the international water-based symposia on religion, science and the environment. These have taken place under the auspices of Patriarch Bartholomew with the participation of noted religious and political leaders and public officials, as well as scientific and environmental figures. The first one with the theme "Revelation and the Environment

A.D. 95–1995" took place in September 1995 aboard a ship on the Aegean Sea on the occasion of the 1900th anniversary of the writing of the Book of the Apocalypse. The second one entitled "The Black Sea in Crisis" was dedicated to the protection of the natural environment of the Black Sea and took place in September 1997 under the patronage of the European Commission on board a ship that carried the participants along the Black and the Aegean Sea. The third floating symposium entitled "Danube: River of Life" took place in October 1999, again under the patronage of the European Commission, and included a 2,800 kilometer voyage down the Danube from Passau (Germany) to the Danube Delta in Romania and the Ukraine; the symposium aimed at highlighting the river's many problems and war damage. The fourth environmental symposium entitled "The Adriatic. A Sea at Risk, a Unity of Purpose" was held in June 2002, again under the patronage of the European Commission, and focused on the Adriatic Sea's environmental challenges. After visiting five Adriatic countries the symposium was concluded in Venice, where Patriarch Bartholomew and Pope John Paul II, joined by a video link, signed an important declaration together on protecting the environment. Afterwards Patriarch Bartholomew flew to Oslo, where on 12 June he was awarded the Sophie Prize by the Norwegian Sophie Foundation for his consistent efforts in protecting nature. Patriarch Bartholomew's campaigns for drawing attention to environmental problems in European waters are planned to continue in the following years, including a floating symposium in 2003 on the Baltic Sea. Given this wider interest in environmental issues, it is not accidental that one eminent Greek theologian of the Ecumenical Patriarchate, who is also a regular participant and contributor to the above activities, Metropolitan of Pergamon Ioannis Zizioulas, has been especially active in developing an Orthodox theology of the environment and has been at the forefront of relevant ecological endeavors. His book *κτίση ως ευχαριστία: θεολογική προσγγιση στο πρόβλημα της οικολογίας* (*Creation as Eucharist: A Theological Approach to the Problem of Ecology*; Athens 1992) has become a classic text and a welcome Greek contribution in this area, following the work of Russian theologian N. Zabolotskij, who had dealt with such issues in another context in the 1970s.

Analogous sensitivities for the protection of the environment including lectures, meetings, conferences, publications and other activities have been demonstrated by the Church of Greece under the auspices of Archbishop Serapheim (1974–1998), especially since 1987, the international year for the protection of the environment. The same interest has been occasionally shown at a lower level in the various dioceses, in which several metropolitans exhibited a vivid interest in local ecological problems (e.g., on the Ionian islands for the protection of the longerhead sea turtle *Caretta caretta*). In addition, due to the demand of relevant Greek organizations, Saint Modestos, celebrated on the 16th of December, has been officially declared the protector of animals by the Church. Finally, another service for the protection of the environment has also been instituted by the Metropolitan of Patras Nikodimos (Vallindras); following the decree of the Holy Synod on 10 January 1992, it is celebrated every September 1st. Similar interests in ecological issues are also exhibited by the new Archbishop Christodoulos (since 1998), and there is a special “Synodal Committee for Divine and Political Providence and Ecology.”

The greater involvement of the above sister Churches in ecological endeavors is certainly a recent phenomenon, but it is not one without a precedent. The protection of the environment has been an issue for the Church occasionally in the past too (cf. an encyclical of the Church of Greece against those burning and destroying forests in April 1845). While it is true that the involvement of the Church in environmental issues has its critics, these endeavors perform many other functions on a domestic as well as international level. The adoption of the ecological cause, for example, by the Patriarchate of Constantinople has enhanced the Church’s broader role and reputation worldwide, as it is no longer considered to be a beleaguered relic of Byzantium.

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Breakout Box: Common Declaration on the Environment: Common Declaration of John Paul II and The Ecumenical Patriarch His Holiness Bartholomew I

Editor's Note: On 10 June 2002, in a video hook-up between Rome and Venice, Pope John Paul II and the Orthodox Patriarch of Constantinople, Bartholomeos I, issued a landmark joint declaration on the environment. It illustrated not only an intensification of environmental concern, but also how our environmental predicaments can provide a common ground for reconciliation among religious groups with previously strained relations.

We are gathered here today in the spirit of peace for the good of all human beings and for the care of creation.

At this moment in history, at the beginning of the third millennium, we are saddened to see the daily suffering of a great number of people from violence, starvation, poverty and disease. We are also concerned about the negative consequences for humanity and for all creation resulting from the degradation of basic natural resources such as water, air and land, brought about by an economic and technological progress which does not recognize and take into account its limits.

Almighty God envisioned a world of beauty and harmony, and He created it, making every part an expression of His freedom, wisdom and love (cf. Gen 1:1–25).

At the centre of the whole of creation, He placed us, human beings, with our inalienable human dignity. Although we share many features with the rest of the living beings, Almighty God went further with us and gave us an immortal soul, the source of self-awareness and freedom, endowments that make us in His image and likeness (cf. Gen. 1:26–31; 2:7). Marked with that resemblance, we have been placed by God in the world in order to cooperate with Him in realizing more and more fully the divine purpose for creation.

At the beginning of history, man and woman sinned by disobeying God and rejecting His design for creation. Among the results of this first sin was the destruction of the original harmony of creation. If we examine carefully the social and environmental crisis which the world community is facing, we must conclude that we are still betraying the mandate God has given us: to be stewards called to collaborate with God in watching over creation in holiness and wisdom.

God has not abandoned the world. It is His will that His design and our hope for it will be realized through our co-operation in restoring its original harmony. In our own time we are witnessing a growth of an ecological awareness which needs to be encouraged, so that it will lead to practical programmes and initiatives. An awareness of the relationship between God and humankind brings a fuller sense of the importance of the relationship between human beings and the natural environment, which is God's creation and which God entrusted to us to guard with wisdom and love (cf. Gen. 1:28).

Respect for creation stems from respect for human life and dignity. It is on the basis of our recognition that the world is created by God that we can discern an objective moral order within which to articulate a code of environmental ethics. In this perspective, Christians and all other believers have a specific role to play in proclaiming moral values and in educating people in ecological awareness, which is none other than responsibility toward self, toward others, toward creation.

What is required is an act of repentance on our part and a renewed attempt to view ourselves, one another, and the world around us within the perspective of the divine design for creation. The problem is not simply economic and technological; it is moral and spiritual. A solution at the economic and technological level can be found only if we undergo, in the most radical way, an inner change of heart, which can lead to a change in lifestyle and of unsustainable patterns of consumption and production. A genuine conversion in Christ will enable us to change the way we think and act.

First, we must regain humility and recognize the limits of our powers, and most importantly, the limits of our knowledge and judgment. We have been making decisions, taking actions and assigning values that are leading us away from the world as it should be, away from the design of God for creation, away from all that is essential for a healthy planet and a healthy commonwealth of people. A new approach and a new culture are needed, based on the centrality of the human person within creation and inspired by environmentally ethical behavior stemming from our triple relationship to God, to self and to creation. Such an ethics fosters interdependence and stresses the principles of universal solidarity, social justice and responsibility, in order to promote a true culture of life.

Secondly, we must frankly admit that humankind is entitled to something better than what we see around us. We and, much more, our children and future generations are entitled to a better world, a world free from degradation, violence and bloodshed, a world of generosity and love.

Thirdly, aware of the value of prayer, we must implore God the Creator to enlighten people everywhere regarding the duty to respect and carefully guard creation.

We therefore invite all men and women of good will to ponder the importance of the following ethical goals:

1. To think of the world's children when we reflect on and evaluate our options for action.
2. To be open to study the true values based on the natural laws that sustain every human culture.

3. To use science and technology in a full and constructive way, while recognizing that the findings of science have always to be evaluated in the light of the centrality of the human person, of the common good and of the inner purpose of creation. Science may help us to correct the mistakes of the past, in order to enhance the spiritual and material well-being of the present and future generations. It is love for our children that will show us the path that we must follow into the future.

4. To be humble regarding the idea of ownership and to be open to the demands of solidarity. Our mortality and our weakness of judgment together warn us not to take irreversible actions with what we choose to regard as our property during our brief stay on this earth. We have not been entrusted with unlimited power over creation, we are only stewards of the common heritage.

5. To acknowledge the diversity of situations and responsibilities in the work for a better world environment. We do not expect every person and every institution to assume the same burden. Everyone has a part to play, but for the demands of justice and charity to be respected the most affluent societies must carry the greater burden, and from them is demanded a sacrifice greater than can be offered by the poor. Religions, governments and institutions are faced by many different situations; but on the basis of the principle of subsidiarity all of them can take on some tasks, some part of the shared effort.

6. To promote a peaceful approach to disagreement about how to live on this earth, about how to share it and use it, about what to change and what to leave unchanged. It is not our desire to evade controversy about the environment, for we trust in the capacity of human reason and the path of dialogue to reach agreement. We commit ourselves to respect the views of all who disagree with us, seeking solutions through open exchange, without resorting to oppression and domination.

It is not too late. God's world has incredible healing powers. Within a single generation, we could steer the earth toward our children's future. Let that generation start now, with God's help and blessing.

Christianity (6c1) – Reformation Traditions (Lutheranism and Calvinism)

The two major Protestant Reformers of the sixteenth century, Martin Luther and John Calvin, inherited traditions of theological reflection about nature which were in large measure shaped by a *spirit-matter dualism*, the idea that the material world is in some fundamental way, in itself, an obstacle to the life of faith, something that the believer should aspire to rise above. At the highest levels of theological sophistication, this spirit-matter dualism had been given expression in terms of an ontology of the Great Chain (Hierarchy) of Being. This was the theological perspective: theologians and mystics and many other people of faith thought of the world as if they were situated in a valley, contemplating a towering mountain. The goal of the spiritual life, from this perspective, is to ascend from this material world, higher and higher spiritually, through various stages of material and spiritual being, to God at the top, who is pure spirit. According to this perspective, then, the question of loving nature and caring for nature would rarely, if at all, have to be taken seriously: because the whole purpose of human life would be understood to be ascending *above* nature (the world of the flesh) to be with God – and using or even abusing nature along the way was morally unproblematic.

In contrast, some pre-Reformation theologians and mystics, such as Irenaeus in the second century, the mature Augustine (with some ambiguities) in the fifth century, and Francis of Assisi in the thirteenth century, eschewed that kind of spirit-matter dualism in favor of a more integrated vision of the world. Although they may have thought of the world in terms of a Great Chain of Being, they were variously captivated by the thought of the Divine Goodness – or the Divine Fecundity – *overflowing*, from the apex of the hierarchy to its lowest regions. They took for granted the idea that an eighteenth-century Lutheran theologian, F.C. Oetinger, was later to champion: that “corporeality is the end of the ways of God.” Which is to say: the purpose (the “end” in this sense) of God and the presence of God are to be discerned and encountered *within* the material world, *not above or beyond it*. This was the perspective: not contemplating the world as if looking up at a towering mountain, but rather envisioning the world as if one were stationed at the peak of such a mountain looking out at the vistas of the slopes and valleys below and all around.

Luther and Calvin were surely very much aware of the theological traditions of the ontological and hierarchical reflection about nature that they had inherited. But these traditions were not the primary intellectual context they self-consciously chose for their own theological reflection about the created world. The Reformers as a matter of course regarded their own theological work primarily as interpretation of the Scriptures. And there they found, and gave voice to, a rich theology of nature. As they interpreted the Bible afresh, moreover, they broke dramatically with the spirit-matter dualism they had inherited.

“In every part of the world, in heaven and on Earth,” Calvin wrote, in a typical utterance,

[God] has written and as it were engraven the glory of his power, goodness, wisdom and eternity . . . For the little singing birds sang of God, the animals acclaimed him, the elements feared and the mountains resounded with him, the river and springs threw glances toward him, the grasses and the flowers smiled.

Calvin even suggests that when we contemplate the wonders of God in nature “we should not merely run them over cursorily, and, so to speak, with the fleeting glance, but we should ponder them at length, turn them over in our mind seriously and faithfully, and recollect them repeatedly” (Calvin in Wendel 1963: 34). Luther had a similar view of the glories of God in the whole creation and of creation’s marvels. “If you truly understood a grain of wheat,” he once wrote, “you would die of wonder” (Luther, *Werke*: 19: 496). In his Genesis commentary, Luther even imagined Adam and Eve, before the fall, enjoying a common table with the animals. In the same spirit, both Reformers thought theocentrically about human interactions with nature: God and his righteous will, they believed, set very real limits for the reaches of human pride and arrogance. The created world, the Reformers held, belonged first and foremost to the Creator. Yes, in keeping with the teaching of the Book of Genesis, the Reformers affirmed that humans were mandated by God to exercise dominion over the Earth, but, for the Reformers, especially for Luther, that dominion was understood to be a restoration of Adam’s and Eve’s lives as caretakers or gardeners, “before the Fall,” not as a license for exploitation.

Further, both Reformers affirmed the immediacy of God in nature. For them, God was not detached from the world, far above in some spiritualized heaven. On the contrary, as Luther often said, God is “in, with, and under” the whole created world. For Luther, God is “with all creatures, flowing and pouring into them, filling all things” (Luther in *Weimarer Ausgabe*: 10: 143). Indeed, God is so near, according to Luther, that if he were to withdraw his hand, the whole creation would collapse:

The sun would not long return to its position and shine in the heavens, no child would be born; no kernel, no blade of grass, nothing at all would grow on earth or reproduce itself if God did not work forever and ever (Luther in Pelikan 1957: 26).

This view of nature as divinely given and divinely charged came to its completion, for the Reformers, in their teachings about “last things” (eschatology). Both theologians strongly emphasized the traditional Christian teaching about the resurrection of the

body. Both also, Luther perhaps most vividly, projected a view of the end of the world as a cosmic consummation, the coming of the “new heavens and new Earth” announced in biblical traditions. Nature itself, the Reformers believed, would be “saved” and consummated at the very end. Then, they believed, with the Apostle Paul, God would be “all in all” (1 Corinthians 15:28).

In retrospect, Luther and Calvin can thus be seen to be champions of the idea of the overflowing goodness, the fecundity, of God. The Reformers rejected the theme that the way to find God is to rise above nature. For them, in this sense, “corporeality is the end of the ways of God.” God is always to be encountered, when he is encountered, immanent in the material world.

Fatefully, however, the issues that preoccupied Luther and Calvin had to do not with God and nature, but much more so with God and human salvation. Their theologies, accordingly, took on a kind of anthropocentric character, by way of emphasis. “Justification by grace through faith alone” was the theological teaching that most occupied their attention. Furthermore, presupposing his own idea of the justified Christian’s life of active sanctification, Calvin accented the responsibility of Christians to change the world for the better. In Calvin’s thought, accordingly, the theme of human dominion over the Earth tended to lose the contemplative character it had for earlier theologians who had celebrated the overflowing goodness of God and take on, instead, more active, interventionist meanings.

The theological heirs of Luther and Calvin, especially in the nineteenth century and thereafter, took the Reformers’ measured anthropocentrism as a given, but tended to abandon the Reformers’ rich teaching about God and the natural world. As a result, Protestant theology after Luther and Calvin tended to become much more exclusively anthropocentric. There were many reasons for this marked shift of emphasis, not the least of them being the rise of Newtonian mechanistic science and Darwinian evolutionary science, and the felt need by many post-Reformation theologians to root religious faith in the intangible human spirit or human subjectivity, so as to leave the objective world of nature, as it were, to the natural scientists, and also to protect faith from the attacks of some scientists and scientifically informed philosophers. This anthropocentric dynamic also made it easy – intended or not – for both theologians in particular and Protestants of every walk of life to be swept along by the dynamics of industrial society, which were publicly predicated on the exploitation of the Earth for the sake of human progress.

It was a profound historical irony, then, that the Reformers’ rejection of the theme that humans are called to rise above nature, a theme which they had inherited with the spirit–matter dualism of the Great Chain of Being ontology, was contradicted by many of their own theological heirs. “Humans rising above nature” was to become one of the central themes of nineteenth and early twentieth-century Protestant theology, above all through the influence of the nineteenth-century theologian, Albrecht Ritschl. The theme was given new life in the middle of the twentieth century by the Protestant New Testament scholar, Rudolf Bultmann, whose existentialist interpretation of

Christianity presupposed a view of nature as a mechanistic, “objective” world, which, Bultmann believed, those who chose “authentic existence” should rise above. Even the great Karl Barth, said to be the Thomas Aquinas of the Protestant tradition, whose works dominated Protestant theological discussions in the middle of the twentieth century, refused to develop a theology of nature and, along the way, almost by default, set forth ideas about nature in instrumental terms that posed no real challenge to the ideas of rising above nature espoused by thinkers like Ritschl and Bultmann.

This whole situation began to change in the second half of the twentieth century. A number of theologians writing in the tradition of Luther and Calvin began to take issue with the whole direction that Protestant thought about nature had taken in the nineteenth and early twentieth centuries. Paul Tillich reached deeply into what for him was the nature-mysticism of Martin Luther, in order to reaffirm nature as a theological theme in its own right and nature itself as having sacramental value. In a stirring address to the World Council of Churches meeting in New Delhi in 1961, Joseph Sittler called the attention of the churches of the world to the “cosmic redemption” theology of St. Paul and pleaded that the theology of grace that was so critically important for the theologies of Luther and Calvin be extended to comprehend, and no longer exclude, the world of nature.

Presupposing such trends and drawing still more deeply on newly discerned ecological teachings of the Bible, Jürgen Moltmann projected a grand theological schema of cosmic, as well as historical, redemption, predicated on a new and compelling appreciation for biblical eschatology. Moltmann developed a “theology of hope” that claimed liberation not just for humans, above all the poor and the oppressed, but also for all the creatures of nature. He also developed a new and deeper understanding of God’s immanence in the whole created world – in nature, as well as in spirit – than many of his nineteenth and early twentieth-century theological forebears had done, reminiscent of the sensibilities for nature that the Reformers took for granted. In this sense, Moltmann’s thought represents a decisive rejection of the hierarchical spirit–matter dualism that dominated much of the theology inherited by the Reformers and much of the theology espoused by the heirs of the Reformers in the nineteenth and early twentieth centuries.

Moltmann also went beyond the teaching of the Reformers, whose thought had been anthropocentric in emphasis. Moltmann developed a theology of “cosmic redemption” through Christ and a theology of the creative Spirit of God that integrated and extended the Reformers’ rich apperceptions of nature, precisely in terms of a comprehensive, cosmic theology of grace, a theological theme which, for the Reformers, had been mainly focused on issues relating to human salvation. Moltmann likewise transvalued post-Reformation teaching about human dominion over nature, which presupposed the theme of human mastery, even domination. Instead, Moltmann espoused a theology of the integrity and the rights of nature.

But Moltmann’s was by no means the only Protestant voice to address the theology of nature positively and creatively in the wake of the pioneering work of Tillich and

Sittler. John Cobb, a thinker deeply influenced by the process philosophy of Alfred North Whitehead, focused much of his innovative theological writings on the global environmental crisis, which by the end of the twentieth century had been widely recognized by theologians as well as by scholars in other fields to be *the* challenge of the future. Protestant theologians such as H. Paul Santmire and James Nash also studied the historical and ethical dimensions of the crisis. In addition, a wide variety of Protestant Old and New Testament scholars began to explore the theology of creation espoused by biblical traditions in new and suggestive ways. Further, the critique of the hierarchical ontology of the Great Chain of Being imagery was voiced with increasing poignancy and power by feminist theologians such as Sallie McFague. Building, in part, on the sacramental insights of Luther, McFague, for one, argued that the whole creation is the “Body of God,” that the love of nature is in fact, in this sense, the love of God. Global ecological and ethical concerns were addressed imaginatively, as well, by Larry Rasmussen, whose work reflected the growing interests in cultural diversity and religious pluralism that emerged in some strains of Protestant thought toward the end of the twentieth century.

Alongside of and integrated with their theologies, all these late twentieth-century thinkers also took for granted the same kind of passion for social justice that had been voiced most prominently by Moltmann. This ethical accent on nature represented a relatively new development in the unfolding of the Reformation tradition, whose concerns had hitherto focused mainly on issues pertaining to humankind’s status before God and, later, on the theoretical relationship between faith and the natural sciences.

This is not to say that all Protestant theologians in the second half of the twentieth century were committed to the projection of new and imaginative theologies of nature, sensitive to the issues of justice for all creatures. Numerous Protestant thinkers in that era were preoccupied with other issues. Some, following Karl Barth, viewed any kind of interest in the theology of nature with suspicion. Still, in many thoroughgoing ways, by the beginning of the twenty-first century, the tradition of Luther and Calvin, which had begun with a rich theology of nature of its own, had been expanded and deepened. It had become a profoundly ecological tradition, shaped by concerns both for human liberation and for the liberation of the whole creation.

H. Paul Santmire

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See also: Christianity (6c2) – Calvin, John and the Reformed Tradition; Eden and Other Gardens; Fall, The; Francis of Assisi; McFague, Sallie; World Council of Churches and Ecumenical Thought.

Christianity (6c2) – Calvin, John (1509– 1564) and the Reformed Tradition

The core concern of the Protestant Reformation was salvation for human beings. While “nature” was not central to the concern of the early Reformers, the distinctive theocentric matrix of the Reformed tradition shaped a common ethos in understandings of nature that emerged within it. This ethos had four main features. First, an emphasis on the unique glory of God and hence on the distinction between Creator and creature. Second, an emphasis on the pervasive sovereignty of God and hence an attempt to bring God and creation into as close a proximity as possible. Third, an emphasis that the purpose of creation is the glory of God and hence that nature, in diverse ways, demonstrates the character of God. Fourth, an emphasis on the vocation of human beings to glorify God in all areas of life leading to an activist and world transformative spirituality.

Many of the diverse features of the tradition have roots in John Calvin’s interpretation of creation. For Calvin the act of creation was the free and gracious act of the triune God who desired to give existence and life to the created universe. While humanity is the focus of God’s creative and providential activity, God exercises a fatherly care over all creatures. As a consequence the entire creation bears witness to God’s goodness and power, becoming a magnificent theater that displays the glory of God.

The created order, by virtue of its creaturehood, is inherently precarious. The Fall intensifies this precarious character. Creation is thus always on the point of descending into chaos. The continued existence, order and beauty of creation are the product of God’s constant activity in sustaining creation and restraining evil. As the natural order is the consequence of God’s constant activity, it is thus “the clothes” in which God appears. Human beings were created with the ability to perceive God through creation; this ability has been removed by sin but could be restored by regeneration. Christians are called to exercise all their senses in contemplating creation not only to apprehend the character of God revealed through it but also to contemplate its intricacies and beauty. Nature thus becomes a meeting place between God and humanity.

Calvin emphasized the presence and activity of God to such an extent that he struggled to define the role of secondary causation, yet he equally emphasized that creation was not in any sense divine. In order to guard the unique glory of God and

to reject all idolatry the distinction between Creator and creature must be maintained. His theology thus rejected any divinization of creation and emphasized its integrity as creation. This is exemplified in his insistence that Jesus Christ retained his authentic humanity after the ascension. Creation maintained its genuine creaturehood even when it was brought into as close as possible proximity with deity.

Calvin never resolved the tension between the proximity and the distinction between God and creation. He emphasized one or the other depending on the context. He posited a Trinitarian and pneumatological theology (a branch of theology that deals with the Holy Spirit) in which the Spirit is understood as the creative source of life and energy in the universe. This has the potential of addressing this tension, but it remained undeveloped in Calvin's theology.

God created the Earth for the good of human beings and it is to be received by them with thanksgiving. As such human beings are to act as good stewards of creation, caring for it, treating otherkind with justice and adopting a frugal lifestyle. Human sin is the ungrateful rejection of God that has brought catastrophe to the created order. Salvation is God's action to restore creation to its original purpose through the transformation of human beings. Regenerate human beings are called to act to advance this restoration by working for the reformation of all of life.

The eschatological redemption of humanity will result in the cleansing and restoration of creation. In this renewed creation, God will indwell all creatures and not only humanity.

The debates of post-Reformation Reformed scholasticism placed an even greater focus on the salvation of humanity and neglected the nonhuman creation. To the extent that the subject was addressed, most of Calvin's emphases were followed. The only changes were in attempts to give greater precision to the understanding of the relationship between first and secondary causation. The concept of the eschatological redemption of the Earth became a subject of debate with some theologians rejecting the idea. Calvin's incipient Trinitarian approach to creation was neglected.

The American revivalist and theologian Jonathan Edwards (1703–1758) provided the first significant development after Calvin in the understanding of nature as he attempted to relate Reformed scholasticism to developments in science and the experiences of the Great Awakening. Edwards had a deep appreciation for the natural world. This was combined with his relational, dispositional and occasional ontology, which opened the way for a more dynamic understanding of the relationship between God and creation. Edwards rejected an understanding of reality as composed of substances; he proposed instead that reality is composed of law-like dispositions or habits which are actualized in response to divine activity, hence reality is dynamic. Further, for Edwards, habits are inherently relational. Hence, an entity is what it is by virtue of its relationships. Furthermore, for Edwards, creation is radically dependent on God, who is constantly creating it out of nothing. Central to Edwards' understanding of God was God's disposition to communicate Godself. This disposition was fully actualized in the relationship between the persons of the Trinity among themselves. Yet it is further

actualized outside the Trinity in the creation of the universe, which is a finite repetition of the divine being. Edwards argued that beauty is constituted by relationships, hence God as Trinity is the ultimately beautiful one. As creation is the repetition of divine being, its beauty is a reflection of God's beauty. Regeneration enables humans to perceive the natural world in a new manner. It is now perceived in relationship to God and hence in its true beauty as providing images of divine realities. Here again nature becomes the meeting place between God and regenerate human beings. The new perception of creation in relation to God provides new insights into God's concern for creation, so that Edwards can argue that God is even concerned about the enjoyment experienced by spiders! Yet paradoxically Edwards argued that the eschatological destiny of the Earth would be destruction and God would bring about out a new, radically reconstructed creation.

The German theologian Friedrich D.E. Schleiermacher's (1768–1834) reworking of the Reformed tradition in the aftermath of the Enlightenment, and under the influence of Romanticism, brought a greater identification of God with nature. He so emphasized that God was the cause of all things that the distinction between Creator and creature almost disappeared. Schleiermacher argued that God is experienced as the infinite unity that underlies and brings wholeness to the diversity of finite things. Thus the sense of absolute dependence on God, which was for Schleiermacher the essence of religion, is no different from the sense of the determination of all things by nature. Nature in turn provides numerous diverse stimulations to the sense of absolute dependence.

After Schleiermacher the Dutch neo-Calvinist theologians Abraham Kuyper (1837–1920) and Herman Bavinck (1854–1921) returned to and developed Calvin's incipient Trinitarian approach to creation. The origin of creation is from the Father, the Son arranges and specializes creation, and the Spirit perfects, individualizes, energizes and gives life to creation. This Trinitarian perspective forms the basis of an organic rather than a mechanistic understanding of nature. As with Calvin, the neo-Calvinists argued that the present creation has been broken and distorted by the Fall and will be renewed and restored at the return of Christ. While they emphasized the continuity between creation and new creation, this was not understood as a mere return to paradise but as a transformation of creation into something far more wondrous. In the mid-twentieth century Gerrit C. Berkouwer followed Kuyper and Bavinck in rejecting creation-negating theologies. He proposed a holistic anthropology that rejected the division of human beings into two distinct parts, soul and body, and further argued that the doctrines of the resurrection of the dead and the new heaven and new Earth were to be interpreted as affirmations of the body and earthly life. Some followers of Kuyper and Bavinck developed a creation-centered philosophy, theology and ethics in which ethical norms could be derived from an examination of nature through the spectacles of scripture. Christians were called to a stewardship of all spheres of life in order to transform them in accordance with these creational norms. This creation-centered theology has provided an important basis for the development of an ethic of care toward creation by some neo-Calvinists and conservative evangelicals.

Nature played a minor role in Karl Barth's (1886–1968) renewal of the Reformed tradition. In response to the role played by nature in theological liberalism and in theological support of Nazism, Barth rejected the idea of natural revelation or of a natural point of contact between humanity and God. While his doctrine of creation emphasized that creation was a product of the intra-Trinitarian relationship between the Father and the Son and the co-creaturehood of human beings with otherkind, the focus was almost exclusively on humanity which was elect in Christ. The nonhuman creation was merely the stage for the drama of salvation enacted by God and the human creature.

The second half of the twentieth century produced a number of Reformed perspectives on nature that used a Trinitarian perspective to respond to the corrosive forces of modernity. The German theologian Jürgen Moltmann integrated ecological themes into all the interdependent dimensions of his theology thus portraying ecological concern as integral to Christianity. Among his contributions is a Trinitarian panentheism in which God indwells the world and the world indwells God. In this model the Spirit is the source of individualization and life as the indwelling presence of God. At present, creation experiences finitude and suffering but its destiny is to be transformed into a radically new creation that will be the home of God. This understanding is interrelated with his rejection of the traditional notion that humanity is the crown of creation for which Earth and heaven were brought into being. In contrast he argued that creation was brought into being for the glory of and indwelling by God. He thus interprets the first creation story in Genesis as portraying the Sabbath, which prefigures the eschatological indwelling of God with creation, and not human beings as the crown of creation.

The British theologian Colin Gunton has also developed a Trinitarian perspective on creation in response to modernity's monistic and homogenizing tendencies that have resulted in the modification, exploitation and degradation of Earth. He argued that this is a consequence of a portrait of humanity based on an inversion of the traditional monistic and despotic portrait of God. The neglect of creation in Christian theology is a consequence of such monistic understanding. In contrast he argued for a Trinitarian understanding of God and creation in which the Spirit is the source of the diversity of creation and its interdependence, yet in such a way that the distinction between Creator and creature is preserved. Gunton has emphasized the continuity between creation and new creation and argued that the Spirit acts as an Other who draws creation to its eschatological transformation. The relationship between humanity and other creatures must arise out of a respect for their Spirit-derived diversity, particularity, interdependence and their eschatological destiny.

Wesley Granberg-Michaelson, an American Reformed church leader, theologian and former World Council of Churches staff person has made a significant contribution to mobilizing churches and Christians in the struggle for eco-justice and to ecumenical theological reflection on ecological issues. In focusing his theology on the struggle for eco-justice he has brought to the foreground the idea of God's concern for all creation

that is implicit within the Reformed tradition. He has rejected the traditional doctrine of *creatio ex nihilo* (creation out of nothing) as overemphasizing the distinction between God and creation and proposed that it be replaced by an emphasis on God as the source of creation and creation as an expression of the life of God. He has also rejected the idea of creation as “fallen” arguing instead that death and the predator-prey relationships are part of God’s purpose for creation. However the nonhuman creation is affected by human sin. God’s purpose for creation is its comprehensive well-being (designated by the Hebrew word *shalom*); human sin breaks the relationship between God, humanity and the nonhuman creation, resulting in oppression of humanity and the exploitation of nonhuman creation. Hence, rebellion against God, social injustice and ecological destruction are dynamically and reciprocally related. Salvation in Christ restores these relationships and hence the struggle for eco-justice is central to the identity and mission of the Church.

The American ethicist James M. Gustafson has proposed an alternative retrieval of the Reformed tradition by relating its theocentric dimension, contemporary scientific portraits of the universe and an understanding that the knowledge of God is mediated through our experience of reality, including nature. God is the powerful Other whose ordering activity can be perceived in the complex interdependencies of the natural world. Gustafson rejects any concept of God’s ordering the universe for the good of humanity or for that matter the good of any other creature. Humanity is just one species among many others that participates in nature. God’s ordering of nature makes human good possible but does not ensure it, which provides both limitations to and opportunities for the exercise for human activity. Human beings are called to responsible action based on a respectful contemplation of the complexities of nature that arise from a sense of awe before God who has ordered it.

Historic Reformed confessions of faith have been anthropocentric with little if any reference to the nonhuman creation. Some recent confessions, notably *The New Confession* of the Presbyterian Church in the Republic of Korea (1972), *The Confession of Faith* of the Presbyterian and Reformed Church in Cuba (1977), *The Song of Hope* of the Reformed Church in America (1974), *A Declaration of Faith* of the Presbyterian Church of the USA (1976), *The Confession of 1967* of the United Presbyterian Church in the USA and *A Brief Statement of Faith* of the Presbyterian Church (USA) (1991), have to varying degrees affirmed that God cares for all creation, that the exploitation and degradation of creation is a form of sin, that humanity has a responsibility to care for creation, and that salvation embraces the nonhuman creation.

David N. Field

Breakout Box Begins: The Reformed Tradition in its Own Words John Calvin

In Calvin's theology of creation, nature's continued existence, vitality and life is a product of God's constant activity and in particular the work of the Spirit. In his summary of Christian theology, *The Institutes of the Christian Religion*, he thus argues:

[I]t is the Spirit who, every where diffused, sustains all things, causes them to grow, and quickens them in heaven and on earth. Because he is circumscribed by no limits, he is excepted from the category of creatures; but in transfusing into all things his energy, and breathing into them essence, life and movement (1960: 138).

In a similar manner he comments on Acts 17:28, stating:

God Himself distinguishes Himself from all creatures so that we may realize that strictly speaking He alone is, and that we truly subsist in Him, seeing that He quickens and sustains us by His Spirit. For the power of the Spirit is diffused through all parts of the world, to keep them in their place; and to supply the energy to heaven and earth which we see, and also movement to living creatures. This does not mean the way that crazy men talk nonsense about all things being full of gods, and even the very stones being gods, but that by the wonderful activity and instigation of His Spirit God preserves all that He has created out of nothing (1966: 119–20).

As a consequence of this understanding of God's activity in creation, Calvin portrays nature as demonstrating the character and glory of God. He thus comments on Psalm 104:1,

. . . although God is invisible, yet his glory is conspicuous enough. In respect of his essence God undoubtedly dwells in light that is inaccessible; but as he irradiates the whole world by his splendour, this is the garment in which He who is hidden in himself, appears in a manner visible to us . . . That we may enjoy the sight of Him, He must come forth to view with His clothing; that is to say, we must cast our eyes upon the very fabric of the world, in which he wishes to be seen by us (1949: 145).

A similar thought is expressed in his "Preface to Olivétan's New Testament."

[God] has raised everywhere, in all places and in all things his ensigns and emblems, under blazons so clear and intelligible that no one can pretend ignorance is not knowing such a Sovereign Lord, who has amply exalted his magnificence; who has in all parts of the world, in heaven and on Earth written and as it were engraved the glory of his power, goodness, wisdom and eternity . . . For the little birds that sing, sing of God: the beasts clamour for him; the elements dread him; the mountains echo him; the fountains and flowing waters cast their glances at him; and the grain and flowers laugh before him (1958: 59–60).

This characteristic of creation means that nature can become a meeting place between God and humanity. Calvin thus states: "[T]he skillful ordering of the universe is for us a sort of mirror in which we can contemplate God, who otherwise is invisible" (1960: 52–3).

It thus places humanity under an obligation to appreciate the wonders of nature; thus in summarizing the significance of the account of creation in Genesis, Calvin argues:

We see indeed, the world with our eyes, we tread the Earth with our feet, we touch the innumerable kinds of God's works with our hands, we inhale a sweet and pleasant fragrance from herbs and flowers, we enjoy boundless benefits, but in these very things of which we attain some knowledge, there dwells such an immensity of divine power, goodness and wisdom, as absorbs all our senses (1948: 57).

God's constant activity in the universe is an expression of God's love for creation; he thus comments on Psalm 104:16 that "no part of the world is forgotten by [God], who is the best of fathers, and . . . no creature is excluded from his care" (1949: 160).

Human beings are called to express a similar concern for God's creation; commenting on Genesis 2:15 he states:

. . . the custody of the Garden was given to Adam, to show that we possess the things which God has committed to our hands, on the condition, that being content with a frugal and modest use of them, we should take care of what shall remain. Let him who possesses a field so partake of its yearly fruits, that he may not suffer the ground to be injured by his negligence; but let him endeavour to hand it down to posterity as he received it, or even better cultivated. Let him so feed on its fruits, that he neither dissipates it by luxury, nor permits it to be marred or ruined by neglect. Moreover, that this economy, and this diligence, with respect to the good things which God has given us to enjoy, may flourish among us; let every one regard himself as the steward of God in all things he possesses. Then he will neither conduct himself dissolutely, nor corruptly by abusing those things which God requires to be preserved (1948: 125).

Jonathan Edwards

In his delightful observations of a spider Edwards praises the "exuberant goodness of the Creator, who hath not only provided for all the necessities, but also the pleasure and recreation of all sorts of creatures, even the insects" (1980: 161).

Abraham Kuyper

In his discussion of the Spirit's role in creation Abraham Kuyper argues that:

God's glory in creation appears in various degrees and ways. An insect and a star, the mildew on the wall and the cedar in Lebanon, a common labourer and a man like Augustine, are all creatures of God; yet how dissimilar they are and how varied their ways of glorifying God (1975: 23).

For Kuyper, the Spirit gives dynamism and life to the universe, he thus comments,

We observe . . . in the host of heaven a life material, outward, tangible which in thought we never associate with the Holy Spirit. But, however weak and impalpable, the visible and tangible has an invisible background. How intangible are the forces of nature, how full of majesty the forces of magnetism! But life underlies all. Even through the apparently dead trunk sighs the imperceptible breath. From the unfathomable depths of all an inward hidden principle works upward and outward . . . And what is this quickening and animating principle but the Holy Spirit? (1975: 25–26).

David N. Field

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See also: Afrikaner Theology; Christianity (6c1) – Reformation Traditions (Lutheranism and Calvinism).

Christianity (6c3) – Anabaptist/Mennonite Traditions (Reformation Traditions)

The Anabaptist/Mennonite tradition, the “left wing” of the Reformation (ca. 1525), protested the conflation of the Church and state (i.e., the “corpus Christianum”), rejected the late medieval church’s sacramentalism, and resisted coercion in matters of faith and practice. It has emphasized the ethical dimensions of the Christian Faith, obedience to Christ, strict congregationalism and rejection of hierarchical authority structures.

The relationship of Anabaptist/Mennonites to nature has been very intense. Violent persecution by Roman

Catholic and Protestant “state churches” forced the Anabaptists to develop a unique theological and cultural ethos. They settled in isolated areas and introduced innovative farming and conservation practices. Their formal theology of nature and creation remained undeveloped, but nevertheless they worked out their understandings of Christian existence in the world based on their fundamental theological starting point, the nature of Christ’s “new creation” in the midst of the old.

In the place of the “sacramental theology” which included the “created order,” influenced considerably by the “Chain of Being” philosophy in the late medieval church thinking, early Anabaptists preached the “new creation” and accepted an implicit philosophy and theology that moved the creation to a more peripheral status in practice. Placing highest importance on the “new creation,” Mennonites tended to downplay the “fallen creation” as insignificant in God’s redemptive plan.

David Kline on Amish Agriculture

David Kline is an Amish farmer in Holmes County, Ohio. He and his family run a diversified family farm – the same farm he was born on. Kline writes regularly for the Amish magazine *Family Life*, and his essays from that publication have been collected in two books, *Great Possessions: An Amish Farmer’s Journal* and *Scratching the Woodchuck: Nature on an Amish Farm*. He writes about the plants and animals he encounters on his land and in his neighborhood, about agricultural and natural cycles, and about Amish community and family life.

What are the lessons, if any . . . to be learned from our way of farming? Is it a way of farming that preserves the soil, the water, the air, the wildlife, the families that work the land, and the surrounding communities? In other words, are we proper caretakers or stewards of God's Creation? Are we in harmony with God and nature?

To write about Amish agriculture is to write about traditional agriculture, and agriculture dating back to eighteenth-century Europe, handed down from generation to generation and yet with innovations and improvements constantly added along the way. The Amish are not necessarily against modern technology. We have simply chosen not to be controlled by it (Kline 1990: xv).

Much of Kline's work celebrates the details he notices while plowing with a team of horses or walking his orchard or woodlot. He is a keen observer and passionate celebrator of the intricacy and beauty of the natural world.

It is amazing that the huge green cecropia larva on our apple tree, with its many segments and legs, could spin itself inside a cocoon, and while doing so already begin to shrink in size – to reappear ten months later, without having eaten a bite, a fully developed insect with three segments and three pairs of legs, one of the most beautiful creatures in God's Creation. I can't comprehend a change so complex and so complete. When I think of it I feel like Ezra: "And when I heard this thing,

I rent my garment and my mantle, and plucked off the hair of my head and my beard and sat down astonished [amazed, astonished]" (Kline 1990: 127).

Kline also reflects on the contribution made by traditional Amish agriculture to both human and natural communities, and the contrast between this way of life and that of most North Americans. He "began to realize what community is really all about," he writes, when he moved to the city to start his conscientious objector service during the Vietnam War. (The Amish, like most Anabaptists, are committed pacifists.) After finishing his term of service,

I returned to a community that choose to work with their hands, believing manual labor is close to godliness. A community where technology is restricted and "book learning" is frowned upon. Where even the hymns are passed on without the notes being written down. In this culture, you learn from a master. There is always someone who possesses the arts and skills you need (Kline 1997: 194–5).

In this community, labor is supplied by draft animals and humans, children working alongside parents, neighbors along neighbors. This makes it possible not only to make a living with a minimal amount of machinery and fossil fuel but also to work, on many occasions, "beyond the grips of the money economy" (Kline 1997: 204). In his writing, Kline offers a gentle, religiously grounded critique of many aspects of industrial agriculture and society, while celebrating a thriving, yet largely hidden, alternative society.

Anna Peterson

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See also: Berry, Wendell; Jackson, S. Wesley "Wes."

The Anabaptists developed an ethical dualism of the "two kingdoms": the "fallen kingdom of this world," comprised of rebellious human beings and structures, and God's kingdom, composed of those who lived under God's rule in the "new Kingdom." The Mennonites have been less clear, however, about nature's place (GOOD) as part of God's creation and the coming "Kingdom of our Lord." Some early Anabaptist leaders understood nature as part of God's cosmic plans, but later Mennonites tended to include nature in the fallen and rebellious kingdom, viewing it as in need of redemption. This derived partly from the classical medieval church, which, in turn, was derived from the Apostle Paul in Romans 8:11–23, and other of his epistles.

Four theological emphases have, however, kept Anabaptist/Mennonites tied to the created order. First they believed that Jesus of Nazareth was truly and fully human yet God's true son; thus, through Christ, God was eternally joined with creation. Creation is not, therefore, to be rejected or ignored, but included in the purposes of God. Second, as Jesus by God's grace lived the existential realities of first-century Palestinian culture, so also do his followers of every age recapitulate by faith and the character of their discipleship, his life, death, resurrection. Third, they believed that in the mystery of God's providence, God was somehow present in all things including the movements of nature and moral life. Fourth, God's redeeming grace is experienced most fully when it is embodied in sacrificial love through peace and justice for all God's creation.

Nevertheless, the Mennonite view of nature developed ambiguously – "The problem was that the 'rebellious world' and the natural nonhuman world were not conceptually or existentially separated, and thus, in the process, nonhuman creation became identified with the evil in the world from which the pure were to abstain" (Ackley-Bean in Redekop 2000: 184). The Mennonite tradition was thus not equipped to see nature as part of the creation that God cared for and loved. Consequently, the positive role that nature would play in the redemption of creation and humankind has only recently been explored, and human responsibility for the care of nature as a requisite for human redemption has not been fully developed.

Nature, defined as the totality of material reality, including the terrestrial universe and planet Earth, therefore has had relatively little influence on Mennonite theology and philosophy. Nature (biblically defined as "the Creation") would be redeemed at the day of the *Resurrection* and *Last Judgment*, as would the human race. More recently, especially due to influence by evangelical/ fundamentalist theology, the theological significance of nature has declined. Moreover, focusing on nature came to be associated with the mysticism of the Catholic tradition (Martin), with secularization, or even

worse, with paganism or pantheism (i.e., the worship of the created rather than the Creator [Paul in Romans]).

The Mennonite theological reflection on nature has been minimal. Nature was seen as a practical requisite for humans, which provided the basis for building the kingdom of God, who would glorify and honor him. Ironically, however, most if not all of the confessions begin with God's first acts in the creation.

The Mennonite active relation to ecology is complex. The earlier European Mennonites and the Old Orders (e.g., Amish and Old Order Mennonites), who retain an agrarian life, have remained close to the land and view it almost as sacred. Hence agricultural attitudes and practices are oriented to enriching the soil and conserving and preserving natural resources, in order to guarantee future life in its fullness.

But as Mennonites became more acculturated into the economic and social mainstream, farming practices began to reflect more the "extractive" modes of contemporary agri-business. Research has shown that even the "Plain Peoples" were more extractive than restorative in their practices. In the non-agricultural economic sphere, as Mennonites modernized, beginning with Dutch Mennonite commercial corporations already in the early eighteenth century, they became hardly different from the prevailing commercial/free market capitalistic society.

But significantly, because of increasing pollution and the environmental movement, the Mennonite community has begun to become aware of nature, and has begun to promote awareness and action in response, including petitions to governmental entities. A "theology of nature" is beginning to emerge.

The most promising channel by which Mennonites will increase their commitments to and leadership in the environmental movement will be via its historical commitment to nonviolence, peace and justice, which by implication includes nonviolence to nature. Although this has been almost totally undeveloped, its awakening is illustrated by Walter Klaassen's, "Pacifism, Nonviolence and the Peaceful Reign of God," which maintains

The visions of the "peaceful reign of God" in Isaiah 11; Romans 8 and Revelation 21 and 22 offer a lot of specific details: peace within the animal kingdom, the total absence of injury and destruction [to nature]; [and] the liberation of the creation from entropy (in Redekop 2000: 148).

The increasing activity of the Mennonite community in promoting nonviolence, peace and justice will increasingly include nature. Mennonites increasingly realize that nonviolence, peace and justice cannot ignore nature, because in some ways it is the foundation or basis of all other levels of reality. It may be here that Mennonites will make their greatest future contribution.

Calvin Redekop

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See also: Berry, Wendell; Christianity (6c1) – Reformation Traditions (Lutheranism and Calvinism).

Christianity (6c4) – Anglicanism

The late twentieth century saw an increasing fascination with Irish and Hebridic Celtic Christianity among Anglicans, a trend that rekindled the memory of that Irish tradition's merging of lore, locale and nature with Christian elements. The Celtic Christian tradition employed numerous natural images for theological concepts, such as the shamrock as an image of the Trinity. Irish traditions, such as those of St. Patrick, St. Columba, and St. Brigid have been claimed as sources and inspiration for Anglican spiritualities and theologies, specifically as a resource for ecological spirituality. These texts emphasize kinship with nature, creaturehood, and expose belief in a sacramental universe. Other Hebridic traditions with significant naturalistic theological imagery include Julian of Norwich's writing. Over time, the forest as the counterpiece of city, town and village lodged itself into much of poetic and pious imagination, revived and recontextualized continually.

The concept and position of nature is distinct in English reformation thought. For Richard Hooker, nature is the voice of God, an instrument and teacher of humans.

Hooker's reading of natural law, which relates to Catholic texts, as well as to Protestant reformers' Paul-centered reading of natural law, portrays reason as a resource and tool of nature that allows humans to discern the law of God in creation. God's wisdom is visible in the laws of nature and in the doings of natural agents (Hooker 1907: Book I, VIII). Hooker's continuity with the Catholic natural law tradition was controversial in his time and he was accused of promoting "Romishe doctrine" in conflict with the Thirty-Nine-Articles.

During the early colonization of the so-called "new world," a number of Anglican clergy developed a rhetoric that supplied colonialists with a theology that justified the appropriation, use, and ecological invasion of the colonized lands, animals and plants. Thus Anglican divines such as geographer Richard Hakluyt, Samuel Purchas and poet John Donne justified the disruption of ecological systems by appealing to a divine plan of salvation, arguing that colonization would hasten the coming of the kingdom. Hakluyt's promotion campaign of English settlements along with Purchas' rhetoric helped establish myths of superiority that served to create habits and thought structures of exploitation perceived as salvation through the spread of a superior culture and (Protestant) faith. The contemporary Anglican Communion is an ecclesial structure that has grown with the expansion of British and U.S. cultural and economic imperialism. Notions of cultural and religious superiority over and against colonized peoples and nature pervade colonial British literature.

At the same time, there are clergy, missionaries, theologians and poets whose writings represent early sources of emerging modern as well as contemporary environmental concerns. Thus the Anglican divines and metaphysical poets Thomas Traherne, John Donne, George Herbert, Henry Vaughan and Nicholas Ferrer continued to see (paradise) nature as a location of divine revelation and provided sources for later British romantic writers, who merged theological and spiritual quests with explorations of nature. Strong imagery is also used to read into nature the state of human “fallenness” and impermanence. The British Romantic poets, though their writings hailed relatively cultured and managed picturesque British park landscapes rather than the remaining wilderness of colonized lands, can be seen as early antecedents of contemporary environmental movements. Whereas for the mystical poets nature was symbolic of divine forces beyond the human world, in romantic writers such as Blake, Wordsworth and Coleridge nature inhabits space in the poetic imagination no longer as consistently expressive of orthodox theological sentiment. The Romantic poets also critiqued Enlightenment efforts to master nature, searching for a symbiosis of mind and nature that challenges the mercantilism and commercialism of Western societies. Denise Levertov and others have continued in this tradition of Anglican natural poetry.

The growth of the environmental movements in the late twentieth century is manifested, among others, in the Episcopal Church, USA, whose Episcopal Ecological Network, a subdivision of the Episcopal Church’s Peace and Justice Ministries Office, was designed to help the Church’s grassroots groups preserve the sanctity of creation. Local centers are the Cathedral Church of St. John the Divine in New York City and Grace Cathedral in San Francisco. St. John the Divine emphasizes environmental stewardship, celebrating annual Gaia masses and St. Francis Day celebrations. St. John also headquarters the National Religious Partnership for the Environment (NRPE). San Francisco’s Grace Cathedral houses *Episcopal Power and Light* and *The Regeneration Project*, helping churches to use renewable energy sources. As the Anglican community increasingly begins to listen to Anglican voices from former colonies, the environmental and economic destruction of the Anglican colonial past will have to be constructively addressed.

Marion Grau

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See also: Cathedral of St. John the Divine; Celtic Christianity; Gaian Mass; Lever-
tov, Denise.

Christianity (6c5) – Methodism

The Methodist tradition traces its roots to the preaching, hymnody and small-group organizational ministry of brothers John (1703–1791) and Charles (1707–1788) Wesley, both of whom remained dedicated to the Church of England throughout their lives. The Methodist movement, then, was intended by the Wesleys to serve as a source of renewal within Anglicanism and beyond to other Christian bodies.

The Wesleys' social location within eighteenth-century Anglicanism makes it unsurprising that they tended uncritically to inherit medieval notions of spirit–matter dualism and a “great chain of being” in which the human being, as a composite of body and soul, occupies the middle place. In this traditional body–soul dualism, the soul has inevitably received almost all of the attention, often to the neglect or even despising of the body and all things material.

Given this inheritance, it is noteworthy that in his sermons and other writings John Wesley moved toward affirmations of the goodness of creation and bodily existence, God's radically immanent presence in the world, and the inherent value of all living things. In his five-volume natural philosophy, *A Survey of the Wisdom of God in the Creation* – admittedly inspired (probably to the point of what today would be considered plagiarism) by the work of German philosopher Johann Franz Budde (1667–1729) – Wesley marveled at the intricate beauty and complexity of our world, arguing that “by thus acquainting and familiarizing ourselves with the works of nature, we become as it were a member of her family, a participant in her felicities.” On the other hand, remaining ignorant of the vast world around us is to be “strangers and sojourners,” “unknowing and unknown” within our very home (Wesley 1823: vol. 1, viii).

Wesley also became increasingly convinced that God's saving work through Jesus Christ was of a holistic and even cosmic nature. For him, salvation truly was a process of *salving* or healing of all dimensions and relations in human existence, and indeed of all creation. The most dramatic expression of this idea is undoubtedly his 1782 sermon “The General Deliverance,” a literary piece widely cited in contemporary ecotheological writings. In this sermon, based on Paul's vision of a redeemed and liberated creation in Romans 8:19–22, Wesley pressed the following themes: 1) that the love and compassion of God extend to each and every sentient creature; 2) that the suffering of all creatures, including of course that inflicted by human beings, matters to their Creator, who “will make them large amends” in the world to come; 3) that all creatures therefore will somehow participate in a general resurrection from the dead; and 4) that these considerations should “enlarge our hearts towards those poor creatures” (Wesley 1984:

vol. 2, 449) such that human beings might more adequately and authentically reflect God's infinite love toward all of creation.

Wesley's vision of a salved world – a world being progressively healed by the love of God through Jesus Christ in the sanctifying power of the Holy Spirit – had several practical implications. In his evangelistic travels he gathered local remedies for common ailments and illnesses, publishing *Primitive Physick: An Easy and Natural Method for Curing Most Diseases* in 1747. Virtually all of nearly 300 “cures” in this collection would qualify today as homeopathic. The quaint little volume also recommended a vegetarian diet, and evidence suggests that Wesley himself adopted vegetarianism at roughly the same time *Primitive Physick* was published. He also followed with interest Benjamin Franklin's experiments in electricity, and even fashioned a rudimentary electro-shock therapy instrument for the benefit of others and himself. Wesley clearly was interested not only in the future healing of God's creation, but in the healing properties of nature in the present.

Meanwhile, John Wesley's brother Charles was creating a body of hymns by which to guide Methodists in their worship, for both Wesleys took seriously the educational and formative role of hymnody. One of Charles Wesley's most remarkable hymns is a celebration of the intimate relation between God and all creatures. One of its verses, for instance, reads:

Thou art the Universal Soul,

The Plastick Power that fills the whole, And governs Earth, Air, Sea and Sky, The Creatures all Thy Breath receive, And who by Thy Inspiring live,

Without Thy Inspiration die (in Lodahl 2004: 15).

The Methodist movement after the Wesleys, however, tended not to sing such songs nor to follow very near the Wesley brothers' willingness to describe God as “the soul of the universe.” The Wesleys' theological heirs of the nineteenth century were embroiled largely in debates with Calvinists over the issue of the role of human agency in the process of salvation, and thus rarely moved beyond anthropocentric concerns. That situation did not improve – and may have worsened – with the ascendancy of personalism as the predominant school of philosophy in Methodist higher education and religious instruction in the late nineteenth and early twentieth centuries. Promulgated especially at Boston University and the University of Southern California, both Methodist institutions, but widely influential in most Methodist circles during the era, this philosophy found ultimate reality and value in the ontological category of “person.” This was a category in which God and human beings shared – as opposed to, and in distinction from, everything else in reality. Nothing else but “person,” in fact, was deemed to be ultimately real. Nature was seriously devalued if not entirely ignored, and personalistic reflection upon human existence assumed a distancing from, and generally a triumph over, the world of nature.

Only with the ascendancy of the ecological crisis did Methodist theological reflection begin seriously to turn toward the world. United Methodist minister and teacher John B. Cobb, Jr., raised the question in 1972 with *Is It Too Late? A Theology of Ecology*,

but did not offer an explicitly Wesleyan answer. Indeed, it was not until 1995 that Cobb, in *Grace and Responsibility: A Wesleyan Theology for Today*, consciously drew upon his Methodist heritage to reflect upon ecological issues. He argued persuasively that “Wesley’s teaching . . . calls for respect for all creatures, recognition of the importance of biodiversity and complex ecosystems, and working together with God for the benefit not only of human beings but of all other creatures as well” (Cobb 1995: 53).

Similarly, Methodist theologians such as James Nash, Jay McDaniel and Theodore Runyon have argued that attentiveness to John Wesley’s vision for a new creation, centered in the universal love of God, has potent implications for contemporary eco-theology and practices. Nash’s and McDaniel’s references to Wesley have tended to be piecemeal, drawing mostly on the sermon discussed above, “The General Deliverance.” Runyon, however, in his 1998 work *The New Creation: John Wesley’s Theology Today* has offered a thorough portrait of Wesley’s preaching and ministry that readily undergirds responsible ecological practices. According to Runyon, Wesley understood the biblical teaching that human beings are created in God’s image to imply a responsibility to care for God’s creation, to re-present to the world the compassion and love of the Creator. “Thus,” Runyon comments, “humanity is the image of God *insofar* as the benevolence of God is reflected in human actions toward the rest of creation” (Runyon 1998: 17).

It was this impetus toward a new creation “renewed in love” (to borrow a favorite phrase of John Wesley) – a renewal made possible as human beings are restored through Christ toward becoming responsible bearers of God’s image as “pure, unbounded love” (in the hymnic phrase of Charles Wesley) – that undoubtedly moved the United Methodist Church’s Council of Bishops to issue their 1986 joint statement, *In Defense of Creation: The Nuclear Crisis and a Just Peace*. Written in the face of the imminent danger of the destruction of much, if not all, of the life on planet Earth by nuclear war, the pastoral letter charged United Methodists to become evangelists of shalom, making the ways of Jesus the model of discipleship, embracing all neighbors near and far, all friends and enemies, and becoming defenders of God’s good creation, and to pray without ceasing for peace in our time.

Such counsel is true to Charles Wesley’s hymnic prayer that God might be: *Pleased to restore the ruined Race,*

Michael Lodahl

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See also: Christianity (7f) – Process Theology; Cobb, John (and adjacent), *The Making of an Earthist Christian; Natural Law and Natural Rights*.

Christianity (7a) – Theology and Ecology (Contemporary Introduction)

The systematic effort by modern Christian theologians to review traditional doctrines in light of a growing ecological awareness has been called *environmental theology* or *eco-theology*. Such ecological revisioning involves Christian teachings about (1) God, (2) Creation, (3) the

Fall, (4) the Covenant, (5) Christ, (6) the Church, and (7) Eschatology. intrinsic value to all creatures and the intricate natural systems to which they belong. Some see human beings as no more special than other creatures; their main ethical challenge is to fit in (e.g., Elizabeth Dodson Gray). Others continue to affirm the traditional tenet of Christian anthropology that human beings are created in the image of God, with unique gifts of reason and will and matching responsibilities toward the rest of creation. This mainstream view implies an ethic based on the agent as steward or co-creator (e.g., Thomas Sieger Derr, Pope John Paul II). the creative love of Christ fills the entire universe and becomes manifest in human compassion (e.g., Matthew Fox).

In short, increasing awareness of the contemporary ecological crisis has precipitated many new trends in Christian theology. Eco-theology promises to remain an area of creative theological reconstruction in years to come.

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See also: Altner, Günter; Boff, Leonardo; Christianity (7e) – Creation Spirituality; Fall, The; McFague, Sallie; Moltmann, Jürgen; Ruether, Rosemary Radford.

Christianity (7b) – Political Theology

The new “political theology” grew up in Germany after the Second World War. The shock of Auschwitz, and the shock too at the failure of the churches during the Hitler dictatorship, made resolute political responsibility on the part of Christians a necessity. In modern society religion may be “a private affair,” but the Christian faith is not a private matter. For Christ’s sake, Christians take the part of the humiliated and the oppressed, and set themselves against the perpetrators of violence. Christians are critical of political religions and ideologies of power, because they live in remembrance of the crucified Christ and, in a culture of forgetfulness, keep alive the recollection of suffering. Political theology is also called *public theology*, because it raises a critical voice in society’s public questions, and does not confine itself to the churches. When liberation theology came into being in Latin America, political theology in Europe joined forces with it, because “the preferential option for the poor” and hope for the kingdom of God in the world were common to them both. In 1972 the first report of the Club of Rome on the condition of nature appeared. With this date, awareness of the ecological crises began to penetrate public consciousness. For political theology and liberation theology, tormented nature became theology’s third subject, side by side with politically humiliated and economically exploited men and women. The ecological crisis is a crisis of modern scientific and technological civilization as a whole; it is not confined to the foundations of that civilization’s natural life. It denotes not only a moral crisis of humanity but a religious crisis too. The *ecological theology* which is developing is an attempt to find a new cosmic mysticism, in which God is revered in nature and nature in God. This theology is critical of the modern culture of rule over nature, and strives for a *community* of culture and nature which will be viable and sustainable. It tries to achieve a caring environmental policy and, not least, attempts to liberate nature from inhumane oppression. Political theology began with talk about God in the face of a catastrophe in the political world; it now directs its talk about God toward the ecological crisis of the modern world.

The modern culture of rule and the ecological crises which are the result arose from Christianity in its Western form. So is the Christian faith itself a factor in this crisis? Four points are discussed in this context:

- 1) The biblical destiny laid upon human beings to “subdue the Earth” (Gen. 1.28) is made responsible for the boundlessness of the human will for power.

2) The biblical destiny laid upon human beings to be the image of God (Gen. 1.26) sets them apart from all other creatures and above the earthly community of creation. Whereas in other beings only “traces of God” can be detected, the human being is supposed to be God’s “image” and his representative on Earth. So human beings are not just part of nature; they are set apart as persons with unique dignity. According to modern interpretation, this dignity lies in their quality as determining subjects: only human beings are the subjects of understanding and will – all other created beings can be made their objects. With this, the subjugation of nature and the instrumentalization of their own bodies are laid in the hands of men and women.

3) Both these biblical destinies have contributed to the total anthropocentrism of Western and modern civilization. This anthropocentrism drove out the cosmocentrism of the ancient world. And today the Asian and African ordering of human culture into the wisdom of nature is also falling victim to this Western culture of domination.

4) The most enduring influence of all was exerted by Jewish and Christian monotheism: God is the transcendent Creator and Lord of the world; the world is robbed of all divine mystery, and nature is stripped of its magic and secularized. In Western culture, the divine is seen in the spiritual not the material, in the soul not the body and, not least, on the side of the male not the female.

If it is these ideas in the Christian tradition which are responsible for the degradation of nature, it is here that the necessary reformation must begin.

1. Modern monotheism has stressed God’s transcendence and suppressed his immanence. But according to the biblical idea, God is present through his Spirit and his Wisdom in all created things. It is the Trinitarian idea of God which is alone able to bind together God’s transcendence and his immanence. God the Father, the Son, and the Spirit live with each other and in each other in a unique community (*perichoresis*); and in an analogous way God is present in creation, and creation in God. This divine fellowship fills the world. “No creature is so far from God as not to have him within itself,” said Thomas Aquinas. Some people talk about “the sacramental presence of God in nature”; other people say that nature is

“a parable of God”; still others read nature as “the book of God’s Wisdom,” and from this idea arrive at a new *natural theology*. The reverence for life which Albert Schweitzer talked about is caught up into reverence for God. Reverence for God also embraces reverence for the divine presence in all created beings. All natural things have a transcendent inner side. Because of that inner side, our experiences of them can become experiences of God: God awaits us in all things.

2. Together with the perception or recognition of nature as creation in the Trinitarian framework of the doctrine of God, a new *cosmic Christology* has also developed. In the ancient world, human beings were dependent on uncomprehended forces or powers of nature; and so at that time the theme of cosmic Christology was “Christ and the powers.” In the postmodern world, with the spreading destruction of nature by human beings, the theme of cosmic Christology is “Christ and the cosmic catastrophe.” Modern theology had reduced salvation to the salvation of human beings, and in human

beings to the salvation of the soul. This led to the neglect both of the human body and of nature. But if Jesus is the divine Savior, his saving and healing power reaches as far as the bounds of God's creation. According to the Epistles to the Ephesians and Colossians, "all things on heaven and Earth" are therefore reconciled in him. In him creation also finds its deliverance – the creation which Paul describes in the Epistle to the Romans (8.19ff.) as "groaning" under the burden of transience and unfreedom. For the Church of Christ, this means a cosmic orientation. The Church represents the whole cosmos before God, and represents God before the whole cosmos. The destructions of nature on Earth are therefore the Church's sufferings too. The Church's hope is also the hope of the world for the new creation of all things into their enduring form (Rev. 21.4– 5). The apocryphal Gospel of Thomas lets Christ say: "I am the universe. The universe has come from me. The universe returns to me again. Cleave a piece of wood: I am there. Lift up a stone: you will find me" (Logion: 77).

3. With this, the position of the human being in the cosmos changes too. A *non-anthropocentric anthropology* becomes necessary. The turn to anthropology in the modern world was the result of a cosmology gone wrong and a surrendered theology: people no longer found any meaning in the cosmos, and God was held to be a projection of the human imagination. Consequently human beings have to construct their world for themselves. The technosphere replaces the biosphere, and the human being becomes the Lord and God of the world.

This provokes the fateful question: is the modern world inescapably the end of nature, or do we have to adapt the human world to the living conditions of the Earth? Are we rebuilding the planet into a huge spaceship for the existence of genetically adapted men and women, or do we find our place and our role in the nature of the Earth as it is? Logically speaking, every anthropocentric anthropology founders on the simple fact that nature was there before human beings, and will still be there after the human race has disappeared; for human beings are a late product in the evolution of life, and their era in the cosmos is certainly limited. Consequently the human race with its civilizations must adapt to the living conditions of nature if it is to survive – and this is true for modern and postmodern civilization too. If the human being is not the center and measure of all things, then it is wrong to talk about nature as "our environment" and Earth as "our planetary home." Nature is an interwoven fabric of many living spaces for many different living things, which human beings have to respect if they want to survive in the community of creation.

A fundamental idea of *ecological politics* is that this community of creation should be seen as a community under law. According to biblical tradition, God makes the covenant with Noah so that the Earth may survive "with you and your descendants after you, and with every living creature" (Gen. 9.9–10). Human rights, the rights of future generations, and the rights of nature belong together in a single covenant. So "every living creature" is a partner in the covenant together with human beings, and has its own dignity and its own rights. According to this federalist view of nature, animals are the "fellow creatures" of human beings, and this is the way they are defined in

the German Animal Protection Act of 18 August 1986. According to biblical tradition, the sabbath laws apply to human beings and animals (Ex. 20.10), and to the land too (Leviticus 25). Earth also has the right “to celebrate its great sabbath to the Lord” every seven years, and in that year is to be free of human exploitation. Following this ancient Hebrew ecological policy, we today need to integrate the United Nations Declaration of Human Rights of 1948 and the Covenants on Human Rights of 1966 with the World Charter for Nature of 28 October 1982. Every declaration on human rights begins with a recognition of human dignity. Is this dignity unique or – as the preamble to the Charter for Nature says – are human beings “part of nature?” Politicians who follow the declarations on human rights want to classify the protection of nature under the heading of individual human rights: human beings have a right to an unharmed “environment” just as they have a right to freedom from bodily harm. Nature is to be protected for the sake of human beings. In contrast, the Charter for Nature says: “Every form of life is unique, warranting respect regardless of its worth to man. . .” (U.N. World Charter for Nature: Annex). It is only when human rights are based on the dignity of all created things, not solely on the dignity of human beings, that they lose their anthropocentric character, which is hostile to nature, and minister to our common life. We need a legal framework for the community of all living things on Earth. There are proposals for enlarging the Universal Declaration of

Human Rights, so that it becomes a declaration of the rights of future generations and the rights of nature (Vischer 1990). Today crimes against humanity can be brought before international courts of justice, and in the same way crimes against nature must also one day be indictable in these courts.

Jürgen Moltmann; translated by Margaret Kohl

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See also: Boff, Leonardo; Christianity (7c) – Liberation Theology; Earth Charter; Fall, The; Moltmann, Jürgen.

Christianity (7c) – Liberation Theology

Liberation theology emerged in Latin America during the late 1960s as a theological and religious movement among Roman Catholic clergy and laypeople. The following decades saw the swift spread of its method among both Roman Catholic as well as Protestant Churches, especially in less affluent, southern hemisphere countries. These diverse practitioners were attracted by the specific approach and method of liberation theology, which can be defined as nondualistic, biblical-based praxis rooted in the experience of the poor. This theology was consciously developed in reaction to traditional European theology that focused on intellectual challenges to religion and both spiritualized the Gospel and romanticized poverty. The term liberation is drawn directly from the record of Jesus' first sermon in Luke 4:18–21, where the text states that Jesus had come “to liberate those who are oppressed.” Here the text recounts acts of salvation that encompass both the spiritual and the material dimensions of existence.

This new theological movement found its manifesto in the book *Theology of Liberation* by the Peruvian Roman Catholic theologian Gustavo Gutiérrez. In this book Gutiérrez focused on trends emerging both from Latin American socio-political realities and from the experiences of Church renewal initiated and theologically legitimated through the Second Vatican Council (such as the renewal in Catholic biblical studies), and the Episcopal Conference of Latin America (CELAM). This new approach to theology was spread by Roman Catholic theologians including Hugo Assmann, Leonardo Boff, Clodovis Boff, José Comblin, Virgil Elizondo, Ignacio Ellacuría, Francis Hinkelammert, João Alberto Libânio (Frei Betto), and Jung Mo Sung, and the Protestants José Míguez Bonino and Rubem Alves.

Liberation theologies stress the example of Jesus going first to the poor and oppressed and emphasize doing theology in specific social, political, and economic contexts, contrasting this approach with theologies that prioritize the formulation of abstract doctrine. The methodological priority on the poor was, liberation theologians claimed, what both the example of Jesus in the Gospels and the Latin American Bishops Conference (CELAM) insisted upon at its meetings in Medellín, Colombia in 1968 and Puebla, Mexico in 1979. At Puebla this priority was called the “(preferential) option for the poor.” The basic theological method was provided by the three-step practical prescription developed by the Belgian Joseph Cardijn (who later became cardinal), in Catholic Action, and was summed up in the slogan “see, judge, act.” The Brazilian theologian Clodovis Boff transformed these terms into liberation theology's

three methodological phases of the “social analytical,” the “hermeneutical” and the “practical-pastoral” mediations, respectively. The first mediation is probably the most striking, in that it proposed to use not the traditional theological partner of philosophy, but rather the social sciences, and in particular Marxist sociology. It was thought that this social science better described the actual material condition of the poor under capitalist economies in the Third World. After analyzing the actual sociological condition of the poor, the scriptures would be examined, their message interpreted in the light of the current situation, and then applied.

Liberation theologies’ stress on the social, economic and political dimensions of religion reflect the influences of European political theology on its first articulators, Gutierrez and Leonardo Boff, both of whom completed graduate work in Germany. Political theology emerged roughly a decade earlier than liberation theology, in post-World-War II Europe, and reflecting that situation, stressed the public nature and political relevance of religion. Hope for a better future became a central feature of both the Catholic theologian Johan Baptist Metz and the Protestant theologian Jürgen Moltmann, whose respective works *Theology of the World* (1967) and

Theology of Hope (1964) became widely influential. While liberation theologians drew on political theology’s emphases on the social and material dimensions of spirituality, they criticized it for its critique of the present that did not offer concrete political alternatives. They pointed out that without specific political choices, political theology remained as abstract and theoretical as the Western European Church situation it criticized. Therefore liberation theology claimed to make not only an option for the poor but also one for socialism and socialist political platforms as approaches most likely to offer justice in the social and economic realms. This focus on the economic and political dimensions, and the centrality of Marxist social analysis, was to change over the next two decades. First, liberation theologians recognized that traditional Marxist analysis had failed to recognize other forms of oppression outside of the economic and political, such as sexism, racism, and that of nature. Second, the dramatic collapse of existent socialism in 1989–1991 (and with it the Cold War) threw the political left into crisis, given the collapse of practical socialist alternatives.

Consequently, by the early 1990s the concept of liberation as only a historical, social and political process had been reconceptualized as part of a broader paradigm that included liberation not only from material poverty, but also from all forms of discrimination. The close involvement that these theologians had with the urban and rural poor brought to the fore the environmental degradation caused by poverty and the consequent effects on all humans and living beings. This experience led liberation theologians to recognize not only the similarities between the poor and nature, but also the interdependence of both and the necessity of common action. The issue of mass poverty thus became not only a political and religious issue but also a pressing ecological issue. The importance of ecology in Latin America and the prominent role of religion and voluntary associations were highlighted in 1992 when Rio de Janeiro hosted the United Nations Conference on the Environment and Development.

Ernst Haeckel in 1866 coined ecology as “the study of the interdependence and interaction of living organisms (animals and plants) and their environment (inanimate matter).” This definition refers not just to nature and humans, but also to varying levels of human and nonhuman interactions. To put this even more concisely, Leonardo Boff, who draws on Haeckel’s work, states “everything that exists, co-exists.” At the human level, this “nature of things” calls us from narrow disciplinary foci to interdisciplinary study, from a narrow class-based politics to those based on alliances. Such an approach comes from an awareness of the interconnectedness of all things, as Boff states, “ecology has to do with relations, interaction, and dialogue of all living creatures . . . among themselves and with all that exists” (Boff 1995: 8). This awareness is expressed in diverse ways by differing liberation theologians: Leonardo Boff, drawing on the work of Haeckel and Jan Smuts, speaks of a “holism,” and José Ramos Regidor of a “profound ethical ecology.” Liberation theologians and ecologists emphasize the ethical, political, and social dimensions of the ecological crisis. In much of Latin America, this recognition has provided a point of contact for alliances between civil servants unions, workers unions, religious groups, human rights organizations, student groups, minority groups, feminist and women’s organizations, and indigenous groups. As ecology is a shared concern of all people, it can serve as a bridge between activists from many groups and regions.

Perhaps not surprisingly, since Brazil comprises over half of the South American landmass and includes the Amazon basin and rainforest, the most significant work on liberation theology and ecology has come from Brazilian theologians, the (ex-) Franciscan Leonardo Boff and the ecofeminist Ivone Gebara. This is not to diminish the significant work done by other Brazilian theologians such as José Comblin, by others on the continent such as the Uruguyan Eduardo Gudynas of the Franciscan Institute in Montevideo, by José Ramos Regidor in Italy, or by others in Africa or Asia. However they generally follow these Brazilian theologians.

As early as 1976, Leonardo Boff applied the political interpretation of liberation to the ecological issue in an article relating Franciscan spirituality to the ecological crisis. In this article Boff declared that humans are faced with the choice of relating to things as “over things” or as being “with things.” In choosing the latter option he argued for a unitive and relational mysticism with all things, based on an Augustinian relational model of the Trinity or Christian concept of God. By the 1990s, Boff sought, in a series of works on ecology, “to connect the cry of the oppressed with the cry of the Earth” (Boff 1997: xi). In his understanding, an ecological liberation theology is a multi-dimensioned project, including the Western technological, political and social projects (in liberal or socialist forms), related in turn to the ethical, intellectual and spiritual dimensions. His work, outside of the theological, draws upon two major streams of thought. One is the evolutionary biology of Ernst Haeckel, whose definition of “ecological” Boff utilizes. The other is the concept of holism, coined by the South African statesman and philosopher, General Jan Christian Smuts. According to Boff, the science of ecology is the recognition that humanity is part of the intricate web of

life, and that men and women are its custodians and so responsible for the ongoing evolution of all life.

Boff's approach is described fully in his 1995 work entitled *Ecology and Liberation*. He relates ecology, defined as "the art of relations and of related things," to the Christian understanding of God as Trinitarian, understood thus as the paradigm of the relational. Adopting the holistic perspective already described, he links ecology and global consciousness and proceeds to argue for a new society that assumes the worth of every person and being. Participatory democracy as a universal value is the only polity that can ensure such rights and participation. Such a polity ensures that the material and social rights of the poor and of the ecological systems are addressed. Without this, environmental balance is not possible. Boff thus widens the scope of the "option for the poor" to include the environment. Humans need to recognize, he notes, that they are a center, not *the* center of creation, which comprises many living beings with diverse ends. Humans then have an ethical responsibility to recognize that they are a part of a greater whole, a recognition that in turn implies the reciprocity and complementarity that exists among all things. Boff's conception thus expands liberation theology's utopian social vision through a profoundly holistic conception of the interrelatedness of all being. Finally, spirituality for Boff is that attitude which places life at the center and defends and promotes life against reductionism and death in all its forms.

The writings of Ivone Gebara, the Brazilian feminist theologian, arise out of her experiences with people in the more rural and underdeveloped Northern states of Brazil. She argues that while liberation theology has certainly raised the critical question of how God is understood in the midst of human poverty and misery, it has failed to address the patriarchal presuppositions upon which much of Roman Catholicism rests. Drawing on the works of numerous Latin and North American writers, including Thomas Berry and Sallie McFague, Gebara questions liberation theologians' almost exclusive focus on justice and economic issues, which fails to recognize the links between patriarchy and oppression, between the conditions of the environment and the poor. She seeks to widen the scope of liberation theology's conception of the poor, and to draw new connections to traditional theological doctrines such as the Trinity. In a move similar to Boff's, she argues for a broader concept of life, for a holistic paradigm that includes her ecofeminist principles. Liberation thus includes a commitment to ending poverty as well as patriarchy. The ending of economic poverty, she argues, should go together with restored gender and social relations and the ending of ecological degradation. Gebara views liberated humans as the agents of such transformation, not as the masters of Earth, but rather as the Earth's conscious reflection upon itself. This self-consciousness is then related to Gebara's study of the Trinity. She understands this doctrine as the Christian way of describing the interconnectedness, communion and diversity evident in all life. The distortions of such relations are evident in poverty, ecological degradation, and violence.

Although liberation theology did not begin with an ecological concern for the Earth, later works (as exemplified by those of Leonardo Boff and Ivone Gebara) recognize

the basic interrelatedness of all reality. They thus call for a holistic paradigm that includes all the projects and dimensions of life. In addition, Boff has democratized the ecological question and argues for a planetary ecological and social democracy that comes with a salutary warning to critically evaluate the ecological effects of the process of globalization. This holistic and relational paradigm advocated by many liberation theologians, while powerful, can only succeed by avoiding the nostalgic search for community that cannot exist (at least in traditional forms) in the social conditions of late modernity. The (paradox or tragedy) of modernity is that precisely the advance of globalization is destroying those very links that make for holism and a viable planetary ecology for the future. In their attempt to situate the ecological issue within the context of the poor, liberation theologies indicate the mutual interactions between the social systems and the ecological systems, and since we cannot separate social justice from ecological justice, we must continue as human beings, related to all other life, to be the voice for the voiceless.

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See also: Berry, Thomas; Brazil and Contemporary Christianity; Christianity (7b) – Political Theology; Christianity (7d) – Feminist Theology; Con-spirando Women's Collective (Santiago, Chile); Dualism; Gebara, Ivone; Haekel, Ernst; McFague, Sallie; Roman Catholicism in Latin America; Salvadoran Reflection on Religion, Rights, and Nature; Smuts, Jan Christian.

Christianity (7d) – Feminist Theology

In her seminal work *Sexism and God-Talk: Toward a Feminist Theology* (1983) Rosemary Radford Ruether defines the critical principle of feminist theology:

Theologically speaking, whatever diminishes or denies the full humanity of women must be presumed not to reflect the divine or an authentic relation to the divine, or to reflect the authentic nature of things, or to be the message or work of an authentic redeemer or a community of redemption

. . . what does promote the full humanity of women is of the Holy, it does reflect true relation to the divine, it is the true nature of things, the authentic message of redemption and the mission of redemptive community (1983: 19).

She continues by connecting feminist ideas with all other forms of chauvinism, including humanocentrism or “the making of humans the norm” (1983: 20). Feminist theology connects all power structures to each other and to the various degradations of culture and nature. Its roots are both ancient and recent.

From the late nineteenth century through the beginning of the twenty-first century, feminist theologies addressed predominantly patriarchal Christian traditions. Reformist, revolutionary, radical, liberation, “third world,” and ecological feminist theologies, to name but a few, challenge androcentric norms of Christian belief and institutional structure from myriad perspectives. Language, liturgy, hierarchical establishments, hermeneutics, translations of sacred texts, composition of communities and re-telling of histories (sometimes called “herstories” by feminist theologians) all comprise significant parts of the range of feminist theologies.

While particular glimpses of feminist ideas emerged throughout Christian history, it is anachronistic to apply the term feminist to these concepts from a twenty-first-century perspective. Nonetheless, the roots of feminist thought provide a foundation for its eventual emergence in the nineteenth century since much feminist thought reacts to and rethinks these roots.

Such a sketch usually begins with the creation texts in Genesis 1–3, texts adopted from Jewish traditions by emergent Christianities. Interpretations of these texts have yielded different perspectives, but the figure of Eve (Genesis 2) is blamed by patriarchal Christianity for the fall of humanity (and for all of creation, other-thanhumans included) out of a state of paradise and into a state of sin. She grew to symbolize the assumed weak and sinful state of females. In addition to the centrality of Eve for feminist theological discussion, the Genesis creation stories have been interpreted as

foundational for human (primarily male) dominance over the rest of the natural world. This aspect figured prominently as feminist and ecofeminist thought developed in the twentieth century.

Though evidence from the early Jesus movement points to the potential empowerment of women, and several early Christian forms suggest that women held prominent roles as teachers or healers, within the first generations of Christianity the place of women is problematized. As Christianity became the dominant religion of the Roman Empire, the Church established exclusively male, priestly hierarchies. Simultaneously the Church carefully replaced pre-Christian, nature-based pagan traditions, sometimes led by women, with the new orthodox, state-sanctioned, male-dominated Christianity.

Still, throughout the Middle Ages various female mystics proposed alternative theological ideas, some with more success than others. For example, Hildegard of Bingen (1098–1179) wrote complex theological, medical, and liturgical texts, while simultaneously leading a religious order and preaching throughout Europe. Her focus on the “greening” power of God suggests the roots of Christian ecofeminism.

One of the primary examples of the increasing hostility of patriarchal Christianity to both women and to nature is the *Malleus Maleficarum* (an inquisitional manual published in the late fifteenth century) and the witch trials that hailed from it. Women, particularly those who were traditional nature healers and midwives, were the primary target of the witch hunts in Northern Europe. Women’s bodies, considered more susceptible to evil, and women’s herbal healing practices, considered the work of the devil, were marked for destruction.

Eventually Christian sects emerged that provided empowering space for women. In the seventeenth century the Society of Friends, or Quakers, formed. Women such as Margaret Fell and Rebecca Travers were among the early leaders. They wrote theological tracts, served as preachers and missionaries, and reinterpreted biblical texts. The earliest “feminists” came from Quaker and abolitionist connections in the nineteenth century. Sarah and Angelica Grimke, along with Lucretia Mott and Elizabeth Cady Stanton, are often hailed as the first Christian feminists. In the 1890s Stanton, along with a team of female scholars, composed *The Woman’s Bible*. This text, among the most historically critical of its time, rewrote the Christian Bible deleting any sections that denied the full humanity of women. These religious thinkers comprise part of the “first wave” of the feminist movement.

The second half of the twentieth century, and “second wave” feminism, witnessed an explosion of Christian feminist theologies. First in North America and Northern Europe, then in Africa, South America and the Pacific Rim, feminist theologians challenged, reformed and transformed Christian theology, liturgy, ethics, structure, and community. By the 1960s feminist theologians increased in prominence. Mary Daly, Delores Williams, Rosemary Radford Ruether, Sallie McFague and Ada Maria Isasi-Diaz are among the most influential feminist theologians to nurture, publish and distribute their ideas to Christian communities worldwide.

Daly, raised in the Catholic tradition, earned doctorate degrees in theology and in philosophy. In *The Church and the Second Sex* (1968), she analyzed the marginalized position of women throughout the history of Christianity. Though she retained her teaching position, with tenure, at a Jesuit institution, Daly decided that Christianity was irredeemable for women and called for the women's movement to be anti-Church. In her 1973 publication *Beyond God the Father*, Daly stated "that if God is male, then the male is God" (1973: 19). In her later theological works, including *Gyn/Ecology* (1978) and *Quintessence* (1998), Daly directly connected female-centered reality with nature and the goddess.

Ruether confronted language and its connections to myriad other issues in *Sexism and God-Talk*:

This emotional hostility has deep roots in the JudeoChristian formation of the normative image of transcendent ego in the male God image. The underside of this transcendent male ego is the conquest of nature, imaged as the conquest and transcendence of the Mother (1983: 47).

If the primary language used for the divine is masculine and hierarchical (king, lord, almighty, father), then the norm for individuals and the goal of human culture also becomes masculine and hierarchical. Ruether continued this ecofeminist theological discussion in her book *Gaia and God* (1992). Here she focused on both historical analysis of "western" religions and their impact on the human/nature relationship, and on the possible integration of Gaia and God, even in a Christian belief structure. According to Ruether, a religious transformation that recaptures biophilic mutuality is essential if the biosphere is to survive.

Womanist theology expanded the definition of interlocking systems of oppression, critiquing the predominantly white feminist movement for its lack of expressions of racism and classism. Williams, a leading womanist and author of *Sisters in the Wilderness: The Challenge of Womanist God-Talk* (1993), analyzed these various oppressions, including a discussion of the biblical figure Hagar whose experiences she found parallel to women of color. She also challenged the concept of the "surrogacy" role interpreted onto the figure of Jesus. Williams questioned the role of a "surrogate" (Jesus) to carry the burden of sins when systems of forced "surrogacy" abused black women for centuries (as nannies, surrogate sex partners, etc. . . .). Her theological ideas extended to issues of ecological justice when she reinterpreted the figure of Jesus from a womanist perspective:

Jesus conquers the sin of temptation in the wilderness (Matt. 4:1-11) by resistance – by resisting the temptation to value the material over the spiritual; by resisting death; by resisting the greedy urge of monopolistic ownership. Jesus therefore conquered sin in life, not in death (Williams 1993b: 12).

The call of womanists to take all bodies seriously, including the body of Earth, is a powerful one.

Voices from Hispanic, Asian and African communities

– many of whom are postmodernist and postcolonial feminists – reject the universals that white feminists often articulate and embrace. Related to the liberation theologies of their various communities, these theologians added a feminist perspective, thus reshaping liberation theologies. For example, Isasi-Diaz worked with other Hispanic theologians to develop *mujerista* perspectives. In her book *En La Lucha: Elaborating a Mujerista Theology* (1993), Isasi-Diaz focused on the communal method of Hispanic feminist theological praxis.

Finally, Christian ecofeminist theologians, such as McFague, have brought environmental concerns even more to the forefront of feminist theology. New areas of exploration, such as apocalypticism in Christianity and its impact on ecological worldviews, have formed a central component of ecofeminist theology. Catherine Keller, for example, has pondered why apocalyptic thought figures so centrally in both Christianity and radical environmental movements. She contends that apocalypticism, with its inherent violence and binary characterization of reality, is a central feature of patriarchal systems:

The dispirited readily turn to apocalypse, seeking vitality amidst the violence; the complex demands of the present flee before the single, deafening word; smoke and fire fill the screen, and beasts strip the great whore. Wherever overtly apocalyptic hope has been literalized it has been proven *wrong*; the normative hope, however, cannot be falsified. It can be named: hope for mutual respect in proximate and in political relations, for justice and mercy upon the land and within the city, for transnational, transspecies healing and renewal (Keller 1996: 308, her italics).

Keller and other feminist eco-theologians have been arguing for a rethinking of future possibilities away from apocalyptic trends.

As feminist theologies continue developing, a thisworldly emphasis on justice, creation, bodies and diverse positions is emerging. Christianity's foci on the cross and suffering, on afterlife and apocalypse, on Jesus' maleness and patriarchal hierarchical organization, all come into question. Feminists respond and recreate Christian theology in myriad ways including: an elevation of bodies (human and other-than-human) and of life on Earth rather than an elevation of souls and afterlife; a radical egalitarianism for all of life; new language for the divine and for humanity; eschatological visions that assume ecological justice, but without assuming violence and destruction. Because of their continuing inquiry into all systems of domination, feminist theologians necessarily address human abuse of the Earth. Such destruction denies life to all, but particularly to those who are already most oppressed. These radical new ways of envisioning Christianity comprise feminist theologies in the twentyfirst century, linking Christian theologians with a pluralist, feminist religious dialogue.

Laura Hobgood-Oster

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See also: Christianity (7g) – Womanism; Con-spirando Women's Collective (Santiago, Chile); Ecofeminism; Daly, Mary; Fall, The; Feminist Spirituality Movement; Gaia; Gebara, Ivone; Genesis Farm; Hebrew Bible; Hildegard of Bingen; Liberation Theology; McFague, Sallie; Ruether, Rosemary Radford.

Christianity (7e) – Creation Spirituality

Creation Spirituality is where Christian mysticism meets global indigenous traditions, social justice, the “new science,” feminism, and environmental commitment and concern. Situated at the heart of the contemporary “greening of religion” phenomenon, the Creation Spirituality movement aims to reinvigorate Western religious traditions through a spiritual consciousness keenly attuned to the cosmic and earthly created order. Most clearly articulated by its founding father, former Roman Catholic priest and current Episcopal priest Matthew Fox, Creation Spirituality embraces all of creation as “original blessing” (as opposed to original sin) and emphasizes a worldview that conceives of the divine in all things (panentheism) and all things in the divine. In the tradition of Thomas Aquinas, Creation Spirituality sees God’s revelation as present both in the Bible and inscribed into the natural world.

Matthew Fox argues that the tradition of Creation Spirituality (sometimes referred to as “creation-centered spirituality”) can be found in the ancient Wisdom traditions, in the Earth-based traditions of indigenous cultures, but also in the stories of the biblical prophets and of Jesus (whom Fox recasts as the “Cosmic Christ”). A rich tradition of creation-centered consciousness, according to Fox, can also be found in the “green theologies” of the great medieval “Rhineland” Christian mystics – figures such as Hildegard of Bingen (1098–1179), Julian of Norwich (ca. 1342–1415), Mechtild of Magdeburg (1210–1280), and Meister Eckhart (ca.1260–1327). The work of these four mystics, says Fox, is steeped in an ecological consciousness that communicates six key points: 1) the goodness or blessing of creation, 2) the goodness or blessing of the Earth itself (including human bodiliness),

3) cosmic consciousness, 4) a theology of panentheism, 5) the motherhood of God, and 6) compassion understood as interdependence and justice making.

Fox founded the Institute of Culture and Creation Spirituality (ICCS) at Chicago’s Mundelein College in 1977, where (with others) he increasingly explored the spiritual implications of contemporary scientific understandings of evolution and cosmic origins. No longer sworn enemies, religion and science became for Fox intertwined sources of mysticism and revelation. In 1983, Fox moved the Institute to Holy Names College in Oakland, California, where ICCS would be able to draw upon the booming science and technology community in the Bay Area for programming resources and faculty. In the mid-1990s, Fox transformed the ICCS into the “University of Creation Spiritual-

ity” (UCS), a master’s degree and doctorate-granting institution independent of Holy Names College.

Curriculum at UCS places a strong emphasis on what Fox identifies as the seven principles of Creation

Spirituality: cosmology, feminism, liberation, compassion, prophecy, creativity, and community. Coursework includes workshops on liturgical renewal, including experiments with the genre of “techno cosmic masses.” These masses, which combine body-active worship with rave music, video screens, and various forms of technological art, are more often than not dedicated to Earth-honoring themes, the most repeated mass being one dedicated to “Gaia Our Mother” (1997, 1998, 1999, 2000, 2002). In the period between 1996 and 2003, other mass themes have included topics such as: “The Sacred Cosmos,” “Hildegard of Bingen,” “Kinship with Animals,” “Celebrating Nature’s Power,” “Resurrecting the Green Man,” “All Our Relations,” and “Cosmogenesis.” These experimental masses can be placed within the context of the broader dynamics of ongoing “green liturgical renewal” across a variety of religious communities in North America (Jewish, Catholic, Protestant, and Buddhist).

In response to Fox’s work promoting Creation Spirituality, the Vatican silenced him from teaching or writing during the period of 1988 to 1989. In 1993, Fox was formally dismissed from the Dominican order and stripped of the priestly right to perform the sacraments (although he still technically remained a priest). In 1994, Fox joined the Episcopal Church and was ordained as an Episcopal priest, a decision that was devastating to some of Fox’s Catholic supporters who felt abandoned in their efforts to reform the Church from within.

Matthew Fox’s struggles with institutional authority and orthodoxy points to the complicated challenges faced by those engaged in the work of “greening” religion. Many of those who are committed to remaining firmly within their religious institutions face a delicate balance between pressing for an increased degree of ecological consciousness and confronting accusations of “heresy.” Developing ways to negotiate this balance without being ousted from one’s religious community or without severing institutional ties can be a tricky challenge, to say the least – one that reformers will continue to deal with in various degrees as ecological spirituality, green liturgical innovations, ideals of “creation care” and of “stewardship” become more deeply embedded in the religious landscape.

Sarah McFarland Taylor

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See also: Christianity (6a) – Roman Catholicism; Fox, Matthew; Gaia; Genesis Farm; Green Man; Hildegard of Bingen; Pantheism.

Christianity (7f) – Process Theology

“Process theology” is a name for various theological perspectives that have been developed by many different philosophers and theologians since the mid-twentieth century. Most process theologians are Western and Christian, but some are Jewish, Buddhist, Hindu, and Muslim. Their commonality lies in a common indebtedness to the cosmology of the late philosopher and mathematician, Alfred North Whitehead, whose vision of the universe as an interconnected and evolving whole, of which humans are a part, provides a framework for articulating their distinctively religious perspectives.

Among Christian process theologians, the most influential is John B. Cobb, Jr., whose Whitehead-influenced understanding of Christianity led him to become one of the first Christians in the United States to call for an ecologically-minded Christianity that emphasizes the intrinsic value of all living beings, the relational character of all existence, and the necessity for Christians and others to embrace a holistic ecological ethic. Numerous students and colleagues of Cobb’s, including David Ray Griffin, Marjorie Suchocki, Charles Birch, Mary Elizabeth Moore, and Jay McDaniel have learned from and amplified Cobb’s seminal approach.

Process theology approaches connections between religion and nature at three levels: theology, social ethics, and spirituality.

Theology

At the level of theology, process theology advocates twelve ideas concerning religion and nature, many of which bear affinities with Asian and indigenous religious points of view, even as they have been used by members of Abrahamic faiths, especially Christians, to interpret core Christian teachings.

Nature as Creative. The first is that nature itself, as understood through evolutionary biology and quantum theory as well as many forms of religious experience, is a continuously creative process, with galactic as well as terrestrial dimensions, of which humans are an integral part.

Nature as Visible and Invisible. The second is that nature includes invisible as well as visible dimensions, as exemplified in feelings and other conscious states of mammals (invisible) and the human brain (visible), and that both of these dimensions are expressions of the same kind of creative energy and in this sense “natural.”

Intrinsic Value and Pan-Experientialism. The third idea is that each living being on Earth (and anywhere else) is a subject for itself not just an object for others, such that the living being has intrinsic value and some capacity for experiencing its environment (consciously or unconsciously) from its own unique point of view. Here the word “living” includes God (see below) and carbonbased forms of life such as single-celled organisms and animals. “Living” more generally means any being of any sort that has subjectivity of any kind, on the basis of which it can take into account its surrounding environment in a conscious or non-conscious way, creatively responding in novel ways. When combined with Whitehead’s view that nature includes many planes of existence, not just the three-dimensional plane of space as evident to the vision, this understanding of “living” opens up the possibility, characteristic of many indigenous societies, that there are forms of actuality (spirits, living ancestors) that are part of the larger ecology of a community. It also opens up the possibility, emphasized by empirical studies in parapsychology, that the human self (and perhaps other forms of life) undertake a continuing journey after death, which likewise widens a sense of “ecology” in a way that resembles Chinese emphases on an ecological trinity of heaven–Earth–human relations.

Two Kinds of Wholes. The fourth idea is the view that inorganic materials – mountains, for example – are aggregate expressions of subatomic forms of energy that are, if not living in a biological sense, then at least possessive of some capacity for non-conscious prehending of their immediate environments. The idea that all actual entities have capacities for taking into account their environments, either consciously or non-consciously, is called pan-experientialism or pan-psychism. In order to avoid the idea that this implies that macroscopic entities (rocks, for example) are experiencing subjects in their own right, process theologians draw a distinction between two kinds of natural wholes: wholes that have unified subjectivity on the basis of which they have reality for themselves (living cells, animals) and wholes that are aggregateexpressions of energetic phenomena with non-conscious prehending capacities, but that lack unified subjectivity (rocks).

Interconnectedness. The fifth idea is that all living beings have their existence and identities in relation to, not apart from, all other living beings, which means that the very identity of a living being, including each plant and animal, is partly determined by the material and cultural environment in which it is situated. Process theology goes further, in a sense reminiscent of Buddhism, to say that each entity is “present in” every other entity, such that interconnectedness implies inter-being or intercontainment. This means that all entities are thoroughly ecological in nature, and that human beings are themselves ecological in being persons-in-community, not persons-in-isolation. In a process context, “community” includes the entire web of life in which a human (or other living being) is nested. The means that respect for the intrinsic value of individual living beings cannot be separated from considerations of the instrumental value, positive or negative, that these beings have for others in their biotic communities.

Teleology. The sixth idea is that the universe as a whole, over vast periods of time, has evolved toward heightened degrees of intrinsic value, which are equated with heightened capacities for richness of experience, as evident in the capacities of animals (humans included) to respond to new situations in unpredictable and creative ways, experiencing both the joys and sorrows of mortal existence.

God in Nature. The seventh idea is that the whole of nature is embraced by a divine reality – a One-embracing-many variously named God, Allah, Amida, Heaven – who is influential throughout nature in a continuous way as an indwelling lure toward satisfactory survival within individual living beings, and as a more generalized lure toward new forms of order and novelty within evolution as a whole.

Non-Supernaturalism. The eighth idea is that this divine lure does not interrupt the causal operations of nature as understood in physics and chemistry, which means, among other things, that it is best understood as ultra-natural rather than supernatural. This leads some process theologians to speak of process theology as a form of naturalistic theism.

Divine Empathy. The ninth idea is that the One-embracing-many is not only influential throughout nature in a non-coercive way, but also acted upon by nature in a continuous way, such that it empathically shares in the experiences of all forms of existence and in the joys and sufferings of all living beings.

Tragedy in God. The tenth idea is that, by virtue of this empathy, the One-embracing-many is enriched not only by the experiences of individual living beings, but also by the diverse kinds of lives that inhabit the planet, such that an unnecessary depletion of biological diversity is a tragedy, not only for the Earth, but also for the divine life itself.

Sin as Unnecessary Violence against Creation. The eleventh idea is that, because nature is itself creative at all levels, there are things that happen in evolution itself, and in human interactions with other living beings and forms of existence, that are tragic, even for God. This leads process theologians to define sin as unnecessary violence against creation, from which even God suffers.

Co-creativity. The twelfth idea is that human beings, as creatures among creatures can help prevent these tragedies by cooperating with the divine lure toward the fullness of life, and that this kind of response is their true vocation in life. In process theology the whole of nature is historical or evolutionary, and the future is not preordained, not even by God. What happens in the future depends on decisions made in the present by human beings and other living beings, moment by moment.

Social Ethics

All twelve ideas have implications for social ethics. The idea that all living beings have intrinsic value entails the view that humans have moral obligations to other creatures – animals, for example – under human domestication and in the wild. It

simultaneously means that economic institutions and policies ought to take as their aim the promotion of human well-being in an ecologically responsible context, rather than economic growth for its own sake, and that human communities reach fruition when they live in fruitful cooperation with other forms of life and natural systems, and when they are limited in scope, making space for the habitats of other living beings. This does not imply that any living being, including even human beings, have absolute rights to life; but it does imply that respect and care for the community of life (to borrow language from the Earth Charter) is the defining characteristic of healthy human community. The idea that there are degrees of intrinsic value entails the view that it is more morally problematic to inflict violence on a gazelle than to take the life of a bacterium, even though both the gazelle and the bacterium possess subjectivity. The idea that God is enriched by biological diversity, and harmed by violence against creation, means that ethical relations with nonhuman forms of life cannot be separated from faithful relations to God. And the idea that humans are co-creative with God means that the very will of God, that nature itself flourish in its fullness, depends for its realization on human responsiveness.

Spirituality

Process theology recognizes that religious life is more than theology and ethics; understanding and moral behavior. It includes prayerful states of awareness that are sensitive to the intrinsic value of each living being; forms of ritual that help awaken people to the mystery and grandeur of landscapes, waterways, and galactic vistas; inner journeys toward integration between consciousness and the energies and archetypes that well within the unconscious, some of which are encoded within human genes; and humble acknowledgment that humans are small but included in larger wholes that far transcend their finite concerns. In process theology, all of these forms of spirituality are natural and part of nature understood in general terms.

Moreover, the philosophy of Whitehead is open to the possibility that there can be forms of empathic connection, not only between humans and other humans, but between humans and nonhuman forms of life; and that the very journey toward peaceable selfhood, toward which all living beings strive in their own unique ways, may well continue after death, until wholeness is realized. Should such connections and continuation prove to be true, they, too, would be part of nature broadly understood.

Finally and importantly, from a process perspective it is wrong to think that spirituality as such begins with human beings. Each living being has its own unique relationship to God, and all living beings, indeed the whole of the cosmos, are embraced within the larger and divine whole. How other living beings experience this embrace is a mystery to humans. But that they are part of this embrace is central to process theology. Spirituality begins, not with formal belief or even with social ethics, but with nonverbal attunements to the divine embrace. This embrace takes the form of

an indwelling call to survive with satisfaction relative to the situation at hand. For many creatures in nature, humans much included, the simple desire to survive with satisfaction, even amid sometimes insurmountable odds, is a form of spirituality.

Criticisms and Responses

Process theology is not without its critics, all of whom raise important questions for the process perspective. Three kinds of criticism are illustrative.

First, inasmuch as process theology speaks of degrees of intrinsic value in accordance with degrees of sentience, some environmental thinkers argue that this approach privileges sentient beings, perhaps especially those with a highly developed nervous system, over ostensibly insentient beings, such as mountains and water. Indeed, process theology offers what might best be called a biocentric approach over a geocentric approach, proposing that while ostensibly inorganic realities do indeed contain intrinsic value, their value is best understood in terms of their instrumental value to living beings.

Second, inasmuch as process theology is open to the possibility of continued existence for all living beings after death, it opens up, but fails to answer, the difficult question of whether, in a journey toward peaceable selfhood, impulses toward predation, which seem natural and necessary in life on Earth, would be transcended. This seemingly speculative question bears upon the deeper question of whether predator–prey relations on Earth are unambiguously good, as some deep ecologists might suggest, or whether or not they contain an element of tragedy as well, as process theologians aver. In the latter respect process theology has sympathy with classical traditions, ranging from Jainism to Judaism, that see something tragic in the more violent dimensions of nature. Whereas some environmentally oriented traditions see the evolutionary unfolding of creation as divine will, process theology sees this unfolding as partly the result of divine influence and partly the result of nature's own creativity, which itself can unfold in ways both beautiful and tragic.

Third, and finally, classical theists in the Abrahamic traditions, while appreciating the process image of God as one who shares in the joys and sufferings of all living beings, nevertheless prefer to think of this sharing as something that God chooses to do, as if God could choose otherwise. Process theology proposes by contrast that even God is an exemplification of metaphysical principles, one of which is the ecological principle that, to be actual at all, one must be affected by other realities and partly composed of other realities. Thus process theology speaks of the universe as the very body of God. This means, not only that God must dwell in relation to a universe in order to be fully divine, but also that divine power is limited by the power of the universe itself, such that it cannot be unilateral or one-sided. Classical theists often criticize process theology for offering a view of God that denies omnipotence in the classical sense; and process theologians respond that, only through such a denial, can theists make sense of the unnecessary violence in creation, and also the goodness and

beauty of creation, so much of which results from the creativity of the universe itself, as inspired but not manipulated by the divine lure. Among Christian and Jewish process theologians, it is as important to recognize that the intrinsic value of all living beings, while appreciated by God, is not reducible to God. This respect for otherness – even on God’s part – is a key feature of process theology.

Jay McDaniel

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See also: Cobb, John; Deep Ecology; Earth Charter; Environmental Ethics; Process Philosophy; Whitehead, Alfred North.

Christianity (7g) – Womanism

The African-American novelist Alice Walker defined the term womanist in 1983 as a black feminist or feminist of color. The term is derived from the black folk expression, “You’re acting womanish,” as in “grown up” and “in charge.” It is “the opposite of girlish.” A womanist desires healing and wholeness for entire communities, male and female. A womanist is not heterosexist but loves men and women, sexually and non-sexually. She loves food, the moon, and roundness. She loves the Spirit. A womanist is connected to creation and to her own body, loving the folk and herself, regardless. She describes the colored race as a flower garden with every color in it.

For Walker, a womanist is to feminist as purple to lavender. This analogy contrasts black women’s socialhistorical experience of struggling for freedom of entire communities around interlocking issues of oppression with the activism of those feminists who focus on sexism as a single issue. It is a reference to differences in women’s experience of oppression as struggles against racism, classism, colorism and heterosexism further complicate struggles against sexism. Walker’s analogy extends a challenge to white feminists to recognize interlocking systems of oppression, even as it recognizes that purple and lavender are shades of difference belonging to the same family.

Black feminist scholars in religion and in other academic disciplines quickly identified with the term “womanist.” Part of its appeal is that there is no qualifier before “feminist.” The term honors black women’s experience as freedom fighters who are women and black in one body. This is a proactive response to unrealistic demands that black women choose either black liberation or women’s liberation. Walker’s definition of “womanist” alludes to Harriet Tubman’s commitment to freeing her mother and more than 300 other slaves. Tubman was an abolitionist and a feminist. Some writer-activists, like Audre Lorde and Bell Hooks chose to retain the term “black feminist” to emphasize solidarity with other feminists. Others employ the terms interchangeably. Womanists reference a variety of historical black women in their definitions. Walker refers to black Shaker leaders Rebecca Cox Jackson and Rebecca Perot. Jacquelyn Grant, a systematic theologian, turns to the narrative of Sojourner Truth. Truth is famous for her sermon, “When I Found Jesus,” and for her “Arn’t I a Woman” speech.

Delores Williams, a womanist theologian of culture, offers social-historical analysis of the “violation and exploitation of the land and of women’s bodies” which has

“led to the destruction of natural processes in nature” (Williams 1993: 26). Williams analyzes assaults upon nature, the human spirit, and the divine spirit, describing the “defilement of nature’s body and of black women’s bodies,” particularly of workers in industry, as sin (Williams 1993: 29). She examines the correlation between disrespect

for the peoples of the Earth, particularly African bodies, and disrespect for the Earth. Shamara Shantu Riley, a political scientist, writes on “The Politics of Emergent Afrocentric Ecowomanism,” observing that “womanism and ecology have a common theoretical approach in that both see all parts of a matrix as having equal value” (Riley 1993: 194). “There is no use in womanists advocating liberation politics,” she writes, “if the planet cannot support people’s liberated lives” (Riley 1993: 194). It is “equally useless to advocate saving the planet without addressing” social issues that determine human structural relations (Riley 1993: 194). To advocate both sets of concerns is necessary for survival. Riley employs West African traditional spiritual principles in her analysis alongside black feminist theory, historical analysis, and environmental studies resources from Black women’s organizations.

Emilie Townes is a theo-ethicist who examines the importance of loving black women’s bodies and all bodies in relation to the environment. Considering Robert Bullard’s sociological study of environmental racism in relation to Toni Morrison’s novel *Beloved*, Townes engages in social-ethical analysis of the environmental crises that poor black people in rural, particularly Southern, communities face in the United States. In these streams Karen Baker-Fletcher has provided a collection of prose essays, poems and meditations on environmental justice and environmental racism. Her work is grounded in a creation spirituality that considers what it means to be created as dust and spirit, resisting violence with the rest of creation, in a world fraught with environmental abuse.

Karen Baker-Fletcher

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See also: Christianity (7d) – Feminist Theology; Environmental Justice and Environmental Racism; Walker, Alice.

Christianity (7h) – Natural Theology

Natural theology in its most general sense refers to the study of God and God's attributes as these can be interpreted from the study of God's "works." Natural theology emerges from the medieval theological distinction between "nature" and "revelation" (including revealed scripture) as the two primary means of knowledge of the divine. In Catholic thought, this distinction is preserved in the "natural law" tradition, which is understood to be complementary to, but not to be separate from, the tradition of revelation.

Natural theology in its fundamental sense does not originally refer to theology "about" the physical world, but rather, to the epistemological distinction between what may be known through revelation (in the Bible or through divine miracles) and what may be known through "natural" means (the application of human reason). But because human reason is directed toward the physical world, as well as toward human nature, and because investigating the physical world and the human self are both means of gaining further knowledge of the divine, "natural theology" has often come to refer not only to the way of knowing (using the "natural" faculty of human reason), but also to one of the primary objects of inquiry (the natural, physical world).

In the Euro-American context in which it developed, natural theology came to be understood to be a scholarly discipline of its own (this was resisted by Catholics and some Protestants in earlier periods, in part out of concern that natural theology could lead to the rejection of revelation, or worse, to skepticism and atheism). With roots in earlier centuries, natural theology flourished in the seventeenth and eighteenth centuries, particularly with the publication of John Ray's *The Wisdom of God Manifested in the Works of Creation* (1691), William Derham's *Physico-Theology* (1713), and, later, Archbishop William Paley's popularization of Ray's and Derham's work in his *Natural Theology* (1802). More broadly, the importance of natural theology in demonstrating the "reasonableness" of Christianity was elaborated and popularized in the essays of John Locke. These works all sought to illustrate the intelligence, wisdom and beneficence of God through a close analysis of the systematic workings and perfectly ordered beauty of the natural world.

Among scientific works that might also be included in this category are the "Bridge-water Treatises" (1831), a series of eight treatises authored by prominent British scientists, and, earlier, Linnaeus' essay "The Oeconomy of Nature" (1749), which gave its European and American audience an early picture of hydrological cycles and eco-

logical niches. While intended as a scientific treatise, Linnaeus' work set out also to illuminate the essential orderliness of the natural world and to reason from such order the intelligence and perfection of the divine Creator. At the same time, it established the scientific groundwork for what would later become the field of "ecology" as it was coined by Ernest Haeckel in 1866. In contrast to Linnaeus, Ray and Paley saw themselves primarily as theologians, but they encouraged the study of nature as a way to map the mind of God.

As a field of study in the emerging Enlightenment, natural theology demonstrated the extent to which the intellectual preoccupations of scientists and theologians were deeply intertwined. At the same time, however, the increasing popularity of natural theology also anticipated the development of secular science and secularization more broadly, by encouraging the rational study of natural laws and by employing metaphors of nature as a mechanized system. Such dominant metaphors and approaches to study would later be perpetuated by scientists without reference to a Divine Intelligence as the creator of such orderly systems.

The ecological legacies of natural theology are also complex and mixed. On the one hand, Ray's and Paley's work encouraged the close study and appreciation of nature as a significant aspect of the cultivation of a virtuous Christian life. Such encouragement also included an emphasis on human humility with respect to other wonders of God's creation. The importance of studying nature as an aspect of a responsible Christian life has been emphasized by contemporary ecologically oriented theologians such as Sallie McFague and James Nash.

Sallie McFague's theological work, for instance, emphasizes the importance of attentiveness toward nature and argues that learning about natural theology can return Christians to an ancient theological tradition in which nature played an important role in Christian spirituality. While emphasizing natural theology in its medieval forms (rather than in Enlightenment, more mechanistic, articulations) McFague sees natural theology as an important counterbalance to the anthropocentric aspects of the Christian tradition.

James Nash argues that the natural law tradition (of which natural theology is a part) has been focused historically – and ironically – on human nature, but now must be extended to include nonhuman nature as a source of moral insight and guidance. He suggests that the natural law tradition of "following nature" can be used effectively today when "ecosystemic compatibility" is used as a norm from which to derive ethics.

Similarly, the call for humility and a check of human control of nature has been articulated, not only by Nash and McFague, but also by Dieter Hessel, Rosemary Ruether, Calvin DeWitt, Gordon Kaufman, Larry Rasmussen and Drew Christiansen, as well as philosophers, Holmes Rolston, III and Paul Taylor. Whether intentionally or otherwise, these authors have drawn on the natural theology tradition, albeit with less of a sense of Enlightenment optimism than we find in earlier periods. Changes in our scientific knowledge have also contributed to skepticism with respect to the fixed "laws of nature" and the need to make more modest claims.

The legacy of natural theology, then, includes an appreciation of nature as a means of knowing the divine and a commitment to studying nature that goes beyond the pursuit of knowledge for knowledge's sake. While the link between natural theology and Christian theology is not always direct – and sometimes the term “natural theology” is used without a sense of its philosophical history – there remain important family resemblances between this older theological tradition and contemporary ecological theology.

On the other hand, with the increasing use of technological metaphors for the physical world (nature as a clock or a system of gears) and the corresponding confidence in human reason as a divinely provided key to “unlock” nature's secrets, natural theology also has played a role in the cultural development of Enlightenment models of the domination and mastery of nature for human use.

To the extent that the Enlightenment fostered skepticism with respect to religion and a human sense of mastery over nature that was soon to be articulated in the rise of technology and industrialism, natural theology, ironically perhaps, has played an intellectual role in utilitarian readings of nature and, to a certain extent, has indirectly influenced destructive practices. In contemporary ecological theologies today, however, the potentially problematic legacies of natural theology are largely muted and the natural theology tradition is often being rehabilitated for ecological use.

Rebecca Kneale Gould

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See also: Book of Nature; Deism; Haeckel, Ernst; McFague, Sallie; Natural Law and Natural Rights.

Christianity (7i) – An Evangelical Perspective on Faith and Nature

Evangelicalism is a branch of Protestant Christianity that holds that the Bible and its 66 canonical books are vital for faith and practice and the authoritative source for defining how rightly to live on Earth. Its adherents believe that the good news of the Bible should not be selfishly kept, but proclaimed, this reflecting the Greek derivation of “evangelical,” from *eu* (true) and *angelis* (a messenger, or bearer of news). This news is *good* and it is *good* for every creature. It is *good* because it brings restoration and reconciliation of all things, countering and undoing human-wrought degradation. The reach of this gospel is as great as is human-wrought degradation; its blessings flow “far as the curse is found.” The restorative reach of the second Adam (Jesus Christ) is as great as the damaging reach of the first Adam, evangelicals believe.

At the heart of the good news proclaimed in evangelicalism is salvation. Salvation is a saving from degradation offered to those who are willing to follow in the footsteps of Jesus as savior and reconciler. Those who believe this good news bring joyful service to humanity, to every creature, and to all creation. It is service that works to fulfill the eager expectation of the whole creation for the coming of God’s children. Evangelicals – the bringers of good news in the footsteps of Jesus – are honest in describing the way things really are, are visionary toward the way things ought to be, and are followers who bring food and the means of its production to the hungry, heal the sick and bring the means of healing, and work to restore degraded aspects of creation, engaging with others to reconcile all things. While evangelicalism usually is associated with specific churches and denominations, evangelicals can be found in nearly every Christian denomination.

A distinctive feature of evangelicalism is that it distrusts human authority and societal hierarchy. This distrust is reflected in its congregations and institutional polity, with many congregations operating as independent entities, others loosely organized in associations, and some joined together in denominations with very limited hierarchy. Many in the United States are associated with the National Association of Evangelicals, but not all. In evangelicalism there is no “word from above” from prelates or pontiffs. Instead there is the Word – the Bible. Consequently evangelicals engage in serious and continuing Bible study, individually and in fellowship with others, to discover biblical teachings and apply them to their lives, society and the rest of creation. This fear of earthly authority sometimes is associated with limited knowledge of the Bible, science, and society, including little awareness of biblical teachings on environmental stew-

ardship or of environmental degradation. With growing knowledge on various topics, however, evangelicals are a powerful influence. They are assisted in gaining knowledge by publications such as *Christianity Today*, and by numerous evangelical colleges, universities, and seminaries that convey knowledge through professional and popular writing, preparing pastors and teachers, and educating social, scientific, medical, legal, business, and environmental professionals. Some sixty of these colleges and universities gain depth in study of creation and Christian environmental stewardship through partnership with the Au Sable Institute. They also are provided numerous opportunities to practice their faith worldwide through Christian organizations and agencies dedicated to medical services, disaster relief, development work, food production, environmental restoration, and holistic ministries. These organizations have formed the Association of Evangelical Relief and Development Organizations (AERDO) to aid in this work, and organizations engaged in environmental stewardship are networked through the Evangelical Environmental Network (EEN) from which came a successful effort in 1996 to prevent the

U.S. Congress from weakening the Endangered Species Act and a highly regarded “Evangelical Declaration on the Care of Creation” that is the subject of an important book edited by Professor R.J. Berry of the U.K.’s John Ray Initiative.

Evangelicalism’s commitment to taking the Bible seriously has important implications for its contributions to understanding God, abundant human life, and the caring of creation. Since evangelicals measure their faith and practice against biblical standards and believe in continuous adjustment, correction and conversion in response to wherever they fall short of biblical requirements, they are a potentially powerful force in addressing care for creation and environmental degradation. Contrary to what one might first expect, their adherence to the centrality of the Bible, often identified with the phrase *sola Scriptura*, does not close the window on learning from society and creation. On the contrary, it is the open window through which the world and God’s creation are seen. This window, on the “book of God’s creation,” produces what sometimes is called a “two books theology” – one that reveals God both through the Bible and creation. As one expression of this, the Belgic Confession states “By What Means God is Made Known to Us” in Article II: We know God by two means –

First, by the Creation, preservation, and government of the universe; which is before our eyes as a most elegant book, wherein all creatures, great and small, are as so many characters leading us to see clearly the invisible things of God, even his everlasting power and divinity, as the apostle Paul says (Romans 1:20) . . . Second, He makes Himself more clearly and fully known to us by his Holy and divine Word, that is to say, as far as is necessary for us to know in this life, to His glory and our salvation.

The consequences of learning both from the Word and the world means that an evangelical perspective on locating a city and its churches on the flood plain of a river is one that does not expect God to alter creation to prevent flooding. Neither does this mean that consuming carcinogens will bring God to render these chemicals powerless. At base in evangelicalism, knowledge of God’s word must be accompanied by

knowledge of God's world. Knowledge of the Bible must be accompanied by knowledge of creation.

At evangelicalism's heart is the Bible. And at the heart of the Bible are Jesus' teachings to do God's will on Earth – how rightly to live on Earth based upon a love and respect for God's will. Its aim is to follow Jesus with a passion to live rightly in the world and spread right living. Such passion, of course, is not confined to evangelicalism, nor even to Christianity generally. The Jewish scholar, Joseph Klausner, shows for example, that Judaism also seeks to live rightly in the world out of a sense of God's calling to do so. And he describes Jesus as heir of the Jewish vision of God's plan for the salvation of people and creation, thereby saying that Jesus is in the lineage of David, a product of Jewish faith and culture. In the evangelical view, Jesus does not oppose the Bible and Jewish Law. Instead, Jesus comes to fulfill this Law. And as a fulfiller of the Law, Jesus is central to evangelicalism, with this having a profound significance for the relationship of evangelicals to creation, to Christianity, to Judaism, and to the faiths of other peoples.

The primacy of scripture for evangelicals needs to be seen in light of the belief that without the testimony of the Bible and its being put into practice, human beings will exercise their capacity to destroy the Earth. Evangelicals take seriously God's judgment and particularly the Last Judgment described in the book of Revelation, including the proclamation given at the sounding of the last trumpet, "The time has come for . . . destroying those who destroy the Earth" (Rev. 11:18). Followers of Jesus, taking seriously this proclamation, are committed to turn away from participating in Earth's destruction, and they are deeply concerned that others do the same, for their own salvation. Putting this positively, they would work to direct the attention of any and all who would listen to Matt. 6:33: "Seek ye first the kingdom of God, and these other things will be added unto you." In evangelical and biblical perspective, "Looking out for number one," is not seeking oneself. Instead it is "Looking out for Number One," namely God – who created the heavens and the Earth through Jesus Christ, by whom also the whole creation is held together with integrity and through whom the whole creation is reconciled to God (Col. 1:15–20).

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See also: Au Sable Institute; Biblical Foundations for Christian Stewardship.

Christianity (8) – Ecumenical Movement International

Ecumenical social thought, with growing attention to signs of planetary degradation, is the focus of the treatment here. This is a new development. In particular, the condition of “nature” and “creation,” and the place and activity of human beings as part of them, occupies a place in ecumenical thought and practice that they were not accorded for the first three-quarters of the twentieth century.

The activity of the World Council of Churches is instructive. Among the churches, it gave significant leadership, some of it in close cooperation with the Roman Catholic Church. The language of “sustainable society” itself seems to have been initiated by a group of demographers, physical scientists, economists and theologians at a WCC world conference on science and technology in Bucharest, Romania, in 1974. By 1975, the WCC had proposed a program on the “Just, Participatory and Sustainable Society” at its general assembly in Nairobi, Kenya. Yet the decisive attention to human development and nature’s endangered sustainability as integral one to another came at the next general assembly, in 1983 in

Vancouver, Canada. Delegates voted for the engagement of WCC member churches “in a conciliar process of mutual commitment to justice, peace, and the integrity of creation” (JPIC). “Conciliar process” signaled the desire for a widespread, decentralized process in which resisting social and ecological degradation was regarded as a matter integral to Christian faith itself. The moral and confessional tasks were seen as one. Both the Lutheran World Federation, in 1977, and the World Alliance of Reformed Churches, in 1982, had declared resistance to the social policy of apartheid as a fundamental matter of faith itself, so the link of “social righteousness to the integrity of the faith as such” had already been made by significant confessional bodies. (The WCC’s Program to Combat Racism, begun in 1968, shared this ethos.) Now much the same was being done ecumenically around the eco-crisis and a new theological factor identified as “the integrity of creation.” That is, from the point of view of Christian faith, all creation has standing in and before God. Human beings are not the center of all value and the reason for the existence of the rest of nature. Justice and peace cannot be pursued, then, by human beings as an ecologically segregated species. Realizing justice and peace requires attention to creation as living and as imposing requirements of its own. Moreover, even from a strictly practical point of view, a just and peaceful order is only sustainable if it respects the integrity of creation.

This new chapter in ecumenical social thought came to a certain climax in the World Convocation on JPIC, convened in Seoul, Korea, in 1990. Four “covenants” were adopted, promoting: 1) a just economic order, including debt release of heavily burdened Two-Thirds World countries (interest owed to the World Bank, International Monetary Fund, international banks and nation-states);

2) security for all in nonviolent cultures; 3) cultures that live in accord with creation’s integrity; and 4) an end to racism and discrimination. Ten ecumenical “affirmations” were also adopted, affirming that all exercise of power is accountable to God, God’s option for the poor, the equal value of all races and people, male and female as created in the image of God, truth as the foundation of a free community, the peace of Jesus Christ, the creation as beloved of God, the earth’s is the Lord’s, the dignity and commitment of the younger generation, and human rights as given by God.

These affirmations in turn became the core themes for a series of case studies conducted around the world in a subsequent WCC program under the rubric of the “Theology of Life.” The effort was to see how, concretely, churches and other organizations in a given locale were addressing compelling issues in ways that built up the whole Community of Life. Differently said, the endeavor was to discern how justice and peace might be pursued in a manner that respected the integrity of creation as a whole.

Ecumenical social thought at the outset of the twentyfirst century, then, has expanded its circle of ongoing concern to the whole “household of life.” While every issue has been and continues to be the site of moral contestation, the inclusion of nonhuman nature in ecumenical moral frameworks has been done without erasing or neglecting the justice and peace issues of previous decades.

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See also: Earth Charter; Eco-Justice in Theology and Ethics; Environmental Ethics; United Nations’ “Earth Summits”; World Council of Churches and Ecumenical Thought.

Christianity (9) – Christianity’s Ecological Reformation

The multidimensional ecological crisis, covering a range of problems from species’ extinctions to climate change, has created a theological and ethical crisis in contemporary Christianity. During the last half-century, ecologically aware theologians and ethicists discovered that the conventional theological and ethical interpretations of the faith often did not fit ecological realities. They found that some traditional interpretations were not only irrelevant but harmful in facing the ecological crisis, even contributing to that crisis. As a consequence, they were pressed by these perceived irreconcilable differences into an ecological reformation of Christian thought and practice – a reformation that has meant re-visioning classical affirmations of faith and trans-valuing inherited values and virtues to cohere with ecological data. The ecological reformation of Christianity – and of other major religions, too – may be one of the most significant, though least noted, religious events of this age.

The ecological reformers, however, are not a majority and their movement is not a dominant one in Christian settings. Today, for the majority of Christians – theologians and ethicists as well as faithful church members – ecological consciousness is weak and most environmental concerns are secondary issues. As has been true historically in Christianity, the dominant strains of thought and practice remain largely anthropocentric and dualistic – focused on human interests and segregating humanity from the rest of nature. Indeed, many theologically and politically conservative Christians view environmental causes as anti-Christian. Nevertheless, the reformers have exercised an influence disproportionate to their numbers. In theology and ethics, they have forced some important debates and have developed some creative alternatives to prevailing paradigms. Christian environmental activists, moreover, have enabled some churches to affirm ecological values as Christian mandates and to support environmental causes.

The ecological reformers do not represent a theological and moral monolith. On the contrary, the diversity in types and thought forms is notable, in everything from methodologies to ecclesiologies. They are Orthodox, Catholic, and Protestant, from various parties in each tradition and from many national and ethnic identities. The movement incorporates practitioners from many disciplines, including liturgy, biology, cosmology, and economics. It includes a variety of causes, such as ecofeminism and animal rights. The reformers represent a broad range of theological perspectives, from evangelicals to postmodernists. Some have proposed so-called “radical” theologies that critics see as the abandonment of basic themes in the tradition. Others have been

content with modest revisions and extensions, such as extending the norm of love to include human relationships with otherkind. Some reformers focus on probing scripture and tradition for hidden treasures of ecological wisdom, while others turn to the natural sciences as a prime source for theological and ethical reflection. Disagreements are common. Yet, the reformers are united in sharing a concern for ecological integrity and a commitment to reinterpreting Christian symbols in ways that enhance that integrity.

When many of the ecological reformers first tried to incorporate ecological concerns into their theological and ethical systems, they were looking mainly for an additive – something to supplement, not subvert, established systems. They discovered, however, that an ecological consciousness could not be limited to supplemental effects. It functioned, instead, as a mutational power that internally altered the basic elements in their worldviews. They were encountering what economist Herman Daly and theologian John Cobb called “wild facts” – the ecological dynamics that confounded conventions and seemed to compel re-visions. These mind-altering facts are critical to understanding much of the ecological reformation in contemporary Christian theology and ethics.

Five fundamental facts about ecological realities have fostered the fundamental features of the Christian ecological reformation. Not all of the ecological reformers have been shaped by all of these five, and some have been shaped by other factors. Yet, these five seem to be the most influential factors in the reformation as a whole. These facts are not rare or obscure; they are rather ordinary and evident features of human interactions with the rest of the biosphere. Contrary to the popular myth about the conflict between religion and science, moreover, the main features of this reformation are rooted substantially in a serious engagement of religion with the sciences, especially the biological and ecological sciences. The influence of the environmental movement as a whole is also evident.

The five fundamental facts and their reformative features outlined here are: evolutionary fecundity, biological kinship, universal relationality, biophysical boundaries, and human dominance.

1) *Evolutionary Fecundity*. Most of the ecological reformers stand in wonder and reverence before the astonishing fecundity on this planet – life in wild profusion, probably tens of millions of species, from algae to elephants, in almost every conceivable habitat or niche from microorganisms in the boiling water of volcanic vents to ice worms in glaciers; species generating an abundant breadth of environmentally adaptive strategies for every bodily function from reproduction to mobility; and new life forms radiating from existing ones in a process of continually creative evolution. For Christian reformers, this fecundity has been revelatory. If, as the British biologist Lord Haldane noted, the abundance of beetle species on the planet suggests that God has “an inordinate fondness for beetles,” then the prolific fruitfulness of the planet suggests also that God has an extraordinary devotion to biodiversity. Furthermore, while humans, as the ethical animal, may be called the *moral* images of God, the whole of nature

and all its parts are the *ontological* images of God – incarnations or representations of ultimate power, wisdom, and grandeur.

It is not an exaggeration to say that the ecological reformation of Christianity has been born, nurtured, and empowered in encounters with evolutionary fecundity and other ecological marvels. For most of the reformers, the Earth is a sacramental event, revealing the glory and mediating the grace of God. Much of contemporary Christian ecospirituality, a movement of nature-oriented prayer and worship within the ecological reformation, is rooted in these revelatory experiences and seeks to re-enact them liturgically.

For a wide range of Christian thought, from process theology to evangelical exegesis of scripture, the experience of evolutionary fecundity has also been an encounter with value – intuitions of the intrinsic value of creatures and intimations of the Creator’s valuations. The goodness of creation has been a central affirmation of faith in the ecological reformation (though many Christians reformers add, given the theological problem of natural evil inherent in a predatorial biosphere, that the good creation is being brought to fulfillment by a good God). The Earth was not created solely for humans in this view; it is part of an ongoing process of cosmic and biotic, not merely anthropic, love. It is a habitat to be shared fairly among all creatures. The “world” is not to be despised or abused; it is to be valued in response to the rich and abundant values encountered in diverse life forms, which are also manifestations of divine values. Ethically, from the reformers’ perspective, fidelity to God implies loyalty to divine affections for biodiversity. Sin, accordingly, is defined not only socially but also ecologically, covering human moral offenses against the biosphere and all of its inhabitants.

2) *Biological Kinship*. Humans are linked in biological solidarity with all other forms of life through our common beginnings in one or more living cells and through our subsequent adaptive interactions. All life forms have the same genetic structure and significant genetic overlap. These forms even share elements with the stars and every other celestial entity. Consequently, claim the ecological reformers, we can no longer talk about humans *and* nature. Humans are not a biologically segregated species, but rather interrelated parts and products of nature.

The idea of common creaturehood – from one source and a shared substance – is not new in Christian reflection. The ecological reformation, however, has enhanced its ethical implications. The fundamental fact of biological kinship, from the perspective of the reformers, points to a fundamental fault at the roots of the ecological crisis: the failure to respond benevolently and justly to the biological reality that humans are relatives of every life form. Thus, they argue, one of the essential tasks of ecologically reformed Christian ethics is to develop standards of responsible human relationships with otherkind. A keynote of the ecological reformation is the inclusion of otherkind within the network of moral relationships.

Many of the reformers are intent on grounding human responsibilities to otherkind not only in kindness and generosity but also in concepts of distributive justice. Some

even have argued for “biotic rights” – the prima facie moral claims on humans for the imperative conditions of well-being for other species and their members. These claims demand moral justifications for human harm to otherkind and a limitation of such harm only to the extent that it can be so justified. These rights are rooted not in sentience and similar criteria that apply only to highly evolved animals, but rather in basic biological being, which advocates regard as a minimally sufficient status for moral claims.

But whether or not the language of rights is used, the concern for justice to otherkind is widespread among ecological reformers. Generally, biotic justice means recognizing that other species, given their intrinsic values, are entitled to “fair shares” of planetary goods, especially healthy habitats for sustaining viable populations until the end of their evolutionary time. Defining “fair shares” is extremely difficult, of course, particularly when humans must destroy other life forms in order to survive and create in a predatorial biosphere. Still, say the reformers, the struggle to define fair shares is an essential moral task to control human imperialism. Most argue also that humans have used far more than any reasonably defined fair share of the world’s goods, and should henceforth limit economic production and sexual reproduction to allow much more room for the thriving of wildlife in wildlands, along with the thriving of human communities.

3) *Universal Relationality*. This fundamental fact of social and ecological interdependence is closely linked to biological kinship; it is separable only for analytical purposes. Everything is connected with and has consequences for everything else. Biological existence is coexistence. Being is being in interdependent relationships. This basic reality is deeply imprinted on the ecological reformation.

For the reformers, a consciousness of relationality helps correct another of the fundamental faults at the roots of the ecological crisis: the failure to recognize the intricate and interdependent relationships involving humankind and the rest of the ecosphere – the connections, for example, between the dynamics of the global economy and climate change, or the profligate use of synthetic chemicals and population declines in species. Relationality, the reformers say, undoes the atomistic thinking that has caused countless social and ecological problems.

The influence of relationality is apparent also in a norm that is prominent in the ecological reformation. It is often called “eco-justice,” the integration of social justice and ecological integrity. The two are intimately linked and should be pursued in tandem. Eco-justice is an effort to prevent the compartmentalization of these two primary areas of concern, and to prevent solutions to environmental problems at the expense of social justice, or vice versa. The implicit moral mandate in eco-justice is: Act in ways that solutions to social problems do not cause or aggravate environmental problems, and vice versa – and, indeed, in ways that solutions to one contribute to solutions in the other.

Relationality enables also a broader understanding of humans as social *and* ecological beings – an understanding that is evident in the writings of many of the reformers.

Contrary to the exaggerated individualism in some modern cultures, humans are not self-sufficient moral hermits, living as isolationists and entering into minimal contractual alliances for self-protection. Instead, humans are internally relational creatures – dependent from cradle to grave on the cultural *and* ecological conditions that shape all their perspectives and possibilities. They are parts and products of collectives – not only of family groups and communities but also of ecosystems. Humans are social animals, as mainstream Christian traditions have always understood, but they are also ecological animals, as the traditions rarely noticed. The reformers are intent upon discerning the theological and ethical implications of this insight.

4) *Biophysical Boundaries*. One of the elementary lessons of the natural sciences, including ecology, is that the planet is a finite, essentially self-contained sphere, except for solar energy. There are no infinite bounties, no inexhaustible resources, no limitless systems. Appeals to the lesson of limits are common among ecological reformers. They see it as a corrective response to another of the fundamental faults at the roots of the ecological crisis: the failure to recognize and respect the limiting conditions of life – the carrying, regenerative, and absorptive capacities of the ecosphere.

The prevailing assumption in affluent cultures is that the rest of nature is a warehouse of abundant supplies for human prosperity. Many of the ecological reformers, however, have concentrated on puncturing this illusion of inexhaustibility. Humans face limits everywhere, they insist, from the number of people the planet can support securely to human technological capacities for extending biophysical limits. Everything material can become scarce

– if it is not so inherently – by abuse or overuse. Thus, a fundamental “law of nature,” as the reformers often argue, is that humans must stay within the bounds of nature, or face the effects of their folly.

As a means of respecting planetary limits, sustainability is a major norm in the ecological reformation, as it is in the contemporary environmental movement as a whole. Sustainability is living within the bounds of planetary capacities indefinitely, for the sake of future generations. It seeks a just distribution between the present and future.

For an increasing number of Christian ecological and social reformers, moreover, the revival of frugality as morally constrained production and consumption is a necessary condition of sustainability. A major challenge to modern societies is how to produce, and fairly distribute, sufficient goods, services, jobs, capital, pensions, revenues, and other benefits that will enable human communities to flourish, while at the same time ensuring sustainability and ecological integrity. These goals are not achievable, many reformers argue, without frugality as a personal virtue and social standard. Prodigal societies, the reformers claim, need to learn what the world’s religious traditions at their best have long understood: the fullness and richness of life will not be found in the abundance and luxuriousness of possessions. Rather, genuine joy is found in justice and generosity to ensure that all – humankind and otherkind, present and future – have enough to thrive together.

5) *Human Dominance*. A prominent feature of planetary existence is that humans exercise dominion – in the popular sense of a controlling power over the planet’s future. Whether in popular or theologically sophisticated senses, however, the concept of dominion recognizes a basic biological fact: humans alone have evolved the necessary rational and moral capacities, and, therefore, the creative and/or destructive powers, to represent divine blessings or demonic curses to the rest of the planet’s biota. Humans alone have the talents and the tools to protect or incapacitate the biosphere, even to the point of altering climates and disrupting creative fecundity.

Human dominance – especially in the form of “technocratic dominionism” that exaggerates human technical powers to manage nature and reduces the value of otherkind solely to instruments for human welfare – has been a central nemesis for the Christian ecological reformation. The reformers have encouraged humility as an antidote to arrogance. In their interpretations, humility recognizes human capacities for error and evil. It avoids overconfidence in technical fixes and undervaluations of other species. Humility knows that human societies depend on managerial interventions in the rest of nature, but it denies the aspiration of some to be the Masters of Nature. It stresses instead self-mastery and self-management, keeping ourselves in check for the good of the biosphere.

Not surprisingly, given the role that “dominion” has played in modern Christian history as a rationalization for environmental exploitation, the ecological reformation has given considerable attention to the concept. Some reformers have abandoned the word, but others have reinterpreted it, with support from biblical studies. In these reinterpretations, dominion is not a divine right to plunder with impunity. It is rather a responsibility to represent God’s benevolence and justice, to fulfill the human vocation of being the moral image of God. Moreover, when dominion is interpreted in the light of the New Testament understanding of Christ as the perfect image of God, dominion becomes the serving love of Christ. In a great reversal, dominion is now not destroying but rather nurturing nature.

The ecological reformation is firmly established in contemporary Christianity. It has the potential to prosper. Whether it will succeed, however, in actually reforming Christianity to the point that ecological sensitivity will be the dominant paradigm in this faith tradition is unclear. That will depend on a number of factors, including the reformers’ capacities to make theologically and ethically compelling cases for their cause, their strategic skills in influencing Christian churches, and their persistence in the hope and affections that first inspired this movement.

James A. Nash

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Christianity and Animals

The creation story contained in Genesis 1 was pivotal in shaping Christian thought concerning the relationship between humans and animals. The Genesis story made two critical claims: first, that all creation, including animals, is good (Gen. 1:20–25). A second claim concerns the status and role of humans in nature, who were reportedly created in the *imago dei*, or God’s image (verse 27), and given power over all the other species:

God blessed them and God said to them, “Be fruitful and multiply, and fill the earth and subdue it, and have dominion over the fish of the sea and over the birds of the air and over every living thing that moves upon the Earth” (Gen. 1:28, NRSV).

Despite a common foundation in the Genesis creation story, both historical and contemporary Christian thought has contained a diversity of opinions concerning animals. In his historical survey of Christian environmental perspectives, Paul Santmire identified two competing theological motifs that can provide a framework for thinking about Christianity and animals. On the one hand, Santmire found evidence for a spiritual motif that emphasizes spiritual salvation in such a manner that the physical environment and animals become unimportant for the drama of human salvation. On the other hand, Santmire also identified an ecological motif that acknowledges “the human spirit’s rootedness in the world of nature” and understands the life of faith as occurring within the context of the whole biophysical order (Santmire 1985: 9). Santmire argued that these two theological metaphors are apparent throughout the history of Christian thought, from the early Church Fathers, to the medieval theologians, through the reformers, and even into contemporary thought. The diversity of Christian perspectives concerning the relationship between humans and animals is well illustrated by two historical thinkers and their understanding of the *imago dei*.

The medieval Catholic theologian Thomas Aquinas exemplified the spiritual motif concerning animals. For Aquinas, the human–animal relationship was part of the Great Chain of Being, a hierarchy of being that included both spiritual and material beings. At the top of this hierarchy were spiritual or immaterial beings, most notably angels. At the mid-point of the hierarchy were humans, who held both spiritual and material properties. At the bottom of the hierarchy were material beings, beginning with animals, followed by plants, and, finally, non-living material.

While they share some material similarities, Aquinas held that the *imago dei* profoundly distinguishes humans from animals. He identified the *imago dei* with human rationality – a characteristic and capacity that humans share with no other animal. For Aquinas, human rationality was teleological in nature. “The end and good of the

intellect is truth. Therefore the ultimate end of the whole man and of all his actions and desires is to know the first truth; namely God . . . man's ultimate end is to know God" (Aquinas, *Summa Contra Gentiles* III: 25). Humans were incapable of knowing God during their earthly life, but Aquinas held that this *telos* could be achieved at the eschaton, or end-time: "Final perfect happiness can only come from the vision of the divine essence" (Aquinas, *Summa Theologiae* I-II: 3, 8). This vision of the divine essence represents a return to God by humans, who are now understood to be purely spiritual creatures. As Aquinas summarized his own position,

Man's ultimate happiness consists in the contemplation of truth for this operation is specific to man and is shared with no other animals . . . In this operation man is united to higher beings [substances] since this is the only human operation that is carried out both by God and by the separate substances [angels]. Through this operation too man is united with those higher beings by knowing them in a certain way (Aquinas, *Summa Contra Gentiles* III: 37).

Santmire concluded that Aquinas offered ". . . a theology that both affirms nature and denies nature. . ." (Santmire 1985: 94). Thomas affirmed the goodness of all creation, as claimed in the Genesis 1 creation story. However, his understanding of the *imago dei* created a profound gulf between humans and animals. Whereas the *telos* of humans is spiritual union with God, the rest of creation, including the animals, will cease to be at the end-time.

John Wesley, who was the English founder of the Wesleyan movement that led to the creation of several Protestant denominations including the Methodist and Nazarene Churches, exemplifies Santmire's ecological motif. For Wesley, the *imago dei* was best understood as a special relationship between God and all created beings. Non-human animals could also have a special relationship with God, albeit to a lesser degree than the relationship shared by humans with God. For Wesley, these differences in relationships turned primarily on the greater capacity humans have to enter into relationship with God. In his sermon, "The General Deliverance," Wesley said: "We have no ground to believe that they [animals] are in any degree capable of knowing, loving, or obeying God. This is the specific difference between man and brute – the great gulf which they cannot pass over" (Sermon 60 in *The Works of John Wesley*).

Like Aquinas, Wesley also perceived a hierarchy in which humans were above animals. To appreciate Wesley's understanding of this hierarchy, however, one must apprehend his understanding of the Creation-Fall-Reconciliation motif in Christianity. At the time of creation, Wesley believed that humans and animals lived together in perfect harmony in a pain-free paradise. In this state, animals lived in loving obedience to humans and ". . . all the blessings of God in paradise flowed through man to the inferior creatures." However, with the temptation and fall of Adam and Eve, the relationship between humans and animals changed: the flow of blessings through humans to animals was interrupted and animals now lived in fear of humans. Through sin and the Fall, humans have fractured relationships, not only with God and other humans, but with animals as well. Wesley believed that these relationships would be reconciled and

healed through the new creation in Christ at the endtime. In his sermon, “The General Deliverance,” Wesley concluded by speculating that – at the end-time of reconciliation – God may choose to increase animals’ ability to be in relationship so that they may experience God more fully than before the Fall.

In response to the emergence of serious ecological crises, such as the rapid loss of animal biodiversity, several late twentieth-century Christian thinkers worked from the ecological motif to reexamine the relationship between humans and animals. James Nash, for example, proposed “loving nature” as a controlling metaphor for thinking about the relationship between humans and animals. He wrote, “. . . love is the integrating center of the whole of Christian faith . . . [Thus] a Christian ecological ethic is seriously deficient – if even conceivable – unless it is grounded in Christian love.” Out of his understanding of Christian love, Nash proposed eight biotic rights owed to animals:

1. The right to participate in the natural competition for existence.
2. The right to satisfaction of their basic needs and the opportunity to perform their individual and/or ecosystemic functions.
3. The right to healthy and whole habitats.
4. The right to reproduce their own kind.
5. The right to fulfill their evolutionary potential with freedom from human-induced extinctions.
6. The right to freedom from human cruelty, flagrant abuse, or frivolous use.
7. The right to redress through human interventions, to restore a semblance of the natural conditions disrupted by human actions.
8. The right to a fair share of the goods necessary for the sustainability of one’s species (Nash 1991: 186–9).

Sallie McFague also used “loving nature” as the controlling metaphor for Christian thinking about animals. Writing from an ecofeminist theological perspective, McFague replaced the traditional subject–object dualism with a “Subject–subjects model,” in which “everyone and everything is somewhere on the subject continuum.” For example, humans would “. . . recognize that the wood tick is not merely an object in *our* world . . . but a *subject in its own world*.” Viewed from this perspective, Christians should love animals – as well as other humans and God – as subjects (McFague 1997: 97, 109).

Andrew Linzey would agree with the emphasis that Nash and McFague put on “loving animals.” However, he pushed beyond love to say that Christians are also called to be the servants of animals: “According to the theological doctrine of animal rights, then, humans are to be the servant species – the species given power, opportunity, and privilege to give themselves, nay sacrifice themselves, for the weaker, suffering creatures” (Linzey 1998: 39).

In conclusion, special note should be made of the historical figure Saint Francis of Assisi, who referred to animals as brothers and sisters. For many twenty-first-century Christian thinkers working from Santmire’s spiritual motif, Saint Francis provided the ideal paradigm for understanding Christianity and animals.

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See also: Animals; Animals in the Bible and Qur'an; Bestiary; Creation Story in the Hebrew Bible; Fall, The; Francis of Assisi; Hebrew Bible; Vegetarianism (various).

Christianity and Nature Symbolism

In the main, Christianity understands the divine reality as a Sky God. In nursery rhymes, sermons, hymnody, iconography, and theological teachings, God is pictured as a bodiless, immaterial being who inhabits an invisible, heavenly realm far beyond the vicissitudes of life on Earth. Of course, in the person of Jesus Christ, God did become an enfleshed life form in ancient history. But the Incarnation of God in Christ is generally understood to be a long-ago, punctiliar event limited to a particular human being. The incarnation does not carry the promise that God, in any palpable sense, is continually enfleshed within the natural world as we know it. Rather, for the better part of church history, the divine life and the natural world have been viewed as two separate and distinct orders of being. Whatever else God is, God is not a nature deity captive to the limitations and vagaries of mortal life forms. God is not bound to the impermanent flux of an ever-changing Earth. It is for these reasons, according to majority opinion, that biblical religion forbids the fashioning of graven images as representations of the divine life: God is not a bull or a snake or a lion. On the contrary, so the majority argument goes, God abides in an eternally unchanging heavenly realm where bodily suffering and death are no more and every tear is wiped dry for the privileged believer who dwells there.

The counterpoint to the mainstream opinion is the historic biblical and theological depictions of *God as Earth Spirit*, the benevolent, all-encompassing divine force within the biosphere who inhabits Earth community and continually works to maintain the integrity of all forms of life. In this formulation, God is the Earth God who indwells the land and invigorates and flows with natural processes

– not the invisible Sky God who exists in a heavenly realm far removed from earthly concerns. God as Spirit is the enfleshment of God within everything that burrows, creeps, runs, swims, and flies across the Earth. Here, God is *carnal*: through the Spirit, God *incarnates* Godself within the natural order in order to nurture and bring to fruition every form of life. The Nicene Creed in 381 named the Spirit as “the Lord, the Giver of Life.” To make sense of this ancient appellation by re-envisioning the Holy Spirit as God’s invigorating corporal presence within the society of all living beings is the burden of this article.

Granted, the terms “Holy Spirit” or “Holy Ghost” (a mistranslation of the term “Spirit” in Old English versions of the Bible) does conjure the image of a disembodied, shadowy non-entity in both the popular and high thinking of the Christian West. But many Christian theological and biblical texts stand as a counter-testimony to the conventional mindset. The Bible, for example, is awash with rich imagery of the Spirit

borrowed directly from the natural world. The four traditional elements of natural, embodied life – *Earth, air, water, and fire* – are constitutive of the Spirit’s biblical reality as an enfleshed being who ministers to the whole creation God has made for the refreshment and joy of all beings.

Numerous biblical passages attest to the foundational role of the four cardinal elements regarding the biocentric identity of the Spirit:

(1) As *Earth*, the Spirit is both the divine dove, with an olive branch in its mouth, that brings peace and renewal to a broken and divided world (Gen. 8:11; Matt. 3:16, John 1:32), and a fruit bearer, such as a tree or vine, that yields the virtues of love, joy, and peace in the life of the disciple (Gal. 5:15–26). Far from being the “immaterial substance” defined by the standard theological lexicon, the Spirit is imagined in the Bible as a material, earthen life form – a bird on the wing or a flowering tree – who mediates God’s power to other Earth creatures through its physical presence.

(2) As air, the Spirit is both the vivifying breath that animates all living things (Gen. 1:2; Ps. 104:29–30) and the prophetic wind that brings salvation and new life to those it indwells (Judg. 6:34; John 3:6–8; Acts 2:1–4). The nouns for Spirit in the biblical texts – *rûach* in Hebrew and *pneuma* in Greek – mean “breath” or “air” or “wind.” Literally, the Spirit is pneumatic, a powerful air-driven instrument analogous to a pneumatic drill or pump. The Spirit is God’s all-encompassing, aerial presence in the atmosphere that envelopes the whole Earth; as such, the Spirit escapes the horizon of human activity and cannot be contained by human constraints. The Spirit is divine wind – the breath of God – that blows where it wills (John 3:8) – driven by its own elemental power and independent from human attempts to control it – refreshing and renewing all broken members of the created order.

(3) As water, the Spirit is the living water that quickens and refreshes all who drink from its eternal springs (John 3:1–15; 4:14; 7:37–38). As physical and spiritual sustenance, the Spirit is the liquid God who imbues all lifesustaining bodily fluids – blood, mucus, milk, sweat, urine

–with flowing divine presence and power. As well, the water God flows and circulates within the soaking rains, dewy mists, thermal springs, seeping mudholes, ancient headwaters, swampy wetlands, and teeming oceans that constitute the hydrospheric Earth all life inhabits. The Spirit as water makes possible the wonderful juiciness and succulence of life as we experience life on a liquid planet sustained by complicated and necessary flow patterns.

(4) Finally, as fire, the Spirit is the purgative fire that alternately judges evildoers and ignites the prophetic mission of the early church (Matt. 3:11–12; Acts 2:1–4). Fire is an expression of God’s austere power; it is viewed biblically as the element God uses to castigate human error. But it is also the symbol of God’s unifying presence in the fledgling Christian community where the divine *pneuma* – the rushing, whooshing wind of God – is said to have filled the early church as its members became filled with the Spirit, symbolized by “tongues of fire [that were] distributed and resting above the heads of each” of the early church members (Acts 2:3). Aberrant, subversive,

and creatively destructive, God as fire scorches and roasts who and what it chooses apart from human intervention and design – like the divine wind that blows where it wills. But fire can and should be pressed into the service of maintaining healthy Earth relations. Fire is necessary for the maintenance of planetary life: as furnace heat, fire makes possible machine economies and food preparation; as controlled wildfires, fire revivifies long dormant seed cultures necessary for biodiverse ecosystems; and when harnessed in the form of solar power, fire from the sun makes possible safe energy production not dependent on fossil fuel sources. The burning God is the God who has the power to incinerate and make alive the elements of the life-web essential for the sustenance of our gifted ecosystem.

God as Spirit is biblically defined according to the tropes of Earth, wind, fire, and water. In these scriptural texts, the Spirit is figured as a potency in nature who engenders life and healing throughout the biotic order.

The Earth's bodies of water, communities of plants and animals, and eruptions of fire and wind are not only symbols of the Spirit – as important as this nature symbolism is – but share in the Spirit's very nature as the Spirit is continually enfleshed and embodied through natural landscapes and biological populations. Neither ghostly nor bodiless, the Spirit reveals itself in the biblical literatures as an earthen life form who labors to create and sustain humankind and otherkind in solidarity with one another. Living in the ground, swimming through the oceans, circulating in the atmosphere, God, as Earth Spirit, is always afoot and underfoot – the quickening life-force who seeks to bring all denizens of our sacred Earth into fruition and well-being.

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Christianity and Sustainable Communities

Christianity's concern for sustainable community and sustainable development has historical roots in what numerous observers refer to as "the social question" or "the modern social problem." The reference is to the final third of the nineteenth century, when progressive social theorists in Europe and North America joined popular movements of reform, especially workers' movements, to protest the exploitative character of rapidly developing industrial society. In giving voice to brutalizing social conditions, reform-minded clergy and laity of the Social Gospel movement, labor leaders and workers, and academic students of society developed an extensive critique of the capitalist industrial order and of political and economic efforts to govern it. In varying ways and degrees, they pointed to class suffering (especially poverty and dangerous working conditions, inequality and unemployment) as these were compounded by race, gender, ethnic, and cultural discrimination. And they undertook organized responses to "the modern social problem" (various protest movements with political economic platforms, including both religious and secular socialism). Present Christian concern for sustainable development and community draws on the fact that the social question persists as these have, in many ways, gone global.

In the final third of the twentieth century, the social question was joined by "the ecological question." The language of "sustainability" itself arose here, with some of its first uses in the ecumenical movement. ("Sustainable" as applied to society, and not simply the yield of forests or fisheries, was a mark of the 1975 World Council of Churches program "Toward a Just, Participatory and Sustainable Society.") While the causes are many, the ecological question, too, chiefly arises from the destructive downside of the organization and habits of modern industrialized society, whether in the form of corporate capitalism, state socialism, or the competition of these two over decades around the modernization and alignment of non-industrialized or "developing" nations.

In a word, what has given rise to concern for sustainable development and sustainable community on the part of Christianity is the unending transformation of nature knit integrally to the unending transformation of society as these together have degraded land, sea, air, and human communities in the very process of yielding the benefits of modernity. Few seriously propose a return to pre-modern worlds. Yet the present course is itself considered unjust and unsustainable.

Two broad streams of response have followed. One is the search to understand the roles Christianity has played in the travail of society and nature together in the modern period. Sometimes attention is given to roughly the last five centuries, beginning with the onset of colonization, conquest, and conversion on the part of Christian Europe, while other times the attention is on the last two centuries especially – the industrial era. The other search is for concrete, constructive Christian responses to the “ecocrisis” as that has been given voice from the 1970s onward. Christian-identified groups have often joined other “NGOs” in this (non-governmental organizations).

The internal critique has been extensive. Most of it turns on the complicity of dominant streams of Western Christianity in the making of the modern world. Religiously sanctioned racial, cultural, and gender stratification and oppression are pointed to, together with callousness about the fate of the land and neglect of the requirements of Earth itself for its own flourishing. Christian habits that combine anthropocentricity with assumptions of the superiority and forms of Western Christian civilization are the subject of detailed analysis. In this worldview, God has been separated from nature and the purposes of divine action (salvation, redemption) have been relocated in human history. Humanity itself has been separated from the rest of nature as a unique creation and set in history as a specifically divine/human domain. And throughout, pervasive dualisms of nature and society have been reinforced by church teaching and practice (men are set over women, the rights of humans over the rest of nature, and the dominance of Western technologies and cultures over subjugated peoples, their religions, cultures and lands).

The response to self-examination on the part of Christianity is ongoing. The last decades of the twentieth century have seen the rise of numerous “eco-theologies”; the broadening and deepening of multiple analyses of Christianity’s place in the making of the modern world that go beyond analyses of dominant mainstream Western Christianity to emphasize the resistance to it in the Christianity of indigenous and other subjugated peoples and perspectives; and the explosion of Christian participation in both faith-based and NGO efforts to address socio-environmental maladies around the world.

This last-mentioned item – constructive, on-the-ground organized Christian efforts – achieved a certain focus with the United Nations Conference on Environment and Development in Rio de Janeiro in 1992. That conference, the largest gathering of heads of state to that date, with parallel participation by the largest gathering of NGOs, gave rise to the specific language of “sustainable development” – the capacity to meet the needs of present generations without jeopardizing the capacity of future generations to meet theirs. “Sustainable development” has since become common discourse amid the international efforts to address the social and ecological questions together.

Yet sustainable development as a shared agenda has encountered dissent from the outset, some of it from Christian communities and some of it already in view at the Earth Summit. Many active participants among environmental NGOs regard sustainable development as yielding too much to economic globalization’s efforts to integrate

local, regional, and national economies into a single global economy as led by corporate capitalism. For these dissenting groups – prominent at international meetings of the World Trade Organization, World Economic Forum, and the “G7” (advanced industrial) nations from Seattle to Davos to Genoa to New York in the 1990s and the first decade of the twenty-first century – greening global capitalism so as to render both the environment and the economy “sustainable” does not truly address social inequities or root causes of environmental degradation. The dissenters’ point of departure asks instead what it is that makes for healthy community. They then seek to wrap both economy and environment around that, on successive levels (local, regional, transnational), all the time being aware that Earth’s requirements are fundamental. The human economy is a subset of the economy of Earth. “Sustainable community,” as distinct from

“sustainable development,” thus tries to preserve or create some mix of the following: greater economic selfsufficiency locally and regionally, with a view to the bioregions themselves as basic to human organization; agriculture appropriate to regions and in the hands of local owners and workers using local knowledge and crop varieties, with ability to save their own seeds and treat their own plants and soils with their own products; the preservation of local and regional traditions, language, and cultures and a resistance to global homogenization of culture and values; a revival of religious life and a sense of the sacred, vis-à-vis a present way of life that, because it reduces life to the utilitarian, has little sense of mystery and the sacred; the repair of the moral fiber of society on some terms other than material consumption; resistance to the commodification of all things, including knowledge; the internalization of costs to local, regional, and global environments in the price of goods and services themselves; and the protection of ecosystems and cultivation of Earth as a “commons.” All this is viewed, in the eyes of its advocates, as global democratic community rather than nativist localism. It is global by virtue of its planetary consciousness and the impressive networking of citizens around the world made possible by electronic globalization. Yet its orientation is first of all local in that the key question for sustainable community advocates is how cultural wealth and biological wealth, together with economic well-being, are sustained in the places people live, together with the rest of the community of life.

Christian groups have been active participants in the quest for sustainable community and in the debates about sustainable development. They have joined the search for ways of living that meet the norms of genuine sustainability, norms such as participation as the optimal inclusion of all involved stakeholders in socio-ecological decisions; sufficiency as the commitment to meet the basic material needs of all life possible; equity as basic fairness across generations and across the Community of Life; accountability as the structuring of responsibility in ways that prize “transparency” (decision-making structures and processes that are clear and public); material simplicity and spiritual richness as markers of a quality of life that includes bread for all but is more than bread alone; responsibility on a scale that people can handle (i.e., commensurate with workable community); and subsidiarity – resolving problems at the closest

level at which decisions can be taken and implemented effectively, beginning with local resources and talents.

In addition to joining the quest for sustainable practices, Christian groups have also responded to the critique of their own past by undertaking the retrieval and transformation of Christian faith traditions and practices that are explicitly Earth-honoring. They have sought to uncover or to create Earth-positive traditions and practices that address socio-ecological questions in ways resonating with faith as it has been expressed over millennia. Varieties of ascetic, mystical, sacramental and prophetic-liberative practices are all involved.

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See also: Earth Charter; Religious Studies and Environmental Concern; Sustainability and the World Council of Churches; United Nations' "Earth Summits."

Christianity in Europe

Christians understand “nature” as “creation,” the world and life that in its origin and development as well as in its transience exists due to its relation to God. God is regarded as the creator of everything between heaven and Earth, and classical theology has interpreted God’s work as a making, preserving and fulfilling of nature. The doctrine of creation offers the horizon for the whole understanding of Christian faith, even if it historically has often been opposed to the doctrine of salvation. A general challenge for Christian theology therefore is to relate God’s creation and God’s salvation to each other. Are human beings as “images of God” placed above or among creatures? Are nature and man/woman in need of liberation?

The view of nature and the use of it have undergone several changes in the history of Western civilization. In ancient and medieval times, the notions of “*physis*” and “*natura*” signified everything that existed, and the so-called “natural theology” (e.g., of Thomas Aquinas), shaped the path for modern science by investigating God’s being through studying nature and by explaining the world from the image of God. The view of nature changed markedly in the nineteenth century. Humans and nature were distanced radically from each other and the human identity was no longer understood as divided between divine-spiritual and natural-bodily spheres of reality.

The “roots of our ecological crisis” cannot be identified in one single historical period in the history of Judaism and Christianity. Instead one needs to understand a complex historical process of almost 2000 years where the present problems were developed and accumulated in different “waves” and regions. The anthropocentrism of Western European Christian theology in its mainstream formulations has contributed to this process, legitimating a sense of superiority over nature and a consumerist lifestyle, even if undercurrents such as mysticism tried to resist the historical reductionism of creation spirituality.

In time, with the progress of secularization and modernization, the change of life-systems, for example in climate, revealed with increasing clarity a human regime over nature through reason and technology. Human codes of knowing about, and acting in, nature are out of balance with the codes of nature. Older natural theology no longer addresses this situation, and late modern theology is challenged to reconstruct the traditions of creation theology and to interpret in a new key the God who acts in, with and for a world threatened by human beings who God once created in his/her own image.

Since the 1970s, churches and theologians in Europe have addressed the ecological challenge in three ways. First, the environmental crisis has been regarded simply as

a reason to reformulate conventional doctrines of faith. Second, elements from ecological science have eclectically mixed with selected elements from Christian tradition. A third way has sought for critical-constructive mediations of ecological insights and interpretations of God. In the latter, theology works as a part of a larger ecological discourse and asks for specific Christian reconstructions and represents the mainstream of creation theology in Europe in the second part of the twentieth century. The understanding of God itself is challenged by the suffering of nature caused by men and women who are supposed to be images of God the Creator. Methodologically, one can discern two modes of doing theology: one dogmatic in a direction from faith to environment (ecological doctrine of creation) and another contextual, departing from the state of nature and moving toward the reflection on God (theological ecology).

While process philosophy offered an important background for eco-theology in the United States, European theologians have met this with a far more skeptical attitude. German biologist and theologian Günter Altner (from 1974) was the first to interpret environmental degradation in the light of a Christian theology of the cross, in which nature revealed a civilization in crisis. Altner proposed a dialogue with environmental science and worked out an influential ethics of dignity in widening Albert Schweitzer's approach.

Another among the pioneers of eco-theology, German physician and theologian Gerhard Liedke (1979) profiled the clear challenge to the churches and theology. He focused on the conflict between humans and nature in creation, using the Norwegian peace researcher Johan Galtung's theory. Liedke argued for minimizing the violence constituted by an asymmetry in the relation of humanity and nature. This claim was made into an obligation for the ecumenical movement and its church bodies (the international, interdenominational church movement founded in 1925 to promote reconciliation and cooperation, and represented most prominently by the World Council of Churches). Several theologians related the conflict between humans and nature to the conflicts between different classes, regions and people, and also to the conflict between the sexes, and a wide-open perspective of liberation and reconciliation was brought into the heart of ecumenical social ethics after 1970.

One of the first extensive and influential reinterpretations of Christianity was offered in 1985 by Jürgen Moltmann in his "ecological doctrine of the creation." Different themes from Christian tradition were loosely linked to new insights in ecological science and green social movements in order to work out the relevance of Christian faith for finding ways out of the contemporary crisis of society and nature. Disciples from different confessional traditions tried to respond to the ecological challenge, even if they did not always succeed in finding synthetic correlations with the fathers of their traditions and the challenges of the new situation. The question, for example, of whether Karl Barth's neo-orthodox theology of God's revelation can contribute to a positive understanding of the creation and its spirituality is highly controversial because of Barth's dependence on the dualistic thinking of his times and his tendency to develop theology as a preaching monologue.

After the widening of the academic eco-theological discourse from the first to the third and fourth world in the 1990s, the vision of an ecological theology of liberation emerged. German-Swedish theologian Sigurd Bergmann developed such a normative approach, one in which soteriology and ontology are interpreted in the notion of “God’s liberating movement in creation.” This approach was developed in a constructive correlation with early church theology, especially the Greek Orthodox traditions on the Trinity and the Holy Spirit. The four issues of sociality, motion, suffering and the life-giving Spirit occur as main problems in late antiquity theology as well as in the ecological discourse and in late modern eco-theologies. By an ecological widening of the criteria of contextual and liberation theology, this approach develops an ecotheology of liberation that focuses on the trinitarian view of God, a new theological thought of motion, the theology of the cross of nature and humankind, and a topologically shaped spirituality. The theme of the whole “Creation set free” is contained in this approach, at the center of which is God’s acts and Christian theology reflecting upon those acts.

The ecological challenge was taken up by theologians from all confessions. From the beginning, eco-theology was an ecumenical affair in Europe. The Eastern Orthodox contributions to the new discourse on nature were developed in the institutions and in the conferences of the ecumenical movement, especially in the World Council of Churches (WCC) and the Conference of European Churches (CEC). It was due to the Orthodox representatives at the WCC assembly in 1983 and especially to the Syrian Orthodox theologian and church leader Paulos Mar Gregorios that the WCC “Programme on Justice, Peace and the Integrity of Creation” (JPIC) was enriched with the environmental issue so that the main agenda for ecumenical social ethics since that time has been focused on peace, justice and ecological problems as the most highly prioritized challenges for Christians. Orthodox theologians enriched the sometimes limited perspectives of Protestant and Catholic thinkers with themes like sacraments, liturgy, Trinity and beauty. A breakthrough for ecumenical ecotheology in Europe adopted by the churches took place at the Concilium in Basel in 1989. For the first time after the schism between Eastern and Western Europe, all churches met in one common conference, and they were even able to come to a strong consensus on the need for a more just and ecological order of world economics. The heritage of this strong ecological commitment in the European churches is developed in the “European Christian Environmental Network” (ECEN). The European Ecumenical Forum of Christian Women has a sub-group on Ecofeminism and Ecology.

While ecofeminism has made significant inroads in the United States, it is only slowly being addressed in Europe. Catharina Halkes, Dorothee Sölle, Anne Primavesi and Mary Grey have from different feminist angles produced alternative visions of humanity’s encounter with nature. Ecofeminism highlights the link between women and nature, for example, in the model of analogy, where the idealization of the feminine and nature on the one hand is related to the suffering of both on the other hand.

With academic vitality and multifaceted reflection, the best of this discourse was found in the British journal *Ecotheology*. The ecumenical movement in Europe, consist-

ing of both many independent Christian groups and networks and of institutionalized church bodies, constitutes a strong and sustainable basis for the further development of ecologically constructive and critical theology and praxis. This development is not only about ideological reconstruction, but also about the reacting and renewal of Christian community-life and mission. Alternative church banking, forests and land owned and used ecologically by churches, green parish economy, and Christian church aid for women preserving nature are just a few of many examples where eco-theology and ecopraxis are in mutual exchange. The dignity of the question where and how God acts in the ecological destruction and reconstruction of nature is increasing in accordance with the increasing environmental problems.

Sigurd Bergmann

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See also: Altner, Günter; Christianity (6b2) – Greek Orthodox; Christianity (7b) – Political Theology; Moltmann, Jürgen; Sölle, Dorothee; World Council of Churches and Ecumenical Thought.

Chuang-tzu

– See Zhuangzi

Church of All Worlds

The Church of All Worlds (CAW) officially incorporated in 1968 in Missouri and has since claimed the mantle of the oldest federally recognized Pagan Church in the United States. Its origins, however, go back earlier to a friendship formed in the early 1960s between Westminster College students Lance Christie and Tim Zell (later Otter, then Oberon Zell). Christie and Zell, both deeply taken with Robert Heinlein's science fiction novel *Stranger in a Strange Land*, founded a community, which they called Atl, based on spiritual and social ideas from that novel. Atl split in the summer of 1967, with Zell leading what became CAW. CAW began publishing its journal, *Green Egg*, in 1968 and through it made contact with the emerging American Pagan community. CAW grew in membership during the 1970s and on Labor Day of 1970, Tim Zell had a "cosmic acid vision of the Goddess," which he articulated in the pages of *Green Egg* over following years. This vision was of the Earth as a conscious entity, and following the publication of James Lovelock's Gaia hypothesis, the Church began to identify this goddess with the name "Gaea" (later changed to Lovelock's more popular spelling, "Gaia").

With his marriage to Morning Glory, Tim Zell moved to California in 1975. With the move, CAW became centered in northern California where Morning Glory and Tim Zell lived as caretakers for a parcel of land north of Ukiah, California. Through the late 1970s and early 1980s, CAW developed primarily in northern California. Publication of *Green Egg* ceased in 1976. While many important developments occurred for CAW during this time, including acquisition of its sacred land, Annwn, by the late 1970s it was no longer the primary entity in the national Pagan scene that it had been during the early publication of *Green Egg*. Minutes from a Board of Directors meeting of CAW in June of 1986 show a call for revitalization. In the following years, CAW reemerged as a national entity and began publication of *Green Egg* once more in 1988.

The idea of the Earth as a living, potentially conscious organism that was first articulated by Zell in the early 1970s remains the dominant motif in CAW's spiritual narrative. The stated mission of the Church is "to evolve a network of information, mythology and experience to awaken the divine within and to provide a context and stimulus for reawakening Gaea and reuniting Her children through tribal community dedicated to responsible stewardship and the evolution of consciousness." CAW members have frequently participated in activist environmental movements, like Earth First!; and as a whole CAW has positioned itself strongly in alliance with environmental movements, most specifically with Deep Ecology. CAW's vision of Gaia has always included an evolutionary principle of progressive development. As a result, members of

CAW have sometimes clashed with other environmentalists because of CAW's positive view of technology and science and its validation of human potential.

The second idea emphasized in the mission statement, the divinity of individual humans, shows the continued importance of Heinlein's *Stranger in a Strange Land* on the spiritual imagination of CAW. In addition to its articulation of a concept of immanent divinity, Heinlein's book inspired for the Church the basic structure of local bodies (nests), the central ritual of water-sharing, and the idea of polyamory. CAW is comprised primarily of locally defined "nests," which range from extended group families to bodies defined in a more traditional congregational structure. Water-sharing, a simple ritual in which human bonds are affirmed through a formal sharing of water, provides the basic context for the Church's continued emphasis on human relationships as the basis of the spiritual community. CAW has also participated in redefining sexual and love relationships through articulating a relationship philosophy termed "polyamory," which advocates multiple adult, committed love relationships. This exploration of human relationships has been extended by many CAW members to active participation in cooperative living movements.

Although membership in CAW has remained relatively small, with its continued publication of *Green Egg* until 2000, its presence at major Pagan gatherings throughout the country, and its network of nests (local bodies), CAW continues to be a major contingent of the contemporary Pagan community. Additionally, because of its wider participation within "Gaian spirituality," CAW has reached beyond the immediate Pagan community to work within larger environmental and spiritual communities. *Green Egg* has featured a number of interfaith issues emphasizing building common bonds between Christians, Buddhists, Jews, Hindus, and Pagans. The culture of CAW emphasizes immediate experiential religion and visionary and imaginative ideas of divinity – an approach which has undoubtedly contributed to the radical transformations it has undergone during its short history.

Grant Potts

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See also: Deep Ecology; Earth First! and the Earth Liberation Front; Gaia; Lovelock, James; Paganism; Radical Environmentalism; Wicca.

Church of Euthanasia

The Church of Euthanasia (CoE) proclaims itself “the world’s first anti-human religion.” This radical religious group believes humanity has fallen irredeemably “out of balance” with the larger biosphere. Using shock tactics

(called “Dada Actions”), their publications, website and public protests are directed at awakening a guilty populous to the “Ecocide” which is annihilating species, ecosystems, and everything else that does not serve human progress.

CoE emerged in the summer of 1992 when Chris Korda, who goes by the title “Reverend Korda,” had a “vision/ dream” of being “visited by an alien consciousness.” This alien consciousness, referred to as “The Being,” warned Korda that the planet is in peril. “Save the Planet, Kill Yourself” was the most direct message that Korda received and has become the guiding slogan for CoE.

Korda also recognizes a non-historic time called the “Age of Magic.” Remnants of this age are found in traditionally oral and “magic-based cultures.” While certain people have remained in contact with this “timeless realm of mystical experience,” the eclipse of the Age of Magic and alienation from its vitality is due to the onset of the “Industrial Age.” To participate in the Magical Age requires “sensitivity and ‘oneness,’ ” attributes that Industrial Society “must ruthlessly seek out and destroy, in its effort to create passivity and ‘sameness.’ ”

As a “visionary,” Korda remains in contact with this realm. Living in the Industrial Age, however, she is forced to adapt these visions into the “laws of mass communication.” The tension that Korda struggles with exists between communicating her “irrational vision of Absolute Truth” within a world that is overly rational and lacking spirit “not only in the people, but in the language itself.”

Ideologically, CoE has one main commandment, “Thou Shalt Not Procreate.” Along with this vow there are an additional four “pillars”; Suicide, Abortion, Cannibalism and Sodomy. The commandment and pillars are both prescriptive and symbolically descriptive of the fundamental problem of human overpopulation that is taxing the Earth. Death, suicide, phalluses, cannibalism, and hatred of babies are prominent themes at protests and on their web site. These themes combined with terminology such as “Church,” “Reverend,” “commandments,” and Korda’s own ambiguous gender are tactics designed to disorient and confront people with rejected elements of a dominant culture steeped in anthropocentrism and biblical monotheism. Through public display of disturbing images, banners and artwork, CoE’s mission is to penetrate everyday assumptions and allow unpleasant “truths” about the ugliness of humanity to enter consciousness.

Undergirding their transgressive identity, paradoxical message, shocking tactics, nihilistic beliefs about human nature and their anti-human stance, lie ethical and religious beliefs that life has a purpose: for life itself to flourish. For CoE, as long as humans destroy the opportunity for this diversity of life to continue, then humanity is “anti-life.” “So its kind of a humorous thing” states Korda, “but I often say that the Church of Euthanasia is a true pro-life religion.”

Two sister organizations, the Gaia Liberation Front (GLF) and the Voluntary Human Extinction Movement (VHEMT), each believe that the death of humans is the only feasible option to restore balance. Proclaiming in their central slogan, “Live Long and Die Out!” VHEMT remains dedicated to “voluntary extinction” by refusing to procreate, while GLF supports “involuntary” acts of extinction. According to GLF humans are “genetically programmed” to destroy the Earth, thus only through the complete eradication of the human species will the Earth be able to heal.

CoE claims 300 members in large cities within the United States and smaller numbers in Europe and South America. The majority of CoE members are young and male. Although they call themselves a church (with tax-exempt status as an educational foundation) they do not own buildings nor engage in activities commonly associated with churches. Rather, most of their protests, selling of merchandise, and newsletters are organized via the internet.

Dedicated to their mission, CoE has received national and international attention. They have appeared on the Jerry Springer Show and performed and protested in the United States, Germany, Spain, Bosnia and South America. They have established a website, an e-magazine, a merchandise catalogue, and distributed fifty thousand “Save the Planet – Kill Yourself” bumper stickers.

Matthew Immergut

See also: Death and Afterlife in Jeffers and Abbey; Green Death Movement.

Church of Jesus Christ of Latter-day Saints

Joseph Smith, the founding prophet and president of the Church of Jesus Christ of Latter-day Saints (the Mormons) taught that all of God's creations, humans, animals, plants, and the Earth have eternal spirits. Rejecting the doctrine of *ex nihilo* creation, Smith taught that God took these eternal spirits, combined them with indestructible matter, and organized them into living beings.

We do not know how God created each, except that he used the power of the priesthood. In the cases of human beings, however, a revelation to Joseph Smith said that our Father in heaven is a being with a body and a spirit. A statement of the Church's First Presidency in 1909 said that humans have "heavenly parents," and Mormon tradition calls one of them our Mother in heaven. The difference between humans and other creations is that human spirits are the literal children of God, the Father, and our Mother in heaven. We are created in his image.

The relationship of these creations to the Creator has implications for their treatment by human beings. Since the essence of the Earth, animals, and plants has existed eternally and independent of God, he could not in justice grant humans permission to abuse any of them. Nevertheless, since he organized each of them, he gave humans, the only entities created in his image, the responsibility of caring for his creations.

Revelations to Joseph Smith and commentary by Mormon theologians clarify the biblical account in Genesis. Instead of "subdue" these revelations use the word "till" to refer to treatment of the Earth. Mormon theologian Hugh W. Nibley has written that the word "dominion" means that humans have the responsibility of caring for God's animal creations for him. Abuse of the Earth, Nibley says, is part of Satan's effort to thwart God's plan for salvation by drawing men and women away from God and making nature their enemy.

Moreover, revelations received by Joseph Smith in 1832 and clarified by Brigham Young in 1862 clarify that Christ's atonement, the resurrection, and salvation reach all of God's creations, human, animal, vegetable, and mineral. In contrast with humans who sin regularly, however, nonhuman creations obey God's commandments. A revelation that Joseph Smith received in November and December 1830 linked moral and environmental pollution. The revelation says that the Earth "the mother of men" is "pained" and "weary because of the wickedness of my children. When shall I rest, and be cleansed from the filthiness which is gone forth out of me? When will my Creator sanctify me, that I may rest, and righteousness for a season abide upon my face."

Smith's successor, Brigham Young, elaborated on the teaching.

The soil, the air, the water are all pure and healthy. Do not suffer them to become polluted with wickedness. Strive to preserve the elements from being contaminated by the filthy, wicked conduct and sayings of those who pervert the intelligence God has bestowed upon the human family (Young 1861: 79).

Although the teachings of prophets like Smith and Young admonish the Mormons to care for God's creations as they would for their own morals, like most people they have not always done so. In 1834 while Joseph Smith led a volunteer militia group from Kirtland, Ohio to Independence, Missouri members of the party found three prairie rattlesnakes. They intended to kill the snakes, but Joseph urged them to leave them alone. "Men must," he said, "become harmless, before brute creation; and when men lose their vicious dispositions and cease to destroy the animal race, the lion and the lamb can dwell together," and in an allusion to Isaiah 11:6–8, he said "the sucking child can play with the serpent in safety" (Smith 1948: 71). Clearly, however, these leaders did not oppose killing animals or plants for sustenance. They did, however, counsel as Young put it that Mormons should not take "any more" than needed for subsistence. Nevertheless, in some cases, Young, himself, and others in the pioneer companies that came to Utah beginning in 1847 killed predators apparently in an attempt to protect their food and crops.

Consistent with the ideal of caring for God's creations, Joseph Smith and his counselors proposed a plan for an ideal city designed to exert a minimal impact on the land and its resources and to promote environmental democracy. These cities were to provide a pleasant environment in which people could live in relative equality, raise gardens, and keep a few domestic animals. As they laid out the cities on a grid pattern with central blocks reserved for public buildings, planners placed the larger farms outside the town boundaries. After the cities reached 15,000 to 20,000 those who wanted to live in a city were to move beyond the farmlands surrounding the city and build a new one. When the Mormons settled in Utah, they used the city plan that Smith had proposed to lay out many of the cities, but they did not limit the city growth to 20,000 people.

After the Latter-day Saints settled in Utah, they linked the concept of multiplying and replenishing the Earth found in Genesis 1:28 to the importation and nourishing of a wide variety of plants and animals. In 1862, Heber C. Kimball, Brigham Young's first counselor, taught church members that they should help the Earth "multiply and increase her productions, vegetation, fowls, animals and all manner of creeping things" (Kimball 1862: 337).

Wilford Woodruff, then a member of the Quorum of the Twelve Apostles and later church president, experimented with imported plants during the 1850s. In September 1855 he joined with others to organize the Deseret Horticultural Society. Members of the society planted and grafted a wide variety of fruits to determine which would flourish in Utah's climate and soil.

In 1856 the territorial legislature chartered the Deseret Agricultural and Manufacturing Society. DAMS imported animals and plants and seeds for fruits, grains, and vegetables from other parts of the United States and from Europe and Australia.

As Mormon immigrants continued to pour into Utah, they transformed the land. Along the Wasatch Front they founded communities with families, homes, churches, and schools. They also changed the lush grassland they found there into verdant fields and orchards. With considerable difficulty and a number of failed efforts, between 1847 and 1890 they established more than 500 settlements, the majority of which have persisted to the present.

Although the settlements generally flourished, the Mormons also caused the eradication of some wildlife and environmental damage to their pasturelands. Populations of various species of wildlife such as bears, wolves, mountain sheep, elk, rattlesnakes, fish, and crickets declined or disappeared under predator eradication, harvesting, and competition from domestic crops and animals. By 1865, recognizing the destruction of pastures caused by overgrazing, leaders like Orson Hyde, then serving as president of the Quorum of Twelve Apostles, the second highest governing body in the church, chided members for destruction of land and vegetation.

In spite of such admonitions, the expansion of Mormon participation in the market economy during the 1880s led to the introduction of increasingly large herds of cattle and of sheep. Overgrazing by these animals caused extensive watershed damage in the uplands in northern and central Utah. Such destruction denuded the land and led to summertime rock-mud floods that further eroded the land as they caused millions of dollars worth of property damage.

As watershed destruction mounted, after the turn of the twentieth century church leaders began to reemphasize the principles of stewardship and care of God's creations that nineteenth-century leaders had taught. Declaring, "As children of God, it is our duty to appreciate and worship Him in His creations" (Handley 2001: 195), President Joseph F. Smith denounced the "wicked" destruction of wildlife (Smith 1963: 265).

Consistent with this view, he favored watershed protection. As the federal government encompassed timber stands and watersheds into national forests, under Smith's direction, church priesthood leaders voted on 7 April 1902 to urge the federal government to withdraw from the market for protection of all public lands in the watersheds above Utah cities.

Continued overgrazing and flooding, however, led to the appointment by Utah Governor George H. Dern of a committee headed by MIT engineering graduate and church Presiding Bishop Sylvester Q. Cannon to determine the reasons for the damage. The committee attributed the damage to extensive overgrazing and urged measures to reduce the number of livestock on the mountain watersheds. This report led directly to Forest Service grazing reductions and range rehabilitation projects.

Other early twentieth-century church leaders set examples of caring for God's creations. Reed Smoot, a member of the church's Quorum of the Twelve Apostles, served as a Senator from Utah from 1903 to 1933. He actively supported the conservation

programs of Theodore Roosevelt and Gifford Pinchot. Among other things, he favored the designation of National Forests and opposed the Hetch Hetchy dam slated for construction in California's Sierra Nevada Mountains. After Smoot had introduced legislation for the organization of the National Park Service in previous congressional sessions, in 1916 he served as Senate sponsor for the act introduced in the House by California Congressman William Kent to create and fund the NPS. In 1920, as chair of the Senate Public

Lands and Surveys Committee, he co-authored the Mineral Leasing Act, which serves as the basis for federal leases of minerals such as petroleum and phosphates. He also sponsored legislation to establish Zion and Bryce National Parks.

In the meantime, Latter-day Saints worked to deal with other environmental damages. In 1904, farmers in central Salt Lake valley secured an injunction against nearby smelters for polluting the air and destroying crops. A number of the offending smelters closed and other remained open only by installing pollution control equipment. John A. Widtsoe, University-of-Göttingen-educated member of the Quorum of Twelve Apostles, conducted experiments to make irrigated and dry farming more productive and environmentally sensitive.

In Salt Lake City, Latter-day Saint leaders worked to improve the physical environment. Sylvester Cannon, then serving as a stake president, worked to protect and maintain the city's watersheds and parks. As city engineer, Cannon, and George W. Snow, the director of the city's Mechanical Department, fought against air pollution. Prominent Mormon women like Leah Eudora Dunford Widtsoe, Susa Young Gates, and Emily L. Traub Merrill worked on civic improvements in Salt Lake City during the first decades of the twentieth century, especially to control air pollution.

During the 1930s and 1940s, Latter-day Saints in various localities worked to stabilize and beautify the environment. In 1936, a number including Robert H. Stewart of Brigham City, William Lathum of Wellsville, and Bishop John O. Hughes of Mendon organized the Wellsville Mountain Watershed Protective Association. Collecting money from depression-strapped farmers, they purchased land in the foothills of the Wellsville Mountains on the boundary between Cache and Box Elder Counties. Then they lobbied Congress to extend the boundaries of the Cache National Forest to encompass the land, which they donated to the Forest Service for watershed protection.

As Secretary of Agriculture during the Eisenhower Administration, Ezra Taft Benson, a member of the Quorum of Twelve Apostles and later church president, advocated watershed rehabilitation. Although J. Reuben Clark, then a member of the church's First Presidency and a rancher, criticized Benson, the agriculture secretary nevertheless supported the efforts of the Forest Service to reduce numbers of livestock in grazing allotments and restore the land and its vegetation. In addition, he spoke out in favor of reverence for life and "for the resources God has given man." "The outward expressions of irreverence for life and for fellowmen," he said, "often take the form of heedless pollution of both air and water" (Hirschi 1995: 3).

Recent church presidents have also spoken out on the need for environmentally friendly attitudes. “We recom- mend,” Spencer W. Kimball said in November 1974, “to all people that there be no undue pollution, that the land be taken care of and kept clean, productive, and beautiful” (Hirschi 1995: 2). “This Earth is [God’s] . . . creation,” Gordon B. Hinckley said in April 1983, “When we make it ugly, we offend him” (Hirschi 1995: 3).

In recent years, environmental ethicists have concerned themselves with population growth. Unfortunately, it is much easier to find official statements on population control than to provide accurate statistics on the Mormon population. This is in part because the church does not compile such statistics, only about 14 percent of all Mormons live in Utah, and fewer than 50 percent of all Mormons live in the United States. Nevertheless, the *Church Handbook of Instructions* an official directive for local leaders offers the following: “The decision as to how many children to have and when to have them is extremely intimate and private and should be left between the couple and the Lord. Church members should not judge one another in this matter” (Church of Jesus Christ of Latter-day Saints 1998: 158).

In spite of the small representation of Latter-day Saints and the fact that the sample includes fewer than half of all Mormons, using data from surveys in the United States, Brigham Young University sociology professor Tim Heaton has estimated that Mormon couples both expect to and do have more children than average. Statistics from the General Social Survey indicate that an average LDS family in the United States has 2.63 children compared with a national average of 1.99 children. Moreover, Mormons say that an ideal family should consist of 3.89 children compared with a national average of 2.89 children. Both the larger family size and the larger reported ideal probably derive from Mormon belief in the eternity of the family and in the importance of providing bodies for God’s spirit children. Moreover, the statistics show that Mormons use contraceptives at the same rate as other Americans.

On the matter of the attitudes of the church leadership toward caring for God’s creations, the church’s Public Affairs department has published a general packet including a statement of policy. Among other things, the statement says, “The Church does not, institutionally, endorse specific environmental crusades, but instead encourages its members, as citizens, to join with their fellow citizens in supporting worthy programs that will make their communities better places to live and raise their families” (Hirschi 1995: 1).

Although vestiges of the teachings of Joseph Smith and Brigham Young have appeared in the thought and actions of church leaders like Joseph F. Smith, Spencer

W. Kimball, Ezra Taft Benson, Gordon B. Hinckley, Reed Smoot, and Sylvester Q. Cannon, many members have forgotten the teachings on the relationship between humans, animals, plants, and the Earth. Some scholars and others have begun to remind the current membership of these teachings, but many are unaware of them today.

Thomas G. Alexander

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See also: New Religious Movements; Williams, Terry Tempest.

Church of Nazareth Baptists (KwaZuluNatal, South Africa)

The Church of Nazareth Baptists is a prominent instance of the “Zion City” strain within the prophetic-charismatic African independent churches (“AICs”) of southern Africa.

Originating among the Zulu and today led by a descendant of the founder, its focus is thaumaturgic healing and empowerment, and the reconciliation and incorporation of ancestors. The name “Nazareth” is taken from Numbers 6, the vow of the Nazarites – Yahweh’s ascetic warrior elite in the struggle against Canaanism.

In recent decades (1980–2000) the church has grown beyond KwaZulu-Natal, primarily among Zulu-speakers in Gauteng, but also in the Eastern Cape and Swaziland, and the Nguni-speaking areas of neighboring states (Mozambique, Zimbabwe).

The church was founded in early twentieth century Natal, South Africa, by a syncretizing healer-prophet following a revelation and covenant on a “cosmic mountain”

– now the site of an annual pilgrimage. Oral traditions show that Isaiah Shembe (ca. 1870–1935) was also a nature mystic whose legacy represents an exception to the AIC tradition, in which human concerns are paramount and a “theology of power” prevails. A majority of the present membership remains unaware of the founder’s writings, in which his concerns for animals and environment are preserved, but consciousness of this aspect of his legacy is sustained by oral traditions. As one elder avowed, “According to our religion, no beast is caught and killed without weapons by breaking the neck” (a Zulu quasi-military custom).

The Nazareth Church’s founder was remembered as “a compound of gentleness and severity (who) loved all living things.” An expert horseman and judge of cattle in his youth, he needed just a day to bring an ox to the yoke. He seems also to have had “green fingers,” and later in life, at his citadel/commune headquarters Ekuphakameni, would tell his sons not to sever tree branches, asking: “How if I were to cut one of the fingers from your hand?” He was seen to address tree saplings, and made their names known. Certainly no tree could be cut without permission and good reason. One of his praise-names was “flat-crown tree of Mayekisa (his father).”

Birds were close to God, therefore to be attracted rather than killed: At Ekuphakameni fresh water was put out for them daily, and doves were hand-fed. Followers were ordered to exterminate stray cats preying on them, and they became so numerous

that during service in the great temple, open hymnbook pages would be spattered with droppings.

Church legend records Shembe's command over inanimate nature, in the calming of surf before baptisms, and the turning back of floodwaters. His prophet's power of Edenic communication with wild creatures is heard in his hymnal (the only instance in the history of hymnology in which animals speak), and their surpassing holiness is extolled. In one hymn Adam, the defiler of Eden, is expelled at the request of its other creatures, who ask "Where shall we go today? We are separated from our Father . . . Help us God, expel Adam."

One poignant incident was commemorated in another hymn so as to keep people mindful of animals' sentience: a captive baby monkey appealed to Shembe, who bought it and told the captor to release it where it had been caught. The final verse chastises humanity with a reminder of the spiritual superiority of other creatures: "Awake, it is dawn! / When shall you awaken? / You have been surpassed by the monkeys / In seeing the Lord." Conversely Shembe also mediated human claims to wild animals: when monkeys raided one temple's gardens, he entreated them to remember that while God had given them forests for their food, people had to grow their own. How would they live if their food was stolen? There were no more thefts after this.

By Nguni (Zulu and related) tradition, certain snakes are reincarnations of persons – Shembe himself being known by some as "the horned viper of grace". Once when a mamba appeared on Ekuphakameni dance-ground, the men asked if they could kill it, but Shembe warned that this was in fact a person. His request to the snake was immediately obliged: "If you want to do God's work, go to that tree and stay there, you will be disturbing us here." Likewise, he could call upon water snakes to vacate pools in which he wanted to baptize. His followers believe themselves immune from snakebites, since he had prayed for this privilege on the Holy Mountain; accordingly anyone who killed a snake was fined.

Among domestic animals too, "some are people"; cattle and goats as well as dogs were given names, and bulls were adorned for the July festival dances. After a day's dancing, a ceremony followed, designed as "an object lesson in the care of animals": the feeding of Shembe's old grey horse, "almost as famous as himself" since it responded in kind when converts danced around it. Rules were made against any callousness or cruelty toward domestic animals. Declaring that "people are like children," Shembe cautioned them against causing misery to donkeys by not using a load-support, or roping a milk cow through the nose (since she steps on the rope as she walks). Prayer rather than charms was prescribed for ill cattle and horses, since God had compassion for all living things. Householders who killed their dogs to avoid having to pay the colonial dog tax should be penalized by having to pay it for five years thereafter, and any chief who avoided imposing this penalty would be guilty before God. Those who killed their dogs for impregnating the dogs of others were asked "Why not castrate the dog if it had to live without a bitch? . . . One cannot keep a bull where there is no cow."

Although Shembe's own position on sacrifice was biblical (sacrifices are "a form of gratitude to Jehovah, they hold people together by blood, (and open) the Gate of Heaven"), he is remembered as having disapproved the killing of animals. Just before one sacrifice, he sent the message "This beast has just come to me to say that it is too young to die." At Ekuphakameni only purchased animals were slaughtered, never the home herd, and only virtuous followers were apportioned the meat. No doubt to ensure humane slaughter, Shembe himself wielded the spear. Said to have been fond only of sorghum, he once cast to the ground some meat prepared for him, then took it back, shook off the dirt, and ate, saying "I only do what I have been told . . . When you seek the way of God, you do not make the search a pleasant affair."

On the communal farms he established throughout Natal, Shembe pioneered rational and humane treatment of livestock. Rich stockfeed was planted, bulls of good breed were bought, and the tenacious Zulu "cattle cult" discouraged, as followers were persuaded to keep a few good milk cows rather than many scrub cattle. Cattle being the cultural measure of wealth, this challenged some fundamental precepts, but was critical to curbing overgrazing and erosion of the already barren lands on which Africans had been confined by colonial legislation, and which by the turn of the nineteenth century barely supported rapidly expanding populations. Followers whom Shembe settled on his purchases were governed by a strict Protestant-style work ethic and enjoined to become as productive and self-sufficient as the Indian ex-plantation workers-turned-market gardeners alongside whom the Nazarites lived at Ekuphakameni.

Though many Nazaretha now live in urban areas, nostalgia among older members for life on the land takes most back to their rural family smallholdings for performance of weddings and all domestic ceremonies that require ancestral sanction.

Robert Papini

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See also: African Independent Churches (South Africa); Masowe Wilderness Apostles; Zulu (amaZulu) Culture, Plants and Spirit Worlds (South Africa).

Cihuacoatl – Aztec Snakewoman

The Aztec goddess Cihuacoatl, or Snakewoman, controlled naturally destructive forces that shaped and sustained births, wars, and city life. This old patroness of agricultural fields, matronly advisor, and warrior woman controlled these forces by counseling both women engrossed in the battle of childbirth, and warriors or rulers about to go off to battle. Her powers were needed because all of Aztec life was an ongoing war of opposing forces. To modern sensibilities, the mythical equation of war's destruction with life's creations might seem strange, but it is not so strange when one remembers how much nature structured Aztec life. The closeness with which the Aztecs lived with nature underlay a combative metaphor that fed all existence. Cihuacoatl represented that metaphor.

In the early sixteenth century, the Aztecs (known then as the Mexica) controlled much of Mesoamerica, an area that stretched roughly from what is now northern Mexico into modern-day Nicaragua. But they did not control all, and often had trouble keeping what they did claim under control. For centuries, Mesoamerica had been dominated by shifting alliances among urban centers, cities that were at once religious, political, and social centers. A patron deity governed each city, which gave it life and strength, thereby creating a ritual center and destination for pilgrims. Each city also constituted a complex, stratified yet flexible society of many groups of people ranging from governing elite, to religious professionals, warriors, traders, educators, healers, craftspeople, and farmers. These urban centers often competed for power. Sometimes cities allied with one another, at other times they fought each other in an effort to gain the upper hand; and when one did, they captured their enemies' patron deities and burned the gods' temples to claim their power. The Aztecs had gained the upper hand over many urban centers throughout Mesoamerica, although they found themselves in almost constant warfare to sustain their hegemony. As for many preceding centuries, war kept Mesoamerican religious, political and social bodies alive.

The Aztec capital city Tenochtitlan packed approximately 250,000 people onto an island ringed by fertile farmlands rising out of the surrounding, rich wetlands. This was not modern-day Mexico City, whose concrete structures now sprawl across what once was Tenochtitlan, covering up both the old island, and almost all of the ancient wetlands. Tenochtitlan's human masses lived cheek by jowl, not with concrete, but with corn, beans, tomatoes, chilies, and squash; and thousands of water birds, frogs, salamanders, turtles, and fish. Nature was not banished from this city's life.

This cheek by jowl existence with natural beings echoed a common symbolic equation among humans, nature, and gods. Humans constituted just one more set of natural

beings in an already teeming cosmos. Moreover, gods took the form of natural beings. Mountains, rocks, trees, plants, streams, lakes, all manner of animals, and humans alike could all gain life from godly powers; and no god existed that did not bear the shape or shapes of beings and objects found normally in nature. As Snakewoman, Cihuacoatl was one such deity, probably having arrived in Tenochtitlan as patroness of recently conquered agriculturally rich cities. Some people called her “Edible Heron Herbs” (Quilaztli).

Cihuacoatl, in part, helped control an eating and feeding cycle that sustained all life. To sustain life, one must kill something so that the living have something to eat; this became a root metaphor for Aztec religious thinking. People ate animals like deer, who munched on corn in farmers’ fields. The corn, also living beings, ate the rotting loam, dead fish, and human excrement with which people fertilized their fields. And that excremental fertilizer came from the digested deer, corn, and fish that people killed to eat. Life was one big cycle of eating and being eaten. Gods ate people (without whom they would starve); in return, the gods watered people’s fields so they might eat, helped them produce children, and fed strength to their cities. Sacrificial rituals, human and otherwise (for nonhuman offerings far outnumbered the human) fed the various godly forces so that life’s many forms would be nourished. Cihuacoatl helped people fight successful battles, which religiously created and sustained life, just as war sustained political and social bodies.

Cihuacoatl helped Quetzalcoatl, the Feathered Serpent, create people by grinding their bones as one grinds corn for tortillas. According to one sixteenth-century story, Quetzalcoatl captured the bones from the Underworld by overcoming the Lords of Death. Taking them to the Western Tree, the home of Cihuacoatl and other female deities, he gave them to her to grind. The water required to make the dough came from his own male member, which he sacrificially bled onto the ground cornflour. And so people were born of sacrifice, and Cihuacoatl molded them into tortillas for the gods.

Snakewoman also gave good advice and power to people traveling on the warrior’s path. Midwives invoked her powers to help young mothers through the battle of birth, especially difficult ones. They exhorted their charges to have the courage of Cihuacoatl, and used her powers to carefully plan the strategy required for successful campaigns. Another sixteenth-century source tells how a woman who died in the battle of birth turned into one of the Eagle Women or honorable mythic women warriors who, each noonday, captured the sun from dead male warriors. These women took the sun to their western house. There, people from the Land of the Dead captured it at dusk, keeping it in the Underworld until dawn when the male warriors captured it back from them. If the woman won the battle and lived, she received much fortune from

Cihuacoatl, perhaps even the capture of twins who were said to come from the goddess.

This same source says that young male warriors also sought Cihuacoatl’s powers. They battled the families of women who had died in childbirth in order to capture the dead women’s middle fingers and hair. They attached these potent trophies to their

shields to make them valiant and paralyze their opponents' feet. Snakewoman herself was depicted wearing the eagle plumes belonging to the great warrior god, Mixcoatl, and she carried a shield and wielded a weaving batten like a weapon. The Tlacaellé, a governor who controlled the internal affairs of Tenochtitlan and frequently counseled the ruler who managed external affairs, dressed ceremonially in the goddess' clothes in order to acquire her skills in warrior strategy.

However, stories tell us that Cihuacoatl also could bring bad news about death and destruction. Normally, she wore her hair tied up in a matronly manner, but occasionally she was shown wearing it down, dirty and tangled in the manner of mourning. At such times, she also wore the jawbone of the Lords of Death. Dressed like this – so the tales say – she appeared at night crying warnings for all to hear. Cihuacoatl delivered such a warning twice to the Aztecs just before the Spanish Conquest of Tenochtitlan in 1521. Then she wailed: “Dear children, soon I am going to abandon you! We are going to leave you!” So she and the other gods did, for the Conquistadors brought both a new society and religion to the land.

Kay A. Read

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See also: Aztec Religion – Pre-Colombian; Mesoamerican Deities; Rainbow Serpent (North Wellesley Islands,

Australia); Serpents and Dragons; Snakes and the Luo of Kenya; Volcanoes; Weather Snake.

Circle Sanctuary

Circle Sanctuary, also known as Circle, is one of America's oldest and most prominent Wiccan churches and nature spirituality resource centers. Founded in 1974 by senior minister and high priestess Rev. Selena Fox and others, Circle Sanctuary serves nature religion practitioners worldwide through its networking, websites, events, healing work, education, and publishing ministries. Circle Network, founded in 1977, consists of thousands of individuals and groups, and hundreds of paths of contemporary Paganism and related forms of ecospirituality, including Wicca, Druidism, Animism, Teutonic Paganism, Unitarian Universalism, Daoism, Pantheism, ecofeminist spirituality, and multicultural Shamanism. In serving this network, Circle Sanctuary publishes and distributes books, recordings, and periodicals, including its quarterly *CIRCLE Magazine* and annual *Circle Guide to Pagan Groups*.

Circle Sanctuary is headquartered on a 200-acre site, Circle Sanctuary Nature Preserve, which is located in the rolling forested hills of southwestern Wisconsin near the village of Mt. Horeb and the Blue Mound, an ancient Native American holy place. At its preserve, Circle Sanctuary engages in forest and wetland conservation, prairie restoration, songbird research and preservation, environmental education, and ecospiritual activities. Science and religion converge at Circle Sanctuary Nature Preserve. It not only is a place dedicated to the preservation of wildlife and ecosystems, but is also a place of spiritual nature communion, where the divine is viewed as multifaceted and immanent in all of nature. Those associated with Circle Sanctuary view environmental activities at the preserve and elsewhere as sacred work. Through ecological projects as well as through rituals, meditations, and other forms of religious practice, Circle Sanctuary members endeavor to cultivate and sustain harmonious relationships not only with other humans but also with the rest of the greater Circle of Life on planet Earth and in the universe. Among the many ceremonial sites at the preserve are the Stone Circle dedicated to planetary healing, Brigid's Spring which is a spiritual healing shrine, and Spirit Rock, an ancient Native American vision quest place. Circle Sanctuary also engages in public education and media interviews to help improve public understanding of nature religions people and practices. Through its Lady Liberty League (LLL), Circle Sanctuary is in the forefront of civil rights and religious freedom endeavors on behalf of Wiccans and other Pagans, and has helped win victories in the United States and elsewhere. LLL helped defeat US federal anti-Wiccan legislation in 1985 and in

1999, and has aided successful court battles involving land use, job discrimination, and other issues. Circle Sanctuary ministers serve as consultants on Pagan religious

accommodation to chaplains and administrative staff in hospitals, corrections, the US military, and educational institutions, and Circle Sanctuary is the first Wiccan church to put forth a US military chaplain candidate. In addition, Circle Sanctuary is active in regional, national, and international interfaith organizations and conferences, including the Parliament of the World's Religions, and through this work has developed networking alliances with leaders and practitioners of traditional and contemporary nature religions in many countries. Circle Sanctuary also engages in and supports nature religions research. Rev. Fox and her husband, Dr. Dennis Carpenter, Circle Sanctuary research director, helped found the Nature Religions Scholars Network associated with the American Academy of Religion. They founded this network in order to promote communication and collaboration among those engaged in the emerging interdisciplinary field of Pagan studies. Circle Sanctuary maintains one of North America's largest libraries and archives of books, periodicals, recordings, and other materials on contemporary Paganism. Circle Sanctuary sponsors a variety of activities, at its headquarters and elsewhere. Communion with the divine in nature is a common underlying theme in Circle Sanctuary festivals, classes, passage rites, and seasonal celebrations. The largest event sponsored by Circle Sanctuary is the international Pagan Spirit Gathering, a weeklong conference and summer solstice celebration held at a nature preserve in Ohio. The spiritual foundation of Circle Sanctuary is the Circle Craft tradition, a form of the Wiccan religion that is a blend of old European Pagan folkways, transpersonal psychology, multicultural shamanism, and nature mysticism. Staff and volunteers active in the Circle Sanctuary Community carry out the multifaceted work of Circle Sanctuary throughout the year.

Selena Fox

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See also: Church of All Worlds; Druids and Druidry; Pagan Festivals – Contemporary; Pagan Festivals in North America; Paganism; Religious Studies and Environmental Concern; Starhawk; Wicca.

Coalition for Environmentally Responsible Economies

The Coalition for Environmentally Responsible Economies (CERES), a non-profit coalition of investors, public pension funds, labor unions, religious and public interest groups, works in partnership with companies toward the common goal of corporate environmental stewardship.

In March 1989 a group of social investors, including the Interfaith Center on Corporate Responsibility (ICCR), gathered to look at ways to use investment capital to change the environmental actions of corporations. In September 1989 CERES announced the Valdez Principles, changed in 1992 to the CERES Principles. The ten Principles called for continual environmental improvement within the framework of the Principles and an annual environmental report. The Principles address Protection of the Biosphere, Sustainable Use of Natural Resources, Reduction and Disposal of Wastes, Energy Conservation, Risk Reduction, Safe Products and Services, Environmental Restoration, Informing the Public, Management Commitment, and Audits and Reports.

From the beginning, religious groups in ICCR were primary drivers of CERES, filing shareholder proposals with dozens of companies to endorse the Principles. CERES provides a vehicle for ICCR groups to give expression through the Principles to many environmental issues on their agenda. CERES represents a way to bring the more comprehensive issue of public accountability for environmental action before companies with the support of other parties including public pension funds, labor unions, and social investors.

Early endorsers of the CERES Principles included many small, socially conscious firms but no major public corporations. In 1993 Sunoco became the first large company to endorse the Principles through negotiations led by National Ministries of the American Baptist Churches USA. A year later General Motors endorsed them, again with negotiations led by religious shareholders. Other large endorsers now include Bethlehem Steel, Ford Motor Company, PPL, Baxter International, ITT Industries, Interface, Bank of America, Polaroid, Coca Cola, Nike and American Airlines.

In 1998 CERES convened an international gathering to develop a global environmental metric and in March of 1999 announced the Global Reporting Initiative (GRI). The GRI developed a set of guidelines for international standardized reporting that covers environmental, social and economic impacts. In 2002 the GRI is scheduled to become a separate organization with its own governing structure.

CERES plays a unique role in developing partnerships with business around a set of independently established principles that provide public accountability through reporting and dialogue. This accountability is a distinctive expression for religious groups within ICCR of stewardship. Corporations often use the term stewardship as a description of their environmental program, yet most fail to recognize the theological roots of the word or the connection with economics, a transliteration of the Greek *oikonomia* from which stewardship is derived.

For religious groups, ongoing relationships with corporations through dialogue with CERES also provide an expression of the tension between justice and reconciliation. Most actions of ICCR are justice-oriented, seeking particular changes in corporations viewed as unjust adversaries. The dialogical partnership in CERES between corporations and CERES members allows reconciliation to occur within the framework of accountability for just action provided by the Principles.

J. Andy Smith, III

See also: Wise Use Movement.

Cobb, John B., Jr. (1925–)

John Cobb is Emeritus Professor, Claremont School of Theology and Claremont Graduate School, and was a cowinner of the Grawemeyer Award of Ideas Improving World Order in 1992. As founding co-director of the Center for Process Studies, Cobb is a leading proponent of process theology and its implications for ecological and economic ethics.

John Cobb's early work in process theology (from 1959–1969) gave little consideration to ecological ethics. This changed when he underwent a "conversion" in 1969, after his son introduced him to the drastic proportions of the ecological crisis. In 1972, Cobb published *Is It Too Late? A Theology of Ecology* where he began to develop his ecological ethic.

Cobb accepts the analysis of thinkers like Lynn White, Jr., who argue that Christianity's traditional emphasis upon humanity as being made in God's image and having dominion over the Earth has led to the ecologically harmful view that only humans have intrinsic value, while all other creatures merely have value insofar as they serve human interests. Cobb points out that this anti-ecological perspective is neither truly biblical, nor theologically necessary. Nonetheless, Christian theology needs to be creatively transformed; hence, he turns to process theology to discover a perspective that is truly Christian and fully capable of grounding a strong ecological ethic.

Cobb's process theology understands God panentheistically (i.e., as both present in and more than the world). As present in and experiencing all existence in its fullness, God values all things. Put differently, everything that exists contributes to the experience of God. Moreover, process theology understands each existing thing – or "actual occasion" – as capable of some level of experiencing, even if in a relatively trivial way (e.g., the experience of an electron). Consequently, as a subject of experience, each thing has some degree of intrinsic value – the greater the capacity of experience, the greater the intrinsic value of the creature. Thus, all things have value in themselves, and value for God, over and beyond their instrumental value to humans. On this basis, Cobb develops a comprehensive ecological ethic that rejects anthropocentrism. This ethic has found its most extensive treatment in *The Liberation of Life: From the Cell to the Community*, co-authored with Australian biologist Charles Birch.

Cobb's process relational perspective has also led him to examine the relationship between ecology, social justice, and economics, arguing that a truly ecological ethic will strive to promote a society which is just, participatory, and sustainable. In short, Cobb argues that economic justice, political participation, and ecological sustainability are not competing goods, but rather require each other. The fruit of his expanded vision

can be seen in *For the Common Good: Redirecting the Economy Toward Community, Environment, and a Sustainable Future* (written with economist Herman Daly), which proposes the use of an “Index of Sustainable Economic Welfare” as an alternative to Gross National Product for measuring economic well-being that accounts for ecological health and justice for the poor.

Paul Custodio Bube

Breakout Box Begins: SP The Making of an Earthist Christian

Scholarly Protestant theology in the nineteenth century became primarily anthropology; that is, it focused on the human condition as understood in the Christian tradition. This resulted from the general lack of confidence in theoretical reflection about God, caused in part by the breakdown of the earlier deism and in part by the rejection of metaphysics in the extremely influential philosophy of Immanuel Kant. This move entailed the virtual disappearance of the natural world from consideration. Where it did appear, as in Albrecht Ritschl, it represented the sphere over which human beings were to exercise their mastery.

Popular Protestant piety and its conservative theological expressions did not go so far in this anthropocentric direction. The deistic argument from the order and beauty of the world to God as supreme personal will still played a large role. This piety, however, received a major shock from evolutionary theory. By the twentieth century, in the British and American spheres, the controversy over evolution split the Church between those who appealed to the Bible in a literalistic way as trumping science, and those who adjusted their theology, more or less, to scientific thinking. Most of the latter solved the problem in Kantian fashion, by sharply distinguishing the world of science from the historical world to which theology applied.

Another response played some role in the Englishspeaking world. One might try to develop a larger vision in which the data of biological evolution along with other sciences and the historical understanding of human beings were brought into coherent unity. This required challenging the mechanistic worldview underlying almost all scientific formulations of the time. It required the rejection of supernaturalist theism and appeals to revelation that presupposed this. It took evolution seriously, but understood it to mean that some of the characteristics of the human sphere must have been present also in pre-human creatures.

I attended the Divinity School at the University of Chicago, which was one of the few centers of this kind of thinking in the mid-twentieth century. To avoid complete isolation from the dominant discussion, we emphasized the anthropological implications of our vision. Existentialism was the most challenging form of this anthropology,

and the one most congenial to us. Hence, we were likely to accent this aspect of our tradition of “neo-naturalism.”

The piety I brought with me to the University of Chicago was shattered by my first year of study in the Humanities Division in a program called the Analysis of Ideas and the Study of Method. I entered that program precisely to expose my Christian faith to the acids of modernity. I shifted to the Divinity School because I realized that the faculty there had come to terms with those acids without abandoning their faith. I needed to understand how. I had glimpsed this possibility in a course I had taken with Charles Hartshorne in the Philosophy Department, and I wanted to learn more about it. Hartshorne had introduced me to the thought of Alfred North Whitehead, and it was to this that I was most drawn.

Most of Whitehead’s work was about the natural world. That was important to me chiefly as assuring me that what he said about humanity and God was coherent with a responsible science. The Protestant theology that shaped my questions did not direct my concerns to nature as such. In 1965 I published a book entitled “A Christian Natural Theology” in which I wrote about God and human beings based on Whitehead’s philosophy and said almost nothing about the rest of the natural world.

It was in the summer of 1969 that my conversion occurred. One of my sons, Cliff, urged me to read *The Population Bomb* by Paul Ehrlich. It was at the time a best seller, and it was one of the major influences on Earth Day 1970. Ehrlich was wrong on many particulars, but I was convinced then, and am convinced now, that he was right in his fundamental vision. Population growth combined with rising rates of per capita consumption is on a collision course with the Earth’s capacity to sustain us.

Abruptly, the separation I had been making between human history and the changing condition of the planet became impossible. The fate of the natural world became a consuming concern. I re-thought my vocation. I laid aside a manuscript I had almost completed on explanation in history and wrote *Is It Too Late? A Theology of Ecology*. I led in organizing a 1970 conference on “The Theology of Survival.” And I spoke here and there in all too alarmist ways.

My new vocation was to critique the Protestant theology that had led me, and so many others, to be blind to the dependence of human life on the wider ecological system. We Protestants had much responsibility for the blindness of our whole society. We were called to repent. I was certainly not the first to recognize the error of the dominant tradition. I realized that some of my own teachers, including Hartshorne, had been deeply concerned and had worked for change. Joseph Sittler had made an important speech at the Delhi meeting of the World Council of Churches calling for a renewal of concern for the whole of creation. Most helpful to me, Lynn White, Jr., a Presbyterian layman who taught the history of technology at UCLA, had presented a speech on “The Historical Roots of the Ecological Crisis” in which he had explained how the anthropocentric reading of the Bible in the West had provided the underpinning for the Western ideal of dominating nature. My work depended on all of these.

My work depended, even more, on the thought of Whitehead. Suddenly whole dimensions of its implications became important to me. For Whitehead, human existence is continuous with all other forms of existence. Every momentary event is an occasion of experience, and every occasion of experience is of value to itself as well as to others. Among the others, the Consequent Nature of God, to which all else contributes its value, is supremely important. The idea that only human experience is of value is totally erroneous.

Furthermore, I was convinced that on these points Whitehead was closer to the Bible than the anthropocentric theology that dominated the Western tradition and had been intensified for Protestants by Kant. Quite apart from the relation to human beings, the creation story asserts that God saw that the creation was good. The Jewish scriptures celebrate the land and understand nature to glorify God. Jesus speaks of God's providential care for plants and birds. Even Paul envisions the day when the whole creation is freed of suffering. The narrowing of focus on God and the human soul, so pronounced in Protestantism, is a distortion of the Bible.

It has been a source of joy to find that fairly rapidly other Protestants have moved in the same direction. Already in 1975 at Nairobi, the World Council of Churches added to its vision of a just and participatory society the idea that it must be sustainable as well. Although this is still anthropocentric thinking, it opened the door to seven years of worldwide reflection on the importance of the natural world. At Vancouver in 1982, the Council shifted to the phrase "the integrity of creation," a much less anthropocentric term. Similar changes took place in many denominational statements. The Protestant churches took the Bible seriously and began the long and difficult task of repentance.

Repentance is not easy. Deeply entrenched habits of thought and sensibility continue to dominate even after one has recognized the need for change. This is certainly true of large institutions. It is also true for individuals like me. I published in 1975 my most important theological book, *Christ in a Pluralistic Age*. It sets the issue of Christian belief in Jesus Christ in the context of religious and cultural pluralism. The larger natural context is virtually absent. I am glad to say that after a long period in which I found it necessary to segregate my work in interreligious dialogue from my concern for the fate of the Earth, the two have now merged. My dialogue partners deeply share this passion.

Despite my failure to integrate my concerns in the seventies, I was not inactive on the issue of what we humans are doing to the rest of the world and the Church's responsibility. Shortly after the conference on "The Theology of Survival" I became convinced that there was little likelihood of change unless there were some positive images of what we should change to.

Some students worked with me to find thinkers who took the crisis seriously and then went on to propose ways of ordering our lives that could be both sustainable and rewarding. In 1972 we held another conference on "Alternatives to Catastrophe." The quest for an alternative to the continuing course of events has been central to my quest to this day.

Of all the denominations, it was the American Baptists who took the need for change most seriously. This was due chiefly to the leadership of one man, Jitsuo Morikawa. He had been my pastor during my student days at Chicago, and we reconnected. I had the privilege of working with him on several conferences in the seventies.

The man who played the largest role in bringing the urgency of sustainability before the Nairobi WCC Assembly was an Australian ecologist, Charles Birch. Birch had been influenced by Whitehead and admired Charles Hartshorne. These shared interests had brought us together in the sixties. In 1976 he suggested that we write a book jointly. This took some time, but in 1981 we published *The Liberation of Life*. It employed a Christian ecological perspective to deal with life at several levels and to draw forth the implications of this vision for public issues.

The greatest challenge I felt to my Christian approach was from a colleague in the Claremont Colleges, Paul Shepard. I first worked with him on conference in the mid-seventies on "The Rights of Nature." The conference heightened my awareness of the danger of "rights" language, although it did not persuade me to abandon it. Talking with Shepard then and subsequently, I felt the superficiality of much of my own work. I also recognized how deep was my assumption that civilization was something positive, despite all its problems. I had celebrated the Christian contribution to civilization and to the development of science and technology, despite their ambiguous role.

Paul's view was that the abandonment of the hunting and gathering society had been a disaster and that all supposed "progress" since then had driven humanity further into madness. Much that I had taken as supportive of the positive role of Israel and Christianity (as well as the other "higher" religions) was presented by him as reason to reject them and attempt to recover the basic ethos and sensibility of primal religions. For Paul, the self-transcendence that enables us to be self-critical and to repent is itself a mark of our deep alienation. Several times we taught seminars jointly, and I was often overwhelmed by the depth and richness of his scholarship and the creative originality of his vision. Nevertheless, I have remained convinced that whatever the values that might have been retained had our ancestors never turned to agriculture and herding, today our hope lies in the capacity to repent, that is, to intentionally change the direction of thought and action, which, Paul agreed, the prophetic tradition of the Hebrews most effectively introduced into history. I pointed out to Paul that he was playing the prophetic role, much as he opposed it.

By the early eighties I had become convinced that the church's repentance, however important, would not change the course of events. The world was run on economic principles, not Christian ones. If there were to be any possibility of redirection, these principles would have to be challenged. I began to offer occasional courses on theology and economics in order to educate myself. I became convinced that one major problem was that economic well-being was typically gauged by Gross National Product, whereas I was convinced that increases in GNP had little or no connection to actual human betterment. A group of students worked with me to study existing alternatives to the GNP, better correlated to actual economic gains. None were quite satisfactory,

and none were being kept up. Accordingly, we went on to construct our own tables for the United States. The latter task was finally carried out by my son, Cliff. We called our measure the Index of Sustainable Economic Welfare. It has been developed subsequently by Redefining Progress into the Genuine Progress Index. Similar statistics have now been compiled for eight other countries. Quite consistently it turns out that at the present time growth as measured by GNP (or GDP) does not indicate any real improvement in the economic well-being of the people.

Of course, there is much more to economics. I turned to Herman Daly, who had presented his vision of a stationary state economy at our conference on "Alternatives to Catastrophe," suggesting that we write a book together. We undertook to critique the theoretical assumptions of modern economic thinking, to propose alternative assumptions, and to indicate the practical implications that would follow from these. In 1989 we published *For the Common Good*, which has touched the economic community only at the fringes but has exercised some influence in a wider circle of those interested in public affairs. Working on this book confirmed for me a thesis Birch and I put forward in our earlier book: that the policies that destroy nature are also destructive of human beings, especially the weak and poor.

This work has given me lenses with which to observe the still growing dominance of economics in national and world affairs. I have lectured and written on current events and collected some of these essays in *Sustaining the Common Good*. I have grown increasingly distressed about the dominance of the market in education.

I have written a book locating the development of theory and practice in the World Bank in the context of a theological periodization of history, moving from the age of Christianity through nationalism to the current age of economism. I note the emergence of a new vision and commitment that I call Earthism and see how this is challenging the dominance of economism in the Bank, partly from within, but mostly from without. The book is entitled *The Earthist Challenge to Economism: A Theological Critique of the World Bank*.

It is very hard to remain hopeful, but hope is a theological virtue not to be abandoned because of discouraging circumstances. The corporate domination of the world for purposes of rapid exploitation of both the poor and natural resources is accelerating. It is supported by both of the major US political parties, by the universities, by the media, and therefore by the public. Yet resistance is rising. Labor and environmentalists are putting aside their differences to recognize the commonality of their interests. Repentance is advancing in the churches and other religious communities are joining in. It is too late, much too late, to prevent many of the catastrophes that were still preventable when I wrote *Is It Too Late?* in the summer of 1970. But there is much of value that could still be saved if we change direction now. Sadly, there is less every year. We cannot afford to relax our efforts.

John B. Cobb, Jr.

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See also: Christianity (7f) – Process Theology; Environmental Ethics; Process Philosophy; Shepard, Paul; White, Lynn – Thesis of.

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See also: Christianity (7f)–Process Theology; Environmental Ethics; Process Philosophy.

Cognitive Ethology, Social Morality, and Ethics

Cognitive ethology is the comparative, evolutionary, and ecological study of animal minds and mental experiences including how they think, what they think about, their beliefs, how information is processed, whether they are conscious, whether they are self-aware, and the nature of their emotions. Species and individual differences are of interest in these studies. Cognitive ethology traces its beginnings to Charles Darwin. A natural historian at heart, Darwin emphasized the importance of evolutionary mental continuity among animals, noting that behavioral, cognitive, and emotional variations among different species are differences in *degree* rather than difference in *kind*. Shades of gray, rather than absolute differences, link different species.

One area in which the interests of cognitive ethologists merge with those of theologians and religious leaders concerns the evolution of social morality: Do animals other than humans have codes of social conduct that regulate their behavior in terms of what is permissible during social interactions? Do they cooperate and behave fairly? Are they capable of empathy? Many researchers agree that if social morality is to be found among nonhuman animals, it will be the Great Apes and perhaps other primates who are capable of moralizing. This is a narrow speciesist view that discounts the possibility that some non-primate social species, such as grey wolves in which individuals live in cohesive packs that depend on cooperative and coordinated behavior, might be composed of moral beings.

The study of the evolution of cooperation and fairness is closely linked to science, religion, theology, spirituality and perhaps even different notions of God, because ideas about continuity and discontinuity (the possible uniqueness of humans), individuality, personal identity, and freedom are involved. Such efforts help us come to terms with who we are in this awe-inspiring universe. Many have been moved to be more humble and less anthropocentric and more biocentric in their views of the world when they compare humans to other animals who depend on us, as the voices for their very existence. Animals offer much in terms of spirituality and love, and also show us what we have lost in our own evolution.

While there is little doubt that the animal roots on which human morality might be built are not identical to animal morality, continuity among different species is likely. Linear scales of evolution that portray some species as “higher” or “better” than others are simplistic views of current work in evolutionary biology. Tool-use, language, self-awareness and self-consciousness, culture, art, rationality, and perhaps even the having

of religious experiences no longer can reliably be used to draw species boundaries that separate human from all other animals.

Humans are viewed as a part of the animal kingdom, and not apart from it.

Some animals may also be viewed as “persons.” Among the criteria used to designate a being as a “person” are included: being conscious of one’s surroundings, being able to reason, experiencing various emotions, having a sense of self, adjusting to changing situations, and performing various cognitive and intellectual tasks.

Studies of social play and the cooperation that is needed to maintain play provide insights into animal social morality. The emotions associated with play, joy and happiness, drive animals into becoming at one with the activity. As Darwin noted in his book, *The Descent of Man and Selection in Relation to Sex*, “Happiness is never better exhibited than by young animals, such as puppies, kittens, lambs, &c., when playing together, like our own children.” Concerning the evolution of social morality, the notion of “behaving fairly” has received much attention. “Behaving fairly” centers on the notion that animals often have social expectations when they engage in various sorts of social encounters, the violation of which constitutes being treated unfairly because of a lapse in social etiquette.

Playtime usually is safe time – mistakes are forgiven and apologies are accepted by others, especially when one player is a youngster who is not yet a competitor for social status, food, or mates. Individuals must cooperate with one another when they play. They must negotiate agreements to play. The highly cooperative nature of play has evolved in many species. Detailed studies indicate that individuals trust others to maintain the rules of the game. Cooperation is not merely a by-product of tempering aggressive and selfish tendencies or combating “selfish genes.” Cooperation and fairness are needed for play to occur. It might even feel good to be nice to others, to cooperate with them and to treat them fairly.

In many different species, social cooperation and behaving fairly facilitate the formation of groups (communities) based on individuals agreeing to work in harmony with one another. Individuals of many species fine-tune ongoing play sequences to maintain a play mood and to prevent play from escalating into real aggression. While play in most species does not take up much time and energy, researchers agree that play is very important in social, cognitive, and/or physical development, and may also be important for training youngsters for unexpected circumstances. The absence of play can have devastating effects on social development, rendering an individual incapable of interacting with other species members.

During social play, while individuals are having fun in a relatively safe environment, they learn ground rules that are acceptable to others – how hard they can bite, how roughly they can interact – and how to resolve conflicts. Play cannot occur if the individuals choose not to engage in the activity and the equality (or symmetry) needed for play to continue makes it different from other forms of seemingly cooperative behavior (e.g., hunting, caregiving). This sort of egalitarianism is thought to be a precondition for the evolution of social morality in humans. These codes of conduct likely are im-

portant in the evolution of social morality. Behaving fairly evolved because it helped young animals acquire social (and other) skills needed as they mature into adults.

Without further research, we cannot dismiss the possibility that social play played a role in the evolution of fairness, social morality, and environment-related mores, or that animals other than human and nonhuman primates are unable intentionally to choose to behave fairly because they lack the necessary emotional – empathic – capacities. Even if nonhuman primates do not seem to play fairly, this does not justify the claim that individuals of other species cannot play fairly.

How we view ourselves in relation to other animals informs how we interact with and treat them. If we view animals as “lower” than ourselves we treat them accordingly. Studies of animal cognition stress that it is important to ask the question “What is it like to be another animal?” and to try to answer this question from the point of view of the animals themselves. When we assume the animals’ points of view, it becomes obvious that they are subjects of a life, and not merely objects. Many animals have complex cognitive and emotional lives and experience pain and suffering. They are intelligent beings with feelings and individual personalities. Thus, they deserve moral standing that protects them from being used by humans merely for our own ends.

Current research in cognitive ethology is transforming many researchers’ spirituality and ethics. The detailed study of animal cognition, emotions, and morality makes it increasingly difficult to argue convincingly for dichotomies juxtaposing “them” (nonhuman animals) versus “us” (human animals), and there are movements away from this sort of arrogant and self-serving human-centered polarization. Mainstream journals are beginning to publish essays on science, nature, spirituality, and heart. Rather than arguing speciesistically for the existence of “higher” and “lower” species, evolutionary continuity is emphasized. Accepting continuity leads to various conceptions of a community in which all beings share similar standing based on *who* they are, a community of subjects rather than a mere collection of objects (to paraphrase Thomas Berry).

Much more research is needed on a wider variety of species, and this research must be ethically defensible. This is among the reasons why Jane Goodall and I formed the organization Ethologists for the Ethical Treatment of Animals/Citizens for Responsible Animal Behavior Studies. Our purpose is to develop and to maintain the highest of ethical standards in comparative ethological research that is conducted in the field and in the laboratory. We urge researchers to use the latest developments from research in cognitive ethology and on animal sentience to inform discussion and debate about the practical implications of available data and for the ongoing development of policy concerning the treatment of nonhuman animals by humans.

Marc Bekoff

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See also: Animals (various); Elephants; Epic of Evolution; Environmental Ethics; Goodall, Jane; Hyenas – Spotted; Nile Perch; Primate Spirituality.

Columbia River Watershed Pastoral Letter

The first bioregional statement authored by Catholic bishops was the landmark environmental pastoral letter, *The Columbia River Watershed: Caring for Creation and the Common Good*. The pastoral letter, international in scope because the watershed area includes the U.S. states of Washington, Oregon, Idaho and Montana, and the Canadian province of British Columbia, integrated Catholic faith, community well-being and ecological responsibility, as it discussed issues of ethics, economics and ecology in the region. The letter weaves together a sense of the sacred, creation care, and the common good of watershed communities.

The Columbia watershed encompasses 259,000 square miles. Its major lifeline is the twelve hundred miles of the Columbia River, which emerges in British Columbia and is fed by tributaries in Montana, Idaho, Washington and Oregon as it winds its way to the Pacific Ocean. The area includes a textured topography – mountains and meadows, forests and lakes – in which cities and towns, farmers and fishers, and loggers and miners all owe their existence and their livelihood to regional natural capital. Diverse ethnic groups inhabit the area: Canadians and Euro-Americans mingle with Native Americans (“First Nations” in Canada), African Americans and Asian Americans. Although diverse native peoples inhabit this region, those most directly a part of the Columbia waterways are the Wanapum, the River People. Their name is derived from “Che Wana,” the “Great River” later called the “Columbia” by Captain Robert Gray when he sailed his ship of that name in an exploratory journey to the region in 1792.

The pastoral letter process began in 1997 with the formation of an international Steering Committee whose members represented the watershed’s Canadian and U.S. Catholic dioceses, colleges and universities. The committee, headed by Bishop William Skylstad of Spokane, Washington, selected John Reid as Project Manager and John Hart as Project Writer, and named the faith-based environmental effort the “Columbia River Pastoral Letter Project.” A series of “Readings of the Signs of the Times” was held in Washington, Oregon and British Columbia in which representatives of diverse constituencies – industry, agriculture, fishing, education, community and environmental organizations, and native peoples – presented their perspectives on regional needs. A draft based on their ideas was enlarged and enhanced by suggestions from consultants that included natural and social scientists, theologians and church representatives. A website was established which described project activities, published pertinent biblical

quotes and presentations from the “Readings” sessions, and invited comments from the general public. These activities led to the release on 12 May 1999 of an exploratory document, “The Columbia River Watershed: Realities and Possibilities – A Reflection in Preparation for a Pastoral.”

The “Reflection” noted environmental degradation and human injustice in the watershed, citing pollution, including pollution from the Hanford Nuclear Reservation; salmon species extinction; U.S.-dam-caused extreme variations in Canadian river levels, disruptive of agricultural and commercial enterprises; violations of native peoples’ rights; low working people’s wages; and discrimination against ethnic minorities. The bishops’ draft document proposed concrete steps to improve watershed ecological and social conditions, including Church pledges to reduce gold use and to strive to eliminate pesticides and fertilizers on Church properties (the latter exemplary actions, and strong advocacy of salmon conservation, would be dropped from the final document because of concerns about alienating some watershed stakeholders).

The “Reflection” catalyzed numerous comments, the vast majority positive, from across the U.S. Members of several Christian traditions noted their particular appreciation for the terms “sacramental universe,” cited from the

U.S. bishops’ national environmental letter, and “sacramental commons,” originating in the environmental theology work of the Project Writer (the latter concepts would be eliminated from the final pastoral letter, because some of the region’s bishops did not want to extend the idea of “sacramental” to an experience other than that of the Church’s seven ritual sacraments).

After the release of the “Reflection,” bishops in Montana, Oregon and Washington hosted “listening sessions” which generated ideas that were incorporated by the Project Writer into subsequent drafts of the letter. Under the leadership of Bishop Skylstad, the bishops then finalized the letter and issued it on 8 January 2001 as *The Columbia River Watershed: Caring for Creation and the Common Good*. The final document was much reduced in content from its predecessor “Reflection.”

The pastoral letter has an introduction, “Caring for Creation, Community and the Columbia,” and four major sections: historical perspectives on the rivers, which promote in turn analysis of the current situation, reflections on regional history and religious ideals, formulation of a vision for the future, and proposals for concrete actions to realize that vision. The document appended a poem, “Riversong,” authored by the Project Writer.

In the introduction, the bishops expressed their hope to use the pastoral letter as the basis for an effort “to develop and implement an integrated spiritual, social and ecological vision for our watershed home, a vision that promotes justice for people and stewardship of creation” (*Columbia River* pastoral, 1). In balance with the ordinary Christian focus on the *transcendence* of God from creation, the bishops referred to the *immanence* of God in creation, observing, “The watershed, seen through eyes alive with faith, can be a revelation of God’s presence, an occasion of grace and blessing. There are many signs of the presence of God in this book of nature” (*Columbia River* pastoral,

2). The bishops advocated concern for the common good and intergenerational responsibility: “The common good demands a proper respect for the land, the air and the water to assure that when we have passed through this land it remains habitable and productive for those who come after us” (*Columbia River* pastoral, 2). They quoted approvingly Pope John Paul II’s statement that “Christians, in particular, realize that their responsibility within creation and their duty toward nature and the Creator are an essential part of their faith,” (*Columbia River* pastoral, 3), affirming thereby that environmental concern and caretaking are not “add-ons” to Christian conduct but a vital aspect of Christian life. This idea has been a significant contribution to Catholic environmental thought and action.

Part I, “The Rivers of Our Moment,” focused on current positive and negative aspects of the watershed environment, human relationships and activities, and human interaction with regional ecosystems. The bishops recognized human responsibility to build community and to care for creation: “We are called to relate to people as our neighbors and to our shared place as our common home

. . . We are responsible to God and to the community and we are responsible for the creation around us” (*Columbia River* pastoral, 5).

Part II, “The Rivers through Our Memory,” summarized regional history and reviewed Catholic religious traditions. Its focus was on the stewardship of creation, concern for the common good of the human community, and the promotion of “living water” – biblically, this means water flowing free and pure – in the watershed. This idea is, symbolically and concretely, a prophetic stimulus for restoring and conserving the rivers network. The bishops urged people to be in “service to God and to creation” (*Columbia River* pastoral, 7). This notion of *service to creation* expressed a new understanding with profound implications for human conduct. In this section the bishops returned to the theme of God-immanent, paralleling the idea of a “sacramental universe” expressed by the

U.S. bishops in their 1991 pastoral letter, *Renewing the Earth*, and implying a new concept of a “sacramental commons”: “As the whole universe can be a source of blessing or revelation of God, so also the commons of a local place can be revelatory” (*Columbia River* pastoral, 8). The pastoral articulated the Church’s position that Earth’s goods are to be distributed equitably, because God intends the Earth “to provide for the needs of peoples as they live in complex and diverse ecosystems”; people should “distribute property and goods justly” (*Columbia River* pastoral, 8), ensuring that all humans’ needs are met. Part III, “The Rivers of Our Vision,” proposed that the watershed should be conserved and cared for and its constituent communities – human and biotic – should live in balance. The bishops expressed the hope that “people will recognize the inherent value of creation and the dignity of all living beings as creatures of God” (*Columbia River* pastoral, 11).

Part IV, “The Rivers as Our Responsibility,” suggested ten steps to be taken by individuals and communities to make religious ideals and regional realities congruent in the future:

1. Consider the Common Good
2. Conserve the Watershed as a Common Good
3. Conserve and Protect Species of Wildlife
4. Respect the Dignity and Traditions of the Region's Indigenous Peoples
5. Promote Justice for the Poor, Linking Economic Justice and Environmental Justice
6. Promote Community Resolution of Economic and Ecological Issues
7. Promote Social and Ecological Responsibility among Reductive and Reproductive Enterprises
8. Conserve Energy and Establish Environmentally Integrated Alternative Energy Sources
9. Respect Ethnic and Racial Cultures, Citizens and Communities
10. Integrate Transportation and Recreation Needs with Sustainable Ecosystem Requirements (*Columbia River* pastoral, 13–17).

These proposed ideas and actions, which are being widely disseminated, have a potential to promote care for creation not only in the bishops' bioregion but in other areas around the globe.

In the watershed itself, however, some individuals and groups strive to privatize public lands such as national forests and wilderness areas, advocating virtually absolute personal and corporate rights to hold and use private property in whatever way they desire. The bishops directly addressed such beliefs: "In the concept of the common good, community and individual *needs* take priority over private *wants*. The right to own and use private property is not seen as an absolute individual right; this right must be exercised responsibly" (*Columbia River* pastoral, 13). Private property is a trust from God to the civil owner for the benefit of the entire community.

When they advocated meeting the needs of the economically dispossessed, the bishops declared that the Church exercises an "option for the poor," a term which originated in the Latin American bishops' 1979 "Puebla Document," and was used subsequently in U.S. bishops' national pastoral letters such as *Economic Justice for All: Catholic Social Teaching and the U.S. Economy* (1986) and *Renewing the Earth*. The Church is called to help the poor to acquire "justice, respect, and an inherent sense of dignity, and to participate in transforming economic and political structures to create a just society and a sustainable environment" (*Columbia River* pastoral, 14–15). In response to harm caused by pollution from mining industry operations and agricultural chemicals runoff, the bishops declared that "People . . . have a right to a clean and healthful environment" (*Columbia River* pastoral, 15), borrowing an expression found in the Montana Constitution.

In the Conclusion, the bishops called for transformation of the region "through community commitments to concrete historical projects" (*Columbia River* pastoral, 18). The bishops declared thereby that ideals should be realized through the considered actions of concerned citizens.

The document received significant public attention, including national media coverage in the U.S. and Canada, and was recognized with a number of awards, including a “Sacred Gifts Award” from the Alliance of Religions and Conservation (ARC) and the World Wide Fund for Nature

(WWF). It has stimulated ongoing watershed educational activities, including an elementary school curriculum module, presentations of project videos to parish groups and civic organizations, and distribution of the pastoral letter to members of state legislatures.

The Columbia River Watershed pastoral has made a significant contribution to Catholic Church teachings on issues of environmental caretaking and economic justice. It stimulated ongoing discussions and debates among diverse constituencies in the watershed, and some of its insights will remain part of the enhanced body of Catholic Church environmental teachings. Even sections that were part of the “Reflection” but not included in the final document are a source of reflection and proposals for action among members of the clergy and the laity, possibly signaling future developments in Catholic environmental thought and action.

John Hart

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See also: Christianity (6a) – Roman Catholicism; Environmental Ethics; Sacramental Universe; Yakama Nation.

Commons and Christian Ethics

The “commons” designates a shared place as well as an ethics of relation within and accountability for that public or civic zone (i.e., “the common good”). Such designation as “the commons” can be applied to various scales of communitarian affiliation – from the town square or “green” to the oceans, atmosphere and planet as “the commons” of all kind. While the concept of the commons does not preclude a sense of territoriality or various administrative strategies, it does tend to preclude proprietary relationships, especially those of an individual or private interest group. Evocation of the commons attempts in various ways to account for the land or other resource as a living system of reciprocal exchanges and as a community of creatures with and beside human interests. Likewise, the commons extends human ethical accountability beyond private, individual interests and asserts a holistic versus aggregate communal sensibility. Ethically speaking, the concept of the commons has been asserted to argue for the basic right of subsistence sustenance for all creatures. Hence, as an interdependent community, the planet – including Earth’s arteries of air, water, and energy

– is the life source of all kind, whether human, plant, animal or insect; since all life depends upon sharing the common or basic elements of life (e.g., fresh water, habitat, and food sources), human interaction with these commons must be maintained with respect “for the common good.” Christianity has often evoked an ethics of the commons, especially as an ideal of resistance to world regimes, though the concept does not inherently purport a means of governance or an essential economic pattern thereby.

Historical Views

In the religious sensibilities of ancient Israel, it was said that “the Earth is the Lord’s” (Ps. 24:1); humanity did not possess the land, but held it in sacred trust. For practical management purposes, the land of Israel was divided among tribes and households. Legal provisions were established in this settled agricultural milieu which periodically occasioned the forgiveness of indebtedness and the release of humans from any indentured position into which they had been economically pressed, so as to redistribute the resources of the land (See: SABBATH-JUBILEE CYCLE). Levitical codes insisted that “[t]he land shall not be sold in perpetuity, for the land is mine [Yahweh’s]; with me you are but aliens and tenants. Throughout the land that you hold, you shall provide for the redemption of the land” (Lev. 25:23–24). Later prophets likewise condemned those who “add house to house and join field to field until everyone else is

displaced” (Isa. 5:8). Such legal provisions restored what the priests construed as a sacred trusteeship, a distribution pattern which was apparently intended to guarantee general human access to life sufficiency and accountability for soil management. While the mention of the commons and the common good date back in biblical texts to the reconstruction of the Second Temple (Neh. 2:18), references become more frequent in intertestamental literature (2 Macc. 11:15, Wis. 7:3) and in the literature of the first century (Acts 2:44–45, 4:32 in addition to what follows). The Jesus movement of the first century was generated in reaction to the effects of the combined colonizing tendencies of the ancient Hasmonean reign, the Herodian Temple state, and the Pax Romana upon the region of Galilee. Invoking “the kingdom of God” or the

God-governed commons as a material resistance strategy to the hegemony of empires, Jesus compared the economic flow of divine providence – construed by him as the flow of natural light without architectural direction as in a sanctuary; living or naturally free-flowing water, unconstrained by aqueducts; wild foods outside of the systems of tithing and taxation; bodies outside of patrilineage; the exchange of wisdom without rabbinic oversight or instruction – to the economic patterns created by the imperial rule of Herod Antipas, who was in collusion with Rome and its multinational systems of trade and oversight. Positioning “God’s Great Economy” against the “big economy” of the Pax Romana and its Herodian collaborators not only challenged the presumptive totality of its world scale; Jesus also thereby created an economic circulation among the displaced which exited the imperial structures – if not wholly, at least in ways that resisted the flow of imperial goods. This movement created a new kingdom within, but also a subversion of the prevailing world empire.

Others of the Jesus movements appealed to the ancient ethic of freedom for debt-slaves so as to decolonize the land fallen under the impress of Rome – the first society not to cancel debts. So the author of the Gospel of Luke, for example, later in the first century, framed the practice of Christian ministry, figured in and through the person of Jesus, as that of a Jubilee, as an act of land redemption (Luke 4:18–19).

Paul, another early first-century apostle with the Jesus movements, asserted a certain ethics of living in community (*koinonia*) when instructing Corinthians who were divided by class differences: since all are interrelated, all should act “for the common good” (1 Cor. 1:9, 12:7). Yet if Athenian democracy presumed the common good to be well dispensed from the headquarters of propertied and educated males and wealthy Corinthians were somehow imitative of such an hierarchy, Paul eschews their somatic governance model (1 Cor. 12:14–26). Paul’s resistant evocation of *koinonia* suggested that the adjudication of the common good proceed rather by inverting the value hierarchy: value should be given to the constituents of “the body” generally conceived to be of low status, the so-called “weaker” and less honorable and less beautiful members of the body.

While the Christian Church itself was, from the third century on, numbered among landowners, significant Christian voices throughout late antiquity (e.g., the patristic theologians Basil the Great, Clement of Alexandria and Ambrose) maintained the

moral, philosophical teaching of the commons. The fourth-century theologian Ambrose, Bishop of Milan, declared that “God has willed this Earth to be the common possession of all and its fruit to support all.” Indeed, “God has created everything in such a way that all things be possessed in common. Nature is therefore the mother of common right . . .” (in Avila 1983: 74).

Basil dispensed the philosophical conviction that distinguished *ta koina*, the environment of labor, which individuals had no right to own, from *ta idia*, that which was a product of one’s labor (e.g., ornament, craft, tool, etc.). Further, where the rich become richer and the poor poorer, John Chrysostom – building specifically upon the Pauline commitment to *koinonia* – surmised that two interrelated conditions occasioned economic injustice: 1) private ownership of land, which began under the aegis of Roman law, and 2) the enslavement of laborers, which he considered an inherent tenant of private ownership of land. While Christian ascetic discipline limited the number of personal goods (cloak, staff, clothes on your back, food bowl, etc.), the philosophy of the commons named the “theatre” of land, water, the winds, rain and sun, for which no one – Basil insisted – could claim the labor of origination (Avila 1983).

Christian movements, like the seventeenth-century English Diggers and early North American utopian experiments, which presumed shared land as the basis of community, leaned back into this sensibility of the commons. During the seventeenth-century enclosure of the English commons by feudal lords, the philosophy of the commons was considered a lower-class heresy. Gerard Winstanley, a failed tradesperson, had a vision telling him to publish abroad that “the Earth should be made a common treasury of livelihood to the whole [of hu-]mankind, without respect of persons” (in Hill 1991: 112). Known as “the Diggers,” his community actively opposed the aristocratic conscription of the commons by cultivating and settling St. George’s Hill. Making manuring of this commons a sacramental act, those dislocated by royalist enclosure of the lands there set up an agrarian community of the dispossessed. An act repeated throughout southern and central England, the Diggers reclaimed the commons of forests and cultivated agricultural fringes. By 1650, they added the demand that church land be turned over to the poor. Equating private property with “the original cause of sin” and commenting on Romans 8, Winstanley wrote: “They that are resolved to work and eat together, making the Earth a common treasury, doth join hands with Christ to lift up the creation from bondage and restore all things from the curse” (in Hill 1991: 129). For Winstanley, true religion was founded upon the egalitarian state of nature and true freedom developed as an extension of the social relations of the commons.

In his assessment that human “covetousness” held the Earth in bondage, Winstanley echoed the Reformer Martin Luther’s notion of the “covetous imagination.” Frederick Engels, a reader of Luther, suggested that such covetousness infected not just the human heart, but was built up into perduring social patterns. Engels in his classic outline of human social evolution, *The Origin of the Family, Private Property, and the State*, associated private property with the economic development of animal husbandry and the familial development of father-to-son inheritance, giving this genealogy of

patrilineal exchange of private property something of the connotation of the classic Christian doctrine of “the Fall.” Marxist communism, a hybrid reading of philosopher G.W.F. Hegel’s Spiritenthused idealism infused with Native North American tribal philosophy of the commons, might be understood as one recent historical attempt at encouraging the reemergence of the commons. Even as it must be admitted that the communist experiment failed because of authoritarian, state control thereof, that philosophical Marxism was a tool of liberation theology, for positioning its contention of God’s preferential option for the poor, may indicate that liberation theology too shares in the spirit of this claim to the commons.

Recent Christian Theological Evocations

Contemporary invocations of “the [global] commons,” a refrain of Christian ecoand liberation theologians among others, pose a moral, ethical and philosophical challenge to the prevailing Roman legal model of private property, which undergirds global capitalism and the extension of “property rights” into the domains of knowledge, seed stocks and human genomes, air waves, space and cyberspace. With the inception of the Roman legal system, private property became the legally defined and protected land ethic, a norm which spread with colonization and therefore in the company of Western Christianity. Enclosure of the global commons has been particularly detrimental to indigenous peoples, who claim a tradition of relating to the land as commons (Weaver 1996; Charleston 1998), and to women who, according to United Nations statistics, own less than 1 percent of the planet’s arable land.

Often today evoked as a political wager and religious warrant to create alternative civic pockets and alternative circulatory systems for resource distribution, the metaphor of the commons exists within theological circles as principally that – namely, as a fertile symbol which, like a buoy, marks a philosophical ideal that has not yet been carefully reworked into contemporary theological teaching or a practical ethic, but hopes to be materialized here and there as subversions to economic imperialism. Such an ethical commitment is ritually enacted in Christian circles where the eucharistic sacrament or “communion” is defined as a “sharing of the common elements.” Frequent references to *koinonia* (“community”) within Christian practice (ancient as well as contemporary) and theo-ethical reflection around the notion of “the common good” carry within them remembrance of “the commons” submerged within Christian spiritualities. Inasmuch as Western Christians have inherited an Augustinian revulsion at the level of need and necessity as tying one to the Earth and the mind to practical affairs, resurfacing the theology of the commons returns basic matters of survival and sustainability to the theo-ethical agenda.

Sri Lankan theologian Tissa Balisuriya in his work *Planetary Ecumenism* has charged the Western world with land apartheid, for enclosing – through immigration law

– the most productive agricultural land of North America, while conscripting the mass of humanity to marginal lands. Larry Rasmussen’s evocation of planetary “ecumenacy,” in his book *Earth Ethics, Earth Community*, can be seen as analogically parallel the notion of “the commons.” Leonardo Boff, agreeing with the conviction that “poverty is our main environmental problem,” critiques the way in which power has decided access to necessities and proposes a new model of society, which finds the supreme good in earthly and cosmic integrity. Interpreting the Trinity as a symbol of the communion of the God-hood, Boff urges Christian spiritual mysticism to take up the practical labor of reconstructing patterns of sharing and living within nature’s systems of reciprocity. Sun Ai Lee-Park reads the biblical story of the Tree of Life at the center of the Garden of Eden to support the contention that “the source of life” – that is, the vital and basic systems of life exchange (food, water, shelter) – need to be kept open to all creatures. Genesis Farm – recognizing that as more and more life interchanges are forced through the monetary system, the human social community experiences greater chasms of inequality – has planted a hillside with an orchard that allows persons in its agricultural cooperative as well as visitors to its educational center to “Come eat, without money . . .” (Isa. 55:1–2). This orchard, literally a “free for all,” helps the human community remember the organic, material ideal of the land commons.

Wielding prophetic critique, Christians evoke the commons so as to generate legal and political moves to withhold entities and knowledge from the market, to open value outside of the tide of economic commodification. Engels ended his essay on the history of private property with the conclusion – more hope than historical observation – that “[a] mere property career is not the final destiny of [hu]mankind” (Engels 1972: 166). “The commons” as a communitarian land ethic, as a philosophical and symbolic ideal, has had various material incarnations as well as a long history of political resistance to world-totalizing regimes. Calling upon this powerful political valency, contemporary assertions of “the commons” attempt to evoke a new human relationship to various unclaimed or non-patented though threatened life regions. Rolling the discontent of global economic injustice around ancient and reconstructed memories, the concept of the commons yearns toward a new moral ethic, if not a new economic model, which promises access to a sustainable livelihood for all kind.

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See also: Christianity (4) – Early Church (Fathers & Councils); Christianity (5) – Medieval Period; Christianity (6c1) – Reformation Traditions; Christianity (7a) – Theology and Ecology; Diggers and Levelers; Eco-Justice in Theology and Ethics; Environmental Ethics; Hebrew Bible; Sabbath – Jubilee Cycle.

Community Supported Agriculture

Agricultural practices worldwide in the past four decades have moved away from community-based, diversified farms toward a globally integrated industrial food system. This has been especially true of the industrialized nations of the North. One result of this is that fewer and fewer people know where or how food is produced and what kinds of agricultural practices are involved. Community Supported Agriculture (CSA) emerged originally in Japan and shortly thereafter in several European nations in the late 1960s and 1970s in response to these trends. In Japan, groups of consumers concerned about food production began to approach agricultural producers with the proposal that they buy directly from the producers in exchange for having the food raised using sustainable agricultural practices and no artificial chemicals. By the mid-1980s, two farms in the eastern U.S. began practicing Community Supported Agriculture. Today there are over 1000 CSA projects in the U.S., and the numbers continue to grow.

A key feature of Community Supported Agriculture is building direct partnership between the farmer and the consumer. The farmer or organizing members plan a budget that includes costs of production, salary, distribution, administration and organizational costs. This determines the number of members that a CSA can support and the price of a membership or share. Consumers buy a share in the CSA and receive the return on their “investment” in the form of weekly portions of food during the growing season. In this way consumers share the risk of farming sustainably with the farmer: in good years bountiful harvests provide greater quantities of food to members, while in poor years, consumers and farmers share in the loss of any particular crop. The producer receives payment at the beginning of the season, which prevents the need for springtime operating loans and provides a guaranteed income for the farmer’s labor.

Community Supported Agriculture fosters the integration of several important dimensions of an ecological ethic:

- CSAs serve to link rural and urban dwellers in a particular region through sustainable food production. They counter the trend toward centralized and concentrated food systems and social systems that cause damage to both local ecosystems and the human communities within them. They consciously seek to produce food for humans by working within the natural rhythms and capacities of the land. They strengthen local communities by allowing farmers to live on the land while linking the land and food production to the rest of us. Many CSAs stress education about sustainable food production and either invite or require some participation of their members in the

farming practices so that the knowledge base about food and its production increases. The importance of *culture* in agriculture is retained and strengthened.

- CSAs stress that everyone invests time and money in food consumption; *where* this investment goes and *who* and *what* practices support it can either foster an ecologically aware and sustainable relation to the land or further human alienation from the land and ecologically viable lifestyles.

- An integral part of the CSA ethic is a spiritual dimension. One CSA in Iowa includes in its description of CSAs this phrase: “CSAs seek to reconnect people with the Earth, the rhythms and beauty of nature, and the physical and spiritual rewards of direct contact with the soil.” Many CSA producers and consumers cite spiritual or religious commitments as among the reasons why they are involved in CSAs. The frameworks or spiritualities tend to group broadly into two categories: stewardship convictions rooted in the Judeo-Christian tradition that humans are to be loving stewards of God’s gifts of creation, and more Earth-based spiritualities that discern a sacred dimension in the Earth and its rhythms itself, and try to farm in ways that are harmonious with these energies.

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See also: Back to the Land Movement; Berry, Wendell.

Complexity Theory

Also known as chaos or catastrophe theory, complexity theory is primarily a development of the Santa Fe Institute in New Mexico that focuses upon the predominant nonlinear processes of change operating in economics, physics, biology, computer sciences, social dynamics and the cosmos in general. The sciences of complexity are primarily concerned with the emergent principle of spontaneous self-organization in which the whole becomes something more than the simple sum of its parts.

At present, complexity science as developed by the likes of Murray Gell-Mann, Kenneth Arrow, Ilya Prigogine, Daniel Stein, Arthur Brian, John Holland, Stuart Kauffman, Christopher Langton, Doyne Farmer and Philip Anderson among others has been applied essentially to mechanics and social and political theory, but in principle it is equally applicable to understanding spiritual and green consciousness as products of natural evolution as well as possible reasons behind successful anti-environmental efforts. From the perspective of nature and religion, the Gaia principle of James Lovelock, and the notion of increasingly complex fields of consciousness as spontaneous consequences of uncorrupted and balanced natural development, conform to the explicative dynamics offered by complexity theory. To date and in general, the theory has yet to influence significantly “green” ways of thinking. But it retains potential in providing motivation, spiritual resource or rationale for deployment toward nature conservation.

In both the natural and behavioral sciences, the ability to predict greater than chance has been the bedrock of traditional scientific methodology comprising observation, logical/mathematical analysis, hypothesis and experiment, but with the increased recognition of complexity within both the natural and social worlds, complexity theory argues that, rather than forecast accurately the likely shapes of future development, it is more if not only possible to retrodict (determine causality *ex post facto*) from a situation that has already occurred on how that particular event came to pass. In essence, complexity theory is predicated upon 1) Einstein’s demolishing of Newton’s concepts of absolute space and time; 2) Heisenberg’s understanding of indeterminacy as a fundamental principle that disallowed Laplace’s contention that one could know simultaneously both the position of a particle and its velocity; 3) quantum theory that extends the perception of light as sometimes functioning like waves and sometimes like particles to other fields of physics; and 4) the ideas of deterministic chaos that refute the basis of macroscopic determinism, namely, that even with a small number of objects, their fundamental physics makes longterm prediction impossible.

Consequently, complexity theory comprehends nature both with our terrestrial planet and throughout the universe as not only extremely complicated but also highly

adaptive, undergoing sudden phase transitions or upheavals at the edge of chaos, nonlinearly dynamic, spontaneously self-organizing and emergent. This comprehension, however, undermines science in general and the social sciences in particular by challenging the laws of cause and effect as the foundational basis for a means and method of explanation. Spontaneous self-organization working with ever-increasingly complex building blocks leads to new and unpredictable properties – with a resultant totality that exceeds any understanding of its individual components. Because the significant factor in natural processes is iteration or repeated feedback allowing any given system through multiple folding back onto itself to have both the range and time to exhibit new properties and organizational forms, Frederick Turner (Eve, et al. 1997: xv, xxiv) adds nonlinear dynamic modelling as a new fifth tool of complexity science along with observation, analysis, theorizing and demonstrable testing.

According to Charles Jencks (1995: 37), the complexity understanding sees that the universe is ever increasing in information or negentropy. This production of negative entropy counters the second law of thermodynamics that holds instead that information (including heat or energy) will disappear rapidly as entropy inevitably increases to maximum. Nevertheless, along with such concepts as increasing returns, unpredictability and the immense historical consequences understood possibly to result from tiny events (e.g., hurricanes in Florida following from the flapping of butterfly wings in Saudi Arabia), complexity theory also embraces the notion of lock-in, namely, the entrenched establishment of a less advantageous situation that becomes the norm. Examples of negative feedback patterns of lock-in include the QWERTY/AZERTY keyboard layout, the VHS videotape format over the Beta design, gasoline-powered internal combustion over the steam engine, and light-water reactors over gas-, heavywater-, or liquid-sodium-cooled nuclear power systems.

Even in cases of lock-in, however, the retrodictable explanation is one that makes sense, and for complexity theorists this in turn is part of the process of emergent properties and new forms of organization that can be understood in terms of freedom. Complexity freedom differs from the existential freedom of gratuitous chance and capricious fancy. Instead, the freedom of unpredictability is both the underlying simplicity of turbulent selforganizing feedback and the natural survival advantage inherent in redundant proliferation of unintended backup systems. In understanding complexity science as the cybernetics of effective organization, and in the face of realizing time to be irreducible, irreversible and asymmetrical, a new catalogue of forms emerges: irregularity, discontinuity, tendency toward fragmentation, selfsimilarity, scaling symmetries, infinite depth within a bounded domain, a three-dimensional look and a characteristic “style.” Complexity theory refers to these collectively as the basic “strange attractor” or fractal form embedded in any nonlinear feedback process. It is the strange attractor that allows systemic “free choice” as well as the understanding that nonlinear historical processes are primary – with the abstract laws of science being generated *from* the iteration of dynamic processes rather than the operations necessarily having to conform to pre-established scientific patterns.

Complexity theory, therefore, comprehends nature as an unbounded and perpetual feedback process of selforganization. Consciousness itself is understood as an emergent property of nature rather than a transcendent originator beyond space and time. The teleological emergence of both functional structure and sentience from inert matter is expressive of a spontaneous generative inclination inherent in physical reality. Some complexity theorists have recognized this creative tendency as an incipient inclination toward spiritual development that is internal to nature. In other words, the spiritual is a natural development, a built-in feature, integral to the energymatter matrix that is our cosmos. It comprehends how we as human beings become something more than merely the sum of our bodily parts, how our planet emerges as a self-regulating biosystem and even that a collective consciousness such as is currently being monitored by the Princeton Institute might increasingly become an apparent operative.

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See also: Chaos; Einstein, Albert; Gaia; Lovelock, James; Prigogine, Ilya; Science.

Composting substance. While Midler found in it her place in the universe, many environmentalists use it as a central symbol for the cycle of nature.

In earlier agriculture, composting was a natural part of the recycling of substances, while late modern green spirituality, especially within the Green Death Movement, also includes the notion of humans as being between birth, death and rebirth in the cyclical worldview represented by the compost container in the garden or the flat. Critiquing modern society, compost also serves for the revaluing of garbage, shit and waste that are turned into nearly sacred artifacts representing the flow of nature. Environmentalists sometimes even wish to be buried in their compost, resting in Mother Earth.

Pre-modern religions include differentiated understandings of the planet's surface (e.g., the Earth as mother), while modern worldviews have forgotten or eliminated these. A look at biblical and classical traditions in Christianity shows that the Earth was regarded as in cooperation with God in regard to the history of salvation. The Earth took care of the dead bodies until their final resurrection. Ancient beliefs in the goddess Gaia were transformed by the early church into an understanding of the Earth as a holy element of the Spirit's life-giving. The modern culture of composting in rich and poor countries alike should be regarded as a strong religious symbol for a new cyclic way of understanding life in general and the human bodily self concerning it. The cycle of life, from birth to flourishing to a death which gives new conditions for furthering life, could easily be experienced as a transformative material, social and religious praxis.

Composting is strongly encouraged and legitimized through green ideologies in many nations' environmental policies. Composting can reduce garbage volumes up to 80 percent. Through the practice of composting, the diminishing layer of productive Earth for farming could again be increased, especially in the Third World. Pedagogical programs for the education of teachers and children have been developed around composting. Christian churches in East Germany, Finland and Sweden, for example, have developed a "com-post-modern theology" (a term coined by S. Bergmann) where

gardeners, priests and politicians have reflected on and renewed the material flow in various parishes.

“All my life I had waited for an inspiration, a manifestation of God, some kind of a transcendent, magic experience that could show me my place in the universe. This experience I made with my first compost,” the American singer Bette Midler replied when she was crowned as the “queen of compost” in Germany in 1994.

Compost is a mixture of decomposed vegetable or animal matter that is collected in an open or closed container in order to transform “dead” matter into fertilizing

Sigurd Bergmann

See also: Church of Euthanasia; Death and Afterlife in Jeffers and Abbey; Green Death Movement; Zoroastrianism.

Confucianism

Confucianism has conventionally been described as a humanistic tradition focusing on the roles and responsibilities of humans to family, society, and government. Thus, Confucianism is identified primarily as an ethical or political system of thought with an anthropocentric focus. However, upon further examination and as more translations become available in Western languages, this narrow perspective needs to be reexamined.

Some of the most important results of this reexamination are the insights that have emerged in seeing Confucianism as not simply an ethical, political, or ideological system. Rather, Confucianism is being appreciated as a profoundly religious tradition in ways that are different from Western traditions. This may eventually result in expanding the idea of “religion” itself to include more than criteria adopted from Western traditions such as notions of God, salvation, and redemption. Moreover, Confucianism is being recognized for its affirmation of relationality, not only between and among humans but also with humans and the natural world.

The Confucian worldview might be described as a series of concentric circles where the human is the center, not as an isolated individual but as embedded in rings of family, society, and government. This is especially clear in the ancient text of the *Great Learning (Daxue)* which is a chapter from the *Book of Rites (Liji)*, one of the Confucian classics compiled over 2000 years ago. All of these circles are contained within the vast cosmos itself. Thus the ultimate context for the human is the “10,000 things,” nature in all its remarkable variety and abundance.

Historical Development

We can identify four major periods of Confucian thought and practice. The first stage is that of classical Confucianism, which ranges from approximately the sixth century

B.C.E. to the second century before the Common Era. This is the era of the flourishing of the early Confucian thinkers, namely Confucius and Mencius. The second period is that of Han Confucianism when the classical tradition was shaped into a political orthodoxy under the Han empire (202 B.C.E – 220 C.E.) and began to spread to other parts of East Asia. The Han period saw the development of the theory of correspondences of the microcosm of the human world with the macrocosm of the natural world. The third major period is the Neo-Confucian era from the eleventh to the

early twentieth century. This includes the comprehensive synthesis of Zhu Xi in the eleventh century and the distinctive contributions of Wang Yangming in the fifteenth and sixteenth centuries. The influence of both Confucianism and NeoConfucianism as an educational and philosophical system spread beyond China and shaped East Asian societies especially Korea and Japan, along with Taiwan, Hong Kong, and Singapore.

In the twentieth century a fresh epoch of Confucian humanism has emerged called “New Confucianism.” This represents a revival of the tradition under the influence of scholars who came to Taiwan and Hong Kong after Mao’s ascendancy in 1949. Mao felt that Confucianism was essentially a feudal tradition, anchored in history, and that for his ideas to flourish a radical break must be made with the past. The anti-Confucian campaigns during Mao’s rule were virulent, especially in the Cultural Revolution of the 1960s and 1970s. However, after Mao’s death, there was a resurgence of interest in Confucian values, some of this encouraged by the government. Indeed, the International Confucian Society held two major conferences in Beijing and in Confucius’ birthplace, Qufu, to explore the future of the Confucian Way in 1989. These conferences were held to commemorate the 2540th anniversary of Confucius’ birth and marked a renewed interest in Confucianism to balance the unsettling effects of the rapid industrialization and modernization of China.

Major Thinkers and Texts

The acknowledged founder of the Confucian tradition was known as the sage-teacher Kongzi (551–479 B.C.E.). His name was Latinized by the Jesuit missionaries as Confucius. Born into a time of rapid social change, Confucius was concerned with the goal of reestablishing political and social order through rectification of the individual and the state. The principal teachings of Confucius are contained in his conversations recorded in the *Analects*. Here he emphasized the cultivation of moral virtues, especially humaneness (*ren*) and the practice of civility or ritual decorum (*li*), which includes filiality (*xiao*). Virtue and civility were exemplified by the noble person (*junzi*) particularly within the five relations, namely, between ruler and minister, parent and child, husband and wife, older and younger siblings, and friend and friend. The essence of Confucian thinking was that to establish order in the society one had to begin with harmony, filiality, and decorum in the family. Then, like concentric circles, the effects of virtue would reach outward to the society. Likewise, if the ruler were moral, it would have a ripple effect on the rest of the society and to nature itself, like a pebble dropped into a pond.

At the heart of this classical Confucian worldview was a profound commitment to humaneness and civility. These two virtues defined the means of human relatedness as a spiritual path. Through civility, beginning with filiality, one could repay the gifts of life both to one’s parents and ancestors and to the whole natural world. Through humaneness one could extend this sensibility to other humans and to all living things.

In doing so one became more fully human. The root of practicing humaneness was considered to be filial relations. The extension of these relations from one's family and ancestors to the human family and to the cosmic family of the natural world was the means whereby these primary biological ties provided a person with the roots, trunks, and branches of an interconnected spiritual path. Humans, nature, and the cosmos were joined in the stream of filiality. From the lineages of ancestors to future progeny, intergenerational connections and ethical bonding arose. Reverence and reciprocity were considered a natural response to this gift of life from parents and ancestors. Analogously, through reverence for Heaven and Earth as the great parents of all life, one realized one's full cosmological being and one's place in the natural order.

Confucian thought was further developed in the writings of Mencius (ca. 385–312 B.C.E.) and Xunzi (ca. 310–219 B.C.E.), who debated whether human nature was intrinsically good or evil. Mencius' argument for the inherent goodness of human nature gained dominance among Confucian thinkers and gave an optimistic flavor to Confucian educational philosophy and political theory. This perspective influenced the spiritual aspects of the tradition as well because self-cultivation was seen as a means of uncovering this innate good nature. Mencius contributed an understanding of the process required for self-cultivation. He did this by identifying the innate seeds of virtues in the human and suggesting ways in which they could be cultivated toward their full realization as virtues. Analogies taken from the natural world extended the idea of self-cultivation of the individual for the sake of family and society to a wider frame of reference that also encompassed the natural environment. This can be described as a path of botanical cultivation. In addition to his teachings on personal cultivation, Mencius advocated humane government as a means to promote the flourishing of a larger common good. His political thought embraced appropriate agricultural practices and proper use of natural resources. Mencius taught:

If the agricultural seasons are not interfered with, there will be more grain than can be eaten. If closemeshed nets are not allowed in the pools and ponds, there will be more fish and turtles than can be eaten. And if axes are allowed in the mountains and forests only in the appropriate seasons, there will be more timber than can be used . . . this will mean that the people can nourish their life, bury their dead, and be without rancor (in DeBary and Bloom 1999: 118).

In particular, he urged that the ruler attend to the basic needs of the people and follow the way of righteousness not profit.

Xunzi contributed a strong sense of the importance of ritual practice as a means of self-cultivation. He noted that human desires needed to be satisfied and emotions such as joy and sorrow should be expressed in the appropriate degree. Rituals provided the form for such expression in daily human exchange as well as in rites of passage such as marriage and death. Moreover, because Xunzi saw human nature as innately flawed, he emphasized the need for education to shape human nature toward the good.

Finally, he had a highly developed sense of the interdependent triad of Heaven, Earth, and humanity that was emphasized also by many later Confucian thinkers. He

writes: “Heaven has its seasons; Earth has its riches; humans have their government.” (Heaven was understood as the guiding force of the Universe and Earth as the natural world within which humans lived and flourished.) Confucianism blossomed into a Neo-Confucian revival in the eleventh and twelfth centuries that resulted in a new synthesis of the earlier teachings. The major NeoConfucian thinker, Zhu Xi (1130–1200), designated four texts from the canon of historical writings as containing the central ideas of Confucian thought. These texts and Zhu Xi’s commentaries on them became, in 1315, the basis of the Chinese civil service examination system, which endured for nearly six hundred years until 1905. Every prospective government official had to take the civil service exams based on Zhu Xi’s commentaries on the Four Books. The idea was to provide educated, moral officials for the large government bureaucracy that ruled China. The influence, then, of Neo-Confucian thought on government, education, agriculture, land, and social values was extensive. Views regarding nature, agriculture and management of resources were derived from NeoConfucian understandings of the importance of humans’ working to cultivate and care for nature as a means to fulfill their role in the triad of Heaven and Earth.

Zhu Xi’s synthesis of Neo-Confucianism was recorded in his classic anthology, *Reflections on Things at Hand (Jinsilu)*. In this work Zhu formulated a this-worldly spirituality based on a balance of cosmological orientation, ethical and ritual practices, scholarly reflection, and political participation. The aim was to balance inner cultivation with outward investigation of things in concert with the dynamic changes of the natural world. Zhu Xi affirmed these changes as the source of transformation in both the cosmos and the person. Thus Neo-Confucian spiritual discipline involved cultivating one’s moral nature so as to bring it into harmony with the larger pattern of change in the cosmos. Each moral virtue had its cosmological component. For example, the central virtue of humaneness was seen as the source of fecundity and growth in both the individual and the cosmos. By practicing humaneness, one could effect the transformation of things in oneself, in society, and in the cosmos. In so doing, one’s deeper identity with reality was recognized as forming one body with all things. As the *Doctrine of the Mean* stated: “. . . being able to assist in the transforming and nourishing powers of Heaven and Earth, one can form a triad with Heaven and Earth” (in De Bary and Bloom 1999: 338).

Confucian Relationality and Nature

From the classical texts to the later Neo-Confucian writings there is a strong sense of nature as a relational whole in which human life and society flourishes. Indeed, Confucian thought recognizes that it is the rhythms of nature that sustain life in both its biological needs and socio-cultural expressions. For the Confucians the biological dimensions of life are dependent on nature as a holistic, organic continuum. Everything in nature is interdependent and interrelated. Most importantly, for the Confucians

nature is seen as dynamic and transformational. These ideas are evident in the *Book of Changes* and are expressed in the *Four Books*, especially in *Mencius*, the *Doctrine of the Mean*, and the *Great Learning*. They come to full flowering in the Neo-Confucian tradition of the Song (960–1276) and Ming periods (1368–1644). Nature in this context has an inherent unity, namely, it has a primary ontological source (*Taiji*). It has patterned processes of transformation (*yin/yang*) and it is interrelated in the interaction of the five elements and the 10,000 things. Nature is dynamic and fluid with the movements of (*qi*) material force.

For the Confucians, humans are “anthropocosmic” beings not anthropocentric individuals. The human is viewed as a microcosm in relation to the macrocosm of the universe. This is expressed most succinctly in the metaphor of humans as forming a triad with Heaven and Earth. These relations were developed during the Han period with a complex synthesis of correlative correspondences involving the elements, directions, colors, seasons, and virtues. This need to consciously connect the patterns of nature with the rhythms of human society is very ancient in Confucian culture. It is at the basis of the anthropocosmic worldview where humans are seen as working together with Heaven and Earth in correlative relationships to create harmonious societies. The mutually related resonances between self, society, and nature are constantly being described in the Confucian texts and are evident in art and architecture as well.

For Confucians, nature is not only inherently valuable, it is morally good. Nature, thus, embodies the normative standard for all things; it is not judged from an anthropocentric perspective. There is not a fact/value division in the Confucian worldview, for nature is seen as an intrinsic source of value. In particular, value lies in the ongoing transformation and productivity of nature. A term repeated frequently in Neo-Confucian sources is *sheng sheng* reflecting the ever-renewing fecundity of life itself. In this sense, the dynamic transformation of life is seen as emerging in recurring cycles of growth, fruition, harvesting, and abundance. This reflects the natural processes of flourishing and decay in nature, human life, and human society. Change is thus seen as a dynamic force with which humans should harmonize and interact rather than withdraw from.

In this context, the Confucians do not view hierarchy as leading inevitably to domination. Rather, they see that value rests in each thing, but not in each thing equally.

Everything in nature and society has its appropriate role and place and thus should be treated accordingly. The use of nature for human ends must recognize the intrinsic value of each element of nature, but also its value in relation to the larger context of the environment. Each entity is considered not simply equal to every other; rather, each interrelated part of nature has a particular value according to its nature and function. Thus, there is a differentiated sense of appropriate roles for humans and for all other species. For Confucians, hierarchy is seen as a necessary way for each being to fulfill its function. In this context, then, no individual being has exclusive privileged status in relation to nature. Rather, the processes of nature and its ongoing logic of

transformation (*yin/yang*) is the norm that takes priority for the common good of the whole society.

Confucians were mindful that nature was the basis of a stable society and that without tending nature carefully, imbalance would result. There are numerous passages in *Mencius* advocating humane government based on appropriate management of natural resources and family practices. Moreover, there are various passages in Confucian texts urging humans not to wantonly cut down trees or kill animals needlessly.

Indeed, the Confucians realized that the establishment of humane society, government, and culture inevitably results in the use of nature for housing, for production, and for governance. In this sense, Confucians might be seen as pragmatic social ecologists (rather than deep ecologists) who recognize the necessity of forming human institutions – both educational and political – for a stable society. These ideals, however, did not prevent deforestation historically, which increased drastically in the modern era due to rapid industrialization and population growth. Nonetheless, it is clear that for Confucians human cultural values and practices are grounded in nature and part of its structure, and thus humans are dependent on its beneficence. In addition, the agricultural base of Confucian societies has always been recognized as essential to the political and social well-being of the country. Humans prosper by living within nature's boundaries and are refreshed by its beauty, restored by its seasons, and fulfilled by its rhythms. For Confucians, human flourishing is thus dependent on fostering nature in its variety and abundance; going against nature's processes is selfdestructive. Human moral growth means cultivating one's desires not to interfere with nature but to be in accord with the great Dao of Nature. Thus the "human mind" expands in relation to the "Mind of the Way."

In short, for Confucians, harmony with nature is essential, and human self-realization is achieved in relation to nature. The great triad of Confucianism, namely, Heaven, Earth, and humans, signifies this understanding that humans can only attain their full humanity in relationship to both Heaven and Earth. This became a foundation for a cosmological ethical system of relationality applicable to spheres of family, society, politics, and nature itself.

It is certainly the case that both historically and in the modern period the inevitable gap between ideal principles and pragmatic decisions has caused considerable damage to China's natural environment. In the last fifty years this is due to economic exploitation of resources along with population growth and Maoist ideology that rejected Confucianism and favored modernization at any cost. At present the large-scale industrialization that is occurring in China with few restraints will no doubt cause irreparable damage to China's natural inheritance but will also adversely affect the global commons. With the renewed interest in Confucian thought after several decades of its eclipse under Mao there may be grounds for an indigenous Confucian (and Daoist) approach to environmental protection.

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See also: Chinese Traditional Concepts of Nature; Creatures' Release in Chinese Buddhism; Daoism; Yunnan Region (Southwest China and Montana Mainland Southeast Asia); Zhuangzi.

Confucianism and Environmental Ethics

Historically, the influence of Confucianism has been significant across East Asia in political thought and institutions, social relationships and ritual exchange, educational philosophy and moral teaching, cultural attitudes and historical interpretation. Indeed, Confucian values still play an important part in East Asian life despite the striking inroads of Maoism, modernization, and Westernization. Although we are concerned here with the potential positive contribution of Confucianism to environmental thought, acknowledgment is made of the inevitable gaps between theories and practices, historically and at present. We are aware that historically the record is quite mixed regarding protection of the environment in China and further research needs to be done in this area. This article will point toward the resources Confucianism holds for values toward nature and environmental ethics. However, in light of the contemporary environmental crisis, viewing Confucianism as a singular tradition is problematic because of its geographic spread, its historical development, and its varied forms, ranging from Imperial State Confucianism to local and familial Confucianism.

Nonetheless, while clearly Confucianism has enormous historical variations, cultural particularities, and national differences, there are certain central ideas and values that have spread across East Asia from China through Korea and to Japan. These ancient values constitute key elements of the tradition that have endured despite historical changes and political upheavals. They are major resources for contemporary environmental ethics in East Asia as well as for an emerging global ethics. These include: a dynamic cosmological context or worldview for promoting harmony amidst change; the embeddedness of each person in concentric circles of relationships and ethical responsibilities; the importance of the family including past, present, and future generations; the function of a hierarchical social system where loyalties to elders and to teachers are critical; the significance of education in cultivating the individual, enriching the society, and contributing to the political order; and the role of government in establishing a political bureaucracy for ruling large numbers of people. These values will be discussed in relation to their potential contribution to environmental thought.

Of singular importance in these discussions is the rich cosmological worldview of Confucianism that promotes harmony amidst change. This is an invaluable perspective for seeing nature as intrinsically valuable and for understanding the role of the human in relation to natural processes as critical. This worldview is characterized by four key elements: an anthropocosmic rather than an anthropocentric perspective, an organic

holism of the continuity of being, a dynamic vitalism of material force (*qi*), and a comprehensive ethics embracing both humans and nature.

By “anthropocosmic” we refer to the great triad of Heaven (a guiding force), Earth (nature), and humans. This idea is central to Confucian thought from its earliest expressions in the classical texts to its later developments in Neo-Confucianism that arose in the eleventh century. The seamless interaction of these three forces contrasts markedly with the more human-centered orientation of Western traditions where personal salvation in relation to a divine figure is central.

By “organic holism” the universe is seen as unified, interconnected, and interpenetrating. Everything interacts and affects everything else, which is why the notion of microcosm and macrocosm is so essential to Chinese cosmology. The elaboration of the interconnectedness of reality can be seen in the correspondence of the five elements with seasons, directions, colors, and even virtues. This type of classification began in the third millennium

B.C.E. and resulted in texts such as the *Yijing* (*Book of Changes*). This sense of holism is characterized by the view that there is no creator God behind the universe. Chinese thought is less concerned with theories of origin or with concepts of a personal God than with the perception of an ongoing reality of a self-generating, interconnected universe described by Tu Weiming as a “continuity of being.” “Dynamic vitalism” refers to the basis of the underlying unity of reality that is constituted of *qi*, the material force of the universe. This is the unifying element of the cosmos and creates the basis for a profound reciprocity between humans and the natural world. Material force (*qi*) as the substance of life is the basis for the continuing process of change and transformation in the universe. The term *sheng-sheng*, namely, “production and reproduction” is repeatedly used in Confucian texts to illustrate the creativity of nature. This recognition of the ceaseless movement of the cosmos arises from a profound meditation on the fecundity of nature in continually giving birth to new life. Furthermore, it constitutes a sophisticated awareness that change is the basis of the interaction and continuation of the web of life systems – mineral, vegetable, animal, and human. Finally, it celebrates transformation as the clearest expression of the creative processes of life with which humans should harmonize their own actions. In essence, human beings are urged to “model themselves on the ceaseless vitality of the cosmic process.” Confucian ethics in its most comprehensive form relies on a cosmological context of the entire triad of Heaven, Earth, and humans. Human actions complete this triad and are undertaken in relation to the natural world and its seasonal patterns and cosmic changes. In this context, humans are biological-historical-ethical beings who live in a universe of complex correspondences and relationships. Cultivation of the land and of oneself are seen as analogous processes requiring attention, care, and constant vigilance. Virtues are described as seeds that sprout through moral practice and flower over time. The ethical vitality of the individual is situated against the backdrop of the dynamic pattern of *qi* in nature. The Chinese martial arts and medical practices reflect this attempt to balance and cultivate one’s *qi* as part of maintaining one’s physical and moral health.

For Confucians health meant not only reciprocity with the patterns of nature but also responsibility for the health of nature as well. It was thus critical for the government to support agriculture through irrigation systems as creating the basis for a sustainable society. Human livelihood and culture was seen as continuous with nature, as the following passage by a leading Han Confucian, Dong Zhongshu (ca. 195-105 B.C.E.; traditionally ca. 179-104 B.C.E.), indicates:

Heaven, Earth, and humans are the basis of all creatures. Heaven gives them birth, earth nourishes them, and humans bring them to completion. Heaven provides them at birth with a sense of filial and brotherly love, earth nourishes them with clothing and food, and humans complete them with rites and music. The three act together as hands and feet join to complete the body and none can be dispensed with (in de Bary 1999: 162).

Within this broad cosmological pattern of Confucian thought the person is seen in relationship to others and not as an isolated individual. The Confucian tradition stresses the importance of cooperative group effort so that individual concerns are sublimated to a larger sense of the common good. In this view, self-interest and altruism for a common cause are not mutually exclusive, and responsibilities rather than rights are stressed. Such a communitarian value system may be indispensable for fostering sustainable communities.

With the Confucian emphasis on the continuity of the family there is a strong ethic of indebtedness to past generations and obligations to descendants. Within this moral framework there is the potential for evoking a sense of self-restraint and communal responsibility toward the environmental well-being of future generations. In other words, the Confucian emphasis on lineage (ensuring continuity from the ancestors to the heirs) may be raised to another ethical perspective, namely, intergenerational obligations toward maintaining a healthy environment.

The hierarchical social system of Confucianism can also be expanded to place humans in relation to the biological lineage of life in the natural world. In this sense, loyalty to elders, teachers, and those who have gone before may be broadened to include respect for the complex ecosystems and forms of life that have preceded humans. Thus biodiversity can be valued. The total dependence of humans on other life forms for survival and sustenance may be underscored in this scenario. "Loyalty" is thus enlarged from the human world to include the natural world itself.

Confucian education as essentially a form of moral cultivation has been viewed as a means of contributing to the betterment of the sociopolitical order. By extension, ethical restraint toward the unlimited use of the environment can be seen as adding to the social and political stability of the region as a whole. From a Confucian perspective, moral suasion and education are a viable means of evoking communal changes that would promote such stability through personal choice and voluntary measures rather than simply through legislation from above.

Confucian forms of government are generally highly centralized and interventionist. Thus, they can afford to engage in long-range planning with other key sectors, espe-

cially the business community. Because this longterm policymaking is not unfamiliar in East Asian societies, it is possible to include environmental issues in these kinds of centralized strategic planning. Rather than only being concerned about immediate goals or quarterly profits, such planning can assist processes of environmental preservation.

In conclusion, this comprehensive cosmological worldview of Confucianism has had an enduring influence in East Asian family and social values as well as educational and political institutions. It still has enormous potential in East Asia for a renewed appreciation of nature as intrinsically valuable and for an environmental ethics that affirms the role of humans in working in conjunction with nature.

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See also: Environmental Ethics; Religious Studies and Environmental Concern.

Congo River Basin

One of the world's greatest rivers, the Congo flows for nearly 5000 kilometers from south-central Democratic Republic of Congo (formerly Zaire) north, west, then south, crossing the equator twice before finally emptying into the Atlantic Ocean. With its width spanning in places some 40 kilometers, and its depth reaching 500 meters, the Congo is surpassed in water volume only by the Amazon.

Its hundreds of streams and tributaries reach from Zambia to Cameroon to form the Congo River Basin, which is roughly 3.7 million square kilometers in size, and comprised mostly of tropical rainforest and savannah. The forest itself comprises roughly 15 million hectares and spans more than 3400 kilometers. Sixty million people inhabit this region, with roughly 12 million actually living still in the forest much like they have for hundreds of years. These dwellers of the rainforest, who speak more than 450 dialects, can be divided very generally into two groups: forest peoples like the Mbuti, and river peoples like the Nunu.

Being adjacent to the Rift Valley, which is the cradle of humanity, the Congo Basin has been inhabited since very early in human history, long before the great Central African tropical rainforest expanded after 10,000 B.C.E. The Mbuti are one of several ethnic groups that collectively are called "Pygmies," who, having lived in the great rainforest of Central Africa for thousands of years, possess one of humanity's oldest living cultures and still subsist mainly through hunting and gathering. Fed and in places swamped by the Congo River, the Mbuti's forest is one of Earth's most biologically diverse places. Mbuti religion is deeply intimate with the forest, which is itself understood as the Supreme Being and benevolent provider of all that people require for happiness. Gratitude for such divine providence inspires in the Mbuti the ecstatic ritual dances that intrigued Egyptian Pharo Nefrikare some 2500 years before Christianity. Still today the communal focus of Mbuti religion, these dance forms sometimes follow the music from a woodwind instrument called the *molimo*. Traditionally made from bamboo, the *molimo*'s sound is the voice of the Supreme, who is the forest itself.

The Congo River Basin underwent significant cultural changes with the arrival of Bantu migrants from the north beginning four to five millennia ago through the fourth century. Having acquired ceramics and developed new trapping, fishing, and agricultural techniques, these migrants pushed deeper and deeper into the tropical rainforest by following rivers and elephant trails. In time, they developed metallurgy and cultivated yams and bananas, which allowed them to become more sedentary and eventually develop large chiefdoms and, later, kingdoms like the Kuba and the Kongo.

With an existence so intensely related to the natural environment, it is not surprising that in Central African forest religion, which is cosmogenically monotheistic, there developed a strong belief in nature spirits. There is a life-force within nature that is understood as powerfully sacred, a belief that has made the wilderness the deepest resource of divinity for the Bantu. Centralized political power, moreover, required popular belief that the chief and his family were infused with the force of and legitimized by such nature spirits. The leopard became the symbol

par excellence of such sacred legitimation, and in a ritual known as *bokapa ekopo* (“dividing the sacred emblem”) the spoils of the leopard hunt were often divided among elite families from neighboring chiefdoms in precolonial Congo.

In addition to nature spirits, people in the Congo River Basin have long believed in ancestral deities, especially mythic chiefs of the forgotten past who intervene on behalf of the living in exchange for worship. Shrines for prayer, offerings, and sacrifice to both ancestral leaders and nature spirits had become a prominent feature of Central African religion long before the introduction of Christianity in the fifteenth century, which is today the dominant religion in the region. Because the Bantu believe that ancestors and nature spirits infuse stones and other charms with their sacred power, ritual specialists emerged in the Congo Basin centuries ago, priests who use charms to influence everything from the forces of nature to the outcome of wars and the eradication of “witchcraft.” Such priests have also developed skills in divination and herbalism, each of which crafts are deeply rooted in the natural world and reliant upon natural spirits for effect.

For the riverine Nunu people of the Congo-Ubangi Peninsula, settlement in the forest and its swamps and intercalary savannahs was predicated upon the successful planting into the Earth of the *nkinda* charm. The Nunu believed that life would be abundant and free of disorder only insofar as the spirits of the forest accepted and empowered the *nkinda*. Normally the *nkinda* charm was an ensemble of leaves, cloth, and sacrificed animals, and it ensured the Nunu’s harvest of the rivers and savannahs in order to prosper. The planter of the *nkinda* was automatically the high priest (*ngeli*) and guardian of the newly settled territory, whose permission was required of all prospective settlers. As settlements increased in size, weaker *nkinda* were planted in sub-settlements and a hierarchy of *ngelis* developed accordingly.

The cosmology of Central African peoples was also strongly shaped by observations of the natural world. Generally speaking, the harvest cycle and the cycle of the sun and the moon inspired meditations into the nature of the universe and of human existence and destiny. The universe is divided into two worlds, or lands, which the Kongo people call *nza yayi* (land of the living) and *nsi a bafwa* (land of the dead). Sunrise represents our birth in *nza yayi*; noon represents the fullness of our life in *nza yayi*; and sunset represents our death in *nza yayi*, but also our rebirth in *nsi a bafwa* as an ancestor. This rebirth is also symbolized by the rising of the moon; midnight symbolizes our fullness of life in *nsi a bafwa*; and dawn marks both our death in *nsi a bafwa* and rebirth into *nza yayi*. The two worlds are conceived of as being separated by a body

of water (*nzadi*), across which live our ancestors, who are white, in the forest, under the ground, or under the water. We are, as it were, our own ancestors reincarnated.

Christianity arrived in the Congo in two waves: 1) in the late fifteenth century the Portuguese established missionary and trade enterprises around the Congo's Atlantic river mouth; and 2) in the late nineteenth century Belgian Catholic and British Protestant missions were established much farther up river. In both cases, the white foreigners were identified as spirits or ancestors, which readily instilled in Central Africans a sense of awe of both the visitors and their religion. This is surely a main reason for Christianity's remarkable spread in the Congo River Basin, such that some 90 percent of the region is today Christian. Yet this mass conversion has never meant the disappearance of the traditional Kongolese worldview, which features, in addition to belief in supernatural healing forces, profound belief in supernatural destructive forces (*ndoki*) and sorcerers who control it. The second Christian wave differed from the first in that the horrors of the Belgian rule in the Congo brought Africans to associate Christianity with evil. Soon enough, however, Christianity became widely respected for its healing and exorcising functions and succeeded largely because of its power to combat *ndoki*.

The Congo gained independence from Belgian colonial rule in 1962. Unfortunately, however, post-colonial political culture was dictated by the same endeavor to exploit nature that had driven the Belgians to enslave Africans to extract rubber from the forest in the first place. Belgian colonial rule resulted in the death of over half the region's population long before independence. The ensuing "kleptocratic" regime of Field Marshall (*Maréchal*) Mobutu Sese Seko, who always appeared in public wearing a leopard-skin hat to give the impression that he was the Congo's most powerful *ngeli*, lasted over thirty years until a rebellion led by Laurent Kabila ousted the Zairian dictator from power in 1997. Zaire was then renamed the Democratic Republic of Congo (DRC), but a civil war continued to rage, killing over two million people within five years.

The Congolese Civil War cannot be understood without consideration of the 1994 genocide in Rwanda, which left upward to a million people dead and drove tens of thousands of others into the DRC seeking asylum. Religion played an important role in exacerbating the tribal conflict that fueled the genocide, as Belgian Catholic missionaries in Rwanda had promoted an understanding of the superiority of the Tutsi people, whose height and facial features made them seem closer to Europeans than the shorter, broader-faced Hutus. The resultant Hutu hatred of the Tutsis was a major impetus for the genocide, whose consequences for the peoples and environment of the Congo River Basin have been catastrophic, though still largely immeasurable. Rebel factions from the Rift Valley, moreover, have poured into the Congo since the Rwandan genocide in efforts to control its rich natural resources. Many of them, like the Mai-Mai and the Lord's Resistance Army, use religion as an inspirational and legitimating force for some of the conflict's most unspeakable atrocities, including the crucifixion of their opponents.

Almost from its outset, the war drew no fewer than six other African countries into the conflict, all of them driven primarily by the quest to profit from exploiting the region's extraordinary mineral resources: copper, cobalt, coltan, diamonds, and gold, not to mention timber and ivory. For the victims of "Africa's First World War," hardship has reshaped local religion, as noted by Pulitzer Laureate for Journalism Paul Salopek: "Cults of many types have erupted everywhere in wartime Congo. In hard times, imported Christianity has been whittled and shaped to meet local demand; relief from the suffering and uncertainty of a war the world ignores" (*The Chicago Tribune*, 12/10/00).

Laurent Kabila was assassinated by one of his own bodyguards in 2001 and succeeded by his son, Joseph Kabila. Like many other contemporary African heads of state seeking either to alleviate their people's poverty (the DRC GNP was \$78 in 1999) or to enrich themselves and their minions, DRC President Joseph Kabila values foreign investment in the mining and timber industries much more than the Congo's natural environment. Mining, hunting, and timber regulations have been virtually nonexistent since war first broke out in 1996, and over a million refugees from Rwanda and elsewhere have sought haven in the Congolese forest and surrounding regions. An environmental catastrophe is clearly underway in one of Earth's most precious and biodiverse regions. National parks have not been spared: between 1995 and 1999 alone, one park lost a third of its elephants to ivory hunters and hungry miners, and today bushmeat, along with timber, is one of the region's leading exports. Regrettably, the recent UN intervention, ceasefires, and withdrawals of foreign troops are unlikely to be of much benefit to the Congo River Basin's gravely endangered environment: Presently the Kabila regime is orchestrating an economic recovery program with the World Bank that hinges on the exploitation of the nation's natural resources, much like when his father sold off the Congo's mineral resources for self-enrichment and to pay for protection provided by his foreign supporters, namely Uganda and Rwanda; much like Mobutu had done to become one of the world's richest men; and much like the Belgians had done in one of the most atrocious colonial conquests in world history. Meanwhile, the Kimbanguist Church, which was founded by Congolese healer named Simon Kimbangu in the 1920s, continues to grow, as thousands of recent converts await the coming of a black messiah to the Congo.

Terry Rey

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See also: African Religions and Nature Conservation; Biodiversity and Religion in Equatorial Africa; Kimbanguism (Central Africa); Pygmies (Mbuti Foragers) and Bila Farmers of the Ituri Forest; West Africa.

Conservation Biology

During the late 1970s and 1980s, concerned scientists and resource managers began to shape a new synthetic discipline that integrated scientific knowledge from a variety of disciplines, including the social sciences, with the goal of conserving biodiversity. They called this new field “conservation biology.” As the discipline has grown, it has drawn upon the natural sciences (including genetics, population and evolutionary biology, systematics, and biogeography), the agricultural sciences, and the traditional resource management disciplines (e.g., forestry, wildlife, and fisheries management). It has also welcomed the infusion of knowledge from anthropology, economics, and other social sciences, as well as the humanities, illuminating human behavior in a way that can be used to promote biodiversity conservation. The envisioned level of interdisciplinary inquiry has yet to be realized, however, according to Stephen Humphrey, an officer and Board Member of the Society of Conservation Biology from 1990 through this writing). But it is possible, he believes, to see two forces that animate the field: “Biophilia,” and a belief that conservation-related “science should be applicable to conservation of biological diversity” (author’s interview, July 2003).

Many of conservation biology’s most effective visionaries were motivated by one or another form of nature spirituality involving a profound sense of connection to the Earth’s living systems. Indeed, the breadth and inclusiveness of conservation biology allowed it to incorporate and build upon ideas emerging from environmental ethics, and provided space for scientists and others to explore the cultural and spiritual dimensions of conservation. Some of its leaders have also been involved with deep ecology or radical environmental movements, giving conservation biology an audience wider than might otherwise have been the case. A quick look at several early leaders in the field, including the first two editors of its premier journal, shows that conservation science and nature religion sometimes cross-fertilize, and that important hybrids can result. In 1978 biologist Michael Soulé organized the “First International Conference on Conservation Biology” at the San Diego campus of the University of California, subsequently publishing an anthology that helped to herald the emergence of the new field. According to conservation historian (and long-term board member of the Society of Conservation Biology) Curt Meine, science had for decades been deployed in the conservation cause; in this sense, conservation biology was nothing new. However, conservation biology represented an intensified, self-conscious effort to synthesize “many fields of knowledge around the general goal of protecting and perpetuating biological diversity, which the traditional disciplines had not addressed adequately” (personal communication, June 2003). Soulé organized a second conference at the University of

Michigan in 1985 and is credited by many as the leading founder of the Society for Conservation Biology in 1986, which began publishing its flagship journal *Conservation Biology* in 1987.

Interestingly, in between these first two conservation biology conferences, Soulé organized another conference during an extended sabbatical from the academy that he took at the Los Angeles Zen Center. Held in Los Angeles in 1981 and no doubt motivated by his understanding of Buddhist ethics, the conference explored the relationships between religion and ecology. Soulé asked Deep Ecology's founding philosopher Arne Naess to participate, and the acquaintance spurred a long and close friendship. Soulé invited Naess to give the keynote address at the second conservation biology conference "because I felt he provided a better philosophical foundation for conservation and biodiversity than anybody since [Aldo] Leopold." Soulé added, Naess "has been a major influence on my life." (Soulé's quotes are from author's interviews, 27 February near Tucson, Arizona or by telephone, 15 July 1997.)

David Ehrenfeld was another key figure in the emergence of conservation biology, and served as the founding editor of *Conservation Biology*. This is of particular interest in that Ehrenfeld's 1978 book, *The Arrogance of Humanism* was a landmark in the emergence of nonanthropocentric environmental ethics, and is considered a classic by many deep ecologists. It elegantly expressed their melancholy over the extinction crisis and their perception of a defiled world:

We must live in our century and wait, enduring somehow the unavoidable sadness . . . nothing is free of the taint of our arrogance. We have defiled everything, much of it forever, even the farthest jungles of the Amazon and the air above the mountains, even the everlasting sea which gave us birth (Ehrenfeld 1978: 269).

A third leading figure is Reed Noss, Ehrenfeld's successor as editor of *Conservation Biology*. As a young man Noss was an early and regular contributor to *Earth First!*, getting involved shortly after hearing a news report of some of its early antics and acts of civil disobedience in the early 1980s. He expressed his early enthusiasm for the movement in an early article written from a "Taoist perspective" claiming that "ecological resistance (including sabotage) is to the ecocentric [individual who views entire ecosystems as having intrinsic moral value] an extended form of self-defense: regrettable but necessary." Fusing such militancy with deep ecology, Noss called *Earth First!* "the ecological resistance embodiment of Deep Ecology" (1983: 13). His fifth-degree black belt in Shito-Ryu karate (see Noss and Cooperrider 1994: 417) suggests that for him Eastern religions fit well with his love of nature.

Noss withdrew from *Earth First!* by the end of the decade, having become critical of the anti-scientific bent of increasing numbers of its activists. But he continued to promote deep ecology and Naess' notion of an "ecological self" – a wider-than-human identity that extends the center of moral concern beyond humans to all species. He articulated such views even in his scientific writings (e.g., Noss and Cooperrider 1994: 21–4) and continued to work with Dave Foreman (a co-founder of *Earth First!*) and other radical environmental activists who appreciated conservation biology, many of

whom also quit *Earth First!* while retaining their ecocentric value systems, in which nature is considered to be of intrinsic, moral value. Indeed, Noss subsequently served as science-advisor to the Wildlands Project, which was founded in 1991 by Foreman, Soulé, and a number of other prominent conservationists. It articulates a long-term biodiversity strategy for the Americas based on the principles of conservation biology. It was Noss' research, however, not his grassroots environmental activism or deep ecology affinities, that led to his becoming the second editor of *Conservation Biology* (a post he held most of the time between 1993 and 1997). This prestigious position was offered in part because in numerous journal articles he had advanced significantly the conceptual foundations of the discipline.

Quite a number of other conservation biologists have affinity with deep ecology and have contributed both to scientific and radical environmental journals. Two who have put such spirituality in writing include Bill Willers and Ed Grumbine. The title of Willers' edited book, *Learning to Listen to the Land*, reflects its pantheistic (and animistic) ethos, and it includes excerpts from an eclectic group of writers with deep ecological sensibilities. A biology professor who founded the Superior Wilderness

Action Network (SWAN), Willers was unsuccessfully sued in the 1990s, along with his nemesis, the United States Forest Service (USFS), for allegedly violating the religious freedom protections guaranteed in the First Amendment of the U.S. Constitution. The lawsuit by a group of loggers and their conservative allies alleged that the defendants had conspired to establish "deep ecology religion" by protecting forests that the defendants, according to the lawsuit, considered sacred (Taylor and Geffen 2003).

Ed Grumbine is director of the Sierra Institute, an affiliate of the University of California, Santa Cruz, which promotes wilderness experience and research. Like Noss, Soulé, and Willers, he has also written for radical environmental journals. And his book *Ghost Bears: Exploring the Biodiversity Crisis* is laced through with deep ecology themes. In it he cites movement elders, including Aldo Leopold, Arne Naess, Henry David Thoreau, and the poet Robinson Jeffers, and he explicitly endorsed Naess' notion of the ecological self and defended deep ecology. Praising the Council of All Beings, which he described as an important ritual process that strives to evoke and deepen such an ecological identity, he also confessed that the ritual changed his life (Grumbine 1992: 233, 230–6).

To note that during the late twentieth century some of the key figures promoting the new field of conservation biology were both motivated by and promoted nature religion in no way suggests that their science was compromised. Nor does it prove that other conservation biologists have been similarly motivated; indeed, both Meine and Humphrey think only a small minority of those involved in conservation biology would likely consider themselves to be explicitly or overtly motivated by deep ecological spirituality or other religious sentiments. Indeed, the extent to which conservation biologists are more likely than individuals from other groups to have affinity with deep ecology or other nature-related spiritualities is an as yet unresearched empirical question, worthy of quantitative survey research. It is notable, however, that David

Takacs, who in *The Idea of Biodiversity: Philosophies of Paradise* interviewed dozens of scientists whose careers have been devoted to understanding and protecting biological diversity (including Soulé and

E.O. Wilson) reported that a spiritual connection to nature was a recurrent theme among them. Qualitative research thus suggests that there may be a significant correlation between the pursuit of careers in ecological science (like conservation biology) and nature spirituality.

For his part, Michael Soulé stressed that conservation biology depends first and foremost on the scientific method and not on spirituality or deep ecological value theory. During my interview with him he worried that a historical overview like the one I have provided here might be used by the enemies of conservation to discredit conservation biology as somehow “pagan.” His perception was that few involved in conservation biology had interest in Eastern or alternative religions or deep ecology. Based on their own experiences both Humphrey and Meine have reached similar conclusions: most conservation biologists are focused primarily on their scientific work and its application in solving conservation problems. While such a focus does not preclude an interest in, and commitment to, philosophical or spiritual self-reflection, conservation biologists tend to place their scientific commitments first. This strong commitment of conservation biologists, however, suggests a more complex relationship between their scientific interests and their personal belief systems. Indeed, the role of nature spirituality may be much more prevalent than would be obvious from a cursory review of the everyday experiences of those engaged in conservation biology and its professional organizations. It may be that shedding further light on this matter will depend on devising a way to ask conservation scientists such questions without engendering fear among them that an honest answer would compromise their credibility and thus damage their work and careers. In the twentieth century, as historian Stephen Fox has amply demonstrated, environmentalists often downplayed naturerelated spirituality in the interest of not alienating the more traditionally religious publics they need to persuade. An open question is how strong this tendency will be in the twenty-first century among environmentalists and those scientists who are their allies.

Bron Taylor

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Con-spirando Women's Collective (Santiago, Chile)

Con-spirando is a women's collective working in the areas of ecofeminism, theology and spirituality which began in 1991. I am a founding member of this collective. We publish a quarterly journal, *Con-spirando: Revista Latinoamericana de Ecofeminismo, Espiritualidad y Teología*, hold workshops, seminars and an annual summer school on ecofeminist theology, spirituality and ethics, and offer a yearly cycle of rituals.

In our magazine's first issue, we set out our purpose, which more than ten years later still defines what we are about: in the patriarchal culture in which we live, women's contributions are not taken seriously. This is particularly true in the area of theology. Women are absent as subjects doing theology and also as a major subject-matter of this theological reflection. Our lives, our everyday religious practice and our spirituality, are simply not present in current theological reflection. Absent too, are our experiences of suffering, joy and solidarity – our experiences of the sacred. Besides expressing our criticism of patriarchal culture, we also seek to contribute to the creation of a culture that allows theological reflection to flower from our bodies, our spirits – in short, our experiences as women.

We seek theologies that take into account the differences of class, race and gender that so mark Latin America. We hope to open new spaces where women can dig deeply into our own life experiences without fear. These experiences are often negative, even traumatic, in terms of the religious formation we have received. We seek spaces where women can experience new ways of being in community; where we can celebrate our faith more authentically and creatively; where we can rediscover and value our roots, our history and our traditions – in short, to engage in an interreligious dialogue that helps us to recover the essential task of theology, which is to search out and raise the questions of ultimate meaning.

We are convinced that, to bring about relationships marked by justice and equality, we must celebrate our differences and work toward a greater pluralism worldwide. To this end, we need theologies that unmask the hierarchies in which we live; theologies that, rather than seeking to mediate Mystery, celebrate and explore the Holy without reductionism or universalisms. We call for theologies that question anthropocentrism and that promote the transformation of relationships based on dominance of one race, nationality, gender or age group over another and of the human over other forms of life. Such theologies will have profound political consequences. Such a feminist perspective

based on our diversity of class, race, age and culture must also take up our love as well as our anguish for all life on the planet that we feel is so threatened today. We call this posture ecofeminism. It is within this perspective that we seek a spirituality that will both heal and liberate, that will nourish our Christian tradition as well as take up the long-repressed roots of the native peoples of this continent. We want to explore the liberating dimensions of our experience and imagination of the Holy. To do this, we “*con-spirar juntas*”

(*Con-spirando* 1992: 2–5).

Most of the members of Con-spirando come from the Christian tradition, but we are critical of the patriarchal underpinnings of Christian theologies and try to relativize the Judeo-Christian myths and resurface other, more indigenous myths that have been suppressed, while at the same time always remaining vigilant to patriarchal remnants in these myths as well.

Con-spirando is not a purely academic organization, nor are we associated with any church organization, which frees us from the control of both. We are organized as a collective: we are a non-hierarchical, multicultural team that has both Latin American members as well as members from other countries where relations of justice and tenderness are the goal. We are committed to the following:

First, the belief in the wisdom of our bodies and the priority of knowing through our corporeality in relationship. Here, feeling becomes a way of knowing. Second, efforts to search out non-hierarchical ways of being that model “power with” rather than “power over.” Third, the sharing of new ways to celebrate, new rituals that nurture our emerging spiritualities and our commitments. Fourth, the reexamination of those foundational myths upon which Western, Christian culture is based in order to relativize them and search for new myths that can water our emerging spiritualities, theologies and ethics. And fifth, an ecofeminist ethic that moves toward the ecological self – my neighbor and I are one. All are my kin, from the folks in the *barrio* (neighborhood) to the animals, the mountains, the rivers.

Origins

We are a collective of women who share a joint interest in feminist spirituality and theology. It was this common thread that brought us together in Santiago, Chile in early 1991 to share “a sacred space and time.” These times together were and continue to be moments of creative ritual, of sharing our experiences of the Holy in our lives.

From these times together, a core group of women emerged: the Con-spirando collective. We have many years of experience working with women at the grassroots level. Some of us have a vast experience of working with our churches in programs dealing with women. Others of us have a long history of participation in the feminist movement. Some of us would still identify ourselves as Christian (indeed, one of us is a Catholic missionary and another is a Lutheran pastor), while others have moved beyond the

Christian tradition. Still others of us work in academic settings doing research and teaching in gender studies. Through our time of ritual together, a deep bonding has taken place; in the process we felt the need to become connected with other women who share our same interest in feminist theology and spirituality.

To make those connections and to share our own reflections and experiences, we decided to publish a journal. With the encouragement of key women in other Latin American countries, we launched the first issue of *Con-spirando: Revista Latinoamericana de Ecofeminismo, Espiritualidad y Teología* on 8 March 1992, International Women's Day. That year we published two issues and since 1993 *Con-spirando* has been published quarterly.

Besides the journal, *Con-spirando* has become a gathering place for workshops, seminars and conversations in feminist and ecofeminist theology and spirituality and in gender studies. These sessions continue to draw women from grassroots groups such as barrio women's centers and Christian base communities as well as women with more academic training. The sessions are highly participative: Included as an integral part of each session is body work, which links the personal body – often broken, violated and in pain – with the Earth's body, which is also being devastated and violated by the system we now openly identify as patriarchy.

From 1996–1998, the *Con-spirando* Collective – along with our partners Mary Hunt and Diann Neu of WATER (Silver Spring, MD, USA), and Ivone Gebara (Recife, Brazil)

– has been the organizer of a very key feminist theology program in the Americas called *A Shared Garden*. As a result of this program (which took place over a two-year period in Santiago, Washington, D.C. and Recife), as stated in our overall objective, each of the three organizers has felt empowered by the more than 135 Garden participants to deepen and consolidate the process of empowering ourselves, as women, to speak our own theological word, to celebrate the Holy in our lives according to our deepest intuitions, and to share what it means to live righteously and reverently with Earth and all Earth's children by providing spaces of reflection to grapple with the theological questions we are asking.

Each of the three partners is now committed to carrying forth this process in our own regions and in our own context.

It was with this mandate that *Con-spirando* initiated an annual Summer School for Ecofeminist Spirituality and Ethics in 2000. This “school” offers, for ten days, a contained space and time where women can ask their theological questions without fear. It is a “safe space” allowing participants to search together for more lifegiving theologies, cosmologies and ways of celebrating our emerging spiritualities. It is a space to search together and formulate our own body of thought, study and reflection as Latin American women engaged in the religious debates of our region. Finally it has become a space to begin to build new practices and power relations as we look for ways to sustain ourselves in terms of constructs of meaning both at the personal and at the communal level. This has led us to searching for new stories of meaning,

new myths and symbols of the sacred, as well as new rituals. Throughout our history, we have been deeply influenced by the thought of Brazilian ecofeminist theologian Ivone Gebara, who is one of Con-spirando's midwives. Her sharp analysis of patriarchy within the Christian tradition and her proposed "holistic ecofeminism born of everyday life" has shaped our work. We have also been influenced by the writings of Charlene Spretnak, Thomas Berry and Brian Swimme.

Ever since Con-spirando began, we have offered rituals, a "sacred time and space" to celebrate the Earth's cycles and the cycles of our own lives. These celebrations, open to the public, are an essential part of our work in honoring women's experiences of the sacred. Our rituals always include convening a circle, often chanting "*somos un círculo, dentro de un círculo, sin principio y sin final.*" Sensitive to the indigenous roots of Latin America, we have present in the circle's center the four elements and always salute the four directions. Many rituals concentrate on reconnecting with our ancestors and with the broader community of life.

Another key aspect of our work is research. Either as a collective, or in conjunction with others, we have been involved on an ongoing basis with investigating the evolution of women's experiences as they relate to theology, spirituality and ethics.

In the past three years, we have been responding to increased requests for facilitation from women's groups, helping them clarify their identity, vision, objectives and future plans. Requests have come from Catholic women's religious congregations, evangelical women's groups and gay and lesbian organizations.

Finally, the Con-spirando collective is committed to networking both locally and at a regional/international level with other like-minded organizations, groups and movements who share our vision.

Mary Judith Ress

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Coronado, Rodney

– See Rodney Coronado and the Animal Liberation Front (adjacent to Radical Environmentalism).

Corrington, Robert S. (1950–)

Ecstatic naturalism views nature as having two dimensions: “nature naturing” and “nature natured” (Averroes, Spinoza, Buchler). Unlike most other naturalist philosophies, ecstatic naturalism is committed to thinking about the sacred in nature. Nature naturing represents the vastness of nature which gives birth to nature natured (i.e., the multiple orders and complexes of the world). Nature naturing is not only the origin of everything else, but a destination as well, a “not-yet” (Heidegger). The ontological difference between the two dimensions of nature is, for ecstatic naturalism, held open by an abyss, which a person must confront in order to gain meaning of the world. Melancholy and ecstasy are the two fundamental attunements of ecstatic naturalism, melancholy giving a human self-understanding of the depth and immensurability of nature naturing, often experienced as the longing for a lost origin, or the maternal (Kristeva); ecstasy being radically open to the future. This tense space between the nevermore and the not-yet is the field of world semiosis, where humans gain understanding both of nature and of how they are shaped by nature.

Corrington has advocated a decentered, divine spirit or spirits in his writings, where the sacred in nature is seen as one of the products of nature naturing, which encounters the human in numerous and numinous ways. His recent moves have been into dialogue with Hegel and the esoteric traditions. Ecstatic naturalism has become more pantheistic, not only viewing some aspects of nature natured as sacred, but also encompassing nature naturing as well. One of the capacities of nature is seen to be an “infiniteizing” process, capable of opening up new sacred dimensions for experiencing selves.

Robert S. Corrington, a professor at Drew University in New Jersey, has developed an influential philosophical and religious theory of nature which he calls “ecstatic

Further Reading

Sigrídur Gudmarsdóttir naturalism.” In developing his theory, he claims that nature has no opposite and is all that is. Therefore, for ecstatic naturalism, there can be no God different from or outside nature.

Ecstatic naturalism follows two pragmatic principles. First, everything in the world is seen to be in a complex relationship to something else in the world, but nothing is totally related to everything. These diverse relations form “complexes.” The second rule advocates “ontological parity” and claims that every complex is ontologically as real as any other. The principle of ontological parity is used to refute any worldview

which seeks to classify some structures as not real or less true, and honor others as better, more real or true. Thus classical theism, with its belief in an omnipotent and omnipresent God that utterly surpasses the creatures in oneness, truth, and goodness can neither be in accordance with the rule against total access to complexes nor ontological parity.

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See also: Nature Religion; Pantheism; Spinoza, Baruch; Unitarianism.

Cosmology

Cosmology is the object of research by anthropology and physics. Astrophysics studies the evolution of the universe, while anthropology analyzes the cosmologies of all the world's cultures as socio-cultural constructions. In anthropology, the term cosmology is used as an analytical construct to refer to the overarching cognitive and behavioral templates which are reiterated, transformed and used by a society to comprehend its role within: humanity, life, the world (planet Earth) and the cosmos. A cosmology involves explanations of the past, present and future of a society within these levels of encompassment, and is part of its understanding of cosmo-eco-ethno genesis. It deals with origins as well as with the finality and destiny of humans and of other forms of existence. Anthropology analyzes how these templates of signification exist in rational, scientific, religious, artistic, ethical and emotional and sensorial terms, and how they involve holistic approximations laden with "transcontextual" and multi-experiential meaningfulness.

All cultures have cosmologies, religious or nonreligious, as means to interpret a society's situatedness in the universe, Earth, biosphere, and in humanity. During the twentieth century most anthropological research investigated religious cosmologies among indigenous and traditional cultures. After Griaule's path-breaking research in the 1930s in Africa on Dogon cosmological myths and their functions which defined collective ways of thinking and behaving, decades of research ensued in other continents. Lévi-Strauss, through structuralist analyses, investigated the socio-ecological and intellectual value of Amerindian cosmologies, and he opened an era of structuralist and post-structuralist research worldwide which inquired about their underlying mechanisms.

At the beginning of the twenty-first century, there are academic debates concerning the relevance of cosmologies as ideational and operational systems in a globalizing world where not all cultures live in a single delimited territorial or communitarian context nor sustain unique identities. As a reaction to evolutionary anthropology and similar approaches which hold that there is a common or universal basis for cognitive and behavioral templates in all humans, a majority of analysts defend instead the paradigm of relativism which insists that all cosmologies are socially constructed designs, manufactured to give meaning to existence. Religious persons hold that such meta-referential parameters involve spiritual parameters where the agency of Gods or divinities are believed to define all forms of existence and surpass mere human socio-historical agency. They believe there is a God and a life after death, and that supernatural architects or authors created and run the cosmos and human destiny.

Though analysts having religious and non-religious backgrounds contrast in their reactions to these beliefs, all seek to investigate, ultimately on a cross-cultural bases, the processes involved in cosmology making.

During the twentieth century, research was scarce on industrial societies' cosmologies in spite of the pioneering research by Mary Douglas who analyzed, for example, through "grid-group" methodologies, issues such as risk perceptions in techno-scientific institutions. Yet, increasingly researchers have investigated contemporary cosmologies in industrial or post-industrial societies focusing on issues such as habitus among indigenous or academic organizations, scientific and globalized organizations, millenarian and worker's sects, and ethnic conflicts, among others.

What is clear in all research among a-modern, modern or postmodern societies, is that there can be a single coherent cosmological system prevailing in a given group, especially among indigenous cultures, though in most societies there is no unique, grand cosmological narrative, and several versions exist. Moreover, a common cosmological cosmoscape can prevail but with individual and subcultural variants, according to a person's rank, expertise, age or gender, and to seasonal and situational contexts.

Religion, Ecology, and Cosmology among Indigenous and Traditional Cultures

Cosmologies of traditional and indigenous societies invoke respect for the sacred and the spiritual essence of all forms of existence, to keep a balanced coexistence among the parts composing the total whole of the cosmos. People, ecosystems, and the geoscape and cosmoscape, are defined as having identities defined with matter, spirit, and mind. These common predicaments imply shared cosmic synergies among all forms of existence, human and nonhuman, biotic or not, who must negotiate with other matter, energy, spirit, and other essences. Humans are to calibrate when to exchange or not exchange these essences and must request permission and compensate other beings or forces for using their resources – for example, when engaged in hunting, gathering, fishing, agriculture, herding, or in making artifacts or settlements, or when people are born or die.

Spirit, matter, and principles of "peoplehood" are said to dwell in artifacts of material culture, and in animals, plants, minerals, as well as in winds, thunder, mountains, river rapids, caves, and in certain ecosystems. Cosmological loci exist in many of these sites, as well as in the cardinal, intercardinal orientations, and in the center, nadir and zenith. The cosmological axes mark the linkages between skies, world and underworlds: for example, in village layouts, or temple or house alignment and design, or in the sacred origin sites of ethnic groups or lineages or clans. They also mark the linkages between the ancestors and the present and future generations, as well as between local existence and a universal and immanent one.

In these sites the specialists, such as priests, shamans or elders, officiate rites to maintain the communicative ethos and manage the exchanges among and between interconnected systems of matter and spirit, and past, present and future. Cosmological rites are performed when people are born, die, or are initiated, and to deliberate the use of environmental resources, as well as to celebrate seasonal turnover (astronomical cycles, epochs, years, equinoxes or solstices, months, seasons, days etc.). There is a differential use of ritual artifacts which hold cosmological referents (crowns, staffs, masks, sacred stones, stools or chairs, and others) and these usually express differences in knowledge, expertise, age, or gender.

For indigenous cultures, the cosmological loci are used to remind a community that it must correlate its society to the world and universe, relating their biosocial circumstances to climatic, meteorological, astronomical and cosmic dimensions. This connectivity is reiterated not only in the landscape, but also in abodes. It is made in astronomically oriented observatories, temples, and houses. These architectural devices are used in ceremonial and daily practices to signify a dwelling in the cosmos. The symbolism of the house or temple projects the architecture of the universe (for example a multilayered universe composed of skies, this world, and underworlds), while the universe itself is signified as a temple or home.

Calendars correlate the spatio-temporal significance of the changing astronomical, meteorological, environmental and social links which each society considers as the pivotal references. Rituals express in performative modes the significance of these chronotopes; for example, to mark the opening and closing of seasons, or changes in landscape use or population levels, while rites of passage mark changes in collective or individual identity to publicly mediate how these are to resonate within ecosystems and across the world and universe.

It is significant that among indigenous societies which have shamanism as their main cosmological orientation, there is an overt concern regarding the need to minimize negative human impacts on the environment. Shamanism has rituals and strategies that allow calculations for long-, midand short-term resource use. It has an overarching retrospective and prospective outlook, or a “looking backwards and looking forwards” template to manage human actions within the context of a balance with the grander whole, and shamans consider their task to be to “help manage and care” for humans, the world, and the universe.

Cultures that have shamanism have ritual cycles to engage individual and collective responsibility to monitor the state of biosocial systems and to redress socioenvironmental imbalances. Such individual and group behavior is regulated by cosmological normativity to inculcate environmental resource use and conservation as part of the “proper way” to live in this life and be in the afterlife. Through wise, dignified and austere livelihoods involving the daily monitoring of thoughts, words and actions which reiterate communal life and sound ecosystem use, this shamanic cosmological awareness propels communal responsibility and respect for the sacred bases of life. Such

applied religion is meant to guarantee the greatest good to all while appealing to the conservation of biological and cultural diversity.

Anthropological analyses using the ecosystem approach, cultural ecology, human ecology, environmental anthropology, ethnosciences, and ethnoecology have documented these last decades how indigenous societies engage in sophisticated calculations to correct or avoid negative ecological impacts of human activities. For example, in tribal societies in New Guinea, these imply the use of ritual cycles to manage population levels and de-escalate social conflicts in societies engaged in cultivation and animal husbandry. Among tribal peoples of the Amazon, cosmologies are used by shamans to do longterm environmental assessment to measure resource use for hunting, fishing, gathering or shifting cultivation, or to establish intertribal alliances for regional resource management across rainforest terrains, while similar practices are made by shaman-priests in mountain ecosystems to sustainably manage regions across village networks.

In Asia, among indigenous chiefdoms that practice shamanism but who are confronted with statal (statebased) societies or imposed religions, the struggle to control their socio-ecological systems has implied difficult negotiations. But shamanic superpositions and confrontations of cosmological templates, and ritual contestation has allowed resistance to hegemonic displacement.

Among indigenous shamanistic cultures, the rituals in a person's lifecycle and in group development are made to celebrate, reward, or punish their contribution to the harmonized existence of the socio-biosphere within the cosmos, largely calculated in practical terms. But it is above all the religious dimension which propels a spirituality and an ethics to achieve justice with other forms of life or existence. In rituals of divination, compensation or sacrifice, religious experts seek to redress, propitiate or to calculate the appropriate relations between and among the forces of the universe. Cosmological codes in curative or preventive medicine are attentive to the same laws of harmonized coexistence (though medicinal practices also imply effective phytomedicine and other practical approaches).

Yet, the overall effectiveness of cosmological accountability to maintain biosocial balance and socioenvironmental conservation is achieved by harnessing scientific, medicinal, socio-economic, political, religious, musical, philosophical, artistic and performative modes. Thus, while the religious bases of cosmologies foment community and environmental well-being in a cosmos based on sentient spirituality, there is both a rational approximation and an enchanted one to define a society's place in the universe.

In many shamanistic societies the importance of mindaltering exercises, or the intake of substances that allow altered states of consciousness – for example, the use of hallucinogens – reiterate the cosmological holistic imaginary and experientiality while imbuing people with an intense sense of awe and respect for the linkages between human existence, life and the universe.

Myths and formal narratives, as well as legends, folktales, proverbs, children's stories and songs also express cosmological conventions. Each reiterates heightened forms of

socio-ecological awareness toward sustainable use and conservation of resources and are used to consolidate in families, communities and cultures the daily commitment to sustain a sentient socio-ecological balance while achieving a balanced sense of existence within the world and universe.

Anthropological analyses have indicated the sagacious foresight the shamanistic and cosmological systems deploy to resist ethnocidal or ecocidal tendencies, as traditional and indigenous societies are confronted by modernization and by colonization and displacement. It is important to note that this last decade, indigenous representatives themselves are increasingly voicing and defending their own positions in relation to these predicaments in local, national and global forums, while seeking the respect of their rights, cosmologies and worldviews.

There are however differences in the structures and functions of the cosmologies of the world's 400 million indigenous peoples and their interpretation of ethnoeco-cosmic linkages. Those of nomadic bands of huntergatherers portray egalitarian synergies, those of tribal or chiefdom agricultural, pastoral, or herding cultures portray ranked and hierarchical synergies, while those in statal societies portray stratified and exploitative dynamics. Perhaps in the near future those in post-state and globalized societies may reconsider the value of global interdependencies in a shared biosphere and world, where human creativity could contribute to the celebration and not the destruction of intelligent life in the universe.

There is an urgent task of acknowledging and conserving the heritage of the world's cosmologies and their important lessons, but the extermination of the world's linguistic, cultural and biological diversity continues to accelerate.

Cosmologies in a Globalized World

Though many of the world's indigenous cosmologies have a coherent scaffolding to calculate the impacts of people upon their own and other societies' environments and into the biosphere and universe, as well as upon future generations, and this is important for human survival, it is clear that many of these cultures are being exterminated, displaced or assimilated. Though indigenous people conserve still what are the world's highest areas of biocultural diversity, over 70 percent of this cultural diversity may be exterminated within the next century. Humanity is witnessing an unprecedented loss of invaluable timeproven cultural and cosmological creativity.

Yet the accelerating socio-economic, political, religious and environmental changes among the world's 6800 or so ethnolinguistic groups, and the increasing exchanges among all peoples and nations, now allow a society to construct hybridized fragments of cosmological systems or superposed templates. Convivial or conflicting criteria involving ethnic, religious or juro-political identities and diverse interpretations and stages of modernization or globalization allow contemporary societies to hold dynamic cosmological versions as they manage them in situational contexts.

Though in this globalized era the need to have cosmological parameters seems to be a high stake for all societies, it appears that cosmologies based on the big religious traditions appeal to more profound or fundamentalist commitments, though many of these exclude alternative cosmologies and worldviews.

As some societies struggle to have single cosmologies while marginalizing, respecting, or exterminating those of others, others increasingly hold cosmological diversity, hybridity, or engage in re-cosmologization by transposing preexisting cosmologies. A main concern of contemporary societies is the redefinition of the meaning of human existence within the world and cosmos, but the pressing issue of recognizing socio-environmental interdependencies and redressing imbalances in these across local and global dynamics is at present at an impasse. Facing these tasks requires cross-cultural cooperation among societies holding diverse and often contrasting conceptions of society, humanity, world and universe, or cosmologies and worldviews, and a necessary communication among and between these frameworks is required to achieve common goals.

Though the frontiers of science and technology contribute data which permit the construction of nonreligious cosmologies based upon knowledge of the laws and properties of the universe, world, biosphere and humanity, the majority of people seem intent on holding to cosmologies based on religious or non-scientific bases. If such connectivity between society, environment, world and cosmos necessarily implies a sense of spirituality or of enchantment which in turn relates to the big questions of human existence and attributes meaning to life, death, or justice itself, then cosmologies with a religious base will be determinant in promoting biological and cultural diversity, and with it the possible survival or demise of humanity itself.

This process has begun, because of register-shifts and the upgrading of cosmological referents among concerned environmentalists, and there is an unprecedented expression of creativity engaging new forms of socioenvironmental ethics and spiritual ecology during the last decades. The respect for the sacrality of life encompasses a concern for the well-being of humans who are considered as part of nature and not as opposed entities in a fallacious nature–culture contraposition.

Conclusion

In all historical times, the use of cosmologies to mobilize or immobilize normative directives and social movements indicate their strategic socio-environmental and sociopolitical and economic functions. The long-term directives of their templates have been, and can be used, to manage identitarian parameters within the interpretation of the evolution of humanity, life, the world, and the cosmos. These parameters guide the overarching imaginaries that relate microcosm to macrocosm, and with it, define the ideological and the practical commitments of each self and society in relation to the rest of humanity, and to the world and cosmos.

Cosmologies that contain viable environmental management systems and socio-economic, political and religious systems, can allow wise use and conservation of biosocial resources, but in a globalized world they can only do so if other societies respect this too. Because the age-proven systems of many indigenous or traditional cosmologies are used to monitor and harness socioecological functions and communal well-being, their existence is critical to achieve sustainable development and conviviality among peoples.

Such templates hold important lessons for other sectors of humanity to understand, and to adequately manage key biocultural synergies. It remains to be seen how these will be encompassed in a grander scheme that allows a meaningful sense of human existence and a fulfilled life. As this human situatedness involves a worldview which relates to the dynamics within the world or planet Earth, and a cosmology which encompasses the cosmic dimensions, concatenating humanity, world and universe, the recognition of these multiscale processes may now allow a new form of human consciousness. These imply an acknowledgement of supra-referential parameters to comprehend the distinct orders of magnitude of the spatio-temporal dimensions in the short-, midand long-term calculations each society holds to explain its responsibilities therein.

Today as each of the world's cultures, indigenous or not, recreate the specific meaning it gives to the relations between its society and its own and others' biocultural environment, and to the rest of the world and the cosmos, they constitute particular mechanisms to be, or not be, accountable for the interdependencies affecting, for example, other socio-environmental dynamics. Though some cosmologies include this awareness as an "ecocosmology" which promotes socio-ecological dimensions, or by encompassing this awareness within a grander socio-eco-cosmic consciousness, many modern cosmologies or worldviews may opt for short-sighted, risk-prone, or scapegoating mechanisms. When they do so, they may opt to forget, silence or ignore the lessons reaped for millennia by cultures that calibrated the impact of their daily practices onto the web of life in order to resonate with the ancient laws of nature, or to echo those of the cosmos.

At present the modernizing and the post-industrial societies in a globalizing world are faced with major challenges for the sustainable conservation of biocultural diversity and for peaceful human coexistence. It is important to reconsider the value of spirituality and the lessons of indigenous cosmologies to foster wise human conviviality and environmental management. It is also important to remember that in this globalized world there is an unprecedented impact of human agency in environmental destruction, climatic change, and in exterminating cultural diversity.

Redressing this may partly occur through international negotiations across peoples, nations or regions, but to truly halt the extermination of biological and cultural diversity, ecologists such as Edward Goldsmith stress that there is an urgency – globally, and among many societies – to uphold relevant worldviews and cosmologies to guarantee a fulfilled sense of existence, and the survival of humanity and life itself.

Elizabeth Reichel

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- See also:* Anthropology as a Source of Nature Religion; Bateson, Gregory; Blackfoot Cosmos as Natural Philosophy; Indigenous Environmental Network; New Age.

The Council of All Beings

The Council of All Beings is a communal ritual in which participants step aside from their human identity and speak on behalf of another life form. A simple structure for spontaneous expression, it aims to heighten awareness of our interdependence in the living body of Earth, and to strengthen our commitment to defend it. The ritual serves to help us acknowledge and give voice to the suffering of our world. It also serves, in equal measure, to help us experience the beauty and power of our interconnectedness with all life.

History

The form originated in Australia in early 1985, when I was on a workshop tour bringing group practices to sustain social and environmental activists. One day after a weekend workshop, John Seed, founder of the Rainforest Information Center, took me to one of the last vestiges of his continent's primordial forests, saved from the timber companies by blockades mounted by John and other local protesters. On that excursion John and I discovered that we shared a passionate interest in deep ecology and the writings of Norwegian philosopher Arne Naess about the "ecological self." As Buddhists, we both resonated with these concepts, finding them close to the Buddha's core teaching on the interdependence of all life. John expressed the wish that my workshops include a "deep ecological" group experience to directly challenge the anthropocentrism of industrial society.

So together, that day, we invented the Council of All Beings. It was introduced shortly afterwards, in the course of the weeklong training that culminated my workshop tour. At a camp north of Sydney, on huge flat rocks by a waterfall, some forty people took part. And soon they were taking the ritual back with them to their local communities. Within a year, by word of mouth – and through John's and my travels – the Council of All Beings spread to North America, Western Europe, and Japan. From the Grand Canyon to the banks of the Rhine, in redwood groves and classrooms and church basements, people were gathering to shed their personae as humans and give voice to the plight of the Earth. They spoke as whale and wolf and wind, aspen and marsh and any other nonhuman they felt called to represent.

Articles about the ritual soon appeared in a variety of publications, and by 1988 a book by us both, with Arne Naess and Pat Fleming (*Thinking Like a Mountain: Towards a Council of All Beings*) carried the practice more widely, especially among

activists, religious groups, and environmental educators. These publications helped people from different cultures and walks of life to guide the Councils in a recognizably consistent fashion.

Description

As the practice spread, the name “Council of All Beings” came to be used in two ways: to refer to the ritual itself, and also to refer to the workshop or gathering in which it is held, and which includes closely related processes. Since two of these related processes are considered by many to be important, if not essential, to the experience as a whole, they are included in the following description.

The Mourning

The interdependence of all life remains just a mental concept, without power to affect our attitudes and behaviors, unless it takes on some emotional reality. We need to feel it, and our capacity to feel is stunted, if we block out the pain within us over what is happening to our world. Furthermore, if we proceed to take part in the Council *per se*, speaking on behalf of other life forms, without first acknowledging our sorrow for what other beings are suffering at human hands, we risk being superficial, even presumptuous.

Here we use “mourning” as a generic term for the expression of moral pain for what humans are inflicting on the natural world. This pain for the world includes not only grief, but fear, anger, and despair as well. Because these emotions are not encouraged in conventional society, and because they reveal the truth of our interconnectedness with all life, we allow them full play.

For the Mourning, a variety of forms have evolved, in which people feel both safe and free in expressing and releasing their pain for the world. The methods I like best are simple ones: a recitation of the names of endangered species, with drumbeat and pauses for people to name what is disappearing from their lives today. Or the Cairn of Mourning, where, gathered in a circle, people move to the center, one by one, and place a stone. Each stone represents a loss that has occurred or is occurring. As it is brought forward, the loss is described: a family farm replaced by a shopping mall, a fishing stream polluted or paved over, clean air, safe food...

Reconnecting us with our capacity to care, such ritual namings of the losses brought by our industrial culture serve as an antidote to the pervasive psychic numbing this culture incurs. They also serve to awaken us to the interconnectedness of all life forms, our deep ecology. I have come to see deep ecology as an explanatory principle both for the pain we experience on behalf of the natural world, and for the sense of belonging that arises when we stop repressing that pain.

Remembering

Our connections with other life forms are based not only on emotional attachments to places and beings we have loved. They are also organic, woven by shared ancestries, embedded in our bodies. Each atom in each molecule of our being goes back to the beginning of life, and has belonged to far more ancient and varied forms of life than our own. The human form we now wear is just the latest and briefest chapter of a long evolutionary journey. In the Remembering, we consciously own this ancient kinship so that, when the time comes to speak for other life forms, we can do so a greater sense of naturalness and authenticity.

Also known as “evolutionary remembering,” this experiential process guides the imagination while drawing on multiple senses and inner body knowings. It sets our present-day, hurried lives within larger contexts of time. On occasion, the Remembering extends back to the beginning of space and time, drawing on texts such as *The Universe Story* by Thomas Berry and Brian Swimme, and ritual adaptations by such20teacher-practitioners as Sr. Miriam MacGillis. But as a preparatory stage to the Council of All Beings, we usually focus on “our life as Gaia”; it is easier to feel with our bodies, and we have already done it in our mother’s womb. Just as, *in utero*, we physically recapitulated the evolution of cellular life, so now we attempt to do it consciously, harnessing intellect and imagination.

Instead of relying on words alone, sound and movement help us to “remember.” A heartbeat on a drum, evoking life’s rhythms, as it pumps our blood, breathes through our lungs, can take us back through time, helping us imagine we can recall the adventures of our four and a half billion years. Our evolutionary journey can also be explored through bodily movement, even the barest of motions. Nosing, crawling, wriggling, pushing up, we imaginatively feel our way into the inner body sense of fish and amphibian and reptile, life stages still embedded in our neurological system.

As your memory improves, as the implications of evolution and ecology are internalized and replace outmoded anthropocentric structures in your mind, there is an identification with all life. Then follows the realization that the distinction between “life” and “lifeless” is a human construct. Every atom in this body existed before organic life emerged. Remember our childhood as minerals, as lava, as rocks? (John Seed)

The expanses of time evoked by the Remembering remind us that the industrial growth society is a temporary episode – and that in order to move beyond it now, we can draw on a more deeply rooted legacy. Respect and gratitude arise for our forebears’ capacity to weather adversity and to respond collectively and creatively to enormous challenges. The process helps us to believe that these capacities have not forsaken us, and to draw on them now at this crisis point for life on Earth.

In my years of experiencing and guiding this process, I have seen how it strengthens us to act in defense of Earth and Earth’s beings. It helps us act, not from the whim or nobility of our short-lived individual ego, but clothed in the authority of our four and a half billion years. We start learning to act our age.

Speaking for Other Life Forms

This is the Council of All Beings *per se*, enhanced, when time permits, by the preparatory practices described above.

The beings that coexist with us in the web of life are profoundly affected by our actions, yet they have no hearing in our human deliberations and policies, no voice to call us to account. The Council of All Beings gives them a voice – and because it is our own as well, it can change the ways we see and think.

Participants begin by letting themselves be chosen by another life form, be it animal, plant, or natural feature like swamp or desert. We use the passive verb, *be chosen*, in order to encourage people to go with what first intuitively occurs to them, rather than selecting an object of previous study. This way our minds are more receptive and humble, more open to surprise. When out-of-doors, we can wander off alone to happen on the identity we will assume. When indoors, some quiet moments suffice, as we relax and wait with an open, non-discursive mind for the imagined presence of another life form. Then we take time to behold this life form in our mind's eye, bestowing upon it fullness of attention, imagining its rhythms and pleasures and needs. Respectfully, silently, we ask its permission to speak for it in the Council of All Beings.

If time allows and supplies are available, we make simple masks, working together in companionable silence with paper and paints, twigs and leaves. Then, briefly clustering in small groups, we practice taking on the identity of our chosen life form. This helps us let go of our self-consciousness as humans, and become more at ease in imagining a very different perspective on life.

Then, with due formality, the participants assemble in a circle and the Council of All Beings commences. To create a sense of sacred space, prayers and invocations are spoken. Native American practices, such as smudging with sage or cedar, and calling in the blessings of the four directions, are often used here to good effect. When I am the guide, and speaking, of course, as my adopted life form, I like to begin the proceedings by inviting the beings to identify themselves in turn, a kind of roll call: Wolf is here, I speak for all wolves. I am Wild Goose; I speak for all migratory birds.

Welcoming them all, I thank them for coming, and, with some solemnity, set the theme for our deliberations.

We meet in council because our planet is in trouble; our lives and our ancient ways are endangered. It is fitting that we confer, for there is much now that needs to be said and much that needs to be heard.

The council unfolds in three consecutive stages. First, the beings address each other, telling of the changes and hardships they are experiencing in these present times.

“The shells of my eggs are so thin and brittle now, they break before my young are ready to hatch.”

“I’m tightly crowded in a dark place, far from grass and standing in my own shit. My calves are taken from me, and instead cold machines are clamped to my teats. I call and call for my young. Where did they go? What happened to them?”

“As Lichen, I turn rock into soil. I worked as the glaciers retreated, as other life-forms came and went. I thought nothing could stop my work; but now I’m being poisoned by acid rain.”

The second stage of the Council begins after most have spoken, and the guide invites humans into the center. Since it is clear that one young species is at the root of all this trouble, its representatives should be present to hear these testimonies. So, a few at a time, the beings put aside their masks and move to sit for a while, as humans, in the middle of the circle. The other life forms now speak to them directly.

“For millions of years we’ve raised our young, rich in our ways and wisdom. Now our days are numbered because of what you are doing. Be still for once, and listen to us.”

“See my possum hand, humans? It resembles yours. From its print on the soft soil you can tell where I have passed. What mark on Earth will you leave behind you?”

“Humans! I am Mountain speaking. For millennia your ancestors venerated my holy places. Now you dig and gouge for the ore in my veins. Clearcutting my forests, you take away my capacity to hold water and release it slowly. See the silted rivers? See the floods? In destroying me, you will destroy yourselves.”

The first time I sat in the center, a human in the presence of other life forms, I felt stripped. I wanted to protest. “I’m different than the logging and mining executives, the multinational CEOs, and the consumers addicted to shopping,” I wanted to say. “I am a caring human; I meditate and recycle and teach deep ecology.”

But because I was not permitted to speak, these words began to evaporate in my mind. I saw them soon as essentially irrelevant. The deep ecology that had so lured me with its affirmation of our interconnectedness with other species now forced me to acknowledge my embeddedness in my own. If I was linked to the wild goose and the lichen, I was far more linked to the investment speculators and compulsive shoppers. Shared accountability sank in, leaching away any sense of moral immunity.

Then, as the others did, I moved back to the periphery, to see and speak from that wider context. From here I could see more clearly than before the isolation in which humans imagine themselves to exist, and the fear and greed than can seize them.

In the third stage of the Council, the other life forms offer gifts to the humans. Recognizing how dependent they have become on humankind, they would help this young species deal with the crisis it has created. As ritual guide I might cue this stage by saying,

Many humans now realize the destruction they are causing; they feel overwhelmed and powerless in the face of the forces they have unleashed. Yet our fate is in their hands. O fellow beings, what strengths of ours can we share with them, what powers can we lend them?

With this invitation, the beings in the Council begin spontaneously to offer their own particular qualities and capacities.

“I, Lichen, work slowly, very slowly. Time is my friend. This is what I give you, humans: patience and perseverance.”

“I, Condor, give you my keen, far-seeing eye. Use that power to look ahead beyond your daily distractions, to heed what you see and plan.”

One after another the beings offer their particular powers to the humans in the center. After speaking, each leaves its mask in the outer circle and joins the humans in the middle, receiving the gifts still to be given.

“As Mountain, I offer you humans my solidity and deep peace. Come to me to rest, to dream. Without dreams you lose your vision and hope. Come, too, for my strength and steadfastness, whenever you need them.”

“As Leaf, I would free you humans from your fear of death. My dropping, crumbling, molding allows fresh growth. If you were less afraid of death, you would be readier to live.”

These gifts reside already in the human spirit, as seeds within the psyche; otherwise they could not be spoken. Their naming brings forth a sense of wholeness and glad possibility. When all of them have been offered, the Council of All Beings is formally concluded. Then the assembled often break into singing, drumming, exultant dancing – releasing energy after the long, attentive listening. Sometimes the group just sits in stillness, silently absorbing what has been learned or writing in journals.

Care is taken to thank the life forms, who have spoken through us, and to dispose of the masks in a deliberate fashion. The masks may be formally burned, or hung on a tree or wall, or taken home with us as symbolic reminders of the ritual. On occasion, at the close of a Council, wanting to stay identified with the other life forms, we fancy that we are putting on human masks, the better to work for them as we reenter the world of the two-leggeds.

Reflections and Applications

The Councils of All Beings, that I have personally experienced, number in the hundreds by now. I can think of nothing I would give in exchange for them – nothing that equals their mixture of laughter, tears, and eloquence, or that can replace the spontaneous insights they engender. Sometimes, as I start to offer the ritual, I fear that people will reject it as beneath their dignity, as childish or a waste of their valuable time. But in each case, when I proceed with quiet confidence, the outcome is similar. Whether in Nebraska or Germany, Russia or Japan, people seem ready and able to step free from their human roles, if only for an hour or two, and give voice to wider, more ancient knowings.

The quality and effectiveness of these rituals vary widely, of course. Because there is no required training for the guide, or “quality control,” they can, on occasion, become diffuse, distracted, even boring. Yet, by and large, there is something irreplaceable that happens in the simple act of taking on – or even attempting to take on – the persona and perspective of another life form. It is basically an act of humility and generosity.

It moves the self-important ego from stage center, and sheds a fresh light on even the most ordinary elements of life.

According to theologian Thomas Berry in *The Dream of the Earth*, the “shamanic personality,” which can understand and speak for other life forms, is essential to our survival. It helps us to break free from our culture’s anthropocentrism and dispel the trance of industrial civilization. The life-giving powers shaping creation from the beginning of time are still present within us, Berry writes. They exist as “deep spontaneities,” accessible through the imagination.

The Council of All Beings has shown it can evoke these deep spontaneities. Here no fasting or drugs or arduous disciplines are needed to awaken the inner shaman. The Council does not claim to involve channeling or shapeshifting, or to engage any capacities beyond the moral imagination. All that is required is clear intention; it is like opening a door in the mind and walking through. At times people do experience another voice “coming through” that is beyond any conscious editing on their part. This is not surprising, given the close relation of this work to the shamanic experience.

While the processes described above require a measure of uninterrupted time – a few hours for the ritual circle itself, a full day or two with the related practices – briefer applications have evolved. In church services and celebrations of the mass, abridged versions of the Council of All Beings have, on many occasions, functioned as the sermon or liturgy of the word. As enrichment to environmental education, the Council has occurred in countless settings, from elementary and high school classrooms to graduate schools of architecture and urban planning, where students speak for the flora and fauna affected by a building project they are designing. Inspired by their experience of the Council, concerned citizens in several countries have appeared at public hearings on waste disposal and mining, lumber, and other resource extraction projects; and, with or without masks, they have testified on behalf of the non-human dimensions of life that these plans will affect. People are also choosing to represent our fellow species as listening presences in community meetings, and marchers in town parades. All these current practices attest to our readiness and capacity to break through our society’s anthropocentrism, and give expression to the ecological self.

Joanna Macy

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See also: Breathwork; Deep Ecology; Deep Ecology – Institute for; Earth First! and the Earth Liberation Front; Epic of Evolution; Macy, Joanna; Pure Brethren; Radical Environmentalism; Re-Earthing; Seed, John; Yoga and Ecology.

Covenant of the Unitarian Universalist Pagans

The Covenant of the Unitarian Universalist Pagans (CUUPS) is a branch of the Unitarian Universalist Association (UUA) dedicated to networking among neo-pagan members of the UUA. Its goals include promoting interfaith dialogue, developing neo-pagan religious beliefs and practices and integrating them into UUA services. As a networking group, it has no specific beliefs or practices other than the broad eclecticism and acceptance of spiritual paths characterized by the UUA and by the neo-pagan movement as a whole. In some communities it is seen by neo-pagans as a meeting and recruiting ground for groups as diverse as the OTO and Wiccan covens.

CUUPS emerged in the 1970s as a result of feminists' critique of what was considered the patriarchal orientation of Unitarian Universalist (UU) spirituality. In response, the UUA General Assembly passed the "Woman and Religion Resolution" in 1977 and introduced concepts such as the goddess and a more Earth-centered spirituality through a class offered in many UUA churches. This movement made connections with the growing neo-pagan movement, as Margo Adler noted in *Drawing Down the Moon* (1979). CUUPS received its charter from the UUA in 1987, and became attractive to neo-pagans who were middle class and professionals and, during the "Satanic Panic" of the late 1980s and early 1990s, were looking for protection and legitimacy from an established religious organization. CUUPS had a mixed reception in the UUA. Many congregations were heavily influenced by an atheistic movement in the 1960s, and were as opposed to pagan theology as to Christian theology. However, CUUPS has grown rapidly in numbers and influence within both UUA and in the neo-pagan movement. In 1993 it was able to get the UUA to include goddess and Earth-centered spiritual material in its hymnal, and by 1995 convinced the UUA to adopt the following statement as the "sixth source" of UU spirituality: "Spiritual teachings of Earth-centered traditions which celebrate the sacred circle of life and instruct us to live in harmony with the rhythms of nature." CUUPS membership appears to have two distinct groups, UU-pagans and Pagan-UUs, based on whether the members started as UUs or as neo-pagans. The UU-pagans tend to be older and more socially integrated while the Pagan-UUs tend to be younger and more countercultural. Pagan-UUs are much less likely to attend regular Sunday services, but rather will focus on evening activities and are more likely to introduce energetic activities when the group sponsors the Sunday service. This is most apparent in the national CUUPS meetings, where Pagan-UUs will

be more likely to engage in late-night drumming and dancing while UU-pagans will turn in early.

CUUPs has also had a mixed reception within the neopagan movement. It has primarily appealed to the more Wiccan and Earth-centered branches, and to the more socially integrated portion of that branch. It went through a period of instability in the mid-1990s that resulted in a more activist and Pagan-UU leadership. It is currently regarded as one of the larger organizations that constitute the neo-pagan movement.

Marty Laubach

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See also: Paganism; Unitarianism.

Cowboy Spirituality

As expressed in poetry and song, cowboy spirituality is a classic example of tension between formal religion and heartfelt spirituality that runs deep in American culture and religious life. Protestant-rooted ideas about the authority of individual conscience, the virtue of plain speech, and disdain for the pretentiousness of ritual and hierarchy characterize cowboy spirituality, as do romantic ideas about nature as a production of God, comparable to the Bible, and belief that awareness of God's hand in nature is far superior to citified churchgoing. On spiritual matters, cowboy verse often combines sentimental, even tear-jerking feeling with gallows humor and honest respect for the grim facts of life. As Allen McCanless wrote in his famous "Cowboy's Soliloquy," first published in 1885,

My ceiling the sky, my carpet the grass. My music the lowing of herds as they pass;
My books are the brooks, my sermons the stones, My parson's a wolf on a pulpit
of bones.

As the last line of the stanza illustrates, cowboy verse is a peculiar blend of reverence and irreverence that aims to get at the heart of things, often by reference to the earthiness of life and death. Cowboy verse is also forthright about interpreting people and imagery in the Bible, as if they existed, in a kind of eternal way, in the cowboy culture of the American West. Thus another stanza of McCanless' "Soliloquy" reads,

Abraham emigrated in search of a range,
When water got scarce and he wanted a change. Isaac had cattle in charge of Esau
And Jacob run cows for his father-in-law; He started in business down at bedrock,
And made quite a fortune by watering stock.

One of the most complicated and important aspects of cowboy spirituality is the cowboy's relationship to nature. Respect for the power and grandeur of nature is a recurrent theme, as is cowboy pride in a close working companionship with natural forces. At the same time, however, companionship with the forces of nature turns easily into violence, both in imitation of nature's ways and in efforts to conquer her. This aspect of cowboy spirituality fits Richard Slotkin's thesis that the mythology of the American frontier centers on the embrace of violence as a means of generating vitality, and thus helps place cowboy culture in the larger context of American mythology of the West. As interpreters of American culture often argue, the ideal of the frontier West exists in opposition to stereotypes about the effete and artificiality of urban life. The ideal of the rugged, cowboy West serves as an antidote to the anti-ideal of enervated life in polite society. In this respect, the violent aspects of cowboy culture – bull riding, shoot-outs, drunken brawls – are sometimes presented as part of the rough

morality of nature. McCanless defended cowboy justice by appealing to the big lives of biblical heroes:

If I'd hair on my chin, I might pass for the goat, That bore all sin in ages remote;
But why this is thusly I don't understand, For each of the patriarchs owned a big brand.

In recent years, disagreements about appropriate use of rangelands pitted environmentalists against ranchers and cowboys, and contributed to the strength of the Republican Party, which often opposed restrictions on rangeland in Western states and capitalized on local hostility to federal government intervention. Ranchers and cowboys have not been immune to concerns about the environment, however. Overgrazing has taken its toll on the arid and fragile ecosystems of the West, water is often scarce, and some ranchers and cowboys have started running bison because they need less grass and water than cattle. And for a number of these cowboys and ranchers there is not only a practical reason for running bison, but a belief that it is morally right to prefer native species such as bison over those imported from other continents.

The main difficulty in defining cowboy spirituality lies in understanding the relationship between cowboy mythology and the lives of real people who actually rode (and still ride) the range. On one hand, "cowboy" is a metaphor for high-testosterone, just-do-it behavior that is just as appropriate in the city or suburbs as out on the high plains under a big sky. In this respect, the term "cowboy" can even be used as a verb – as in " 'cowboy' that door shut" or " 'cowboy' that jar open." Tommy Lee Jones flying a space ship with reckless dexterity in *Space Cowboys* and then propelling himself to the moon in a heroic act of selfsacrifice that enables his buddies to reach Earth in safety is another example of the expansive use of the term "cowboy," and one that reflects the emotional and gritty ethics of cowboy spirituality. On the other hand, real cowboys lived, and still live today, working long days in the saddle, punching cows for little pay in all kinds of weather. As members of a proud but often desperately marginal subculture, real cowboys often have lives that are considerably sadder and less romantic than the mythology of cowboy culture would suggest. Still, these real men and boys, and some women as well, write and resonate with the poetry that idealizes their culture.

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See also: Bison Restoration and Native American Traditions; Disney Worlds at War; Manifest Destiny.

Creation Myths of the Ancient World

Creation myths in Egypt, Mesopotamia, and Greece generally express the idea of the creation and defense of an ordered cosmos from out of primordial chaos. Many connections can be made among these different mythic traditions in their attempts to make sense of the natural world. For example, the idea of water as the primordial source of life can be found in all of these traditions. Moreover, water is then used by the gods to punish and purify in the Gilgamesh epic of Mesopotamia (ca. 2000–1600 B.C.E.), in Greek stories of Zeus (the weather-god), and even in the Hebrew story of Genesis. Here we see myth struggling to comprehend the moral purpose of the destructive power of nature. There are many other connections among mythic motifs, including the bull as a symbol of fertility and power, stories about the struggles of the sun-god to maintain the order of day, and stories about the divine origin of the cycle of the seasons. One must be careful, when undertaking such a synthetic approach, however, because these mythological traditions each have their own integrity. And even within a single tradition there are conflicting stories and rival cosmogonies.

Mesopotamia

The complexity of the mythologies of Mesopotamia reflects the linguistic and political diversity of this region. Two of the better-known and more recent texts in this tradition are the epic of Gilgamesh and the *Enuma Elish* (ca. 2000–1200 B.C.E), the Babylonian creation epic. But there are other creation stories, which make use of the same or similar gods and goddesses. Older Mesopotamian cosmogonies focused on various nature gods including: An or Anu, the sky-god; Enlil, the wind-god who originally separated sky from Earth; and Ea or Enki, the creator god who came from out of the primordial waters to create life on land. This pantheon also included the sun-god, Shamash, and the mother-goddess, Ninhursaga. These older Sumerian stories tend to make the creation event a natural occurrence in which the primordial abyss, Apsu or Abzu, was opened and the world was created according to principles of natural order. That these gods represented order and justice in the cosmos is illustrated by the sun-god, Shamash, who gave Hammurabi his famous code of laws (ca. 1700 B.C.E.). A recurrent theme in these early myths is the struggle of the gods of order against chaotic monsters who rise out of Apsu's abysmal depths. The standard interpretation traces

this struggle of cosmos against chaos in Mesopotamian myth to the unpredictability of the Tigris-Euphrates river system.

The cosmogony of the *Enuma Elish* presents a creation story in which this struggle against such violent destructive forces predominates. In this story we find the triumph of a younger god, Marduk, in his struggle against the chaotic primordial waters, the male Apsu, now representing fresh water, and the female Tiamat, who represents the salt water. The other gods arise from out of Tiamat who is impregnated by Apsu, in a symbolic representation of the deposition of silt in the delta. In the course of this story the noisy and active younger gods anger the static tranquility of Apsu and Tiamat. A cycle of violence ensues and finally Marduk, the noisy young upstart, leads the gods in a final decisive battle against Tiamat. Marduk defeats Tiamat and splits her body, creating heaven and Earth. Along the way Marduk also slays Kingu, Tiamat's champion. Marduk ordains that human beings are to be created out of Kingu's blood. In one version, when Tiamat is slain, her body is opened and the waters flow out through various orifices. The Tigris and Euphrates flow out of her eyes and her body becomes the mountains from which these waters flow. The danger of her overflowing flood is always present and religious rituals are used to prevent this threat of chaos.

The moral of these Mesopotamian myths is that the human being is a minor and inconsequential portion of a much larger struggle within the natural world. The primeval creation scene focuses on the coming of order out of nothing and the struggle of order against disorder. The creation of human beings comes later. Indeed, the Mesopotamian myths profess that human beings are created to suffer and die as servants of the gods. The Mesopotamian gods are, for the most part, indifferent to human suffering. When they do intervene in human affairs they do so for their own pleasure.

Certain natural themes are ubiquitous in the Mesopotamian myths. One of the most important of these themes is water. Life is said to have come from water and silt. One can see here an obvious connection with the natural environment of Mesopotamia where flooding and silt deposition were pressing concerns of early agriculturalists. The importance of water recurs in the Gilgamesh epic with the story of the flood as told to Gilgamesh by the immortal one, Utnapishtim. The gods destroyed humanity by way of the flood because the raucous noise made by human beings on Earth was disturbing to their ears. Gilgamesh himself struggles through and across waters to find the immortal one who then directs him to a medicine that can ensure youthful longevity. This medicinal plant is found under water and is later lost by Gilgamesh when a snake comes out of a well and steals it from him. In the Gilgamesh, water is the important element against which human beings must struggle. This struggle does not promise a happy ending, however, as the waters themselves seem to be poised against human success. Human interaction with nature is thus antagonistic.

Egypt

While humans struggled before indifferent gods to subdue nature in the Mesopotamian stories, in Egypt they were seen as allies of the gods in their struggle to maintain order before the forces of chaos. Unlike the precarious and dangerous cosmos of the Mesopotamian stories, the Egyptian cosmogonies seem to hold out the hope for stability and immortality. The Egyptian idea of the primordial nothingness was personified as Nun, waters which are inert and featureless. These waters are not like angry Mesopotamian Tiamat. For the Egyptian, the cycle of time was stable, as represented by the movement of the sun across the sky and the regular cycle of the flooding Nile. There was a promise of stability and permanence, even though there were dangers and monsters to be combated.

The Egyptian creation stories begin when Atum or Re, the first god, comes into existence. His appearance occurs in the same way that a hill might be revealed by the receding floodwaters of the Nile. This naturalistic metaphor has two important aspects for Egyptian mythology. First, Egyptians tried to locate the point of Atum's appearance at some definite geographical high point, which was then sanctified as a center of religious or political power. Indeed, as the Egyptian tradition developed in different cultural centers (Heliopolis, Memphis, or Hermopolis, for example) the geographical location of this holy ground also shifted. Second, it connects the creation myth with the seasonal fluctuation of the Nile and so locates the Egyptian mythology within the natural world. This seasonal ebb and flow, the concealing and revealing of land, may also have been the basis of Egyptian ideas about reincarnation, as seen in the myth of Osiris. In general, the

Egyptian cosmogony appealed to certain basic facts of Egyptian climate and geography.

Other naturalistic elements occur in the Egyptian mythos, including the idea of the generation of the world from a primordial act of divine masturbation or expectoration, as Atum brought the world into existence from out of himself. This idea develops in a more intellectual direction, with connections to the Hebrew creation story, in which the creator god of the Memphis theology, Ptah, speaks the word into existence. There is also a parallel story featuring the spontaneous generation of frogs and snake from out of the mud left by the receding floodwaters. This naturalistic theme was taken up in earnest by the cosmogony of Hermopolis, which was a city located midway between Thebes and Memphis. In the Hermopolitan cosmogony the cosmic egg either laid by a cackling goose, an ibis, or simply left by the receding waters. Within this egg was the sun-god, Re, who then created the rest of the world. Finally, there were stories about the appearance of the divine flower, the lotus, growing out of the sacred lake at Hermopolis. This flower was again identified with the sun god. Other significant natural themes can be found in the animal imagery of these myths. The god Horus was connected with the falcon, which was connected with the sun, the falcon's eye in

the sky. In addition, the sun god was connected with the bull as a symbol of fertility and strength and the cow as a symbol of generation and motherhood.

These naturalistic themes in the Egyptian cosmogony make sense within the geographical context of the Nile system. The cyclical floods of the river, the repetition of cycles and seasons in the natural world showed the Egyptians a concrete example of creation on a yearly basis. Creation occurred in the appearance of land, of the sun, the cycles of the moon, in the genesis of amphibian life, of eggs, and in the birth of the lotus from out of the nothing that was the primordial water of the river and of Nun. The Egyptian concern with immortality and rebirth, its connection with a stable natural world, its worship of the sun-god, and its cult of the pharaoh (who was in some stories the reincarnation of Osiris and thus a descendent of Re) – all of this is connected with the geographical context and its tendency to support these naturalistic explanations for the existence of the world. This natural order was based upon divine order or justice, which was called *ma'at*. This order required human support in the form of rituals and sacrifices because there were threats to order found in the coming of night, the waning of the moon, eclipses, and other natural disturbances to the rule of Re. These disordered elements were personified in Apophis, the evil god who disrupted *ma'at* with its opposite, *isfet* – disorder or injustice. The cosmic struggle between Re and Apophis, between light and dark, seen on a daily basis in the progress of the sun, found its ultimate significance in the cycle of birth and death that permeates the natural world. Individual humans must support the cosmic order of nature, *ma'at*, so that they will be able to accompany Osiris in pursuit of immortality.

Greece and Rome

In the Greek and Roman myths, as in Egypt and Mesopotamia, we find the creation of order, cosmos, out of chaos. Our sources for Greek cosmogony include Homer, Hesiod, the Greek tragic poets, and later Roman poets such as Ovid (spanning a time frame from the eighth century B.C.E to the first century). In the Greco-Roman mythos, Earth and Heaven, Gaia and Uranos, are born from out of Chaos, the primordial undifferentiated abyss. We also see water as the primordial element, personified as Ocean, who surrounds the cosmos. Like the Mesopotamian myths, the Greek myths told of generations of gods struggling against one another. These generational struggles culminate in the battle of Zeus (the Roman Jupiter) against his father, the Titan Cronus (Saturn). Eventually the Olympian gods became supreme under the leadership of Zeus. Zeus then led the battle against those monstrous offspring of Earth who represented disorder. Once Zeus was triumphant, struggle became understood as a struggle among the Olympian gods. As in other mythic traditions, each Greek god was associated with some natural feature or power. The struggle among these gods was thus used to explain natural phenomena such as earthquakes and storms, the rising and setting of the sun, etc. One of the more important of these stories, which figured in

the mysteries of Eleusis, was the story of Demeter and Persephone. Persephone was the daughter of Demeter, the goddess of grain and growing crops. Persephone was seized by Hades and carried to the underworld. In her agony over her lost daughter, Demeter stopped plants from growing until Zeus persuaded Hades to release Persephone. This story, which has obvious connections with the Egyptian stories of death and rebirth, explains the origin of the cycle of the seasons in terms of a struggle among the gods.

The Titan Prometheus created human beings and animals. Prometheus' scatter-brained brother, Epimetheus, who assisted in the creation, botched the job somewhat by giving animals all sorts of physical advantages over humans. Prometheus remedied this by giving human beings the use of fire and other crafts. Another creation story, one taken up by Plato in the *Republic*, finds the gods experimenting with different metals, beginning with gold and ending up with iron. The current race of men is supposed to be descended from the iron race, at the degenerate end of the historical scheme. In these stories we discover the Greek view of the relation between gods and human beings. The gods have no real concern for the human except to the extent that humans maintain rituals for them and make sacrifices to them. Indeed, in one story, similar to the story in Gilgamesh and in the Hebrew bible, Zeus supposedly floods the Earth to kill off the wicked iron men, leaving, finally, only a degenerate race of men made from stone. These stories of degeneration seem to indicate the Greek awareness of the presence of ancient traditions left over from the Minoan and Cretan civilizations, whose culture was contemporary with that of the ancient Egyptians and Mesopotamians. The point here is that the Greeks possessed a healthy respect for the destructive power of the gods and the destructive potential of their natural powers. Odysseus, for example, was punished by Poseidon for blinding Poseidon's son, the Cyclops. As the god of the sea, Poseidon then buffeted Odysseus with storms and prevented him from returning home. Such stories were important for a people who lived and traded on the shores of the Mediterranean, subject to the whims of weather and sea.

Finally, in the literary development of the Greek and Roman mythos, in the Latin poet Ovid's *Metamorphoses*, we find the creative application of myth as explanation for a variety of natural phenomena. Ovid tells of various ways in which the gods meddle in human affairs for their own pleasure. He also tells us how certain plants and animals became the way they are by way of various metamorphoses of humans and gods. Here we find stories of natural transformations, which have become standard parts of Western culture: the stories of Narcissus and Echo, Io and Europa. In this magical atmosphere, Ovid shows a syncretic tendency, using images and appealing to gods, which were part of foreign traditions, including the gods of Egypt.

The moral of the Greek tradition is thus similar to that of the Mesopotamian and Egyptian traditions. The natural world is created full of spiritual energies and divine beings. Human beings must be careful not to offend these natural deities and disrupt the order of the cosmos. And finally, the features of the natural landscape itself can be explained by way of divine conflict.

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See also: Creation Story in the Hebrew Bible; Creation's Fate in the New Testament;
Egypt – Ancient; Greco-Roman

World; Greece – Classical; Mesopotamia – Ancient to 2000 B.C.E.; Ovid's Meta-
morphoses; Roman Religion and Empire.

Creation Story in the Hebrew Bible

The Hebrew Bible preserves two contrary stories of God's relation to nature and humans' place within it, with little editorial attempt to harmonize the stories.

Genesis' first creation account opens with God wrestling chaotic waters in utter darkness, the stormy conflict seemingly without beginning. God creates by pushing chaotic waters behind the barriers of firmament and Earth (Gen. 1:6, 9). Water is pushed to the periphery of this story, a constant threat to creation if the water ever broke through its limits (Gen. 7:11–12; Ps. 46:1–3). The story's closing mandate exhorts humankind to mimic the divine repression of chaos in order to live within this creation, and life is lived under threat (Gen. 1:28).

Water remains a continual danger to God's chosen people, threatening God's plan for his people's survival at key points. Mass drowning during the flood makes the command to multiply and fill the Earth difficult (Gen. 9:1). Called out of Egypt, Israelites pause before the sea in terror, wishing to return, but God dries up the sea so that they can proceed (Ex. 14:16). God repeats this at the river Jordan so Israelites can cross into the Promised Land on dry ground (Josh. 3:16–17). But God may have driven water too far from the land promised to Abraham, as its frequent famines attest (Gen. 12:10; 26:1; Ruth 1:1).

Water is not the only natural threat to creature and Creator. Israelite religious reformers hack and hew *Asherim* – wooden pillars or trees at sacred sites that represent the goddess Asherah – to purify the cult (Ex. 34:13; Deut. 7:5; 12:3; Jer. 2:26–27). God may consider living trees a personal threat to Israel (Ezek. 20:46–47; Isa. 10:33–34; Jer. 7:20). And wilderness becomes hostile to human existence as well (Gen. 21:15–16; Ex. 23:28–30; Joshua 5:6).

Genesis' second creation story gives a contrary view. The story opens with creation thirsting for water to realize its potential (Gen. 2:4–5). God allies with rain, mixing with soil to make mud, into which he breathes divine breath. From this tripartite mix human farmers are pulled to till the land as well as animals to alleviate human loneliness (Gen. 2:5). God mandates a vegetarian diet that protects this sibling relationship (Gen. 2:16–17, also 1:29–30). When humans transgress divine limits, this harmony turns adversarial and humans, animals, soil and water are estranged (Gen. 3:15–19). The hope of this story cycle is to a future return to this original harmony of God, soil, water and creature.

Water is key to bringing exiled Jews back to a verdant Promised Land. God recasts the hostile desert landscape recreating it with springs, rivers and trees so that his

people can freely eat and quench their thirst on their homeward journey (Is. 41:17–20; Ezek. 34).

Aspects of divinity are present in trees like the Tree of Life and the Temple Tree (Gen. 3:22; Ezek. 31; Isa. 55:12–13). God’s essential connection to trees compels Abraham to camp at the groves of sacred trees at Beersheba, Shechem and Hebron so as not to miss divine encounters. Ezekiel envisions God as a sacred tree with water springing from his base (Ezek. 34:25–30; 41:15–26; 47:1–12). Israel also is like a tree according to God (Jer. 11:16, 19; 17:7–8; Hos. 9:10).

God’s presence at Mount Sinai is so strong that Moses must bring the people there to meet him (Ex. 19). Moses and Elijah venture into caves in Mount Sinai and experience intense personal encounters with God (Ex. 33:18–33;

1 Kings 19:8–13). Later God’s presence is integral to Mount Zion in Jerusalem (Ps. 48:1–2, 12–14; 132:13). Jacob, after visions of divinities shuttling between heaven and Earth, calls the mountain of Bethel a gate of heaven (Gen. 28:17). The wilderness is a place of divine restoration for Moses and Elijah (Ex. 3–4; 1 Kings 19:1–9). God so pervades the natural world that ancient Israel’s legal and wisdom traditions assert that God’s will and character are evident in natural phenomena, as well as in animal and human behavior. The law consecrates human and animal life equally before God (Ex. 22:29–30; 23:5).

Animals suffer their domesticity, fulfilling their potential far from human habitation (Job 39:5–30).

The history of the covenant, the most legal of the Bible’s formal agreements, begins with God making a promise to Noah and every living creature as equals (Gen. 9:9–12). That history ends on the Day of the Lord when God will reestablish a covenant between all life, human and animal (Hos. 2:18–19, Joel 1:14–20). In Hosea’s vision God establishes his final covenant by banishing violence to reconcile species (Hos. 2:20–23).

Within this creation story prophets cannot imagine the restoration of the people of God without a concurrent restoration of animals and nature back to their beginnings. In the words of Isaiah, “The Earth lies polluted under its inhabitants; for they have transgressed the laws, violated the statutes, broken the everlasting covenant. Therefore a curse devours the Earth, and its inhabitants suffer for their guilt” (Isa. 24:5–6).

Human vigilance keeping nature’s chaotic elements in check is never relaxed in the worldview of the first story. Reestablished harmony between humans, animals and land is the future hope of the second story. Although the two creation stories set out contrary roles for nature, the natural world in both is a medium of divine revelation and instruction – a role as significant as any historical event.

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See also: Creation's Fate in the New Testament; Fall, The; Hebrew Bible; Judaism.

Creationism and Creation Science

Creationism is the belief in the supernatural origins of the universe. Although many different religious believers – with various mixtures of scientific explanation – could agree to such propositions about divine power and involvement in the natural world, the term has come to be associated exclusively with conservative Christian opposition to evolutionary theories of nature, based on the adequacy of the Bible to answer the mystery of creation. Strictly speaking, almost all thought (in the European world) about cosmic origins before the modern era was creationist in character. However, beginning in the seventeenth century, a number of scientifically oriented thinkers in Western Europe began systematic study of the operation of natural laws. These views proposed to reframe divine action in terms of, or even subordinated to, the workings of nature. As science grew in authority, by accumulating worldly reasons for natural facts and explaining previously mysterious phenomena, “creationism” came to refer to the position of resistance to such scientific explanations: creationists retained a caring, Providential picture of the world’s operation, including its origins, while “scientific naturalists” posited that natural facts and forces were sufficient to understand nature.

Creation Science has a more specific meaning and a more recent history. By the 1960s, some creationists grew impatient with attempts to defy modern science. Instead of trying to object to science completely, creation scientists proposed the development of an alternative science, leaving out the naturalistic assumptions and ignoring whole fields of Darwinian research. Creation science attempts to make creationism up to date and scientific through the search for natural facts that support the Providential and biblical picture of God’s loving creation of the world.

For both creationism and creation science, the advent of Darwinism was a crucial turning point. Previous views of nature tacitly assumed that God carefully watched over the Earth’s creatures with the special creation of individual species, generally in their present location. By contrast, Charles Darwin in *The Origin of Species* (1859) proposed that divergent species develop through wholly natural mechanisms, specifically, by hereditary variation and struggle within their natural environment. While he did not himself openly criticize religious beliefs in the creative action of the divine, his theory of species development through natural selection had no place for such thought. Moreover, as Darwinism and other similarly secular scientific theories in the late nineteenth century rose in public authority and influence, many enthusiasts for science used the new knowledge as a weapon to attack religious belief. In this context, creationism was put on the defensive and grew avowedly anti-scientific and even anti-modernist, as

it affiliated with traditionalist social values and conservative politics in the twentieth century.

While the labels “creationists” and “scientific naturalists” defined the polar extremes of this cultural divide, there were also larger numbers of people who occupied positions on the spectrum in between, with various religious Darwinist and progressive evolutionist positions that allowed for divine action in the world expressed through the natural means that science had come to understand. In public debates, however, creationists were eager to identify their position as the only truly religious stance, with any middle ground on the road to secularism and atheism. In the United States, the publication of a series of books called *The Fundamentals* in the 1910s institutionalized this traditionalist religious orientation, with biblical literalism as a theological centerpiece.

Despite the claims to be doctrinally steadfast through the ages, such fundamentalist-inspired creationism has been, ironically, a modernist phenomenon. The focused attention on the biblical creation account in open scorn of modern science has only emerged in the wake of these modern scientific propositions. From the creationist point of view, scientific inquiries are merely elaborate versions of vain human efforts to understand God’s cosmic workings; better to keep loyal to a set of truths higher than those of any merely human inquiry. The divinely inspired Word of God enshrined in the Christian Bible provides a lens for viewing the facts of nature in their order, beauty, and blessed indications of divine care for humanity.

While creationists could agree on the truth of the Bible and the arrogant temptations of scientific claims, they disagreed on the ways they read the Word of God. There have been three main versions of creationism: the gap, the day-age, and the young Earth theories. With Genesis as a touchstone for Christian creationist explanations of origins, some have been content to accept large lapses of time in the history depicted within the first few verses of the Bible’s opening chapter. “In the beginning, God created the heavens and the Earth,” therefore, serves these creationists as an accurate record of origins, with the next verses describing events occurring ages later in time. This gap theory maintains biblical literalism, but leaves room for naturalistic explanations in the gaps of time not explicitly mentioned in the Bible. Other believers in biblical inerrancy strayed a little further from literalism: The day-age theory was the proposition that passages about days in the Bible corresponded to whole long ages of time. For example, the six days of creation therefore would not mean the activities of a literal line on a monthly calendar, but God’s actions over eons, explained to humanity in the story form of a creator/father’s work week. Both the day-age and the gap versions of creationism offered the potential to accommodate modern professional scientific insights into a biblical understanding of the world. This could not satisfy the most ardent of creationists. The Seventh-Day Adventists, a small American denomination founded in 1863 in the wake of early nineteenth-century millennialist expectations of Jesus’ imminent return, championed a more radically literalist, anti-scientific creationism. In the early twentieth century, an Adventist preacher, George McCready Price, made the first modern attempts to systematize the argument for a young Earth.

He called evolution absurd for its improbability and inaccessibility to empirical verification, and he proposed an alternative: special creation of unchanging species, and a worldwide flood – namely, the one described in the biblical story of Noah – that can explain the seeming antiquity of rocks and fossils. By the early twentieth century, however, Price represented a minority position, even among creationists. For example, during the Scopes Trial (1925), William Jennings Bryan used day-age ideas to prosecute John Scopes and to defend Tennessee’s Butler Act, which prohibited the teaching of evolutionary theories of human origins. Creationists of all varieties remained publicly quiet until the 1960s. During this age of atomic power and ambitions for space travel, when there was unprecedented enthusiasm for progress through science and technology, the young-Earth creationists launched a counterattack.

Creation science, built on the young-Earth version of creationism, began to take shape with the publication of John Witcomb and Henry Morris’ *The Genesis Flood* (1961). These ideas for a 6000-year-old Earth took institutional form with the founding of the Creation Research

Society in 1963, and they have been gaining popular support through the democratically compelling argument that creation science does not seek to defy professional science but just to gain equal time alongside it. Ironically this argument has gained unintended support from leftwing theories about the relativity of truth and the social construction of scientific knowledge. In this setting, science is just another ideology and creation science offers an alternative ideology. However, in a precedent-setting legal case about an Arkansas law mandating equal time for creation science with evolution science, the Supreme Court declared that creation science is not a science, but a religious position that has no place in public education. Ironically, some contemporary creationists have turned against creation science because in its eagerness to establish another parallel science, it has taken on too many of the trappings of science; for these creationists, the point is to witness the truth of their religious truths against the godless despair of modernist thinking distorted by the folly of Darwinism. These rumblings from within fundamentalism have not stopped the public progress of creation science.

In its open defiance of mainstream science, creation science has contributed to an inhibition in public education about the basic principles and facts of evolutionary theory in general, and also about the biological functions of ecological systems that support a healthy environment. This has added a religious edge to environmental policy discussions since creationist religious believers have tended to fear environmentally friendly policies because they associate them with paganism. When advocates of the ecological imagination call for biophilia and a humble turn from anthropocentric practices, creationists tend to see non-Christian nature worship and an erosion of moral standards. While most creationists are at least suspicious of environmentalism, there is a recent movement to regard environmental destruction not through scientific ecology, but through a theological argument about defending God’s creation. This trend in conservative Christianity connects to its historic distaste for the dissolving forces of cosmopolitan corporate capitalism. Just as mass-culture markets can destroy traditional

values, so too they can destroy the beauties of the Earth. Despite these developments, most creationists align politically with anti-environmentalism or with minimal efforts to curb humanity's ecological footprint.

Despite its legal setbacks and its scientific implausibility, creationism in the form of creation science continues to be broadly influential in the United States and in some other parts of the world because it strikes a responsive chord in many people for its ability to portray empirical reasons to believe in the personalized and comforting pictures of the creation that are set out in the Bible and conservative Christian theology. These positions are largely unresponsive to scientific critique, and they fuel periodic political advances for creationism, most recently in the Kansas school system. In an age when many feel distrust and even fear of the growing power of science, but also enthusiasm for the technological fruits of scientific ways to shape our relation with nature, creationism and especially creation science are ways to keep the traditional faith and still lay claim to a kind of scientific authority.

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See also: Biophilia; Darwin, Charles; Science; Scopes Trial.

Creation's Fate in the New Testament

Nature has two dominant fates in New Testament books. It either passes away to be replaced by a new creation, or is transformed anew. In either case tension exists between nature's current state and its future form.

On the future Day of the Lord the heavens and Earth will disappear with a loud snap consumed by fire (2 Pet. 3:10–12). This annihilation of creation prepares the way for new creation to replace the old (Rev. 21:1, 4–5; cp. Isa. 65:17; 66:22). The new creation is to be an entirely spiritual existence (1 Cor. 15:42–50).

This view suggests a disregard for current nature – after all, it is going to be replaced or destroyed anyway. But there is a call for humanity to live transformed lives in the present creation as if it were a new creation (2 Pet. 3:11–14). The dissolution of nature was never intended, and there is a constant hope that the end of the world can be avoided. Nevertheless the dualism behind this view chooses to perfect the human spirit over nature.

The dominant New Testament view of nature's fate is its restoration alongside human restoration. Jesus' miracles in nature – restoring overtaxed fish populations (Lk. 5:4–10, Jn. 21:1–11), increasing the Earth's fertility through multiplication of fish and bread (Matt. 14:13–21; 15:29–39; Mk. 6:30–44; 8:1–10), enhancing its nourishment by changing water into wine (Jn. 2:1–11), or reestablishing supporting relations between species (fish provide the coin to pay state tax, Matt. 17:24–27) – restore nature's fertility. Those parts of nature resisting Jesus' call of fertility, like the withered fig tree, are removed (Matt. 21:18–22; Mk. 11:12–14, 20–26).

Jesus' miracles in nature reveal nature's divine character previously hidden, thus reestablishing nature's abundant fertility by which it expresses divine creation. The incarnation of God in human form is more than the creator's passion for creation, it argues for God's embeddedness in it. Water is no longer just water and bread is no longer just bread but they are aspects of the divine (Jn. 4:10–14, 6:51).

The agricultural setting of Jesus' parables is more than a reminder of his rural upbringing. The thorns, thistles, frustrated sowing and harvest also recall the cursed farmer and ground of Genesis' Adam and Cain (Gen. 3:17–18; 4:11–12). Jesus' words reinvigorate the farmer and fertilize the land, reversing Adam's curse, if both are receptive to his message (Matt. 13:8, 23, 30 and Mk. 4:8, 26–32). Farmers hesitant to plow – unwilling to trust God's reestablished commitment to man and soil – are not ready for the Kingdom (Lk. 9:62).

Numerous images of husbandry – chasing down lost animals (Matt. 18:12, Lk. 15:4), cultivating (Lk. 13:8), grafting (Rom. 11: 17–19), harvesting (Matt. 9:37; Jn.

4:35), plowing (Lk. 9:62; 1 Cor. 9:10), pruning (Jn. 15:2), reaping (Rom. 1:13; Rev. 14:14–16), sowing seed (Matt. 13:3; Jn. 4:36–37), shepherding (Matt. 25:32; 26:31; Jn.

10:2), threshing (Matt. 3:12) and watering (1 Cor. 3:6–8) – argue for human integration into nature. Human alienation from nature is over.

The fate of nature in Revelation includes its replacement (21:1–5). But there also are stronger images of nature’s lengthy transformation process alongside God’s purification of humanity. The scroll of history, a literal bridge of material continuity, stretches from the writer’s day into the future. Nature is not only increasingly renewed in Revelation but it is also enlisted as Christ’s ally in the fight against human evil (Rev. 12:16). Nature is to assist in bringing humanity to repentance (Rev. 16), and to end evil’s rule. Birds pick clean the bones of the wicked, the Earth swallows the Devil, and Satan as well as the wicked are locked up and burn forever in terrestrial lakes of fire (Rev. 19:17–21; 20:3; and 21:8).

Restored creation so appeals to God that God descends down to wed creation. God’s place is with creation (Rev. 21:3; 22:1–2). The vision of the end times in Revelation returns full circle back to the creation images of Genesis. The Creator, who vivified nature with his water and breath calling it good, returns in the end to embrace its goodness.

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See also: Anarcho-Primitivism and the Bible; Christianity

(3) – New Testament; Creation’s Story in the Hebrew Bible; Fall, The; Hebrew Bible.

Creatures' Release in Chinese Buddhism

The releasing of captive creatures (*fangsheng* in Chinese; *hojō-e* in Japanese) destined for slaughter is a popular Buddhist practice in China and the rest of East Asia. It exemplifies an emphasis on cultivation of compassionate and meritorious deeds that is characteristic of Chinese Buddhism; it also resonates with the virtue of nonviolence and the Buddhist sense of concern for the welfare of all creatures. The animals released are usually ones that can survive on their own in their natural habitat, such as birds, wild animals, and fish. Domestic animals are also sometimes donated to monasteries, thereby enabling them to live out their natural lifespans in peaceful environments within consecrated areas.

Traditionally in China many monasteries had pools in which lay devotees could drop fish and turtles they had received from local fishermen, thereby generating good karma for themselves and their families. Like other popular practices, the release of animals was largely motivated by the desire to accrue merit and receive positive karmic recompense. According to Zhuhong (1535–1615), an eminent Ming dynasty cleric and a leading proponent of the practice, the rewards for those who free animals include acquisition of honor and status, extension of one's lifespan, protection from disasters, rebirth in heaven, and enlightenment. Sometimes large ceremonies that feature release of creatures are also performed for the realization of communal goals, especially protection from natural disasters such as drought.

On occasion Chinese Buddhist associations organize mass releases of creatures, especially during popular Buddhist holidays such as an annual festival dedicated to Guanyin, the bodhisattva of compassion. As part of the ceremonies performed at such occasions, Buddhist monks recite the Three Refuges and Five Precepts on behalf of the released animals in the hope of helping them to accrue good karma and improve their chances for favorable rebirth. For some critics this sort of practice gives rise to ethical concerns. Although the release of creatures basically represents a sympathetic attitude toward animals, in effect it increases the demand for the capture of certain types of animals and fish, thereby merely benefiting local pet shop owners and fisherman but doing little to deal with the basic causes of animal suffering.

Scriptural basis for the practice of releasing of creatures can be traced back to canonical sources such as the *Brahma Net Scripture*, an apocryphal text composed in medieval China. This scripture calls for the liberation of living creatures and their protection from suffering and danger. The practice became popular in China during

the medieval period, when it was promoted by pious rulers such as Emperor Wu of the Liang Dynasty (r. 502–549). The emperor adopted a vegetarian diet and enacted laws that restricted the slaughter of animals. Other important factors included the examples set by influential monks such as Zhiyi (538–597), the founder of the Tiantai school. During his tenure as an abbot of monastery at Tiantai mountain, Zhiyi converted the local fisherman to adopt the practice of non-killing and persuaded the imperial government to issue a decree banning fishing along the seacoast close to his monastery.

Rituals for the release of creatures were also transmitted to Japan, where they received support from the medieval Japanese state. Pertinent rites were promoted in concert with a government-issued ban on the killing of animals during specific periods, and eventually they assumed the form of state ritual. Another Japanese innovation was the performance of these rituals at Shinto shrines, especially shrines that served as cultic centers for the deity Hachiman. In the course of time the services came to incorporate and mix elements from both traditions, thereby ceasing to be purely Buddhist rituals.

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See also: Buddhism (various); Chinese Traditional Concepts of Nature; Daoism.

Cronon, William

– See Environmental Ethics.

Crop Circles

Large, complex and intricate patterns have been found swirled into crop fields around the world on a noticeable scale since the early 1980s, though documented reports of related phenomena go back much further. Known generically as “crop circles,” their origin and purpose remains contested or mysterious. Despite many attempts to dismiss them all as the work of human artists, a dedicated coterie of researchers and followers, generically dubbed “cerealogists” (after Ceres, the Roman goddess of vegetation), believe they represent something much more mysterious.

The appearance of crop circles was first reported in 1980 in the Wiltshire area of southern England. Since then, the number, size, and diversity of formations has grown considerably, numbering several thousand in total, found as far apart as Australia and western Canada, though with a disproportionate amount still concentrated in rural England. Formations range in size from about a foot across to several hundred feet in diameter. The earliest reported formations were simple swirled circles and ellipses. By the mid-1980s these were joined by circles with numerous rings and satellites, and by 1990 included elaborate “pictograms.” When the phenomenon first began to attract serious attention in the 1980s, many believed the initially simple circles to be the result of unusual meteorological phenomena. Perhaps the most widely touted scientific hypothesis has been physicist Terence Meaden’s “plasma vortex” theory, which postulates that they are formed by the rapid downward collapse of a standing, electrically charged whirlwind.

But rapidly increasing numbers and evolving designs soon made Meaden’s hypothesis appear untenable. Tantalized by associated reports of glowing lights, strange sounds and other bizarre phenomena, everyone from UFO buffs to eminent scientists became involved in trying to unravel the mystery. The year 1990 saw a substantial leap in the evolution and complexity of the designs and an increase in media attention. For many, the mystery of crop circles was solved in 1991 when two English sexagenarians, Doug Bower and Dave Chorley, announced that they had invented the whole phenomenon as a joke and had themselves created over 250 formations. Despite this and the appearance of other hoax claimants over the years, crop formations of growing sophistication and size have continued to be discovered, leaving many convinced that there is an unexplained force at work.

Today one can find beautiful interlinked spirals, snowflake and spiderweb-like designs, fractals, and various more free-form shapes, often spectacular and sometimes demonstrating clear symbolism of a scientific or esoteric nature. Any sown crop can host formations, but they are most common in wheat, rye, corn, and barley fields,

though they have been found in wild grass and undergrowth. Many cases exhibit great complexity in the swirled lay of the crop, with little apparent stem damage, and scientific tests have reportedly found distinctive biological anomalies within the plants themselves.

Like other mysterious phenomena (see *Earth Mysteries*), reception of crop circle appearances has tended to be polarized between believers and debunkers. The latter group claims that all crop formations are done by hoaxers, though only a small percentage have been claimed by their erstwhile creators. The former group, meanwhile, resorts to a wide range of arguments to dispute this, including the fact that few, if any, circle-makers have ever been caught in the act, and that some circles are seemingly made in the space of a few minutes, most commonly at night, with the makers leaving no apparent tracks. Cerealogists have proposed several complementary hypotheses to explain the phenomenon. Besides Meaden's plasma vortex theory, crop formations have been interpreted as caused by lightning-induced electrical pulses; geomagnetic or telluric energies; collective psychokinesis; greetings, warnings, abstract doodles, or other communications from an extraterrestrial source; microwave transient radiation, possibly resulting as a by-product of secret military experiments; or as the trickster-like response of Gaia or of more place-specific Earth spirits to the environmental crisis.

Perhaps of equal interest to the question "what are they?" is the religious dimension of the crop circle phenomenon. The hundreds of individuals who have devoted months or years of their lives to visiting, researching, and pondering these figures constitute a subculture that finds meaning in mysteries, unanswered by the current scientific worldview, which they believe to be associated with the ecological crisis or with an impending transformation in human consciousness. Crop circles thus constitute an enigma that suggests that the Earth itself or some higher power is provoking us to wonder, to "question authority" and to "think outside the box." At the same time, the individuals who have been responsible for creating at least some of these formations have revived a tradition noticeably absent in the art world since the medieval era – that of the anonymous artist, in this case, a landscape or Earth artist whose work is intended to evoke a sense of mystery, or at least puzzlement, rather than to provide answers or assert one's individuality. Whatever their origins, crop circles have entered the creative mythmaking endeavor by which some humans are reconceiving their relationship to the Earth.

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See also: Earth Mysteries; UFOs and Extraterrestrials.

Cuero, Delfina (1900–1972)

“My name is Delfina Cuero. I was born in xamaca’ (Jamacha) about sixty-five years ago (about 1900).” So begins the classic as-told-to-story in *Delfina Cuero: An Account of Her Last Years and Her Ethnobotanic Contributions*, which offers a window into the Kumeyaay and their relation to the coastal regions of California in the early 1900s. Recorded and edited by anthropologist and ethnobotanist Florence C. Shipek, and originally published by Dawsons’ Book Shop in 1968, this book provides invaluable information on food collecting, hunting, and fishing along the coastal regions in San Diego County and Baja California. Most important, Delfina Cuero recounts in a precise manner the interdependent relationship between ritual and food resources, a characteristic of California Indians. One can trace the diminution of ritual through their forced displacement in the late 1800s and early 1900s.

“My father and mother left Mission Valley, they told me, when a lot of Chinese and Americans came and told them that they would have to leave. They did not own the land that their ancestors had always lived upon . . .” (Shipek 1991: 23). Delfina Cuero tells how her people survived from hand to mouth, belonging nowhere, owning nothing, exploited as the cheapest form of labor supply. “When the Indians were told to leave a place, they generally just headed farther into the mountains. Pretty soon they would tell me we had to move again” (in Shipek 1991: 26).

Delfina Cuero describes what plants, such as cactus, acorns, pine nuts, manzanita berries, wild sweet pea with red flowers, pumpkins, mint, sumac, and edible seaweed, had been gathered and where, and how they were prepared for food or medicine. She explains what fish and shellfish, such as starfish, crabs, octopus, abalone scallops, clams, lobster, and shrimp, were collected. She remembers only a few stories and relates them: accounts of the dipper in the sky, lying differently in the summer and winter; coyote and the two beautiful female crows; rabbit’s eyes which make one a good hunter; tattooing and nose piercing which helped one travel on a straight road when one dies; and the stinging red ants’ “good medicine.” She tells of great dreamers, of witches, of medicine people, herb women, “sucking doctors,” healing songs and their power.

A good one, after he had dreamed and received his power would go off and fast and dance by himself. Then he would quietly start healing anyone who happened near . . . Anyone who did that, never thought of themselves any more, only of the people who needed help (in Shipek 1991: 51).

What is remembered is an intimate relation with the land, sea and sky. What emerges in this story is not a bitterness, but a sense of tremendous sadness and loss

as a people are dislocated from their land, “When I was young, we had to move too much to plant anything. Always being told to leave, it was no use to plant” (Shipek 1991: 32).

There was another loss: ritual. Rituals – menstruation rituals, tattooing practices, the fire dance, the image dance, the death ceremonies – had taught people of life and its transitions. Delfina explains,

In the real old days, grandmothers taught these things about life at the time of a girl’s initiation ceremony, when she was about to become a woman. Nobody just talked about these things ever. It was all in the songs and myths that belonged to the ceremony. All that a girl needed to know . . . was learned at the ceremony, at the time when a girl became a woman (in Shipek 1991: 42–4).

But by the time Delfina was a young women, she recounts, “They had already stopped having the ceremonies before I became a woman, so I didn’t know these things until later” (Shipek 1991: 43). In a moving narrative, she tells how other young girls had the same trouble she did after she was married. One day she was picking greens, as food was hard to come by, and she says,

No one told me anything. I knew something was wrong with me but I didn’t know what . . . I had a terrible pain . . . I started walking back home but I had to stop and rest when the pain was too much. Then the baby came, I couldn’t walk any more, and I didn’t know what to do . . . I lost the baby (in Shipek 1991: 43).

Kumeyaay no longer had access to sacred places for ceremonies nor in their search for food could they maintain the ceremonial rhythm as a people. Most young mothers of her generation lost their first-born.

By the early 1960s when this story was told, the Kumeyaay no longer had access to familiar land for food resources, “I went out and hunted for wild greens and honey. Sometimes we found things. Lots of times we did not and we went hungry” (in Shipek 1991: 60). Nor did they have the ritual structure which expressed their interdependent relation of ritual and food resources. Yet we hear the echoes of a transformed continuity, a grateful reciprocity. Delfina Cuero says, “Nobody ever told me anything about God that I can remember. But I thank God all the time, especially for plants” (Shipek 1991: 53).

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See also: Ethnobotany; Traditional Ecological Knowledge among Aboriginal Peoples in Canada.

Cusa, Nicholas of (1401–1464)

The medieval philosopher and theologian, Nicholas of Cusa developed a concept of divine presence in the universe that can be mined for its rich spirituality, which is inclusive, rather than exclusive, of the natural world. Because he saw the world as an outward expression of God's very self, today he is being rediscovered as providing a theological basis for reverence for nature. God enfolds the universe in himself and unfolds himself in the world, Nicholas believed, and thus nature is not a fabricated object apart from God, created for human use, but it is God's self-externalization. Since this doctrine of divine immanence is held in tension with a doctrine of divine transcendence, or extreme otherness, Nicholas avoided both the hierarchy that is the source of much criticism among environmentalists today, as well as pantheism and monism. The variety of nature is a result of divine fecundity, not of the filling in of the slots of a hierarchy reflective of medieval society. Thus, his mystical approach promises a new way of religiously valuing nature.

Nicholas understood the world as fundamentally oriented toward God because of God's intimate presence there. It originates in divine self-manifestation and is destined for its own unique deification. Although it does not surrender its own independent being, it is nevertheless inextricably linked to God. His concept of divine immanence infuses the world with immeasurable value and gives rise to a Christian spirituality that can address the current ecological crisis.

Since the essence of God is the essence of all things, a characteristic of the natural order is unity. It is because the One reveals itself in multiplicity that the universe is indeed a *uni*-verse. The One God who is absolutely identical to each and every thing appears actually in variety. The divine manifestation of Unity into difference allows for the created order's existence as a united, singular thing. Thus, to divine Unity can be traced the self-identity of the diversity of things and their incorporation into the universe. The unfolding of God in the world and its enfolding in God means that there is an interdependence within the natural order itself. Metaphysically, the whole comes before the part; no aspect could exist without the other.

Nicholas offers a model of the universe that is traditional and yet innovative. God reveals himself to humanity as he reveals the natural order. The link between reverence for the divine and reverence for nature is inescapable. As an expression of the divine, the natural world has its own perfection that commands our respect and care. Hence, "natural" never refers to an order apart from God; nature is never severed from grace. Nicholas of Cusa's model of God offers a promisingly Christian, yet modern, understanding of God that suggests new ways of thinking about nature.

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See also: Christianity (5) – Medieval Period.

Cyborgism

In *Simians, Cyborgs, and Women: The Reinvention of Nature*, Donna Haraway invokes the ironic image of the cyborg as a tactic to disturb gender essentialism in both mainstream Western culture and feminism. Haraway's embracing of the cyborg figure is born of a concern that certain uses of female imagery associated with nature tend to essentialize women, and construct "women's experience" in a unitary fashion. To essentialize is to take a characteristic or part of something as descriptive of the whole phenomenon, as in taking an idea of what a woman is like, perhaps "nurturing" or "closer to nature," and equating it with what all women are like, ignoring the other characteristics of individual women, such as personality, culture, race, class, sexual orientation, etc. Haraway's image of the cyborg transgresses such essentialist ideas of what women are like, by disturbing expectations of tidy categories. Cyborgs are transgressive boundary creatures, monsters, ambiguities of organism and machine, neither necessarily one gender nor the other. The image of the cyborg demonstrates and signifies the intertwining of technology and organic bodies in humans, transgressing the categorical boundaries that would name humans as either cultural or natural beings. Using the image of the cyborg communicates the idea that humans are both organic creatures and cultural beings dependent on technology. The cyborg figure undermines belief in the expected explanations provided by biology, evolution, and technology, as it questions the boundaries between living and technological systems. Where do our science and technology end, and our selves begin? The cyborg has the potential to stimulate social change, Haraway argues, as an ironic image that suggests a model of the person as being connected, responsible, and diverse, rather than an independent ego.

Haraway concludes her "Cyborg Manifesto" with the words "I would rather be a cyborg than a goddess" (1991: 181), but this should not be taken to mean that she rejects all feminist spirituality and ecofeminism. On the contrary, she speaks well of ecofeminist and spiritual activities such as the demonstrations against nuclear power in which Starhawk, a prominent American witch, participates. Haraway objects not to ecofeminism or feminist spirituality *per se*, but to any unquestioning identification of women with nature, and use of the image of Mother Nature or Mother Earth in the essentialist forms familiar within mainstream culture. Haraway suggests that women would do better to revision "the world as coding trickster with whom we must learn to converse" (1991: 201), rather than seek a primal mother in nature.

Haraway self-identifies as ecofeminist, yet maintains a critical stance regarding ecofeminism as well as feminist spirituality. Following the logic of the cyborg, she

does not choose to accept or reject these completely, but continues questioning. Her work suggests that the question is wrongly posed to imply that women, to be effective feminists or environmentalists, must choose between science and religion or spirituality. Women should not abandon science, Haraway maintains, because it is too powerful to ignore: it will continue to overwhelm our culture if we do not change it from within. Science is a powerful myth in Western culture, and she suggests challenging it through adopting the ironic political myth of cyborgism. Haraway's work explains and illustrates a view shared by many ecofeminists, that science and myth, a form popularly thought of as relegated to religion and spirituality, cannot be separated.

Marsha A. Hewitt criticizes Haraway's cyborgism for offering an escapist abstract vision of emancipation that lacks an awareness of the concrete conditions of women's oppression, and that is appropriate only to middle-class academic feminists living in late industrial capitalist society. Haraway's writing may not be accessible to lay audiences, but it has proven influential in feminist and ecofeminist theory, notably in the work of Stacy Alaimo (1994), Catriona Sandilands (1999), and Noël Sturgeon (1997).

Barbara Jane Davy

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See also: Ecofeminism (various).

D

Dalai Lama (1935–)

The fourteenth Dalai Lama, Tenzin Gyatso, was born in the Amdo region of eastern Tibet in 1935. Recognized at age six as the reincarnation of the thirteenth Dalai Lama, he was brought to central Tibet, where he began his formal education. Dalai Lamas traditionally are invested with full temporal power at age eighteen, but due to the Chinese invasion of Tibet in 1950 the date was moved up by two years.

For the next nine years the Dalai Lama attempted to cooperate with Tibet's new Chinese rulers, but following an abortive popular uprising in March 1959, the Dalai Lama fled to India. Once there, he formed a government-in-exile headquartered in Dharamsala, Himachal Pradesh. Since then, he has become one of the world's most widely recognized religious leaders, and in 1989 he received the Nobel Peace Prize for his work in attempting to promote a peaceful resolution to the crisis in Tibet with the Chinese government. He has authored numerous books on Buddhist philosophy in both Tibetan and English, and also has a keen interest in current social issues, particularly human rights and the environment.

In his writings on the environment, the Dalai Lama stresses the Buddhist notion of interdependence (Sanskrit: *pratitya-samutpada*), according to which all things come into being in dependence upon causes and conditions and change in every moment in dependence upon causes and conditions. The world is conceived as an infinitely complex network of interconnected relations, and there is no clear dividing line between oneself and the environment. This is also linked to the Buddhist doctrine of no-self (*anatman*), which holds that there is no permanent, enduring essence or soul, and that individuals should be viewed as continuums, changing in every moment, continually influenced by and influencing the surrounding environment. In this view, each individual is intimately connected with the dynamic system of the environment, and so one's innate concern for oneself becomes extended to the entire universe.

In light of these ideas, the Dalai Lama contends that a concern for the environment is a natural outgrowth of Buddhist teachings, and he points to the fact that Tibetans have traditionally maintained a sustainable approach to natural resources. That this is due primarily to Buddhist beliefs is open to debate, however, because prior to the Chinese invasion and the subsequent introduction of modern technology, Tibet was a low-technology society that was sustained mainly by primitive agriculture and animal husbandry.

Moreover, the Dalai Lama's own engagement with environmental themes is not evident prior to the mid-1980s, when his first public remarks on the environment were made in several speeches, which were later published by the government-in-exile. Since

this time, however, he has shown an increasing concern with environmental issues, and his plan for a future Tibet envisions it as an environmentally aware country that practices sustainable agriculture, a “zone of peace” in which there would be no armed forces or weapons of mass destruction.

While the Dalai Lama is widely revered among his people, both in exile communities and in Tibet itself, there is little evidence that his pronouncements on the environment have significantly altered Tibetans’ attitudes toward the environment or their day-to-day practices. Visitors to Dharamsala frequently remark at the fact that the roadsides are filled with garbage, and there is little visible evidence in other Tibetan refugee communities of widespread concern for environmental issues. Among educated Tibetans, however, there has been a more positive response, and his environmental pronouncements have also struck a responsive chord among his followers overseas. In the past two decades the Dalai Lama has emerged as one of the world’s leading Buddhist thinkers in this area.

John Powers

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See also: Bon (Tibet); Buddhism – Engaged; Buddhism – Tibetan; Environmental Ethics; Religious Studies and Environmental Concern; Tibet and Central Asia; United Nations’ “Earth Summits”; Yunnan Region (Southwest China and Montane Mainland Southeast Asia).

Daly, Mary (1928–)

Known for her fierce wit and creative wordplay, Daly is widely regarded as one of the most important thinkers of the radical feminist movement. With doctorates in religion, philosophy and theology from Notre Dame and the University of Fribourg, her work is deeply rooted in existentialist and Catholic philosophical traditions, though since 1975 she has publicly disavowed Christianity as irredeemably misogynistic. Daly's impact on feminist thought can be traced to her insistence that radical feminism cannot be content with social, political or psychological change, but requires fundamental shifts at the level of language, spirituality, and ultimately ontology. While she has moved beyond and/or rejected much of the theology of her most influential book, *Beyond God the Father*, its understanding of the sacred as Be-ing, the movement in which women move out of patriarchal constructs into authentic existence, remains a touchstone in her work.

As early as 1978 and increasingly in her later work, Daly identifies “inherent connections between women, especially Wild Women, and all Elemental/Natural Reality” (Daly 1998: 7), and is a prominent voice in discussions of ecofeminist spirituality. She contrasts “biophilia,” or love of life in all its elemental forms, with “necrophilia,” the death-loving ethos that drives contemporary patriarchal societies worldwide. In *Gyn/Ecology* she catalogs atrocities committed on women's bodies, and in *Quintessence* links these practices with planetary rape and the “necrotechnologies” that pass as creative science. Often charged, especially by postmodern feminists, with essentialist views of gender, Daly insists that the distinction between biophilia and necrophilia is not based on sexual difference. Nonetheless it is the spiritual – indeed metaphysical – journey of *women* toward biophilic Be-ing that remains her unwavering focus and the telos of her radical vision.

Kate McCarthy

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See also: Biophilia; Ecofeminism (various); Feminist Spirituality Movement.

Dance

Dancings – the diverse and ever-changing activities of dance, dancing, and dancers – have been associated with religions and “nature” from pre-history to the present day. Paleolithic images of human dancers with animal masks enliven caves in south-western France and northern Spain. Petroglyphs and pictographs of ritually dancing hunters and planters appear later not only in Europe, but in north and southern Africa, Scandinavia, the Americas, Australia, and the Far East. Pottery, statuary, sarcophagi, weavings, and paintings attest to such dancings worldwide as well.

Much of contemporary secular theatrical and social dancings owe their allegiance to religious “nature” dancings. *Kagura* dancings of Shintoism spawned the court dance *Bugaku*, the classical dance/theatre *Noh*, and the popular theatre of *Kabuki*. Chinese theater developed from Chinese fertility and ancestral rituals practiced by Daoists and Confucianists. Greek dancings and theater are said to have evolved from the rituals of Dionysus, god of wine, fertility, and vegetation. The influence of animaland plant-inspired dancings from West Africa continues in the dance halls and clubs of the United States, with retentions of particular gestures and movements, and names like “the monkey,” the funky “chicken,” and “the grapevine step.”

In the United States, deeply spiritual, although not necessarily institutionally religious, theatrical dancers in various eras have “gone back to nature” to discover what they have considered to be the essence of dancings. Among these are Isadora Duncan (1877–1927) who scandalized audiences by removing her shoes, her corset, and the clasps from her hair to dance more “naturally” on the concert stage, embodying the movements of waves, weather, and wind. Doris Humphrey (1885–1958) developed an entire movement vocabulary based on the rise and fall of breathing. In the last thirty years, Anna Halprin has made “planetary dances,” Simone Forti has embodied animals, and Joanna Haigood has choreographed dancings with live bees or butterflies. Jennifer Monson is following the migration patterns of whales and birds, dancing outdoors in fields, on beaches, and in national parks. Eiko & Koma have blended influences from Shintoism, Buddhism, Marxism, *butoh* and German expressionism to create dancings for stages, caravans, and rivers. In the Sierra Nevada Mountains of California, Project Bandaloup dances outdoor aerial choreography, soaring on ropes from the crest of Yosemite’s El Capitán.

Religious “nature” dancings – defined for now as those dancings done in relationship with manifestations of “nature” – have occurred in a variety of ways since ancient times based on where and when the dancers dance, what they wear, and whom or what they invoke, supplicate, propitiate, embody, communicate or join with, defend themselves

against, or are entered by. People might dance in relationship with the deities, spirits, or powers of animals such as deer or whales; plants like corn or manioc; weather, including rain, snow, thunder or lightning; geographical features like mountains or bodies of water; or astronomical entities including the milky way, sun, or moon. Dancers might carry, clothe themselves with, or make musical instruments from “nature:” skins, furs, feathers, flowers, leaves, fronds, bones, horns, claws, shells, and/or masks of “nature” beings. They might dance at “natural” sites considered sacred such as springs or outcroppings of rocks.

People might dance ritually at times that mark the cyclic reappearance of “natural” passages, celestial or biological. Dancings performed at transitions such as seasons, solstices, equinoxes, conception, birth, puberty, or death reinforce for the dancer and the community a visceral understanding of the interrelationship between cosmological, earthly, human, and/or “supernatural” spheres. Through certain dancings, particular peoples might also link the creation and destruction of the universe with the sowing, growing, and harvesting of the Earth’s plants and animals, including or excluding humankind.

Evidence of religious “nature” dancings exists in Hinduism, Buddhism, Shintoism, Daoism, West African Religions, Indigenous Religions, and to a less widely acknowledged extent in Christianity, Islam, and Judaism. Some of these dancings are more obvious in their relationships with “nature.” Others are less visible. For example, the Hindu god Siva Nataraja, Lord of the Dance, is the ultimate dancing eco-cycler. With his matted hair symbolizing the sacred river Ganges, the sun’s flames encircle him as he dances the creation and destruction of the universe. Less frequently pointed out in Hinduism is that the three classic heroes in the epic Ramayana are animal deities. Hanuman, the monkey general, Sugriva, king of the monkeys, and Jambava, king of the bears also represent “nature’s” beneficent powers, and they bring order to the universe while they help Rama to vanquish the demon king. Disguised under the veneer of Roman Catholic saints are the dancings of the orixas, manifestations of “nature” brought from Africa by the Yoruba people, among others, to the New World. For example, in the Brazilian religion of Candomblé, Yemoja (Yemayá) is both goddess of the sea and associated with the Virgin Mary, sharing, as Robert Farris Thompson writes, “the qualities of sacred love, faith, and purity” (Thompson 1984: 77). Likewise, Xangô (Shàngó), god of thunder, who is associated with the summer solstice, is equated with Saint Barbara, whose murderers God killed with lightning.

Ritual *cham* dancings performed by Buddhist monks include not only the Black Hat Ceremony, but the *Ngonpae Don*, dance of the hunters, a purification rite that appears in nearly every Ladakhi play in northern India; the Snow Lion Dance, performed to secure peace and prosperity; and the *Sha Cham*, dance of the sacred stag. In Daoism and

Confucianism, dancings were an essential practice in the ancestor and nature worship of the Chow (Zhou) Dynasty for nine hundred years. Hexagram XVI in the *I Ching* explains that, “The enthusiasm of the heart expresses itself involuntarily in a burst of

song, in dance and rhythmic movement of the body” enabling people to “draw near to God” (*I Ching* 1967: 68). Ritual dancings provided a pathway linking past and present for “The ruler who revered the Divinity in revering his ancestors became thereby the Son of Heaven, in whom the heavenly and the earthly world met in mystical contact” (*I Ching* 1967: 68).

Best known among Shinto dancings is *kagura*, danced to revitalize and prolong human and divine life. *Kagura* was originally performed by Shinto priestesses to honor Ame-no-Uzume, goddess of dancings. For it was through her divine dancing that she lured the sun goddess Amaterasu from her cave, retrieving the world from darkness to light. Less known are other Shinto “nature” dancings including *dengaku*, performed to encourage agricultural fertility, and *furya*, designed to ward off natural disasters and diseases.

Sun-dancing practices of the Lakota Sioux have been widely studied. Less known are those of the cult of the Egyptian pharaoh Akhenaton, or the Inti Raymi, still practiced in Andean Peru. Little known is that Sufi sheikhs also represent the sun, whirling slowly in the center of a Mevlana solar system, surrounded by spinning dervishes orbiting like planets around them. Rarely considered are the Christian medieval dancings of the *pilota*, in which a ball passed among dancers was linked both to the movement of the sun and the resurrection of Christ during Easter celebrations. Rarer still in the context of “nature” dancings is that the French King Louis XIV not only called himself the Sun King, but choreographed himself as the most important celestial being among those lesser, his subjects. Much has been written about the so-called “rain” dancings of the Hopi and other indigenous peoples. Less has been written about the water-drawing ceremony of Judaism, which was held at harvest time when prayers for rain were offered and performed in the Temple during the seven days of the festival of Tabernacles. Still less has been mentioned of the *orans* (praying) figures of Roman catacomb frescoes that portray what could be called early Christian rain dancings in the biblical story of Daniel 3. As Theodoret wrote in ca. 430, “They [Shadrach, Meshach, and Abednego] summon to the dance both heaven and the waters above the heavens, and the powers that circle round the divine throne” (in Taylor 1976: 80–1) to put out the flames of the fiery furnace that threaten their lives. Likewise, the animal and “spirit” dancings of indigenous peoples have been widely described in the context of “nature” by various scholars, but those of Europeans – for example, the ballet dancings of swans (animals) and sylphs (spirits) – are rarely considered with the same lens. Religious dancings can serve a variety of functions in relationship with “nature.” Along with other ritual activities, certain dancings can be a conduit for divine energy or power, providing a relational through-way between beings and worlds, between the seen and unseen. Sufi dancers, for example, turn holding their right arms high, palms up to receive power from heaven, which travels through their bodies, and into their left arms held low, palms down, facing the Earth. According to the Indian theory of aesthetics, for Hindus, works of art, including dancings, create a bridge from the formless ground of the cosmos, through the many forms of life, to that which is beyond form. Leslie

E. Sponsel reports that for indigenous Hawaiians, “A mystical force, *mana*, permeates everyone and everything, including people, plants, animals, fish, stones, landforms, sea, wind, clouds, and rain. Prayers, chants, dances (*hula*), offerings and rituals are among the ways of channeling *mana* and communicating with the spirits” (Sponsel in Grim 2001: 166).

“Nature” dances are often used to convince deities and spirits to act on behalf of the dancer and/or the dancer’s community. Mohan Khokar writes that in India,

In preserved [traditional] societies, dancing is universally recognized as an exercise akin to prayer, in which context it becomes a profound and intense experience. The objective is to communicate with the chosen divinity with a purposefulness that moves the divinity to respond (Khokar 1987: 18).

In a presentation on “Andean Cosmology, Biodiversity, and Regeneration,” Julio Valladolid said of Andean peoples, “We don’t pray; we dance” (Conference on Indigenous Traditions and Ecology, Cambridge, MA, 15 November 1997). In this way, rain dances and those that encourage the fertility of people and fields are vital to invoke the deities to effect transformational and practical change.

Religious “nature” dances are also used to teach the cultural history, traditions, ethics, and values of peoples in relationship with “nature.” They intensify beliefs about and experiences with “nature” psycho-physically. They can strengthen communal bonds among, or hierarchical divisions between, those who are dancing in activities practiced in relationship with “nature.” In many circumstances, they impart a sense of empathic connection with and reciprocal responsibility in the triangular relationship between deities, “nature,” and human beings. As Gregory Cajete writes, for Puebloan peoples, they are essential to “maintain the balance of all essential relationships of the world.” Referring to animal dances in particular he writes, “These symbolic acts of respect and remembrance reinforce communal relationship to animals that gave life for the community’s benefit. It is a way of remembering to remember relationship” (Cajete in Grim 2001: 627).

This “remembering to remember relationship” requires a responsibility on the part of humans to co-create order, harmony, and balance in the universe. It is a responsibility restricted not only to indigenous religions, but present in “nature” dances of many, perhaps all, religions. In the *Gemma Animae*, the hermit Honorius describes a Christian dance in the twelfth century that “remembers” cosmological relationships,

They thought of the rotation of the firmament; in the clasping of their hands the union of the elements; in the sounds of song the harmony of the planets; in the gestures of the body, the movements of the celestial bodies; in the clapping of the hands and the stamping of feet the sound of thunder; something which the faithful imitate, converting all to the true service of God (Honorius in Taylor 1976: 90).

There are many questions to investigate in the discussion of “dances,” “religions,” and “nature.” Among them, is there a correlation between those people who still practice religious “nature” dances and good ecological stewardship? What responsibility do people have now to co-create their universe? Is there a correspondence between the

rise of scientific inquiry in the West and the divisions of dancings into categories of “folk” (rural) and “classical” (urban) genres? Is the presence or absence of “nature” dancings a barometer for environmental health of an area? What happens psycho-physically and environmentally when “nature” dancings are restricted or removed from a people? What might be regained if they were recovered, reintroduced, or made new?

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See also: Buddhism – Tibetan; Candomblé of Brazil; Confucianism; Daoism; Hinduism; Indian Classical Dance; Lakota Sun Dance; Planetary Dance; Raves; Spiral Dance; Washat Religion (Drummer-Dreamer Faith).

Daoism

Daoism, or Taoism, is an English word that refers to a wide variety of beliefs and practices that originated in China and are now found, in varying forms, across the world. These various movements have at their heart an understanding of Dao as the deep wellspring of life, and the human condition as inextricably folded into this matrix of cosmic creativity. The staggering diversity and often conflicting values of these movements preclude any attempt at defining a unitary Daoist view of nature. Furthermore, Daoism has taken different cultural forms in China, Indonesia, Korea, Japan, India, Brazil and Canada, to name some countries where Daoist religious groups are currently active. Still further complicating the situation is that Daoism was nearly destroyed in the People's Republic of China in the latter half of the twentieth century, and the scholarly work of understanding Daoism has been undertaken largely in countries that have had a historically colonialist interest in China, such as Japan and France. Despite these problems and with all these caveats in mind, it is possible to make some tentative generalizations about the core motifs and values that have historically influenced Daoist attitudes and behaviors toward the natural environment.

The concept of Dao originated in China during the period of political disunity that saw the gradual dissolution of the Zhou empire (1122–256 B.C.E.) and was accompanied by the flourishing of an intellectual culture whose question was: Where is the Way? This question was answered on a wide variety of levels – ethical relationships, political organization, moral self-cultivation, and ritual order – that were seen as being mutually related. There was, however, one seminal text that penetrated right to the heart of this deeply humane question by stating that the Way is to be sought in the very vitality of nature, in the wholly natural and wholly spontaneous transformation and flourishing of the world. The *Daode jing* (Scripture of Way and Power, fourth century B.C.E.) or the *Laozi* (after its mythical author) is the key text around which the variety of Daoist traditions continue to construct themselves by means of written commentaries, ritual recitation, and meditation. The worldview of this text implies a certain redundancy to the title of this present essay: there can be no “Dao and Nature” as though these were two discrete categories of being (cf. Creator and the created in Christian thought). Dao is no more – and no less – than the flourishing of nature itself.

This natural spontaneity translates a Chinese term *ziran* (literally, “self-so”) that is the basis of the Modern Standard Chinese term for nature (*ziranjie*). In *Daode jing* 25 we read: “Humans model Earth / Earth models Heaven / Heaven models Dao / Dao models natural spontaneity (*ziran*).” The three basic dimensions of existence (human,

earthly, and heavenly) are thus folded into the natural evolution of the Way, which proceeds without reference to any wholly external power or transcendent force.

The earliest Daoists sought a practical experience of nature’s creative power, manifested in the spontaneous arising and decaying of things in a ceaseless flow of activity (*yang*) and receptivity (*yin*) within the energetic field (*qi*) that constitutes the material of the universe. And they sought to model their lives after this natural spontaneity, making *ziran*, or naturalness, the core value of their philosophy. In the *Daode jing* this core value entails a strategy of non-(artificial) action (*wuwei*) as a means to achieve the optimal state of harmonic integration between the various dimensions of life.

Many modern environmentalists, who see in this text the principles of conservation, organic harmony and respect for nature that they themselves espouse, have enthusiastically adopted the *Daode jing*, together with selected parts of the tradition. Although it is foolish, not to say blatantly anachronistic, to suggest that early Daoists were environmentalists, nonetheless it is easy to see why the text and its traditions should be so appealing given present environmental concerns.

Indeed, there is much support for the view that early Chinese thought is deeply embedded in the natural world. Sarah Allan persuasively explains how the root metaphors of Chinese culture are derived from images of nature or explained in terms of natural phenomena. The term Dao, for instance, is analogous to the flowing of water. It provides irrigation-life for the ten thousand things (*Daode jing* 62), and like water it is soft, weak, pliable, yielding, and ultimately unstoppable. On the other hand, the attitude that seemingly equates Daoism (or at least the classical, textual Daoism) with an environmentally friendly naturalism, has not been universally shared among modern commentators. Although it is impossible to think Daoism without thinking nature, the Daoist *problematik* calls into question the nature of nature itself and offers many seemingly conflicting and paradoxical answers to the question of the human relationship with, and our being embedded within, the natural world. This is entirely appropriate as the root understanding of *dao* as the spontaneous and creative unfolding of nature is, for Daoists, fundamentally a concept that is also dark, obscure and mysterious.

Table 1: Five Phases

<i>Phase</i>	<i>Direction</i>	<i>Color</i>	<i>Season</i>	<i>Orb</i>	<i>Emotion</i>	<i>Sense</i>	<i>Flavors</i>
Wood	East	Green	Spring	Left	Anger	Smell	Sour
Fire	South	Red	Summer	Right	Happiness	Seeing	Bitter
Earth	Center	Yellow	Harvest	Center	Worry	Touch	Salty
Metal	West	White	Autumn	Right	Grief	Smell	Sour
Water	North	Black	Winter	Left	Anger	Smell	Sour

Correlative Thinking

During the Han dynasty (206 B.C.E. to 220) a basic cosmological system was established that remains at the heart of the traditional Chinese worldview. This basic microcosm/ macrocosm relationship can be seen in such early Han dynasty cosmological texts as the *Huainanzi* in which the four seasons, five phases, nine directions and 360 days of heaven are correlated with the four limbs, five inner organs, nine orifices, and 360 joints of human beings.

As traditional Chinese medicine developed, a more mature and technical understanding of the relationship between the various cosmic-human dimensions of life emerged. This cosmology is based on the concept of a universe of multiple, interrelated dimensions of *qi*-energy that resonate synchronically with each other and diachronically in a sequence of five phases.

Although there is nothing specifically Daoist about this correlative thinking, it lies at the heart of all traditional Chinese thinking. Moreover, since the body is the pre-eminent field or domain in which Daoist practices take place, it is important to understand how the functioning of the body is located within, and synchronically affected by, the constantly transforming phases of the natural world. In the fully realized or perfected (*zhen*) Daoist, the boundaries between self and world are completely porous; it is as though one is fully transparent to the cosmic location in which one is situated.

This holistic or correlative way of thinking is also emblematic of Daoist texts and practices, in which words and gestures signify and actualize objects of a wholly other dimension. For instance, in Highest Clarity (*Shangqing*) Daoist texts, meditation practices developed that sought to visualize astral deities dressed in certain colored clothes, inhabiting certain organs of the body at certain times of the year. Here the energy cycles of the body are fully aligned with the seasons, the stars, and the colors in an elaborate and highly technical exercise of meditative harmonization. It is important to appreciate how this multi-dimensional all-pervasive way of thinking threads itself throughout the Daoist worldview. In this way, heavens, the Earth, and the body are woven together into the seamless fabric of the spontaneously self-creating *dao*.

Nature in Daoist Community

The most important form of communal Daoism is known as the Way of the Celestial Masters (*Tianshi dao*), a movement that allegedly originated with a series of revelations from the divinized Laozi to a man known as Zhang Ling in 142. We have some insight into how, historically, this communal movement functioned in its earliest days through a text the Celestial Masters adopted and transmitted, known as the *One Hundred and Eighty Precepts* (*Yibaibashi jie*). Some twenty of the precepts are directly relevant to the preservation of the natural environment, including injunctions against chopping

down trees without cause, poisoning lakes and rivers, drying marshes, disturbing birds and other animals.

In answer to the question of why the earliest Daoist communities were concerned with the state of the natural environment, Kristofer Schipper has drawn the conclusion that the natural environment functioned as a kind of sanctuary, in the sense of a sacred space, and in the sense of a place of refuge from the human world. Although the *Precepts* have been replaced by other texts as the code for Daoist priests today, their influence is evident in that discussions as to the contemporary Daoist approach to nature are couched in terms of the person-within-the-world, not in terms of “nature” or “environment” as though these terms referred to some external entity or object with which we have to do. In this light the respect for the environment indicated in the *One Hundred and Eighty Precepts* indicates a respect for the life of the communal body and for the life of the individual.

Nature and the Body

From the earliest days of the Daoist tradition, the practice of nourishing the vitality of the body has been a central concern, a concern that was elaborately developed in the Daoist tradition of inner alchemy (*neidan*). The foundations of internal alchemy practices can be found in the cosmogony set forth in chapter 42 of the *Daode jing*: “Dao gives birth to One; One gives birth to Two; Two gives birth to Three; Three gives birth to the ten thousand things.” This cosmogony accounts for the gradual decay and dissipation of energy within the cosmos. The aim of the alchemist is to reverse this dissipation by reverting or countering the cosmogonic process, a process further elaborated in terms of the cyclical mutation of yin into yang and yang into yin, as symbolized in the 64 hexagrams of the *Yijing*. Briefly, the aim is to arrive, through a series of purifications, at the decoction of undifferentiated yang and yin-energy (the “Two” of the cosmogonic sequence), and to fuse these two primal energies into the undifferentiated Oneness of the original Dao.

Alchemists such as Ge Hong (283–343) had sought to arrive at this stage through an “external,” operative or laboratory alchemy (*waidan*) based on the use of mercury sulphide or cinnabar (HgS). In one version, cinnabar was heated seven or nine times to produce a pure form of mercury, representing pure yin energy. In a second version, mercury (pure yin) was extracted from cinnabar, and lead (pure yang) from native lead. These two were then fused together, thus reversing the cosmogonic division of One into Two. Many Daoist traditions, however, viewed laboratory alchemy as distinctly inferior to internal forms of alchemy and meditation, reflecting the overall priority of the inner landscape as the field of operations for Daoist practices.

Within the landscape of the body, pure yin (mercury) is imaged as the pure energy of the kidneys (corresponding to water), and pure yang (lead) as the pure energy of the heart (corresponding to fire). The elixir is decocted in the three “cinnabar fields”

(*dantian*) of the body. By correctly directing the essence (*jing*) and the *qi* of the body through a series of internal meditations, the adept produces an “immortal embryo,” the pure distillation of the primal energy from which the adept was created. Having been appropriately nurtured and nourished, the embryo is birthed through the head in a complete inversion of the physical birth of the adept.

This alchemical tradition embodies a seemingly contradictory attitude toward nature. On the one hand, life is seen as good and worthy of preservation, but on the other hand, this life is preserved paradoxically by reversing the process that seems to govern it. It must be remembered however, that this reversal is not to be understood as an eradication or as a wholly negative movement. Rather it has the character of a recursion.

Contemporary Daoist Cultivation

China’s rapid industrialization in the late twentieth century has led to widespread environmental degradation throughout the country. The Chinese Daoist Association issued a declaration on global ecology in 1995 that firmly placed the practices of immortality and self-cultivation in the context of the flourishing of nature: one may not cultivate oneself unless one also cultivates one’s environment. This is entirely consistent with the ancient traditions in which Daoist masters retired to the mountains to cultivate their bodies, and in which energy practices and other forms of self-cultivation pay close attention to the rhythms of nature. The recent environmental devastation has, however, made this “ecological” aspect of Daoist cultivation more urgent than ever. The declaration further proposed using traditional Daoist monasteries and hermitages located in mountain areas as bases where the environment and the body could be properly cultivated. Field research in China indicates that this proposal has met with some success as temples and their environments have been restored since the relative liberalization of religion in 1979, but paradoxically this success has come at the price of increased tourism and development in the mountain areas. The Daoist mountain complex at Mt. Qingcheng, Sichuan Province, now a UNESCO World Heritage Site, is not only full of tourists year round, it is also full of signs warning them to respect the natural environment.

Conclusions

It is not easy to sum up the Daoist view of nature and environment in a few swift sentences, because the tradition is so rich and complex in terms of the appropriation of nature by adepts and the metaphysical imaging of the operation of nature. There are, however, three key principles that tend to distinguish the Daoist view of nature:

the surprising recursivity of nature, the practical correlativity of all dimensions of life, and the textuality of the fabric of the Dao.

The recursivity of nature means that nature is evolving in a way that continuously folds back on itself and, as it were, gathers itself up in its hands. Nature is always pregnant with itself in an irrepressible superfluity of vitality and power. This is the theoretical explanation for the fractal-like identity of microcosm and macrocosm in which the overarching patterns of creation, transformation and decay are imaged in both the tiniest and the grandest processes of the cosmos.

The practice of correlativity is thus the way in which the human mind fits together the many different dimensions of life so as accurately to reflect the interlocked and interconnected trajectories of evolution (*dao*) that are woven together into the fabric of time. This fabric, symbolized spatially as a rotating canopy that is suspended from the central ridgepole of the cosmos, contains many different dimensions of being, but they are all made from the same *qi*. This vibrates in particular forms and frequencies to configure the various arrays of matter and energy in the universe, all of which resonate sympathetically with each other.

The Daoist tradition, moreover, holds that the deep mysteries of nature are available to the properly initiated adept in the form of texts and talismans that decode the very nature of the Dao for us. These texts are the symbolic revelation of the root processes of the Dao, processes that are ordinarily veiled from our understanding, and which have the appearance of magic to the uneducated. The whole of nature itself, however, may be understood as an ongoing activity of communication or *dao* – whose alternate meaning is “to speak.” In this drama whose script

– the script of nature – is continuously evolving, we are both privileged actors and mere fragments of selfconsciousness. But this is no Hegelian drama that is aiming toward a final purpose of absolute selfcommunication. It is a drama that is spontaneously rewriting itself in unpredictable, marvelous and deeply mesmerizing ways.

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See also: Chinese Traditional Concepts of Nature; Confucianism; Zhuangzi.

Darré, Walther (1895–1953)

The man most representative of the “green” wing of National Socialism is Walther Darré, who served as Minister of Agriculture for a decade during the Third Reich. Born Richard Walther Oskar Darré on 14 July 1895 to a middle-class German family living in Buenos Aires, Argentina, at the age of 10 he was sent to finish his primary school education in Germany. He later enrolled in the German Colonial School at Witzenhausen and began his formal agricultural studies which he completed after serving in World War I.

In the 1920s Darré became involved with various associations relating to agriculture and husbandry, but generally avoided larger political affiliations. The *Wander- vögel* phenomenon was then still prevalent, with its emphasis on rural values and interaction with the outdoors through climbing and hiking, and Darré was exposed to influences from this as well as input from agricultural collectives and sects such as the Artamanen. In tandem with their attempts to live in greater harmony with nature, many of these *völkisch* groups eschewed Christianity in favor of neo-heathenist ideals. While Darré shared similar anti-Christian and anti-materialist beliefs, he does not seem to have been inclined toward the mysticism or romanticism that were common in such circles. He was a strong proponent of Nordic racialism and maintained contact with groups such as the Nordic Ring that promulgated these ideas. His biological interpretation of Nordicism was not entirely synonymous with more extreme National Socialist beliefs, but instead focused on a preservationist, defensive position. Darré’s racialism was “ecological” in the sense that it was an effort to safeguard precious racial characteristics that he understood as threatened in an increasingly urbanized and unnatural world.

Darré’s two major works were *Das Bauerntum als Lebensquell der nordischen Rasse* (*The Peasantry as the Life-Source of the Nordic Race*, 1929) and *Neuadel aus Blut und Boden* (*A New Nobility of Blood and Soil*, 1930). These present the core of his thinking, which remained unchanged over his lifetime. He maintained that the basis of a healthy racial aristocracy depended upon and drew from a thriving peasantry, whose direct link to the Earth was essential. This extended beyond pure biology when Darré extolled the “inner sense” of the Germanic peasant as a gift from the gods which could only properly develop away from the cities. These conceptions were summed up in the evocative phrase “*Blut und Boden*” (Blood and Soil). Despite the fact that it was originally coined by a German Socialist Party member, this slogan would become practically a cliché in the early years of the Third Reich. In Darré’s books he presents a positive vision of this rooted peasantry, and it was only in later commentaries (e.g.,

the brief forewords to later printings of his books) that he opportunistically added more negative and explicitly antiJewish remarks.

Darré began working with the National Socialists at the end of the 1920s, having gained their attention due to his influence among the farmers and the agricultural sector. Following Darré's crucial success at garnering the peasant vote for the NSDAP, Hitler appointed him the Minister of Agriculture and Peasant Leader in June 1933 after coming to power. It was only at this point that Darré formally joined the party.

Darré quickly set about to improving conditions for farmers in the Reich. Through his efforts the *Erbhofgesetz* or Hereditary Farm Law was enacted which would protect small and medium-sized farm holdings and ensure they be passed down from generation to generation within families. A *Reichsnährstand* or National Food Estate was also formed. This was a corporatist/syndicalist entity that set quality standards for agricultural products, created direct lines of distribution, and ordained equitable prices to the benefit of the farmers. The old town of Goslar in the Harz region was declared a national "peasant capital," and this became the seat of Darré's operations. In addition to the large annual rallies held there, a publishing arm called Blut und Boden Verlag was formed which issued books on the importance of peasant history, culture, and racial typology. Darré edited a monthly journal, *Odal* (the title is a reference to the Germanic rune meaning "hereditary property" – this symbol also officially designated the *Erbhöfe*, or hereditary farms), that actively promoted his peasant ideology, and wrote articles during his early years in office on ecological topics as well as on the importance of small-scale farming.

With his vocal opposition toward imperialism and the *Führerprinzip*, Darré was not a typical NSDAP leader. In contrast to the party functionaries, he was a social visionary with a more revolutionary outlook – he leaned toward decentralization and was generally opposed to Germany waging wars of aggression, which he predicted would spell catastrophe for the peasantry. By the latter half of the 1930s increasing conflicts erupted between Darré's staff and other factions of the government. His last significant achievement was the Entailed Estate Law of 1938. He had also begun initiating measures to promote changeovers to organic farming – a move that was perceived as reckless or unrealistic with the onset of the war. Another key party member who supported environmentally sound and holistic approaches to agriculture was Rudolf Hess, but the latter's ill-fated solo flight to England in 1941 caused such tendencies to be looked upon with grave suspicion among other party leaders. "Biodynamic" farming methods were seen as inherently connected to Rudolf Steiner, the pedagogical theorist and mystic whose Anthroposophy Society and Waldorf schools had been officially shut down as part of the wider crackdown by the regime upon any nonaligned and potentially subversive groups; as a result, those who campaigned for such methods (including some of Darré's staff) were persecuted. In an effort to downplay associations to Steiner's "biodynamic" practices, Darré advocated the use of the term "organic farming," which has since become commonplace.

Increasingly isolated from the rest of the party leadership, Darré was demoted in 1942 from his position as minister and replaced by a staff member more loyal to Hitler. Although some of his ideas found their way into the doctrines of the SS, Darré never regained his influence on national policies; by this time Germany was in full war-production mode and the proponents of standard industrialized agriculture and artificial fertilizers had won out.

After the war, Darré underwent two trials and was eventually sentenced to seven years' imprisonment, primarily for his involvement in the Race and Settlement Office which managed deportations and relocations of non-German farmers in areas of occupied Poland. Given an early release in 1950 on account of failing health, he spent his final years authoring articles on his old themes of the peasantry and the necessity of organic farming. He died on 6 September 1953 and is buried in Goslar.

Notwithstanding his clashes with other government leaders, Darré was generally a popular figure during his years as Minister of Agriculture. His approaches often met with positive interest from abroad, and he has also been cited as an influence on the "Soil Association" organic farming movement that was blossoming in Britain at the time. More recently his legacy has received renewed attention due to the work of ecology historian Anna Bramwell. There are also many sympathizers who see him as a role model for an alternative and pragmatically oriented "Green Nazi," a racial revolutionary who is opposed to the illness and alienation caused by the excesses of modern capitalism in an industrialized, urbanized, and globalized modern world.

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See also: ATWA; Evola, Julius; Fascism; Heathenry – Asatru; Odinism; Steiner, Rudolf – and Anthroposophy.

Darwin, Charles (1809–1882)

Charles Darwin, the British naturalist and author of various books and essays on natural history, ranks among the most influential scientists of all time. His theories regarding the evolution and the distribution of species, articulated in *On the Origin of Species* (1859), revolutionized biology during the nineteenth century, and have exerted considerable sway over a wide range of scientific and other intellectual activities ever since. Arguably, no modern concepts of nature have been as widely influential, or as controversial, as Darwin's.

Darwin's Views of Nature

Although the study of nature made great strides in the century before Darwin, attempts to develop a systematic theory of organic development, such as Jean Baptiste Lamarck's assertion of the inheritance of acquired characteristics, had been poorly received. Therefore, in many ways the natural history Darwin encountered at the start of his career was grounded in theological assumptions. It was widely held that God had directly created a natural realm that was abundant, benevolent, and stable over time. The tasks of natural history were to describe and catalog natural phenomena, and in doing so to glorify nature's Creator by recognizing the marvelous ingenuity that went into its design. Darwin would undo the cozy relationship between science and theology by developing a thoroughly naturalistic explanation of evolutionary development. Such has been the influence and explanatory power of his work that subsequent generations of scientists would speak of their work as being grounded in Darwinian assumptions.

Darwin built his natural philosophy from various sources: his lifelong passion for observing natural phenomena, established scientific traditions (particularly in botany, zoology, and geology), and assorted ideas derived from his reading in philosophy, economics, and literature. Although subsequently referred to as "Darwinism" (i.e., as if a single theory), according to historian Ernst Mayer, Darwin's mature thought accounted for two distinct biological processes, transformation in time and diversification in space, using a "bundle of theories" (Mayr 1991: 35–7). Taken as a whole, Darwin's "bundle" emphasizes dynamism, spontaneity, and novelty alongside the cruelty of natural process wherein the early death of many individuals, and even entire species, was inevitable.

First and foremost, Darwin argued that nature was neither static nor subject to repeating cycles, but in a constant process of change. Drawing upon recent geological theories, he assumed that the Earth was much older than previously thought, perhaps

by many orders of magnitude. This allowed nature the time to work through processes of change that were incrementally slow. He next asserted that similar species could be traced to common ancestors, or more generally, that all organisms were descended from a few simple species. This meant that the history of life looked like a branching tree – a process that started with a few forms that subsequently diversified. Darwin felt that variations in organic beings were rather small, but accumulated changes wrought over time could bring about conspicuous change, or transmutation. He also believed that the multiplication of species, and thus the plenitude of nature, was driven by the tendency of all species to produce more offspring that could be supported by the food supply and space in a given area.

Darwin's most daring, and subsequently controversial concept was natural selection. He argued that because of various competitive pressures there was a constant "struggle for existence" among individuals of a species. Some individuals, because of slight variations that allow them to better compete for resources and mates, are better able to produce healthy offspring and thus are naturally selected to survive. In this, Darwin made an analogy to "artificial selection," or the way that breeders of animals and gardeners in domestic situations culled individuals with undesirable traits and promoted the breeding of individuals with desirable ones. He also recognized the influence of other factors such as "sexual selection," or the way that animals choose their mates.

Although immediately recognized as a set of theories to be reckoned with, Darwinism was not immediately or completely accepted within the scientific community. For example, many who accepted the idea of organic evolution remained skeptical of Darwin's mechanism of natural selection and posed alternatives such as neoLamarckianism. Thus it took genetics and population biology in the early twentieth century, the so-called "modern synthesis," to secure Darwin's position as the major theorist of modern biology.

Darwin's Religious Views

Darwin's religious views have been the subject of scholarly and public interest from the time he became famous in the mid-nineteenth century. His voluminous paper trail (including published works, correspondences, notebooks, and other materials) can both assist and vex this line of inquiry in that it offers up evidence that is simultaneously intimate, detailed, and ambiguous. Darwin had freethinkers and religious dissenters in his family tree, notably his deist-evolutionist grandfather Erasmus, but as a youth he was exposed to, and seems to have accepted, a good deal of prevailing Anglican theology. As a young man, he read the works of natural theologians, and also studied with, and greatly admired, two devout Anglican naturalists, John Henslow and Adam Sedgwick. Darwin even considered a religious career for a while, in part, because it would have afforded him time to study natural history. Writings from his famous trip aboard the

H.M.S. Beagle, show the influence of natural theology. For example, while observing the rich variety of life in tropical rain-forests, he described feelings of “wonder, admiration, and devotion which fill and elevate the mind” (Darwin 1958: 91).

After returning to England, Darwin began to rethink some of the reigning assumptions about natural history that dominated his era. In particular, he began to question whether the explanation for the “economy of nature” proffered by natural theology (that God had created everything in its place) was intellectually satisfying. In searching for an alternative, Darwin was encouraged by Hume, who had challenged the design argument in his famous *Dialogue Concerning Natural Religion*; Comte, who felt that theological thought should be replaced by a “positive” philosophy that emphasized scientific laws; Wordsworth’s poetry and prose, which encouraged intellectuals boldly to rethink the relationship between humanity and nature; and Malthus’s *Essay on the Principle of Population*, which argued that natural populations are irreducibly subject to food shortages that lead directly to struggle and competition. In regards to the last issue, some scholars argue that Darwin, unable to square notions of a good God with the centrality of pain and suffering in the natural process, gave up theism in any meaningful sense during or soon after the development of his theories in the late 1830s.

Others locate his apostasy in later life. James Moore, for example, argues that Darwin only gives up on the basic elements of Christian theology after the death of his daughter in 1851, for reasons related to his bitterness over the doctrine of eternal damnation. And still others find in Darwin’s public and personal writings a lifetime struggle with the concept of God – a theological “muddle,” that wavers between theism, deism, and doubt. Intellectual historians such as Dov Ospovat argue that a type of rational theism underwrote Darwin’s naturalism well into his career. And biographers like Moore note that many members of Darwin’s immediate family and social propriety endorsed religious belief. Clearly, Darwin is ready to call himself an “agnostic” in his *Autobiography* written in the late 1870s. The term, coined by his colleague T.H. Huxley, expresses a formal and perhaps irresolvable feeling of doubt about foundational questions such as the existence of God.

Also noteworthy were Darwin’s later writings that tried to put religious belief in evolutionary perspective. In his main work on human evolution, *The Descent of Man* (1871), he argued that religion (like language and morality) probably first arose as a by-product of the development of the human mind. Building from faculty psychology, Darwin assumes that mental attributes, like limbs or instincts, emerged because they gave adaptive advantage to their hosts. The earliest type of religion, “belief in the unseen or spiritual agencies,” emerged when basic human mental faculties of “imagination, wonder, and curiosity, together with some power of reasoning” had developed enough to speculate crudely about the surrounding world and the nature of existence. Later more elaborate systems of gods and monotheism developed out of these basic attributes. Although Darwin recognizes the complexity of religion and calls belief in an Omnipotent God “ennobling,” he is also quick to point out how religion often got misdirected into superstition and barbaric practices. Cursory as these speculations were,

they set the tone for later thinkers, notably the sociobiologists, who argue that certain ethical ideals, such as altruism, and collective religious activity can be understood in terms of natural selection and adaptive advantage.

General Reactions to Darwinism

As might be anticipated for such a major figure, attempts to situate Darwin's views of nature into a wider intellectual framework have varied, and these diverse reactions have contributed to Darwin's decidedly mixed reception in religious quarters. Some interpreters regarded Darwin as the scientist who decisively extended the mechanistic philosophy of the Enlightenment to the biological realm. In doing so, according to scholars such as Michael Ghiselin and Richard Lewontin, he was the key figure in advancing the anti-metaphysical positivism of modern science and the general cause of secular thought. Critics of these tendencies, such as cultural critic Jacques Barzun, accordingly, decry Darwinism as a potent form of reductionism and materialism that contributes to the disenchantment of the natural world.

Historian Daniel Worster regards Darwin's ideas as a major impetus to modern ecological thinking and thus the reassertion of an essentially organic view of nature. Darwinism has also been celebrated for its ability to unify broad fields of knowledge and inquiry. Philosopher Ernst Cassirer saw in Darwinism a biological version of the idea of universal historical development that elsewhere had more metaphysical (Hegel) and political (Marx) manifestations. Conversely, others find in Darwin's work a stark recognition of the precariousness of life and the primacy of "chance and necessity" in cosmic history. For some, notably philosopher Jacques Monod, this has been a liberating insight, and an escape from the subjective illusions and teleological views of natural order of previous eras. Many intellectuals, however, have echoed historian Bert Loewenberg's assessment that Darwinism carries a profoundly unsettling message of randomness and purposelessness, and thus contributes to the modern sense of angst and pessimism.

Political evaluations have found ideological implications in Darwinism; however these have varied considerably. Many on the left saw in the general idea of evolution, particularly when linked to the idea of social progress, a mandate for reform, even revolution. On the other hand, other leftist critics regard Darwinism as a kind "natural" apologetics for Victorian notions of individualism, marketplace competition, and other forms of social coercion and thus highly suspicious. Often these criticisms will echo anarchist Peter Kropotkin in rejecting Darwin's emphasis on the brutal struggle in favor of a naturalism that emphasizes synergy and cooperative effort. Conservatives have been mixed as well. Many condemned Darwin for undermining traditional social and religious institutions, whereas others, notably American social theorist William

Graham Sumner, used Darwinism to legitimize laissez faire free-market capitalism.

In terms of literary analysis, Stanley Edgar Hyman regards Darwin as the author of a cosmic tragedy wherein all struggles against all, and most of the characters die painfully and young. In contrast, literary critic William Scheik and others recognize traces of a cosmic epic in Darwin's work, a sweeping narrative whose final act emphasizes the emergence of a self-aware humanity that better comprehends its history and controls its own destiny.

Religious Reactions to Darwinism

Darwin's ideas directly challenged one of the bulwarks of theistic theology, the design argument, which held that the intricacies and beautiful structures found in the natural world were evidences of the creative action of an intelligent and omnipotent deity. As opposed to the action of an external power (a supernatural entity that intervened into history and arranged matter directly) Darwinism implied that forces resident within nature, the "laws" of biology, working over a vast time scale, were capable of producing the variety and intricacy of the natural world. Was "God" necessary to this process? Darwin himself was ambiguous on this issue. Although he used language like "Creator" in his works, notably in the first edition of *On the Origin of Species* (1859), many regarded supernaturalism superfluous to his natural philosophy. Darwinism also challenged the centrality of a humanity created in "the image" of God and given dominion over the natural world by arguing that human beings were simply another type of primate with no special claims or status. In ethics as well, Darwin's focus on struggle, fitness, and reproductive success seemed to give sanction to aggressive, even violent, impulses at the expense of classic virtues such as love, benevolence, and selflessness. Finally, Darwinism figured prominently in a larger intellectual revolution that historicized scriptural traditions and, for many, threatened their authority as molders of culture. Thus, since their introduction, Darwin's main ideas have been understood as potent and pointed challenges to religious thought.

The major Western traditions have responded in markedly diverse ways to Darwinism. Some groups have tolerated and assimilated evolutionary views, in part or in total. These include liberal and moderate Protestant denominations, most Jewish groups, and after a long period of suspicion, Roman Catholicism. Also many of the alternative religions of the Western tradition, various esoteric, occult, and New Age groups, have adopted evolutionary thinking. Many of those who accept evolution, however, maintain teleological and theistic beliefs that are arguably extraneous to Darwin's scientific views. Other religious groups have utterly rejected Darwinism as irreligious and immoral. In the United States, antievolutionism has been a conspicuous feature of the conservative wing of Protestantism since the latter half of the nineteenth century. Helped by famed orator and politician, William Jennings Bryan, various fundamentalist groups mounted an aggressive anti-evolution campaign in the wake of World War I that culminated in the Scopes Trial of 1925. Post-Scopes, anti-evolutionists have con-

tinued to challenge textbooks that include Darwinism, press for equal time in school curricula for biblically based interpretations of natural history, and disseminate alternatives to Darwinism such as creation science. Popularly, the anti-evolution movement has actually grown in strength over that time, and some current polls indicate that 45 percent of the American population utterly rejects the idea of evolution. In other major world religions, comparable patterns have developed. Thus various attempts to reconcile evolutionary thought with, for example, Islam, Hinduism, and Buddhism, must be measured against antimodernist, traditionalist, and fundamentalist movements that tend to view Darwinism as a subversive “Western” influence that denies supernaturalism or other traditional beliefs.

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See also: Creationism and Creation Science; Malthus, Thomas Robert; Science; Scopes Trial.

Death and Afterlife in Robinson Jeffers and Edward Abbey

The poem “Vulture” by Robinson Jeffers expresses a religious perspective on death and afterlife that is pervasive in contemporary green spirituality. In it, Jeffers reflects on an occasion when, while lying on his back in a desert canyon in the Southwestern United States, he was once mistaken for carrion by a vulture.

Vulture

I had walked since dawn and lay down to rest on a bare hillside
Above the ocean. I saw through half-shut eyelids a vulture wheeling high up in
heaven,

And presently it passed again, but lower and nearer, its orbit narrowing,
I understood then

That I was under inspection. I lay death-still and heard the flight feathers
Whistle above me and make their circle and come nearer...

. . . how beautiful he looked, gliding down

On those great sails; how beautiful he looked, veering away in the sea-light over the
precipice. I tell you solemnly

That I was sorry to have disappointed him. To be eaten by that beak and become
part of him, to share those wings and those eyes –

What a sublime end of one’s body, what an enskyment; what a life after death.

Another author with a deep love of the desert was the novelist Edward Abbey. Abbey’s reflections on death are reminiscent of Jeffers, whom he admired. For Abbey, an authentic death is unaccompanied by life-prolonging technology. It is when the body is left unpolluted so that it can properly reunite with and nurture the Earth. Reflecting on a tourist who died alone in the desert, he had good luck – I envy him the manner of his going: to die alone, on a rock under the sun at the brink of the unknown, like a wolf, like a great bird, seems to me very good fortune indeed. To die in the open, under the sky, far from the insolent interference of leech and priest, before this desert vastness opening like a window onto eternity – that surely was an overwhelming stroke of good luck . . . [Today], I think of the dead man under the juniper on the edge of the world, seeing him as the vulture would have seen him, far below and from a great distance. And I see myself through those cruel eyes

. . . I feel myself sinking into the landscape, fixed in place like a stone, like a tree, a small motionless shape of vague outline, desert-colored, and with the wings of imagination look down at myself through the eyes of the bird, watching a human figure that becomes smaller, smaller in the receding landscape as the bird rises into the evening (1968: 186, 190).

In their own ways Jeffers and Abbey expressed their sense of belonging to a sacred Earth and a feeling of reverence toward the processes of life and death. In so doing they also rejected the prevalent monotheisms of their day, which obviate the fear of death through belief in supernatural rescue from it.

This kind of attitude, which sacralizes a natural death and views artifice in death as a desecrating act, can be found in a wide variety of contemporary green subcultures. It is expressed in conversation, poetry, art, and song. It has also been implemented through burial practices perceived to be natural. Before his death in 1989, for example, in his last act of desert consecration, Abbey arranged for his body, unpolluted by toxic embalming fluids, to be spirited away and illegally buried in his beloved, sacred desert. In death Abbey would nourish and return to his beloved and sacred desert landscape.

Bron Taylor

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See also: Abbey, Edward; Black Mesa; Church of Euthanasia; Earth First! and the Earth Liberation Front; Green Death Movement; Jeffers, John Robinson; Radical Environmentalism.

Deep Ecology

Norwegian philosopher Arne Naess (b. 1912) coined the term “Deep Ecology” in 1972 to express the idea that nature has intrinsic value, namely, value apart from its usefulness to human beings, and that all life forms should be allowed to flourish and fulfill their evolutionary destinies. Naess invented the rubric to contrast such views with what he considered to be “shallow” environmentalism, namely, environmental concern rooted only in concern for humans. The term has since come to signify both its advocates’ deeply felt spiritual connections to the Earth’s living systems and ethical obligations to protect them, as well as the global environmental movement that bears its name. Moreover, some deep ecologists posit close connections between certain streams in world religions and deep ecology.

Naess and most deep ecologists, however, trace their perspective to personal experiences of connection to and wholeness in wild nature, experiences which are the ground of their intuitive, affective perception of the sacredness and interconnection of all life. Those who have experienced such a transformation of consciousness (experiencing what is sometimes called one’s “ecological self” in these movements) view the self not as separate from and superior to all else, but rather as a small part of the entire cosmos. From such experience flows the conclusion that all life and even ecosystems themselves have inherent or intrinsic value – that is, value independently of whether they are useful to humans.

Although Naess coined the term, many deep ecologists credit the American ecologist Aldo Leopold with succinctly expressing such a deep ecological worldview in his now famous “Land Ethic” essay, which was published posthumously in *A Sand County Almanac* in 1948. Leopold argued that humans ought to act only in ways designed to protect the long-term flourishing of all ecosystems and each of their constituent parts.

Many deep ecologists call their perspective alternatively “ecocentrism” or “biocentrism” (to convey, respectively, an ecosystem-centered or life-centered value system). As importantly, they believe humans have so degraded the biosphere that its life-sustaining systems are breaking down. They trace this tragic situation to anthropocentrism (human-centeredness), which values nature exclusively in terms of its usefulness to humans. Anthropocentrism, in turn, is viewed as grounded in Western religion and philosophy, which many deep ecologists believe must be rejected (or a deep ecological transformation of consciousness within them must occur) if humans are to learn to live sustainably on the Earth.

Thus, many deep ecologists believe that only by “resacralizing” our perceptions of the natural world can we put ecosystems above narrow human interests and learn

to live harmoniously with the natural world, thereby averting ecological catastrophe. It is a common perception within the deep ecology movement that the religions of indigenous cultures, the world's remnant and newly revitalized or invented pagan religions, and religions originating in Asia (especially Daoism, Buddhism, and Hinduism) provide superior grounds for ecological ethics, and greater ecological wisdom, than do Occidental religions. Theologians such as Matthew Fox and Thomas Berry, however, have shown that Western religions such as Christianity may be interpreted in ways largely compatible with the deep ecology movement.

Although Naess coined the umbrella term, which is now a catchphrase for most non-anthropocentric environmental ethics, a number of Americans were also criticizing anthropocentrism and laying the foundation for the movement's ideas at about the same time as Naess was coining the term. One crucial event early in deep ecology's evolution was the 1974 "Rights of Non-Human Nature" conference held at a college in Claremont, California. Inspired by Christopher Stone's influential 1972 law article (and subsequent book) *Should Trees Have Standing? – Toward Legal Rights for Natural Objects*, the conference drew many of those who would become the intellectual architects of deep ecology. These included George Sessions who, like Naess, drew on Spinoza's pantheism, later coauthoring *Deep Ecology* with Bill Devall; Gary Snyder, whose remarkable, Pulitzer prize-winning *Turtle Island* proclaimed the value of place-based spiritualities, indigenous cultures, and animistic perceptions, ideas that would become central within deep ecology subcultures; and the late Paul Shepard (d. 1996), who in *The Tender Carnivore and the Sacred Game*, and subsequent works such as *Nature and Madness* and the posthumously published *Coming Back to the Pleistocene*, argued that foraging societies were ecologically superior to and emotionally healthier than agricultural societies. Shepard and Snyder especially provided a cosmogony that explained humanity's fall from a pristine, natural paradise. Also extremely influential was Edward Abbey's *Desert Solitaire*, which viewed the desert as a sacred place uniquely able to evoke in people a proper, non-anthropocentric understanding of the value of nature. By the early 1970s the above figures put in place the intellectual foundations of deep ecology.

A corresponding movement soon followed and grew rapidly, greatly influencing grassroots environmentalism, especially in Europe, North America, and Australia. Shortly after forming in 1980, for example, leaders of the politically radical Earth First! movement (the exclamation point is part of its name) learned about Deep Ecology, and immediately embraced it as their own spiritual philosophy. Meanwhile, the green lifestyle-focused movement known as bioregionalism also began to embody a deep ecology worldview. Given their natural affinities it was not long before bioregionalism became the prevailing social philosophy among deep ecologists.

As a philosophy and as a movement, deep ecology spread in many ways. During the 1980s and early 1990s, for example, Bill Devall and George Sessions published their influential book, *Deep Ecology: Living as if Nature Mattered*; Warwick Fox in *Toward a Transpersonal Ecology* linked deep ecology with transpersonal psychology, thereby

furthering the development of what is now called ecopsychology; David Rothenberg translated and edited Arne Naess's important work, *Ecology, Community and Lifestyle*; and Michael E. Zimmerman interpreted Martin Heidegger as a forerunner of deep ecology, thus helping to spark a trend of calling upon contemporary European thinkers for insight into environmental issues. Many deep ecologists have complained, however, that the postmodern thinking imported from Europe has undermined the status of "nature," defined by deep ecologists as a whole that includes but exists independently of humankind.

Radical environmentalist activists, including the American co-founder of Earth First!, Dave Foreman, and the Australian co-founder of the Rainforest Information Centre, John Seed, beginning in the early 1980s, conducted "road shows" to transform consciousness and promote environmental action. Such events usually involve speeches and music designed to evoke or reinforce peoples' felt connections to nature, and inspires action. Often, they also include photographic presentations contrasting intact and revered ecosystems with degraded and defiled lands.

Some activists have designed ritual processes to further deepen participants' spiritual connections to nature and political commitment to defend it. Joanna Macy and a number of others, including John Seed, for example, developed a ritual process known as the Council of All Beings, which endeavors to get activists to see the world from the perspective of nonhuman entities. Since the early 1980s, traveling widely around the world, Seed has labored especially hard spreading deep ecology through this and other newly invented ritual processes. The movement has also been disseminated through the writings of its architects (often reaching college students in environmental studies courses); through journalists reporting on deep ecology-inspired environmental protests and direct action resistance; and through the work of novelists, poets, musicians, and other artists, who promote in their work deep ecological perceptions. Recent expressions in ecotourism can be seen, for example, in the "Deep Ecology Elephant Project," which includes tours in both Asia and Africa, and suggest that elephants and other wildlife have much to teach their human kin.

Deep Ecology has been criticized by people representing social ecology, socialist ecology, liberal democracy, and ecofeminism. Murray Bookchin, architect of the anarchistic green social philosophy known as Social Ecology, engaged in sometimes vituperative attacks on deep ecology and its activist vanguard, Earth First!, for being intellectually incoherent, ignorant of socioeconomic factors in environmental problems, and given to mysticism and misanthropy. Bookchin harshly criticized Earth First! co-founder Dave Foreman for suggesting that starvation was a solution to human overpopulation and environmental deterioration. Later, however, Bookchin and Foreman engaged in a more constructive dialogue. Meanwhile, socialist ecologists maintain that deep ecology overemphasizes cultural factors (worldviews, religion, philosophy) in diagnosing the roots of, and solutions to, environmental problems, thereby minimizing the roles played by the social, political, and economic factors inherent in global capitalism.

Liberal democrats such as the French scholar Luc Ferry (1995) maintain that deep ecology is incapable of providing guidance in moral decision making. Insofar as deep ecology fails adequately to recognize that human life has more value than other life forms, he argues, it promotes “ecofascism,” namely the sacrifice of individual humans for the benefit of the ecological whole, what Leopold termed “the land.” (Ecofascism in its most extreme form links the racial purity of a people to the well-being of the nation’s land; calls for the removal or killing of nonnative peoples; and may also justify profound individual and collective sacrifice of its own people for the health of the natural environment.) Many environmental philosophers have defended Leopold’s land ethic, and by extension, deep ecology, against such charges, most notably one of the pioneers of contemporary environmental philosophy, J. Baird Callicott.

Although some ecofeminists indicate sympathy with deep ecology’s basic goal, namely, protecting natural phenomena from human destruction, others have sharply criticized deep ecology. Male, white, and middle-class deep ecologists, Ariel Salleh maintains, ignore how patriarchal beliefs, attitudes, practices, and institutions help to generate environmental problems. Val Plumwood and Jim Cheney criticize deep ecology’s idea of expanding the self so as to include and thus to have a basis for protecting nonhuman phenomena. This “ecological self” allegedly constitutes a totalizing view that obliterates legitimate distinctions between self and other. Moreover, Plumwood argues, deep ecology unwisely follows the rationalist tradition in basing moral decisions on “impartial identification,” a practice that does not allow for the highly particular attachments that often motivate environmentalists and indigenous people alike to care for local places.

Warwick Fox has replied that impartial and wider identification does not cancel out particular or personal attachments, but instead, puts them in the context of more encompassing concerns that are otherwise ignored, as when for example concern for one’s family blinds one to concerns about concerns of the community. Fox adds that deep ecology criticizes the ideology – anthropocentrism – that has always been used to by social agents to legitimate oppression of groups regarded as subor nonhuman. While modern liberation movements have sought to include more and more people into the class of full humans, such movements have typically not criticized anthropocentrism as such. Even a fully egalitarian society, in other words, could continue to use anthropocentrism to justify exploiting the nonhuman realm.

In response to the claim that deep ecology is, or threatens to be, a totalizing worldview that excludes alternatives and that – ironically – threatens cultural diversity, Arne Naess responds that, to the contrary, deep ecology is constituted by multiple perspectives or “ecosophies” (ecological philosophies) and is compatible with a wide range of religious perspectives and philosophical orientations.

Another critic, best-selling author Ken Wilber, argues that by portraying humankind as merely one strand in the web of life, deep ecology adheres to a one-dimensional, or “flatland” metaphysics (1995). Paradoxically, by asserting that material nature constitutes the whole of which humans are but a part, deep ecologists

agree in important respects with modern naturalism, according to which humankind is a clever animal capable of and justified in dominating other life forms in the struggle for survival and power. According to Wilber, a “deeper” ecology would discern that the cosmos is hierarchically ordered in terms of complexity, and that respect and compassion are due all phenomena because they are manifestations of the divine. In the last analysis, for Naess, it is personal experiences of a profound connection with nature and related perceptions of nature’s inherent worth or sacredness, which give rise to deep ecological commitments. Naess believes such commitments may be derived from a wide variety of ultimate premises, religious and philosophical, so as to form a particular ecosophy. Ecosophies that identify themselves as part of the Deep Ecology Movement are consistent with the eight-point, Deep Ecology Platform, which Naess developed with George Sessions in 1984.

Although controversial and contested, both internally and among its proponents and its critics, deep ecology is an increasingly influential green spirituality and ethics that is universally recognized in environmentalist enclaves, and increasingly outside of such subcultures, as a radical movement challenging the conventional, usually anthropocentric ways humans deal with the natural world. Its influence in environmental philosophy has been profound, for even those articulating alternative environmental ethics are compelled to respond to its insistence that nature has intrinsic and even sacred value, and its challenge to anthropocentrism.

Its greatest influence, however, may be through the diverse forms of environmental activism that it inspires, action that increasingly shapes world environmental politics. Not only is deep ecology the prevailing spirituality of bioregionalism and radical environmentalism; it also undergirds the International Forum on Globalization and the Ruckus Society, two organizations playing key roles in the anti-globalization protests that erupted in 1999. Both of these groups are generously funded by the San Francisco-based Foundation for Deep Ecology, and other foundations, which share deep ecological perceptions.

Such developments reflect a growing impulse toward institutionalization, which is designed to promote deep ecology and intensify environmental action. There are now Institutes for Deep Ecology in London, England and Occidental, California, a Sierra Nevada Deep Ecology Institute in Nevada City, California, and dozens of other organizations in the United States, Oceania, and Europe, which provide ritual-infused experiences in deep ecology and training for environmental activists. It is not, however, the movement’s institutions, but instead the participants’ love for the living Earth, along with their widespread apocalypticism (their conviction that the world as we know it is imperiled or doomed), that give the movement its urgent passion to promote earthen spirituality, sustainable living, and environmental activism.

Bron Taylor Michael Zimmerman

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See also: Abbey, Edward; Bioregionalism; Ecopsychology; Ecosophy T; Environmental Ethics; Naess, Arne; Radical Environmentalism; Seed, John; Shepard, Paul; Snyder, Gary; Wilber, Ken.

Deep Ecology, Institute for

If religion is “that dimension of human experience engaged with sacred norms [and] ultimate concerns, as David Chidester (1987: 4) has argued, then the Institute for Deep Ecology (IDE) can be viewed as a religious movement that reveres the Earth and promotes environmental activism in its defense. The Institute’s website states that deep ecology is “a philosophy based on our sacred relationship with Earth and all beings; an international movement for a viable future; a path for self-realization; (and) a compass for daily action.” Without specifically defining what is meant by “sacred,” the site indicates that it seeks to “honor spirit” by acknowledging that the relationship between humankind and the natural world is a matter of ultimate concern and that to speak of the interdependence of all beings in the natural world is to engage in a description of ultimate reality.

Such understandings undergird the organization’s mission to promote “well-being of the whole web of life.” In 2002 the Institute’s website stated that it does this through ecological values and actions. At our core is a recognition of and reverence for the interdependence and inherent value of all life. To nourish these values in ourselves and the world, we provide opportunities for inquiry and practice through workshops, publications, and support networks. We seek to encourage and empower people to do good work in their home communities.

These intentions lead to actions, some of which have a marked ritual nature (such as the Council of All Beings), and are designed to foster awareness of the interconnect- edness of all things, and to derive promote strategic environmental action.

The institute was initially co-founded in 1992 by Fran and Joanna Macy, in close association with Bill Devall, Stephanie Kaza, Elias Amidon, Elizabeth Roberts and others, and is situated in Boulder, Colorado. A 1993 brochure advertising its first Summer School provided the following description:

The Institute for Deep Ecology Education . . . sponsors regional and national train- ings, consults on deep ecology curriculum and programs, and works to build coalitions among educators, activists, and others involved in this work. Its goal is to bring the deep ecology perspective to the environmental debates of our time.

By 1996 the organization had moved to Occidental, California, shortening its name to the Institute for Deep Ecology. In its Spring 1998 newsletter, the Institute’s descrip- tion stated:

The Institute for Deep Ecology (IDE) advances a world view based upon humanity’s fundamental interdependence with all life forms – a philosophy commonly known as deep ecology. IDE seeks to heal the contemporary alienation from self, community,

and the earth by encouraging a fundamental shift in the way we experience nature and respond to the environmental crisis.

The Institute provides transformative, action-oriented educational resources to a diverse constituency. In particular, IDE hosts trainings that bring community organizers, educators, psychotherapists, clergy, and others together with a large, multifaceted faculty of prominent environmentalists.

This second description reflects a shift toward experiential work. In addition, certain therapeutic claims are made concerning the work of the Institute (“to heal the contemporary alienation from self, community, and the Earth

. . .”). In these shifts, it is possible to detect the influence of ecopsychology, and also, a more explicit articulation of the spirituality common within many deep ecological groups around the world.

For the first several years, the Institute sponsored workshops and trainings in deep ecology. Many of the trainings featured various teachers of deep ecology or environmental activists who ascribed to the principles of deep ecology. In the late 1990s, the Institute went through a self-evaluation process that resulted in a shift from small, workshop-styled trainings to larger conferences co-sponsored with other progressive groups, such as the Physicians for Social Responsibility, the Cultural Conservancy, Global Exchange, New College of California, Youth for Environmental Sanity, and the Indigenous & Non-Indigenous Youth Alliance. This marked increasing coalition-building around social justice issues. The 2000 Summer Conference held in San Francisco, for example, was entitled “Globalization or Earth Wisdom? Creating Just and Sustainable Communities.” Workshops and panel presentations included discussions of the negative impact of globalization on indigenous and poor people, as well as on the Earth’s natural variety. With such efforts the Institute has sought to broaden its influence and expand its efforts to include the human community as part of the ecological community by applying deep ecology principles of interconnectedness and interdependence to the political and social spheres. In this way, it has at least implicitly responded to criticisms that deep ecology tends toward indifference toward the plight of human beings.

Craig S. Strobel Bron Taylor

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See also: Breathwork; Council of All Beings; Deep Ecology; Earth First! and the Earth Liberation Front; Radical Environmentalism; Re-Earthing.

Deere, Phillip (1926–1985)

The latter part of the twentieth century witnessed a resurgence of Native American traditions, particularly a focused Mother Earth spirituality. One of the most significant leaders in native America who fostered and guided this resurgence was the Muskogee elder Phillip Deere. He was born into poverty, was a carpenter by trade, and became internationally recognized as a spiritual leader, civil and human rights activist, oral historian and storyteller, elder statesman, spellbinding orator and traditional healer. His people, once part of the great Creek Confederacy, had been forced to move in the nineteenth century from the Southeastern U.S. to the “Indian Territory,” now the state of Oklahoma, but retained their Earth-related spirituality.

Although he had little formal education, Phillip Deere was literate and of a profound intellect. He had a prodigious memory in which he retained prayers and healing chants in Old Muskogee, creation stories and the ancient migration legend of his people’s history in Muskogee and English, and federal and state governments’ treaty provisions in English. He was a Methodist preacher for a time and learned biblical stories and teachings, but returned to traditional Muskogee ways.

Phillip Deere’s spiritual calling kept him poor. In the Muskogee tradition, one who is gifted by the Great Mystery (the Creator Spirit) with healing powers is required to care for peoples’ needs, no matter the personal cost. The healer had to set aside their usual employment whenever necessary to respond to a request for healing, without any expectation of remuneration and without consideration of the petitioner’s ethnic or economic background; post-healing gifts, voluntarily offered, could be accepted from the person cured or their family. Consequently, Deere lived on allotted land in an unfinished home he was gradually building, cooking and heating with a wood stove, using outdoor plumbing. Near his dwelling was the open-walled roundhouse, with its central fire, which he had built for sacred ceremonies. As a traditional healer he learned chants and the names of herbs in Old Muskogee, a language not understood even by the traditional people who spoke Muskogee as their first language. He knew 424 healing chants in Old Muskogee: each chant containing a symptom of illness, the name of the healing herb to treat that symptom, and a prayer to the Great Mystery to make the healing ceremony efficacious. Healers were not allowed to use their powers to help themselves.

Although native to Okemah, Oklahoma, Phillip Deere traveled throughout the world to offer spiritual insights, support for native peoples’ treaty rights, and concrete proposals for the promotion of human rights and egalitarian, respectful relationships among all peoples. He was a founder of the Traditional Youths and Elders Circle, and served

as the primary spiritual guide for the American Indian Movement (AIM) and the International Indian Treaty Council (IITC), a non-governmental organization (NGO) recognized by the United Nations. In the latter capacity, he traveled in the spring to participate in the annual sessions of the United Nations International Human Rights Commission held in Geneva, Switzerland at the Palace of Nations. He spoke there about care for Mother Earth, and called for redress for injustices suffered by indigenous peoples of the Americas.

In his teachings, Phillip Deere integrated a sense of the sacred with concrete concern for people, all living beings and Mother Earth. He taught that the Great Mystery, when bringing about the creation, instilled certain “natural laws” within it that governed it as a whole and guided each individual creature:

In the beginning when the earth was created, when everything came about, everything was given original instructions of life and everything followed those instructions of life. The earth has its duties to perform, the sun, the moon, the stars. Everything was given instructions of life. And the trees have never failed to follow those instructions. They have never made a mistake. The rivers have never made a mistake. Every plant, every animal, every bird, every fish have never made a mistake. They still follow those original instructions of life (Interview by author, 1984).

Phillip Deere taught that people should be aware of and appreciative for what Earth provides, recognizing that although they have a spiritual dimension to their lives, they must also care for the natural home that is their earthly dwelling:

We cannot say that “I am just a pilgrim passing through.” We are the caretakers of this land and we are part of this creation. So we must respect Mother Earth.

We believe in natural laws of love, peace and respect. We learned this thousands of years ago and this was the life of our people. When we destroy anything within the creation, we feel that we destroy ourselves . . . So we must preserve what we have . . . We have felt ourselves to be a part of the creation: not superiors, not the rulers of the creation, but only part of the creation. If we understand those natural ways, natural laws of love, peace and respect, we will be able to get along with everyone. We will learn to love and share with everyone (Interview by author, 1984).

Deere taught that spiritual people must be conscious of their responsibilities to the Creator and grateful that this Great Mystery is solicitous of them as a loving parent, called *Father* in the Christian tradition; and they must be conscious of their responsibilities to, and grateful for the nurturing of, *Mother Earth*:

When we learned about Christianity we heard about the Father. We learned to pray to the Father and in the churches every Sunday we heard about Father. To this day we still hear about Father. But we never hear anything about Mother . . . But every Indian knows what you mean when you say, “Mother Earth.” Traditional people know what you’re talking about . . . We must all learn to say “Mother” as well as we say “our Father.” And in this way of life we will have balance (Interview by author, 1984).

The balance that Phillip Deere called for includes the understanding that spirituality is not something reserved only for a part of one’s week; it must permeate every moment:

Native religion to us is a way of life. That religion is based upon this creation and its sacredness. In this religion every day was a sacred day to us. Religion did not take place just Saturdays or Sundays. Every day of our life was a holy day (Interview by author, 1984).

The Muskogee elder Phillip Deere, who walked gently on the Earth and respected all of her life forms as well as her being, lived a way of life related to all creation, and encountered the Great Mystery along that way. When in his company, people sensed that they were in the presence of a spiritual leader who walked with the Spirit, a holy man who not only taught about spirituality but lived connected to its source and to all creatures. When he died, Phillip Deere was mourned throughout the Americas and Europe by people inspired by his words and made whole from his healing touch.

John Hart

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See also: Mother Earth; Traditional Ecological Knowledge among Aboriginal Peoples in Canada.

Deism

Deism is a theological position that upholds a belief in God as a creator of the world, but rejects the concept of divine revelation (including miracles and supernatural events). More broadly, Deism refers to a cluster of philosophical and theological ideas that flourished in Europe and North America during the Enlightenment and led to a thorough critique of Christian orthodoxy. These ideas often found their starting point in natural theology, an ancient theological approach which, in the Enlightenment, became increasingly separate from “revealed” and “supernatural” theology, with which it was once joined in complementary fashion.

Deism began as a response to Christianity from within Christian cultural circles, but often leads to a broader view that extended past Christianity to “religion in general” or “natural religion” (the systemization of knowledge of the divine attained through the use of natural theology). Thus, the thinking of some deists led to the evolution of new ideas of “religiousness” as being part of human nature. This conclusion led, in turn, to the acceptance of non-Christian religious traditions as being equally valid. While deists varied in their particular convictions, most deists affirmed a view of God that could be arrived at solely through rational reflection (as opposed to revelation) and upheld a perspective that either rejected Christianity, accepted it as a moral guide (but not a personal means of redemption), or embraced certain aspects of the Christian tradition without arguing for its uniqueness when compared to other traditions.

In terms of intellectual history, Deism is associated with such figures as Denis Diderot, Jean Le Rond d’Alembert, Jean-Jacques Rousseau and M. Jean Antione de Condorcet in France; Gotthold Lessing and, to a lesser degree, Immanuel Kant in Germany; Samuel Clark, Matthew Tindal, Anthony Collins, John Toland and Thomas Paine in England, and Ben Franklin and Thomas Jefferson in America. Not surprisingly, the Deists held a range of theological views, including the shifting views of any number of individuals in the course of a lifetime. Less radical thinkers held positions close to those of the English latitudinarians (who maintained a belief in revelation, but put their emphasis on the “reasonableness” and accessibility of Christianity) or stayed in intellectual conversation with the German pietists, while the most radical bordered on agnosticism and atheism. Most were Enlightenment rationalists, though some, like Rousseau and Lessing, produced writing that also would qualify as “Romantic.”

The term “deist” itself was used more often as an insult (to suggest heresy or atheism) by the theological opponents of Enlightenment thinkers. Most deists upheld a belief in God as the creator of the universe and of humanity. Their precise vision of God, however, tended to be abstract rather than personalistic. God was variously termed

“the Great Architect” (who designed the world), Providence (who intended good things for the world at the time of creation and gave humanity the capacity to create and sustain such goodness), and the Great Watchmaker (who wound up the “clock” of the world and set it eternally ticking in an orderly fashion). The implication of these various epithets for the divine was that God set the world in motion and gave it all the necessary ingredients to flourish (including humanity), but that God did not intervene in daily life.

Drawing on the methods and conclusions of seventeenth-century ventures in natural theology (such as the writings of John Locke), the deists discounted those aspects of the Bible that were considered to be “superstitious,” supernatural or dubious accretions. Following in the natural theology tradition, they insisted that the character of God could be discerned by studying the “Book of Nature.” By studying nature’s laws and unifying order, deists and other rationalists believed that the character of God could be determined, and they assumed that God, by definition, would act in a rational, predictable and ultimately beneficent way. Moreover, they believed that God had endowed humanity with special, rational qualities and expected humans to use these faculties. Moving beyond such thinkers as Locke (who still affirmed the existence of truths beyond reason), the deists embraced only a natural theological approach and some – such as the young Voltaire – eventually rejected even a natural theology stance and took up positions of secular humanism, skepticism or atheism.

In America, Deism was attractive to those thinkers who already accepted the thought of John Locke and the implicit rationalism of Scottish Common Sense realism, but who took the Enlightenment emphasis on rationalism much further, to the point of questioning most orthodox Christian opinion. Deism came to America through largely English sources. Deists such as New Hampshire senator William Plummer and Vermont military hero Ethan Allen, took their cues from English authors, while the more prominent Ben Franklin and Thomas Jefferson were influenced by the French intellectual circles in which they were both involved.

In America, particularly, Deism was linked with the importance of paying attention to the natural world. Nature was seen as both a mechanical system of divinely ordained laws (the watch made by the watchmaker) and a Providential gift from the divine Creator, which human reason could “use” for its own progress. As such readings of nature suggest, Deism stood with a variety of other intellectual forces relying on natural theology (Scottish Common Sense, the Enlightenment in general, the rise of Unitarianism) in expressing a confidence that nature’s “secrets” could be discovered by humanity and put to use for humanity’s benefit (with God’s blessing). Not surprisingly, one legacy of such approaches to nature in the seventeenth and eighteenth centuries has been the development of a mechanistic view of nature that has played a role in the anthropogenic impact on the natural world and the destruction and depletion of natural resources. At the same time, however, enlightenment interest in studying the book of nature (while criticizing supernaturalism and the concept of miracles) directly influenced the growth of the sciences, including, ultimately, the development of ecology

as a field of study. The deists were among the intellectual ancestors of modern science, and thus leave an ambivalent legacy of emphasizing the importance of nature, the value of progress and the promise of human intellectual capacity. At the same time, the enlightenment “disenchantment” of the natural world has led some environmentalists to search for ways in which nature might be reconceptualized as a site of mystery or of divine action and grace, in contrast to a deistic concept of nature as machine or system of laws. In addition, some aspects of eco-criticism explicitly blame

Enlightenment thinking and writing for developing concepts of nature that have led to its exploitation.

While Deism is generally understood to be a historical movement, some Westerners today refer to themselves as deists. Moreover, while Deism, by definition, resists “organization,” many individuals without claiming the term, hold essentially deist views, upholding a belief in God, while denying revelation and miracles. Some organized forms of Deism do persist. The World Union of Deists, for instance, promotes Deism as a rational religion that is appropriate to the contemporary period. They also emphasize Deism as a “religion of nature.” This current emphasis counteracts earlier critiques of the Enlightenment legacy and, to a certain extent, rehabilitates older deist concepts of nature which, while scientific, were not wholly disenchanting.

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See also: Book of Nature; Natural Law and Natural Rights; Natural Theology.

Deloria, Vine, Jr. (1933–)

The 1960s civil rights movement had an enormous impact on American Indian communities, not least in sparking the career of Vine Deloria, generally considered the leading intellectual figure among twentieth-century American Indians. Deloria has been a prolific author and – for over twenty years – professor at two public universities, making an important impact on scholarly and broader public understandings of native interests and perspectives in fields such as law, political science, religion, and anthropology. In addition to advocating a strong defense of tribal sovereignty and native rights over against mainstream American culture, he has consistently argued that native outlooks on the environment constitute an important critique of American values, and that tribal landuse practices demonstrate an important alternative to American practices toward the natural world.

A member of the Standing Rock Lakota (Sioux) tribe, in

South Dakota, Deloria inherited a long family tradition of “being involved in the affairs of the Sioux tribe” (Deloria 1969: 263), including a father (Vine, Sr.) and grandfather (Philip) who were both important native leaders in the Episcopalian church, a great grandfather (Saswe) who practiced as a medicine man within the Yankton Dakota tribe, and an aunt (Ella) who, as an author trained in ethnography and linguistics, wrote a number of important volumes on Lakota/Dakota culture. Although Deloria, Jr. studied theology at Augustana Lutheran Seminary, he eventually did his graduate work in law – at the University of Colorado – after serving as executive director of the National Congress of American Indians from 1964 to 1967.

As a student of both law and theology, Deloria’s early work appeared in the years marked by a resurgence of militancy within native communities, such as the occupations of Alcatraz Island (1969) and Wounded Knee (1973), and the “Trail of Broken Treaties” (1972) – which resulted in the occupation of the federal Bureau of Indian Affairs office in Washington, D.C. With publication of *Custer Died for Your Sins: An Indian Manifesto* (1969), Deloria issued a series of biting polemics against official American Indian policy and underlying public attitudes and prejudices.

In *God Is Red: A Native View of Religion* (1973), Deloria developed a sustained critique of the weaknesses of Christianity in contrast with American Indian tribal religions. Key to this critique is the claim, reminiscent of the perspective of historian of religion Mircea Eliade, that Western religious traditions have developed their understandings of human life based more on temporal as opposed to spatial orientation. Native American religions, by contrast, are place-specific, concerned more with maintaining communal and individual well-being within a particular piece of land than in

providing salvation at the end of history. Christian religion, for Deloria, thus proved an exercise in alienation when Europeans brought it to the Americas, in effect removing it from its original environment.

Christianity shattered on the shores of this continent, producing hundreds of sects in the same manner that the tribes continually subdivided in an effort to relate to the rhythms of the land. It is probably in the nature of this continent that divisiveness is one of its greatest characteristics, a virtually uncontrollable freedom of the spirit (Deloria: 1992 [1973]: 145–6).

In subsequent work, such as *The Nations Within: The Past and Future of American Indian Sovereignty* (1984) and *Tribes, Treaties and Constitutional Tribulations* (1999) Deloria addressed the continued dilemmas tribes faced in dealing with the legal system, the web of racial stereotypes, and the forms of official knowledge through which Americans have insured the continuing subordination of Indians, and accomplished the expropriation of their lands. For Deloria, the legal/scientific/political administration of Indians and tribal land reflects the same differences in worldview that he first sketched out in *God Is Red*.

In arguing that the tribes, many of whom have retained important though strained cultural links to their lands in spite of colonizing pressures, could “speak meaningfully to the modern world,” Deloria has provided younger Indians with a role model of a publicly engaged intellectual with a relentless critique of American society. The heart of that criticism, though darkened over time, is that tribal values and practices offer much-needed correctives to the fundamental ideas animating industrial society. In questioning the marginalizing design he finds shaping mainstream anthropological practice regarding Indians, he asks, for instance, whether the festivals by which people reestablished relationships with the natural world [could] provide us with a vehicle for making our concern about the environment an actual change of behavior instead of a vague sense of warm sentiment about chipmunks? (in Biolsi and Zimmerman 1997: 220)

However, in functioning as critic, his role differs from that of his forebears, who sought to soften the impact of American society land-use aims on those turn-of-the-century Lakotas first confined to reservations. Deloria’s task has been not to soften, but to challenge those aims through creation of an alternative consensus about treaty law, about conceptions of the sacred, and about the future place of Indians in American society. His expertise in both law and religion has enabled him to play a crucial role in a variety of land-claim and land-use cases brought into the courts during the last decades of the twentieth century, and in the process to amend the American Indian Religious Freedom Act of 1978, which the high courts unanimously found insufficient to provide tribes with protection of traditional sacred sites. While serving as a critic of American legal culture, he has also consistently advocated the alliance of Indian and non-Indian in efforts to protect the environment. For Deloria, all Americans have an interest in the land claims which tribes have brought to the bar. “No real progress can be made in environmental law unless some of the insights into

the sacredness of land derived from traditional tribal religions become basic attitudes of the larger society” (Deloria 1999: 213).

Although much of Deloria’s career has been taken up with addressing the practical and political dilemmas facing Indian tribes, he has consistently sought to analyze the conflict of worldviews underlying the contests between tribes and Western institutions. In such works as *The Metaphysics of Modern Existence* (1979), and more recently in *Red Earth/White Lies: Native Americans and the Myth of Scientific Fact* (1995), Deloria has challenged the deepest assumptions about nature, God and truth animating modern Western culture. In these works, the knowledge claims of Western science, and the taken-for-granted-superiority of Western technology, take a thrashing for their reduction of nature to the malleable and controllable, a thrashing grounded as much in the metaphysics of Alfred North Whitehead and methodological suspicion of Berkeley’s anarchistic philosopher of science Paul Feyerabend, as in the reconstituted tribal traditions that Deloria hopes to preserve. Scientific theory, Deloria has argued, has yielded not so much the authoritative account of nature, but rather “the folklore of materialistic industrialism” with “no basis in fact” (Deloria 1999: 275). His willingness to attack scientific consensus as well as Western religion has earned him many opponents, some of them other American Indian writers. Deloria has consistently played the heretic, however, not simply out of a polemicist’s desire to disturb the orthodox. Instead, he has held to a rather traditional Lakota conviction that though nature remains an intractable mystery, any possible progress in meeting human needs requires epistemological humility, and in the case of modern society, a good deal more humility than religion or science have been able to retain.

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See also: American Indians as “First Ecologists”; Law, Religion, and Native American Lands; Manifest Destiny; Mother Earth; Noble Savage; Sacred and the Modern World, The; Traditional Ecological Knowledge among Aboriginal Peoples in Canada.

Delphic Oracle

The Delphic Oracle, the most important religious center in the ancient Greek world, owed its existence to a unique natural setting. The Greeks themselves believed that the oracle derived its power from a number of geological features: a cleft in the rock; a spring; and a gaseous exhalation. A nearby cave and a second spring were also linked to the prophetic tradition at Delphi.

Nature visibly dominates Delphi. The temple of Apollo and the sacred precinct lie cupped in a spectacular semicircle of precipitous limestone cliffs, giving the effect of an open-air theatre. Below the sanctuary the ground plunges down to the gorge of the Pleistos River. The southern exposure fills Delphi with sunlight all day: “To argue about a shadow in Delphi” was a proverbial phrase for arguing about nothing. The surrounding cliffs, known as the Phaedriades or “Shining Ones,” lie on the southern slope of the massif of Parnassus, one of the holy mountains of Greece. The waters of the Corinthian Gulf are visible in the distance to the southwest, so Delphi seems to hang suspended between mountain and sea. The special geographical position of the site was shown by the omphalos or “navel-stone” inside the temple, marking Delphi as the center of the known world.

According to Greek tradition, the Delphic Oracle was founded by Ge or Earth herself, the mother of all things. Ge was followed first by her daughter Themis or Justice, and then by a succession of nymphs – female water deities. The site is indeed famous for its springs: Cassotis (the modern Kerna spring) inside the sanctuary and Castalia in a rocky cleft to the east.

The oracle played an important role in some of the most ancient myths. According to the Greek version of the Flood story, the two survivors Deucalion and Pyrrha took refuge on the summit of Mount Parnassus, and then asked the Delphic Oracle how they could repopulate the Earth. They were told to walk away from the oracle, throwing the bones of their “mother” behind them as they went. After some perplexity, they realized that Earth was their mother and rocks were her bones. From the stones that they cast over their shoulders, a new race of humans came into existence.

The Delphic Oracle was also believed to have given advice to such mythical heroes as Aegeus, father of Theseus, and Agamemnon, leader of the Greek expedition against Troy. In the *Odyssey*, Homer tells how Agamemnon received a riddling message at Delphi that indicated that his victory over the Trojans would come only after dissension and fighting among his own captains. The Delphic Oracle was famous for cryptic responses. Most famous of the legendary prophecies was that given to young Oedipus:

“You will kill your father and marry your mother.” The oracle neglected to explain that he did not know the identity of his real parents.

Most modern scholars doubt that the oracle was in existence before the eighth century B.C.E. The ancient Greek tradition has however received some support from archeological discoveries showing that a small town existed at Delphi as early as the Middle Bronze Age, roughly 1600 B.C.E. The importance of religious cults in this first settlement is shown by finds of terracotta figurines of female deities or priestesses (some seated on three-legged chairs or thrones), and a fine ceremonial rhyton in the form of a lioness’ head.

An even older link between religious ritual and this region of Mount Parnassus was discovered in the Corycian Cave, a few kilometers north of Delphi. During classical times, pilgrims who came to consult the oracle at Delphi often hiked up to the Corycian Cave as well. Here the deities were not Ge or Apollo but Pan and the nymphs. But thousands of years earlier, in the Neolithic age, early farmers and herders were visiting the Corycian Cave for ceremonies of divination. Archeologists discovered thousands of “knucklebones” in the cave – the astragalus bones from the hooves of sheep and goats – which have been traditionally used in Greece and elsewhere in drawing lots or obtaining “Yes/No” answers to questions.

In essence, the formal oracle of Apollo continued this tradition of providing guidance in making difficult choices. During the heyday of the oracle from the eighth through fourth centuries B.C.E., thousands of pilgrims made their way by ship or overland to Delphi. There they received divine guidance on decisions ranging from founding a colony or launching a war to choosing a spouse or investing in a cargo. On days when the god did not speak, one could still receive a “Yes/No” answer to a question through the drawing of colored beans that served as lots.

But the major feature of Delphi was undoubtedly the performance of the Pythia, the woman who spoke for the god Apollo on the seventh day after each new moon in the spring, summer, and fall. The Pythia derived her title from the ancient name of the site, “Pytho,” as did the legendary serpent or dragoness “Python” that the young Apollo had killed there with his bow and arrow. The Python had guarded a crevice on the mountainside from which Ge pronounced her oracles to humans. By killing the beast, Apollo was able to claim the oracle as his own, though he continued the tradition of speaking through the mouths of women. During classical times, the Pythia served as a medium for the god’s voice, passing into a trance while seated on a tripod in the subterranean crypt or “adyton” of the temple. In no other spot could the woman be filled with the spirit of prophecy.

The service of the Pythia was exhausting and debilitating. During the glorious era when Delphi was consulted by Greek city-states and foreign monarchs alike, the Pythia who began the morning’s session might later be replaced by a second woman, with a third held in reserve for days when the line of questioners was exceptionally long. Every Pythia was a woman of Delphi, but the office was not monopolized by any one family, as was the norm for Greek religious positions. The Pythia could be young

or old, rich or poor, well educated or illiterate. The sisterhood of the oracle seems to have chosen the Pythias based on their aptitude for spiritual experience, specifically for experiencing a mediumistic trance. In this state, the Pythia would reply to questions either by chanting in poetical verse, or by responding in simple prose. In the latter case, male temple attendants might compose a poetical version of the Pythia's response in return for a gratuity from the questioner. There is no ancient evidence for the popular modern claims that the Pythia spoke gibberish, and that the oracular responses were really composed by the male priests.

The most remarkable element of the prophetic ritual was the part played by an exhalation of natural gas or vapor within the temple. The Greek term was *pneuma*, which also meant "breath." According to a number of ancient Greek and Roman writers, the Pythia mounted a tripod that straddled a cleft or fissure in the rocky floor of the adyton. She would then breathe in the *pneuma* rising from the cleft, and then be empowered to speak in the words of the god Apollo. The *pneuma* normally triggered a benign trance, in which the Pythia could sit upright (though relaxed), see and hear the questioners, and give audible responses. On occasion, however, the Pythia was seized by a violent delirium, and would rave and thrash wildly. After one such frenzy, it was recorded that a Pythia in the time of the Roman Empire actually died a few days after the oracular session.

The source of this information is Plutarch, priest of Apollo at Delphi for many years and therefore an eyewitness to the workings of the oracle. In his three essays or dialogues dealing with Delphi ("On the E at Delphi," "Why the Oracles Are No Longer Given in Verse," and "On the Obsolescence of the Oracles"), Plutarch made it clear that even the priests were not let into all the secrets of the women who served as Pythia. However, he did provide many insights into the relationship between religion and nature at Delphi, particularly in the third dialogue.

Plutarch cast "On the Obsolescence of the Oracles" as a debate between conservative religious belief in the limitless power and eternal existence of the gods versus rationalizing natural philosophy. Pious visitors disapproved of the idea that Apollo or any other divine being should need to use a transitory, fluctuating natural phenomenon such as the Delphic *pneuma* to work his will. Skeptical philosophers on the other hand attributed the behavior of the Pythia merely to the physical effects of the gaseous emission, or dismissed the oracles as mere guesswork. At the end, Plutarch attempted to reconcile Science and Religion by stating that the gods were indeed divine and eternal, but were compelled to use the corrupt substances of this earthly world in order to communicate with mortals. In the course of this fascinating discussion, Plutarch provided considerable information about the *pneuma*. It had a sweet smell; it was detectable to the priests and questioners outside the adyton, although faint and unpredictable; it could reach the surface either as a free gas or through water; and its flow had diminished through time. The weakening of the *pneuma* was identified by Plutarch as the cause of the oracle's decline. He advanced three possibilities to account for the change, all of them physical or geological. First, the vital essence in the rock that produces the

effect on the Pythia may have simply worn out over time. Second, heavy rains may have washed the vapor away. And third, it may be that the great earthquake of 372 B.C.E. not only destroyed the old temple of Apollo but also blocked up the vents that allowed the *pneuma* to reach the surface. The first observation is an early recognition that natural resources are not inexhaustible, and the third a reminder that Poseidon the Earthshaker was also worshipped in the temple at Delphi.

From the Renaissance to the end of the nineteenth century, modern scholars took these reports of geological activity at face value. But when French archeologists failed to find a large chasm in the rock under the central part of the temple, skepticism set in. In the first half of the twentieth century, a number of articles and books were published which purported to debunk the ancient tradition. Adolph Paul Oppe published the seminal article "The chasm at Delphi" in 1904, and Pierre Amandry summed up the evidence against the ancient tradition in his book on the oracular procedure at Delphi in *La Mantique Apollinienne á Delphes* (1950). The latter work included the claim that it was geologically impossible for an intoxicating gas to have been emitted at Delphi, since such exhalations can be found only in areas of volcanic activity. The new skepticism was embraced by historians and archeologists throughout Europe and the Americas, and established itself as the dominant opinion concerning the oracle.

Starting in 1996 an interdisciplinary team from the United States carried out geological and archeological field surveys at the oracle site, followed up by laboratory analysis of rock and water samples. The team included geologist Jelle de Boer of Wesleyan University, archeologist John Hale of the University of Louisville, chemist Jeff Chanton of Florida State University, and toxicologist Henry Spiller of the Kentucky Regional Poison Center. The team's fieldwork showed that the temple of Apollo had been built at the intersection of two geological faults, dubbed the Delphi and Kerna faults, at least one of which was still active. One of the springs rising along the Kerna fault emerged in the interior of the temple. The architecture of the temple had been adapted to the geological setting, with a sunken interior so that the natural surface of the mountainside could be reached by Pythia and pilgrims. The builders also constructed an off-center niche for the adyton at the spot where the spring reached the surface.

The underlying bedrock proved to be bituminous limestone, with a petrochemical content of up to 20 percent. Geologist de Boer theorized that friction due to movement along the fault would heat the rock to a temperature at which the petrochemicals vaporized. The resulting gases would rise to the surface along the fault, along with ground water. During laboratory analysis, traces of intoxicating light hydrocarbon gases, including methane and ethane, were found in the travertine rock that had been laid down by the spring in antiquity. And sweet-smelling ethylene, also an intoxicant, was detected in the modern Kerna spring directly up the slope from the temple.

When seated in the enclosed, poorly ventilated adyton inside the temple, the Pythia would thus have been exposed to a mixture of gases that could trigger a trance state. Of particular interest was ethylene, which is known to produce both mild out-of-body

experiences and (on rare occasions) violent delirium. The results of the interdisciplinary project confirmed the validity of the ancient literary sources, and suggest that the scientific observations of Greek natural philosophers should be carefully considered.

The existence of gaseous emissions and springs under the foundations of Apolline temples elsewhere in Greece and in Turkey make it clear that Delphi is not an isolated instance, but rather the center of a widespread religious tradition – a tradition that linked the worship of Apollo and the presence of oracular power to geological features in the landscape. The temples of Apollo at Ptoon in Greece and at Claros, Didyma, and Hierapolis in Turkey were all built on such sites.

In about the year 362, the Pythia at Delphi received a visit from envoys sent by Julian the Apostate, the last pagan ruler of the Roman Empire. Julian was attempting to combat the tidal wave of Christianity that was sweeping away the old pagan cults, and he asked the Pythia to prophecy once more in order to show the continuing power of the old gods. The woman replied, “Tell the king the fair-built hall has fallen. Apollo no longer has a shrine here, nor a prophetic laurel tree, nor a talking spring. The water of speech is silent.” Even in these last verses from the last of the long line of Pythias, the natural features of Delphi dominate the scene.

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See also: Greece – Classical; Greek Landscape; Greek Paganism; Water Spirits and Indigenous Ecological Management.

Demons

The demon is a traditional designation for a hostile and/or evil spirit entity. As a concept, it becomes part of Western culture through the influence of Zoroastrian thought that polarizes the world between good and negative forces. The dualistic framework has become part of gnosticism, hermeticism, kabbalist doctrine and the Abrahamic religions of Judaism, Christianity and Islam. However, the term “demon” derives from the Greek *δαίμων*, Latin *daemōn* the “divider” – the one who apportions the resources of the natural world among recipients. The daemon was originally a part-human and part-divine spiritual entity that was amoral rather than immoral. The transition of this superhuman power into a devilish being reflects the loss of an earlier understanding based on the sanctity of nature’s plenitude and its subsequent institutionalized transformation into dualistic theologies that posit the natural as something inferior and impeding to transcendental evolution. As a result, the demonic has become synonymous with impurity, sensuousness and harm. The ambiguity of the threshold zones associated with the Greek daimon as demi-god has been likewise translated into a longstanding vernacular fear of liminality. Passages, entryways, bridges and the like become regarded as unsafe and unclean. As Mary Douglas contends, this antipathy toward the liminal extends to the human body and its openings considered as dangerous places. By positing a framework that holds purity and impurity to be good-and-evil opposites, such natural negatives as miasma, illness and misfortune become ethical issues. The historic trajectory of the demon is, therefore, a narrative that describes the superimposition of a hermeneutics of ethics onto natural conditions. It is the story and legacy of Western civilization’s distortion of the organic and holistic into an artificial world that is divided and opposed to itself.

With the advent of Christianity, the nature spirit, the genius as intermediary between the human and the divine, and the power of the pagan gods were turned “by an easy, traditional shift of opinion . . . into malevolent ‘demons,’ the troupe of Satan” (Fox 1987: 137). While the classical deity transcended ethnocentric ethics and the daemon could be either benevolent or malevolent, the nascent Church came to classify all demons as evil in contrast to God, Christ and the angels of heaven. Christian demonology divided the spirit world in conformity to the four elements of fire, air, Earth and water – respectively, the salamander, sylph, gnome and undine. By the Middle Ages, drawing on the account of Lucifer’s rebellion and defeat by the archangel Michael, the demonic legions assumed a complexity of order that mirrored the angelic hierarchies consisting of seraphim, cherubim, thrones, dominions, virtues, powers, principalities, archangels and angels. In the magical arts of conjuration, a rich iconography

developed through which the evoked devil could be identified by rank, form and shape. The corollary of conjured demonic apparition is the Christian pursuit of exorcism. Ad-juration of the demonic is not, however, a Christian innovation. Ambiguous *daimones* might once have been eliminated, for example, through recitation of particular Homeric verse. But whereas the pagan tended to understand disease as an imbalance of nature, for the Christian it was a result of demonic invasion of the body. Remedial effort invariably centered on expulsion of the unclean spirit, and this attitude has carried through into the dominant ethos behind contemporary secularized allopathic medicine as well. Western curing does not predominantly countenance regaining health through restoring a natural balance of the whole organism but rather by simply suppressing and/or getting rid of an invading entity.

This metamorphosis of the Greek *daimon* into the Christian demon rests on the development of a dualistic worldview. Prior to this, the demon at worst simply represented the difficult and dangerous aspects of the natural cycle (night, winter, tempest, death, etc.) With the emergence of dualistic theology, both demons and God are removed from the natural cycle – God as transcendent; the demon as intrinsically evil. The result for the human being is alienation from nature. Moreover, if there is only good and evil – and particularly evil that is intrinsic – the danger that arises with such an understanding is that every dissenting opinion is categorically condemned. This situation ultimately leaves no room for dialogue and the possibility of reaching any democratic compromise between different positions. However, the very foundation of democracy is predicated on the fundamental equality of each individual's worth. Without this assumption, democracy itself becomes an impossibility. If, on the other hand, one assumes that those who appear to thwart his or her own way or those who would appear to be motivated solely by self-interest are fallen angels or demons masquerading as humans, the voice of the other is simply condemned and not heard.

Michael York

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See also: Paganism – Contemporary; Paganism in North America; Satanism.

Depth Ecology

Deep Ecology, as a movement and a way of thinking, has generally been contrasted to conventional environmentalism, and especially to approaches that focus only on alleviating the most obvious symptoms of ecological disarray without reflecting upon, and seeking to transform, the more deep-seated cultural assumptions and practices that have given rise to those problems. Rather than applying various “band-aid” solutions to environmental problems, adherents of deep ecology ostensibly ask “deeper” questions, and aim at deeper, more long-range solutions. Yet some stalwart environmental activists have taken offense at the implication that their own strenuous efforts merely amount to a kind of “shallow” ecology. In fact, the implicit contrast between “deep” and “shallow” approaches to ecological problems has led various folks to suspect a kind of arrogance in the very idea of “deep ecology”; and such suspicions have weakened the deep ecology movement.

Yet the tremendous potential of the deep ecology movement, and the real eloquence of “deep ecology” as a powerful, if largely inchoate, set of intuitions, never really had anything to do, I believe, with the contrast between “deep” and “shallow” approaches. Worthy and visionary activists from many different fields – scientists and farmers, professors and poets, artists and anarchists, all with a intense love for wild nature and a sense of outrage at the ugly insults that civilization was inflicting on the animate Earth – were drawn to deep ecology because they could sense a new kind of heartfelt humility in this movement, a gathering of brilliant spirits who were not afraid to acknowledge their own existence as earthly animals. All were happy to affirm that the human was but one of the Earth’s many creatures – a remarkable creature, to be sure, but ultimately no more astonishing than the grizzly bears, or the cormorants, or the spiders riding the grasses as they bend in the wind. Far from being arrogant, deep ecology was marked by a new kind of humility – a new assumption that we two-leggeds were entirely a part of the intricate web of life – and by a new wish to reflect and to act without violating our responsibility as plain citizens of the biotic community. The other side of this humility was a steady wonder in the face of a world that exceeds all our designs, the delicious and sometimes terrifying awareness of being human in a much more-than-human world.

The name “deep ecology” resonated well with this new impulse, mostly because of the richness of meaning in this curious word “deep.” It is a meaning that very few of us recognized consciously, yet I suspect that our animal bodies sensed it right from the start. For the adjective “deep” speaks of a particular dimension of the experienced world: often termed the third dimension, it is that which photographers refer to when

they speak of “depth of field.” It is that dimension that stretches from the *near* to the *far*, from the place where we stand all the way to the horizon, and beyond. The curious nature of this dimension is such that, unlike “height” and “width,” which seem entirely objective aspects of the perceived world, the dimension of depth is wholly dependent upon the position of the viewer *within* that world! The height of a boulder, for instance, seems to stay constant as I move around that rock. Yet the *depth* of the rock, the relation between the near and the far aspects of the boulder, steadily changes as I move around it. Unlike the height of a mountain range, and the width or span of a valley, the *depth* of a landscape depends entirely on where we are standing within that landscape. And as we move, bodily, within that landscape, the depth of the landscape shifts around us.

In truth, a space has depth only if one is situated somewhere within that space. A cluster of boulders, or a grove of trees, may be said to have a particular depth only if you are situated, bodily, in the same world as those rocks or those trees.

If, for example, I am watching some nature program on the television, observing a female lion, perhaps, as she lolls with her cubs under the shade of a leafy tree, and I happen to stand and walk across the room, my movement does not alter anything on the screen. The depth of the room will shift around me as I move – the bookcase looms up in front of me and then recedes as I move past it, the music stand comes between me and the television screen for a moment as I walk by – yet the spatial positions of those cubs do not shift in relation to one another or in relation to the tree behind them. For the lions and I do not inhabit the same space. There is no depth between us, for I look at their world from a position entirely outside of that world, an utterly detached spectator looking at a flat spectacle. My real, bodily encounter is not at all with those lions, but with the flat screen of the television.

Modern, conventional science has long presumed to observe the natural world from a detached position utterly outside that world. And the science of “ecology” inherited this presumption from the older sciences that preceded it – the assumption that we could objectively analyze the interactions of various organisms and their earthly environment as though we ourselves were not participants in that same environment, as though our rational minds could somehow spring themselves free from our coevolved, carnal embedment in the thick of this ecology in order to observe it from a wholly detached and impartial perspective. In high school biology class, we gazed at a complex diagram of the local ecosystem drawn on the flat blackboard, but of course we did not include our own gaze within the system. Later, some of us learned to model particular ecosystems on the flat screens of our computers. Although I learned a fair amount from such exercises, the primary lesson I learned was that earthly nature is an objective, determinate phenomenon that can best be studied from outside, not an enveloping mystery in which I am wholly participant.

Such is the view of nature that we perpetuate when we neglect, or overlook, the depth dimension of the world – the fact that, in truth, we only ever experience the *actual* world from our embodied, two-legged perspective down here in the thick of

things. Since we are entirely *in* and *of* this earthly world, nature can disclose certain aspects of itself to us only by concealing other aspects; we never perceive the whole of any earthly phenomenon all at once. Because we are animals immersed in the world, each thing we directly encounter meets us with its own depth, its visible facets and its invisible facets, its closer aspects open to our gaze and its more distant aspects hidden from view. The belief in a purely objective comprehension of nature, in a clear and complete understanding of how the world works, is the belief in an entirely *flat* world seen from above, *a world without depth*, a nature that we are not a part of but that we look at from outside – like a God, or like a person staring at a computer screen.

Deep ecology calls this presumption into question; it suggests that such cool, disembodied detachment is itself an illusion, and a primary cause of our destructive relation to the land. It insists on the primacy of our bodily embedment in the encompassing ecology, on our thorough entanglement within the earthly web of life. It suggests that we are utterly immersed in, and dependent upon, the world that we mistakenly try to study, manipulate, and manage from outside.

Thus, the most relevant contrast provoked by the notion of *deep ecology* is not a facile contrast between “shallow” and “deep” approaches, but rather the contrast between the *flat* and the *deep* – between *flat ecology* and *deep ecology* – between a detached way of seeing that looks *at* nature from outside, and an embedded way of seeing (and feeling) that gazes into the depths of a nature that encompasses and permeates us. *Deep ecology*, in other words, implies that we are situated *in the depths* of the earthly ecology.

It is this tacit implication of our thorough inherence in the biosphere, this intuition of depth, that unites all of us who were drawn, from various directions, to the phrase “deep ecology.” We all sensed the need for a way of speaking, and thinking that did not tear us out of our felt immersion in, and consanguinity with, the animate Earth. By acknowledging that we are a part of something so much vaster and more inscrutable than ourselves – by affirming that our own life is entirely continuous with the life of the rivers and the forests, that our intelligence is entangled with the wild intelligence of wolves and of wetlands, that our breathing bodies are simply our part of the exuberant flesh of the Earth – deep ecology opens a new (and perhaps also very old) sense of the sacred. It brings the sacred down to Earth, exposing the clearcuts and the dams and the spreading extinctions as a horrific sacrilege, making us pause in the face of biotechnology and other intensely manipulative initiatives that stem from a flat view of the world. Deep ecology – or *depth ecology* – opens a profoundly immanent experience of the holy precisely as the manyvoiced land that carnally enfolds us – a mystery at once palpable, sensuous, and greatly in need of our attentive participation.

David Abram

See also: Deep Ecology; Earth First! and the Earth Liberation Front; Ecopsychology; Magic, Animism, and the Shaman’s Craft; Radical Environmentalism; Transpersonal Psychology.

Desana Indians (Northwest Amazon)

– See Reichel-Dolmatoff, Gerardo – and Ethnoecology in Colombia.

Descartes, René (1596–1650) and the Problem of Cartesian Dualism

If historical figures can be understood best by examining the contradictions that condition their lives, then it is worth noting that René Descartes, the wellspring of enlightenment rationalism, found the direction of his career in a series of traumatic dreams he took to be a divine communication. And despite his rational commitment to the view that animals are soulless automata – becoming, thereby, the philosopher most often blamed for reducing laboratory animals to mere mechanisms available for guilt-free vivisection – he owned a dog named Monsieur Grat. Anthony Grafton summed this up succinctly when he noted

Paradoxically, Descartes, the pre-eminent modern rationalist, took dreams as the basis for his con-

fidence in his new philosophy – a philosophy that supposedly did more than any other to deanimate the world, to convince intellectuals that they lived in a world uninhabited by occult forces, among animals and plants unequipped with souls, where the only ground of certainty lay in the thinking self (Grafton 1996: 36).

The following pedestrian details provide the outer shell of his life: Descartes was born in La Haye on 31 March 1596, was sent off at age 10 to the Jesuit college of La Fleche, and attended the University of Poitiers in 1615 where he graduated in canon and civil law. In 1618 he enlisted in the army of Prince Maurice of Nassau and was startled into philosophic action by dreams in 1619. He afterwards lived in Amsterdam, Deventer, and Leiden where, in 1637, he published *Discourse on Method*. *Discourse on Method* contains a more concise version of the arguments he expounded in his later and better-known *Meditations* – like the famous proof of his own thinking existence (*cogito ergo sum*), and the argument that animals do not have souls. He began work on *Meditations*, his most famous and lasting contribution to Western philosophy, in 1639 and published it a year later. In 1643 he relocated to Egmond du Hoef and began a correspondence with Princess Elizabeth of Bohemia. In 1644 he published *Principles of Philosophy* and dedicated it to her. In 1646 he began to correspond with Queen Christina of Sweden. This remarkable sovereign persuaded him to move to Stockholm to become her tutor in philosophy in 1649. Unprepared for either the climate of Stockholm or the extraordinary constitution of the Queen – who scheduled their meetings well before Descartes' normal waking hours – he died halfway through his first Scandinavian winter, on 11 February 1650.

The importance of the Cartesian dichotomy – Descartes’ division of the universe into two distinct substances, spiritual and physical – can hardly be understated. Using the language of philosophy and early science, his arguments articulated and sanctioned the long-held view that human beings are incorporeal souls inhabiting corporeal bodies. Set into the bedrock of Western culture, these underlying tectonics continue to condition the overlying topography of discourse that divides soul from body, spirit from matter, God from nature, and religion from science. These divisions continue to affect even the most mundane aspects of daily life. Even today, humans remain strangers in a strange land and nature remains a waiting room, a temptation, or a gauntlet to be endured on our trek into paradise or hell or the Great Nothing.

In his *Meditations* II and VI and, more accessibly, in Part IV of his *Discourse on Method*, Descartes argued that mind and body are composed of two distinct substances. This distinction follows, Descartes asserted, clearly and distinctly from an irrevocable certainty: that because he thinks, he can know with certainty that he exists. *Cogito ergo sum* – I think therefore I [know] I am. From here he argued that it is possible to doubt the existence of the physical body – since anything known through the senses can always be deceived – but that it is not possible to doubt the existence of the mind – since to do so simply verifies that the doubting mind must exist. Because it is possible to doubt what we know about physical reality (since it is known through the senses) but impossible to doubt the existence of our minds, Descartes concludes that minds and bodies must be composed of distinct substances. He wrapped up by noting that physical substance is extended in space while mental substance is not. Physical objects take up space. Objects composed of mental, spiritual, substance do not.

His argument reinforces worldviews that define human beings as incorporeal souls trapped in corporeal, spatially extended, bodies.

This was the traditional and well-accepted point of view, but there are stunning contradictions buried like fault lines in his argument. Most simply: Descartes defined mental and physical substances in a way that makes their interaction impossible. If bodies take up space and souls do not, then they can not interact. He attempted to save his argument in Part V of *Discourse on Method* – just prior to his argument that animals are not sentient – with the ad hoc hypothesis that the mind/body connection is maintained by “animal spirits,” neurological angels composed of both substances. Unfortunately, once we ask how the corporeal and incorporeal parts of the animal spirits themselves are able to communicate with each other (even tinier animal spirits), this patchwork dissolves into an infinite regression.

What we have here, apparently, is a philosophical dead end.

Given these obvious contradictions one might well ask why Descartes could have had such a great effect on the history of Western thought. His distinction between minds and bodies is deeply flawed; his contemporaries aggressively critiqued it; the consequences have been sore and even dire; and yet it continues to affect the trajectory of thought at the level of an entire culture. So why would anyone have accepted it? The answer is simple. His argument was appealing not for its logical consistency,

but because it: 1) asserted something his readers already believed (the paradigmatic assumption that humans are incorporeal souls inhabiting physical bodies) and, more relevant to his era, 2) temporarily soothed the mounting tensions between science and Christianity. His division of the world into mental or physical substances brilliantly resolved some dangerous and uncomfortable predicaments facing scientist and theologian alike – at first.

Descartes opened a door both to the budding scientific enterprise, fearful of religious Inquisitions and conducting its investigations in the shadows of darkened surgical theaters, and to theologians who were beginning to feel the hammer of science chipping away at the decaying fortress walls of dogma. His distinction between spiritual and physical realms negotiated a buffer zone between religion and science and set this distinction, as if in concrete, into the psyche of Western culture. By setting aside a specific subject-matter for religion (mental or spiritual substance) and a specific subject-matter for science (physical substance), Cartesian dualism 1) made a safe haven for scientific explanation and 2) allowed the religious community to avoid increasingly embarrassing questions such as “Where is heaven if not among the stars?” and “Where is the Garden of Eden if not on Earth?” – and later, “What are human origins if not those suggested by the fossil record?” Physical substance remains the subject matter of science; mental or spiritual substance, the arena of theology. This clear and distinct separation of subject matters seemed to alleviate the increasing tension between sacred and secular. Scientists and theologians alike could, at their leisure, pursue their respective lines of inquiry without interference from one another.

This boundary agreement secured a few centuries of détente between science and religion, time that would allow the logical contradictions in Western culture to work themselves to the surface – like splinters of glass in your thumb. It was a useful solution that left Western culture with some unhappy consequences. Scientists who wished to comment on religious questions and theologians who wished to say something meaningful about the physical universe found themselves hobbled by the shackles of their assigned subject-matters. The distinction that set them free became a quarantine. Science, exiled to the “merely” physical world, became a discipline without spiritual or ethical consequences. Theology, confined to mental substance, was cloaked in a spiritual insulation that kept it from being relevant to the world of time and space. The human soul was unable to interact with the body it inhabits and, analogously, the Western world’s God was left equally unable to interact with the physical universe. If God is locked out of the physical universe then Nietzsche’s sentiment is correct: the physical universe, the place in which humans live and try to find meaning, is nothing but an empty tomb. Existentialism, anomie, and postmodern desiderata all find their first toehold here.

Human values continue to divide along this fault line. Here is a simple example: Descartes’ philosophical method allowed him to contemplate an applied philosophy by which,

Knowing the nature and behavior of fire, water, air, stars, the heavens and all the other bodies which surround us, as well as we now understand the different skills of our workers, *we can employ these*

entities for all the purposes for which they are suited and so make ourselves masters and possessors of nature (Descartes 1956: 40, author's italics.)

The way in which our relationship to nature has been conditioned by the Western cultural paradigm was explored, most notably, by Lynn White. Human dominion over nature was a logical consequence of defining human beings as spiritual “entities” rather than as earthly “creatures.” Incorporeality set human souls safely outside the Heraclitean flux of cause and effect. Human, spiritual, “being” was paradigmatically defined as “above” nature. In this, Descartes simply propagated an old and accepted worldview – but its inherent contradictions are easier to see in his dry philosophical prose than in the sweep and tumult of Old Testament saga or Francis Bacon’s hopes for the recovery of Eden through the implementation of a divinely implanted rationality. Descartes’ commitment to being clear and distinct makes it possible to pry out these submerged influences and take their effect on contemporary culture into account.

The clear contradictions within Descartes’ dichotomy forced science and theology to reconsider how “human” and “nature” have been defined. Contemporary environmental ethics provides a good example of how these unexamined assumptions, and the paradigm underlying them, have been scrutinized during the last few decades.

The challenge of environmental ethics is, simply put, to produce ethical theories that can extend what Kenneth Goodpaster called “moral considerability” to the rest of nature. Unfortunately, any ethical consideration that proceeds from Descartes’ definitions will fail because it begins by assuming an axiom that makes it impossible to apply an incorporeal-soul-based, human-centered, ethics to the realm of corporeal nature. If you begin from the position that the gap between humans (as spiritual entities) and nature (as fallen corporeality) is unbridgeable, then any ethical theory that attempts to extend anthropocentric ethics to nature – or supplant it by merely denying any such distinction (without addressing the assumptions that frame this distinction in the first place) – will also, and necessarily, fail.

What makes radical environmental ethics “radical,” for example, is that it begins not by arguing about what actions or objects are good or right, but by challenging the underlying conceptual framework that conditions what “good” or “right” must be. Arne Naess began the project of deep ecology by taking aim at the underlying assumption that human beings are independent from the world they inhabit, by calling into question the human-self-as-independent-from-nature. Redefining humans as *part* of nature shatters the grounding assumption that ensouled humans stand outside the material world – and so too it topples the ethical corollaries that depend upon this definition.

Ecofeminism takes a similar approach through the problematization of assumptions about gender and applies this method to our assumptions about the boundary between humans and nature. Descartes and Francis Bacon, the primary modern proponents of rationality as humanity’s privileged mode of understanding and manipulating nature

– a mode of understanding and a manipulation, many ecofeminists claim, that has caused and justified the domination of both nature and women – stand out as primary targets for the critique of ecofeminist authors. The solution is to overcome not only the culturally institutionalized subjugation of women and nature, but the very cognitive processes that perpetuate and legitimate such oppression. Carolyn Merchant analyzed what she concluded is the common ground of this oppression and argued “we must reexamine the formation of a worldview and a science that, by reconceptualizing reality as a machine rather than a living organism, sanctioned the domination of both nature and women” (Merchant 1980: xvii). Karen Warren aimed her critique at “oppressive conceptual frameworks” that she believes underlie and condition any possible ethical system in a way that “an oppressive *patriarchal* conceptual framework sanctions and justifies the domination of women . . .” (Warren 1999: 155). This “logic of domination,” a term borrowed from Marcuse, such ecofeminists claim follows axiomatically from the embedded dichotomy that defines humans as ensouled beings and nature as a realm of mechanical “creatures.”

Social ecology argues that the same fault lines underlying the paradigmatic division of nature from the human self, and female from male, are also at work in the division between the natural world and human society. In this context society can be understood to be the product and embodiment of human rationality (“spirituality” encoded by Cartesian algorithms) while nature (as the material Other) is mere matter. Just as Marx claimed that political issues are economic, social ecologist Murray Bookchin has suggested that social and political issues are environmental ones and that environmental problems are just as much social and political in nature. Bookchin notes that, “This social system is especially rapacious. It has projected the domination of human by human into an ideology that ‘man’ is destined to dominate ‘Nature’ ” (Bookchin 1991: xiv). The conceptual gulf between society and nature, Bookchin thus argues, allows political and economic institutions to ignore their effects on the environment. This conceptual gulf follows the same fault lines outlined and reinforced by the Cartesian dichotomy.

All such “radical” theories are radical simply because they address the real problem. The real problem was, as always, that we have attempted to answer questions without examining what they meant in the first place and the degree to which we may be paradigmatically conditioned to answer them.

The reader is encouraged to explore this event horizon by carefully analyzing, and then attempting to answer, the following, simple question: “Are humans natural?”

For Descartes, and the Western cultural paradigm, the answer is no.

Mark C.E. Peterson

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See also: Deep Ecology; Ecofeminism; Environmental Ethics; Radical Environmentalism.

Desert Writers (Western United States)

A spirit of place, in the most literal sense, has long been central to southwestern storytellers whether they work in an oral or written tradition. Stories have been grounded in sand, stone, and soil since the early creation myths of the region's native inhabitants. For tribes like the Hopi, whose crops depend on the life-giving gift of the annual rains, interactions with the desert have always been an inseparable blend of the spiritual and practical. Religious beliefs are embedded through ritual and story in the land: the basis of daily experience and the ultimate source of sustenance.

The westward migration of whites brought different values into the American desert, some of which still influence contemporary attitudes toward it. This can be traced to another set of stories, which stem from experiences in the dry lands of another continent. It is difficult to understand the American colonial past without mentioning Jewish and Christian desert imagery. The Puritans, for instance, employed desert references from the Old Testament to underline the moral imperative of what Perry Miller called their errand into the wilderness. Viewing the new continent as a test of their faith, settlers drew on biblical descriptions of making a recalcitrant desert bloom. Like the ancient Hebrews, they hoped that their devotion would be rewarded by the transformation of barren wasteland into a promised land of milk and honey.

Such a narrative of reclamation, which saw the desert as an enemy to be conquered rather than a place with which to make peace, influenced everyone from Mark Twain (who endlessly gripes about the landscape's worthlessness in *Roughing It*, his account of a journey to the gold fields of Nevada) to the Mormons. The latter brought this displaced imagery into an actual desert region near Utah's Great Salt Lake, where they settled down to turn the land into Zion. The desert appeared a forbidding purgatory, but it could be redeemed and was thus a good place to make saints, according to Brigham Young. Labor on the land was a means of achieving salvation for the soul.

But as that land was subdued and settled, different feelings emerged. Many Americans began to flee the growing stresses and excesses of urban, industrial civilization for wide open spaces like the desert, which in its relatively undisturbed state became a sort of refuge. In leaving behind the garden, Americans created "out of a desert continent," spurning its values as destructive of our relationship with nature; the dissenters were resurrecting another Judeo-Christian narrative: that of the desert fathers, who

shunned the sinfulness of human cities for the austere and revelatory purity of the wilderness.

Increasingly, it was the desert that came to seem holy, not the task of eradicating it. Edward Abbey's 1968 book *Desert Solitaire* encapsulated this countercultural shift in attitudes. An agnostic of sorts, Abbey was less interested in finding God in the desert than in stripping the otherworldly away from religion, focusing on what is at hand. "I dream of a hard mysticism," he wrote, "in which the naked self merges with a non-human world and yet somehow survives still intact, individual, separate" (1968: 7). Abbey's sojourn in the desert was fueled by a personal quest to behold the immediate divinity of what is before us rather than beyond us.

Relocating spirituality in the land, Abbey foreshadowed an ecospiritual approach shared by other contemporary desert writers. Various influenced by modern environmentalism, feminism, and New Age imagery, they find holiness in the desert and have joined the struggle to protect it. So the desert is transvalued: from a fallen wilderness condemned to worthlessness by secular society, it returns to a state of grace. With its seasonal beauties, suggestive silences, and flashes of insight, it becomes a shrine for modern-day pilgrims who see the natural world increasingly threatened by a rapacious society.

In Terry Tempest Williams' book *Refuge*, the marshes and deserts surrounding the Great Salt Lake become a psychological sanctuary from the anguish of losing her mother to cancer. A Mormon, Williams grew up in an area wrested into productivity through hard work and spiritual resolve. But the changes she experienced in the desert were entirely internal; the land's quiet role in healing is contrasted with the violent physical transformation of desert into something other than desert. Williams discovered an innate capacity for personal strength and affirmation of the universe in accepting, not rejecting, these arid places: "If the desert is holy, it is because it is a forgotten place that allows us to remember the sacred. Perhaps that is why every pilgrimage to the desert is a pilgrimage to the self. There is no place to hide, and so we are found . . ." (1991: 148).

The desert has a rich history as such a testing-ground: a powerful, even dangerous space of personal purification, or of confrontation with the demons inside one's head. Transplanted to southern California in the 1930s, the British writer Aldous Huxley fell in love with the crystalline landscapes that stretched east from Los Angeles. As befitting someone interested in the mystical dimensions of experience, Huxley found there a place in which to slough off the spiritual decay of a dystopian modernity. For him, the desert's space, silence, and emptiness formed a holy trinity of perceptual insight. Here, one confronted both self and not-self: the manifold possibilities of being and the inevitable imminence of nonexistence. The latter was symbolized for Huxley by the atomic bomb tests then being conducted in Nevada.

Today, proposals to bury radioactive waste in that same state underline the continuing split between Americans who view the desert as blank – devoid of history and suitable only as a dumping-ground – and those whose personal connections to these

places, when communicated to others in words, redeem them from generalization and devaluation. The resurgence of Native American story, for instance, has meant a renewed interest in the links between language and landscape.

Leslie Marmon Silko's novel *Ceremony* depicts a struggle in contemporary Indian culture between preserving old ways that viewed the land as sacred, essential to the spiritual health of its inhabitants, and adopting white American values and lifestyles. Tayo, her protagonist, returns to the Laguna Pueblo reservation in New Mexico bearing the scars of war and despair. His eventual renewal comes about as a result of traditional rituals tied to the deserts and mountains in which he grew up. The novel is itself a ceremony, enacting the power of story to heal and make whole; and the tales, like the people telling them, are grounded in the places they call home. Silko explicitly juxtaposes Tayo's healing with the return of rain to the drought-plagued region. With the completion of the ceremony, "the land was green again," rich and complete in itself, defying another character's spiteful reference to "this goddamn dried-up country around here" (1977: 234, 55).

Though they may reach certain limits in attempting to express the innermost mysteries of existence, words are a powerful force in bringing people together to defend what they love. As Silko writes, "You don't have anything if you don't have the stories" (1977: 2). In the face of ongoing threats to America's fragile deserts, writers of all backgrounds are continuing to forge spiritual connections to these beautiful and visionary places.

Jonathan Cook

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See also: Abbey, Edward; Earth First! and the Earth Liberation Front; Huxley, Aldous; Silko, Leslie Marmon; Williams, Terry Tempest.

Devi, Savitri (1905–1982)

Savitri Devi, whose birth name was Maximiani Portas, was one of the most compelling figures to emerge from the wreckage of post-war National Socialism. More than any single figure, it was Devi who would carry the torch of occult National Socialism through the grim period following World War II. Through her writings and her personal example, she would inspire a new generation of National Socialists to explore the occult byways of racial mysticism that were once blazed by such nineteenth-century German figures as Guido von List and such Third Reich figures as Heinrich Himmler.

Originally a French citizen, Devi was born on 30 September 1905 of Greek and British parents. Educated in France and in Greece, Devi earned masters'-level degrees in philosophy and science in France in the 1920s, and received a Ph.D. in chemistry in 1931. Mathematics and science however, held less allure to Devi than did contemporary politics, religious speculation, and, of greatest import, the Aryan philosophical and religious traditions of ancient India, which would be her home for much of her life.

Before embarking on her spiritual quest, however, Devi took an active interest in politics. Even as a young girl, she was much attracted to Germany and to the German philosophical and intellectual traditions. Appalled by the betrayal of Germany at Versailles following the First World War, as well of the treatment of Greek refugees in the same period, Devi determined to learn more of what she instinctively felt were the deeper realities which determined the seemingly chaotic course of world events. It was during this youthful quest for hidden and suppressed knowledge that Devi acquired her lifelong aversion to Judaism.

In the 1930s, Devi moved to India and undertook what would prove to be a lifelong study of the classic Indian texts – the Vedas and the Upanishads. From these sources, and from their contemporary manifestations in the caste system, Devi felt that she had found the true sources of the once and future greatness of the Aryan race.

In 1940, Devi married a pro-Nazi Indian nationalist named A.K. Mukherji. This gave her a British passport and the possibility of deepening her work for the Third Reich. In Calcutta, the Mukherji home became something of a salon for Allied diplomats and military officers, and whatever intelligence that could be gathered quickly found its way to the German consulate. Devi felt her greatest service to the cause, however, would be in her ongoing research and the book which she was writing which would set out a blueprint for the new Aryan religion of nature which she believed would be instituted in Germany after the inevitable Nazi victory.

In the event, of course, Germany was defeated. Devi's dream of a global Aryan racial paradise would now never be realized, but through considerable adversity, she

held fast to her ideals until her death in 1982. She returned to Europe in 1945, settling in England where her book on the religious heritage of Ancient Egypt, *A Son of God*, was published and well received in British intellectual and occult circles.

It was the work that followed however, the *Impeachment of Man*, which was finished in London and published in 1946, that stands as a classic in the current world of National Socialism. A radical approach to environmentalism, amounting indeed to a religion of nature that has striking affinities with the nature-revering spiritualities of radical environmentalism, has always been strong in National Socialist thought, and with the wartime defeat, has become as much a trademark of the movement as anti-Semitism and racialist thought. The *Impeachment of Man* remains the strongest statement of the National Socialist nature religion that may be found today. Opening with epigraphs from Alfred Rosenberg (“Thou shalt love God in all things, animals and plants”) and Josef Goebbels, who in a diary entry quotes the Führer’s resolve to create a post-war society that would eschew the eating of meat, the book is a passionate treatise on the rights of animals and of plants, as contrasted with humans’ egocentric consumption and destruction of the natural world. The argument is couched in religious terms and the proof texts are drawn from the Aryan Golden Age. The book, long out of print, underwent a revival with a new Noontide Press edition, which appeared in 1991.

In 1946, Devi moved from England to Iceland. There, the ancient Norse pantheon joined the ancient Indian heritage as a source for Aryan religiosity. Here too Devi anticipated by decades Odinism’s popularization of the Norse/Germanic pantheon as a fitting Aryan racial religion in the post-war movement.

Two years later, Devi undertook a more open pro-Nazi course of activism, traveling to occupied Germany and distributing propaganda leaflets. This resulted in her incarceration in 1949. While in jail, Devi expanded one of her leaflets into the book that she considered her magnum opus, “Gold in the Furnace”, which is at once an autobiography and a dreamy meditation on what could have been. In it, she states explicitly that until 1948 she had never dared to publicly utter:

...I love this land, Germany, as the hallowed cradle of National Socialism; the country that staked its all so that the whole of the Aryan race might stand together in its regained ancestral pride; Hitler’s country . . . Because for the last twenty years I have loved and admired Hitler and the German people . . . I was happy – oh so happy! – thus to express my faith in the superman whom the world has misunderstood and hated and rejected. I was not sorry to lose my freedom for the pleasure of bearing witness to his glory, now, in 1948 (page number unavailable).

Devi was released from prison after six months, and then entered her most productive literary period. The autobiographical “Defiance” appeared in 1950. Devi’s example served as an inspiration to a new generation of National Socialists when a portion of the book was published in the Winter 1968 edition of William Pierce’s American Nazi Party intellectual journal *National Socialist World*. “Gold in the Furnace” came out in 1952, followed by *Pilgrimage*, another memoir, in 1958 (although some sources

place the publication date as early as 1953). Her most important work, “The Lightning and the Sun”, appeared in 1956 and a condensed version was published in the premier edition (Spring 1966) *National Socialist World*. “The Lightning and the Sun” is a remarkable exposition on occult National Socialism’s nature mysticism, which explicitly deifies Hitler as the savior of the Aryan people. The first words read: “To the godlike individual of our times; the *Man against time*; the greatest European of all times; both Sun and Lightning: ADOLF

HITLER” (Devi 1966).

“The Lightning and the Sun” ranges through the ages, suggesting a religious and political history in which the Third Reich is the apex and the natural culmination of Aryan development. The book ends with at once a cry of despair and an affirmation of hope:

Kalki [Kali] will lead them through the flames of the great end, and into the sunshine of the new Golden Age . . . We like to hope that the memory of the one-before-the-last and most heroic of all our men *against time* – Adolf Hitler – will survive at least in songs and symbols. We like to hope that the lords of the age, men of his own blood and faith, will render him divine honors, through rites full of meaning and full of potency, in the cool shade of the endless regrown forests, on the beaches, or upon inviolate mountain peaks, facing the rising sun (page number unavailable).

Devi’s last years were bleak. Much of this time was spent back in mother India with her husband, writing and corresponding with National Socialists throughout the world. She was an early convert to the field of holocaust denial, and it was under her influence that such wellknown holocaust revisionists of the present day such as Ernst Zundel were introduced to the field. Her personal circumstances did not fare so well, however, and at her death in 1982 she was reportedly penniless.

In the course of her life, Devi’s achievements, if measured on the scale of her dream of the re-creation of a National Socialist revival, were meager. At her death, the world of explicit National Socialism was, if anything, more fragmented and powerless than ever before. But her writings, and the powerful dream of a religio-mystical Aryan Golden Age which they so eloquently convey, are having a powerful impact on the radical right.

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See also: ATWA; Darré, Walther; Evola, Julius; Fascism; Odinism.

Devils Tower, *Mato Tipi*, or Bear's Lodge (Wyoming)

At the turn of the twentieth century, as Americans grappled with the anxieties and opportunities inherent in their tumultuous shift from rural to urban life, the United States Congress granted the president authority to preserve from development “objects of historic or scientific interest” found on public land. Accordingly, on 24 September 1906, President Theodore Roosevelt proclaimed that Wyoming's Devils Tower was “such an extraordinary example of the effect of erosion in the higher mountains as to be a natural wonder and an object of historic and great scientific interest.” In declaring Devils Tower the first national monument under the Antiquities Act, Roosevelt equated scenic beauty, scientific import and a significantly storied past as harmonious rationales for its preservation. In subsequent decades these rationales have also given rise to conflicting cultural, religious, and legal efforts to mark both the monument's meaning and the kinds of human practice appropriate there.

Devils Tower, a phonolite porphyry monolith rising 1267 feet above the Belle Fourche River, is the westernmost outcrop of the igneous rock that thrust up beneath the ancient seabed to form the Black Hills some sixty million years ago. Erosion of the surrounding sandstone deposits by the Belle Fourche gradually exposed the outcrop to weathering, resulting in the vertical scars that mark the length of its surface today.

Many Plains tribes have a long, continuing history at Devils Tower, their members regarding it as a place manifesting sacred power. The malevolent sound of its name in English is due to Col. Richard Dodge, commander of the

1875 United States Geological Survey's military escort. In most native languages, however, the name itself is more typically some variety of *Mato Tipi* or “Bears Lodge” – which hints at the presence there of powers upon which human beings are dependent. An oft-told story of the butte's formation, with Lakota and Kiowa variants, tells of a group of sisters chased by bears. The girls jumped onto a rock and prayed “Rock take pity on us.” The rock grew rapidly as the bears tried to scale it and left their claw marks behind as they slid back down its side. The rock pushed the girls so far from danger that they became the Pleiades, visible in the winter night sky above the mountain.

Lakotas historically found on its sheltering side a good winter camp, and through a variety of ritual means turned to the butte to provide or restore individual and community well-being. Naming ceremonies, vision quests, healing rites, funerals and

notably a summer solstice Sun Dance have all been performed at the Bear's Lodge. Cheyennes regard the lodge as the resting place of Sweet Medicine, the heroic figure whose contact with superhuman beings there founded the Cheyenne way of life. The Bear's Lodge is thus seen as a place where wisdom dwells, and might be obtained by human beings. Lakota and Cheyenne traditions speak of receiving important objects from the sacred beings at the Bears Lodge, such as the Lakota Pipe and the Cheyenne Four Sacred Arrows, which established their people's religious and ethical identities. Other tribes with significant attachments to the mountain include the Crow, the Arapaho, and the Wind River Shoshone. All of the ritual activities associated with the Bear's Lodge became harder to sustain in the years after the northern plains wars, as tribes were confined to reservations on marginal land, individual travel was policed, and federal law restricted the performance of the Sun Dance and other ceremonies.

White residents of the newly formed neighboring ranching communities were gathering at Devils Tower for recreation by the close of the nineteenth century. Summer camping, festivals and Fourth of July celebrations were all popular, some bringing people in from one hundred miles away – a long journey on buckboard. The 1893 Independence Day celebration featured the first formal climb of Devils Tower, by local rancher William Rogers, who scaled a 350-foot ladder and planted an American flag at the top. Not until 1937 was a technical ascent accomplished, by a team of New York mountaineers. Given its remoteness and the absence of paved roads in the area, interest in the monument remained primarily local until after World War II, by which time it was being incorporated into the vacation routes of the middle class, and was being recognized as a notable destination for rock climbers.

Another interest in Devils Tower was marked by film director Steven Spielberg, whose 1977 *Close Encounters of the Third Kind* climaxed with the descent of an enormous alien spaceship onto the mountaintop. Spielberg's film connected the benevolence of alien beings with the mountain's mysterious appearance and storied past. Conspiratorial federal agencies seek to deprive the public of what amounts to an experience of supernatural wonder and interstellar travel at the mountain – in effect a modern gloss on the native story of the mountain's mediating link with the stars. Although the New Age themes have certainly played an important role in shaping American expectations of this and other native sacred places, what the film expresses even more is the perceived role of the federal government in denying to Americans their public lands birthright.

In the years following *Close Encounters* annual visitation rose drastically, reaching half a million by the mid-1990s. At the same time, Congress had mandated in the American Indian Religious Freedom Act (AIRFA) of 1978 that federal agencies accommodate traditional religious practices as far as practically possible. Encouraged by this legislation, in 1984 some Lakotas resumed the June Sun-Dance tradition at the monument, and the park service began receiving complaints of visitors disturbing ritualists. Most troublesome to those natives who continued to engage in ritual activities at the monument was the increasing number of ascents, which grew in the twenty years after

1973 from three hundred to some six thousand. Not only the noise from climbers, but also the increased scarring of the rock surface from pitons and bolts up the two hundred climbing routes, registered as profaning the Bear's Lodge's sacred role in native history.

In 1995, as a result of challenges to administrative procedures made possible under AIRFA, representatives of several tribal and intertribal groups were able to influence the National Park Service to accommodate native religious practitioners at the monument. The NPS established an interpretive exhibit on native cultural history that included information on religious use of the mountain, and a series of trail signs asking visitors to remain on trails and not disturb native ritualists. In addition, the NPS implemented a voluntary climbing ban, effective during the month of June. The number of June climbs dropped dramatically – from twelve hundred to less than two hundred in each of the following years, but several individuals and one area outfitter saw the climbing ban as a significant restriction on their personal freedom. As a result, the Denver-based Mountain States Legal Foundation (MSLF) – an active defender of the private use of public lands – and the local Bear Lodge Multiple Use Association, brought suit against the Department of the Interior in 1996 in *Bear Lodge Multiple Use Association vs. Babbitt et al.*

The MSLF claimed that the climbing ban violated the establishment clause of the First Amendment, which enjoins the government from privileging one religion over another. In support of the suit, some climbers argued that since they saw climbing as a form of spiritual practice, the climbing ban was an infringement on their religious freedom. In addition, the MSLF argued that a new interpretive exhibit focused on the mountain's cultural history, and a series of signs asking visitors to remain on trails, coerced visitors into supporting native religions. For the MSLF the park service's efforts to accommodate native religions reflected what William Perry Pendley – its president, and former assistant to Reagan-era Secretary of the Interior James Watt – has written of as acts of “war on the West,” conducted by “an increasingly tyrannical government that abuses federal laws” (Pendley 1995). The Wyoming federal district court was not swayed by the MSLF argument, however, concluding that it did not show legal standing in regards to the coercive impact of the park service's accommodation to native religion, and that the voluntary ban passed the relevant tests conducted by the courts to ascertain whether government actions violate the establishment clause. On 27 March 2000 the U.S. Supreme Court also refused to hear the case, concurring unanimously with the lower court's ruling that the monument's Climbing Management Plan was not unconstitutional. The higher courts' uniform defense of native religious practice at the monument is especially significant given their more typical stance, as maintained in *Lyng vs. Northwest Indian Cemetery Protective Association* (1991), that accommodation of native land-based religion is not a constitutional necessity on the public lands.

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See also: Deloria, Vine, Jr.; G-O Road; Holy Land in Native North America; Indigenous Environmental Network; Law, Religion and Native American Lands; Manifest Destiny; Sacred and the Modern World, The; Sacred Mountains; Wise Use Movement.

Dharma – Hindu

Frequently translated as “duty” or “righteousness,” the word dharma has been used by Hindus since the nineteenth century to refer to religion in general and to their religion in particular. The term *sanatana dharma* (the eternal or perennial dharma), specifically, is used to designate the Hindu tradition. Buddhists, Jains, and Hindus use the term “dharma” to indicate a fairly wide variety of concepts and issues, and the word has some recognition in the Western world. In Hinduism, dharma has been used in many contexts including (1) a force, power, or value that sustains the cosmos; (2) one’s duty as incumbent on one’s caste/class of society and stage of life (*varnasrama dharma*); (3) as a code of conduct which includes and is not limited to regulations involving marriages, food, and religious observances; (4) virtues such as gratitude, nonviolence, and compassion which are thought of as common aspirations of all human beings; (5) a word for “religion”; and (6) as a path to liberation from the cycle of life and death (*moksha*). Although this may sometimes fit into some of the earlier categories, it is also possible to distinguish it as a separate one. The texts on dharma also form the basis for formulating the administration of Hindu family law in India. Highlighting dharmic virtues such as compassion and nonviolence, retrieving and giving prominence to textual passages and local practices which promote ecological welfare, as well as the relative latitude in the Hindu tradition in the interpretation of dharma to be relevant to changing worldviews are conceptual tools which can help us understand its significance for nature.

The meanings of dharma frequently depend on the context and some emphases have changed over the centuries. The Monier-Williams Sanskrit-English dictionary gives about seventeen meanings: dharma means religion, the customary observances of a caste, sect, law usage, practice, religious or moral merit, virtue, righteousness, duty, justice, piety, morality, sacrifice, and so on.

This preliminary set of meanings gives us only the parameters of the concept and practice. Sanskrit and vernacular texts as well as oral traditions affirm the importance of dharma. The Tamil work *Tirukkural* (ca. 3rd–4th centuries) celebrates the importance of *aram* (dharma) thus:

What greater wealth is there than dharma? It gives heavenly joy and earthly happiness.

There is no greater wealth than dharma. There is no greater loss than to forget it.
Try to perform dharma in every way.

Don’t wait another day to perform dharma; it will remain with you on the day you die (*Tirukkural* 4:1–3, 6).

The many treatises on the nature of righteousness, moral duty, and law composed around the first few centuries C.E. were called the dharma sastras (texts on dharma). The most famous of these is the Manava Dharmasastra, or the Laws of Manu. These were probably codified around the first century and reflect the social norms of the time. The Laws of Manu (2.6), along with some other texts, list four sources as the foundations for our understanding of dharma: the Vedas (sruti); the epics, texts of lore called the *Puranas*; the behavior and practices of the good people (*sadacara*); and finally, the promptings of one's mind or conscience.

In the early Vedic texts, "dharma" means "religious ordinances and rites" and in others, it refers to "fixed principles or rules of conduct." In conjunction with other words, "dharma" also means "merit acquired by the performance of religious rites" and "the whole body of religious duties" (Kane 1968: 1–2). Eventually, the prominent meaning of dharma came to mean a human being's privileges, duties and obligations to the community as a member of one of the castes and as relevant to a particular stage of life (Kane 1968: 3). Texts on dharma both described and prescribed these duties and responsibilities and divided up the subject-matter into various categories.

The earliest texts on dharma are the *Dharma Sutras*. These are part of the *Kalpa Sutras*, which is considered to be an ancillary to the Vedas. Thus, the earliest and preeminent source for dharma, at least in theory if not in practice, is considered to be the Vedic corpus. In addition to these texts, the more famous works on dharma is the corpus of *dharma shastra* texts, of which those written by Manu and Yajnavalkya are well known. The text of Yajnavalkya was commented upon by Mitakshara in the twelfth century. This text has, for the last few centuries, formed one of the bases in formulating Hindu family law in India and is seminal in understanding the legal structure in India.

The lofty ideals of the texts of dharma are made accessible in the stories of the epics, the *Ramayana* and *Mahabharata*, and texts known as puranas. The main *Puranas*, texts of myth and lore, composed approximately between the fifth and tenth century, have wonderful resources on trees. Hindus in India and the diaspora know the epics and puranas better than the dharma shastra texts. They understand stories from these texts as exemplifying values of dharma and situations of dharmic dilemmas. Some of these texts have encouraged the planting of trees, condemned the destruction of plants and forests, and said that trees are like children. For example, the *Matsya Purana* says that the goddess Parvati planted a sapling of the Asoka tree and took good care of it. She watered it and took care of it and it grew well. The divine beings and sages came and told her:

O [Goddess] . . . almost everyone wants children. When people see their children and grandchildren, they feel they have been successful. What do you achieve by creating and rearing trees like sons . . . ?" Parvati replied: "One who digs a well where there is little water lives in heaven for as many years as there are drops of water in it. One large reservoir of water is worth ten wells. One son is like ten reservoirs and *one tree*

is equal to ten sons (dasa putra samo drumam). This is my standard and I will protect the universe to safeguard it . . . (*Matsya Puranam* chapter 154: 506–12).

Parvati's words about a tree being equal to ten sons has been lifted from the text and put on billboards by at least one major Hindu temple in Tirupati, Andhra Pradesh. Those sentences are seen to be particularly significant for the Indian context where more trees and a lower population are considered to be ideal. Having many children, particularly sons, is a traditional Hindu dharmic goal, and selectively valorizing statements which highlight the importance of trees rather than sons is significant in modern interpretations of dharma.

The *Varaha Purana* says that one who plants five mango trees does not go to hell, and the *Vishnu Dharmot-tara* (3.297.13) claims that one who plants a tree will never fall into hell (in Kane 1958: 415–16). The *Puranas* differ in the number and description of hells in the universe, and one may perhaps take the liberty of interpreting "hell" as symbolic of various levels of suffering, including a steamy planet where human beings make holes in the ozone layer. The *Matsya Purana* also describes a celebration for planting trees and calls it the "Festival of Trees."

Virtues that are said to be common or obligatory to all human beings are called *sadharana dharma* (common dharma), *sanatana dharma* (eternal dharma), and *samanya dharma* (general or ordinary dharma). These include virtues such as gratitude nonviolence, compassion, generosity. Emphasis on and cultivation of these virtues would be particularly significant in the protection of nature and prevention of further harm to the environment around us. The term "sanatana" or eternal dharma has been used in the epics and Puranas to refer to these virtues, but since the nineteenth century it has been used to refer to the Hindu tradition which is perceived as continuous and eternal.

Dharma is also seen as one of the four aspirations or goals of human beings. The epics and classical texts of the period just before the beginning of the Common Era also recognized that there were certain aims for which human beings strive. The four "goals of man" (*purusha artha/ purusartha*) are said to be dharma, the discharging of one's duties and responsibilities, *artha* (wealth, polity, power in many forms), *kama* (sensual pleasure in a narrow sense but referring to aesthetic experience as well) and *moksha* (liberation from the cycle of life and death). The goals of kama and artha are not good or bad in themselves, but the intensity with which one is preoccupied with them as well as the stage of life when one pursues them make them appropriate or a-dharma, that is, immoral. Thus, the gluttony for more wealth and power can be seen as the root cause of environmental degradation in all its manifestations.

Moksha was sometimes seen as being on a different plane and as having goals distinct from dharma, but several theologians have interpreted the Bhagavadgita and other texts as saying that dharma and liberation are contiguous and not contradictory. Devotion to the deity is sometimes seen as the highest dharma.

Dharma and Moksha

However, while dharma, in many contexts, focuses on order in this world, *moksha* leads one away from existence in this world. Dharma frequently refers to actions that promote righteousness, order, and well-being in this world; the realms of monetary success and power encompassed by the term *artha* as well as the sensual love denoted by *kama* are all also of this world. *Moksha*, on the other hand, generally refers to liberation from the cycle of life and death and is other-worldly in character. Is there a continuum between dharma and *moksha*, or are they fundamentally opposed to each other, pointing in different directions and having different aims? Books on dharma say that one is to be married at a certain age, beget children (especially sons), do acts of righteousness, ritual actions and so on. Many texts which show the path to *moksha* speak of renunciation and abandonment of attachments. Seen from this perspective, the path to moksha may imply a denial of ultimate value to the world and nature around us.

Modern reconstructions of the term dharma in environmental contexts can be perceived in many parts of India. The cleaning up of rivers, opposition to the building of large dams, and planting of trees are all proclaimed to be part of one's dharma. Here the reference is both to the generic duty and the action incumbent on human beings to the specific situation. Institutions such as the Tirumala Tirupati Devasthanam, which controls the wealthy and powerful temple in Tirupati, Andhra Pradesh, post signs all over the local town saying "Trees, when protected, protect us." This is a deliberate reformulating of the traditional saying in the dharma texts: "Dharma, when protected, protects us." From the Hindu perspective, appeals to dharma seems to be one of the most promising ways to relate to issues of environmental protection.

Vasudha Narayanan

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See also: Bhagavadgita; Hinduism; India.

Diana

One of the animal deities that appear in religious culture of many societies, Diana is recognizable to Western culture as the Roman goddess of the hunt. She is one of several goddesses and gods in European mythologies associated with the full moon, the forest, and sexuality, fertility, and marriage (despite being male deities, Odin, Herne, Wodden, and the followers of the Wild Ride of the dead, all embody similar characteristics). As Diana, the goddess represents a host of archetypal associations: virginity, midwifery, fertility, domestic and wild animals, and the moon. She appears in myth under the Greek names Artemis and Cynthia, the latter deriving from Mount Cynthos, the agreed birthplace of Diana. Artemis was one of the three Greek goddesses of the moon that indicated the cyclical pattern of life, time, and fertility. Artemis represented Virginity, while Selene was the Mother of the moon, and Hecate, the Crone, embodied the waning and dark moon. Furthermore, the moon is the governing symbol of the female menstrual cycle, whose regular waxing and waning is said to be caused by the orbit of the moon. Despite her variable name and her plural associations, it is clear that Diana appears as a constant in history as a goddess embodying the concerns of women.

In pre-Christian Rome, Diana was the figurehead of a cult and was associated with ceremonies in the grove of Aricia near Lake Niemi (which is also known as Diana's Mirror). Here, the goddess was celebrated in a women's festival of lights on 13 August each year. The goddess Diana was "explicitly connected with the lower classes, plebeians and slaves," writes the post-colonial critic Homi Bhabha in his elegy for the more recent Diana, the Princess of Wales (1998: 107). As the figure of myth, her name and image worked their way into literature and art across the ensuing centuries. For example, the Temple of Diana at Ephesus, one of the Seven Wonders of the World, was celebrated in Shakespeare's early seventeenth-century play, *Pericles*, and the goddess watches over the virginal daughter of the protagonist through childbirth, shipwreck, and peril. The actual statue at Ephesus is recorded to depict Diana as a many-breasted pagan deity, thus emphasizing her ability to conceive and to nurture.

Marguerite Helmers

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See also: Greece – Classical; Greek Paganism; Roman Natural Religion; Roman Religion and Empire.

Diggers and Levellers

During the English Civil War (1642–1649), between Charles I and Parliament, the Levellers emerged as the left wing of the Parliamentary forces. They advocated the levelling of society to create a classless democracy. The Diggers, in turn, called themselves the “true levellers” and voiced yet more radical demands. They were best known for putting their philosophy into action by establishing a series of short-lived communities across Britain where they occupied and farmed land. The most important of these was at St. George’s Hill, Surrey in 1649. As many as ten other Digger communities were established in southern England but all were broken up by the authorities.

Their best-known spokesman, Gerrard Winstanley, wrote numerous tracts outlining the movement’s religious and political beliefs. He advocated a pantheist philosophy, arguing that spirit dwelled in both humanity and the rest of nature. Such pantheism was shared to a greater or lesser extent with a range of seventeenth-century religious/political movements in Britain such as the Ranters but remained undeveloped and unemphasized by Winstanley. His overriding concern was with property, which he identified as evil. He argued that the real Fall occurred not when Adam and Eve were expelled from Eden but when Cain and Abel fought over property. Despite the Diggers’ belief that God resided in nature, they stressed the communal productive use of land through human stewardship, rather than any philosophical or practical commitment to the sanctity of the natural world itself.

The Marxist historian Christopher Hill suggests that Winstanley was concerned with political priorities and clothed his philosophy with religious metaphors. In contrast others have suggested he was essentially a religious millenarian awaiting a New Jerusalem who had little interest in worldly matters. In turn, the British historian

E.P. Thompson argued that a long tradition that articulated theology and revolutionary thought can be traced from the Diggers to William Blake and beyond.

The Diggers’ communism, pantheism and direct action orientation made them a potent symbolic resource for later radicals, including ecological ones; many socialists, anarchists and greens trace their roots back to the Diggers. Typically, the British Labour MP Tony Benn, writing in 1980, noted:

The modern movements towards a more responsible attitude towards the environment, together with a commitment to the common ownership of the land, to be held in trust for future generations, can all be traced back to the influence of the Diggers (in Brockway 1980: xi).

In the 1960s a Diggers’ movement was established in California, which carried out acts of street theatre and gave away free food. In 1974 a Digger Party contested the

Cambridge parliamentary constituency in the British General Election. The Diggers have been important to the direct action environmental movement in Britain, especially the land-reform campaign “This Land is Ours,” which reoccupied St. George’s Hill in 1999 on the 350th anniversary of Winstanley’s action. The Diggers’ Song based on Winstanley’s lyrics is often sung at environmental protest camps in Britain and the United States (lyrics in Taylor 2002: 51–2).

Thus, while Winstanley did not develop a detailed green theology, his campaign of direct action and his writings have acted as potent resources for later green movements.

Derek Wall

The Diggers’ Song

Commonly known in radical environmental subcultures in the United Kingdom and America as “The Diggers’ Song,” a song written by Leon Rosselson that is actually entitled “World Turned Upside Down,” has been recorded by a number of artists. Probably the bestknown version was recorded by Dick Gaughan on *Handful of Earth* (Green Linnet, 1993; full lyrics in Taylor 2002: 51–2). The song, inspired by the Diggers and influenced by Gerrard Winstanley’s writings, expresses a radical critique of religious power and the way it sanctions private property and poverty, while offering an alternative vision where the land is shared equitably by all. Excerpts provide a sense of the song:

In 1649, To St. George’s Hill

A ragged band they called the Diggers Came to show the people’s will

They defied the landlords They defied the laws

They were the dispossessed Reclaiming what was theirs

“We come in peace” they said “To dig and sow

By theft and murder They took the land

Now everywhere the walls Rise up at their command

“They make the laws To chain us well

The clergy dazzle us with heaven Or they damn us into hell

We will not worship The God they serve

The God of greed who feeds the rich While poor men starve . . .

“You poor take courage You rich take care

The earth was made a common treasury For everyone to share

All things in common All people one

We come in peace” –

The order came to cut them down

Further Reading

Bron Taylor

We come to work the land in common And to make the waste land grow This earth divided

We will make whole

So it can be a common treasury for all “The sin of property, we do disdain No one has any right to buy and sell The earth for private gain

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See also: Music and Eco-activism in America; Music of Resistance; Radical Environmentalism.

Dillard, Annie (1945–)

Annie Dillard is known for her attentiveness to the dramatic details of the natural world and for linking those minute details to divine mystery. She made a double impact with her 1974 Pulitzer-Prize winner, *Pilgrim at Tinker Creek*, which has influenced contemporary musing on both nature and the sacred. In that first book she says, “Our life is a faint tracing on the surface of mystery, like the idle, curved tunnels of leaf miners on the face of a leaf” (1974: 16).

A quarter of a century later, in *For the Time Being*, she still looks unflinchingly at cruel minutiae, weaving natural horror along with delight on finely spun prose, perusing a manual of children’s birth defects. She muses on the flaw of all human life, “Ours is a planet sown in beings. Our generations overlap like shingles. We don’t fall in rows like hay, but we fall” (1999: 202).

In addition to her contemplative and introspective nonfiction (*Teaching a Stone to Talk*), she is a novelist (*The Living: A Novel*), poet (*Mornings Like This: Found Poems*), a self-reflective writer (*The Writing Life*), and memoirist (*An American Childhood*). Dillard has rejuvenated the old idea of nature as revelation or sacred book, has revived Emersonian nature mysticism, has quickened the sense of beauty at the heart of mortal experience. She is an exuberant witness of beauty in the minuscule and the macabre.

At Hollins College she wrote her master’s thesis on Thoreau and many readers and critics have been quick to compare her to him; Tinker Creek is a short literary distance from Walden Pond in terms of pensive nature writing. Dillard inherits from and replenishes that strand of the American tradition claiming nature as divine revelation and key to the awakening individual.

A distinguished name in American letters, she is often classified as a mystic or an environmentalist. Yet, one might be cautious about calling the work of this inquiring convert to Catholicism a pantheist or mystic. She has called herself a “Hasidic Christian” and casts her inquiry through ethical terrain to confront the role of a theologically Christian God: “Do we need blind men stumbling about, and little flamefaced children, to remind us what God can – and will – do?” (1977: 61). The burned child she names “Julie Norwich,” for Julian of Norwich, the fourteenth-century Christian mystic who experienced the passion of Christ. Dillard also makes lyrical statements detached from theism or its ethical dilemmas, more in line with the description of the mystical according to William James’s “ineffable” or Rudolf Otto’s *mysterium tremendum*:

It has always been a happy thought to me that the creek runs on all night, new every minute, whether I wish it or know it or care, as a closed book on a shelf continues to whisper to itself its own inexhaustible tale. So many things have been shown me

on these banks, so much light has illuminated me by reflection here where the water comes down, that I can hardly believe that this grace never flags (1974: 68).

She seems to express a pantheism struggling with the theological problems of monotheism; she seems to express an immanent God in contradiction with a transcendent reality. Her writing is studded with paradox, but theologically she entertains multiple and contradictory perspectives.

One might be cautious, too, in classifying Dillard as an environmentalist. Her work is not a call to action, even though she has inspired environmentalists of her generation. Yet she has said,

There is no one but us . . . a generation comforting ourselves with the notion that we have come at an awkward time, that our innocent fathers are all dead

– as if innocence had ever been . . . But there is no one but us. There never has been (1977: 56).

She celebrates relentless nature,

A golden female moth, a biggish one with a twoinch wingspan, flapped into the fire, dropped her abdomen into the wet wax, stuck, flamed, frazzled and fried in a second. Her moving wings ignited like tissue paper, enlarging the circle of light in the clearing . . . (1977: 15).

But her interest in nature finally focuses inward, on the human observer. She makes parables of those details of weasels and eagles, and draws correspondences between human experience and the natural world, and between nature and an elusive, mysterious, divine. She had years ago opened her specimen box and saw that a carrion beetle had been for days “swimming on its pin” and Dillard transformed into incandescent prose the puzzle of suffering.

Finally her beautifully constructed language silences conclusions: “But the air hardens your skin; you stand; you leave the lighted shore to explore some dim headland, and soon you’re lost in the leafy interior, intent, remembering nothing” (1974: 2).

Lynda Sexson

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See also: Autobiography; Memoir and Nature Writing; Thoreau, Henry David.

Diola (West Africa)

The Diola of Senegal, Gambia, and Guinea-Bissau number about 500,000 people and include the largest number of adherents to an African traditional religion in the Senegambia region. Living in well-watered coastal areas, the Diola inhabit the northern limits of the Guinean forest. This area has a dry season stretching from late October until late May and a shorter rainy season during the remainder of the year. Annual rainfall averages between

2000 mm in the southwest to about 1100 mm in the northeast, though droughts are frequent. The Diola are generally considered to be the best wet-rice farmers in West Africa. Before the colonial conquests of the nineteenth century, most of these communities governed themselves through councils of shrine elders and village assemblies and were considered to be stateless societies.

Diola religious traditions focus on a supreme being known as Emitai, who created the Earth and all living things. The name Emitai, or Ata-Emit, means “of the sky” and is closely associated with rain (*Emitai ehlahl*) and the calendar year (*emit*), which begins with the onset of the rains. Emitai may withhold precipitation when the community fails to live up to its ritual obligations or when witchcraft becomes pervasive. Reflecting a sense that the supreme being is primarily concerned with issues of broad significance, most Diola regard the supreme being as the creator of a variety of lesser spirits who serve as intermediaries with humans in regard to specific types of problems. Thus, there are spirit shrines (*ukine*) associated with the procurement of rain; the fertility of women, livestock, and the land; economic activities ranging from fishing to hunting; the ritual transformation of young people into adults; healing; and community governance.

Central to Diola religious traditions is a dichotomy between the settled community (*hukin*) and the bush (*boudiale*). The former is an area that is relatively harmonious and predictable; the latter is chaotic and amoral. Benevolent ancestors (*kahoeka*) live within the community, but are invisible to all but those with a special power of the eyes to see into the realm of the spirit. Phantoms, the unrighteous dead (*kahoelra*), reside in the bush, often revealing themselves to solitary travelers at dusk. Violations of rules established by Emitai and lesser spirits can transform otherwise fertile land, where an offense took place, into barren land, symbolized by the hard red laterite soil that lies exposed in many locations.

Because of the frequency of drought, the procurement of rain is a central concern of Diola religion. Some of the oldest shrines are primarily concerned with rainfall and fertility and are invoked at the time of the harvest festival and at the beginning of the rainy season. Diola historians trace the origins of these shrines back to a group of men

who established the earliest settlements in the region, initially inhabited by Bainouk people who were conquered by and incorporated in invasive Diola communities. These men, often said to have originated with Emitai rather than with earthly parents, created spirit shrines for the procurement of rain, and then returned to Emitai. The most famous of these early “prophets,” Atta-Essou, fashioned wings out of fan palm leaves and flew up into the heavens (emit) to Emitai.

In the twentieth century a new type of prophet became central to Diola religion. These people, mostly women, are described in Diola traditions by the epithet, “whom

God has sent” (*Emitai dabognol*). Beginning in the first decade of the twentieth century, three women, Weyah of Nyambalang, Djitabeh of Karouate, and Ayimpene of Siganar claimed that Emitai commanded them to create new spirit shrines, also known as Emitai, to be used for prayers to the supreme being for the procurement of rain and the healing of illness.

During the Second World War, a young woman named Alinesitoué Diatta believed that she was called by Emitai to introduce a new ritual for the procurement of rain, along with a series of teachings that rejected French colonial agricultural schemes. In the midst of a severe drought, Alinesitoué began work as a maid in the capital of French West Africa, Dakar. While running an errand in the Sandaga market, she felt the presence of Emitai who commanded her to go down to the sea and dig in the sand. As the hole she had dug filled with water, she realized that Emitai had wanted her to end the drought and renew the Diola religious tradition. In 1941, she summoned the elders of her township and told them about a new ritual called *Kasila*, which required community participation in the sacrifice of a black bull. She also taught that the Diola had to renew their observance of a Diola day of rest, (*Huyaye*) every sixth day. It was a day of rest for the rice paddies, not for people; so work outside of rice cultivation could be performed. Furthermore, she instructed her followers that they must continue to plant the varieties of rice that had been given to them by Emitai, expressly to be planted in their lands. These West African varieties (*oryza glaberrima*), she argued, were spiritually related to the land and to Emitai. While she allowed her followers to continue planting what they regarded as European rice (actually Asian, *oryza sativa*) she insisted that only African varieties could be used in ritual. She also prohibited the cultivation of peanuts, the major Senegalese cash crop, which the French were promoting throughout the Diola territories. Peanuts grew on the low plateau areas that normally sustained mixed forest and grasslands, which were sources of palm oil and palm wine, thatch, and herbal medicines, while providing vital habitat for game animals. Furthermore, men planted peanuts and, at least among the Muslim northern Diola, they abandoned most of the labor-intensive rice cultivation to women. This dramatically increased women’s labor, as men focused on cash crops, while undermining rice production.

Alinesitoué taught that the droughts were caused by Diola neglect of their religious traditions and conversions to Islam or Christianity; by their reliance on foreign rice; by their embracing of peanut cultivation and the resultant cutting down of upland forests.

These changes undermined their duties as caretakers of a land given to them by Emitai. Unfortunately, the Vichy French administration decided, in 1943, that Alinesitoué constituted a threat to their authority. They arrested her and exiled her to Timbuctoo, where she died of starvation in 1944.

Other men and women claimed to be prophets in the tradition of Alinesitoué. Most shared her emphasis on the community sacrifice known as *Kasila* and her rejection of foreign crops. One of the more influential, Todjai Diatta of Djivent, expanded her teachings to demand the renewed cultivation of a wide variety of crops that Diola had once planted but were still only farmed in the most remote areas. Diola prophets have not only revitalized a Diola religious tradition in the face of the sustained challenges of the colonial and post-colonial eras. They have also provided a critique of agricultural development schemes, of a “Green Revolution,” based on divine revelation.

Robert M. Baum

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See also: African Religions and Nature Conservation; Saro-Wiwa, Kenule Beeson and the Ogoni of Ogoni; West Africa; Yoruba Culture (West Africa).

Dirt

In both its literal and metaphorical associations, dirt is a central theme in religious discourse. Its primary dictionary meaning is something that contaminates or befouls. The label dirty marks something as bad or taboo. Yet dirt also signifies the Earth or soil, the very ground of human being. Any consideration of the symbolic meaning of dirt must take into account all of these associations.

In many religions, “the mere existence of the soil was seen as significant”; the Earth is understood “as a religious form . . . repository of a wealth of sacred forces” (Eliade 1958: 242). The beloved dirt, soil or Earth, sometimes eaten as an act of identification, has been understood as the very flesh of Goddess, the cosmic womb that begets us and to which we ultimately return. Conversely, in less Earth-respecting traditions, dirt becomes the core metaphor for sexual thoughts, words, and deeds, for demeaning labor, and for fraudulent practices.

In *Purity and Danger* Mary Douglas asserts, “There is no such thing as absolute dirt.” Rather, dirt, that which is perceived to be disorderly, contaminating or polluting, is “in the eye of the beholder” (1966: 2). Moreover, dirt is not always seen as profane, as it is in the now dominant moral system. Rather, worldviews that recognize suffering, disease, and death as ontological necessities frequently understand the dirt as sacred.

Arguably, the degradation of dirt and its ensuing association with impurity and obscenity is linked to the negation of the feminine that underlies many patriarchal religions, philosophies and civilizations. In some belief systems associated with Abrahamic religions, it is Eve’s original transgression that is believed to be “responsible for bringing bodily ‘dirtiness’ (defecation, sweating, menstruation, etc.) into existence” (Delaney 1988: 79). In such beliefs, a conceptual dualism separates the masculine from the feminine, culture from nature, spirit from matter. The identification of nature with the feminine serves not as a source of respect, but as a legitimation for the subordination of nature. The moral imperative is to transcend and/or control the “lower realms,” and to attain distance from nature in order to achieve spirituality, rationality, and control. Thus everyone and everything associated with the “lower” realms (of the body and the world) – including the land, the sexual flesh, animals, women, and ethnic “others” – are stigmatized and deemed dirty. Disgust, the emotion occasioned by contact with the dirt, functions as a touchstone for degrees of civilization.

Feminist ecological thinkers urge a reconciliation with matter, a rethinking of socially constructed disgust. Alienation from the dirt/land/nature enables gynocide, genocide, misogyny, body hatred, fear of diversity, negativity toward sex, and an in-

ability to come to terms with disease and death. These factors underlie and interrelate sexism, racism, heterosexism, and environmental deprecations.

Despised groups are stigmatized as “closer to nature” and inherently dirty. Alice Walker synthesizes this perspective:

Some of us have become used to thinking that woman is the nigger of the world, that a person of color is the nigger of the world, that a poor person is the nigger of the world. But, in truth, Earth itself has become the nigger of the world . . . While it is “treated like dirt,” so are we (1988: 147).

The English word “dirt” is derived from a word meaning excrement. Excrement, what Goethe referred to as our “remnant of Earth,” though obviously dangerous if it comes in contact with food and water, is intrinsic to the cycling and regeneration of nature. For just as the Earth bears, nourishes, and sustains us, humans are obligated to return gifts and energy to the Earth. We do this through prayer and ritual but also through our bodily functions, including respiration, sexual exuberance, defecation and urination, and ultimately death when our bodies return to the elements. These cyclic processes are represented by such divinities as the Aztec Tlaelcuani, the “Filth Eater,” so named because she is able to absorb the sins, ego, corruption, disease and waste of human beings. Tlaelcuani takes filth (pollutions of all types, psychical as well as material) back into herself and cosmically recycles it, transforming and energizing the cosmos, and rebirthing matter.

The word human derives from the Latin humus, Earth or dirt, signifying the basic equality of all humans, and the core connection of our flesh to the matter of Earth. Humus also is the root of humility, a virtue that is based in respect for the ways of the flesh and recognition and acceptance of human dependence on the Earth. Linda Hogan recognizes the madness of a worldview in which “the clay of creation has ceased to be the rich element from which life grows.” Dirt-denying cultures promote “lives that are lived outside of life, without a love or respect for the land and other lives” (1995: 132). A healthy dose of respect for the land/dirt as well as for the permeable, sensual, fragrant, fluid, intelligent, excreting and finally mortal body is undoubtedly helpful to our survival (as is our humor around the subject). Yet, civilization has opted for a dissociating disgust and a suicidal pursuit of a monotonous purity, which is, of course, sterility, rather than revering the muck, diversity, darkness, and riot of fertility, which is invariably and exuberantly dirty.

In 1970, Lewis Mumford lamented that an egomaniacal technological culture, marked by a reigning “myth of the machine,” has idealized a “transcendent world of light and space, disinfected of the human presence” and “fit only for machines” (33). War against the dirt is ultimately warfare against ourselves. The desire to “disinfect,” to separate totally from the dirt/flesh motivates a panoply of related cultural practices and beliefs (e.g., violence engendering obsessions with sexual and racial purity; embalming; controlling wayward flesh with “botox” injections; silicone implants, and plastic surgeries; the proliferation of antibiotic soaps and lotions in everyday use; the promotion of virtual realities and/or a heavenly afterlife as superior

to material existence). It is easy to empathize with the human desire to avoid suffering, diminishment of powers through aging, and death. Yet, the dirt-phobic and death-denying culture ultimately is a self-defeating one.

Earth cannot be cheated. The quest for transcendence, control of the wild, and purity produces not only temporary conveniences and comforts, but also long-term desensitization and loss of purpose as well as chronic and sometimes terminal diseases (from allergies through cancer). And while humans will not become immortal, our technologically engineered wastes (from plastics through nuclear droppings) will continue in perpetuity.

Louke van Wensveen identifies virtues associated with environmentalism, including humility, compassion toward animals, hope and frugality – ones that she personally thinks of as “dirty virtues” because they express “a preoccupation with the Earth” and also because, as she says, this juxtaposition points out that many of these virtues would be considered “vicious,” bad or taboo during most of Western history (van Wensveen 2000). Of course, the phrase “dirty virtues” also reclaims dirt as a metaphor for the good. Environmentally minded folks might seek actively to name and celebrate dirty virtues, as well as dirty thoughts, words, and deeds.

Jane Caputi

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See also: Composting; Green Death Movement; Sexuality and Eco-spirituality; Sexuality and Green Consciousness; Tantrism in the West; Virtues and Ecology in World Religions; Wicca.

Disney

Like McDonald's and Coca-Cola, the Disney brand name is now synonymous with American culture. The symbols and meanings of the corporation's seemingly ubiquitous products maintain a strong presence in our minds and households. In 1994, Disney had the number one record, movie, video, and television show in the United States. The History Channel, ABC, ESPN, A&E, E!, Lifetime, SOAPnet, Miramax, Hyperion Books, Hollywood Records, Touchstone Television and Anaheim's professional sports teams are all owned by Disney. More than a half a billion people have been to a Disney theme park. Walt Disney World is the most popular tourist destination on Earth, with approximately 20 million visitors per year. The company's websites attract 28 million unique visitors monthly and rank in the top ten of all Internet properties, according to Media Metrix and Disney's 2002 annual report. The company owns 10 local television stations and 62 radio stations across the country. Disney has infiltrated Broadway, Times Square, and even, in 2002, the World Series, with a victory by its Anaheim Angels.

The Walt Disney Company's pervasiveness puts it in a powerful position to perpetuate and shape beliefs and practices related to gender, race, ethnicity, class, international relations, and in many and important ways, with regard to the environment. From its early days in 1923 as an animation studio, the Disney Company's creations have always been loaded with images and messages of nature and animals that were often not natural: Mickey Mouse and his barnyard pals, Jiminy Cricket's *I'm No Fool* short films, *Old Yeller*, Davy Crockett's exploration, and the synthetic hillsides and humanmade lakes that hide the engineered infrastructure of Walt Disney World.

Critics have dismissed Disney's presentations of nature, especially the tendency to anthropomorphize, to gloss over environmental degradation, and exploit the natural world for financial gain. Such criticisms, while insightful, can obfuscate other important activities, narratives and interpretations. Increasingly, researchers have questioned audiences' reactions to and interactions with Disney's portrayals of nature. Walt Disney, the person and creator of an entertainment empire, explicitly outlined and embodied what sociologists in the 1960s dubbed "Civil Religion" (Bellah 1968). Disney's weekly television show, frequent movie releases, and theme parks provided opportunities for ritualized behavior, social cohesion, and emotional expression. These behaviors were linked to a thoroughly modern manifest destiny – a belief in social progress fueled by science and technology, the nuclear family and domesticity, wealth and leisure through national supremacy, and corporate influence in all facets of public and private life. For example, Disney's 1957 animated television broadcast, *Our Friend the Atom*, was a

redemptive tale encouraging the baby-boom children of the Cold War 1950s – the same children who were taught to crouch under their desks during air raid sirens at school – not to fear the atom, but to take the optimistic view that it could be applied to solve the world’s problems. The message is that natural processes can and should be harnessed for human use and progress.

Another important Disney/religion/nature nexus has been the presentation of nature as a source of deep meanings and symbols *sui generis* – for its own sake. This can be seen as a modernizing of the Walt Disney Company’s presentation of nature and religion, and is most prominent in the Company’s more recent films and attendant theme park attractions. Disney’s version of nature as a source of deep meanings and symbols has developed over many years, emerging alongside of and at times overlapping with the civil religion and frontier narratives. For instance, between 1948 and 1960, Walt Disney studios produced a series of live-action nature films called “True Life Adventures,” beginning with *Seal Island*. With titles like *The Living Desert* (1953), *The Vanishing Prairie* (1954), and *White Wilderness* (1958), many of these films won Academy Awards in the “Best Documentary Feature” category. These stories, often in contradictory ways, reflected both civil religion and frontier myths: the primacy of the resourceful individual, but the sanctity of the family, and the success of cooperation; the inevitability of death, yet the possibilities of birth and renewal. What has made this developing narrative of nature celebration distinct, however, was the change from an attitude where Frontierland was a wilderness to be conquered to a view of wilderness as a place for inspiration and wisdom. Today Jiminy Cricket touts “Environmentality” in Disney hotel bathrooms and on brochures, while in the Land pavilion in EPCOT, *Lion King* characters Timon and Pumba decry the evils of development in Nestlé’s *The Circle of Life*.

The question arising from this discussion is how people use Disney’s nature narratives to give their own lives meaning, order and ritual. We can only be sure that, like Disney’s treatments of nature, what people draw from them is filled with contradiction, irony, and inconsistency. At Disney the natural world and wilderness are simultaneously presented as dark and dangerous places, to be feared and controlled, but at the same time peaceful, beautiful, light, airy places, imbued with sacred meanings to be protected and enjoyed.

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See also: Disney Worlds at War; Motion Pictures; Theme Parks.

Disney Worlds at War

Walt Disney's theme parks, television productions, and motion pictures evoke strong feelings among those who attend and avoid them. These feelings are an indication that the narrative experiences conveyed in them are plural and contested. These reactions represent a canvas ripe for scholarly analysis – one that reveals not only a battle among devotees and critics of Disney, but also internal ambiguities and contradictions over what is a contested ideological and spiritual terrain. Put simply, there is a war over Disney Worlds, and Disney Worlds are at war. And as is usually the case when humans go to war, religion has a lot to do with it.

Disneyland (California)

Growing up in southern California, in the late 1960s I regularly visited the original “Disneyland” (which opened in 1955), taking advantage of a paperboy's perk. I learned the place with an intimacy made possible by regular access and the energy of youth. Now, several decades later, perhaps I can be an un-Disney-like tour guide.

Upon entering Disneyland, one's first encounter is with “Main Street USA,” and the initial glimpses it offers the park visitor is something I now consider (with my retroactive religious studies lenses) to be a model of utopian sacred space. Here one finds symbolized what Martin Luther King, Jr. hoped for, “the beloved community”; in other words, a utopian and sacred space reinforcing what Robert Bellah dubbed Civil Religion, and what others have labeled more negatively as “religious nationalism.” (American civil religion conceives of the United States as representative of sacred ideals and includes a divine mandate to protect – if not extend globally – such ideals, including religious liberty and democracy.) An Opera House where visitors learn about Saint (Walt) Disney and from his childhood hero, President Abraham Lincoln, is featured prominently at the Mainstreet USA locale. (At Florida's Disney World, Lincoln was moved to the Hall of the Presidents at Liberty Square, but his message remained the same.)

Lincoln is perhaps the central idol of American Civil Religion. He features prominently in Bellah's *The Broken Covenant*, for his speeches express a conviction in the divine calling of the nation, as well as God's displeasure and judgment when it does not live up to its ideals. The Lincoln Memorial in Washington, D.C. provides a classic example of such civil religion adorned with key quotations from Lincoln's speeches, it provides visitors with an opportunity to sense the weight of Lincoln's vision of the

nation. Similarly, visitors at Disneyland attend “Great moments with Mr. Lincoln,” a presentation adapted from the 1964–1965 New York World’s Fair exhibit, where a robotic Lincoln extols upon the ideals of the Republic and the sacred trust of liberty, and recapitulates for thousands daily a key script from the nation’s sacred narratives. The message coheres well with early Puritan understandings in which the Atlantic Ocean was understood to be the Red Sea-like challenge to be crossed on the way to the promised land, a land whose sacredness depends not only on divine creative fiat, but on human labor establishing religious liberty and social justice. Lincoln acknowledged

American imperfections (such as slavery), but his central message was that America had a God-given duty to build, from nature, a utopian sacred space. Of course, this space was to be carved out from that which was considered a “wilderness,” a notion increasingly contested, in part, because the continent was already well populated by indigenous peoples.

These peoples provide part of the backdrop at Disneyland’s Frontierland, where the American continent is presented as an exciting and dangerous place, full of Indians as well as pirates and other bandits, all of whom must give way to the advancing, implicitly Christian, Euro-American civilization.

My suggestion that this narrative has to do with the advance of an implicitly Christian civilization could be challenged. But Walt Disney himself, who died in 1966, implied that Christianity contributed to his vision for the Park. He insisted on strict moral codes for employees and even visitors, for years banning same-sex dancing while opening the park after normal hours for Christian special events. Moreover, he attributed his success in part to his “Congregational upbringing and lifelong habit of prayer,” according to “Crosswalk,” a website hosted by conservative Christians dismayed at what they considered to be the moral decline of the Disney Worlds after Walt Disney’s death. Indeed, an internet search with key words like “Walt Disney” and “Christianity” reveals that many Christians now believe Disney World propagates anti-Christian beliefs and practices, including sorcery, witchcraft, paganism and homosexuality; concerns that played a role in a 1997 Southern Baptist boycott of everything Disney. A smaller number of fundamentalist Christians believe Walt Disney himself promoted occult religion, in a secret conspiracy with Freemasons, Jews, Catholics, the Illuminati, and Satan himself, seeking to create a repressive One World Order.

Despite such perceptions, Disney’s mainstreams more clearly promote Christian religious nationalism than a nefarious world system. But the Christian ethos is partially obscured by Disney’s presentation of a “melting pot” theory of America. This pot coheres, of course, with the assimilationist agenda of the predominantly Christian, Euro-American society, manifesting its “destiny” to control the land and its original human inhabitants. Many Disney Television shows and feature films, notably the Davy Crockett television shows of 1954 and 1955 (the first one was subtitled “Indian Fighter” and, combined with later shows, was released as a retitled feature film) reinforced this “progressive” narrative. At Disneyland, visitors could symbolically participate in the

story by paddling “Davy Crockett’s Explorer Canoes,” shooting imagined Indians in the river below the frontier fort’s parapets, and by purchasing period guns and coonskin caps.

While Davy Crockett justified European-American domination of the American land it is worth underscoring that patriotism involves both “we feeling” and affection, if not reverence, for land. This can be seen, for example, in national hymns such as “America the Beautiful,” in the long history of American art, such as that of the Hudson School and in the photography of Ansel Adams, which finds the sublime in the continent’s outstanding landscape features. Such patriotism is also found in the nineteenth-century emergence and subsequent evolution of tourism, especially to National Parks and historic landscapes, which John Sears and Edward Linenthal have shown powerfully (and often in ironic if not contradictory ways) fuse religion and nationalism as they invest the certain places on the American landscape with sacredness.

The Crockett stories reflected a kind of patriotic nature spirituality that has erupted in America. They conveyed the idea that a strong connection to wild American land is the ground of good moral character and political legitimacy. Davy Crockett, after all, “Goes to Congress” (episode

#2), ironically perhaps, in part to help ensure peace with and the just treatment of the Indians he earlier went to fight. And later he would die heroically “At the Alamo” (episode #3), defending an outpost at the southern border of the expanding Euro-American empire. (Crockett was not the only American whose charismatic authority was grounded literally in wild land; with more time we could run a similar analysis on Abraham Lincoln and others.)

Historians would label these Crockett narratives fanciful, but at Disneyland Frontierland is no fantasy. Neither is Fantasyland, which is an adjacent realm, placed at the very center of the park. This placing is unlikely to be accidental. Sleeping Beauty’s castle is there, modeled after Neuschwanstein Castle, which was built in the late nineteenth century by Bavaria’s King Ludwig, who was himself called “mad” by some in his day for creating a castle impractical for defense and fanciful of design. It was an excellent design to borrow for Fantasyland, however, which is populated by people and creatures drawn largely from European folk stories and Disney inventions drawing on such stories. Fantasyland is presented as both a fun and (playfully) dangerous place. There, European culture, and even European land, is symbolically central: Switzerland’s Matterhorn Mountain is Fantasyland’s sacred mountain, rising majestically above the entire park. If Disneyland is exemplar of the nation’s civil religion, then here at its center is Europe, appearing as the new Fatherland’s mother. Perhaps it is not fanciful to suggest that, at Disneyland, Europe is the implied ground from which European civilization could strong-arm its way to power in Frontierland, mustering its troops to secure the American future.

That future, labeled Tomorrowland, appeared opposite Frontierland and adjacent Fantasyland. With exhibits like the “Carousel of Progress,” it painted an unambiguously positive picture of modern, industrial civilization. Its major venues were spon-

sored unself-consciously by multinational corporations, including those of the extractive, chemical, oil, and telecommunication industries.

The chemical corporation Monsanto, for example, took visitors on a journey inside of the atom, celebrating the science that was unlocking nature's secrets. This and kindred venues promised "better living through chemistry" and the peaceful if not utopian benefits of nuclear power. The oil giant Chevron presented "Autopia," giving youngsters a chance to drive pint-sized cars. This fusion of utopia with the automobile was more than linguistic innovation. For millions of children it was a performative rite of passage into car culture. Many of them went on to view America itself as an Autopia, finding great if not ultimate meaning in everything automotive.

Cumulatively, Tomorrowland expressed unbridled, utopian optimism in technology and America's leading role as its developer. And the American mission was otherworldly as well, with venues expressing awe at rocketry, Apollo moon explorations, and an envisioned "Mission to Mars." Placed adjacent to Main Street USA, Tomorrowland has provided ever since the 1950s a physical connection between American sacred space and outer space, grounding civil religion and the future of religion both in the here and now in America, and above and beyond this world.

Disney World (Florida)

But the narrative could not end there, though it did require additional habitat. Disney had run out of room in Orange County, California. So, Disney World was created in Orlando, Florida, where Walt Disney secretly purchased seventy square miles of biologically diverse, wild land to secure control of the developments to come. Denounced as a desecration by radical environmentalists who positioned themselves in opposition to the Disney myth, Disney World repeated and elaborated the plot begun in California. But as this new Disney World was built, the story line became even more expansive, complicated, ironic, and contested. The "religion and nature" dimensions of this appear most clearly at two new developments there: Epcot Center and Disney's Animal Kingdom.

Epcot globalizes the mythic vision of a technological utopia presented more provincially at Disneyland. Its "world showcase" celebrates the cultures of eleven nations on Earth, which stand in for the world's cultural diversity. Meanwhile, "Future World" continues Tomorrowland's utopian technological optimism. There, a "Geosphere" labeled "Spaceship Earth" is Epcot's axis mundi, towering 165 feet over visitors ever since the park opened in 1982. Located within the dome itself is "Spaceship Earth," a ride that tells a story reminiscent of the Epic of Evolution; it is a newly invented narrative, inspiring diverse forms of nature-oriented ritualizing that consecrates cosmological and evolutionary narratives. Sponsored by American Telephone and Telegraph, the ride focuses on 60,000 years of human communicative evolution and signals wondrous new ways humans will communicate in the near future.

Keeping the original Disneyland's fusion of corporate America and technical utopianism, the "Universe of Energy" venue was sponsored by ExxonMobil. "Mission Space" (which opened in 2002) superseded Disneyland's "Mission to Mars" with a grander cosmopolitanism. Other venues celebrated agricultural innovations, such as hydroponic plant cultivation – touted as a way beyond pesticides – and bioengineering, promising freedom from hunger. Meanwhile, "Living Seas" programs provided an opportunity to commune with sea life, including what many in the New Age movement today consider morally if not spiritually superior beings, the dolphins. These last two examples show that competing if not warring worldviews are emerging, even at Epcot itself. The possibility of a pesticide-free agriculture implicitly acknowledged a shadow side to chemical-intensive agriculture, and the living seas programs reflected a growing concern for and valuing of the oceans and sea creatures, something not strongly represented in earlier Disney World incarnations. This subtle counternarrative, present even at Epcot, broke out in a more full-scale counterrevolution at the nearby Animal Kingdom, which opened in 1998. Here a strong message in favor of environmental conservation was expressed, often wrapped in and reflecting a kind of nature-as-sacred religion that seemingly contradicted civil religion-baptized narratives of progress and beneficent territorial expansion.

At the "Kilimanjaro Safari," where visitors ride a simulated Land Rover to view authentic African plant and animal life, poachers are identified as the villains responsible for endangering species. This is, of course, a simplistic explanation for the near-extinction of much African fauna; one chosen, little doubt, for its snug fit into Disney melodrama. But elsewhere in the park, admittedly in more museum-like exhibit panels that engage fewer visitors than the adventure rides, visitors can view socially scientifically credible exhibits on the diverse interplay of social and ecological factors precipitating Africa's biodiversity crisis. When I first viewed these areas the month the park was opened, I found myself wondering if there was any place in America where greater numbers of ordinary people could be exposed to such an analysis of the challenges facing African conservation. It was a presentation standing in direct opposition to the corporation-friendly optimism that reigns almost everywhere else in Disney's Worlds.

The first business of the Animal Kingdom, of course, was not environmental education. Disney Chief Michael Eisner, who took a tour of the "Kilimanjaro Safari" before the park opened, decided unilaterally that the lions could not be allowed to feed in front of the visitors, as the park's planners had planned. This decision was to the annoyance of the Kingdom ecologist who told me that people should not be shielded from the predatory nature of the Animal Kingdom. On the other hand, another venue, the "Affection Section," provides a place where children can, presumably, emotionally connect to (non-predatory) animals.

These exhibits and this experience, perhaps especially when compared to Disneyland and Epcot Center, suggest there are fault lines in Disney's Worlds: they are not an entirely monolithic, hegemonic, and unchanging enterprise.

Disney Movies in the Animal Kingdom

Recent Disney movies, for example, have been adopted by the Animal Kingdom where they are given even more pointed conservation messages. This adoption further illustrates that some of the architects laboring under the Disney umbrella resonate with, and promote, a nature-assacred spirituality. Or at least, they have affinity with what I have elsewhere called “spiritualities of connection” to the Earth’s creatures and living systems.

Of course, even Disney’s classic animated film *Bambi* (1942) may be read as an early environmental film, one that expressed a kind of animistic nature spirituality that emotionally connected the viewer to the film’s nonhuman forest inhabitants. Few who saw it were unmoved by Bambi’s wrenching loss at the hands of a hunter, or could easily forget the fear of the forest creatures facing the anthropogenic forest fire. In this picture, nature untrammelled by humans is depicted as miraculous and sublime, but it is also revered as the very life cycle itself that envelopes all creatures. In this way, all creatures are kin and have reciprocal obligations.

Much of this formula was repeated in the *Lion King* (1994), where nature was again portrayed as sublime but threatened. The “Circle of Life” theme song celebrated a natural metaphysics of interrelatedness, and the moral of the fable was the need for the reharmonization of life on Earth by fitting into one’s proper niche in the natural order. At the Animal Kingdom’s “Festival of the Lion King,” these themes are represented daily before huge crowds of spectators.

The film *Pocahontas* (1995) is even more obviously an expression of contemporary nature spirituality if not eco-religion. Its transformation from the inherited story of the American Indian Princess who saved a European explorer and later died in Europe – which critics like Christian Feest argue provided a symbolic justification for European invasion – is remarkable indeed. In Disney’s version, the princess and her people hear nature’s spirits. At their receptive best, they learn from them (especially, in this movie, through Grandmother Willow), particularly of their sacred interconnections within the web of life. Meanwhile, though Europeans are largely portrayed as agents of desecration, the good-hearted among them learn to respect the indigenous peoples and their land. Like the best-known versions of the inherited story, Disney’s *Pocahontas* saves a European explorer. But in Disney’s version she does not die alienated from her sacred place in a foreign land. She stays with her people to help them to protect nature and learn to coexist peacefully with the newcomers.

According to many scholars and at least one band of contemporary Powhatan Indians “The film distorts history beyond recognition” (Powhatan Renape Nation, from their website, accessed June 2003). But it pleased many Native Americans, who found the portrayal of the Powhatan people respectful and authentic. Some of them were, apparently, consulted about the film, as was the (non-Powhatan) American Indian Movement activist Russell Means, who provided the voice for the animated Chief Powhatan character in the movie. He said afterward,

I find it astounding that Americans and the Disney Studios are willing to tell the truth. It's never been done before . . . and I love it. The cooperation I got with every suggestion I made, even the smallest little things about our culture, have been incorporated into the script (Anonymous, movie review at .movieweb.com/movie/pocahontas/pocprod1.txt, May 2003).

Not only were the film's directors and Native American participants moved by the film's depiction of Native American nature spirituality. So was Stephen Schwartz, the lyricist for the film's signature song, "Colors of the Wind," which challenged Euro-American understandings of land ownership, countering these with the claim that one ought not to "own" the creatures and spirit-filled entities that make up animate nature. In words sung by the Pocahontas character:

You think you own whatever land you land on
The earth is just a dead thing you can claim
But I know ev'ry rock and tree and creature
Has a life, has a spirit, has a name...

The rainstorm and the river are my brothers
The heron and the otter are my friends
In a circle, in a hoop that never ends

Toward the end, to the question, "How high does the sycamore grow?" the song answers, "If you cut it down, then you'll never know." Here the environmental message is inescapable. Commenting about the process of writing these lyrics, Stephen Schwartz would later comment,

It was just one of those magical things . . . We knew what we wanted to say and we knew who the person was. We were able to find the parts of ourselves that beat in synchronicity with Pocahontas on those particular thoughts. The image of a sycamore echoes Chief Seattle's speech to Congress, in which he says, "No one can own the sky" and "What will you do when the rivers are gone?" (Quoted from the previously cited movie review).

It is certainly ironic that these words served as inspiration for the movie's Indian nature spirituality, since the words attributed by Schwartz to Chief Seattle (more accurately Chief Sealth) are now suspected of being history-inspired fiction. Nevertheless, many would consider this speech, and these lyrics, to have captured well the nature spirituality of many Native Americans. Whether accurate or not, the speech and its resonance certainly reflect a nature-as-sacred spirituality that is increasingly common among a diverse spectrum of the American public. And lest anyone think I am reading too much into all this, it was not only the lyricist Schwartz who resonated with what he took to be the nature spirituality of Pocahontas and her people. The film's directors Mike Gabriel and Eric Goldberg reported that in the film they also "tried to tap into her spirituality and the spirituality of the Native Americans, especially in the way they relate to nature" (Quoted from the same anonymous movie review).

The animistic nature spirituality and environmental kinship ethic of the recast story is not only clear in the movie, it is also clearly reiterated at an Animal Kingdom's show entitled "Pocahontas and Her Forest Friends," which reiterates the Disney version of the

story, thus the moral quest for kinship among all creatures. The literature promoting the performance ends with the question, “Will you be a protector of the forest?”

Indeed, if we look at Animal Kingdom overall, commerce and conservation intertwine in complicated and contradictory ways. Certainly there are profound ethical questions surrounding the borrowing (some would say stealing) of stories and spirituality from Native Americans or other indigenous people for commercial purposes, even if there is also a motive to promote reconciliation between different groups of people and between these groups and their wider relations. Such questions are properly debated in a wide variety of contexts. To acknowledge this part of the controversial nature of Disney’s nature spirituality should not distract us, however, from recognizing that in this part of the Disney orbit, the conservation theme seems in some sense at war with its commercial logic. It also stands in direct opposition to the techno-utopian civil religion that is its dominant narrative, for in the Animal Kingdom, the sacred center is not a European point of divine origin, nor a technological utopia, but the Earth and her denizens interconnected in the circle of life.

Indeed, at the center of Animal Kingdom is a giant Tree of Life, standing nearly 150 feet tall, containing the sculpted images of more than 300 animals. In this sculpture the animals flow one into another, hybridized, in a way reminiscent of art sometimes created by indigenous peoples with shamanic traditions. The message could not be clearer: life is an interconnected web, worthy of reverence, and we must all eventually recognize that it is within this circle that we belong.

Disney Wars

Disney Worlds provide an excellent contemporary case study of how the salutary and shadow in contemporary nature religion become engaged and change over time. As Joseph Champ and Rebecca Self Hill suggest in their overview entry on THEME PARKS in this encyclopedia, further study is needed into the experiences people have in such places. What do they bring to and take from such experiences in the area of religion, nature, and ethics? To my knowledge, there has been no in-depth scholarly study of the way Disney Worlds influence the millions exposed to them.

One thing is certain. Disney’s Worlds are at war. Or at least, they are hotly contested. And these battles have much to do with religion and nature.

This, of course, is a complex claim that depends on which enclaves within and beyond the Disney Universe we are focusing upon. While the dominant narratives place a sacred canopy of legitimation over a globalizing empire and a techno-utopian Tomorrowland, they are not immune from incursions. Some Disney World partisans subvert the dominant plot lines offering a nature-oriented spirituality that may provide a significant counterweight. These guerillas are themselves under attack, charged with eroding the moral fiber of the nation, which depends, according to the worldviews of the attackers, on the nation’s putatively Christian underpinnings. In short, Disney Worlds

and the vehement nature of the reaction to them, provide one significant example that, in American culture and our globalizing world, religion and nature are contested, in play, and very much up for grabs.

Bron Taylor

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See also: Adams, Ansel; Disney; Dolphins and New Age Religion; Indigenous Religions and Cultural Borrowing; Manifest Destiny; Mother Earth; Motion Pictures; Nature Religion in the United States; Seattle (Sealth), Chief; Theme Parks.

Divine Waters of the Oru-Igbo (Southeastern Nigeria)

The Oru-Igbo of Southeastern Nigeria perceive their waters animated by water deities – the goddess of Oguta Lake, Ogbuide also known as Uhammiri, and her divine husband, the river god, Urashi, among others. The corresponding worldview among the Oru-Igbo is thus diametrically opposed to the Western notion of water as a mere natural element, resource, or commodity.

The Oru-Igbo are a sub-division of the Igbo people, one of Nigeria's major ethnic groups numbering 20–40 million people whose language, Igbo, is heterogeneous with many dialects. Also known as Riverine Igbo, the Oru live in and around Oguta and distinguish themselves from other Igbos on account of their institution of sacred kingship and their physical and spiritual affinity to major bodies of water (e.g., Oguta Lake) and rivers including the River Niger.

Igbo-land is among the most densely populated areas of Africa, with intense agricultural productivity and several large urban centers. Yet, despite their success in drawing on their natural resources to support a large population for centuries, pre-Christian Igbo religion regards the major forces of nature as divine and the environment as sacred. Moreover, the need for balance emerges as a major cultural value contributing to an ecologically responsible worldview whereby humans are accountable for their actions to their gods and goddesses, must constantly strive for equilibrium in their social and natural environments, and groom and re-conciliate various forces to maintain and perpetuate human existence spiritually and physically. The resulting goals of balanced gender relations, and a fruitful and respectful correlation of humans and nature manifest in Oru-Igbo religion, is expressed in everyday life and culture, economically, socially, politically, emotionally, spiritually, and in art and ritual.

The prime deity underpinning Igbo custom is the Earth goddess, Ani/ Ala, as reflected in the Igbo word for custom, *omen-ala* / *omen-ani*, or laws of the land. Colonial administrators interested in territorial claims recognized the importance of the Earth goddess. But in addition, there are several other equally significant nature deities whose prominence varies from place to place in correspondence to the natural environment. One major divinity besides the Earth goddess is the mother water goddess generalized as *nne mmiri* and locally known by different names (e.g., Ogbuide / Uhammiri in Oguta). A brief outline of Igbo cosmology illuminates this deity and spiritual significance ascribed to the natural element, water.

The Mother Water Goddess in Igbo Cosmology

The Igbo supreme god is Chi-Ukwu / Chukwu, the great spirit of creation and destiny, an unlimited entity, beyond shape, age, or gender, neither male nor female, too vast to be contained in manmade images or temples, and traditionally addressed through the arishi, or messenger deities, an entire pantheon of nature deities, spirits, and ancestors below the supreme god.

Among the lesser deities, the supreme Earth goddess, Ani/Ala, the supreme water goddess, nne mmiri, and in some areas the god of thunder, Amadi Oha, take the lead. Antagonisms and tensions exist between more static forces on the one hand, and creative ones challenging tradition, on the other. This binary opposition has been equated to the antagonism of “water spirits” and “land spirits” and is a major theme in the religious beliefs of the Igbo, Kalabari and Ijaw people of the Niger Delta. The various manifestations of the divine forces of nature (Earth and water) and human achievement (ancestors) may either confront or support human beings, are at times antagonistic to human life, yet may also support life, and are potentially either beneficial or harmful. People must constantly balance these challenges in order to survive.

The Earth goddess, Ani/Ala, harbors the preservation of custom, but she is complex, manifesting herself in multiple antagonistic ways: firstly, Ani is the supreme Earth goddess of the town; secondly, the Earth goddess of the wild bush, Onabuluwa, represents the opposite of Ani; third, there are the many individual Earth goddesses of different compounds and farmlands, each commanding her own calendar of days of worship, or refraining from farming.

The water goddess, nne mmiri, is complementary to the Earth goddess. With her own set of rules she may either affirm custom, or challenge, renew and modify tradition. A fertility goddess, she may give life. Yet, a volatile force, she may also destroy and take life. Moreover, she challenges, and may even alter human destiny.

In the Igbo worldview each human being has his/her own *chi*, an individual force derived from and endowed by Chi-Ukwu. The individual *chi* leaves the human body at death, reunites with *Chi-Ukwu*, and may be reborn through reincarnation, albeit in another body, at a later stage of the eternal life cycle.

Before entering and exiting this world, the human being must cross a river. Because the concept of time is circular, the individual must cross a river twice, and forever – not only once, as in ancient Greek mythology. Each time a person is crossing the river to enter life on Earth he/ she is challenged either by the water goddess, nne mmiri, or by the Earth goddess of the wild bush, Onabuluwa. At this point, the individual’s destiny, *akarakara*, and sacred pact with the supreme god are at stake. The person may either defend his/her destiny, or change its course by forming a pact with the mother water goddess. This pact not only alters one’s life and destiny, but also dedicates the person to the goddess as her devotee. If the individual later tries to evade both his/her original destiny and the water deity’s claim by refusing to fulfill her requirements

resulting from the pact to change one's destiny, then, it is believed, this may cause illness, particularly mental derangement and even death.

Water Priesthood

Oguta's mother water goddess is Uhammiri, also known as Ogbuide, or Mammy Water in pidgin English, a name that has caused much controversy. The Oru-Igbo ascribe vital importance to this volatile deity who may either grant or destroy life. Her beauty, power and threatening qualities are expressed in one of her names, *Ogbuide*, "She/ beauty that kills with excess."

The worship of this awesome deity and her husband, the river god Urashi, is imbued with existential responsibility for the town's well-being, and vested in several different types of priesthood and services. There are hereditary male priests for each water deity whose shrine is reserved to the oldest man of a designated clan. In addition, both male and female priesthood titles may be attained through possession, or water spirit calling. These priests/priestesses are often widely known as diviners, or mediators between humans and the spirit world who interpret the complex Igbo universe and its requirements to individual clients. Moreover, some of these priests/ priestesses and diviners are renowned herbalists, many of whom have once suffered from either physical or emotional illness, were healed by a local herbalist and priest, and have attained their own special status through a complex personal history of disease, healing, initiation, training, and title-taking.

Everyone may seek a water deity's assistance in times of need, or to pray for children, or wealth. Some individuals permanently dedicate themselves to a water deity as a priest/priestess, or as members of a congregation of followers, worshipping the water deity every four or eight days. The Igbo market week has four days and weeks are grouped in sets of two. The Earth goddess is worshipped on Eke, while Orie and Afor days are dedicated to the lake goddess, Ogbuide, and Nkwo to her husband, Urashi. In addition, the Owu priest, Omodi, and the town's oldest woman, the Eze Nwanyi, address and invoke the water deities during the Oru towns' major festivals, *Agugu*, New Year, and *Omerife*, New Yam festival, once every year.

Owu, Agugu and Omerife, the Art and Ritual of Balancing People and Nature

Oru-Igbo villagers describe the *Agugu* festival as "doing, acting out, or celebrating our custom" – a body of beliefs and activities representing, defining and reaffirming their culture and collective identity. In the absence of brute force, and different from our rules of law, the order of custom is a rather subtle agent compelling people to live up to society's norms, keeping society together, and its culture and values alive. Oru custom

is based on a body of sanctions and religious beliefs encoded in myths and celebrated in the annual *Agugu* festival. Individual practices may change, but the complete erosion of custom threatens the very integrity of a people's culture, identity, and social cohesion, together with their emotional and economic well-being and environment.

The *Agugu* festival is a multi-layered, complex event: a ritual, it addresses the religious beliefs in the divine forces of nature and teaches respect rather than mere exploitation of the environment; an event of economic importance, it signals the beginning of the planting season, and an occasion and venue for the accumulation and subsequent distribution of surplus staples; a major educational and social event, it initiates boys into the ranks of men, whereby the initiates are taught esoteric knowledge and also the most essential existential skills necessary to live and flourish in their social and geographic environment; an occasion for festivities, recreation and play, *Agugu* entertains, educates, and unites the townspeople with their fellow humans, custom and identity, their beliefs in the gods and goddesses of their land and water, local knowledge and survival skills, the necessity of balancing power and complementary gender, and the distinction between the wilderness of nature and civilization created by humans.

Only if the *Agugu* festival is properly performed and the order of custom maintained, can a good harvest follow with *Omerife*, the New Yam festival in due course. For, only if people observe nature properly – in this case, the flooding and recessing of the water levels of rivers and lakes – and plant accordingly, can they enjoy a rich harvest. Based on this belief and wisdom, *Agugu* promotes an environmental strategy of respect, observing nature and acting accordingly, rather than interfering and attempting to dominate.

Agugu reenacts sacred myths and celebrates the indebtedness of successfully farming and procreating to the forces of nature and to the mysterious force of *Owu*, “something mysterious from the water, good, and life giving.” The *Owu* myth celebrated during the festival encodes custom (e.g., paternal rights) and is reenacted in a masquerade, initiation ceremonies and other rituals performed at that time. All of these events illustrate how religious beliefs, the local environment, knowledge, practical skills, and the economy are closely interrelated.

The Oru farmer knows very well that an accurate observation and analysis of the water levels of the lake, rivers, and local creeks are basic to his success. He also knows that male and female must complement each other step by step, just as “you cannot walk on one leg alone.” During the festival, young men are initiated into adulthood. They become men who may soon plant their seeds to grow and yield fruit, yam and children. Men must eat to survive, but without women, there are no children, and there is no cooked food. Moreover, it is nearly impossible to eat without one's hands, or handiwork.

These are some of the practical lessons taught to the initiates during initiation, in the informal “university of the village,” rather than in formal education. All of *Agugu*'s lessons are highly relevant to the local life and environment. Preparing the graduates of initiation to confront and master life at home, they learn to respect while making

use of the gifts of nature/water. This education is for living locally, rather than feeding into or stemming from a body of Eurocentric or merely utilitarian knowledge whose benefit to society and the natural environment is highly questionable in Africa as elsewhere. Contrary to Western models, but equally striving for maximum emotional and existential benefit, *Agugu* promotes an environmental strategy of observing and respecting, rather than merely exploiting or dominating nature. The religious beliefs underpinning Oru-Igbo custom provide additional safeguards toward protecting the environment.

Sacred Groves

Uhammiri/Ogbuide and Urashi, and other water deities, are worshipped in multiple locations. Priests, priestesses and their followers privately maintain shrines for these deities in their homes, some built on demand, and specific clans own other shrines in or near the town. In addition, major communal shrines to the water deities are located far from town, hidden in the wild thicket near the shores of rivers and lakes. These sacred groves can only be reached by canoe. In these semi-secret, special places nature must not be disturbed and not one branch cut, according to the water deity's rules. The requirement to respect nature's sacred integrity is strictly observed, for the python, sacred avenger of divine anger, is believed to keep watch and punish transgressors. From an ecological point of view, sacred groves sustain the natural environment as sanctuaries for diverse species of plants and animals threatened by cultivation and destruction of their natural habitat (*Nyamweru*).

Totem Animals and Other Creatures

Because of their association with the water deities, certain animals are sacred to the Oru-Igbo, including the python, crocodile, tortoise, and Iguana who must not be killed under any circumstances. If accidentally trapped and killed, a python is buried like a human being. Additional creatures are taboo to part of the population, for whenever a human is born in town, an animal is believed to be born in the bush, considered a totem animal of the clan in question, who must not harm but instead protect this creature under any and all circumstances. The killing of another animal, "beautiful *Asa*," the "fatty fish without eyes," is taboo to worshippers of Ogbuide. If accidentally caught, the fisherman must report this to his elder and share his spoil with his entire clan. These and other religious rules protect the natural environment and its

flora and fauna, partially threatened with extinction due to the dismantling of indigenous religious beliefs and the resulting erosion of African culture.

Behavioral Codes

A host of behavioral codes indebted to Oru-Igbo custom and religion, particularly the belief in divine water and the sacredness of nature in general, regulates how much and when people may take from their environment (e.g., fishing near the lake shores where the young ones hatch is permitted only at certain times of the year, allowing for the fish population to restore itself). Moreover, custom requires reciprocity, a balance of give and take not only between people, but also between man and nature (e.g., manifest in the notion of water deities and the need to sacrifice to them in return for divine gifts): offering an animal's life may be necessary to show gratitude for receiving the gift of life (e.g., the birth or survival of a child).

Pre-Christian Igbo religion and cosmology acknowledge human indebtedness to nature and the need to maintain equilibrium with her divine forces (e.g., Earth, water and thunder). All life, human and animal alike, is sacred, and traditionally domestic animals were slaughtered only in ritual, not for profane greed. Even the seemingly unimportant lizard's life must be respected, as Obiadinbugha, the hereditary priest of the lake goddess Uhammiri, said in his prayer, "He who kills the lizard for nothing, let the war of lizards encircle him."

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See also: African Religions and Nature Conservation; Mammy Water; Sacred Groves of Africa; Sea Goddesses and Female Water Spirits; Serpents and Dragons; Traditional Ecological Knowledge; Water Spirits and Indigenous Ecological Management.

Dogs in the Abrahamic Traditions

The widespread practice of pet-keeping in modern society is in line with ancient traditions that elevated dogs to the epicenter of the harmonious relationship between animals and humankind. Greek and Roman literature offer ample evidence of dog-keeping, with all its emotional weight. Faithfulness, memory, intelligence, love – all the rich spectrum of human virtues – were attributed to dogs, which in many cases were said to excel the average human being in these qualities. This highly positive approach, however, stands in complete discordance with the tenets of all monotheistic religions, which at best developed ambivalence toward dogs, and, at worst placed a strong emphasis on their negative nature. This religious antagonism, though, lacks clear dogmatic validation, similar to that found in Genesis against the snake, for example, and raises questions that are still open to further research.

The Bible mentions dogs 32 times, mostly in a deprecatory form. When God adopted the Children of Israel to become his chosen people and, as such, regulated their diet, he commanded, “And ye shall be holy men unto me: neither shall ye eat any flesh that is torn of beasts in the field; ye shall cast it to the dogs” (Ex. 22:31). During the week of Passover, as well, Jews were allowed to throw forbidden leavened food to their dogs (*Babylonian Talmud, Pesahim* 32a). Medieval homilies explain this command as a kind of reward for the good behavior of canines during the Exodus when they supposedly refrained from barking, thus facilitating the flight of the Hebrews from Egypt to the land of Canaan (Ex. 11:7). Still, their connection with carrion and carcasses turned canines into despised animals, and the Bible records many instances of dogs lapping human blood (1 Kgs. 14:11; 16:4; 21:19, 23–24; 2 Kgs. 9:10, 36; Ps. 68:23). To their essential impurity – which, according to Jeremiah, will burden dogs with carrying the dead on Doomsday (Jer. 15:3) – the Book of Proverbs adds their stupidity: “As a dog returneth to his vomit, so a fool returneth to his folly” (Prov. 26:11; cf. 2 Peter 2:21–22). The Bible also uses dogs as a common metaphor to hint at the unfortunate status of men (2 Kgs 8:13; Job 30:1) or at the negative elements of society, whether the enemy (Ps. 22:16, 20), renegades in general (Ps. 59:6, 14), or false prophets (Isa. 56:10–11). The apocryphal Book of Enoch, as well, utilizes canine symbolism to describe the Philistines, Ammonites, and Edomites – all of whom posed a danger to the Chosen people. No wonder, therefore, that Deuteronomy proscribes the admittance of dogs along with whores into the House of the Lord: “Thou shalt not bring the hire of a whore, or the price of a dog, into the house of the Lord thy God for any vow; for even both these are abomination unto the Lord thy God” (23:18).

Rabbinical literature effectively provides the longrange development of biblical tenets and some explanation of their enigmatic nature. Although the rabbis differentiated between “evil” and “good” dogs, they advised taking a cautious attitude toward “good dogs,” as well. These dogs had to be securely chained during the day and could be freed only at night, when decent people remained in their houses. The ownership of an “evil” dog – that is, one that bites and barks – was completely forbidden, since it could cause its owner to violate a biblical prohibition: “Do not place blood in your home” (Deut. 22:8). The equation gradually became clear: a good Jew had to avoid the presence of dogs in his home, since a pet could turn into a public danger. Among the three “objects” that a wise Jew was to evade, dogs stood alongside women and snakes, all three being suspected of sorcery and malevolence (*Babylonian Talmud, Pesahim* 111a).

On the other hand, rabbinical literature also acknowledges canine loyalty and courage, which justified a charitable attitude to pets. Following Deuteronomy 11:15, the Talmud states that Jews may not eat before feeding them (*Babylonian Talmud, Berachot* 40a, *Gittin* 62a); it also acknowledges the meritorious behavior of canines in defense of their owners, thus earning them recognition for life. Stories of this kind were used to emphasize God’s omnipotence, which in times of danger may turn the “natural enemies of men” (i.e., dogs) into their allies. Thus, after exiling Cain from paradise, God furnished the first criminal in the history of humankind with a dog, to defend him from the attack of savage animals (*Babylonian Talmud, Bereshit Rabbah*, 22, 12). The apocryphal Book of Tobit, as well, refers to Tobit’s dog, which faithfully accompanied its owner on his journey to Media (5:16, 10:14). One rabbi further commented that “there are three distinguished in strength: Israel among the nations, the dog among the animals, [and] the cock among the birds” (*Babylonian Talmud, Beitza* 25b).

Biblical and rabbinical tenets heavily influenced the prevailing attitude toward dogs in the New Testament and early Christian theology. In his eschatological vision, St. John perpetuated the biblical connection of dogs to whores: “For without are dogs, and sorcerers, and whoremongers, and murderers, and idolaters, and whosoever loveth and maketh a lie” (Rev. 22:15). Together with the most despicable strata of human society, and as the only representative of the animal kingdom, dogs were therefore excluded from heavenly Jerusalem. Jesus, as well, corroborated their dishonorable status when he decreed: “Give not that which is holy unto the dogs, neither cast ye your pearls before swine, lest they trample them under their feet, and turn again and rend you” (Matt. 7:6). Both Matthew (15:26) and Mark (7:27) testified that Jesus had requested of the Greek woman: “Let the children first be filled: for it is not meet to take the children’s bread, and to cast it unto the dogs.” No wonder, therefore, that Paul advised the Philippians: “Beware of dogs, beware of evil workers, beware of the concision” (Phil. 3:2).

Receptive as it was of the Classical heritage, Christendom was not immune to the worthy aspects of dogs, which left their mark on patristic literature. Commenting

upon the parable of Dives and Lazarus (Luke 16:19–25), Ambrose of Milan, one of the four recognized Doctors of the Latin Church in the fourth century, blessed dogs “that represent those who guard the flock and protect it against the wolves . . . keep guard for their masters’ safety . . . and display noteworthy smelling skills” (Ambrose in Springer 1931: 29–32). He also reported in detail the genealogies of several dogs – carefully established in patterns similar to those that served the aristocracy – and described birthday parties celebrated in their honor.

The ambivalent attitudes toward dogs found in Christian and Jewish traditions, further strengthened by ecological challenges, found a fruitful arena in the emerging Islam. Faced with a plague of stray dogs, Muhammad at first made a categorical decision to exterminate all dogs. He moderated his decree afterwards, reasoning that God had created the canine genus and that people needed certain species of dogs. The Prophet thus decided to exterminate only black-coated strays, particularly those with light patches, the indisputable mark of the devil. Muhammad further established that a woman, a donkey and a black dog interrupt the prayer. The widespread belief that dogs, especially black dogs, were in fact a demonic emanation of evil spirits created the ground for a biased approach toward dogs in Islam. According to Moslem exegetes, any place where the eye of a black dog is buried will fall into ruins. Everything a dog touched or licked was rendered impure, and the place where it had lain had to be purified with water, following the practice of the Prophet on one occasion. A dog prowling close to a believer in prayer invalidates his prayer, and its presence prevents angels from visiting a house. Ultimately, any believer who keeps a useless and vicious dog lessens his final reward, a categorical conclusion very similar to that reached in the Babylonian Talmud. No wonder, therefore, that the Arabic word for dog, *kalb*, became a biting insult and appears pejoratively in numerous proverbial sayings.

All useful dogs that obey their master are freed of divine condemnation, however. This category includes trained hunting dogs and watchdogs, which guarded houses, alleys, flocks, crops, or vineyards; their killing was punished with heavy fines, which varied according to the species and the functions that the dogs fulfilled. Though useful dogs were socially tolerated, they remained unclean with respect to religious practice. On the other hand, there was a widespread belief in the therapeutic value of dogs, as scape-animals against intestinal and stomach disorders, the disease being transmitted to them through physical contact. There are also some indications of attachment to dogs, even from the Prophet himself. It was said that Muhammad had promised a divine reward to an old woman for her act of charity to a thirsty dog. Moreover, a dog by the name of Kitmir will be allowed to enter paradise (Qur’an C?XVIII:17), because of its praiseworthy behavior toward some youngsters whose lives were in danger.

In sum, all three monotheistic religions seem to promote an ambivalent attitude toward dogs, one that embraces different emotions: love and hate, power and submission, depravity and honesty. All kind of polarized attitudes were projected on dogs, thus turning “man’s best friend” into a faithful reflection of the history of humankind itself.

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See also: Animals; Animals in the Bible and Qur'an; Dogs in the Islamic Tradition; Hyenas – Spotted.

Dogs in the Islamic Tradition

Islamic discourses on the nature and function of dogs are representative of a range of tensions regarding the roles of history, mythology, rationality, and modernity in Islam. In fact, the debates surrounding the avowed impurity of dogs, and the lawfulness of possessing or living with these animals, was one of the main issues symbolizing the challenging dynamic between the revealed religious law, and the state of creation or nature. In addition, certain aspects of these debates pertained to the power dynamics of patriarchy, and more generally, the construction of social attitudes toward marginal elements in society.

In a fashion similar to European medieval folklore, black dogs, in particular, were viewed ominously in the Islamic tradition. According to one tradition attributed to Muhammad, the Prophet of Islam, black dogs are evil, or even devils, in animal form. Although this report did reflect a part of pre-Islamic Arab mythology, it had a limited impact upon Islamic law. The vast majority of Muslim jurists considered this particular tradition to be falsely attributed to the Prophet, and therefore, apocryphal. Nevertheless, much of the Islamic discourse focused on a Prophetic report instructing that if a dog, regardless of the color, licks a container, the container must be washed seven times, with the sprinkling of dust in one of the washings. Different versions of the same report specify that the container be washed once, three, or five times, or omit the reference to the sprinkling of dust. The essential point conveyed in these reports is that dogs are impure animals, or, at least, that their saliva is a contaminant that voids a Muslim's ritual purity. Hostility to dogs, not just as a source of physical but moral impurity, is further expressed in Prophetic reports claiming that angels, as God's agents of mercy and absolution, will not enter a home that has a dog, or that the company of dogs voids a portion of a Muslim's good deeds. Cultural biases against dogs as a source of moral danger reach an extreme point in reports that claim that Prophet commanded Muslims not to trade or deal in dogs, and even to slaughter all dogs, except for those used in herding, farming, or hunting.

These various anti-dogs reports expressed culturally ingrained social anxieties about aspects of nature that were seen as threatening or unpredictable. In addition, discourses on dogs played a symbolic role in the attempts of pre-modern societies to explore the boundaries that differentiated human beings from animals. In that sense, the debates about dogs acted as a forum for negotiating not just the nature of dogs but also the nature of human beings. This is most apparent in traditions that create a symbolic nexus between marginalized elements in society, such as non-Muslims or women, and dogs. In some such traditions, it is claimed that the Prophet said that dogs, donkeys,

women, and in some versions non-Muslims, if they pass in front of men in prayer, will void or nullify that prayer. Interestingly, early Muslim authorities, such as the Prophet's wife Aisha, strongly protested this symbolic association between dogs and women because of its demeaning implications for women. As a result, most Muslim jurists ruled that this tradition is not authentic, and that the crossing of women in front of men does not negate their prayers.

Despite the attribution to the Prophet of a large number of traditions hostile to dogs, for a variety of reasons, many pre-modern Muslim scholars challenged this orientation.

The Qur'an, the divine book of Islam, does not condemn dogs as impure or evil. In addition, a large number of early reports, probably reflecting historical practice, contradicted the dog-hostile traditions. For instance, several reports indicated that the Prophet's young cousins, and some of their companions, owned puppies. Other reports indicated that the Prophet prayed while a dog played in the vicinity. In addition, there is considerable historical evidence that dogs roamed freely in Medina and even entered the Prophet's mosque. A particularly interesting tradition attributed to the Prophet asserted that a prostitute, and in some versions, a sinning man, secured their places in Heaven by saving the life of a dog dying of thirst in the desert.

Most jurists rejected the traditions mandating the killing of dogs as fabrications because, they reasoned, such behavior would be wasteful of life. These jurists argued that there is a presumption prohibiting the destruction of nature, and mandating the honoring of all creation. Any part of creation or nature cannot be needlessly destroyed, and no life can be taken without compelling cause. For the vast majority of jurists, since the consumption of dogs was strictly prohibited in Islam, there was no reason to slaughter dogs. Aside from the issue of killing dogs, Muslim jurists disagreed on the permissibility of owning dogs. A large number of jurists allowed the ownership of dogs for the purpose of serving human needs, such as herding, farming, hunting, or protection. They also prohibited the ownership of dogs for frivolous reasons, such as enjoying their appearance or out of a desire to show off. Some scholars rationalized this determination by arguing that dogs endanger the safety of neighbors and travelers. For the majority of jurists, however, the pertinent issue was not whether it was lawful to own dogs, but the avowed impurity of dogs. The majority contended that the pivotal issue is whether the bodies and saliva of dogs are pure or not. If dogs are in fact impure then they cannot be owned unless there is a serious need for doing so.

As to the issue of purity, the main point of contention concerned whether there is a rational basis for the command to wash a container if touched or licked by a dog. The majority of jurists held that there is no rational basis for this command, and that dogs, like pigs, must be considered impure simply as a matter of deference to the religious text. A sizeable number of jurists, however, disagreed with this position. Jurists, particularly from the Maliki school of thought, argued that everything found in nature is presumed to be pure unless proven otherwise, either through experience or text. Ruling that the traditions mentioned above are not of sufficient reliability or authenticity so as to overcome the presumption of purity, they argued that dogs are

pure animals. Accordingly, they maintained that dogs do not void a Muslim's prayer or ritual purity. Other jurists argued that the command mandating that a vessel be washed a number of times was intended as a precautionary health measure. These jurists argued that the Prophet's tradition on this issue was intended to apply only to dogs at risk of being infected by the rabies virus. Hence, if a dog is not a possible carrier of rabies, it is presumed to be pure. A small number of jurists carried this logic further in arguing that rural dogs are pure, while urban dogs are impure because urban dogs often consume human garbage. Another group of jurists argued that the purity of dogs turns on their domesticity – domestic dogs are considered pure because human beings feed and clean them, while dogs that live in the wild or on the streets of a city could be carriers of disease, and therefore, they are considered impure. It is clear from the evolution of these discourses that as nature became more susceptible to rational understanding, complex and potentially dangerous creatures, such as dogs, became less threatening for Muslim jurists.

Aside from the legal discourses, dogs occupied an elusive position in Muslim culture. On the one hand, in Arabic literature dogs were often portrayed as a symbol of highly esteemed virtues such as self-sacrifice and loyalty. For example, Ibn Al-Marzuban wrote a fascinating treatise titled *The Book of the Superiority of Dogs over Many of Those Who Wear Clothes*, which contrasts the loyalty and faithfulness of dogs to the treachery and fickleness of human beings. Dogs were also widely used for protection, sheep herding, and hunting. On the other hand, dogs were often portrayed as an oppressive instrument in the hands of despotic and unjust rulers. Similar to the medieval European practice, in the pre-modern Middle East region, as an expression of contempt or deprecation, at times dogs were hung or buried with the corpses of dissidents or rebels. Furthermore, in popular culture, unlike cats, dogs were considered filthy or impure animals that ought not share the living space of the pious or religiously observant. This cultural anti-dog prejudice survived into modern times, and as a result, the ownership of dogs continues to be socially frowned upon. In the contemporary Muslim world, dog ownership is common only among Bedouins, law enforcement, and the Westernized higher classes. As a matter of fact, it is rather striking that, to a very large extent, modern Muslims are unaware of the pre-modern juristic determinations that vindicated the purity of dogs. Nevertheless, this in itself is a measure of the ambiguous fortunes of the dynamics between Islamic law and nature in modernity. In the pre-modern age, Islamic law evolved in near proportion to the advances achieved in the human knowledge of nature. But as the institutions of Islamic law were deconstructed by European Colonialism, and with the rise of puritanical movements in contemporary Islam, Islamic jurisprudence has ceased to be a forum for creative thinking or dynamic interactions with the vastness of nature.

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See also: Animals; Animals and Christianity; Animals in African Legend and Ethiopian Scriptures; Animals in the Bible and Qur'an; Dogs in the Abrahamic Traditions; Hyenas – Spotted.

Dolphins and New Age Religion

Dolphins have become an important icon in the New Age movement, and a large number of publications and websites testify to this. Book titles like *Dolphins into the Future*, *Journey into the Dolphin Dreamtime* and *Dolphins, ETs & Angels* are typical of the genre, as are websites like The Divine Dolphin, Dolphin Connection and DolphinHeart.

At least two lines of thought are brought together to form this icon. One is inspired by pre-modern myths and legends about dolphin-human relations. The other is inspired by high tech, modern science and space travels. Common to both is a notion of a highly intelligent and social animal.

Dolphins have fascinated people in many societies throughout the world. In Australia, for example, a tribe calls itself the “Dolphin People” and believes their shamans to be reincarnated dolphins, whereas on the Butaritari atoll in Kiribati, people believe that spirits living beneath the ocean shed their human form to become dolphins and other small whales when invited to village feasts by hereditary “callers.” Upon arriving at the beach, they are slaughtered and eaten. Dolphins have both in Australian and in Northwest Coast Indian cultures been regarded as totem animals, which imposes prohibitions against hunting and consumption of dolphins by the groups having these animals as their totem. (Totemism is a taxonomic system by which animals, plants, and other natural phenomena are used to divide people into groups [e.g. clans], and where the group members have a ritual relationship to their natural phenomenon/totem.) And in the Brazilian Amazon numerous tales are told about dolphins transforming themselves into human beings to take part in village festivals. But it is to the ancient Greeks that modern dolphin enthusiasts most often turn in their quest for inspiration. Dolphins had a semi-divine status in Greek cosmology and they figure prominently in many of the ancient myths. Moreover, a number of legends tell about friendly dolphins capable of assisting people in a number of ways and even saving their lives.

Since the 1960s new elements have been added to these myths and legends. The friendship between people and dolphins of antiquity has become a symbol of an idyllic, primordial relationship between human beings and nature, a relationship allegedly destroyed by modernity. The dolphin stands for nature as a whole, and being good to dolphins has become a yardstick of human evolution. In much New Age literature dolphins are given important roles to play in our struggle to reunite with nature as well as with our fellow human beings. In this cultural critique, which blames development of modern technologies and the market economy for both our environmental and social problems, dolphins appear as a noble teacher able to guide humans back

to sustainable living in harmony with nature. Such views may even be found within more mainstream environmental organizations. A former leader of Greenpeace in Denmark, Michael Gylling Nielsen, for example, asserted that because they are without hands, dolphins are not distracted by mechanical objects and can concentrate on their social skills, emotional self-control and humor, and even develop their intelligence in a spiritual direction. Many writers on dolphins see this pretech dolphin as a champion of values and knowledge that people have lost along the road to modernity, such as playfulness, kindness, and caring.

Interspecies communication is a strong element in the dolphin cult. Dr. John Lilly, a psychiatrist, inaugurated research on dolphin language to learn from dolphins their ethics, laws and knowledge that have allowed them to live sustainably for millions of years. Others think that it is possible to communicate telepathically with dolphins. It is claimed that it is particularly beneficial to infants to be born among dolphins, as it is believed that similar brain waves facilitate transmission of dolphin wisdom to the infants through telepathy. A dolphinarium in Eilat, Israel, is among those that have been sought by pregnant women who wanted to deliver their babies among dolphins.

The discovery that dolphins – like bats – navigate and locate their prey by the aid of echolocation or sonar has helped to create an image of a sophisticated, high-tech animal. Dolphins are believed to be able to scan each other in order to diagnose ailments in their comrades and even to cure tumors and cancer (both ideas are taken from the use of ultrasound in modern medicine). From here it is only a short step to the notion of the dolphin as a healer, and a number of swim-with-dolphins programs now offer dolphin therapy. For those unable to meet dolphins in the water, Horace Dobbs – a British psychiatrist and founder of International Dolphin Watch – has for years distributed what he calls “audio pills” consisting of an audio-tape with music combining Westernized versions of Aborigine didgeridoo music and dolphin sounds. According to Dobbs, people with a variety of ailments have been cured by listening to this vibrant *Dolphin Dreamtime* tape. Echolocation is also seen as a means of communication in a three-dimensional mode by which ultrasonic pictograms build up holographic images. The difference between this way of communication and human languages is like the difference between 3D TV broadcasts (not yet invented) and radio broadcasts.

The image of a pre-tech dolphin of a nostalgic past has in the dolphin cult merged with an image of a high-tech dolphin that may even have contacts with galactic forces.

In this cosmology, the dolphin takes on the character of messiah and serves as an instrument or a medium for a divine or cosmic mind. The dolphins have been sent on a mission to save the Earth. The science fiction writer Douglas Adams has in his *The Hitch Hikers' Guide to the Galaxy* popularized this belief. In his novel, the dolphins return to space after giving up their attempt to alert human beings to the impending ecological destruction of the Earth. New Age writers have developed this idea, such as Joan Ocean, who via the internet and in a series of seminars invites people to swim with dolphins and meet “our Extraterrestrial, galactic neighbors” and share their latest messages. Opinions are divided whether the messages are rooted in

profound dolphin wisdom or in a cosmic or divine mind outside both dolphins and human beings. Their messages can be received in different ways, not least through “dreamtime,” a concept inspired by literature on the Australian Aborigines. Others may feel a resonance between dolphin crystalline energy fields and cosmic vibrations, bringing them to a higher level of awareness and thereby making contacts with the divine possible.

Despite their engagements with dolphins, organizations promoting mainly a spiritual connection with these animals have played only minor roles in the campaigns against dolphinariums, dolphin hunting and dolphin by-catches in fisheries, campaigns that are led by environmental or animal rights activists. Activists seldom contest views expressed in the dolphin cult, however, and many may in fact be influenced by spiritualism themselves. Indirectly, such spirituality may therefore have considerable impact.

Arne Kalland

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See also: Animals; Celestine Prophecy; Cetacean Spirituality; New Age; Power Animals; Watson, Paul – and the Sea Shepherd Conservation Society; Whales and Japanese Cultures; Whales and Whaling.

Domanski, Don (1950–)

The titles of Don Domanski's seven poetry books – such as *Heaven* (1978), *Wolf-Ladder* (1991), and *Parish of the Physic Moon* (1998) – indicate the roots of his poetry in both nature and spirituality. For over three decades, his poetry has tried to balance the belief (once quoted from Novalis by Domanski) that “All that is visible clings to the invisible” (Domanski 1986: 7) with the feeling expressed in one of his poems that “the human heart is still / three ribbons tied to a belief / in flesh and form” (from an unpublished poem).

Born in Cape Breton, Nova Scotia, in 1950, Domanski has lived most of the past thirty years in Halifax. His poetry is richly original, with influences ranging from Baudelaire and twentieth-century Surrealists to Wallace Stevens, from ancient Chinese poetry to Rilke, from Buddhist scriptures and Sufi teachers to Hindu, Christian, and Jewish mystics. During an interview conducted in 2002, Domanski humourously called himself “a spiritual free-range chicken, pecking here and there, finding what suits the hunger of a moment” (Domanski 2002: 247). He has also read extensively in the sciences, and collected fossils for many years. He sums up one of his core beliefs in the interview just cited: “The wonder is that anything at all exists” (Domanski 2002: 246). His poetry is also permeated by his sense of the interconnectedness of all things.

Domanski's poetry is less likely to record stages in human history than to hint at the vastnesses of biological, geological time; less likely to describe natural phenomena in their full idiosyncratic detail than to present them as seen by a transforming eye energized by both reason and intuition. Domanski's experience of nature is one of restless, unusually fertile metaphor-making. The shortcomings of language fully to express both the immediate and the ineffable are reflected in his metaphors, his constant renaming and redescribing. Though his poetry includes images of wolves, bears, and whales, it has been especially drawn to small creatures such as ants, moths, snails, mice, and bats. A spider “prays that its buckle / of flesh will last out this night” (Domanski 1978: 34). A finch is “surely not Lucifer / yet in the quick climb / a true competitor for Man” (Domanski 1975: 23).

For all the sustenance his poetry finds in myth and dream, even when Domanski uses words like “heaven,” “angels,” and “gods” he does so with a startling physicality. His “heaven” is not conventionally palatial and golden, but something that “sprawls its unearthly hulk / an inch above the pond / to finger its brainwork of flies” (Domanski 1978: 60). Elsewhere, heaven is “miserable,” “lonely / for wooing / for the dolphin's / sensual flesh” (Domanski 1978: 25). This is poetry in which a god of creation “put

on a wool sweater / and felt the tugging of sheep / down the back of it” (Domanski 1986: 67), and in which angels have “pen-names / like Michael and Israfel / but know themselves as larvae / twirling in a man’s ear” (Domanski 1975: 54). It is a poetry that delves deeply into the borderland between the visible and the invisible.

Brian Bartlett

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See also: Canadian Nature Writing.

Domestication

Among the seminal processes that characterized the evolution of human culture, one of the earliest was humankind's developing awareness of the surrounding physical world. This led, inevitably, to attempts to explain this world and the human relationship to it, attempts which found expression in the emergence of philosophical and religious belief systems. All such systems, whether relatively simple and localized in character or the subsequent complex, institutionalized structures of the world's great religions, contain elements that focus on these concerns. Among tribal peoples, for example, "nature" (in its broadest sense) provides sustenance, and is inextricably linked with fertility and fecundity, and the mysteries of birth, life, and death; the elements of nature that direct these forces have to be dealt with – controlled, where possible, or propitiated or appeased through ritual and sacrifice. Among more advanced philosophical and religious traditions, however, humanity's place in the world is formalized in doctrine and dogma. In religions originating in South Asia, for instance, humans are a part of nature and subject to the same guiding principles. This is quite different from Western views of the world, which place humans apart from nature and in dominion over it.

One aspect of this "dominion" over nature is seen in the domestication of plants and animals. Precise definitions of what "domestication" actually involves is a matter of considerable scholarly debate, but the concept invariably encompasses human control of the reproduction of plant and animal species, usually for utilitarian purposes and commonly to provide sustenance – a process that invariably results in genetic differentiation between wild and domesticated forms of the species involved. Domestication has occurred in many locales and with many different species and at many times in the past, but the domestication of cereals and of herd animals that occurred in the ancient Middle East around 8000 B.C.E. is widely seen as the *sine qua non* of the beginnings of agriculture, the rise of the earliest urban civilizations, and associated emergence of complex social structures and formal religious systems.

The origins of agriculture, along with the motivations for, and the processes of, domestication represent important themes in Western thought. Numerous theories have been put forward to explain these origins, from the cyclical Golden Age theory of classical times to the "Three Stages of Man" theory of the nineteenth century, to various hypotheses of the modern era. The latter include the evolutionary thinking of Robert Braidwood and David Rindos (domestication is the result of natural evolutionary processes involving contact between humans, plants and animals), environmental challenges (e.g., the climatic change proposed by V. Gordon Childe and Charles Reed), economic factors (e.g., the population-pressure theory of Mark Cohen), social mecha-

nisms (Barbara Bender and Brian Hayden) and the ecological model of Kent Flannery. A common thread underlying many of these theories of agricultural origins is that domestication was undertaken for the purpose of developing food supplies. Such interpretations, however, have been challenged by scholars who argue for non-utilitarian motives for domestication. In the late nineteenth century, the German geographer, Eduard Hahn (1896) proposed a religious motivation for the domestication of herd animals, especially cattle. He noted that the usefulness of wild cattle for labor or milk could not have been foreseen until after they had been domesticated, and that initial interest in them was as sacrificial animals. Hahn specifically proposed that common cattle were the first herd animals to be domesticated; and that they were domesticated in Mesopotamia to provide animals for sacrifice in fertility rites dedicated to the lunar mother-goddess.

Hahn's ideas were taken up and elaborated by the influential cultural geographer Carl Sauer and others during the middle and later decades of the twentieth century. Animals were often domesticated, Sauer argued, less as a food source than for ceremonial or ritual purposes (1952). Erich Isaac restated Hahn's view that the motive for domestication of cattle in western Asia was religious rather than economic (1962). In their study of the *mithan*, a free-ranging, domesticated bovine of the northeastern hills bordering the Indian subcontinent, Frederick and Elizabeth Simoons, concluded that the animal was probably domesticated for sacrificial purposes. The Simoons suggest similar processes at work in the domestication of common cattle in the ancient Near East, though there – unlike in South Asia – economic functions subsequently came to dominate the initial ritual role of cattle.

Religious motivations for the domestication of cattle in the Ancient Near East have come to be challenged in the light of the archeological record. However, some scholars see religion playing a significant role in the process by which stable, sedentary agricultural societies (i.e., societies whose economies were based on domesticated plants and animals) emerged in Southwest Asia. Jacques Cauvin (2000), for example, notes the explosion of religious symbolism associated with the Neolithic in this region and argues that a religious revolution preceded the shift from hunting and gathering to farming. Çatal Hüyük, an important archeological site near Konya on the Anatolian plateau of Turkey, shows remarkable evidence of thriving fertility cults dating to as early as 6500 B.C.E. embracing a mother-goddess, a bull-god, and cattle. The site also shows the presence of both wild and domesticated forms of cattle at approximately the same time. Such evidence has led Ian Hodder (1990) to speculate that agriculture, surrounded by ritual, was adopted not for the purpose of ensuring food supplies, but as a metaphor for human domination over nature.

Whatever the validity of arguments for religious motivations for the domestication of cattle in the Ancient Near East, there are other instances where religious or ritual motivations for the domestication of specific plants and animals have been proposed. Some scholars have suggested that cereals were domesticated to produce beer for ritual purposes prior to their use as food. Turmeric and other dye plants may have been

domesticated for religious reasons. Isaac (1970) has argued that the citron was domesticated for ritual purposes, and that its spread through the Mediterranean region was tied to the Diaspora and the citron's role in Jewish ritual. He also cites the domestication of the cat in ancient Egypt as being the clearest case of religious motivation in the domestication of an animal (the cat was the epiphany of the Egyptian goddess Bast). Sauer proposes that the chicken was originally domesticated in Southeast Asia for cockfighting purposes, representing, perhaps, a ritual reenactment of some mythological divine combat. Certainly, the association of the cock-crow with sunrise and the identification of the poultry egg with death, rebirth and fertility (e.g., the "Easter egg") are ancient ideas held in widespread areas of the Old World. Similarly, the pigeon played a significant role in the religious conception of early farming communities in the ancient Near East, becoming a symbol of the mother-goddess. This symbolism appears to have been adopted in Christianity, and even today the dove continues to be a universal sign of peace.

Examples of domesticates from the New World, with its different fauna and flora and history of human settlement are more limited, though they do occur. Raúl Azúa has suggested, for example, that in MesoAmerica, macaws, some parrots and several songbird species were domesticated for religious purposes, while howler monkeys, hares, quail, and woodpeckers were maintained in captivity for ritual purposes.

Domestication is a process by which humans have extended their control over nature, bringing certain plant and animal species under their direct control. The first domestication of cereals and herd animals in the Ancient Near East nearly 10,000 years ago led to a significant change in the nature of humans' relationship with their environment, one that had remained relatively unchanged since the species *Homo sapiens* first appeared on Earth. The more assured food supply permitted the emergence of permanent settlements, population growth, the rise of cities, social stratification, religious systems, technological advances – indeed, all the features commonly identified with "civilization." Traditional views propose that domestication was undertaken for utilitarian reasons, but these views have been challenged by those who argue that a religious revolution preceded the emergence of agriculture and that religious belief and practices may have played a critical role in this process. Whatever the validity of this view, numerous examples exist where religion and ritual may have been involved in the emergence of specific domesticates. Religion has, in a sense, acted as an arbiter between humans and nature. It has allowed humans to explain their place in the natural world, but has also allowed them to dramatically change the character of this very same world. The domestication of plants and animals has been one means by which the latter has been accomplished.

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See also: Ecological Anthropology; Ecology and Religion; Goshalas (Home for Aged Cattle); Hinduism; India.

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Donga Tribe

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The "Donga Tribe," as they came to be called, were a group of 15–20 young people who lived for most of 1992 directly on Twyford Down in an effort to stop the land from being destroyed for the M3 (Southampton–London) motorway. Twyford Down was apparently "the most protected site in Britain," its chalk downland the habitat for a number of rare species, ensuring that several areas were designated Sites of Special Scientific Interest. Twyford Down had long been an area of human habitation; a barrow containing excavated skeletons was just one of several Scheduled Ancient Monuments. The whole Down was an Area of Outstanding Natural Beauty.

Another Scheduled Ancient Monument on part of the Down was the iron-age trackways where the Dongas had their camp. These trackways were first called "Dongas" nearly a century ago by the two ex-Winchester private schoolboys who left Twyford Down in the protection of Winchester College in their wills. Dongas is the Matabele word for the same type of humanmade gullies and remained the local word for the trackways. The group of people who came together to protect and live on the land "acquired" the name the Donga Tribe, and this self-identification with the land itself quickly became explicitly tied to their political and spiritual beliefs.

The Dongas, Earth First!ers, and other activists (needless to say, these identities blurred) who, over the course of the protest, delayed the motorway construction through their direct actions, were the catalyst that sparked a decade of roads' protest and related direct action in the nineties, and up to the present day. The Dongas were, to

borrow Sidney Tarrow's term, "early risers" in this protest cycle, and thus their actions and worldviews had a significant influence on the wave of activists who followed. In turn, many of these ideas had diffused down from Greenham Common women – whose long-lived anti-nuclear protests became a model for the Dongas activists to emulate.

In the first stages of the protest (autumn 1992), the primary action strategy was to defend the land from "attacks" by the contractors and their machinery; a regular occurrence was the arrival of bulldozers on the Donga end of the Down, activists lying down in front of the machinery, and the retreat of the bulldozers. This changed on "Yellow Wednesday" (9 December 1992 and, ominously for the Dongas, the date of a full moon lunar eclipse) when for the first time security guards were hired to forcibly remove the Dongas and other activists from the site. The three-day eviction sparked accusations of security and police violence, national media coverage, and a resurgence of protest at Twyford in 1993. "Site invasions" – charging onto the increasingly vast (40 meters deep, 250 meters wide, a mile long) scar through the Down and stopping the machines working – became a regular occurrence, sometimes attracting hundreds of people.

Underpinning the political direct actions of the Dongas was an ethical framework, an explicit spirituality – or to be precise, a political paganism. The Dongas explicitly articulated a sense of connection to nature; nature was seen as sacred. Crucially, the Dongas saw themselves and all life as part of this web: nature was not some "other." These concepts (most people were familiar with Lovelock's "Gaia" theories) were linked to ideas about significant landscapes and Earth energies. The Down, and the nearby hillfort St. Catherines' Hill, were "powerpoints," markers for currents of Earth energy or leylines. The Dongas were not alone on this; the founder of Winchester College, also a Mason, was also a keen sacred geometrist, and to this day, Winchester College schoolboys hold a service on the Hill on summer solstice morning.

The Dongas felt that these beliefs would have been shared by the Bronze and Iron Age people who had lived on the Down. Identifying with sacred landscape thus meant identifying with these earlier "tribes." They felt such a connection to the place and its history that they produced stories, poems, songs and myths about wheels come full circle, new tribes, old ways. Conscious parallels were also made with the beliefs and political land-rights struggles of indigenous tribes worldwide.

Magic reality, myth-weaving and sympathetic magic melded into direct action. Believing themselves protected by the land that they physically defended with their bodies, they symbolized this protection and called it into being with the use of significant images and objects. Music, especially drumming, and invoking protection through chants and songs, often preceded action, and went on during it. The Dongas would stop work for the day by running onto a worksite at the other end of the Down, dressed in a wicker and cloth dragon and sitting on the machines. They would meet the advancing bulldozers with (for example) goddess chants, faces smeared with chalk from the Down, sage sticks – the purifying herb used in ritual by the North American Indians – and hazel pentacles (the pentacle symbolised protection and the five elements – Earth,

air, fire, water and spirit). Their camp was protected by a ditch that they dug in the shape of a dragon (the dragon symbolized Earth energy), runes, and a hawthorn hedge. Women on the camp would go out on moonlit nights and make very personal magic, planting (for example) garlic bulbs (as a purifying herb, garlic symbolized protection) and other objects of personal importance on the boundaries of the land. They would sing, invoke (most often) the moon, and ask for the land to be protected.

Simply on the level of group psychology, this meld of ritual and direct action worked well, uniting and empowering the group and making the digger drivers (and later the security guards) very wary. In the early days, it was significant how the bulldozers always stopped at the dragon ditch boundary at the edge of the camp. On the first night of “Yellow Wednesday,” when the lunar eclipse started and the (outnumbered) Dongas broke back onto the land now defended by security guards, the guards huddled around their fires as the Dongas danced. Dozens quit their jobs the following day.

Donga paganism was of a very earthy, “hedge-witch” nature (i.e., closer to country herbalism than anything else). Thus plant identification, noticing what was in season and making herbal remedies with the results such as comfrey root ointment for bruises and rosehip syrup for colds was a mainstay of Donga paganism. Everyday nature, the facts of life, growth and change, were at the heart of what was seen as magical. Similarly, the Dongas observed and celebrated natural cycles such as full moon and winter solstice with fire, music, drumming, circledancing and often the ingesting of “magic mushrooms,” an indigenous hallucinogenic mushroom which, whilst “recreational,” also enabled shamanic connection to the Earth/universe, increasing the sense of sacredness. On such nights (and on many others), protection “spells” for the Down were made up on the spot during drumming and chanting sessions like performance poems, very differently from formalized ritual. “Male” and “female” energies present in living things were celebrated, articulated in archetypal ways – the Green Man, the Triple Goddess (maid/mother/crone; also linked to the moon, new/ full/waning). One such “spell” sung straight out went: “green man of sap springing / moon lady water flowing / both bound together / protect the land around us.”

It should be emphasized that the Dongas did not claim to see these essences actually manifesting (unless they had eaten many magic mushrooms). Rather, they were symbolic ways of reestablishing connections to nature, and, as importantly, to history.

Such everyday “cookbook” eco-magic was tied into ideas about living lightly on the Earth through living communally and sustainably. The Dongas lived in benders (like rounded tepees) made from saplings and tarpaulins, ate communal simple meals, buried their feces, etc. Such alternative lifestyles were seen as providing at least partial solutions to overconsumption and an anthropocentric alienation from nature, viewed as the modern (Western) condition. Critiques of Christianity’s role in creating cultures/structures of patriarchal anthropocentrism and dislocation from nature were a common thread, concentrating on such manifestations as the power implications of burning village midwives and herbalists as witches, the loss of animism, and the like. Such discourses, and the political paganism, link Donga spirituality to ecofeminist, deep

ecology, and social ecology perspectives, as such distinctions often blur among and within individuals.

Alexandra Plows

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See also: Anarchism; Deep Ecology; Dragon Environmental Network (United Kingdom); Earth First! and the Earth Liberation Front; Ecofeminism (various); EcoPaganism; Radical Environmentalism; Social Ecology.

Dragon Environmental Network (United Kingdom)

Dragon was founded in London in 1990 to link environmental action with a magical practice called “eco-magic.” Founding members sought a practical expression of the pagan belief that “the Earth is sacred.”

Dragon’s practical work began with woodland conservation, but within months we became involved in the campaign to save Oxleas Wood. Dragon worked closely with other campaign groups providing practical as well as eco-magical support. We initiated a postcard campaign and petition, published a school information pack on the Wood and helped organize fundraising events.

Dragon initially kept our magical work secret, but allowed it to become public knowledge once our practical worth was proved. Oxleas Wood became a major campaign success when the road project was shelved in July 1993. As Dragon became more widely known, the need arose to establish basic principles that allowed flexibility but clearly established our identity.

We agreed that:

1. Dragon believes that the Earth is sacred.
2. Dragon is a decentralized network – a web of people working together on local, national and international issues.
3. Dragon combines practical environmental work with eco-magic. Each is as important as the other and it is through this synergy that we focus our vision for change.
4. Dragon is committed to nonviolent direct action.
5. Anyone who shares our principles and aims is welcome to join, regardless of their religion or spiritual path.

Our aims were defined as to:

1. Increase general awareness of the sacredness of the Earth.
2. Encourage Pagans to become involved in conservation work.
3. Encourage Pagans to become involved in environmental campaigns.
4. Develop the principles and practice of magical and Spiritual action for the environment (which we call “eco-magic”).

With Oxleas Wood safe, Dragon became more involved with the M11 road protests in East London and the Twyford Down campaign. The Dongas Tribe, who were encamped on the Down, were natural allies, although Dragon remained an essential urban pagan group.

Dragon grew throughout the early 1990s reaching a membership of over 300 in 13 local groups. The organization was particularly active in road protests and nature conservation, and published a regular newsletter discussing environmental issues and eco-magic.

The mid-1990s marked a peak of activity. Dragon became involved with many campaigns including protests against the Criminal Justice Act, road building at Solsbury Hill and Newbury, and the Manchester airport campaign. Conservation work continued, and the Essex Dragon group started to manage woodland for the regional Wildlife Trust. Positive media coverage of Dragon improved public perception of Pagans, while environmental concerns proved to be fertile ground for interfaith work. But despite, or perhaps because of, this success, Dragon needed to change.

The influence of eco-paganism meant that by the mid-1990s eco-magic had become common at campaign sites in Britain. Some Dragon members felt that ecomagic had become a movement that was beyond any one organization, so Dragon increasingly adopted a networking role.

Meanwhile, internal concerns that Dragon had become a campaigning rather than a magical organization led to an increasing focus on eco-magic. Dragon now encourages the development of eco-magic through conferences and a journal. The Dragon website has a selection of eco-magic workings and a link to an email discussion list.

Dragon has become part of a global movement and, instead of membership, holds a register of eco-magic practitioners. Joining the Network is free and open to all. Although Dragon welcomes people from all magical traditions, we have evolved an eco-magic that is strongly influenced by Starhawk. Dragon rituals, which typically include drumming, dancing, chanting and simple ritual, blur the distinction between ceremony, performance and political action. Dragon has organized open ceremonies at protest sites, during the illegal "Reclaim the Streets" street parties, and at nightclubs.

The Dragon World Tree Rune, a central symbol for the Network, is a sigil combining several runes. The Dragon Rune has been drawn onto machinery, buildings and trees, used in ritual and meditations and worn as a talisman.

Mainstream campaigners typically show a skeptical tolerance of eco-magic, while grassroots protestors often invite it. Dragon works mainly with grassroots groups, although there has been constructive cooperation with Friends of the Earth, Surfers Against Sewage, the Wildlife Trust and local councils.

Several campaigns illustrate Dragon's commitment to social protest as well as narrowly defined environmental campaigning. The M11 campaign, for example, was as much about the destruction of an urban community as the environmental impact of a road.

The Dragon Network resists a final definition. Although the Network has specific principles, it encourages constant reinterpretation and ultimately belongs to whoever practices eco-magic.

Adrian Harris

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See also: Deep Ecology; Donga Tribe; Earth First! and the Earth Liberation Front; Eco-magic; Eco-paganism; Paganism; Radical Environmentalism; Starhawk.

Druids and Druidry

Contemporary Druidry, notionally derived from the ancient religion and philosophical system of the Celts as described by classical authors and later Christian commentators, is a highly eclectic phenomenon. There is considerable variety within Druidry (Pagan Druids, Christian Druids, New Age Druids, CyberDruids, syncretistic Zen Druids and Hassidic Druids) and differing levels of commitment, formality and seriousness among Druids.

The earliest references to Druids come from classical authors, who remark upon their level of learning (acquired over many years of study), and their ritual use of mistletoe, oak trees and groves. The social and religious position of the Druid described in classical literature is often equated with that of the Brahman in Hinduism, a tradition with which Druidry is frequently compared. Bards (concerned with poetry, genealogy and music) and Ovates (specializing in healing) were also part of this system. Classical accounts of human sacrifice are rejected by some modern Druids as a slur by hostile outsiders, while others explain that for a willing victim acting for the good of the community it would have been a great honor.

Although for centuries Druids were depicted as the pagan enemies of Christianity, their image underwent considerable rehabilitation in the eighteenth century. Antiquarian and Anglican cleric William Stukeley characterized Druids as proto-Christians who had come to Britain “during the life of Abraham, or very soon after,” with a religion “so extremely like Christianity that in effect it differ’d from it only in this; they believed in a Messiah who was to come, as we believe in him that is come” (in Piggott 1989: 145). Welsh patriot, freemason and Unitarian Edward Williams – better known as Iolo Morganwg – presented and promoted what he claimed was an authentic, ancient Druidic tradition of the British Isles which had survived in Wales through the bardic system, a distinctive Welsh language poetic tradition. He held his first Welsh Gorsedd (assembly of bards or poets) in 1791 on Primrose Hill in London. In 1819, Morganwg’s Gorsedd became affiliated to the Welsh Eisteddfod (itself an eighteenth-century revival of a medieval literary and musical competition), which promotes Welsh language and culture, and is still held annually in Wales. Morganwg claimed that ceremonies were to be held outside, within a circle of stones (at Primrose Hill he carried stones in his pocket for the purpose) and “in the eye of the sun”; they were to start by honoring the four directions. He also taught the Gorsedd Prayer, which he attributed to an ancient bard:

Grant, O God! thy refuge, And in refuge, strength,
And in strength, understanding, In understanding, knowledge,

In knowledge, knowledge of right, In knowledge of right, to love it, In loving it, the
love of all essences, In love of all essences, love of God,
God and all Goodness
(in Morgan 1975: 51)

Morganwg's claims and writings were accepted as genuine at the time, and it was not until the late nineteenth century that they were denounced as imaginative elaborations or forgeries.

Many modern groups trace their roots to the eighteenth-century Druidic "revival," particularly the Ancient Order of Druids which in the nineteenth century spread widely in America, Canada, Australia and Europe. A number of those involved with the late nineteenth/early twentieth-century Celtic revival (such as W.B. Yeats) were involved in Theosophy, which in turn had an impact on how Druidry was envisaged. Broadly speaking, three main strands of Druidry emerged in the nineteenth century: cultural Bardism on the Welsh model, with its linguistic, literary and cultural focus; "mutualistic" Druidry, primarily concerned with its members' welfare; and esoteric or religious Druidry. This third strand developed and flourished in the twentieth century, with a great proliferation of new Druidic groups in Britain, Ireland, Europe, America, Australia and New Zealand, in parallel with the growth of paganism, alternative spirituality and Celtic religiosity.

Modern Druids generally observe the Celtic or eightfold calendar, although nowadays some ceremonies (particularly relating to Imbolc, Beltane, Lughnasagh/Lammas and Samhain) may be held on the nearest weekend to allow more people to attend. Rituals are held "in the eye of the sun" (i.e., usually in the middle of the day), the spirits of the four directions are honored, and Morganwg's prayer is said (sometimes adapted to include God *and* Goddess, gods, or whatever is appropriate to the group). Ceremonies tend to reflect on the time of year, the passing of the seasons, and connectedness with both the land and the ancestors. Some groups are keen on what are regarded as "traditional" long white robes, while others innovate or leave dress style to individual taste. Becoming a Druid in some groups involves instruction, initiation and a cumulative three-stage process, from Bard through Ovate to Druid; other groups regard these three as distinct and complementary roles, and are less formal or completely informal about membership criteria.

The connection between Druidry and Stonehenge, popularized by Stukeley in the eighteenth century, continues to be articulated and acted upon by Druids in England, for whom the issue of access to the site for ritual purposes has become a matter of religious and civil liberty. While some Druids believe that Stonehenge and similar monuments were built by or for Druids, others argue that although their building may predate the arrival of "historical" Druids, they are of such obvious sacredness and significance that Druids would have used them as ritual sites. The "archeoastronomy" of writers such as Thom (1967), Hawkins (1965) and Hoyle (1972) has reinforced views of the importance of the solstices and the advanced scientific knowledge of the ancients. Numerous new stone circles have been and continue to be built for ritual

purposes by Druid groups in the British Isles, Europe, America and the Antipodes. While many prefer to perform ritual at ancient sites such as Stonehenge and Avebury where possible, some Druids argue that rather than traveling to distant sites, people should be honoring and sacralizing their local landscape.

As some regard Druidism as the original native spirituality of the British Isles, the incorporation of elements from “other” indigenous traditions seems logical; thus didgeridoos and drumming are commonplace at Druid rituals, there are Druidic sweat-lodges, and Druidry is commonly equated with shamanism. Some Druids resident in countries such as North America and Australia use Druidry as a means of expressing their Celtic heritage and practicing what they consider their ancestral religion; others strive to make creative links between Druidry and the land, spirits, people and religious practices of the places where they now reside.

The close connection between Druidry and the land is frequently articulated. One of the aims of the Order of Bards, Ovates and Druids (OBOD) founded in 1964, is “to work with the natural world, to cherish and protect it, and to co-operate with it in every way – both esoterically and exoterically.” The Charnwood Grove of Druids in England declare,

We believe that people working together are capable of raising power which can balance and heal the Earth. We focus our energy at local sacred sites and we honour the Celtic god and goddess forms as personifications of the land and the seasons (1997: 33).

Many Druids are committed to schemes for planting woodland, and some have been involved in protest action against the destruction of ancient sites, landscapes or forest. The various courses that orders and individuals now run on Druidry tend to include instruction on sacred trees, animals and plants, and herbal lore. “Awen,” traditionally understood as the poetic or creative inspiration particularly associated with Bards, is more broadly interpreted by the British Druid Order as “the divine inspiration that flows, spirit to spirit, between the people, the land and the ancestors.”

Just as Stukeley considered Druids proto-Christians, there are Christian Druids who see Druidry as both precursor of and complementary to Celtic Christianity. Indeed, many feel that Celtic Christianity became the repository of Druidic wisdom, accounting for what are seen as its distinctive features, such as awareness of nature and holism.

Modern Druidry is symptomatic of the flexibility and creativity of contemporary spirituality generally, and the ways in which people look to the past to create something meaningful for the present. While aspiring to continuity in relation to ideas and practices from earlier periods, Druidry becomes ever more diverse and globalized in its beliefs and praxis.

Marion Bowman

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See also: Celtic Spirituality; Paganism; Stonehenge.

Drums and Drumming

Rhythm is a repeating pattern of beats marking the passage of time. It is embodied in the cycles of nature: of life and death, evaporation and rain, the sequencing of ocean waves and tides, the inhalation and exhalation of animal breath, the donning and shedding of leaves. Earth is a planet heavily influenced by the recurrent phases of an orbiting moon, dependent upon and defined by its steady pace around the sun. The consistent heartbeat of the mother is the first sound a fetus hears afloat in the womb, and a child is born into a rhythmic world. In a sense, the health of an individual or ecosystem is the result not only of its diversity, but also of the polyrhythmic interaction of its constituent parts. Taking this metaphor a step further, it is as though in its practiced separateness civilized humanity has gotten “off beat,” out of synch with the overall composition of greater creation.

Rhythm can be an aid to reconnection, and the drum is an instrument of rhythm. Drumming has the potential to lead both the player and the engaged audience into deep sensory and emotional contact with their natural selves, each other, and the natural world of which they are an integral part. Played rhythms can reflect and at times entrain with the rhythms of the body, suspending normal cognition and intellection and leading to an expansive feeling of connection or oneness. The result may not only be musical but religious.

Ethnomusicologist Fredric Lieberman and Grateful Dead percussionist Mickey Hart have written in their book *Planet Drum*,

Our word religion comes from the Latin and means “to bind together.” A successful religion is one that binds together all the fundamental rhythms that each of us experiences: the personal rhythm of the human body, the larger social rhythm of the family, tribe, or nation, and the enveloping cosmic rhythms of the planet and universe. If a religion “works,” its followers are rewarded with a new dimension of rhythm and time – the sacred (1991: 17).

For “primitive” indigenous peoples the meaning and success of human affairs is often held to be determined by nature spirits or forces. The drum is a vehicle for the shaman to access the realms of these spirits, in order to bring back to the people the wisdom and songs found there. The medicine elders of many tribes and traditions – such as the Inuit of Canada, the Huaorani of Ecuador and the Siberian Buriat employ distinct mesmerizing rhythms for the purpose of encouraging an altered state that can lead to sacred visions, heroic spiritual assignments or miraculous cures.

Drums produce the low-frequency “steep fronted” sonic impulses that most strongly affect the auditory cortex.

Commercially available biofeedback machines indicate that the psychically aroused “alpha/theta border” occurs when the electric brain waves are pulsing at a rate of six to eight cycles per second – the predominant tempo of Haitian Voudo music and African trance dancing. The theta state occurs after sex and right before sleep, the twilight phase when linear thought succumbs to free-form images, and awareness of the narrowly defined self is supplanted by identification with the shifting fields of an organic whole.

Drumming and ecstatic dance are common elements not only of primitive land-based tribes, but also of many contemporary gatherings featuring a synthesis of spirituality and nature including Eugene, Oregon’s Environmental Law Conference, the annual Earth First! Rendezvous, the Rainbow “tribal gatherings” in the U.S. and Europe, and pagan festivals such as Starwood in Ohio or the solstice and equinox events at Stonehenge, Great Britain.

The drum’s purported ability to provoke personal religious experience was understandably threatening to various state churches and their far-flung missionaries, as was its tendency to excite behavior that the Christianized Roman Empire ruled “licentious” and “mischievous.” Portuguese colonizers in Brazil in the sixteenth and seventeenth centuries enforced laws against the percussive music of their African slaves. The sound of Native American drums was sometimes enough to trigger a violent response from the U.S. Cavalry during the messianic religious revival of the late 1870s known to historians as the Ghost Dance. Since the 1960s drums have been a regular feature of environmental protests throughout the world, from efforts to save the Daintree Forest in New South Wales, Australia, to “drum-ins” at the Nevada nuclear test site. Ecoactivist drummers include Starhawk, an acclaimed author and Wiccan priestess known for her community organizing and environmental stance.

The styles of drums range from tiny Asian finger drums to the giant hanging barrel drums found in various Buddhist temples in Japan. Some have one head, others are covered at both ends. Hand-held open-frame styles were popular with Siberian shamans as well as the Druidic priests of ancient Great Britain. The most popular handmade drums in America today are designs that originated in Africa: the narrow-bottomed ashiko, and the hourglassshaped djembe. Until the introduction of the first plastic heads in the 1950s, drums were built entirely of natural materials. Their womb-like shells were usually constructed of wood or clay, with animal-skin heads stretched tight with the help of iron bolts and rings, or with cord laced at the sides.

The carvers of ceremonial drums take into account the religious symbolism of the materials they are made with. The bodies of the instruments may be sculpted into the shapes of animal spirits, dyed with sacred minerals or shed blood, or hung with fur and feather. In Cuba as late as the 1860s priests of the Abakua brotherhood are said to have used drums made out of human skulls during their funeral rites, alongside symbols of resurrection. In ritual terms, the impermanence of life is made more bearable through the apparent impermanence of death.

Other traditional percussion instruments employed for ceremonial and spiritual purposes include rattles, shakers, gongs, bells, claves (wood blocks), the African m'bira (thumb piano), and the Brazilian berimbau – a wire affixed to a wooden bow, struck with a painted stick, and with a coin eased against the wire to affect a haunting vibrato. In the creation of rhythms the player becomes a part of a process that goes back to the very beginnings of time.

“A sound precipitates air, then fire, then water and Earth,” Joseph Campbell wrote, “and that’s how the world becomes. The whole universe is included in this first sound, this vibration . . .” (in Hart and Lieberman 1991: 11).

Jesse Wolf Hardin

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See also: Music (various).

Dualism

Dualism refers to a view of reality as divided into two incompatible parts. Early forms of dualism focused on the division of good and evil, embodied in two divinities. The religion of Zarathushtra for instance, emerging approximately 600 B.C.E. and located in the area of what is today eastern Iran, identified a good and an evil spirit who are locked in battle. Since no middle ground exists between good and evil, humanity needs to decide on which side to stand. This divine dualism, however, does not imply a dualism between spiritual and material reality or between religion and nature. The good spirit is seen as the creator of the material world, and even though the evil spirit has

SP Dualism – A Perspective

Religious reflection instigates resistance to the exploitation and devaluation of nature in its critique of dualism as separation of spirit and matter, and where it locates God not only in relation to humanity but also in relation to nature. This position finds support not only in the religious traditions of Judaism, Christianity, and Islam, but also to a certain degree even in Zarathustra's ancient religion which promoted its own kind of dualism. The difference between Zarathustra's dualism of good and evil and the dualism of spirit and matter promoted by the Gnostics shows that dualism as such is not in itself a problem for the relation of religion and nature. A clear distinction of good and evil that does not shy away from naming destructive forces and dares to call for open resistance may well help in resisting the exploitation of nature. An insistence of God's otherness not in terms of the tension between spirit and matter (or transcendence and immanence) but in terms of the tension between liberation and oppression/exploitation may indeed strengthen the relation of religion and nature. Not dualism in general but the dualism of spirit and matter and the related dualism of humanity and nature are, therefore, at the root of the problem. These latter dualisms endorse a devaluation of matter and nature and are thus unable to resist the increasing exploitation of nature and the material world which has acquired a whole new dimension with modernity and the industrial revolution.

At the dawn of the new millennium, one more step in the metamorphoses of dualism needs to be mentioned. In the world of the postmodern global market there is a new shade of dualism that takes on quasi-religious legitimacy due to the fact that it is considered as rooted in ultimate reality. This dualism poses new challenges. Here the

increasing pace of commodification – of turning more and more of reality into commodities whose value is determined by the market – extends ever further beyond nature and the material world to human beings and even to what might be considered the “spiritual world.” In this situation, the dualism between humanity and nature (anthropocentrism) is no longer the primary issue. A new form of dualism, between a world of pure economic value (venture capital, stocks and bonds, the fiscal “bottom line”) and a world in which most of humanity and nature are lumped together as subservient to the economy (defined by economic value for instance as raw material, as producers of commodities, as commodities, or as without value due to lack of employment or use for the economy) poses new challenges to religious reflection and invites new forms of resistance.

Joerg Rieger also had a hand in the creation of things like demons and “noxious creatures,” the material world is not bad in itself or inferior as such.

The later religious systems of the Manicheans (a group that also originated in Iran) and of the Gnostics in the early centuries of the common era expanded their divine dualisms to include a dualism between spiritual and material reality. Here the material world is no longer the creation of the good spirit; rather, the material world is the work of an inferior spirit, often called the “Demiurge” in Gnostic systems. The material world, including nature and the human body, is thus less than perfect. Perfection can only be found in the spiritual world. In the Manichean and Gnostic dualisms, salvation no longer aims at living a harmonious life in the material world and in nature in accordance with the will of the good spirit (Zarathushtra’s religion, by contrast, even included reflections on the divine quality of the sowing of grain). Salvation now aims at finding ways to sever one’s ties with the imperfect material world and to find refuge in the perfect spiritual world. Dualism now includes the incompatibility of the material and the spiritual, a position that has wideranging implications for the relation of religion and nature.

In the modern study of religion and nature, this latter dualism between the material and the spiritual seems to be invoked in the argument of medieval historian Lynn White and others after him that Christianity, particularly in its Western form and in contrast to ancient paganism and Asia’s religions, established a dualism of nature and humanity that made it “the most anthropocentric religion the world has seen.” This dualism has been used to endorse the mastery of humanity over nature. In light of this often repeated critique, however, it is well to recall that such a strong dualism does not seem to be warranted by Jewish and Christian beliefs that Godself is the sole creator of the world and that this creation is good in God’s eyes (Gen 1:31). In Islam, too, Allah is seen as the creator of the world, a conviction that does not allow for a strict dualism of matter and spirit and implies a positive view of the world and the imperative to preserve it.

Nevertheless, it is true that followers of Judaism, Christianity, and Islam have not always managed to resist dualistic images. Christianity, in particular, has often harbored a residual dualism between humanity and nature that is paralleled by other

dichotomies between spiritual and worldly things and between mind and body (frequently based not only on Gnostic influences but also on internal developments, such as misreadings of the Pauline dichotomy between “flesh” and “spirit” – a dichotomy that does not necessarily refer to a dualism of matter and spirit but to two different ways of living in the world [Gal.

5:19–22]). With the Enlightenment and the industrialization of the West, these dualisms have been further extended to dualisms of producer and product, of culture and nature, and of subject and object, all of which have had detrimental effects on the relation of humanity and nature.

In recent history there has been increasing awareness of the connection between dualisms that have led to the exploitation of nature and other exploitative relationships. Feminists and feminist theologians have exposed links between the dualism of matter and spirit and the dualistic images of maleness and femaleness. Ecofeminists have taken this critique further and located dualism in three phenomena, including (1) classical thought and certain aspects of the Jewish and Christian traditions,

(2) the Enlightenment emphasis on human autonomy, objective knowledge, and mechanistic thought, and (3) the dichotomy of Earth and a transcendent God. Similar arguments are now also made from a Latin American point of view, where Brazilian liberation theologian Leonardo Boff identifies the core problem of religion and nature as the dualistic separation of people and nature.

Dualism, it has been argued, has contributed to the economic exploitation of nature, justified the depletion of natural resources, and led to the destruction of nature. The main problem with the dualisms in question is not merely that they divide reality, but that this division leads to subordination and to a structure of service according to which one part of reality must serve the other: nature must serve humanity, women must serve men, and the body must serve the mind. Dualism, therefore, results in a form of anthropocentrism where everything is subordinated to the concerns of humanity, which is seen as a manifestation of the spirit, and – as feminists would add – in androcentrism (male-centeredness) where everything is subordinated to the desires of men.

If dualism is thus identified as the problem, the remedy is often seen in establishing unifying relationships. Notions like “organism,” “community,” “wholeness,” “interdependence,” “connectedness,” and “mutuality” are considered to provide antidotes to dualism and separation. Process theology has promoted a natural theology on the basis of the philosophy of Alfred North Whitehead, which relates nature, humanity, and the divine without giving up the distinctions between them. In this way, process thinking counters the often overly mechanistic worldview of modern science (mirrored in industrial and other economic developments), which relegates nature and the world to a lower level of existence and shows little concern about its well-being. New Age spiritualities, incorporating insights from multiple religions, have rediscovered mystical and cosmological traditions in order to heal the gaps (see, for instance, the work of Matthew Fox and Western efforts to incorporate Eastern spirituality). Others, like the Brazilian theologian Ivone Gebara have talked about relatedness as “primary reality.” The North

American theologian Sallie McFague praises ecological thought because it transforms the division of subject and object in modernity into relationships between subjects and proposes to rethink the world as nothing less than the “body of God.” Ecofeminism adds an understanding that relationship is not uniform but permits diversity and a complex web that respects differences of race, class, and national boundaries.

Joerg Rieger

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See also: Boff, Leonardo; Dualist Heresies; Ecofeminism (various); Gebara, Ivone; Holism; McFague, Sallie; New Age; Smuts, Jan Christiaan.

Dualist Heresies

Dualist heresies, beginning with Gnosticism, basically held that there was a fundamental antagonism between the world of matter and the world of spirit. Good was posited in the spiritual sphere and Evil in the natural. Some systems held that the evil, created world came into being because of a revolt against a primordial spiritual god. Others believed that there were two coeternal and equal gods and that the material world was a product of the evil supernatural being. These views came into sharp conflict with an orthodox Christianity that saw the natural world as the creation of a good God and a place where salvation could be realized. Ironically, the dualist emphasis on personal knowledge, pacifism, the equality of women and simplicity – over against institutional religion, power, conformity and doctrine – set the stage for later perspectives on the environment as sacred.

In the second century, Gnosticism presented a considerable challenge to orthodox Christianity. The Gnostics said that Christ had a body only in appearance and that his death on the cross was a show. At this time, a new type of Christian theologian arose to address the challenge. Called apologists, they were frequently converts well versed in the philosophies of the times. Irenaeus of Lyons (d. 202) set the stage for the orthodox refutation of Gnosticism and subsequent dualistic heresies. His basic position was simply that Gnosticism contradicted the experience and teachings of the Apostles who knew and wrote about the historic Jesus and the events surrounding the Resurrection. Christian orthodoxy consists of this traditional teaching of the Church handed down in large part by bishops. The orthodox position stood in sharp contrast to the direct and personal experience of the Gnostics and their view that the resurrection of the body was symbolic.

Gnosticism existed before Christianity and functioned independently of it. Manicheism began in the fourth century as a distinct religion that incorporated elements of Christianity. Mani, the founder, saw three stages in the world's development. In the First Time, Light and Darkness comprised two kingdoms. In the Second Time, the two kingdoms clashed and produced a mingling of the two substances. Adam and Eve begin the Second Time. The end of the world will inaugurate the Third Time. The great ambassadors of revelation were Buddha, Zoroaster, and Jesus. The definitive revelation comes to Mani.

Mani's purpose was to recover the light imprisoned in the world. Knowledge and understanding are the first conditions of salvation. Light resides in knowledge, revelation, spirit, soul, heaven, the heights, repose and endurance. Darkness is found in ignorance, matter, body, depth and unrest. Light will be free and pure after the final destruc-

tion of the cosmos by eschatological fire. Each person is a microcosm of the struggle. Therefore, one should withdraw from the darkness of meat, wine, sex and property and eat luminous foods such as melons and fruit. The Manicheans had two types of members; the Elect and the Auditors. The Auditors brought food to the Elect. With the Auditors, marriage was tolerated, concubinage was permitted, but procreation should be avoided. They believed in a transmigration wherein the soul could move down to become an animal and, beyond that, move to hell. The Emperor Justinian (r. 527–565) joined with the Christians and drove Manicheism east. It was virtually gone by the end of the ninth century.

The Cathars

After the Manicheans, the Paulicians, a dualist group, emerged in Armenia in the sixth century. Bogomilism, another dualism, started in the Balkans in the tenth century. The Bogomils believed that God the Father had two sons, Jesus and Satan. This heresy influenced the Cathars.

The Cathars arose in the Middle Ages as the strongest dualistic heresy since the Manicheans. Its principle hubs were in Northern Italy, Southern France and Bosnia. The most dramatic conflicts occurred in Southern France during the early years of the thirteenth century.

Languedoc is the area of present-day France that stretches from Avignon west to Aquitaine and south to the Mediterranean Sea and the Spanish border. It was a prosperous land, rich in troubadour poetry with a reputation for tolerance and a significant number of Jews. The Jewish Cabbalist writings from this area and period show dualistic influences.

The Great Cathar Council met at St-Félix-de-Caraman sometime between 1166 and 1176 to establish the tenants and design the infrastructure for the new movement. The Cathars began with a doctrine of an absolute dualism that posed the inexorable opposition between two coeternal and coequal powers; a good god and a bad one. They believed that matter was evil and that one should live an ascetic life without sex. The community was divided into The Perfect and the Believers. Ideally, the Believers would go through the rite of *Consolamentum* before they died. This rite was administered by the Perfect and it alone assured salvation. The Cathars had no use for the Christian sacraments or a belief in the resurrection of the body. The soul was imprisoned in the body and the object of redemption was simply to release it. The Cathars found dualistic meanings in the Bible and in nature. One Cathar theologian said that morning dew and honey were the fluids that flowed from the coitus of the sun and moon. Therefore, humans should not eat honey.

The Perfect were black-robed monks-in-the-world. They lived lives of great simplicity, abstinence and serenity that were in marked contrast to the opulence of the Catholic clergy around them. Unlike the Manicheans, women could be Perfects. There

was real gender equality here. The approximate number of the Cathar Perfect at the beginning of the thirteenth century has been estimated at between 1000 and 1500.

Strong opposition to the Cathars began when Innocent II became pope in 1198. He called for a crusade against the kingdoms of Languedoc. Called the Albigensian Crusade after the town of Albi, the movement quickly became very violent. The crusaders used the occasion for plunder and personal gain. The word “Albigensian” was originally used to denote the Cathars of Southern France. It later became loosely synonymous with all Cathars.

The procedure for dealing with the Cathars was to put them on trial and, if convicted, burn them. Deceased Cathars were exhumed and their bodies burnt. The Albigensian Crusade and its aftermath gave rise to the notion of a permanent papal heresy tribunal as opposed to a local episcopal one. In 1231, Pope Gregory IX established the Inquisition, which continued to search out and try suspected Cathars. The newly founded Dominicans had little success preaching in Languedoc before the Albigensian crusades. Afterwards, they and the Franciscans were involved with the Inquisition. The Inquisition quickly went from being an undertaking of a fanatical few to a proficient bureaucracy employing hundreds and interrogating thousands. Their process included a pervasive system of informants. On the other hand, the Cathars lived simple and frugal lives. They abhorred violence, and were fine doctors and herbalists.

The Inquisition slowly eliminated the Albigensian threat. Some pockets survived for a while in the Pyrenees and Alpine mountains, Verona, Sicily and Bosnia. By the beginning of the fourteenth century, only a heroic few dared to say aloud that the world was evil. By the middle of the century, the Inquisition had virtually eliminated any residual traces of the Albigensian heresy from the landscape.

But today, the Cathars are still remembered. Driving south into Languedoc, there are signs that read, “Entering Cathar Country.” In the 1930s, Simone Weil looked to medieval Languedoc as a moral utopia. French Protestants have recalled the Cathars with sympathy, as have advocates for a more decentralized France. Romantic tales were written linking the Cathars with the Holy Grail. A Nazi-Vichy spin on these stories prefigured “Raiders of the Lost Ark.” After the Second World War, a Ku Klux Klansman in Michigan named Robert Miles, influenced by the Cathars, called for a new religion named dualism as a way of attracting white racist followers.

Later Developments of Dualism

The Protestant Reformation showed some dualistic elements. Roman Catholics referred to the Protestants as “heretics” and the reformers had the same opinion of the Catholics. Martin Luther (1483–1546) emphasized the sinfulness of human nature and claimed that it was only the sheer grace of God that could save humanity. John Calvin (1509–1564) added the notion of predestination, which held that before someone was

born, they were predetermined to be saved or damned. No human effort could alter the consequences. In this arrangement, God's complete power was manifest.

Jansenius (1510–1576) gave Calvinism a Catholic twist. According to Jansenism, the supernatural and preternatural gifts (i.e., immunity from death and sickness) were natural to Adam and Eve. These gifts were “lost” in the Fall and consequently everything purely natural is evil. Humanity is powerless. If God gives grace, sin can be avoided. Further, God gives the grace only to a few. Jansenius saw himself as a man raised by Providence to save the Church from the Jesuits. The Jesuits preached prayer and the sacraments as ways humans could cooperate with grace and avoid sin.

Quietism was later developed by Michael de Molinos (1628–1696), a Spanish priest who worked primarily in Italy. Quietism advocated a passive rather than an active approach to the spiritual life. An individual's will should be lost in God. If one committed sin, they would then do so without offense. One should annihilate all his or her powers. The desire to be active in one's spiritual life is offensive to God. Temptation should be ignored because resistance involves activity.

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See also: Christianity (5) – Medieval Period; Holism; New Age.

E

Earth Bible

The Earth Bible is an international project, initiated in Adelaide, Australia, which attempts to read texts and traditions from the perspective of Earth, by employing a set of eco-justice principles. This five-volume series was published in England by Sheffield Academic Press and in the United States by Pilgrim Press. The central aims of the Earth Bible are to:

1. Develop ecojustice principles appropriate for an ecojustice hermeneutics (modes for interpretation) for understanding the Bible and for promoting justice and healing for Earth.
2. Publish these interpretations as contributions to current debates on ecology, eco-ethics and ecotheology.
3. Provide a responsible forum within which the suppressed voice of Earth and the Earth community can be heard.

Following the hermeneutics of the project, interpreters read the biblical text with the suspicion that it is probably anthropocentric rather than Earth-friendly, but they also allow the possibility of retrieving traditions in the text which affirm the intrinsic worth of Earth or reflect the voice of the Earth community.

The studies in the project demonstrate that many parts of the Bible devalue Earth and the Earth community. When God sends punishment on a particular people, whether Israel, Egypt or another nation, the land, nature and living creatures often suffer unfairly. In Ezekiel, for example, the land is made desolate to somehow vindicate the name of God (Ezek. 6:14; 12:20 *passim*), not because the land has done anything to deserve such a fate. In Jeremiah, however, there are indications that the prophet hears the land mourning under the weight of these judgments (e.g., Jer. 12:4, 11).

Especially significant is the “mandate to dominate” found in Genesis 1:26–28, where humans are given the command to “rule over all living things” and “to subdue Earth.” In the Earth Bible, the verbs “rule” and “subdue” (Gen. 1:28) are not softened but allowed to have their full weight. To “subdue” (*likh’bosh*) refers to forceful subjugation (as in Jer. 34:11; 2 Sam. 8:11; Josh. 18:1). To “rule” (*lir’dot*) refers to forceful control and conquest (as in Ps. 72:8–11). Because passages like this mandate have played a role in the conquest of nature in some countries, the Earth Bible project seeks to highlight the negative force of such texts in the current ecological crisis and balance them with alternative traditions such as Genesis 2:15. In this text, the first human is placed in the garden to “till/ serve” (*la’avod*) and to “keep” (*lish’mor*) it, not to “rule” and “subdue” it.

Between the years 2000 and 2002, five volumes of the Earth Bible were published. The five volumes are 1. *Readings from the Perspective of Earth*, 2. *The Earth Story in Genesis*, 3. *The Earth Story in Wisdom Traditions*, 4. *The Earth Story in the Psalms and the Prophets*, 5. *The Earth Story in the New Testament*. Norman Habel of Adelaide, Australia, is the chief editor of the Earth Bible, who is also preparing popular works based on these academic volumes. One of these is a volume of Earth liturgies entitled *Seven Songs of Creation*, also published by Pilgrim Press.

Norman Habel

See also: Animals in African Legend and Ethiopian Scriptures; Anarcho-Primitivism and the Bible; Biblical Foundations for Christian Stewardship; Christianity(3) – New Testament; Creation Story in the Hebrew Bible; Creation's Fate in the New Testament; Ecofeminism and Biblical Interpretation; Hebrew Bible; Jewish Intertestamental Literature.

Breakout Section: Eco-justice Hermeneutics

This approach assumes that the posture of the reader influences what is found in the interpretation process. In an eco-justice hermeneutic, the reader acknowledges that he/she is part of Earth and seeks to read from the perspective of Earth. This hermeneutics is the approach employed in the Earth Bible project (see under Earth Bible). As a guide to this reading process, a set of ecojustice principles have been developed in dialogue with ecologists. These principles are not overtly religious and do not refer to God explicitly, but provide a basis for dialogue with a range of disciplines and religions on the way humanity has interpreted Earth.

These principles are:

The principle of intrinsic worth: The universe, Earth and all its components have intrinsic worth/value.

The principle of interconnectedness: Earth is a community of interconnected living things that are mutually dependent on each other for life and survival.

The principle of voice: Earth is a subject capable of raising its voice in celebration and against injustice. *The principle of purpose:* The universe, Earth and all its components are part of a dynamic cosmic design within which each piece has a place in the overall goal of that design.

The principle of mutual custodianship: Earth is a balanced and diverse domain where responsible custodians can function as partners with, rather than rulers over, Earth to sustain its balance and a diverse Earth community.

The principle of resistance: Earth and its components not only suffer from human injustices but also actively resist them in the struggle for justice.

When reading the text, the interpreter asks critical questions rising from these principles to ascertain whether there is justice for Earth in the orientation, ideology or focus of the text. Typical questions are: Is Earth viewed merely as a human resource or as a subject with intrinsic worth? Is Earth treated as a subject with a “voice” or as an object to be exploited?

Some of the biblical psalms, for example, acknowledge the voices of Earth and call on Earth and its creatures to celebrate (e.g., Ps. 148). Other Psalms (e.g., Ps. 8) reflect a hierarchical view of the cosmos in which humans are on a level close to God and “all things” are located “under their feet.” Employing a hermeneutics of suspicion and retrieval, the reader may assume that both the text and the interpreting traditions are likely to be anthropocentric, giving priority of voice and value to humans. In such

contexts, Earth is at the mercy of human exploitation both by the original writers and modern interpreters.

Another feature of eco-justice hermeneutics is a consciousness that in the Western tradition patterns of dualistic thought have tended to devalue much of the natural world. Within dualistic oppositions between heaven and Earth, humanity and nature, spirit and matter, the material and natural world has been considered inferior. The task in this approach is to ascertain whether this dualism is maintained in the text and expose how the tradition has assumed this dualism to devalue Earth and the Earth community. Ultimately, the goal of this approach is to retrieve the voice and value of Earth in the context of the environmental crisis at the beginning of the twenty-first century.

Norman Habel

See also: Eco-justice in Theology and Ethics.

Breakout Section: Heavenism

Heavenism is a form of spirituality that tends to value all things associated with heaven to the detriment of Earth. This spiritual orientation is reflected in hymns such as Guide me, O Thou great Jehovah, pilgrim through this barren land. Compared with heaven, Earth is viewed as a vale of tears, a barren land, a place of exile, a domain ruled by the forces of darkness. Heaven is the abode of God, a place of purity, happiness and spiritual joy. Those who espouse this spiritual view of reality tend to be more concerned about getting to heaven than caring for Earth. Heaven is eternal and sacred; Earth is disposable and mere matter. It is not really important what happens to Earth because it is only a temporary abode for humans; heaven is home. Christian texts like Hebrews 11, which speak of a heavenly country (11:16), are used to interpret the rest of the scriptures and render care for a polluted Earth a waste of time. The Earth Bible project (see under Earth Bible) exposes the anthropocentric and anti-Earth orientation of such texts. The project also identifies alternative traditions that highlight the sacredness and intrinsic value of Earth. A clear example is Isaiah 6:3 where the heavenly host declare, “the whole Earth is full of God’s glory.” Here God’s glory – firecloud of God’s presence – not only fills the temple but the whole planet. Heavenism is reflected in slogans such as “Forget the planet, save yourself,” and sees the environmental movement as a negative force that directs the believer away from his/her true goal: getting to heaven.

Norman Habel

Earth Charter

The Earth Charter is a declaration of fundamental principles for building a just, sustainable, and peaceful world. It endeavors to identify the critical challenges and choices facing humanity and to provide a moral framework for the development of the emerging global civilization. It is designed to inspire in all peoples a new sense of global interdependence and shared responsibility for the wellbeing of the human family, the greater community of life, and future generations. It is at once an urgent call for major social and economic change and an expression of hope. The principles in the Earth Charter were developed in and through a decade-long, worldwide, cross-cultural, interfaith dialogue on common goals and shared values.

First proposed in *Our Common Future* (1987), the report of the United Nations World Commission on Environment and Development, the drafting of the Earth Charter was part of the unfinished business of the 1992 UN Rio Earth Summit. In 1994 Maurice Strong, the secretary general of the Earth Summit and chairman of the Earth Council, and Mikhail Gorbachev, the president of Green Cross International, launched a new Earth Charter initiative with support from the Dutch government. An Earth Charter Secretariat was established at the Earth Council in Costa Rica, and in 1997 an Earth Charter Commission of eminent persons with representation from all regions of the world was formed to oversee the project.

The Commission proceeded to draft the Earth Charter as a people's treaty, because there was little interest among governments in negotiating new and stronger commitments regarding the environment and sustainable development. Thousands of individuals and hundreds of organizations from Africa, the Americas, Asia and the Pacific, Europe, and the Middle East participated in creating the Earth Charter. Forty-five Earth Charter national committees were formed. Earth Charter dialogues were held in all regions of the world and on the internet. The project involved the most open and participatory consultation process ever conducted in connection with the drafting of an international document.

The ideas and values in the Earth Charter reflect the influence of a rich diversity of intellectual sources and social movements. These include over fifty international law declarations and treaties, the new scientific worldview being shaped by discoveries in physics, cosmology, and ecology, the wisdom of the world's religions and philosophical traditions, and over 200 non-governmental declarations and people's treaties. The document reflects the concerns and aspirations expressed at the seven UN summit conferences held during the 1990s on human rights, population, children, women, social

development, and the city as well as the environment. It also recognizes the importance of the spread of democracy for human development and environmental protection.

The Earth Charter is an especially significant product of the global ethics movement, which gained wide support in the 1990s. In an increasingly interdependent world, cooperative problem solving is a necessity, and effective collaboration among diverse cultures and peoples requires shared values. It has been the objective of the Earth Charter initiative not to impose the values of one group, culture, or tradition on all others, but rather to seek common ground while respecting and supporting cultural diversity. This meant, for example, that the Earth Charter could not employ theological language or the concept of animal rights, but the document does acknowledge the important role of religion in achieving sustainability and affirms that animals warrant moral consideration. The Earth Charter principles reflect a consensus on basic values that is taking form in the rapidly developing global civil society.

The vision of widely shared values in the Earth Charter does focus special attention on the environment. However, the document contains an inclusive and integrated ethical vision reflecting the realization that humanity's environmental, economic, political, social, cultural, and spiritual challenges are interrelated. It recognizes, for example, the interconnections between the protection of ecosystems, the eradication of poverty, human rights, gender equality, economic justice, democracy, and a culture of peace. The result is a new holistic understanding of what constitutes a sustainable way of living and sustainable development.

At the heart of the Earth Charter is an ethic of respect and care for all life forms and the greater community of life, of which humanity is a part. The Earth Charter founds the principle of respect for all life on the recognition that all beings are interdependent and all life forms have value regardless of their worth to people. The sense of ethical responsibility begins with an attitude of respect for others and finds expression in active caring, which involves the prevention of harm and the promotion of well-being. A fundamental purpose of the Earth Charter is to encourage all peoples to identify with the whole Earth community as well as their local communities and to expand their moral concern and caring to include the present and future wellbeing of the entire human family and the larger living world.

The ethics of the Earth Charter are grounded in a vision of widely shared spiritual values. For example, the document affirms, "when basic needs have been met, human development is primarily about being more, not having more." It asserts, "the spirit of human solidarity and kinship with all life is strengthened when we live with reverence for the mystery of being, gratitude for the gift of life, and humility regarding the human place in nature." The Earth Charter culminates with a vision of peace and the joyful celebration of life.

A final version of the Earth Charter was approved by the Earth Charter Commission in March 2000. A new phase in the Earth Charter initiative began with the official launching of the Earth Charter at the Peace Palace in The Hague the following June. Efforts are now underway to disseminate the Charter around the world, to promote

its educational use in schools, universities, and faith communities, and to encourage its endorsement and implementation by civil society, business, government, and the United Nations General Assembly. Thousands of local, national, and international organizations, including hundreds of local governments, have endorsed the document and are using it as an educational tool and guide to a sustainable way of living.

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See also: Bahá'í Faith and the United Nations; Environmental Ethics; Religious Studies and Environmental Concern; United Nations' "Earth Summits".

Earth First! and the Earth Liberation Front

Radical Environmentalism comprises a cluster of environmental movements and ideologies that share an overall worldview that includes a perception of the sacredness of nature. The religious and ideological beliefs of these movements, and the criticisms to which they are typically subjected, are described in detail in *RADICAL ENVIRONMENTALISM*. Their basic orientation can be, however, briefly characterized: Radical environmental movements trace environmental degradation to anthropocentric and hierarchical Western philosophies and religions. They prescribe in response lifestyle simplification, political resistance to the destructive forces, and a spiritual “reconnection” with nature. These responses, they believe, depend on a “resacralization” of human attitudes and perceptions of the natural world.

By the early twenty-first century Earth First! and the Earth Liberation Front (ELF) had become the best known of the radical environmental groups in the United States, Australia, and the United Kingdom, and they had established beachheads in scores of countries on every continent but Antarctica.

Earth First!

Earth First!, with its slogan “no compromise in defense of mother Earth,” was founded in 1980. It rapidly became known for its dramatic civil disobedience campaigns and the occasional use of sabotage in its efforts to thwart commercial incursions into biologically sensitive lands. In its first two decades it focused especially upon North America’s remaining old-growth forests, evocatively labeled “ancient” or “cathedral” forests to reinforce their special importance.

Dave Foreman, who left the *WILDERNESS SOCIETY* after he became disenchanted with the efforts of such mainstream environmental groups to arrest environmental decline, was the most charismatic leader among Earth First!’s co-founders (variously numbered at 4 or 5, depending on differing movement origin myths). His strategic purpose in founding the group was, firstly, to introduce and promote sabotage as well as civil disobedience as a means of environmental struggle, whenever possible increasing the costs and removing the profit from environmentally destructive practices – in other words, waging economic warfare against those destroying nature; secondly, to shame mainstream environmentalists into taking stronger stands by harshly criticiz-

ing them and exposing their compromising positions; thirdly, and ironically given the second tactic, he expected that by taking on the mantle of “environmental extremism,” a label often applied to mainstream groups by their adversaries, mainstream groups might appear more reasonable by comparison, thereby increasing their influence and effectiveness.

As importantly, Foreman wanted to attack anthropocentric attitudes, for he viewed the root of the problem as religious in essence. Drawing on historians such as Lynn White, Perry Miller and Roderick Nash, Foreman argued,

Our problem is a spiritual crisis. The Puritans brought with them a theology that saw the wilderness of North America as a haunt of Satan, with savages as his disciples and wild animals as his demons – all of which had to be cleared, defeated, tamed, or killed (Harpers Forum 1990: 44).

So like most radical greens, Foreman blamed the advent of agriculture (following Paul Shepard and Jim Mason), and Christianity as well, for environmental decline. During *Earth First!*'s early years it was not difficult to find evidence of an anti-Christianity view, particularly since James Watt was the Secretary of the Interior. In 1976, before his appointment by President Ronald Reagan, Watt had founded the Mountain States Legal Foundation, which bills itself as a defender of individual liberty, property rights, and free enterprise. It is regarded by environmentalists as an anti-environmental group, one of the first and most important members of the so-called WISE USE MOVEMENT. Watt was also an evangelical Christian who minimized environmental problems and was widely if inaccurately perceived (largely due to selectively quoted congressional testimony) to believe the imminent second coming of Christ obviated the need for environmental concern. Reagan, who had appointed him, told confidants that he also expected the imminent return of Christ.

Like most radical greens, Foreman saw promise in pagan religions for a biocentric ethics. Indeed, the most common perception animating the movement can be labeled “pagan,” if this is defined as spirituality involving one or more of two perceptions: (1) the Earth itself is alive and sacred, a perception that for many could properly be labeled pantheism (a word derived by conflating the Greek word *pan* meaning “all” and *theos* meaning “god,” signifying that “all is god”); and (2) that the world is filled with nonhuman intelligences – often thought to be capable of communicating and communing with humans – who are worthy of reverence. Such perceptions, sometimes labeled “ANIMISM” (from the Latin for “soul”), involve a belief that various entities in nature have souls or spirits.

Early in the publication of the *Earth First!* journal, Foreman signaled his spiritual inclinations by publishing according to what has become known in contemporary Paganism as the PAGAN CALENDAR. He was significantly influenced by PAUL SHEPARD, GARY SNYDER, and STARHAWK, each of whom promoted earthen spiritualities. Even more influential upon Foreman was the subtle nature spirituality of the ecologist ALDO LEOPOLD and the novelist EDWARD ABBEY. After learning about ARNE NAESS and DEEP ECOLOGY shortly after founding *Earth First!*,

Foreman and his comrades also immediately seized on and adopted deep ecology as Earth First!'s natural philosophy.

But it was Abbey's *Desert Solitaire* (1968) that captured especially well the deep affective connections that Foreman had for nature, as it had for many other desert dwellers. In this book Abbey described mystical experiences in the desert that taught him humility and a proper spiritual perception, which for him meant biocentrism and a reverence for the land. Abbey's novel *The Monkey-wrench Gang* (1975) portrayed ecological saboteurs fighting back against an industrial civilization portrayed as totalitarian and relentlessly destructive. The book was not entirely fiction, because it was based on an ecological resistance movement that had begun in the 1950s and had been hinted at in *Desert Solitaire*. Indeed, Abbey's friend Jack Loeffler would later indicate that Abbey and many of his friends had been experimenting with *The Anarchist Cookbook* during the campaign to save BLACK MESA from Peabody Coal, and that some of these experiences, and related fantasies, were incorporated into the novel (author's interview, July 1997). Moreover, through its characters, *The Monkeywrench Gang* effectively captured the various types of nature religion that animated those early green rebels, such as Doc Sarvis's enthusiastic hope that "Pan shall rise again!" (1975: 44), and George Washington Hayduke's occasional pondering of "the oceanic unity of things" and his rationale for desert monkeywrenching as a perception that the desert was "holy country" (1975: 227, 128).

Like Abbey and most of his rebel characters, and critics including Louis Mumford and Gary Snyder, Foreman's social philosophy was anarchistic, although his was a kind of libertarian individualism common in the western United States, not the kind that envisioned the overthrow of the United States government. Yet the early *Earth First!* journal included language in its masthead about not accepting the authority of the state. Its pages expressed enthusiasm for anarchism, on the one hand, and paganism, indigenous religions, and sometimes religions originating in Asia, especially Daoism and Buddhism, on the other. These expressed affinities contributed to the kind of subcultures that were drawn to the movement, which included communitarian anarchists and anarchoprimitivists, who really *did* wish to overthrow the state, as well as Pagans and some Wiccans, many from California and the Pacific Northwest, who brought a more overt and ritualized form of nature religion to the movement.

In general, the newcomers were more avowedly anticapitalist and likely to completely reject the legitimacy of nation-states than were Foreman and some of the environmentalists who had helped form Earth First!. In short, they did not believe the capitalistic world system could be reformed. Meanwhile pacifists, anti-war and anti-nuclear weapons activists, many who had been inspired by the religious ethics of Mahatma Gandhi and Martin Luther King, were also drawn to the movement because of its willingness to engage in civil disobedience in defense of life.

The diverse streams that flowed into the movement quickly led to tensions. A few activists including Howie Wolke, an Earth First! co-founder and one of Foreman's closest friends, argued strongly but unsuccessfully that the pagan tone of the journal

was counterproductive and should be halted. In 1982 an Earth First! editor objected to publishing articles describing tactics such as tree and road spiking (using metal or other sharp spikes in an effort to prevent tree felling by making it unprofitable, or to damage the tires of adversaries, sometimes in order to avert apprehension and incarceration). Despite his cogent argument that such tactics could lead to injuries, he was forced out by Foreman and his supporters, who considered the environmental crisis to be so grave that such risks were acceptable and necessary. Indeed, Foreman and many of his supporters, who sometimes musingly called themselves “rednecks for wilderness,” asserted that if attacked during campaigns, they would not hesitate to use violence in self-defense, even lethal violence if necessary. Foreman wrote that while he admired the nonviolent approaches “advocated by Gandhi and Martin Luther King” he could not go along with them because, “unfortunately, I am still an animal . . . I cannot turn the other cheek” (1982: 4).

Two prominent Buddhists, Robert Aitken and Gary Snyder, criticized the martial and violent-sounding rhetoric of those initial years, but Foreman responded strongly in a way that many other Earth First!ers would later parrot:

Any creature, no matter how seemingly meek, will fight back when threatened . . . Eastern [religious] ideas of stepping out of the violent cycle are presumptuous and anthropocentric (by setting human beings apart from the semi-violent natural world) . . . I am entirely pragmatic about violence/nonviolence. We should use whichever we feel comfortable with and whichever is most appropriate to a particular situation . . . There are many paths one can take to defend our Earth Mother. Including that of the warrior (Foreman 1982: 2).

By 1983 a “Cathedral Forest Action Group” had formed to defend Oregon’s forests and distance themselves from such martial tones, a group that generally thought that the revolution of consciousness that was needed would have to come from a loving rather than an angry and violent disposition. But another response was emerging at the same time, that of impatient Earth First!ers who thought that the time had come to escalate tactics. Some began to advocate arson, and such incidents began in the 1980s.

Others sought to develop a revolutionary strategy to overturn the nation-state, or at least, to be ready to take advantage of the inevitable devolution of industrial civilization, which they considered to be unsustainable. In 1988, for example, an anarchist faction began publishing *Live Wild or Die* to promote what they considered to be an even more radical approach. During the same period of the midto late 1980s, a former labor organizer turned environmentalist, Judi Bari, rose to some prominence, advocating “revolutionary ecology” in an effort to blend biocentrism and socialism in a pro-worker green ideology. Bari became famous when a bomb exploded in her automobile in May 1990, permanently disabling her and causing lesser injuries to fellow Earth First! campaigner Darryl Cherney. Both were soon arrested, charged with knowingly possessing the bomb and labeled “ecoterrorists” by law-enforcement authorities. They were soon released for lack of evidence in a case that was never solved.

Both Bari and Cherney had been campaigning to protect California's redwood forests and had strong, pagan spiritual sensibilities; Cherney even had become involved with the innovative, pagan CHURCH OF ALL WORLDS, itself inspired by Robert Heinlein's science fiction novel, *Stranger in a Strange Land* (1961). Bari and Cherney sued the Federal Bureau of Investigation (FBI) and the Police Department in Oakland, where the bombing occurred, asserting these authorities had violated their rights when they publicly accused them of knowingly transporting the bomb and of planning to use it in an act of eco-terrorism. Bari and Cherney won their lawsuit in 2002 and were awarded 4.4 million dollars in damages, five years after Bari's death from cancer in 1997. She specified that her obituaries list her occupation as a "revolutionary" and urged her friends to remember what Wobbly martyr Joe Hill said just before he was executed in 1915: "Don't mourn. Organize!"

A year before the bombing, in 1989, Foreman and four others were arrested and charged with a number of sabotage incidents after a multi-million dollar FBI operation. The attention of the authorities had been drawn to Earth First! as a result of their rhetoric and a growing amount of "ecotage" (a term meaning sabotage in defense of the environment), occurring in the Western United States. FBI agents infiltrated Earth First!, identified an active group of saboteurs, and encouraged it to use explosives, which its members refused to do. The cell decided to use torches to topple power-line towers carrying electricity from a nuclear power plant. The plan was hatched as a protest against nuclear power, which radical environmentalists oppose for the radioactive pollutants it produces, as well as for its role in nuclear weapons production and as an example of an irresponsible human appetite for energy. Authorities successfully portrayed the action as nuclear terrorism, even though stopping electricity transmission from a power plant poses no danger to its stability or safety. After the arrests, of course, Foreman and his supporters were feeling especially vulnerable. The west coast leftists (including Judi Bari) and anarchists of Earth First! continued to press for a more radical movement. Between 1989 and 1990, a schism occurred, with Foreman and many of the earliest Earth First!ers disassociating themselves from the movement that they had launched.

One of the many reasons for the schism was that many Earth First!ers, including at least two who had been arrested and charged with Foreman, felt that he had disassociated himself from the movement for selfish motives, as part of a strategy to prevent a long prison sentence. Foreman, in an unusual plea agreement, pled guilty to a felony conspiracy charge in the power line incident, and the charge was reduced to a misdemeanor after a period of good behavior was certified by the court. He thus escaped serving time in prison. Two other activists with relatively minor roles received little jail time, but Peg Millett and Mark Davis, who had been directly involved in trying to topple the power line towers, served several years each in federal prison.

Both Millett and Davis were motivated by a deep earthen spirituality. Millett often sang songs expressing reverence for the Earth at Earth First! gatherings, and did so also during her sentencing hearing, to convey why she had taken such an action. Davis

explained his vandalism of ski lifts in Arizona as an effort to thwart the expansion of a ski resort in Arizona's San Francisco Mountains, because he agreed with the Hopi and Navajo tribes who believe "those mountains are sacred." He concluded with regret that "what has occurred there, despite our feeble efforts, is a terrible spiritual mistake" (Letter to the author, summer 1992).

After the disposition of the case and writing from prison to the *Earth First!* journal, Davis asserted that his own, more honorable silence, had enabled Foreman and his attorneys to craft his creative plea agreement. Davis claimed that Foreman had knowingly given him \$480 for the anti-nuclear action and that he "was fully aware of the anti-nuke plans. I know this because I told him myself . . . I could easily have cut a deal to [put him in prison] and save myself" (Davis 1993: 14).

The arrests, bombing, and the aftermath of both, intensified the tensions inherent in the diverse streams of American radicalism that had been drawn to Earth First!. By the late 1990s the contradictions that produced the schism that had begun the decade had led to the departure of the majority of Earth First!ers who did not consider themselves anarchists (or considered themselves more libertarian than communitarian/socialistic), along with some of the anarchists who considered their primary passion and moral commitment to be the protection of wilderness and biodiversity. Such activists did not leave environmental work, but created or joined other groups to continue it. Dave Foreman, for example, founded the Wildlands Project in 1992 and started a new magazine, *Wild Earth*. Both endeavors reflected a more mainstream political strategy and drew on CONSERVATION BIOLOGY, as Foreman continued his association with many of the leading figures in this field. The strategy was to draw together scientists, grassroots biodiversity activists, private landholders, and environmental groups such as the Nature Conservancy to secure critical habitat while simultaneously lobbying North American governments to support research and policies congruent with managing ecosystems for long-term biodiversity preservation.

Another outcome from all the discord was that beginning in the late 1980s and through the mid-1990s, many of the movement's most talented musicians and ritual innovators drifted away, including Dana Lyons, whose songs, including TREE MUSIC (which has also been turned into a children's book), would later find an audience within the wider environmental movement. With such figures went much of the wilderness ritualizing that had evolved within the movement, especially from the early 1980s to the middle of the 1990s. This ritualizing had included song and poetry fests, Wicca-influenced dances, and other processes designed to deepen connections with nonhuman nature, such as the Council of All Beings. At the annual "Round River Rendezvous" (named after a story by Aldo Leopold), sometimes elaborate pageants had been performed that expressed the typical radical environmental cosmogony of a fall from a foraging paradise, a sense of an apocalyptic present, and the hope for a world with all life forms that would again live in a sacred balance.

Most long-term participants recognized that the Earth First! of the 1980s and first half of the 1990s, which had involved a great deal of religious innovation, had been

replaced by the end of the century with a much more urban and anarchistic ethos. The movement was increasingly fueled by disaffected youth from large cities more than by career environmental activists whose primary passion was the wilderness. Many long-term activists came to consider moribund the movement they had known earlier. Many of these felt nostalgic for what had been and regretted their own uncharitable behavior that led to its devolution. The upshot of this history is that by the early twenty-first century, it seemed less likely than it did a decade earlier that Earth First! would establish itself as a nature religion with its own evolving ritual life that would continue to inspire environmental action.

This does not mean that radical environmental activism had disappeared or lost social power. Its worldview continued to spread, and in the early 1990s, a new faction emerged, interjecting new energy, if not into the movement's religious dimensions, into its strategic arsenal. This came with the invention of the Earth Liberation Front.

The Earth Liberation Front

Earth First! was established in the United Kingdom after a 1990 "roadshow" tour by activists from the United States. It grew and flourished there in the 1990s in the midst of sometimes furious direct action resistance to roadbuilding projects, many of which enjoyed significant public support. Much of this campaign was conducted under the Earth First! umbrella, which had a number of creative expressions, including overtly pagan groups such as the

DONGA TRIBE and DRAGON ENVIRONMENTAL NETWORK.

In a way reminiscent of the factionalizing of the Earth First! movement in the United States, however, individuals who considered themselves to be the most radical if not revolutionary of these activists, felt that more aggressive tactics than nonviolent civil disobedience were necessary. According to an account published in the *Earth First!* journal in the United States, activists frustrated with resistance within Earth First! to more aggressive tactics, formed the "Earth Liberation Front" in 1992 (ELF 1993). A communiqué from "Tara the Sea Elf" (ELF members refer to themselves as "elves") claimed that by 1993 the elves had created twenty clandestine cells in England, and had used arson and other means to attack corporations in Europe and North America, including a number engaged in producing genetically modified organisms.

In the United States, many of the most radical of Earth First! and green anarchists quickly adopted the ELF acronym, seemingly emboldened by it. The name caught on rapidly, in part because it provided a rubric for the most radical of actions that was good public relations: elves are viewed positively in Western literature as playfully mischievous, not malicious. The moniker caught on also, in part, because the idea of elves in the woods cohered with the pagan spiritualities commonly found in radical environmental movements and among some of these activists.

Given the covert nature of the ELF, which makes interviewing such activists nearly impossible, care must be taken when discussing the religious motivations of its participants. Interviewing spokespeople is problematic, for it is unclear how close they and their views are to the Elves themselves. Two anarchists, Craig Rosebraugh and Leslie James Pickering, who said they had received anonymous communiqués from ELF activists and were anointed (by themselves and the media) as official ELF spokespeople, claimed not to know any of the Elves personally. Moreover, they did not dwell on spiritual motivations in defending ELF actions. Instead, they seemed primarily interested in promoting their anarchist cause, connecting it closely with an understanding of ELF as an anti-capitalist movement. They “resigned” from their spokesperson’s roles in 2003, they averred, because they did not believe the ELF had a revolutionary strategy, nor did they believe that arson and other sabotage tactics should preclude harming human beings. For these reasons, they said, they were resigning in order to form a truly revolutionary organization. The desire to avoid further unwanted attention by law-enforcement authorities may have provided a more concrete rationale for the resignations.

Despite the difficulties involved in learning directly from ELF cell members, it is possible to surmise, given the ELF’s birth from the Earth First! movement which is often overtly pagan in its spirituality, that at least some of its activists would be similarly motivated. Tara the Sea Elf provides concrete reason to suspect a similar spirituality animating both Earth First! and the ELF. She asserted that the ELF

. . . perpetuates the legends of the “Little People,” which in most European countries have a history of causing trouble, being mischievously always heard, but never seen. These “mythical creatures” lived close to the earth in most legends (1996: 18).

Here elves function as fairies have for other radical environmental activists – they are appropriated as symbolic Earth warriors – conjuring images that resonate with the pagan spirituality of many such activists. One Earth First!er, for example, writing under the pseudonym “Buck Young,” argued that modern people cannot experience the world as enchanted because they have paved over and thus muted the Earth’s sacred voices. He wrote an innovative account of the emergence of radical environmental activism that hints at why “elves” proved to be an attractive trope:

Gnomes and elves, fauns and faeries, goblins and ogres, trolls and bogies . . . [must infiltrate our world to] effect change from the inside . . . [These naturespirits are] running around in human bodies . . . working in co-ops . . . talking to themselves in the streets . . . spiking trees and blowing up tractors . . . starting revolutions . . . [and] making up religions (Young 1991: 8–9).

This statement reveals not only a pagan spirituality but also awareness that he and his compatriots are inventing religion. In an interview during an Earth First! Rendezvous

(Vermont, August 1991) he explained, for example, that

J.R.R. Tolkien’s fantasy novels, *The Lord of the Rings*, were important to his nature spirituality. In this he is not alone, for these novels were inspirational to a number of

radical greens. He is also not alone in recognizing that he and others are making up a new green religion, crafting it in innovative ways from historical sources, existing religions, and new sources wherever found, whenever useful.

Tara the Sea Elf would have no objection to spiritualities that help people to perceive the Earth's sacred voices. She concluded her own primer on the ELF by asserting that radical environmental and indigenous groups like the militant American Indian Movement "reflect the philosophy of many First Nations [indigenous peoples] across the world, that you have to show your enemy how serious you are in defending what you regard as sacred" (1996: 18). Yet she insisted that Elves and their sympathizers emphasize nonviolence, with the proviso that it is improper to consider property damage violent: "As always, ELF calls for no injury to life, only to profit and property" (1996: 18).

By 2004, a little more than a decade after it was founded, the Elves had proven fertile and innovative, growing in number and expanding their targets to include luxury homes and apartments being built in areas considered ecologically sensitive, ski resorts expanding into habitats considered critical to endangered species, and sport utility vehicles, considered the most egregious examples of unbridled materialism and pollution-causing consumption. In the United States alone, damages had grown to well over 100 million dollars, and the Federal Bureau of Investigation had labeled the ELF its numberone domestic terrorism group. Yet neither Earth First! nor the ELF had caused serious injuries or deaths of their adversaries or bystanders, although their many critics understandably asserted that it was only a matter of time before they would do so, even if unintentionally. Meanwhile, other critics claimed it was only a matter of time before some of their members broke off into another faction that would intend, and succeed, in doing so.

Conclusions

Care must be taken not to overemphasize the influence of religion when analyzing social movements, for religion is a variable that combines with other factors in complicated ways, and its relative importance is often obscure. Nevertheless, Earth-centered religious perceptions and motivations do appear to be decisive for many if not most in radical environmentalism and Earth First!, and probably in the shadowy realm of the movement's elvish underground.

If there is a radical environmental milieu in which these subcultures freely trade in religious and political ideologies that are at variance with the mainstreams of the cultures in which they are situated, it would make sense to assume that this process of exchange and crossfertilization will continue. There does seem to be such a milieu, so this process is likely to continue, as will the debates and contested nature over what different people consider authentic expressions of radical environmental sensibility. Only time will tell the future evolution of radical environmentalism in general, and the

Earth First! and ELF movements, but in the short term, it looks like the twenty-first century will see more of such earthen spirituality-inspired activism.

Despite the commitment not to cause injuries to adversaries or innocents that is professed by most of the activists who engage in sabotage or arson, they clearly risk causing harm. Some of the most radical among them, at least rhetorically, seem ready to abandon such scruples. Presumably they would if the revolutionary moment appeared to be nigh. This may be the most common criticism, and fear, of Earth First! and the ELF. There are other criticisms of the radical environmental worldview and ideology that are discussed in *RADICAL ENVIRONMENTALISM*, as well as typical rejoinders, which need not be repeated here.

What ought not to be lost in the social scientific analysis of these movements is the moral challenge posed by them. Whether one ends up agreeing with or condemning them, or doing a little of both, carefully considering the claims these activists make can spur reasoned moral debate. With their illegal, outrageous, and sometimes dangerous tactics, they urge us to evaluate whether our behaviors are threatening the fecundity and diversity of life on Earth. They demand that we consider whether our putatively democratic political systems provide what they claim to, namely a reasonable chance to promote and protect the values that we as citizens consider inviolable. And they pose the morally and spiritually radical question, whether nature is sacred in some way, and if so, what moral duties to the wider community of life inhere to such a perception, to such a faith.

Bron Taylor

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See also: Abbey, Edward; Ananda Marga's Tantric NeoHumanism; Anarchism; Biocentric Religion – A Call for; Bioregionalism; Bioregionalism and the North American Bioregional Congress; Black Mesa; Conservation Biology; Deep Ecology; Depth Ecology; Diggers and Levellers; Donga Tribe; Dragon Environmental Network; Eco-magic; Ecopsychology; Ecosophy T; Environmental Ethics; Faerie Faith in Scotland; Heidegger, Martin; Indigenous Environmental Network; Left Biocentrism; Magic, Animism, and the Shaman's Craft; Middle Earth; Music of Resistance; Naess, Arne; Power Animals; Radical Environmentalism (and adjacent, Rodney Coronado and the Animal

Liberation Front); Religious Environmentalist Paradigm; Seed, John; Sexuality and Ecospirituality; Shepard, Paul; Snyder, Gary; Starhawk; Tree Music; Watson, Paul – and the Sea Shepherd Conservation Society; White, Lynn – Thesis of.

Earth Liberation Front

– See Earth First! and the Earth Liberation Front; Radical Environmentalism.

Earth Ministry

Earth Ministry, located in Seattle, Washington is one of the more successful Christian eco-groups to emerge in the 1990s in the United States. Not only does it have several thousand subscribers to its newsletter, *Earth Letter*, but it has also built a successful outreach program in the Seattle area that has involved over a hundred congregations. The organization describes itself as a Christian, ecumenical, eco-justice organization whose work “engages individuals and congregations in knowing God more fully through deepening relationships with all of God’s creation” (Barnett, 2002: Appendices 61).

Founded in 1992 by James and Ruth Mulligan and Reverend Carla Berkadal, Earth Ministry grew out of a successful ecology and spirituality group at the St. Mark’s Episcopal Cathedral in Seattle, where Reverend Berkadal was minister. They felt called to start a larger ecological ministry that went beyond the Cathedral (partly as a result of their shifting energies, and Reverend Berkadal leaving, the eco-group within the Cathedral dissipated and was revived by Ruth Mulligan ten years later). Its first years were devoted to convincing Christians that there was a deep ecological tradition within Christianity and that Christians were called to “earth ministry.”

Jim Mulligan, and eventually a staff of five, continued to lead EM until his retirement in 2003. Several key staff have published relevant books: Michael Schut, edited *Food and Faith* (2002) and *Simpler Living, Compassionate Life* (2001), Tanya Marcovna Becker Barnett was editor and contributor to Earth Ministry’s *Greening Congregations Handbook* (2002) and Nancy Wright (who left the organization in late 2002), co-authored *Ecological Healing* (1993). These publications, as well as their website, extended their outreach beyond the Seattle area. In addition, the staff travel widely as speakers, and consult with those hoping to start an ecological ministry in their own church or in other venues (including prisons).

Two reasons for the organization’s successes have been its extensive guide to congregational organizing and the related Congregational Colleagues programs. The *Greening Congregations Handbook* provides relevant biblical texts, a wide range of excerpts from key authors, an extensive appendix listing resources by denomination, and detailed suggestions on how to get something started that emphasize examining the organizer’s community, faith tradition and bioregion for already-available resources. It then encourages congregational organizers to start small, focus on specific activities, balance action with reflection, and be strategic. This section is followed by an explanation of the various dimensions of congregations that can be “greened,” from the liturgy and worship, to mission and educational aspects, to transportation, landscaping, food, en-

ergy, water, consumption, recycling, composting and green building design. “Helping a congregation cultivate a creation-honoring vision,” as the *Handbook* puts it, is the central goal of the Congregational Colleague program.

The congregation of one of Earth Ministry’s most successful participants, Leroy Hedman, pastor of an independent Pentecostal congregation in a poor, racially and ethnically diverse urban neighborhood ringed by industry and hazardous waste sites, won the first Environmental Protection Agency Energy Star congregation award in 1999. The efforts of Pastor Hedman at the Georgetown Gospel Church demonstrate the multiple aspects of congregational life that can be transformed, even when the theological outlook of the congregation is not particularly ecological, for few would describe his parishioners as “tree-huggers.” The award recognized the comprehensive use of compact fluorescent bulbs and other energy-saving devices by the congregation. Additionally, every ounce of ground in the small, paved lot surrounding the church is planted with flowers, fruits, vegetables and herbs available to all. Hedman, energy miser and master gardener and composter, teaches his congregation and community how to save money as well as grow a source of healthy food.

Another successful congregational group, set in the middle-class outskirts of Seattle, goes on frequent hikes, rides bikes to church, educates parishioners about endangered species and environmental issues, and converted the congregation to serving fair-trade, shade-grown coffee, which expresses its concern for the people and bird-life of the areas where coffee is produced.

Beyond Earth Ministry’s intensive grassroots and outreach efforts, the organization brings in speakers, organizes conferences and local events such as outings to help local groups to successfully restore salmon habitat, and enlists churches to support local immigrant community farmers through Community Supported Agriculture cooperatives.

Laurel Kearns

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See also: Community Supported Agriculture; Composting; Target Earth.

Earth Mysteries

Unusual geophysical and environmental phenomena exercise a persistent fascination on the human imagination. Since its coinage in the early 1970s, the term *earth mysteries* has become an umbrella designation covering a variety of speculative studies and theories regarding the alleged powers of the Earth; mysterious energies that are thought to be found at particular sites on the Earth's surface (especially recognized sacred sites); and the construction, positioning, and uses of ancient monuments and prehistoric landscapes. For the "alternative archeologists" and others who study Earth mysteries, the field constitutes a multidisciplinary and holistic endeavor to understand the past and the human relationship to the Earth, an endeavor that encompasses such wide-ranging pursuits as archeology, archaeoastronomy, the study of folklore and mythology, geophysics, consciousness studies, geomancy, dowsing and other divinatory and clairvoyant techniques, sacred geometry and "gematria," epigraphy, crystallography, pyramidology, speculation about lost continents, and the study of scientifically anomalous phenomena such as UFOs, crop circles, and so-called Earth lights. From the outside, the field often appears a hodgepodge, and most of the scientific establishment of archeologists and prehistorians characteristically dismisses it as empirically flawed and theoretically incoherent, pseudoscientific, atavistic, and irrational.

Nevertheless, "alternative archeology" and the study of Earth mysteries has helped to fuel a popular interest in the distant past and in preserving natural and cultural landscapes, and, in some measure, has helped to correct earlier views of prehistory, which had characterized the ancient world as a time of toil, superstition, and ignorance. In the view promoted by writers on Earth mysteries, the ancients were more attuned to the Earth than we are now, and the time has come to learn what we can from the evidence of the past.

Though research on the geophysical qualities and alignments of prehistoric sites had been undertaken sporadically since the mid-nineteenth century, the inaugural moment of the contemporary Earth mysteries movement, at least in its Anglo-American formulation, is often taken to be the summer day in 1921 when the English businessman Alfred Watkins (1855–1935) stood on a hilltop in Herefordshire and suddenly saw the English landscape spread out before him as if laid out in a network of invisible lines. In his 1925 book *The Old Straight Track*, Watkins presented the case for a network of completely straight roads used by traders in prehistoric England and marked by a variety of Neolithic, Bronze and Iron Age, Roman, and medieval monuments, including standing stones and megalithic structures, barrow mounds, holy wells, old churches, castles, hilltop beacons, crosses and old crossroads, and significant place-names. To

pursue his “linear vision,” Watkins founded the Old Straight Track Club, a group of ley aficionados, which flourished between the wars and inspired countless other “ley hunting” enthusiasts.

Also in the early decades of the twentieth century, German landscape researchers Wilhelm Teudt and Josef Heinsch popularized the notion that ancient Teutonic peoples possessed a centralized, protoscientific solar cult which built an extensive network of astronomical lines, so-called “Holy lines” (*Heilige linien*), the existence of which could still be found in the geographical layout of ancient sites. Supported by Heinrich Himmler, Teudt became the head of an association dedicated to promoting Germany’s ancestral heritage (*Deutsche Ahnenerbe*), and the search for “holy lines” and astrological orientations was encouraged as a pro-party act by the Nazis before and during World War II. For Teudt and his associates, the Teutoburger Wald district in Lower Saxony – with astronomical lines linking sacred places, all centered around the dramatic rock formation called *Die Externsteine* – was the sacred heartland of Germany.

After the war, German geomancy suffered from its connections with Nazism, but by the 1960s, similar ideas resurfaced in other parts of Europe and North America, as part of the general resurgence of interest in ancient civilizations and mysterious phenomena. The 1965 publication of Boston University astronomer Gerald Hawkins’s *Stonehenge Decoded* injected a modicum of scientific respectability to the burgeoning field. Equipped with the latest Harvard-Smithsonian IBM digital computer, Hawkins claimed to discover close correlations between the placement of the main stones at Stonehenge and the positions of the rising and setting midsummer and midwinter sun, the moon, and other celestial bodies, and concluded that Stonehenge was an ancient astronomical observatory and “prehistoric computer.” Hawkins’ ideas gave rise to the new field of *archeoastronomy* (or astroarcheology) and spurred on other scientists and amateurs to seek similar correlations elsewhere. Among others, mechanical engineer Alexander Thom carried out extensive surveys of British stone circles and hypothesized the existence of a “megalithic science,” complete with a precise measuring unit called the “megalithic yard.” Though many of Hawkins’ and Thom’s findings have since been rejected by most scholars, there is a consensus today that some sorts of alignments with celestial events were important in the design and uses of many stone circles in certain parts of the world, even if these alignments were on the whole imprecise, non-systematic, and most likely secondary to ritual, political, and other concerns; and archeoastronomers have continued to research astronomical correlations at European stone circles, as well as Mayan temples, networks of straight lines at Nazca and Cuzco in the Bolivian Andes, and sites of the preColumbian Anasazi culture of the U.S. Southwest.

Buoyed by the growing popular interest in unexplained phenomena, however, ley hunting has undergone a dramatic revival in countercultural and New Age circles in recent decades. In 1965, a group of ley aficionados founded *The Ley Hunter*, a magazine that was to become the longest running publication (it is still publishing) devoted to Earth mysteries, the term that the magazine’s editors coined in the early 1970s.

The journal attracted the rising stars of the British Earth mysteries community, including John Michell, Paul Devereux, Anthony Roberts, and Nigel Pennick. Michell's 1969 book *The View Over Atlantis* helped to crystallize the movement, synthesizing an eclectic array of previously disparate fields into an alluring narrative of a glorious past in which a caste of astronomer-priests built and manipulated a "great scientific instrument" of stone construction that lay sprawled over the surface of the planet. With other proponents of "sacred geometry," Michell proposed that there are correspondences between geometrical shapes, mathematical principles, natural energies and other geophysical properties, and cosmic harmonies; and that these principles were utilized in the design and construction of sacred monuments including the stone circles of the British Isles, the pyramids of Egypt, Greek and Hindu temples, medieval and Renaissance cathedrals and churches and, it seems, almost anywhere else he looked. By associating leys with Chinese "dragon-paths" or *lung mei*, Michell also made "geomancy" a central notion of the Earth mysteries movement. Responding to the apparent contradiction that Chinese dragon lines are thought to flow through the land in undulating curves, while Britain's ley lines are, by definition, perfectly straight, Michell suggested the straight leys were a human construction intended to channel natural energy flow into direct pathways, and went on to produce a detailed local case study of megalithic sites at West Penwith in Cornwall which is still considered by ley aficionados as convincing proof of the ley hypothesis.

By the mid-1970s, Watkins' notion of a network of trade routes had been largely supplanted by the idea of ley lines as invisible but perceptible energy pathways pulsing and circulating through the landscape – "etheric" or "subtle" energies which meet at nodes or concentrated "power points," and which can be directed and manipulated for good or ill like the *chi* or *prana* of Eastern medicine. One of the ways in which these energies can be perceived, according to believers, is through dowsing, that is, divining with metal rods, twigs or other aids. Dowsers have, over the years, enthusiastically mapped out not only the underground water sources for which they are better known, but also countless other purported energies in the vicinity of ancient sites. Much recent Earth mysteries writing portrays the Earth itself as alive and sentient, but under threat by industrial civilization, with the appropriate response to that threat being magic, eco-ritual, and so-called "Earth acupuncture," as in Tom Graves' 1986 book *Needles of Stone Revisited*. At the "power points" where energy leys supposedly converge, everyday reality is said to interpenetrate with non-ordinary, parapsychical realities, facilitating transpersonal experiences and communication with spiritual or non-physical beings. Mixed in with much of this literature on Earth energy is frequent reference to Earth lights, UFO sightings, mysterious crop formations, psychic phenomena, and other curiosities.

Sensing a need to establish scientific credibility for Earth mysteries research, *Ley Hunter* editor Paul Devereux in 1977 launched the Dragon Project, an interdisciplinary research effort to document and measure unusual energy phenomena, such as magnetic or radiation anomalies, ultrasonic emissions, and light phenomena, at stone circles in

Britain. A shoestring-budget operation, the project lumbered along for several years in fits and starts, but by 1989, Devereux had admitted that its psychic archeological work (using dowsers and psychics for archeological purposes) had produced unclear results, and that energy dowsing had “not yet developed much beyond belief-system status.” The project had, however, produced suggestive, if inconclusive, evidence of magnetic, ultrasound, and radiation oddities, giving rise to speculation that unusual phenomena reported at megalithic sites may be related to the natural radiation of the stone itself, usually granite. This hypothesis seemed to parallel the claims of a handful of North American neurophysiologists who have found correlations between geophysical features, such as underground uranium deposits (e.g., in the U.S. Southwest), seismic phenomena, or tectonic stress zones, and increased reporting of UFOs and other unusual psychological experiences. Neurophysiologist Michael Persinger hypothesizes that piezoelectric effects and other electromagnetic discharges associated with tectonic plate movements, specifically at geological fault zones, stimulate specific areas of the human neocortex, producing hallucinatory images which the brain interprets as encounters with UFOs, poltergeists, or even near-death experiences. Certain regions of the world, including the famed Bermuda Triangle, the so-called Wessex Triangle in Britain, the Sedona area in Arizona, and the island of Maui, have seemed to specialize in generating such phenomena, or at least in attracting people who specialize in perceiving them.

In line with this more pragmatic and scientific approach, Devereux decisively rejected the “energetic” school of ley line theorizing and proposed a third hypothesis to account for the leys. In this new view, straight-line tracks and landscape alignments, such as the extensive landscape lines found in the South American Andes, are collective mental constructs or “shamanic spirit paths,” representations of the trance-state travels of shamans, and as such represent the ability of the human mind to roam across space in altered and religious states of consciousness. Alongside a wealth of other data from around the world, Devereux supported his case citing the use of straight tracks as actual funerary roads for the carriage of the dead in some cultures; and despite its overgeneralized nature, the spirit path hypothesis has been taken up enthusiastically by other ley researchers.

Though Britain has been a hothouse of recent Earth mysteries theorizing, other parts of the world have produced their own variants. North American Earth mysteries research has been especially infused with cultural diffusionist speculation, including far-flung theories of ancient transatlantic migrations by Celts, Vikings, Phoenicians, and other seafarers. The doyen of these pursuits has been Harvard marine biologist Barry Fell, whose theories about Pre-Columbian voyagers were outlined in a series of popular books in the 1970s and early 1980s. Though dismissed by the scientific community, Fell’s books drew attention to various sites, such as Mystery Hill in New Hampshire (also known as the American Stonehenge) and other stone structures, whose suggestive features and apparent inscriptions have continued to exercise a fascination on the curious. Another subcategory of Earth mysteries researchers have sought to confirm is

archeologist Marija Gimbutas's hypothesis of an ancient goddess civilization, discovering imagery associated with "the Goddess" in landscape formations and folklore as far and wide as England (notably Silbury Hill) and Ireland, islands in the Mediterranean, and North and South America.

Yet another line of Earth mysteries research has been the hypothesis of a global energy grid. In the 1970s, Cambridge mathematician Michael Behrend began detecting alignments of ancient sites in geometric shapes (such as hexagons and decagons) spread on a vast scale across Britain. Other researchers have since projected such geometrical patterns over the entire Earth, portraying the planet as a crystalline structure made up of regular geometrical patterns based on Platonic solids, or as composed of vast circles, so-called Rings of Gaia, whose intersections mark energy points or "planetary chakras." Some theorists have attempted to classify the different "power points" or "energy vortexes" into types. One common scheme, proffered by psychic Page Bryant, distinguishes between *electrical* vortexes, which include areas of high elevation and sacred mountains (such as mounts Shasta, Kilauea, or Denali/McKinley) and are said to be physically charging and stimulating; *magnetic* vortexes, which are lower lying and include wells and springs, lakes, and caves, and are said to be conducive to meditation, healing, past-life recall, and intuitive guidance; and *electromagnetic* vortexes or larger *electromagnetic grids*, which combine the two types of features over larger areas (e.g., Niagara Falls, Maui and Kauai in Hawai'i, the Rocky Mountains). The volcanic Ring of Fire that stretches across the Pacific is, for Bryant, the axis for the Earth's "kundalini" energy. (In Hindu and Buddhist spiritual and physicommedical traditions, the *chakras* are thought to be energy centers that run along the body's central axis, and along which flows the spiritual or "life energy" known as *kundalini*.)

Like other researchers of the paranormal, Earth mysteries researchers have not fared well against the scrutiny of scientists and skeptics. Though most archeologists know little of the world of "alternative archeology," the few instances of scholarly scrutiny of Earth mysteries research have proved humbling to the field's credibility. Ley hunters have been critiqued for their "telescoped" view of prehistory, which sees all prehistoric earthworks and all grass-covered mounds as roughly contemporaneous, and for flawed methodology, selective and inappropriate use of statistical evidence, dubious use of folklore and placenames, and the sheer incoherence of their various notions of Earth or telluric "energies." Their site-evolution or site-continuity argument – according to which different cultural groups, separated from each other by many centuries, are said to have recognized the sanctity of a place, erecting a variety of structures, from stone circles to tumuli to churches, to mark it out – is rejected by most archeologists, as is the common claim that the British ley network was established back in the Neolithic, since, in fact, most purported ley lines require the use of later sites as well as ill-defined mark points (including moats, ponds, lanes, and even trees) to "confirm" their veracity as leys. More generally, Earth mysteries research is faulted for over reliance on outdated ideas about prehistory, and for injudicious appropriation of scholarly theories – such as Gimbutas's hypothesis of an ancient goddess civilization, James Lovelock's

Gaia hypothesis, or the wild variety of “new physics” ideas about holographic universes and multidimensional realities – to prop up their own ideas, without recognizing the limitations of those theories or their tendentious status within their respective source disciplines. As archeological knowledge has accumulated, especially since the dawn of radiocarbon dating, the picture of the European Neolithic, for instance, has become altogether much more complex, characterized by a recognition of intense local regionalism and conflict, extensive environmental disruption, profound changes in cultural tradition over time, with different structures being built for different purposes at different periods of time – but also with a proliferation of ritual monuments, which served less as astronomical observatories than as largescale visual and territorial markers. Analogous situations apply in other parts of the world. Earth mysteries researchers, in contrast, have tended to ignore archeologists’ growing knowledge of the cultural, functional, and chronological contexts of ancient sites, while doggedly pursuing their overarching hypothesis of a lost Golden Age.

Nevertheless, dialogue between fringe and orthodox (i.e., amateur and professional) prehistorians has taken place sporadically, at conferences and in occasional articles in popular archeological journals and alternative venues. Some of the ideas of earlier Earth mysteries research have, in fact, turned out to be more accurate than the science of the time had supposed: for instance, the idea, shared by Watkins and others, that the Neolithic landscape of Europe and the British Isles was widely cleared and settled, or the view that “continuity of development” was a keynote to European history (this contrasts to early archeologists’ emphasis on invasions and migrations). Recent developments in symbolic, cognitive, interpretive, phenomenological, and post-processualist archeology, however, have pursued with great vigor the sorts of questions that should interest Earth mysteries aficionados. If the “Earth mysteries” field is to have a future other than mere wishful thinking, skillful collaboration between scholarly prehistorians and amateur enthusiasts – and, more practically, with environmental activists – would seem to be a prerequisite.

Adrian Ivakhiv

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See also: Crop Circles; Delphic Oracle; Glastonbury; New Age; Sedona; Stone Cir-
cles; Stonehenge.

EarthSpirit Community

EarthSpirit is a national organization of neo-pagans located in western Massachusetts. The organization, which was founded in 1980 in the Boston area by its current directors, Andras Corban Arthen and Deirdre Pulgram Arthen, organizes festivals and open rituals, offers classes on neo-pagan topics, maintains a website, and publishes a newsletter for its members. The organization has a performance group, Mothertongue, which has produced several recordings of stories and songs with neo-pagan and nature themes. From 1988 to 1993 EarthSpirit published a popular glossy magazine, *FireHeart*, which included interviews with well-known neo-pagans and articles about magical practices, rituals, and topical issues within the neo-pagan community. Although most of the articles were written by EarthSpirit members, neo-pagans, who were not active members in ESC and environmental activist groups, such as Earth First!, were also invited to write articles for this journal, helping to make it an important source for information and debate within the neo-pagan community.

EarthSpirit is best known for its festival, Rites of Spring, which takes place yearly around Memorial Day weekend in western Massachusetts. The festival began in 1979 as a two-day gathering of neo-pagans in the Boston area, grew to an event that occurred over a long weekend, and ultimately to a week-long gathering that has drawn up to 700 people. The theme of the gathering changes each year but always focuses on the spiritual connection between participants and the Earth. EarthSpirit also organizes three smaller gatherings – Twilight Covening in the fall, Suntide in midsummer, and the Festival of Lights in mid-winter – as well as workshops throughout the year to train neo-pagans in aspects of magical or ritual practice or to facilitate discussions of topics such as the spiritual connection between people and the Earth as reflected in the folklore and practices of indigenous peoples. Public seasonal rituals held by EarthSpirit in both the Boston area and western Massachusetts often serve as a bridge for interested individuals to become neo-pagans. These rituals also provide an arena for local neo-pagans to meet one another and to make and renew friendships, magical partnerships, and sometimes form into working spiritual groups.

EarthSpirit's large rituals are dramatic, involving the use of music, masks, props, and dance to enact some aspect of change that is occurring in nature and its meaning for participants. For instance, at Samhain rituals, which occur around October 31st, death and rebirth in nature is celebrated. Participants are encouraged to remember deceased friends and family members and to think about their own bad habits or relationships that they want to “die” to be replaced with healthier ones. EarthSpirit is gifted at using dance, chants, songs, and mazes to involve large groups of people in

open rituals. For example, at one Rites of Spring a maze was created through which approximately 600 individuals walked at the conclusion of a ritual, transfiguring the amebic circles of participants into a butterfly, which reflected that year's theme of transformation in nature and in individuals' lives.

The organization is run by a dedicated group of individuals, many of whom, like Andras and Deirdre, have taken the last name Arthen, share a homestead in western Massachusetts, and are members of the Glainn Sidhr (Glenshire) Order of Witches. The organization and its leaders often serve as public spokespersons for neopaganism and Earth-based spirituality. EarthSpirit was one of the three neo-pagan groups to represent their religion at the World Parliament of Religions in Chicago in 1993 and in South Africa in 1999. The organization boasts over 4000 members, most of whom live in the New England area, although others reside throughout the United States and abroad. Membership within the organization requires individuals to pay a small fee in return for which they receive newsletters, mailings about upcoming events, and discounts at those events. Members vary in their commitment to the organization; some donate time to help organize its rituals and festivals, and to maintain the organization, while others attend only some events. All of EarthSpirit's events are open to members and non-members alike.

Although those in the inner circle are members of the same spiritual and magical tradition, EarthSpirit aims to be a service organization for the larger neo-pagan community. At both the festivals and open circles organized by EarthSpirit the focus is on what they believe all neopagans share – a magical worldview and reverence for the Earth. Animals, streams, trees, the wind, and stones are all venerated as part of the sacred web of creation. Woven into the fabric of the rituals is a theme that humanity, which is viewed as part of the sacred web, needs to honor and protect nature. The group encourages its members to be environmentally responsible. Some outdoor rituals include the planting of trees or the removal of trash from public lands as a symbol of the participants' respect and care for Mother Earth.

Helen A. Berger

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Contemporary; Reclaiming; Wicca.

Eco-Church

The Eco-Church Movement was initially developed by the North American Coalition for Christianity and Ecology (NACCE), a Minnesota-based organization founded in 1986 to foster greater ecological responsibility and care of creation among Christians. Since then, the concept of ecochurch has extended beyond the context of the NACCE to non-affiliated grassroots groups that define themselves as eco-churches but not necessarily under the guidelines advanced by the NACCE. As conceived by the NACCE, eco-churches (the NACCE now calls them “Earthkeeping Circles”) were to be small groups of people who meet weekly to discuss relevant biblical passages and to study issues related to Christianity and ecology. Eco-churches would have freedom to experiment and tailor their own gatherings to the interests of the local group but would largely remain biblically based. Eco-churches could create their own rituals for celebrating Christian holy days, the natural seasons, or even Earth Day. NACCE’s guidelines for eco-churches identify body prayer, song and music, study and action, exploring the bioregion, cultivating Earth literacy, and observing holy days as suggested group activities. Although there were very few eco-churches actually affiliated with the NACCE as of 2003, the ecochurch concept and name had been picked and interpreted in different ways by various independent lay-led groups. Catholic lay groups in particular, which have come to the eco-church idea through the writings of Father Albert Fritsch (and not necessarily through the NACCE) have given the eco-church concept their own interpretation and added a special emphasis on eco-justice concerns.

Although the NACCE advises groups to hold gatherings outdoors as much as possible, at other times eco-church groups meet in members’ homes instead of within institutional walls. Like the “House Church Movement” of the 1970s and the Liberation Theology Movement with its small Christian Based Communities (CBCs) in Central and Latin America, eco-churches are committed not just to study and worship but also to social and environmental action. Much as the House Church Movement did, the EcoChurch Movement today draws support and precedent from key passages in the New Testament (Acts 2:46, 12:12; Rom. 16:5; 1 Cor. 16:19; Col. 4:15) to authenticate the new growth of more egalitarian and experimental home-based liturgical groups. Much of the literature on eco-churches has a “Liberation Theology” feel to it and emphasizes the powerful potential of local grassroots action. For example, the March/April 2000 written message from NACCE President Rev. Finley Schaef said,

Why should we want to create house churches, or “Eco-church circles,” or “earth-keeping circles,” or cells? The answer is quite simple: the existing local churches, in my humble estimation, will never make the radical changes we envision. Local churches, if

they can get beyond the mission of sociability and charity, do try to address individual salvation, but that's the limit (Schaef 2000).

Eco-church proponents also argue that smaller, homebased groups are by nature more ecologically sustainable since they do not require the resources to build, maintain, and power large institutional buildings. Creating simpler, more flexible churches that model sustainability and commitment to creation is thus one of the movement's goals. For traditional congregations that wish to become more eco-friendly, the NACCE provides eco-Church ministry teams a variety of resources and directs them to Father Albert Fritsch's book *Eco-Church: An Action Manual* (1992), which offers step-by-step instructions on how congregations can conduct their own environmental resource audit. Rev. Schaef has welcomed and praised such institutional "greening" but with the caveat that "established churches need to do much more than tack on ecological issues to their existing agenda" (Schaef 2000). The development of eco-churches then, which has extended even to a study group inside a New York penitentiary, was ideally conceived of as a way to build a more immediate grassroots movement of ecologically sensitive Christians from the bottom up without waiting for slower-moving church bureaucracies to implement changes. Much like House Churches, these "cell groups" are by nature decentralized and not necessarily affiliated with any environmental organization or congregation, making the scope of the movement more challenging to judge.

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See also: African Earthkeeping Churches – Association of (Zimbabwe); Christianity (7c) – Liberation Theology; North American Conference (Coalition) on Christianity and Ecology [and the] North American Coalition on Religion and Ecology.

Ecofascism

Fascism is a totalitarian form of government that requires individuals to sacrifice their interests and even their lives to the well-being and glory of the state. Acquiring mystical qualities usually reserved for divinities, the state and its leaders become the heroic manifestations of the people's sacred blood. A new social hierarchy is required to overcome the debilitating, blood-destroying effects of mass civilization. Militarism, expansionist nationalism, and racism usually follow from fascism's social Darwinism, according to which dynamic societies can and must win the inevitable struggle for survival against weaker states.

Following this definition, we may define "ecofascism" as a totalitarian government that requires individuals to sacrifice their interests to the well-being and glory of the "land," understood as the splendid web of life, or the organic whole of nature, including peoples and their states. The land acquires mystical properties as the sacred source and absolute measure for all things. Polluting the land, either by toxins or by admitting the wrong kind of immigrants, not only threatens the state's stability and security, but also affronts the sacred natural order itself. Even though the web of life supposedly admits of no hierarchies, ecofascism requires leaders who enforce "natural" principles against selfish (hence, unnatural) individuals and peoples. Militarism, expansionism, and possibly racism are required to defend the land – Fatherland, Mother Earth, Gaia – from those who disrespect the land, including both industrialized countries and overpopulated "developing" nations. Consistent with Darwinist principles, the ecofascist state will succeed in the struggle for survival, because such a state is more adaptive to (respectful of) the environment, now glorified as the sacred web of life.

No ecofascism government has yet existed, but important aspects of it can be discerned in German National Socialism, one of whose central slogans was *Blut und Boden*, "[pure] blood and [pure] land." Some portray Nazism as a political religion, according to which the state must protect the racially pure blood that manifests and sustains the creative power of nature. Many Nazis believed that blood purity was crucial for Germany's sacred mission of saving noble northern European races from degenerate ones, such as the Jews. The Nazis explicitly contrasted their "religion of nature" with the otherworldliness of Christianity, itself a product of the "unnatural" Jews. Since races were closely tied to the land in which they arose, German land had to be protected both from industrial pollution and from the injurious presence of half-breeds. Only pure blood Germans could draw creative energy from the land that originally gave rise to the *Volk*. Divinity was purely immanent within nature, respect for which was possible only for people with the blood of northern Europeans. Capitalism and commu-

nism, which not only reduced peoples to undifferentiated masses, but also destroyed the land with their industrial practices, were supposedly ideological offspring of the nature-despising, blood-polluting, semi-human Jews. These attitudes were not erased from Nazism, despite its post-1936 commitment to the total industrial mobilization required for acquiring *Lebensraum* to the East and for “liberating” northern European countries from the institutions imposed by modernity, such as democracy, socialism, and capitalism.

Nazism’s perverted neo-paganism must be sharply contrasted with contemporary neo-paganism, which typically affirms the achievements of modernity, while disagreeing with its total desacralization of nature. Nevertheless, the ecofascist aspect of National Socialism must be kept in mind by those environmentalists who call for worshipping nature and who also engage in a totalizing critique of modernity. In the future, the possibility of some kind of ecofascism could grow if environmental problems lead to international tensions (e.g., disputes over water rights or immigration) that national leaders use as an excuse to whip up nationalist and/or ethnic passions, build up military forces, suppress internal opposition, and enforce draconian laws compelling people to behave in ways consistent with the well-being and purity of “nature.”

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See also: ATWA; Devi, Savitri; Environmental Ethics; Fascism; Radical Environmentalism.

Ecofeminism and Biblical Interpretation

For some time now ecofeminists have interpreted the Bible both critically and hopefully. Alert to the ways biblical religion has been implicated in the oppression of women and the domination of nature, ecofeminist theologians such as Rosemary Radford Ruether, Judith Plaskow and Ivone Gebara have used ecofeminist ethics as a basis for critical and selective reinterpretations of biblical material. For example, in *Gaia and God* (1992) Ruether reinterprets the biblical motif of “covenant” to encompass “the covenant of creation” in which “we are to be in right relation to our fellow beings” (1992: 228). Plaskow refers to biblical prophecy in the context of a Jewish ecofeminist vision of repair of the world (in Adams 1993). In *Longing for Running Water* (1999), Gebara describes an orientation toward life within the parables of Jesus. Through these new interpretations, the Bible becomes a source for developing an ecofeminist response to environmental devastation and to the interrelated oppressions of women, indigenous peoples and other subordinated groups.

Of particular interest to ecofeminists have been the biblical motifs of genesis and apocalypse. In a reversal of the Christian canon, Anne Primavesi’s *From Apocalypse to Genesis* (1991) moves from contemporary judgments on human actions destructive of nature to the possibility of an ecological re-reading of the creation stories of Genesis 1 to 3. Critical of the role of Christianity and Western society in the subordination of women and the domination of nature, Primavesi interprets the Spirit of God in creation as an image of the regenerative power of trees, oceans and human bodies. In “Nuclear Power and the Sacred,” Jane Caputi (Adams 1993), following the work of film critic Michael Wood, links the gendering of the atomic bomb as female with the biblically based myth of Adam and Eve. She traces a pattern in which nuclear weapons are given women’s names and associated with the sexual power of women. This pattern, portraying woman as seductive and destructive, emerges from a tradition that represents Eve as culpable for human evil. In Ruether’s “Women Healing Earth” (1996), Sun-Ai Lee-Park focuses on “the forbidden tree” of Genesis 2 and 3. There God offers the first humans all the bounty of the forest garden, except for the fruit of the tree of knowledge of good and evil. When Lee-Park witnesses the logging of ancient rainforests in Sarawak, she recalls this divine prohibition. The Genesis story for her parallels the way in which ignoring environmental limits leads to destruction and loss.

Themes of genesis and apocalypse come together in Carolyn Merchant’s *Earthcare* (1995) and Catherine Keller’s *Apocalypse Now and Then* (1996). Both writers describe

ways in which the myth of a lost Eden and the vision of a New World coalesce in the colonization of the Americas. Keller argues that an apocalyptic framework, rejected by Western modernity, continues to influence Western imagination and practice through what she calls a “cryptoapocalypse.” By offering an extended, ecological, feminist engagement with a single biblical book, namely the Book of Revelation, Keller’s *Apocalypse* represents a shift for ecofeminist biblical interpretation.

Within biblical studies, ecofeminist frameworks of interpretation are continuing to be developed. As Gebara indicates, in several Latin American countries women are re-reading biblical scriptures from the joint perspective of “the integrity of creation” and “respect for women.” In the first volume of the *Earth Bible*, Australian biblical scholar Elaine Wainwright has extended a feminist hermeneutic to develop an ecofeminist reading of the Gospel of Matthew. Focusing in particular on Matthew 11, which deals with the question of who Jesus is, Wainwright suggests that the deeds of Jesus reveal the presence of divine wisdom and the possibility of right relationship not only between humans but within the entire Earth community.

In the same volume Heather Eaton draws on feminist biblical criticism to suggest directions for an ecofeminist approach to biblical interpretation. Questioning conventional notions of the text as sacred and authoritative, Eaton writes: “From an ecofeminist perspective, the Bible can be accepted only as contingent and provisional” (in Habel 2000: 59). This implies an acceptance of the material reality of the Bible. Words on a scroll, page or screen are not possible without the plants from which paper or papyrus and ink are produced or the fossils and rocks from which the plastics of a CD-ROM and the parts of a computer are formed. Writers and readers of the text are also dependent on the Earth community for their sustenance. A recognition of the interdependence of readers and text within an Earth community is particularly pertinent for ecofeminist biblical interpretation.

Related ecofeminist concerns with embodiment surface in the *Earth Bible*’s volume on biblical wisdom literature (Habel and Wurst 2001). Shirley Wurst’s focus on eokinship develops aspects of interconnectedness and Earth kinship evident in the biblical personification of divine wisdom as a woman. Drawing on the practice of biblical scholar Claudia Camp, Wurst names this figure of kinship Woman Wisdom. For Laura Hobgood-Oster, Woman Wisdom offers a vision of the divine which contrasts with other less Earth-friendly images: “The divine being frolicking in creation suggests a very different image than a king sitting on a throne with Earth as ‘his’ footstool” (in Habel and Wurst 2001: 40). Woman Wisdom inhabits the realm of Earth; she invites humans to open themselves to a passionate knowing of Earth. In the same volume, Carole Fontaine focuses on the celebration of sexual desire in the Song of Songs. The lovers’ desire to connect is reflected in the wider interconnectedness of the Earth community. Not only does the natural world provide space for the lovers’ meeting and material for their metaphors, but also it itself is both lover and beloved.

As Eaton indicates, ecofeminist interpretations must be ethically responsible. The patriarchal and androcentric character of much biblical material remains a key con-

cern. So, too, does the problem of the anthropocentrism of the text and its readers, which tends to make ecological concerns marginal to the work of biblical interpretation. Further, as post-colonial insights are integrated with ecofeminist ones, there is a critical focus on the ways in which the Bible has been used in the Eurowestern project of colonization. At the same time, eco-sensitive readings are emerging in the interplay between ecofeminist reader and biblical text. Considering the problematic aspects of the text, Hobgood-Oster writes: "Earth recontextualizes and subverts" (in Habel and Wurst 2001: 46). The challenge to ecofeminist interpreters of the Bible is to allow Earth to recontextualize and subvert our readings of the text.

Anne Elvey

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See also: Christianity (7c) – Liberation Theology; Christianity (7d) – Feminist Theology; Earth Bible; Ecofeminism (various); Gebara, Ivone; Ruether, Rosemary Radford.

Ecofeminism – Historic and International Evolution

Ecofeminism emerged in the 1970s and 1980s as myriad forms of feminist and environmental theories and activism intersected. The term was introduced by Françoise d'Eaubonne in her book *Le Feminisme ou la Mort* (Feminism or Death) published in 1974. Some theorists, such as Ynestra King, name it as a third wave of feminism, while others place it in the general category of deep ecology. Ecofeminism acts in both and neither of these broad movements, simultaneously serving as an environmental critique of feminism and a feminist critique of environmentalism. Ecofeminist trajectories are varied; there is no one accepted or orthodox “ecofeminism.” Rosemary Radford Ruether, Ivone Gebara, Vandana Shiva, Susan Griffin, Alice Walker, Starhawk, Sallie McFague, Luisah Teish, Sun Ai Lee-Park, Paula Gunn Allen, Monica Sjöö, Greta Gaard, Karen Warren and Andy Smith are among the voices speaking from ecofeminist positions.

Ecofeminism asserts that all forms of oppression are connected and that structures of oppression must be addressed in their totality. Oppression of the natural world and of women by patriarchal power structures must be examined together or neither can be confronted fully. These socially constructed oppressions formed out of the power dynamics of patriarchal systems. In one of the first ecofeminist books, *New Woman/New Earth*, Ruether, states:

Women must see that there can be no liberation for them and no solution to the ecological crisis within a society whose fundamental model of relationships continues to be one of domination. They must unite the demands of the women’s movement with those of the ecological movement to envision a radical reshaping of the basic socioeconomic relations and the underlying values of this [modern industrial] society (1975: 204).

Ruether makes clear a central tenet of ecofeminism: Earth and the other-than-human experience the tyranny of patriarchy along with women. Classism, racism, sexism, heterosexism, naturism (a term coined by Warren) and speciesism are all intertwined.

Ecofeminism is multi-faceted and multi-located, challenging structures rather than individuals. By confronting systems of patriarchy, ecofeminism broadens the scope of the cultural critique and incorporates seemingly disparate but, according to ecofeminism, radically connected elements. Combining feminist and deep ecological perspectives

– in and of themselves extremely varied ways of thinking about reality – is a complex, transgressive process that is often in flux. Ecofeminist positions reflect varied political stances that may be, and usually are, transformed through time and place. In other words, the political activisms and alliances stemming from ecofeminism modify in relationship to the perceived justice issues being confronted in differing cultural and historical settings. Because of this constant morphing, ecofeminism simultaneously challenges patriarchies from different angles. This is one of the myriad strengths of the fluid and radically diverse positions assumed by ecofeminism.

Ecofeminism claims that patriarchal structures justify their dominance through categorical or dualistic hierarchies: heaven/Earth, mind/body, male/female, human/ animal, spirit/matter, culture/nature, white/non-white. Established oppressive systems continue to manifest their abusive powers by reinforcing assumptions of these binaries, even making them sacred through religious and scientific constructs. Ecofeminism posits that as long as any of the dualisms exist as an integral component of societal structuring and justification, they will all continue to serve as starting points to justify patriarchy. Therefore all dualisms and binary oppositional forms must be dismantled otherwise humanity remains “divided against” itself, a phrase that Griffin uses to describe the ideological impact of dualism.

As a justice advocate for the entire web of life, ecofeminism resists dividing culture into these imbedded separate or dualistic arenas. In her introduction to *Eco-feminism: Women, Culture, Nature*, editor Warren asserts: “What makes ecofeminism distinct is its insistence that nonhuman nature and naturism (i.e., the unjustified domination of nature) are feminist issues. Ecofeminist philosophy extends familiar feminist critiques of social isms of domination to nature” (1997: 4).

Ecofeminism’s constructive worldview replaces hierarchical dualisms with radical diversity and relationship, modeled on both biodiversity and the feminist emphasis on the strength of difference.

Throughout the 1970s, few ecofeminists in academic settings designated themselves as such, though several engaged in similar theoretical endeavors linking feminist and environmental ideas. Early publications that analyze the woman/nature connection in light of the environmental crisis include Ruether’s *New Woman/New Earth* (1975), Mary Daly’s *Gyn/Ecology* (1978), Griffin’s *Woman and Nature* (1978) and Carolyn Merchant’s *The Death of Nature* (1980).

Some of the earliest articulations of ecofeminism analyzed the patriarchal underpinnings in religious and philosophical systems of the European and Mediterranean world. These cultural and geographical foci surfaced from the primarily European and Euro-American voices that constituted the initial ecofeminist conversations. Such scholars as Anne Primavesi, Carol Christ, Merchant, Daly, and Charlene Spretnak examined cultural and religious systems from such areas as ancient Mesopotamia and Greece, as well as religious systems such as Judaism and Christianity. They proposed that patriarchal cultural structures revolved around layers of symbol systems that justified domination. For example, they interpret the creation stories in the book of Genesis,

foundational for Judaism, Christianity and Islam, as demonizing both woman (Eve) and animal (the snake).

These and other early ecofeminists analyzed prepatriarchal cultures in the Mediterranean and old European worlds as well. Feminist historian Gerda Lerner and archeomythologist Marija Gimbutas provided some of the groundwork for this analysis. Gimbutas' theories of Old Europe are based in her complex and widely critiqued archeomythological reconstructions. Her theories suggest that life-valuing, sometimes matriarchal and rarely militaristic societies existed before Indo-Aryan invaders slowly destroyed these cultures. Lerner's historical reconstructions focus on the shift from small Neolithic villages to city-based states with the accompanying rise of patriarchal cultural systems. Both theorists posit pre-patriarchal Mediterranean world religious cultures in which fertility goddesses and other nature symbolism figured prominently.

Gradually, patriarchal, militaristic sky gods replaced Earth goddesses and gods. Most of the ancient symbols of power were subverted and remythologized as evil or chaotic. The mother goddess, whose body often birthed or constituted the Earth, became the target of the powerful sky gods, as evidenced by such creation stories as the Babylonian *Enuma Elish*. The pattern of male deities killing female or animal deities in an effort to establish a patriarchal order and to control forces assumed to be chaotic repeats itself consistently. The snake, once a symbol of life, was trampled under the foot of the male deity and connected to evil. Hell was in the Earth, and Heaven was removed to the sky. Paradise lost its materiality and became a masculine, hierarchical projection.

Such theories raise many questions for scholars interested in the reconstruction of early human civilizations. For example, few archeologists accept Gimbutas' theories and suggest that they are projections of matriarchal and goddess myths. Still, some ecofeminists reference these historical reconstructions as alternatives to the commonly accepted patriarchal constructions that project historical progress. In other words, the idea of civilizations advancing from pre-agricultural to agricultural to industrial to post-industrial/technological might also be construed as a mythological projection. Applying feminist historical methodology, some academic ecofeminists reevaluate the patriarchal myth of progress, particularly its detrimental effects on the human-nature relationship. Carolyn Merchant articulates a version of this critique in *The Death of Nature*.

From the work of Griffin, Daly, Ruether, Merchant and others in the 1970s, grew a dramatic expansion of ecofeminism in academic circles during the 1980s and 1990s. Activist movements, sometimes connected with but generally outside of the academy, also increased in the 1980s. Several conferences focusing on ecofeminism were organized: "Women and Life on Earth: Eco-feminism in the Eighties" (1980), "Ecofeminist Perspectives: Culture, Nature, Theory" (1987), and a group at the National Women's Studies Association (1989). These efforts, along with other attempts to create sustainable organizations such as the Feminist Peace Institute and WomanEarth, led to the publication of several foundational anthologies. *Reclaim the Earth: Women Speak Out*

for *Life on Earth*, edited by Stephanie Leland and Leonie Caldecott (1983); *Healing the Wounds: The Promise of Ecofeminism*, edited by Judith Plant (1989); and *Reweaving the World: The Emergence of Ecofeminism*, edited by Irene Diamond and Gloria Orenstein (1990). All three volumes were edited by Euro-American ecofeminists but the editors included authors from various cultures. Petra Kelly, in her foreword to *Healing the Wounds*, proclaims a “global ecological sisterhood” and calls on the women of the Chipko Movement (India), the Greenham Common (England), the Krim Region (former Soviet Union) and the Western Shoshone Indian Nation to “link arms” as global sisters (1989: ix). The practice of publishing anthologies with diverse voices rather than books representing just one voice exhibits the overall tendency among ecofeminists to value inclusivity and difference. Still these anthologies, while influential, were criticized for essentializing the woman/nature connection and for over-romanticizing or over-simplifying women in non-Western cultures.

Vandana Shiva, a physicist and environmental researcher/activist in India, published *Staying Alive: Women, Ecology and Survival in India* (1988), which reflects the increasingly global nature of ecofeminism during the 1980s. Shiva connects the “death of the feminine principle” with “maldevelopment,” a term she uses to describe the introduction of Western, intensive agriculture to the “Third World.” In her essay “Development, Ecology and Women” Shiva articulates the relationship clearly:

Maldevelopment militates against this equality in diversity, and superimposes the ideologically constructed category of western technological man as a uniform measure of the worth of classes, cultures, and genders . . . Diversity, and unity and harmony in diversity, become epistemologically unattainable in the context of maldevelopment, which then becomes synonymous with women’s underdevelopment (increasing sexist domination), and nature’s depletion (deepening ecological crises) (Shiva in Plant 1989: 83).

Shiva also published, with Maria Mies, a German, Marxist sociologist, *Ecofeminism: Reconnecting a Divided World* (1993). In this book the authors connect the capitalist-patriarchal economic system with the oppression of women in both the northern and southern hemispheres. However Shiva, not unlike some other ecofeminists, has been criticized for essentializing women and nature in her work.

Another area of focus concerned the relationship of scientific worldviews to religion and culture. Ecofeminism suggests that the antagonism sometimes existing between religious and scientific worldviews has been detrimental, used by both approaches to advance their own hierarchical structures. The reductionist models of both Western theologies and many Western scientific ideologies project a material world that is not sacred, but mechanistic. This apparent disconnect between the material and the sacred, alleged by ecofeminists to be fostered by both religion and science, has been particularly detrimental when acted upon by European-American dominant cultures. The Christian ecofeminist theologian Sallie McFague, in her book *The Body of God: An Ecological Theology* (1993), summarizes the situation:

Moreover, and most significant for an ecological theology, this picture projected disembodiment: disembodied knowing (the Cartesian mind/body dualism) and disembodied doing (internal human peace or forgiveness of sins became the principal action between God and the world) (1993: 29).

In *The Death of Nature*, Merchant links this hierarchical, mechanistic approach to nature to the oppression of women. She argues that, whereas organic thinking and interdependence shaped European life through the Middle Ages, the “fathers” of the scientific revolution determined to dominate nature. Merchant quotes Francis Bacon extensively. He proposes to “hound nature in her wanderings” in order to “drive her afterward to the same place again.” To disclose the “secrets of nature” Bacon suggests that “entering and penetrating into these holes and corners” of nature will lead to the uncovering of truth (in Merchant 1980: 168). During the same general time period, numerous European women (and men, though significantly fewer) were accused of witchcraft. The *Malleus Maleficarum* or *Hammer of Witches* (1486), a manual on identifying and interrogating witches, instructed inquisitors to “penetrate” and torture witches in order to discover their secrets. Merchant argues that the feminine language used for “nature” and the parallel violent approaches of control assigned against unruly nature and unruly women are obvious.

Both Merchant and McFague emphasize the new (and also old), organic model of the cosmos developing in some areas of science and religion. The “common creation story” and the growing field of ecology, as well as some new cosmologies emerging from physics, provide fertile ground for ecofeminist entry into dialogue with the natural sciences.

The first volume of essays to focus on the topic of ecofeminism and spirituality was *Ecofeminism and the Sacred*, edited by Carol Adams. Voices from various religious and ethnic perspectives were included; for example: Hindu (Lina Gupta), Jewish (Judith Plaskow), Buddhist (Stephanie Kaza), Native American (Andy Smith), Womanist (Delores Williams), Christian (McFague). The volume combined voices from activist positions as well as from academic ones, with many contributors speaking from both simultaneously. Byllye Avery of the National Black Women’s Health Project and Zoe Weil of ANIMALEARN, a division of the American Anti-vivisection Society, are two such contributors.

During the same three decades (1970–2000), ecofeminist activists engaged in myriad protests, boycotts and campaigns to bring attention to the interconnection of justice issues related to women and the environment as a whole. Feminism is politically activist at its core and feminist methodologies applied to scholarly work make political engagement requisite. Various scholars entered the activist arena via their intellectual contributions and various activists entered the academic arena via their commitment to justice-oriented endeavors. Many first generation ecofeminists encountered each other through antimilitarist and anti-nuclear protests during the height of the Cold War. In 1980 *A Handbook for Women on the Nuclear Mentality*, written by Susan Koen and Nina Swaim, used the word ecofeminism as a foundational concept for action. The

Women's Pentagon Actions (1980–1981) and the Greenham Women's Peace Camp (established in 1981) are two examples of ecofeminist, antimilitarization and anti-nuclear organizations.

The influence of the United Nations Decade for Women (1975–1985), with its many gatherings and coalitionbuilding opportunities, on the development of ecofeminism has not been adequately researched. Various international political conferences sponsored by the U.N. and international NGOs did impact ecofeminist activism. For example, the U.N. Conference on Women in Nairobi in 1985 brought together ecofeminist leaders and provided them with further opportunities to connect with international colleagues. Other major international conferences that linked environmentalism and women's issues were the "U.N.'s Environmental Programme's (UNEP) Global Assembly on Women and the Environment" and the "World Women's Congress for a Healthy Planet," both held in Miami in 1991. While these international ecofeminist (though not named explicitly as such) gatherings connected academic voices with activist voices, there are some ecofeminists whose focus has been activist and justice-oriented who deliberately separate themselves from the academic arena in general, and in particular from the Euro-American academy.

The issue of racism within ecofeminist, and feminist, dialogues has also been prominent. Though paying significant attention to diversity, white ecofeminists have often essentialized racial difference. For example, in the academic anthologies listed above, Shiva's voice figures prominently and seems to stand for all women who are not European or Euro-American. Few women of color have been able to remain in positions of leadership in activist or academic organizations for long periods of time. The political power of white women in these organizations undermines, often unintentionally, that of women of color. Even though such organizations as WomanEarth attempted to make racism an integral part of the ecofeminist conversation, racial tensions contributed to the eventual disbanding of numerous ecofeminist dialogue groups. Even the designations "white" and "of color" seem to maintain a binary within ecofeminism as it tries to subvert all such labels.

Another outcome of issues connected to racism is the critique of the label "ecofeminist" by various activists from indigenous peoples. For example, Winona LaDuke (Anishinaabeg), director of the Honor the Earth Fund and the White Earth Land Recovery Project, identifies herself as an activist for indigenous people rather than an ecofeminist activist. In an interview with Judith Plant (published in *Healing the Wounds*) Marie Wilson, member of the Gitksan-Wet'suwet'en Tribal Council (British Columbia) explains her perspective on this issue:

At the risk of sounding scornful or derogatory I have to say that the Indian attitude toward the natural world is different from the environmentalists. I have had the awful feeling that when we are finished dealing with the courts and our land claims, we will then have to battle the environmentalists and they will not understand why (Wilson in Plant 1989: 217).

Some of this tension grows from the appropriation of indigenous religious rituals by white people, including some ecofeminists. Andy Smith harshly criticizes such borrowing in her essay “For All Those Who Were Indian in a Former Life” (*Ecofeminism and the Sacred*).

Ecowomanists and African-American ecofeminists, express related concerns. They identify with racism as the first and most dominant oppression in their experience, while sexism is secondary. As Shamara Shantu Riley points out in *Ecofeminism and the Sacred*:

There are several differences between ecofeminism and Afrocentric ecowomanism. While Afrocentric ecowomanism also articulates the links between male supremacy and environmental degradation, it lays far more stress on other distinctive features, such as race and class, that leave an impression markedly different from ecofeminists’ theories (Riley in Adams 1993: 197).

With the growing recognition of the extensive environmental racism in the United States and on a global scale, ecowomanists and others determine that their political alliances need to shift from a feminist agenda to one more directly engaging issues of race and class. This complexifying of interconnected oppressions, a central tenet of ecofeminism, continues to arise within the varieties of ecofeminism itself.

Globalization of all aspects of environmentalism has begun to shift the momentum in ecofeminism as well. *Women Healing Earth: Third World Women on Ecology, Feminism, and Religion* (Ruether, ed. 1996) provides insight into Latin American, Asian and African ecofeminism. In the introduction Ruether notes that while ecofeminism is not a “movement” in these large geographical areas, the global dialogue inspired by connections between the oppression of women and nature needs to be recognized. The contributors are all local/global activists and their work speaks to the globalization of ecofeminisms. The Con-Spirando Collective in Chile collaborated with Ruether in developing the volume. Con-spirando, translated as “breathing with” or “spiritual conspiracy,” tries to “weave a network of women throughout Latin America who are interested in feminist theology, spirituality and ecofeminism” while also holding women’s rituals (1996: 51). This collective publishes a magazine by the same name and operates a women’s center in Santiago in addition to focusing specifically on ecofeminist activisms and analyses. Victoria Tauli-Corpuz, from the tribal community of the Igorots in the Philippines, reflects on the spiritual links between women and nature in Igorot culture. But the “introduction of high-yielding varieties of rice seeds (HYV)” has disrupted women’s spiritual leadership roles (in Ruether 1996: 105). Finally, Sarah Mvududu, with the Women and Law in Southern Africa Research Project in Zimbabwe, claims “gender is also fundamental in understanding human interaction with the environment and with respect to natural resources” (in Ruether 1996: 144). She explains this by analyzing Shona beliefs and woodland management. Spirit mediums, often women, are deeply involved with sustainable woodland development in Zimbabwe and their connection to sacred places where trees are protected is requisite for reforestation.

Ecofeminism has not been without critics, from ecofeminists themselves as well as from others. Some of the most ardent critics question the woman/nature link that is sometimes placed at the core of ecofeminism, as evidenced in the title of such essays as Sherry Ortner's "Is Female to Male as Nature is to Culture?" (1974). Because of the strong woman–nature connection assumed and developed in some ecofeminist positions, various feminists distance themselves from ecofeminism and suggest that it is essentialist in nature. Essentialism claims that crossculturally and cross-historically those of a particular race, gender or other category share the same traits. Many expressions of feminism and ecofeminism argue against all such essentialist constructions, while others expressions seem to maintain essentialism. Kate Nash, in her 1994 essay "The Feminist Production of Knowledge: Is Deconstruction a Practice for Women?" published in *Feminist Review*, clarifies the "tension" between the "deconstructive politics of feminism and the assertions, or constructions of unified identity that feminists are frequently called on to make on behalf of the category 'women' which gives the project its political specificity" (Nash 1994: 75–6).

Various attempts at typologizing feminisms and ecofeminisms have been made and are helpful for clarifying the diverse perspectives, though it should be noted that even these designations are understood differently by different ecofeminists. Cultural and radical forms tend to idealize the feminine (therefore being labeled as essentialist more often) whereas activist (and theoretical) ecofeminists usually see their position as an analysis of a particular historical and cultural phenomenon. Some activist ecofeminists do engage in shifting political alliances that employ essentialist arguments functionally, but disengage from these alliances and reform others as requisite for effectively subverting patriarchal structures. One of the most helpful treatments of this continuing, sometimes heated, interaction among diverse manifestations of ecofeminism is Noel Sturgeon's work *Ecofeminist Natures: Race, Gender, Feminist Theory and Political Action* (1997). In addition to these groupings within ecofeminism are ecowomanism, mentioned above, with a focus on race as the primary lens through which to view oppressions, and animal rights-oriented ecofeminism. There are also those who consider themselves spiritual ecofeminists, such as Starhawk, embracing the religious, Earth-goddess-based components of the position.

Deep ecology and ecofeminism also engage in ideological debates. Many ecofeminists count themselves as deep ecologists and many deep ecologists count themselves as ecofeminists, while others might designate themselves as one but not the other. The background to the differences between some deep ecologists and some ecofeminists grew from the feminist critique of the androcentric (male-centered) tendency of deep ecology in its earliest, and often militaristic or violent expressions, such as those expounded upon in Edward Abbey's *The Monkey Wrench Gang*. This approach has been dubbed eco-macho. Specific philosophical discussions took place under the auspices of the journal *Environmental Ethics*. Karen Warren and Michael Zimmerman published essays in this journal in 1987, both of which made explicit connections between feminism and deep ecology. In 1989, Warwick Fox's essay "The Deep Ecology–Ecofeminism Debate

and Its Parallels” was published in the journal and followed by a response by Deborah Slicer in 1995 entitled “Is there an ecofeminism–deep ecology ‘debate’?” Though the intricacies of the discussion cannot be expanded here, recognition of this ongoing tension (i.e., whether or not male–female dualism is the primary lens through which to analyze and critique destructive power relations) is requisite. One interpretation of ecofeminism that shifts this analysis is Val Plumwood’s *Feminism and the Mastery of Nature*. Plumwood’s central relational model for abusive Western power structures is master–slave rather than male–female.

Another area of ecofeminism that needs to be addressed is the connection with animal rights activism, as noted previously. Adams has made explicit links between androcentric, patriarchal treatment of other-than-human animals, particularly focusing on the meat-producing industries of the United States, and the exploitation of women. Her study, *The Sexual Politics of Meat*, provides the foundation for this field of inquiry. Greta Gaard’s anthology *Ecofeminism: Women, Animals, Nature* includes several essays that analyze the mutual oppressions of women and nonhuman animals in patriarchal societies. A prominent activist presence in this field is the organization Feminists for Animal Rights, whose cofounder, Marti Kheel, is also recognized as a leading ecofeminist voice. However, these perspectives are countered by another prominent author, Mary Stange. She has referred to herself as an ecofeminist, though one who is critical of much that is usually assumed as central to ecofeminism. Her books, *Woman the Hunter* and *Gun Women*, posit that women are natural hunters, therefore in a predatory relationship with animals. Stange suggests that the linkages between woman and other animals sometimes made by ecofeminists could justify continued essentialism and, therefore, continued domination of both women and other animals. Thus she claims that the woman–animal connection should be reevaluated.

As ecofeminism continues to shift and grow, different positions will surely form and surface, while other positions and alliances will fade away or be replaced by more urgent connections. Diverse understandings regarding the nature of the web of relationships between various spiritual/religious traditions and ecofeminism could persist. Ecofeminism and deep ecology may continue wrangling. Issues of racism, population growth and the valuing of some humans over others, or of all humans over other-than-human animals, will stir the thoughts and actions of ecofeminists on a global scale. Charlene Spretnak provides one perspective that summarizes ecofeminist ideological positions effectively: “An ontology based on dynamic and admittedly partial knowledge as well as awe toward the complexity of embodied and embedded existence would contribute substantially to the profound social transformation that is needed” (in Warren 1997: 435).

And Wangari Maathai, while speaking at the World Women’s Congress for a Healthy Planet in 1991, succinctly stated the activist positions of ecofeminism: “Things will not just happen. Women must do something” (in Gaard 1993: 3).

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Further Reading

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- See also:* Adams, Carol; Christ, Carol; Christianity(7d) – Feminist Theology; Christianity(7g) – Womanism; Daly, Mary; Gimbutas, Marija; Hunting Spirituality and Animism; Kenya Greenbelt Movement (and adjacent Wangari Maathai on Reforesting Kenya); Ruether, Rosemary Radford; Shiva, Vandana; Women and Animals.

Eco-justice in Theology and Ethics

As planet Earth becomes hotter, stormier, less biologically diverse, more crowded, unequal and violent, a growing number of scholars in theology and ethics as well as discerning leaders and members of churches on six continents are joining the eco-justice movement. It involves environmentally responsive Christians (along with adherents of other world religions) who seek the wellbeing of Earth and people through practices and policies that serve ecological wholeness and social justice together (ecology + justice).

Stepping into an Ecumenical Stream

When cultural historians look back at the last third of the twentieth century with renewed appreciation for religion's ambiguous power, they may see that religious leaders, scholars, and organizations had to relearn from the ecologists that, in addition to the human species and culture, nature in all its biodiversity is real and valuable. But historians should also see that twentieth-century environmentalism often lacked passion for, or adequate principles of, social justice. So, it was left to working groups of ecumenical theologians and socially engaged laity – informed by the insights of environmental activists and social ecologists, as well as by the Hebrew Bible's Sabbath sensibility and Covenant ethics – to emphasize that there will be little environmental health without social justice, and vice versa. Once the ecumenical movement came to this realization, its gatherings and leaders began to express an inclusive vision of eco-justice that seeks what is ecologically fitting and socially fair through democratic decision making for the common good.

The global ecumenical movement and its member churches began to address the environmental challenge in the mid-1970s, following the U.N. Stockholm Conference on Environment and Development (1972). In response, the Nairobi Assembly of the World Council of Churches (1975) emphasized the need to establish a “just, sustainable, and participatory society” (JPSS). In his address to that Assembly, Australian biologist Charles Birch explained:

A prior requirement of any global society is that it be so organized that human life and other living creatures on which human life depends can be sustained indefinitely within the limits of the earth. A second requirement is that it be sustained at a quality that makes possible fulfillment of human life for all people. A society so organized to achieve both these ends we can call a sustainable global society in contrast to the

present unsustainable global society. If the life of the world is to be sustained and renewed

. . . it will have to be with a new sort of science and technology governed by a new sort of economics and politics.

After Nairobi, there was significant responsive activity in ecumenical circles. A 1979 WCC-sponsored Conference at MIT on “Faith, Science and the Future” pursued the subject in more detail, and the next WCC Assembly (Vancouver, 1983) focused on the theme: Justice, Peace, and Integrity of Creation. Even with these prominent initiatives, it took at least another decade to gain wide ecumenical acceptance of a fulsome eco-justice ethic that features basic moral norms of: solidarity with other people and creatures; ecological sustainability in development, technology and production; sufficiency as a standard of organized sharing that requires floors and ceilings for equitable consumption; and socially just participation in decisions about how to obtain sustenance and to manage community life for the good of all.

Coordinated Environmental Engagement by U.S. Churches In the United States the ecumenical environmental response has involved five emphases:

Cultivating quality Eco-theology and Ethics

It started with essays by forerunner Lutheran theologian Joseph Sittler, and developed through the National Council of Churches Work Group on “Faith-Man-Nature” formed in 1963–64 by biologist Philip Joranson. Prominent theologians such as Daniel Day Williams, H. Paul Santmire, John B. Cobb, and Rosemary Radford Ruether soon added contributions. Roderick Nash tracked this early period in *The Rights of Nature*. But Nash did not discern the beginnings of a theological bent toward ecojustice ethics and action (exemplified by a popular 1971 Friendship Press anthology entitled, *A New Ethic for a New Earth*). He also overlooked what the ecumenical denominations actually said and did in proximity to the

first Earth Day, and was unaware of extensive church engagement with hunger and energy policies from the mid-1970s forward.

Eco-theology and ethics languished in the 1980s, and then developed with vigor again in the 1990s. Now diverse voices representing both genders and a rainbow of people across the Christian spectrum are contributing, and thinking about well-rounded praxis, as can be seen in the growing body of writing on eco-theology and ethics. Yet, few theological schools give prominence to this important advance in theology and ethics; most seminary and religious studies programs only offer electives on this subject, with very few fieldwork opportunities. To refocus higher education in general

and religious studies in particular to teach for the environment and to educate for sustainability is an unfinished, daunting agenda.

Fostering sustainable food systems and lifestyles

During the 1970s, progressive churches were prominently involved in struggles to protect the rights of farm workers. National boycotts of grapes and lettuce, spearheaded by the United Church of Christ, lent strong support to the United Farm Workers. Boycotts (selective buying) of other commodity producers because they violate labor rights have also occurred with less fanfare in recent years.

Meanwhile, the churches working together in the National Council of Churches became quite knowledgeable about U.S. government food and farm programs, as well as problems of international aid and trade, and the churches invested considerable energy in leadership development for hunger education/action through new denominational initiatives and the ecumenical effort named WHEAT – World Hunger Education/Action Together – (which I chaired). The hunger programs institutionalized by the churches in the late 1970s gave some attention and project funding to the environmental dimensions of sustainable food systems (e.g., how to decrease monoculture, pesticide use, export cropping, and grain-fed meat consumption, while using appropriate technology for food production in poor countries). Today we face deepening problems of inappropriate technology in export crops, controlled by corporations that patent and produce genetically modified organisms (GMOs) such as pesticide-resistant plants or “killer” seeds. So far, ecumenical critique of these ominous developments seems muted. The churches need to take seriously the assertion by Lester Brown (Founder of the World Watch Institute), “We need an environmental revolution of an order of magnitude that matches the agricultural and industrial revolutions, and at the same time transforms them.”

As the crisis of family farmers deepened in the 1980s and 1990s, church groups, influenced by Wendell Berry, Wes Jackson, and Dean Freudenberger, began to focus on the need for sustainable agriculture, churchand community-based agriculture, and local food security. In the

U.S., much of the solid analysis, education and advocacy has been led by creative clergy – often Lutherans – working with centers for land stewardship and rural life, especially in the upper Plains states. Roman Catholics have approached these concerns in a different style featuring regional pastoral letters (drafted in both of the following cases by John Hart of Carroll College, Montana). In 1984, Catholic bishops of 12 Midwestern states issued *Strangers and Guests: Toward Community in the Heartland*. In February 2001, 12 Northwestern Catholic bishops issued a pastoral letter on the *Columbia River Watershed: Caring for Creation and the Common Good*. That international watershed is threatened not only by inappropriate dams and logging,

but by water diversion for irrigated agriculture, and a regional population explosion of high consumers.

Speaking of consumption, the pioneering work of campus minister William E. Gibson and the Eco-Justice Project at Cornell University fostered quality education for lifestyle change as an emphasis of the church's hunger programs. It focused on reduced consumption, voluntary conservation, appropriate diet and recreation, plus public engagement. In the 1990s, education for lifestyle integrity returned to prominence, thanks to the initiative of another regional ecumenical project called Earth Ministry, based in Seattle.

Advocating responsible energy and climate change policies

Before the first oil shock from OPEC, U.S. churches were not involved in energy policy debates, viewing them as too technical or merely political. But in 1974, the Division of Church and Society of the NCC formed a committee of inquiry, chaired by Margaret Mead and Rene Dubos, on the use of plutonium as a commercial nuclear fuel. When, in October 1975, the committee proposed a policy statement condemning such use of plutonium, the nuclear industry and utility executives attacked the NCC for being irresponsible. A resolution calling for a moratorium was substituted for the policy statement, and in the same action, the Council mandated a broad study on *The Ethical Implications of Responsible Energy Production and Use*. The study was directed by the late Chris Cowap, NCC Director of Economic Justice, who wrote her own concise, instructive overview of that highly conflicted study to conclude a book I edited on *Energy Ethics*. Her description of the emphases and outcome of the three-year study involving a panel of 120 knowledgeable persons indicates how intellectually demanding and politically sophisticated was this timely ecumenical endeavor.

The energy study impelled the ecumenical church to be powerfully present among competing interests with contradictory answers to the environmental challenge. The NCC energy policy study coincided with the grassroots movement to delegitimize nuclear power and to take a "soft energy path" (as promoted by Amory Lovins and his

Rocky Mountain Institute). It was followed by interchurch programs to foster local energy responsibility, by substantive denominational energy policy statements, and by interfaith efforts to demand corporate accountability to communities on the part of utilities with CO₂-emitting or nuclear power plants.

Local congregations, however, tended to limit their participation to lowering the thermostats on their heating systems, and a few to retrofitting their buildings for energy-efficiency. At the turn of the century, thanks to a creative project called Episcopal Power and Light, and federal government funding for an "energy star" program, more congregations began to take energy conservation seriously.

Now, three decades later, the U.S. has come back full circle to many of the same aspects of energy policy that the 1970s NCC study explored: fossil fuel dependence, reliance on dangerous nuclear and CO₂-emitting coal-fired generators, lack of public accountability by power companies, and lethargic federal support for renewable energy technologies, conservation incentives, mass transit or carbon taxes to reduce consumption.

Moreover, the world now faces an urgent need to halt global warming, regarding which the U.S. – with 4 percent of the world’s population, but responsible for 25 percent of the world’s heat-trapping gasses – is dragging its feet. Ecumenical work on climate change – the world’s most urgent moral issue – emerged through workshops in different parts of the world organized by Canadian churchman David Hallman as a way to focus on the links between economic injustice and environmental destruction. WCC workshops and its 1988 study paper on “Climate Change and the Quest for Sustainable Societies,” plus reinforcing reports and statements by member communions, presented scientific facts about climate change and theological reflections on socio-ecological justice. This was followed by a worldwide petition campaign involving the churches and other faith communities, which got the attention of government officials. It positioned an ecumenical team of church representatives to become active advocates at climate-change negotiations from Kyoto forward.

Ecumenical advocacy on this issue emphasizes the disproportionate impact of climate change on the poor and the responsibility of the most industrialized countries to demonstrate global responsibility and fairness to developing countries by making real cuts in greenhouse gas emissions, rather than just relying on “trading” emission credits. Toward this end, churches in the industrialized countries are engaged in advocacy work with public officials. Currently in the U.S., this is done through Interfaith Climate Change Campaigns – that have emerged in about half of the fifty states – coordinated by the National Council of Churches Eco-Justice Working Group working with state councils of churches.

Community organizing for environmental justice

The U.S. churches most distinctive involvement with the environmental movement has been to demand environmental justice. The UCC Commission on Racial Justice first prepared, published and circulated documentation about severe racial and class inequity in locating toxic dumps and incinerators. The churches also took the initiative to contact community organizations fighting toxic facilities, to bring some of their leaders together, and to find funding that enabled community organizations to challenge unjust waste management. Though the Citizens’ Clearing House on Hazardous Wastes (now the Center for Health, Environment and Justice) deserves more credit for starting this kind of organizing, the ecumenical churches helped to make environmental justice more possible for communities of color, rural areas, and Indian nations.

By late 1987, these initiatives were being coordinated through the NCC Eco-Justice Working Group (EJWG) formed the year before, with Chris Cowap as staff director, and myself as founding co-chair. Support of community organizing for environmental justice led the EJWG to subsidize participation by leaders of community groups in the National People of Color Environmental Leadership Summit (Washington, D.C., 1991), where they pushed the leaders of established environmental organizations to support basic principles of environmental justice, and to help “build a movement of all peoples of color to fight the destruction and taking of our lands and communities.

. . . and to secure our political, economic, and cultural liberation.” Lutheran layman Jim Schwab pointed out in *Deeper Shades of Green* that this unique summit “drew more than 600 activists, combining the colors of the rainbow in one giant sharing and strategizing meeting that has literally and permanently changed the complexion of the U.S. environmental movement.” The environmental justice emphasis also strengthened collaboration between para-church groups and non-governmental organizations (NGOs) at United Nations forums such as the Rio Earth Summit (1992), the Cairo Conference on Population and Development (1993) and the Beijing Conference on Women (1995).

The environmental justice focus carried over into the work of the National Religious Partnership for the Environment (involving Christians and Jews), which provided funding for the NCC to hold special meetings with leaders of the Black Churches and the Orthodox communions. But preoccupation with community organizing to combat toxics tended for a time to preempt other styles of engagement and to narrow eco-justice work to become a mere subset of economic justice advocacy.

Developing leadership for earth community ministry

At this point, the churches remembered that it is not enough to support grassroots groups of activists siding with the powerless in ecologically degraded urban and rural communities. A mature agenda of environmental responsibility is also concerned with preserving biodiversity and protecting special places. To grapple with this broad agenda the churches must continuously develop leaders and nurture members, gain a voice in the media as well as the attention of public officials, and challenge indifferent or hostile institutions to care about the web of creation and human relations with otherkind. In other words, for there to be significant movement toward ecojustice that responds to the oppressed, there must be more pedagogy of the privileged and careful structuring of well-rounded environmental ministry.

Beginning in the mid-1990s, the NCC Eco-Justice Working Group and the U.S. Catholic Conference, utilizing foundation funding obtained by the National Religious Partnership for the Environment, published educational resources and invested in lead-

ership development to integrate creation-care into parish life – always with a strong social justice component. The NCC group has continued to gather its grassroots network annually to share the latest educational resources, strengthen community engagement and focus public policy advocacy efforts. Aware congregations and ecumenical groups can move most effectively in a similar direction, not by starting from scratch, but by utilizing the ecumenical movement’s resources for faith communities and building on its pioneering eco-justice initiatives.

Despite the emergence of ecumenical leadership for eco-justice, few Christian communities have actually institutionalized a ministry of care for creation. Many congregations and their leaders remain unaware of or indifferent to the eco-justice ethic. Church bodies and congregations still tend to affirm and practice social “stewardship” apart from ecological responsibility. Only a scattering of congregations care for the place where they are as much as they are for the people in their pews. They have yet to grasp the depth of the eco-justice crisis, or to see mission in terms of communing and suffering with creation while building just and sustainable community. Except for some recycling and modest retrofitting of church buildings to conserve energy, congregations typically continue to conduct religious business as usual with little time for the most basic human vocation of earthkeeping (see Gen. 2:15).

Concluding Observations

The preceding story of ecumenical eco-justice journeying shows that leaders of the religious and environmental communities can positively influence each other in a reciprocal relation that needs to continue. *On the one hand*, environmentalists have pushed the ecumenical churches to rethink theology, ethics, and mission in light of the ideal of a sustainable society, to which the churches came slowly. While the ecumenical movement affirmed its social calling, in light of Jesus’ public ministry, to care for and seek distributive justice to other humans, the environmental movement was focusing world attention on the plight and rights of the rest of nature, challenging the narrowly human-centered preoccupations of modern culture. Environmentalists, in addition to clarifying global ecological problems, contributed important concepts such as carrying capacity and interconnectedness. They defined the norm of sustainability in terms of ecological integrity, which forbids human activities that diminish Earth’s bio-diversity or life-carrying capacity. The environmental movement also asserted that humans are called to feel respect and show care for all forms of life, not just other humans – an emphasis that broadens the meaning of “solidarity.”

Instructed by these ecological insights, as well as critical social analysis, ecumenical ethicists came to a holistic understanding of what eco-justice requires to meet the world’s dual crisis: degradation of the natural environment and oppression of poor people. So, on the other hand, ecumenical eco-justice sensibility about human–Earth relations has positively influenced the environmental movement. It has pushed environ-

mental organizations to explore beliefs about what is sacred, and (moving beyond the insights of environmental philosophy and ecological science) to broaden their thinking about ecological sustainability to encompass principles of social and economic justice. That advance was demonstrated vividly in two events that bookended the 1990s: the October 1991 People of Color Environmental Leadership Summit (discussed above), and the Earth Council's completion and release in March 2000 of a peoples' Earth Charter, a global ethics document that, without using the term "eco-justice", states ethical principles expressive of solidarity, sustainability, sufficiency, and participation – in that order.

In retrospect, a posture that first emerged after the first Earth Day to mediate hostile competition between social justice and environmental action groups turns out to offer much more than "tradeoffs." Eco-justice is a dynamic framework for theological study, ethical reflection, and practical action. The eco-justice movement, knowing that justice and sustainability increase together or not at all, melds concerns for the natural world and for human life in ways that foster both environmental wholeness and economic justice. Eco-justice vision and values reshape the way we approach ecology, justice and faith – stimulating broader expressions of environmentalism, challenging social activists to build sustainable community, and recycling religious doctrine, liturgy and social teachings to focus on the well-being of Earth community.

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Eco-Kabbalah

This term refers to a school of thought within Judaism first articulated near the turn of the twenty-first century that turns to the Jewish mystical tradition (Kabbalah) as a source of inspiration for a contemporary religiosity emphasizing the holiness of the natural world. It may be seen as a Jewish parallel to the “Creation Spirituality” (not to be confused with Creationism) tendency found in certain contemporary Christian thinkers.

The growing awareness of ecological crisis in these decades led to a reconsideration of the central role of faith in creation in pre-modern Jewish theologies. Most modern (nineteenth/twentieth-century) versions of Judaism downplayed the theme of creation, “conceding” speculation on the world’s origins as an area better pursued by scientists than by theologians. Outside of rather narrow ultra-Orthodox circles, few Jews cared to defend the biblical account of creation, even if extended to refer to seven “eras” rather than the literal “days.” This stood in sharp contrast to the classical theologies of the Middle Ages, both the philosophical thought of Moses Maimonides (1135–1204) and the mysticism of the Zohar

(ca. 1290), in which faith in creation stood at the very heart of Judaism’s self-understanding. Nevertheless, the Genesis creation narrative retains a prominent place in the religious life of contemporary Jews as the source of the weekly Sabbath celebration, the defining ritual act of traditional Jewish piety. Celebration of the Sabbath is portrayed as an act of human participation in the divine rest that constitutes the fulfillment of creation. There thus remains a sense, mostly undefined, that faith in God as Creator is an essential part of Judaism, despite Jews’ willingness to accept the legitimacy of scientific cosmology and cosmogony.

Kabbalah, an esoteric Judaism dating at least to the twelfth century, offers an alternative version of creation, one that has been more attractive to some contemporary seekers. Some have even claimed parallels between Kabbalistic speculations and the language of contemporary science. The Kabbalists see creation as emerging out of God, an energy-flow that both embodies and hides the elusive divine presence within the ever-changing physical forms that constitute our world. God is the underlying source of all reality, the “deep well” or “quarry” out of which being is drawn, the “Ground of Being” (to readapt a phrase from Christian theologian Paul Tillich, itself echoing Jewish mystical usages) rather than a supreme Creator who stands outside the universe as created. The divine flow of energy constantly proceeds from *Eyn Sof*, the infinite and completely mysterious entity that contains all of being, transcending any distinction between past, present, and future. The creative energy of the cosmos,

often depicted as a divine desire for self-expression, first emerges in a realm described as “Nothing” or perhaps “non-being.” From there it emerges into a primal point of reality, continuing to expand and grow through various stages (named *sefirot* or primal numbers, and constituting the essential subject of most Kabbalistic speculation) until it is manifest as *Shekhinah*, or the “indwelling” divine presence (often depicted in feminine terms) immanent throughout the universe. God is thus seen as the mysterious core of being, the natural world serving as a “garb” within which the divine is hidden. God and world are primarily related as deep structure and surface manifestation, rather than the conventionally understood Creator and creation. (This is not to say that theistic formulations of God as Creator are entirely absent from Kabbalistic sources. The mystical tradition is imperfectly grafted onto a much older and highly developed tradition of personalist theism, which it seeks to absorb and transform, but never to deny.)

Such a theology implies that reverence for God and respect for nature are inseparable from one another. God is present throughout the natural world; indeed it is primarily through nature that God is experienced and comes to be known. It offers a version of Judaism that appreciates the work of botanist, zoologist, chemist, and physicist as each uncovering some part of the single truth that constitutes *raza dim'hem'nuta*, the mystery of faith. Rather than feeling threatened by scientific understanding, as so much of religion has in recent history, this renewed Kabbalah positions itself as a poetic meta-science that both transcends and encompasses scientific achievement, much as *Eyn Sof* both transcends and embraces the universe that is the object of scientific observation.

This theology of creation is complemented by a revelation theology (always essential in Judaism) that understands God’s self-revelation as a constant process, symbolically encapsulated in Moses’ and Israel’s experience at Mount Sinai. The content of revelation is essentially nothing “new,” but a making manifest of that which has been true since creation: the realization that God underlies all of being and is thus to be discovered and encountered in every time and place. This revelation, however, serves as well to make a demand upon the faithful that they act and indeed shape the lives of both individual and community according to norms that reflect and respond to this great truth. In traditional language this shift is indicated by the move from God’s ten utterances of creation (“Let there be” in Genesis 1) to the ten commandments of Sinai, restating the original utterances in the imperative mode.

This theoretical framework is articulated in various ways in the writings of Zalman Schachter-Shalomi, Daniel Matt, Arthur Green, and others. Its historical roots can be seen in several of the great mystical theologies of Judaism in prior ages. Philo of Alexandria (ca. 20 B.C.E.–50 C.E.), the Zohar, Rabbi Israel Ba’al Shem Tov (ca. 1700–1760), and Rabbi Abraham Isaac Kook (1865–1935) have all had a role in shaping this contemporary understanding. EcoKabbalah also contains a series of implied attitudes and norms of behavior (here the writings of Arthur Waskow especially come to mind). It is an activist strain within the Jewish community as well as an intellectual/religious ten-

dency in Jewish thought. The reappropriation of Kabbalistic language by postmodern Jewish seekers takes place in an age when vast numbers of Westerners are turning to the neglected wisdom traditions of humanity (Asian, Native American, etc.) in hope of guidance to transform behaviors that threaten the very existence of humanity and the planet we inhabit. The Eco-Kabbalist believes that such wisdom is to be found within mystical Judaism, needing only to be liberated from the antimaterialist bias that is so pervasive in the medieval Western tradition. Such classical biblical and Jewish forms as the sabbatical year (requiring that farmland be left fallow for one in every seven years), the Sukkot festival with its supplications for the rainy season, and the annual celebration of a New Year of Trees all invite adaptation to the needs of our time. The last of these, the Tu biSh'vat festival (occurring in January or February), has taken hold in large parts of the Jewish community as an occasion for ecological awareness. The formerly obscure Kabbalistic custom of a *seder* or symbolic banquet for that day has been adapted by several modern Jewish movements, each of which has published its own text for a celebration that highlights environmental education. These and other rituals throughout the year are reinterpreted as reminders of ecological awareness and opportunities for heightened sensitivity to environmental issues in the Jewish context.

Arthur Green

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See also: Jewish Environmentalism in North America; Jewish Law and Animal Experimentation; Kabbalah and Eco-theology; Vegetarianism and Kabbalah.

Eco-kosher

– See Jewish Environmentalism in North America; Waskow, Rabbi Arthur.

Ecological Anthropology

What is the place of humans in nature? What should it be? The first question is pivotal for ecological anthropology, the second for environmental philosophy and ethics, and also for a more recent field, spiritual ecology. Probably both are very ancient and elemental questions of most thoughtful humans, the former since humans evolved into self-aware and rational beings, the latter since they became spiritual beings. Viable answers to such questions are indispensable for any ecologically sustainable green society. In most cultures, religion is usually decisive in answering such questions. Nevertheless, with a few notable exceptions, ecological anthropology has usually ignored the relationships between religion and nature.

It was not until the pioneering field research of anthropologist Julian Steward (1902–1972) in the Great Basin and Plateau region of the United States, especially among the Shoshone, that the place of humans in nature was addressed through ecological observations on cultural behavior. The result was his 1938 *Basin-Plateau Aboriginal Socio-political Groups*, wherein lie the roots of cultural ecology. Steward's theory and method of cultural ecology was elaborated in his 1955 *Theory of Culture Change: The Methodology of Multilinear Evolution*. He rejected the dominant theoretical position in American anthropology during the formative phase of his career – that usually cultural factors alone are sufficient to explain culture. Steward was not an environmental determinist, but sought to identify the aspects of a particular culture that are most influenced by its environment through field research focused on the natural resources on which the society is dependent for survival along with the technology used to extract and process them; the ways the society organizes work in order to accomplish this; and the ways these two factors delimit the culture core, those aspects of culture most closely related to ecology. Yet Steward did not address the relationship between religion and nature, either in theory or fieldwork.

Roy Rappaport (1926–1997) was the first ecological anthropologist to encompass religion in his theory and fieldwork. Rappaport and others transformed cultural ecology into ecological anthropology during the second half of the twentieth century. They biologized cultural ecology by applying concepts from biological ecology: population as the unit of study, the environment as ecosystem, and the ecological processes of energy flow, nutrient cycling, and adaptation. All of these were in turn related to carrying capacity and limiting factors; that is, the level at which a given population can be sustained in a particular habitat without irreversible natural resource depletion and environmental degradation; and the factors which regulate the population below that threshold. Rappaport applied these principles in a detailed case study of the

Tsembaga Maring in his 1964 *Pigs for the Ancestors: Ritual in the Ecology of a New Guinea*.

Yet another innovation in ecological anthropology developed by Rappaport was his argument that ritual functions as a mechanism regulating the Tsembaga population below the carrying capacity of their habitat. Accordingly, in Rappaport's empirical and theoretical work, the questions of what is and should be the place of humans in nature began to be addressed in more systematic and sophisticated ways than ever before. Rappaport worked through these and other ideas on the role of religion in human evolution and ecology in his subsequent more theoretical books, *Ecology, Meaning and Ritual* in 1979, and *Ritual and Religion in the Making of Humanity* in 1999.

A third major contributor to the advancement of ecological anthropology was Marvin Harris (1929–2001) through his development of cultural materialism as a research strategy. He laid the groundwork for cultural materialism in his monumental inventory, *The Rise of Anthropological Theory* in 1968. In 1979 Harris elaborated on this research strategy and refuted competing approaches in his *Cultural Materialism: The Struggle for a Science of Culture*. Harris divided up the cultural system into three components. Infrastructure is the product of the interactions of the environment, population and technology. Structure refers to the local domestic economy and the wider political economy. Superstructure encompasses the ideational realm of the cultural system including religion, myth, and the arts.

Harris asserted that infrastructure was most basic and influential because it functioned as the ultimate adaptive mechanism for the very survival and maintenance of individuals and society. Therefore, he considered infrastructure to be the primary cause of most of the rest of the cultural system including religion. Accordingly, Harris assigned research priority to infrastructure instead of superstructure.

Harris demonstrated the power of cultural materialism with ingenious explanatory analyses of many cultural puzzles: among them, religious phenomena such as Aztec ritual human sacrifice as a source of sorely needed quality protein; the sacred cow of India as far more useful alive for farm-field plowing, fertilizer, and milk; and the Islamic and Jewish prohibitions on eating pork as the most effective way to cope with a problematic animal in their desert environments. Pigs are not well adapted to such an environment and they can transmit diseases and compete with humans for the same foods. His analyses appeared in a series of articles in the magazine *Natural History* as well as in his numerous books and other publications.

A fourth major figure is Eugene N. Anderson, especially his 1996 *Ecologies of the Heart: Emotion, Belief, and the Environment*. His basic argument is that the sustainable use and management of resources depends not only on economic cost-benefit calculations, but also on beliefs, emotions, rituals, and symbols. Traditional indigenous societies that invest heart and soul as well as body and mind in caring for their environment usually do so successfully. Resource strategies linked with religion that may appear superficially to be irrational to an ignorant outsider might actually be ecologically sound, grounded in intimate daily observations of nature over many years

or generations. In contrast, so-called modern scientific, technocratic, and bureaucratic resource and environmental policies of centralized governments have failed more often than not. They usually lack not only meaningful experience on the ground locally, but appropriate religious motivations, guidelines, rituals, and the like. Anderson demonstrates these principles with data and insights from his fieldwork on forest management by Mayan farmers in southern Mexico as well as fisheries and other resource management by communities in the Pacific and Asia. In the process Anderson counters the simplistic reductionism of extremists from cultural materialism, evolutionary ecology, and postmodernism. Instead, he prescribes an intermediate path that combines reliable information, rational decision making, and positive emotion focused on reverential respect and care for nature, rather than simply the obsessive pursuit of resources as commodities for merely material ends.

A fifth and final individual to single out here as an outstanding pioneer in the development of ecological anthropology is John Bennett in his 1976 *The Ecological Transition: Cultural Anthropology and Human Adaptation* and other publications. Bennett characterizes the ecological transition as the global movement from societies in relative and dynamic ecological equilibrium to an accelerating number in disequilibrium. Equilibrium societies are small, sustainable, and green cultures focused on subsistence, food sharing, and kinship. In general, most traditional indigenes lived in some degree of balance with their environment. However, other than discussing Rapaport's work, Bennett did not address the possible relationships between religion and nature, even though he conducted fieldwork in the religious communes of Hutterites in Saskatchewan, Canada.

In contrast, disequilibrium societies are large-scale urban and industrial cultures. Their population as well as needs and desires have exceeded the carrying capacity of their habitats, and consequently they must import vast quantities of resources extracted worldwide from distant environments through extensive trade networks. Disequilibrium societies have an extraordinarily high impact on the natural environment from local to global levels as agents of ecocide, ethnocide, and genocide. Examples of disequilibrium societies are the nation-states of the European colonial systems during the last five centuries. In recent decades many disequilibrium societies have become increasingly obsessed with materialism, consumerism, and capitalism like a fanatical religion of greed.

The nearly 7000 distinct cultures existing in the world today fall along a continuum from equilibrium to disequilibrium, with the net trend shifting toward greater disequilibrium, and this spiraling beyond control. The logical conclusion of Bennett's concept of the ecological transition is that global environmental catastrophe is imminent. Bennett's basic idea has been independently envisioned and variously labeled and described by deep thinkers from a wide diversity of backgrounds and professions, an example of the convergence in environmental thought during recent decades. Some of these deep thinkers, although not ecological anthropologists, have been pioneers in spiritual ecology.

Of course, many others have contributed to ecological anthropology, but here it must suffice to summarize their work as three trends: a proliferation of exploratory approaches; a very substantial expansion in the spatial and temporal scale of the phenomena researched; and far greater concern for practical environmental problems and issues.

Several new approaches emerged mainly in the 1990s. Behavioral or evolutionary ecology, inspired mostly by neo-Darwinian, microeconomic, and game theories, concentrates on the costs and benefits of exploiting different resources. Historical ecology emphasizes how human societies change their natural environment and this in turn changes them. Political ecology focuses on power differentials regarding resource use and environmental problems like pollution in relation to colonialism, poverty, racism, and injustice. Postmodern environmental anthropology analyzes and challenges basic ideas as relativistic constructions, such as nature, wilderness, environment, ecosystem, environmentalism, conservation, sustainability, and development. Postmodern and other revisionists have also challenged dualistic thinking such as the dichotomies of culture/nature and natural/supernatural. In addition, during recent years more attention has been afforded to specific events, individual actors, and decision making in the processes of adapting at the behavioral level to environmental constraints, hazards, stresses, and perturbations as well as opportunities. Among all the approaches previously mentioned, only spiritual ecology directly explores the relationships between religion and nature.

A second recent and related development has been to consider local communities as linked to an ascending hierarchy of more inclusive systems – regional, national, international, and global. Thus, the spatial, geographic, and cultural scales have expanded, as has the temporal one, the latter with historical ecology. Furthermore, the spatial dimension is increasingly viewed from the perspective of political economy combined with social and economic justice, the pivotal concerns of political ecology. Of course, historically the geographic and political expansion of the so-called world religions like Buddhism, Christianity, and Islam impacted in varied ways and degrees on local cultures, religions, and environments, but this topic has yet to be pursued by ecological anthropologists.

The third major recent trend in ecological anthropology is now called environmental anthropology. It is more applied, largely stimulated by the growing gravity and urgency of ecological crises from the local to the global levels. Furthermore, beyond an activist concern with practical environmental problems and issues, environmental anthropology takes advantage of the latest technologies such as satellite images of land cover or vegetation changes to document and assess human environmental impacts from the regional to the global levels. However, it has largely ignored religion.

This trend toward the greater application of ecological anthropology to practical environmental matters is also stimulated by growing concern over the tragedy of tropical deforestation. That and related issues nourished a new frontier in science largely precipitated by biologist Edward O. Wilson in the 1990s, biodiversity studies and con-

ervation. (The usual measure of biodiversity is the number of species in an area.) An increasing number of anthropologists and linguists have recognized what the present author calls the diversity principle – the geographical coincidence of high biological diversity with high cultural and linguistic diversity (Posey 1999). Thus, whenever biological diversity is threatened and eroded, so is cultural and linguistic diversity, and vice versa. This applies as well to religion as an integral component of most cultural systems. A correlate of the diversity principle is that the loss of cultural, religious, and linguistic diversity also involves a loss of local ecological knowledge, understanding, and wisdom. In recent years there has been growing appreciation of traditional environmental knowledge – that indigenous and folk societies who interact in an intimate way on a daily basis with their habitat for subsistence have an enormous wealth of reliable empirical information about local soils, plants, animals, and their web of interrelationships in ecosystems. This knowledge has become a Western research focus, especially in ethnoecology, but only recently has it begun to be linked with spiritual ecology (Posey 1999).

Thanks to the contributions of Steward, Rappaport, Harris, Anderson, and Bennett, among others, ecological anthropology provides numerous heuristic models of sustainable green societies and also of maladaptive ones through its accumulating repertoire of case studies. Simultaneously, it provides a defense of indigenous and other societies while critiquing the external forces imposing change on them, such as colonialism and secular models of development from so-called Western civilization.

Today ecological anthropology is mature and thriving, as evidenced by the publication of a special journal called *Human Ecology* since 1972; the establishment of the Anthropology and Environment Section as a unit within the American Anthropological Association in 1996; its internet forum called Eanth-1 hosted by the Department of Anthropology at the University of Georgia; a second generation of textbooks; and special training and research programs and/or concentrations of ecological and/or environmental anthropologists at several universities including Arizona, California (Davis and Santa Barbara), Georgia, Hawai'i, Indiana, Maryland, Massachusetts (Amherst), Michigan, New Mexico, North Carolina (Chapel Hill), Rutgers, and Washington (Seattle). This regional diversification of academic interest contrasts sharply with the prior heavy concentration of ecological studies in anthropology at Columbia University during the 1950s– 1970s. However, as yet little attention is afforded to spiritual ecology.

The greatest achievement of ecological anthropology may yet be the demonstration that many societies have created a benign place in nature or a viable niche, and thereby flourished for centuries or even millennia. An extremely important correlate is that the human species is not necessarily inherently anti-nature, environmentally destructive, maladaptive, or ecocidal. Indeed, historical ecology reveals that the more serious environmental problems are remarkably recent, largely a result of colonialism, industrialization, and “modernization.” For five centuries, and increasingly so in the last five decades, there has been an alarming and accelerating synergy of ecocide, ethnocide, and genocide throughout planet Earth. From the perspective of ecological

anthropology, nevertheless, it is quite possible for humans to harmoniously coexist within the biosphere far into the future, if, among other things, they can learn and follow the knowledge and wisdom of many past generations that have achieved this so successfully. Religion must be an integral part of such adaptations though instilling viable environmental values, reverence for nature, and other means. The most formidable barrier to this is that, like a cancer, a most powerful expansionist, predatory, maladaptive, global, and secular political economy is gradually degrading and even destroying previously adaptive local cultural and environmental systems.

Humans interact with their natural environment in emotional and spiritual as well as intellectual ways (Anderson 1996). A growing number of deep thinkers are pointing to religion as the single most important consideration in dealing with and alleviating ecological crises, because, in general, religion is usually the primary source for the particular worldview, attitudes, and values determining how most people interact with their habitat. Undoubtedly, some very fundamental changes in the way humans relate to nature need to be made, if humanity and the biosphere are to survive and flourish. In this connection, a systematic in-depth assessment of the relationships between religions and environments as pioneered by Rappaport and others is of increasing practical importance. In the face of this global holocaust, spiritual ecology, which emerged largely in the 1990s, has a very special strategic role to play in promoting a healthy coevolution of humanity and the biosphere in the future.

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See also: American Indians as “First Ecologists”; Anthropologists; Domestication; Ecology and Religion; Evolutionary Biology, Religion, and Stewardship; Harris, Marvin; Hunting and the Origins of Religion; Rappaport, Roy A. (“Skip”); Religio-Ecological Perspective on Religion and Nature; Sky; Traditional Ecological Knowledge among Aboriginal Peoples in Canada; Wilson, Edward O.; Wonder toward Nature.

Ecology and Religion

An ecological approach to religion requires taking into account the environmental constraints within which organisms seek to survive, as well as the fact that being an organism entails being subject to internal constraints, constraints which are themselves the result of adaptive evolutionary strategies. In this regard, a properly understood ecological approach, instead of contradicting, encompasses the methods employed by biologists, ethologists and cognitive scientists. From this unified perspective, religions can be understood as the attempts to come to terms with constraints of all kinds, a task that is accomplished by exploring through speculation and ritual the range of options open to the kind of organisms that humans happen to be. But because of the peculiar human capacity to use complex tools and symbols – including tools to make tools and symbols to refer to symbols – a peculiarity that necessarily entails establishing distance between oneself and the rest of reality, religions must also be understood as attempts to escape limitations of all kinds, an undertaking that involves the postulation of mystical or utopian realms. In either case, just as it happens with other natural processes, the symbolic systems, ritual practices or mystical speculations generated by human beings can metastasize, taking forms that instead of furthering survival go against it. In order to approach religion from an ecological angle, therefore, one needs to consider instances of adaptation as well as of maladaptation; indeed, given that adaptation is a process rather than a state, one must pay attention to the precariousness inherent in all social and ideological formations. At the same time, just as the reference to a precariousness that is “inherent” in social formations points in the direction of certain epistemological assumptions, we must assume that during certain long evolutionary segments – which for us human beings constitute reality *tout court* – certain constraints, which are also enablers, will be at work, underlying the “social constructions” that seem to have become the primary concern of social scientists.

In order to do justice to the role played by the ecosystem in the development of a religious system we must place societies along a continuum according to their size and complexity. At one end we find small-scale societies, whose symbolic-ritual systems seem to have emerged in order to insure the maintenance of an equilibrium between a human population and its ecosystem, while at the other we encounter vast social systems whose religions seem to play no ecological role whatsoever. As we shall see, however, even in small-scale societies it is difficult to discern the role played by religion in ensuring adaptation to an ecosystem, that difficulty being multiplied when one deals with large-scale, especially industrial, societies. The classical example of an ecological approach to the ritual system of a small-scale society is found in Roy Rappaport's *Pigs*

for the Ancestors, a study of the ritual system of the Tsembaga of New Guinea. In this book, Rappaport postulates that the Tsembaga ritual slaughter and consumption of pigs – the *kaiko* – functions as a regulatory mechanism that keeps within acceptable parameters the size of the herd of pigs, the intake of animal protein, and the amount of female labor needed to take care of them as well as of the gardens. The picture presented by Rappaport is one in which all the components of Tsembaga reality – ecological, nutritional, social, military, ideological – constitute a coherent totality. But Rappaport’s reconstruction has not gone unchallenged; for example, Lees has called attention to a passage of *Pigs for the Ancestors* in which Rappaport mentions how “men with few or no pigs responded to the talk of an approaching *kaiko* by attempting to acquire animals,” thus questioning the regulatory function of the slaughter of pigs (Rappaport 1984: 159; see Lees 2001). Similarly, Gillison has pointed out the contradiction between Rappaport’s report that “the Tsembaga have difficulty in *increasing* their herds” and his “assertion that Tsembaga herds spontaneously grow to unmanageable proportions” (Gillison 2001: 293). Whatever the results of the debates among New Guinea specialists, it can be said that *Pigs for the Ancestors* together with Rappaport’s related studies provide a model for understanding the role of ritual in the creation and maintenance not just of social solidarity, à la Durkheim, but in the maintenance of the conditions within which human organisms can survive. It must be added that, despite its flaws, Rappaport’s model has been used by a classical historian, Michael Jameson, to show the correlation between the Greek sacrificial calendar and the consumption of animal protein; Jameson having also shown the continuity of that correlation in Greece in recent times. The persistence of this connection shows that even in a modern society such as Greece one can still see the ritual calendar being involved, however minimally, in the regulation of meat consumption – a significant fact, given that virtually all the meat consumed in the ancient Greek world came from animals that had been ritually slaughtered.

Besides studying the Tsembaga and making important contributions to the theory of ritual and sacredness, Rappaport proposed a distinction that is useful for an ecological approach to all symbolic systems. He distinguished between “cognized” and “operational models,” the former referring to the systems of meaning created by human actors, whereas the latter refers to the organization of nature. Rappaport’s thesis is that there is a correlation between the level of discrepancy between the cognized and the operational models and the degree of endangerment of the individuals who generate the cognized models. An example of a situation in which there seems to be a consonance between cognized and operational models, that is, of the way in which a symbolic system is used to regulate the relation between a human population and its ecosystem, is provided by the Tukano of the Colombian northwest Amazon, studied by ReichelDolmatoff. The Tukano understand the cosmos as having been designed by Sun-Father, an anthropomorphic divinity who created only a limited number of animals and plants, which he placed in a restricted space. These limitations have led the Tukano to understand the world in a manner that resembles modern systems analysis

– that is, as a system in which the balance between them and their ecosystem is kept in place through the regulation of the input and output of finite energy. This circulation of energy is represented in sexual terms, in such a way that repressed sexual energy is believed not to have been wasted but to have gone into the ecosystem. In practical terms, this results in periods of sexual continence which, in combination with herbal oral contraceptives, keep the population size under control. Dietary restrictions, continence, and taboos involving menstruation are enforced during periods of hunting, thus reinforcing the regulatory function of sexual abstinence. The role of the supernatural realm in the regulation of hunting is shown by the role of the “master of animals,” who jealously guards his flock, as well as by the shaman, who controls all the activities through which the population interacts with their ecosystem – hunting, fishing, gathering and harvesting.

Bali provides an example of a larger, more complex society, but one in which it is still possible to discern the interaction between religious practices and the maintenance of equilibrium between a population and its ecosystem. The ecological characteristics of the island require the construction and maintenance of a vast network of irrigation canals as well as a system to regulate the supply of water to the rice fields. Construction, maintenance and distribution of water to the rice fields are regulated by the “religion of water” (*tirtha agama*), a system constituted by a ritual calendar and by a number of hierarchically arranged water temples and shrines built at various points between the Crater lake and the places where the irrigation water enters the fields. It must be pointed out that unlike the cases studied before, in which the entire population lived in a homogeneous territory, one finds in Bali an ecologically determined distinction between forms of social organization: egalitarian forms are found in the highlands where wet-rice cultivation is not possible, and where, therefore, there is not much of a surplus to be extracted by the lowland nobility; in the southern plains villages, on the other hand, one finds a hierarchical organization that approximates to the Indian system. This distinction, and the fact that force or the threat of force were used to extract surplus from the peasantry, refutes the irresponsible claims advanced by C. Geertz, for whom Bali was a “theater state,” where pomp validated power rather than the other way around.

Having found in Bali a ritual system which besides being intimately connected with the management of agriculture is also hierarchically arranged – both in terms of the hierarchy of water temples and of social hierarchy – we must now pay attention to the effects of stratification on the management of the ecosystem, a connection that is relevant insofar as both the management of the ecosystem and the division of society have generally required validation through non-falsifiables, that is, religious, means. Nowhere is the concern with hierarchy more visible than in India; and it is in India that a hierarchical system built ostensibly around the poles of ritual purity and impurity affects society and its ecosystem in a number of sometimes contradictory ways. In effect, the obsessive concern with the purity of one’s body and of one’s dwelling, but not of one’s surroundings, contributes to the degradation of the environment. To com-

plicate the situation, the fear of ritual pollution confers a degraded status on garbage collectors, making it difficult to institute recycling practices. A concrete example of the connection between mythology and health risks is provided by the belief in the purifying nature of the Ganges, a belief that leads worshippers to disregard the effects of human waste on the river, as well as the contaminating effects of the water on themselves. Being interested above all in maintaining their livelihood, the *panda*s, the Banaras pilgrim priests, contribute to the problem by resisting efforts to reform the traditional cremation practices. No less important in terms of its ecological impact is the role played by religiously validated views of gender. In furthering the desire for male offspring, these views contribute both to the subordinate position of women and to population growth, growth which in turns exacerbates ecological problems. It is instructive to contrast this reality with the claims made by Western enthusiasts and by purveyors of Oriental wisdom concerning the holistic view of reality supposedly prevalent in Asian societies. In reality, neither in the canonical texts nor in those that belong to the Tantric or Shakta forms of South Asian religion does one find evidence of attempts to preserve nature. Similarly, contemporary everyday practices do not lead one to assume that modern Asian societies are better equipped than Western ones to achieve ecological balance.

The interaction of ecological and ideological constraints can be seen at work in the practice of intensive irrigation agriculture in the polities that emerged in Southeast Asia partly under the influence of Indian symbolic systems. For our purposes it will be sufficient to mention the case of the hydraulic Khmer cities, whose collapse appears to have been caused by the negative ecological consequences of the building frenzy ordered by the Angkor rulers, between the ninth and the eleventh century. According to Groslier, the sedimentation in the artificial lakes built between the ninth and the eleventh century impacted negatively the soil, leading eventually to the destruction of what had been the flourishing agriculture of these hydraulic states. The Cambodian situation demonstrates the consequences of the discrepancy between the operational models, constituted by the ecological conditions of the Khmer territories, and the cognized models, constituted by the Angkor rulers' need to legitimize themselves through the use of pan-Southeast Asian symbolic systems involving vast temple complexes. In the end, the ideologically motivated need to create ever larger reservoirs eventually outstripped what the land was able to sustain, leading to the decay of the kingdom. Ultimately, the Khmer situation seems to constitute the ecological amplification of the economic consequences of temple building encapsulated in the Burmese saying, "the pagoda is finished and the country is ruined."

Examples of this maladaptiveness can be found in many places. Indeed, in his critique of ecological approaches to religion, Walter Burkert has pointed out as a counterexample the ecological collapse of Stone-Age Malta about 2500 B.C.E., a collapse that may be linked to the proliferation of large temples during the Tarxien period – that is, to the fact that instead of using their resources in a productive way, Stone-Age Maltese diverted their energies into wasteful construction projects. Burkert is right in

referring to the Maltese case; nevertheless, there is no necessary contradiction between ethological approaches such as the one he proposes and ecological ones, for one can still hold to an ecological/evolutionary perspective, as long as one is aware that, as pointed out at the beginning of this essay, adaptiveness is not a once-and-for-all affair. One must recognize, rather, that in order to be effective the practices through which a community seeks to maintain an ecological equilibrium need to be fine tuned; for if such practices become ends in themselves, they will eventually lead to situations which imperil the survival of the community in question. It is above all changes in the size of the human population or in the ecosystem that require changes in the mechanisms of adaptation: in either case, the disappearance of the situation that gave rise to a given symbolic universe and to their concomitant ritual practices renders such symbolic ritual clusters ineffective or, worse, counterproductive. Often, the very success of religiously legitimized adaptive strategies may lead to population increase, which in turn leads to ecological degradation.

Related to population expansion and to the resulting increase in social complexity is the coming into being of a priesthood. The role of a self-perpetuating body of religious specialists is generally negative in terms of the maintenance of ecological equilibrium, as the members of the priesthood tend to be concerned above all with their self-perpetuation, whether this takes place as the result of sexual reproduction or of recruitment. Being above all ritual specialists, priests seek to protect the means that validate their existence. In the case of Buddhism, for example, the concept of merit (*punya*) led to the direct economic support of the monks, understood as “merit fields,” and to the construction of temples, an activity that in some cases – Burma, for example – has been economically wasteful, while in others – China, Cambodia – has had negative ecological consequences. In this regard, insofar as the process can be reconstructed, the Maltese case constitutes but an extreme example of what happens when the means become the ends, or when “a people focus too much energy on worshiping life rather than sustaining it” (Malone et al.: 1993: 110) – to use the words of a team of archeologists engaged in studying prehistoric Malta.

We can also see the ecological dangers inherent in the concern with priestly self-perpetuation in the case of the Roman Church, an organization whose ritual specialists are concerned with defending at all costs their status as the necessary link between ordinary Christians and the supernatural realm. Torn between an understanding of reality as a god’s creation and a deep unease toward anything that comes between the believers and their god, the Roman Church is condemned to claim the right to manage sexual reproduction and physicality in general, while at the same time having to reject those aspects of sexuality that come between human beings and their god. These contradictory demands force high-ranking celibate ritual specialists – popes, cardinals, and such – to stress the link between sexuality and reproduction, while being adamantly against sexual activities that are not aimed at reproduction, as well as, *a fortiori*, against homosexual behavior (this last aspect more in theory than in

practice, as clerical recruitment may suffer now that the population pressures that led men and women to enter religious orders have disappeared in Europe).

The Roman Church's concern with the regulation of life can be seen in the speech the pope delivered to the Italian parliament in November 2002, a speech in which, among other things, Woytila spoke about a "birth crisis, demographic decline and ageing of the population"; he also referred to the human, social and economic problems that this crisis will cause in Italy in the next decades. Given the fact of Italy's low birth rate, one can say that the operational model involving the relationship between the future retirees and the as yet unborn workers whose contributions will keep those retirees alive, coincides with the cognized model proposed by Woytila, a cognized model constituted by the Roman Church's understanding of sexuality and reproduction. Insofar as the sermon to the Italian people contained within the speech to the Italian parliament constitutes a non-calendrical ritual attempt to regulate human fertility, we can see Roman Catholicism still seeking to function in a way that is not substantially different from the manner in which religions have functioned in the pre-industrial world – that is, as a ritual/ ideological mechanism that regulates the relations between a population and its ecosystem. In this regard, therefore, one can say that some manifestations of contemporary religion can still be understood in evolutionary terms as having been generated in order to regulate birth, copulation and death. We must recognize, however, that even though this particular call to increase fertility seems to be reasonable, such reasonableness is the exception rather than the rule, as the reproductive policies – that is, the cognized models – that constitute the Roman Church are counterproductive outside Europe.

What is significant about this obsession regarding sexual activities and gender roles is its archaic character, which in certain ways resembles that of the Tukano. In effect, this sacramental conception of reality presupposes the existence of certain natural constants, the most important of which is the distinction between maleness and femaleness and, in more general terms, the distinction between male and female realms, the latter having been charged with the preservation, and indeed multiplication of life regardless of the costs. Despite the reasonableness of assuming the existence of natural constants, one must recognize that symbolic systems that keep small-scale societies viable are unlikely to serve the needs of largescale societies; therefore, the deleterious effects of this sacramental conception of reality in terms of population increase, transmission of diseases and ultimately of ecological disaster cannot be overstated.

While bodies of clerical ritual specialists try to regulate, generally without success, the sexual behavior of the citizens of modern societies, those same citizens are still subject to a successful ritual calendar that contributes to the mobilization of the process of demand, production and work. In contemporary Western societies the process is set in motion by the Christmas season, a period which, clerical protestations notwithstanding, is built around giving and receiving rather than around the human birth of a god. It is true that given the complexity of the social system as well as the size of the economic sphere, the regulatory function of the Christmas rituals of giving is not as

evident as that played by analogous practices in small-scale societies such as the Tsembaga or the Tukano. This is especially clear when one compares the frequency of meat consumption in tribal New Guinea or ancient Greece with that of modern Western societies. Whereas, as noted above, meat consumption among the former was regulated ritually, increased meat consumption during Christmas and Easter (and Thanksgiving in the United States and Canada) has a negligible effect in terms of the total intake of animal protein among the inhabitants of industrial societies. Nevertheless, it would be a mistake not to pay attention to the long-term environmental effects of ritually regulated social practices in large-scale industrial societies.

Besides considering the characteristics of a given territory, an ecological approach to religion must pay attention to weather patterns, especially to the effects of abrupt changes on people's religious attitudes. With this in mind, we can consider from an ecological angle developments as distant from each other as a drought that affected Greece in the eighth century B.C.E. and the witch-craze of the sixteenth and seventeenth centuries. Regarding the first, we can follow Camp's reasoning and recognize that the drought, famine, and epidemics that affected Athens in the late eighth century B.C.E. led to a renaissance in religious activity, prompted by the fears of inhabitants of the affected areas. (It must also be mentioned that an ecological explanation of Greek pederasty and of its surrounding mythology has been offered: according to Percy, Greek pederasty emerged in the seventh century as an attempt to control the population.)

Moving ahead more than two millennia, we can turn to the witch-craze, the madness that unfolded at the threshold of European modernity, pitting neighbor against neighbor. That religious and political elites were involved in fanning the fires is beyond doubt; that the anxieties produced by the Reformation and the Counter Reformation played a role seems beyond doubt as well; nevertheless, the evidence indicates that the accusations appear to have grown mainly from below, in many cases having been resisted by the ecclesiastical and civil authorities. Why the fear and the accusations then? The reasons for them are multiple, but there is one to which not enough attention has been paid, namely, that the accusations of witchcraft took place during the "little ice age," that is, at a time when crops, always at the mercy of the weather, were especially vulnerable. The mix of scarcity and fear resulted in neighbors being accused of stealing or damaging crops through magical arts. Rather, then, than the generalized fear chronicled by historians such as Jean Delumeau, what we encounter in late medieval and early modern Europe seems to be a situation in which the uncertainty that characterizes pre-industrial societies – the image of the limited good – was exacerbated by a world that, as Lehmann and Behringer have shown, in climatic terms had been turned upside down.

Far more radical than changes in weather patterns are those brought about by sudden natural disasters such as earthquakes and volcanic eruptions. The effects on the European intelligentsia of the destruction of Lisbon in 1755 by an earthquake are well known, but despite the contribution of that catastrophe to the process of secularization one may be hesitant to consider this episode as having much to do with an ecological

approach to religion. On the other hand, the effects of the explosion that destroyed the island of Krakatoa in 1883 must be mentioned, for it seems to be the case that as the result of believing the disaster had been caused by their gods, the inhabitants of Java converted to Islam, making Indonesia the largest Muslim country in the world – this development being parallel, albeit extreme, to the surge in devotional activity in late eighth-century B.C.E. Greece.

The role of labor, cognition and ideology in the adaptive process must be mentioned to conclude this survey. Labor functions as the mediator between groups and their ecosystems, for it is through labor that human beings confront their milieu, in a process that involves accommodation as well as transformation. As we have seen, in small-scale societies both the accommodation and the transformation involve, besides physical exertion, the generation of etiological myths, symbolic systems, and ritual practices through which the interaction between humans and the rest of nature are made intelligible. Lest one be tempted to romanticize the pre-industrial world, or to reduce it to the realm of pure meaning, it must be stressed that in hierarchical societies the myths, symbols and rituals represent attempts to validate social stratification, attempts that are always backed by the threat of force. In the stratified societies that emerged in the Fertile Crescent, for example, the rise of organized labor gave rise to a mythology involving a stratification of the pantheon. Whether subaltern groups, generally condemned to acknowledge the reality of brute force, submit also to the ideological constructs that seek to transfigure that brute force is open to question; it can be said in fact that the symbolic systems constitute arenas within which various groups advance their interests.

If we turn to the cognitive capacities through which human organisms engage in the process of accommodation and transformation to which we have referred, we see that these cognitive capacities emerge, just as labor does, in order to allow the organism to satisfy needs. But it must not be forgotten that our cognitive proclivities are such that through the religions they make possible, these cognitive propensities serve also as the scaffolding for symbolic/ideological constructions. Among the former we find the tendency toward the personalization and indeed the anthropomorphization of natural processes; these include the personifications of staples, such as the “goddess of rice” in Southeast Asia, or the dema divinities, sources of tubers and grains, studied by Jensen. We find also the tendency to imagine mythical beings, such as the master of animals, who serve as the mediators between humans and their prey; the human counterpart of the master of animals is the shaman, a ritual specialist who has been postulated at the origin of kingship, thus establishing one of the connections between religious and political symbolism.

In the context of a discussion of the relationship among conceptions of supernatural beings, political organization, forms of production and ecological constraints, we can refer to a controversy among Swanson, Underhill and Simpson, in which Swanson maintained that monotheism tends to appear in societies which having developed settled agriculture, depend on grain as their most stable sources of food. He also claimed

that there is a correlation between monotheism and political complexity, defined by the presence of a hierarchy of sovereign groups in a society. Underhill, on the other hand, emphasized the correlation between economic complexity and monotheism and claimed that although economic and political complexity have effects on monotheism, economic complexity has the stronger independent effect. Approaching the problem from an ecological angle, Simpson focused on the activeness or inertness of the subsistence raw materials on which small-scale societies depend, claiming that the degree of activeness or inertness can serve as predictors of the presence or absence of a high god. He observed that “active raw materials may provide contingencies that are best dealt with by the skilled and, sometimes, necessarily swift action of individuals and/or the concerted action of highly motivated individuals . . . active raw materials support and encourage pragmatic and autonomous role definition” (Simpson 1979: 306). This led him to conclude that a high god “can be viewed not only as the symbolic arbiter and judge of the world’s events but also as the symbolic representation of the efficacious, pragmatic worker” (Simpson 1979: 307). He also approached the activeness/inertness continuum by focusing on the type of animal kept and the type of fauna hunted in a given society, concluding that there is a correlation between large and powerful animals and the belief in high gods. For our purposes it is not necessary to try to determine which of these positions is the correct one; it is sufficient to point out that by emphasizing the correlation between purposeful action and the belief in high gods, Underhill and Simpson, and to a lesser extent Swanson, explore the connections among ecology, work and conceptions of god.

As we can see from this controversy, the work required to survive within a set of ecological constraints gives rise to conceptions of agency and of rulership, human and divine; but as we also saw at the beginning of this essay, human peculiarities also give rise to the opposite: to the desire to give up one’s agency, to flee the power of the ruler, to erase the distinction between oneself and the world.

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Eco-magic

Eco-magic is the use of magical and spiritual techniques for the benefit or protection of the environment. Because practitioners believe that magic backed by practical action is more effective, eco-magic often supports conventional campaigning or is integrated with direct action.

Eco-magic is an evolving practice that blurs into a whole ideology of change. Starhawk, a witch and political activist, “offers the principles of magic not as a belief system . . . but as an alternative descriptive system that can help develop a psychology of liberation” (1987: 20).

Because eco-magic is a strategy that a conventional opponent will find hard to counter, it has been perceived as a tool of the oppressed.

Any magical tradition or technique can be adapted to eco-magic and practitioners work with a wide variety of deities. Rituals can be public or private and involve groups or single individuals.

Western eco-magic does exhibit certain distinctive qualities, notably the use of elements of performance, especially drumming, dance and chanting.

Certain symbols and mythic elements recur. The goddess Gaia and the Green Man appear frequently, as does the Dragon, symbol of Earth energy. Spirals and runic talismans (e.g., the Dragon Tree Rune) are common.

Eco-magic often involves working with the “Genius Loci” of the place, the Devas or Faery Folk, who are understood as teachers and allies in the campaign.

Since the early 1980s, a more theorized eco-magic practice has emerged from Western Paganism. Starhawk, Reclaiming and the Dragon Environmental Network have been influential in defining this practice, which I call “Dragon/Reclaiming eco-magic” (DREM).

Although generally eco-magic may include cursing or similar “aggressive” magic, DREM is nonviolent, nonhierarchical, and strives toward holistic solutions. It is a magic that works toward building reciprocal relationships between the natural world and humanity. DREM excludes Western magical traditions that use nature spirits instrumentally. Practitioners allege that such traditions emerge from a cerebral “dominator” ideology of control that is incompatible with an eco-magic that works in tune with nature.

Mainstream environmentalists are generally dismissive of spiritual perspectives while many spiritual people consider political issues to be irrelevant. Eco-magic, like liberation theology, explicitly connects the political and the spiritual: “the personal is political is spiritual” (Harvey 1997).

Eco-magic blurs the distinction between political action and magical ritual: “When political action moves into the realm of symbols it becomes magical” (Starhawk 1982: 169).

The Three Mile Island Memorial Parade (1980) combined a march with a large-scale public ritual. By integrating elements of a conventional political demonstration with ritual and aspects of theatre, magic and politics can merge seamlessly.

Although magical practice is normally secret, ecomagic rituals are often public. This serves a psychological purpose, boosting the morale of campaigners and unnerving the opposition. Public ritual is unusual in Western magic but is common in the tribal cultures that influence many eco-activists.

Adrian Harris

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Economics

While research into economic relationships is a fairly recent development in the study of religion and nature, the fast-moving pace of global capitalism constantly poses new challenges and demands fresh reflection.

The pioneer of the relation of economics, religion, and nature has been E.F. Schumacher, an economist writing from a Buddhist perspective. One of the fundamental problems of modern economics, according to Schumacher, is that dominant economics leads to “economism,” a state where human values, work, and even the environment are all subordinated to the pursuit of material ends. As a result, certain dimensions of spiritual reality are neglected. Schumacher follows Mohandas K. Gandhi’s sense that only the realization of the permanent nature of the soul, apart from the body, will give us peace. At the same time, Schumacher believes, modern economics has itself assumed the metaphysical status of a religion and its main values of money and entrepreneurial profit have brushed aside other values, including respect for the natural environment. As a result, Buddhist economics (or economics inspired by any of the other great Eastern or Western traditions, including Christianity, Islam, and Judaism) is seen to have the potential to reverse this trend. Valuing people as more important than goods and profits, espousing principles of simplicity (how to attain given ends with the minimum means) and nonviolence rather than a “bigger is better” lifestyle built on aggression toward nature and resulting in political aggression, provides the necessary antidotes to an economic system and its religion that will destroy both the Earth and humanity, according to Schumacher.

Bringing together insights from fields as different as economics, biology, history, philosophy, physics, and theology, self-described Christian theists Herman Daly (economist) and John Cobb (theologian) develop an alternative vision that seeks to go beyond standard models of capitalism and socialism. Their project is based on the vision of a community in which all aspects of reality are related in an emerging “biospheric consciousness.” The main problem with dominant economic paradigms, they argue, is a myopia that leads to the destruction of communities and the separation of humans and the natural world. The theoretical lack of values that promote community and nature has led to the practical destruction of community and nature. Anthropological dualism, the belief that humans occupy a higher stage than the rest of nature, and philosophical idealism, the assumption that ideas are more important than matter, are among the main culprits in this state of affairs. Once this myopia is cleared up and a biospheric consciousness is adopted, Cobb and Daly argue, the principles of the free market can be put to more constructive use. In this approach,

the religious component plays a role in how the biospheric vision is conceived. Faith in God – a theocentric perspective – liberates us from the misdirected anthropocentrism of Western culture and economics. Faith in God also helps to interrelate concern for the value of individual beings and for the holistic interrelation of all beings since both exist only in relation to God.

Christian ethicist Larry Rasmussen has raised concerns about a mismatch between the globalizing human economy and the economy of nature. The challenge, he asserts, is to realize that any human economy is always part of the larger economy of nature since everything depends on the regenerative powers of nature. Rasmussen assumes that there is a certain “carrying capacity of nature” and that economic systems which disregard it end up destroying the Earth not because they are too materialistic but because they are too “docetic,” namely, not materialistic enough. There are parallels to a colonial logic where the true costs to the colonized are kept off the books. As a result, those who profit from such colonial relations broadly conceived remain unaware of the real cost of their lifestyles and may end up destroying their own basis of survival as well. One way to address this situation is to engage in a “reenchantment of the world” and to develop religious symbols that promote new values. According to Rasmussen, religious symbols can lead to a new appreciation for nature and the integrity of God’s creation of which human beings are a part.

Christian theologian Sallie McFague has also begun to extend her work in religion and ecology to include economic concerns. Her argument begins with the observation that first-world Christians are destroying nature not because they lack love for nature – an earlier theme of her work – but because of their consumerist lifestyles. The greatest ecological dangers have to do with the consumerist desires of the middle class, which are seen as necessary for sustained economic growth. This sort of consumerism can only be resisted through a new ecologicaleconomic lens that sees the whole of reality as interrelated. McFague develops the theme of interrelation through a notion of God not as distant and related externally to the world, but as embodied in it and as its source and fulfillment.

In sum, one of the fundamental problems to be addressed in the study of religion and nature is what Schumacher and later Cobb have called “economism,” a system in which economic concerns have absolute priority over concerns for nature and – to a certain degree – over concerns for human beings as well. Under the conditions of globalizing capitalism, however, this insight needs to be taken to the next step. Anthropocentrism may no longer be the greatest challenge to nature, and even the more and more common critique of consumerism needs to be reevaluated at this point. Arguably, the economy has become hegemonic to such an extent that the majority of humanity matters less and less and consumerism has become a mode of existence that can no longer be contained by the individual will of the consumer. In this context we need to rethink what it means to propose religion as an antidote – as the place from where resistance can be formed and alternative lifestyles can be developed. Can religion itself be considered to be free from the pull of the global market economy?

Today, progress in reconfiguring the interrelations of economics, religion, and nature depends on a return to places similar to those where the initial insights of the pioneers of this question were forged: situations of great pressure. In this context the contribution of theological and religious reflection to the further development of economics and ecology is not primarily that of providing another set of ideas or a new state of mind but of finding glimpses into the reality of God where the pressures of the economic and ecological status quo become unbearable and are thus being questioned. Here, the different religions will be able to offer alternatives not primarily where they represent symbols of regulated religiosity (easily commodified by the commercial spin doctors' efforts at reenchantment) but where they draw on the irrepressible energies emerging out of the undercurrent of their own traditions and strengths as they have developed and continue to take shape in the midst of the pressures of life as a whole.

Joerg Rieger

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Eco-paganism

In an attempt to curb Britain's worsening traffic congestion problems, the Conservative government of the 1990s commenced a massive program of road-building. In the process they unwittingly instigated a protest movement vehemently opposed to road and other construction schemes (such as the expansion of open-cast quarrying, and the building of new airport runways), and which centralized the use of nonviolent direct action to achieve its environmental and political aims. While protests against new roads had occurred since the 1970s, those at Twyford Down in Hampshire (1992) are regarded as igniting the direct action movement in Britain.

Protests followed across the country, culminating in the Newbury Bypass campaign (which, with many hundreds of protesters, achieved considerable media coverage) and the A30 campaign at Fairmile in Devon (where Daniel "Swampy" Hooper achieved notoriety by spending seven days locked underground in a tunnel). Protesters combined "the protest camp" from the British anti-nuclear protests of the 1980s, with the direct action tactics of American Earth First!, to barricade themselves in camps along the proposed route, using treehouses, tunnels and other locking-on points, or to disrupt construction by "digger diving" and occasionally by eco-sabotage. As camps had to be evicted before construction could continue, protesters hoped, if not to halt construction completely, then to render future projects economically unviable.

While by no means all protesters had pagan or other religious sympathies, eco-paganism is used as a loose term for spiritualities within the British protest movement; it includes two broad groups. Firstly it refers to the practices of initiated members of existing pagan faiths who involve themselves in direct action. Perhaps the best example is the Dragon Environmental Network (Dragon). Dragon was established by progressive Wiccans who, motivated by the belief that "all the Earth is sacred," sought to combine ritual/magical practice with direct action in what they termed "eco-magic." Borrowing ideas of "Earth," or "dragon," energies from *Earth mysteries*, they used ritual to "raise the dragon" so as to protect and empower both a piece of threatened land, and those attempting to defend it. Thus during a mass trespass on the newly constructed M3 at Twyford Down, Dragon members used frenetic drumming to raise this dragon energy. In a similar fashion they created a sigil or "bindrune," the "Dragon Tree Rune," which they "charged" using drumming at public rituals (often held in rave clubs); the rune was worn by protesters for protection, and daubed upon trees and construction machinery to intimidate workers. Practitioners attribute the saving of Oxleas Wood in London to the efficacy of eco-magic. There is some evidence of similar, but locally nuanced, practices occurring in Europe. Lindquist (1997) describes how heathen neo-

shamans invoked “ice giants” from Norse mythology using *seidr* trance, so as to prevent residential construction outside Stockholm. Whatever its cause, the resulting freeze prevented work just long enough for the local government to be persuaded to abandon its plans.

Eco-paganism secondly refers to the “detraditionalized,” elective and affectual spiritualities of protesters living more permanently at protest camps. Loose and resisting tight categorization, these syncretic spiritualities incorporate belief and practice from Buddhism, Shamanism, the New Age, Theosophy, 60s psychedelia, the Rainbow movement, and British folklore, while retaining a core pagan doxa. Thus the standard eight pagan festivals are marked (in addition to full moons and other celestial phenomena), and many practitioners honor a god (“the Horned God,” or “the Green Man”) and a goddess (usually “Gaia” the Earth Mother). However ritual structures, if they occur at all, are rudimentary, and the emphasis is very much upon celebration. Such occasions are often marked by entheogenic consumption, especially of cannabis and indigenous British Psilocybin mushrooms. Such celebrations are a product of the movement’s origins in (free) festival, and so-called “new-age traveler” culture. Traveling, the romanticized gypsy life, and a new tribalism are important aspects of this eco-pagan identity. Protesters at Twyford Down named themselves “the Donga tribe,” and set off on the “freedom trail.” Traveling on foot or by bicycle (later with horse and cart, goats and chickens) between prehistoric sites, they regarded themselves not only as spiritual and ecological exemplars, but as the indigenous pagan nomads of Britain.

Eco-pagans of both groups stress the importance of a bodily engagement with environmental problems, and with the natural world more generally. Adrian Harris (1996) argues for a “somatic ecology,” a move away from intellectual to bodily “knowing,” while others stress the need to build a relationship with the spirit(s) of a place, the *genius loci*, by spending time outdoors. Camp dwelling eco-pagans often feel intense emotional bonds with the tree in which they live, or the land they are defending, and often regard their lifestyle as exemplary when compared to that of urban society, pagan or otherwise.

Eco-paganism exhibits a fascination with fairies and the mythology of the other-world, an aspect that takes two forms. Firstly, identification with fairies can be purely symbolic. The reiterated belief that practitioners are the downtrodden “little people,” helps them to make sense of the inevitability of eviction, and hence defeat. Further, by identifying with fairies, practitioners are allying themselves with “nature,” and with nature’s “higher” morality, a move that helps justify the legal infractions of protesting. Thus the damaging of machinery is called “pixieing,” a move that downplays the implications of what is effectively sabotage. Secondly, though, some practitioners maintain a literal belief in fairies as spirits of, or spirits dwelling within, a pristine nature untrammelled by human agency. Occasional phenomenological encounters with fairies, entheogenically inspired or otherwise, fuel the belief that “nature” supports protesters’ actions. Ecopagans believe that encounters with fairies are a reward for their ecologi-

cal self-sacrifice and that they are being granted privileged access to nature's hidden realms.

The road protests galvanized eco-paganism, allowing it to become embedded through the establishment of camps; the construction of new roads ironically provided spaces in which eco-paganism could flourish. Having effectively succeeded in its aims the movement removed its *raison d'être*, and has remained in a dormant phase. However a new wave of protests has begun, focusing on issues of climate change and globalization, and so eco-paganism can be expected to emerge as a significant religious movement once again.

Andy Letcher

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See also: Donga Tribe; Dragon Environmental Network; Earth First! and the Earth Liberation Front; Paganism – Contemporary; Radical Environmentalism.

Ecopsychology

Ecopsychology is a diverse field committed to placing human psychology into an ecological context. Perhaps the main idea behind ecopsychology is that the human mind does not stand wholly apart from the natural world but is deeply rooted in and tangled up with it; the human psyche is a phenomenon of nature, an aspect of the larger psyche of nature. By ignoring the natural world, modern psychology both misconceives the human mind and helps to maintain the Western/industrial world's destructive state of estrangement from its Earth home. Ecopsychology seeks to reverse this situation. By expanding the focus of psychology to include the relationship between humans and nature, it aims to develop a truer picture of human psychology and to draw attention to the psychological dimension of the ecological crisis.

One of the strong claims made by ecopsychology is that psychological well-being ultimately involves establishing mature, reciprocal relationships with the natural world, seeing it not as a mere resource pool for human use but as the larger community of life of which humans are mere members. As a general failure to develop such relationships, the ecological crisis can be viewed as a psychological and spiritual crisis. Many ecopsychologists trace the degradation of the planet to the consumeristic, ego-driven, Earth-alienated mode of consciousness that governs modern society's exploitative interactions with the natural environment. Ecopsychology thus maintains that the pursuit of human sanity and spiritual fulfillment, on the one hand, and environmental recovery, on the other, are closely related tasks.

Ecopsychology is usually described as an "emerging" field, having only recently been named as such. This does not mean that the subject matter of ecopsychology is entirely new. Numerous references to the human–nature relationship have been made in a wide variety of sources since at least the time of Jean-Jacques Rousseau. Moreover, the lifestyles of indigenous peoples are generally viewed by ecopsychologists as already being "ecopsychological." However, if ecopsychology is regarded as an ecological revisioning of modern psychology and as a response to a particularly modern state of disconnection from nature, then it is indeed a historically unique undertaking. The first major work to criticize modern psychology for its anthropocentrism, and to propose a psychology that specifically focuses on the natural world, did not appear until 1960. In his book *The Nonhuman Environment: In Normal Development and in Schizophrenia*, psychoanalyst Harold F. Searles observed that the psychological theorists of his day regarded the nonhuman environment as irrelevant to human personality development, as if humans existed completely alone in the universe. He posited instead that a sense of relatedness to nonhuman reality, even if largely unconscious, is one of the most

significant facts of human life, which humans ignore at their peril. Searles' work came and went with little comment from his professional peers. The years that followed did, however, witness a number of developments that can be seen as evidence of an evolving ecopsychological sensibility.

In 1963 Robert Greenway introduced the term *psycho-ecology*, using it to describe his search for a language capable of conceptually merging mind and nature, as well as to describe his subsequent work on the psychology of wilderness experience. In the 1960s and 1970s Gregory Bateson carried out his cybernetic studies into the "ecology of mind," locating the human mind within a greater ecosystemic mind or Mind. In the late 1960s Paul Shepard suggested that the central problem of human ecology is the relationship between mind and nature. Shepard's anthropologically informed work culminated in his 1982 book *Nature and Madness*, in which he argued that normal psychological development requires that children be thoroughly bonded to the natural world and that adolescents be initiated into the sacredness, mysteriousness, and poetry of earthly life. According to Shepard, Western society's irrational destruction of the Earth can be directly linked to an increasing disruption of this normal process of psychogenesis. By the mid-1980s, the deep ecology movement had gained a significant following. This movement advocates deepening one's sense of connection to the Earth, in the process of which one becomes "ecologically conscious" or "ecologically mature," or realizes an "ecological self." The psychospiritual quality of much deep ecology discourse and practice makes it an obvious precursor to ecopsychology, and some regard the two movements as essentially the same. The 1980s also saw the introduction by Joanna Macy and others of "despair and empowerment" work. One of the main principles of this work is that personal distress over the state of the planet is not just a symptom of individual neurosis but is better understood as a healthy expression of "pain for the world," the pain one feels as a result of being connected to the ecological whole. By consciously experiencing this pain one is led to a kind of spiritual awakening in which one realizes one's interdependence with all life. Macy was also involved, along with John Seed, in developing the "Council of All Beings" ritual, a deep ecology practice in which participants shed their human boundaries to identify with and experience the suffering of other life forms. Another noteworthy development was that of transpersonal psychology, the psychological study of spiritual experience or nondual states of consciousness. Transpersonal psychology forms a basis for ecopsychology because one of the goals of ecopsychology is to overcome the dualistic mode of thought and experience that supports the illusion of separation between the human ego and the natural world. Indeed, much ecopsychological and deep ecological activity focuses on those ego-dissolving, free-flowing, or mystical experiences in the natural world that defy easy conceptualization. Hence Warwick Fox's 1990 proposal that the name deep ecology be replaced with *transpersonal ecology*, the latter term indicating a marriage between transpersonal psychology and the ecocentric ecology movement. These and many other developments – including the appearance of environmental psy-

chology, environmental education, and ecofeminism – prepared the way for an explicit ecopsychology movement to finally surface in the early 1990s.

The first major work directly to explore the idea of ecopsychology was cultural historian Theodore Roszak's 1993 book *The Voice of the Earth*. At the center of Roszak's "exploration of ecopsychology" was an attempt to revise an animistic worldview by drawing on the latest ideas in scientific cosmology. Around the time this book was published, the term ecopsychology entered into relatively wide (if not trendy) usage. A number of ecopsychology workshops were held, and in 1995 an anthology of ecopsychology writings was published. Ecopsychology was also finding its way into a handful of college and university departments, primarily in the United States, though also in Canada, Britain, Europe, and Australia. A small ecopsychology literature now exists, including a 1996 college text by Deborah Du Nann Winter, *Ecological Psychology: Healing the Split Between Planet and Self*. To date, however, the stress in ecopsychology has arguably been less on its theory and more on its practice.

The practice of ecopsychology currently includes or extends into – though is not limited to – the following areas: ecologically oriented psychotherapy (especially within Gestalt, body-centered, Jungian, and transpersonal frameworks); psychospiritual work in support of ecoactivism; wilderness rituals/eco-therapy, including vision quests and deep ecological councils; numerous forms of contemplative practice; neo-paganism; large-scale Earth rituals; shamanic counseling; Earth poetics and story telling; experiential programs for reconnecting with nature; perceptual ecology/sensory awakening practices; gardening; environmental education; bioregionalism; building sustainable communities; ecological design; ecological restoration; organic farming; and environmental and social justice (including community land rights) activism. As a still-emerging field, ecopsychology faces a number of challenges and criticisms. These can perhaps be grouped into two areas. The first general challenge is to build a comprehensive and intellectually coherent body of ecopsychological thought. Critics such as Joseph Reser charge that ecopsychology is not really a psychology because it has produced little in the way of recognizably academic research findings; it is more of a popular movement than a disciplined profession. Others say that as a synthesis of psychology and ecology, ecopsychology opens up a subject matter that is so all-encompassing as to defy workable definition. Part of the difficulty for ecopsychology is that modern academic psychology assumes a divide between inner/human reality and outer/natural reality, and uses objectivistic methods that deny nature its own voice. Many ecopsychologists are accordingly leery of turning their field into a conventional psychological discipline, believing that this would betray their very subject matter. Ecopsychology is often distinguished from the more mainstream field of environmental psychology for just this reason. It nonetheless remains for ecopsychology to clarify in what sense it may be thought of as a psychology and to build its own distinct body of well-defined theory.

The second general criticism of ecopsychology is that it is politically weak. Ecopsychology has been faulted (as summarized in Andy Fisher's *Radical Ecopsychology*) for having a Eurocentric bias, for neglecting the significance of social and economic forces,

and for being too narrowly therapeutic in practice. These criticisms have not gone entirely unmet, as there are efforts within ecopsychology to develop a multicultural approach, to consider how the corporate sphere distorts consciousness toward consumptive behavior, and actively to engage in social change work. The challenge, however, is to create an ecopsychology that when considered as a whole has sufficient political weight to be included among the important social and ecological movements of these times.

For all that ecopsychology may be theoretically and politically underdeveloped, the very idea of it has great intuitive appeal for many people. It speaks to their experience of earthly dislocation and their yearning for a greater sense of communion or kinship with the natural world. If it can adequately address the challenges facing it, ecopsychology may therefore play an important role in bringing about an urgently needed reconciliation between modern humanity and the rest of the natural world.

Andy Fisher

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See also: Council of All Beings; Deep Ecology; Esalen Institute; Jung, Karl; Macy, Joanna; Naropa Institute; Radical Environmentalism; Restoration Ecology and Ritual; Seed, John; Shepard, Paul; Transpersonal Psychology; Wilderness Rites of Passage.

Ecosophy T

The term “Ecosophy T” is the name of a total view, or better, general view from part of which I *derive* (in the sense being of derived from a set of premises) what I call the eight points of deep ecology. This is only a small part of Ecosophy T which has not been and probably will not be adequately described or articulated by me. As a philosopher, I have of course not been outstandingly original, but have accepted and partly modified philosophical theories on a vast variety of subjects. What I am trying to do is to articulate fairly adequately a representative part of the views I entertain.

During many years as a student and a professor I specialized in the theory of knowledge. Within a great variety of clusters of problems, I developed a view which may loosely be characterized as skepticism. My book with the title *Scepticism* has been characterized as an endeavor to make the term a plus-term, a term for a kind of view many people would accept. Since the book was published I have slightly modified the relevant view covered by the term “skepticism.” Ecosophy T may better be characterized as (radical) “pluralism.” But Ecosophy T may be said to contain the fairly radical view expressible by the short sentence: “Humans are fallible whatever they assert.”

How is deep ecology with its eight points *derived* from Ecosophy T? Cosmology has an important place in Ecosophy T. The answer to “Where am I, what am I, what do I want?” starts with cosmology – the insight that I am in a largely meaningless, largely lifeless, ghastly, utterly immense world. Any island of any kind of life breaks the uniformity in a touching, heart-rending way. Through hundreds of millions of years of development, living beings have broken the uniformity of death and unconsciousness. How could we but embrace life with enthusiasm? How far away are our potential friends and neighbors from our planet? What do we do to protect life in this strange, marvelous place where we live? Have we been mature protectors of the biological diversity and the teeming of life? How does it come about that we now try to stop the extinction of species and behave in a way that is good for the teeming of life? What senselessness has made us capable of radically diminishing this teeming of animals which are not a danger to us? Especially not when we limit our interference with the ecosystems and stop extending the areas of the planet which are clearly dominated by human activities?

In short, the derivation of a deep ecology outlook from Ecosophy T is not complicated. But it should be stressed that a total view like Ecosophy T is vastly broader in outlook than the teachings of deep ecology.

An important part of Ecosophy T is my semantics, also called my “empirical semantics.” Whether in daily life or in professional verbal communication, a sentence may be

interpreted differently. Let T0 be a sentence that presumably is intended to express an assertion. It may be interpreted in at least two ways – one makes it synonymous with a sentence T1, the other with T2, these being considered to mean something different (at least) in the communication C. A primitive example: Mr P and Mr Q agreed to meet at 9 o'clock.

P: I meant (of course) 9 in the evening. Q: I meant (of course) 9 in the morning.

There is an ambiguity. The more precise sentences, “We meet at 9 in the morning” and “We meet at 9 in the evening,” I call “precizations” of the two more ambiguous sentences.

Let “Humans are fallible whatever they assert” be considered a T0 uttered by a (second) person P, a point of departure formulation. We may immediately ask P whether T0 is to be considered a human assertion, and if so, whether what is said is meant to be interpreted as a human assertion and therefore as fallible. It is likely that P will answer that he is not fallible when uttering T0. Compare the sentence sometimes said to have been uttered by Socrates that he knows nothing. In general, I use the signs “T1” and “T2” for two conflicting interpretations of T0. But the sentences T1 and T2 may be considered open to two interpretations. We then have 4 precizations which I express by T11, T12, T21 and T22.

The empirical semantics I make use of in Ecosophy T I apply to my own sentences in Ecosophy T. That is, conceive it as likely that the sentences of Ecosophy T are open to various interpretations. Some differences in interpretation may be uninteresting and negligible; others ought to be “clarified,” that is, explicitly formulated. I may then tell which precization furnishes a more precise expression of what it is intended to assert.

Ecological views may be part of a “total view,” a general philosophy of life and the world (universe). The latter I call an “ecosophy.” By a “philosophy,” here I don't mean a professional philosophy; I include personal comprehensive general views of non-philosophers, of people who tend to reflect a lot and who do form, however amateurishly, a total view including priorities of value in life.

My own total view I call “Ecosophy T.” The letter “T” is an arbitrary letter which suggests that there may be other ecosophies, A, B, C, . . . I just wish to indicate an openness toward ecosophies that I personally find are not in harmony with my own opinions.

One of the central points of Ecosophy T may be formulated as follows: Humans are in many ways wonderful creatures living on the surface of a wonderful planet and have required hundreds of millions of years to form. The brain, which ordinarily is thought of as an organ of intelligence, is an organ capable of surveying and assessing immense varieties of relations, an organ that eventually will make humans not a destructive, but a constructive factor on the planet. The change may occur relatively soon, perhaps within, say, a few hundred years. Wars will not only seem ethically objectionable, but somehow childish. It might of course be asked how I can be sure about this.

A more moderate number of humans on this planet will eventually make it possible for people to continue to live where they would like to live. This would make it possible

to live in acknowledged “wonderful” places where you today need to have a lot of money in order to buy a tiny plot of land. Mentioning population reduction, people naturally ask “how?”, suspecting coercion. I admit that my belief in a reduction is of a rather abstract kind. I do not see an easy way of how it could happen. It has to be an ethically perfectly satisfactory way. For instance, a way that encourages couples to produce only two children on average. Of the various social changes I envision, I shall here mention only one: there will be customs making it easier for people to have closer relations to the children of friends. From time to time we might house or be host to children other than our own, reducing the difference between “having” and “not having” children in the ordinary sense.

The two-children average is a system that rapidly reduces population, especially if the number of teenagers having babies is reduced, or if the general average of the age of mothers increases.

Reduced population is of course an important factor in decreasing the ecological crisis. This applies especially when there is a reduction in the materially richest countries. An ordinary family in such a country may cause more ecological damage than ten families in countries with a lower material standard of living.

Some might say that if people lived in accordance with the motto “rich life, simple means” then we need no reduction of the population. But Ecosophy T does not assume such a revolutionary change of lifestyle. Furthermore, it seems that in countries with economic poverty and less ecological damage, the aspiration is generally to live in an ecological way not very dissimilar to the way to live today in the rich countries. In short, Ecosophy T envisages considerable reduction of population, but does not predict how long a time it will take, how many centuries.

If I have to characterize Ecosophy T with one word, I will choose “this-worldly-ness,” *Diesseitigkeit* in German, something similar to what Plato rejects with his world of ideas. There is an emphasis on realism – in a wide sense. It implies (for me) the admittance that we live in a universe (described by modern cosmology) which seems to be devoid of every sort of meaning, any sort of purposefulness. And it should be added that what we get to know of it

– and to know a lot – is an endless sequence of explosions. Through our great telescopes we actually *see* such explosions. The explosions provide light rays traveling at the speed of light for millions of *years* and which hit the lens of the telescope. Humans today can *see*, realistically see, happenings which occurred millions of years ago. The gigantic character of the explosion is grasped if we make note that a colleague of an astronomer looking through a telescope near the neighborhood where the first astronomer is looking sees another fraction of the explosion. This means that every single locality in gigantic space is filled with effects of the catastrophic explosion. Enough about the main ingredient in cosmos: electromagnetic waves of great energy.

But there are infinitely small areas of the kind we inhabit: planets with life, some of them possibly with life forms with human or even transhuman capacities. We have potential friends out there, but at distances so great that you would be “lucky” if you

got an answer to a letter sent at the speed of light one hundred thousand years after your death.

In short, Ecosophy T contains a short description of modern cosmology and some rather confusing or disconcerting conclusions about *where we are* when we take this question in its cosmological sense. Is Ecosophy T in this sense taken seriously? Because of the important conclusions of modern science that the basic chemistry of the universe seems to be the same everywhere – with carbon and its potential for various complex combinations with other elements – this is a strong reason why Ecosophy T is highly optimistic about potential friends “out there.” We should not feel alone; we may feel that we are parts of a kind of living world and universe. Since I was a small child, very big numbers and distances have fascinated me, and it is only natural that contemplation of cosmological questions is important to me. We are genuine parts of something immense, and strange parts because we talk and think about it.

After so much about so distant concerns, I shall diminish my horizons and talk about humans, my “fellow humans.” Whatever the differences between us, I have a strong feeling that in all essentials we are similar.

It was in Vienna in 1934–1935 when I was in my early twenties that I sensed that I had left behind me the characterization of being “stupid.” Being critical of others, I seemed to have more complex criteria than most people. But even being in some cases very critical, I got a firm feeling that I could understand others as fellow human beings. A climber friend of mine was a Hitler fan, but I joined him on a climb. When I started eating some pieces of bread, I offered him some, saying “Would you have some of this? But it was prepared by a Jewish girl I know.” He hesitated, but took some of the bread. I do not think he hesitated for ideological reasons. Gentle, young Nazis did not react against individual Jews. They were seemingly capable of seeing individuals as fellow humans. But certainly I was somewhat extreme in my fellow human ideology. And this radicalness was part of my personal philosophy. Among the consequences was the view that the death penalty was unwarranted.

“Socialism” today in the West is a positive word among extremely few people, and the idea of radical change in general appeals to few. But in the very long run there will be, I firmly believe, radical change in radically different ways from what is now expected, if at all.

Socialism had profound consequences in 1945, when the German occupation of Norway ended. A great percentage of Norwegians considered communism to be a greater and deeper danger for Norway than the National Socialism of Hitler and neofascism. Several thousand Norwegians believed that it was their duty to join the Germans fighting the Soviets on the Eastern Front in Russia. To the Norwegian Government, however, the Soviets were allies in the fight against Hitler, and Norwegians fighting against the Soviet Union were, according to the established terminology, committing high treason.

All this is important if we are to understand the situation when the “Eastern Front Fighters,” that is, those who survived, came home to Norway. They were put in prison

as traitors. This was ethically absurd in my opinion, and because I had fought in the resistance movement, I could talk and act without danger in favor of the so-called traitors. I saw them as fellow humans and worked to get them out of prison. It was amusing and very important for me to call up the director of a prison to say that I needed a couple of prisoners in my seminar on “moral indignation during and after wars.” The resistance movement fighters who survived the war and who were members of the seminar were flabbergasted when I entered the auditorium with well-known “traitors,” people on the very wrong side of the war. But already in the next session (the following week), tempers were neutral and this was a victory for an important conception of being fellow humans. Members were interested in two basic questions: “How did *you* develop into a fighter on the front x?”, where x could mean the highly prestigious front and/or the highly detested front. The seminar was important and strengthened the feeling that we were all fellow humans, all having too much in common to make certain, very common value judgments.

This leads to the consideration of causal chains. Freedom of will and freedom of decision in a sense imply strict causality. One of the most frightful and devastating experiences we *can* have is to do something seemingly

“uncaused,” “unexplainable,” not merely impulsive. We cannot but wish to be links in causal chains as long as we, ourselves, are part of the chains. We wish that our “will is free” in the sense of making our own decisions freely, not by being forced or pushed.

In recent years I have introduced a verb “to emerge.” When certain things, maybe tiny things, *happen*, they occur *because* of something. There *must* absolutely be something, some constellation of factors, just making those things happen at the moment. Today I think that, sometimes, something *just emerges*. I believe in “emergings” in such a sense. Of course I’m not thinking of major, complex events, but of tiny details. “But they must come from something!” Why must they? Because even tiny details *may* have great importance. Answer: such details, perhaps, may never emerge.

Acceptance of emergence is one thing, but to give a convincing example is very difficult. Even conceiving how one could pick out and describe the emerging “thing” is difficult to establish. But does it justify the gigantic generalization about tiny happenings: “Absolutely nothing comes from nothing”?

The complex debate on the relation between testability and meaning of hypotheses is relevant here. Is the hypothesis of an emergence testable? Scarcely or surely not testable. But for those who do not subscribe to a completely general requirement of such a kind, the assertion “emergence *may* happen” may still have cognitive meaning. After all, it is a gigantic, and in a way, fantastic assertion that emergence never happens and never will happen. Fantastic only in the sense of its scope.

Enough about events that may absolutely never have occurred.

Concluding, I would simply maintain that Ecosophy T contains a thesis that there *may* occur emergences. Even within your own thinking, for instance, within your thinking about emergences.

How does this feel? Momentary, like some slight forms of liberation. Nothing much to write about? I am not certain about that.

The last but not the least important aspect of Ecosophy T is the attitude and practice of education. It is more or less generally accepted that four-year-old boys and girls who did not have siblings enjoy enormous self-respect, a feeling that they are something important, and require an acknowledged status as such. What I find especially remarkable is their spontaneous “deep” questions. What is the world? How great is it? Has the world ever been like it is? You say that grandmother is dead. What does that mean? Simply being away? Are we all going to disappear? Or nothing?

Whether four-year-olds vary in different cultures I do not know. But I suspect that their precocious questions may be similar. The question I would like to get answered may be thus formulated: Why do their lively interests in the above-mentioned questions seem to be reduced rather than stimulated in ensuing, years, especially in the first school years, when adults, in principle, should furnish excellent conditions for a deepening and an articulation of those questions; even conditions for learning about tentative answers to them?

If we say that God created nature, what we usually mean by the word “nature” is an extremely small part of what the contemporary science of cosmology teaches us. When a young religious group half a century ago asserted, “We have sinned against God’s creation” they referred to a sin against an extremely small part of cosmos – the tiny Earth. Today, there are frightful questions we must answer. Are we able to see God’s hand in the hundred-thousand million galaxies, each with, on average, a hundredthousand million stars? Yes, we may say, why not? Ecosophy T does not exclude mentioning the constant gigantic explosions going on, perhaps killing living beings on a vaster scale than our imagination can fathom.

The enormity and seemingly brutal and meaningless character of the cosmos as described by science makes it important to ask whether we might limit God’s direct creation to what is suggested in the Bible, and in many other basic religious documents. Nothing was known about the cosmos at the time these old texts were written. It must be religiously acceptable to ignore cosmology and thereby acknowledge that creation concerns the world inside a gigantic cosmos that was already there.

An ecosophy is a “general view” which should not keep silent about the above questions.

Arne Naess

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ECOtherapy (by Hans Andeweg & Rijk Bols)

Hans Andeweg, M.Sc. is a Dutch biologist who has worked as a researcher in the field of bioorganic agriculture, gardening and forestry, and as a teacher and international organizational consultant. With his wife Rijk Bols, in 2001 he founded the Center for ECOtherapy in Waltrop, Germany, to teach a way of healing the spiritual energies of natural systems in which the healer, the system and the caretaker/manager are equally involved. Based on the viewpoint that nature has a soul and that we can communicate with it, ECOtherapy helps to restore and maintain a harmonious balance of vital energies underlying health and vitality. Andeweg and Bols believe ECOtherapy can be effectively applied anywhere where the balance between living organisms and their environment has been disturbed.

Andeweg and Bols draw on their long experience at the Institute of Resonance Therapy (IRT) in Germany where they worked with remote healing of pollution-stricken forests in Central and Eastern Europe. However, whereas the IRT relies more on the effects of radionic equipment, Andeweg and Bols maintain that the conscious involvement of the caretakers, their inner intuitive development in working with nature, and their connection with the higher spiritual world is essential for the ecosystem's long-term vitality. This links ECOtherapy with the ideas of Pogac̃nik and other present-day, spiritual-ecological movements.

In his book *In Resonance with Nature* (1999) Andeweg explains his worldview, which underlies the practice of ECOtherapy. He combines a wide range of phenomena such as life-force energy (*ch'i*), form resonance (based on Rupert Sheldrake's morphogenetic fields), and orgon (from Wilhelm Reich), with the biometry of André Bovis, the work of Rudolf Steiner, blending these and the worldviews of Hawaiian, Dutch and other spiritual thinkers into a unified, holistic model. The model is applicable to anything that fits the description of an organism, organization, or system, be they animals, people, plants, gardens, houses, businesses, farms or landscapes. It includes measurable parameters by which a diagnosis can be made and replicated, and progress can be monitored over time.

On the basis of this model he builds the principles and practices of ECOtherapy. A typical ECOtherapeutic project lasts several months at least and consists of a diagnostic component and a "treatment" component. In the former, the healer intuitively diagnoses the energetic values of the system – Earth radiation, Bovis values, (Reichian)

“orgon” etc. – with the aid of a pendulum or dowsing rod; this is done before treatment and repeated at regular intervals during the second phase. The resulting qualitative and quantitative observations reveal the energetic “state” of the system concerned, including spots where energies are disbalanced. The “treatment” itself is aimed at restoring the balance and is therefore called a “balancing.” It involves the application of various well-known remedies for human healing (Reiki, homeopathy, music, etc.) adapted to the system’s specific needs. The “balancing” can be performed not only on the spot but also – and more efficiently so – at a distance (“remote balancing”). Instead of having to go around large areas (e.g., forest), the treatment is applied on a map, photograph or other representative item of that forest which resonates with the physical system through its morphogenetic field. In this way the healer can repeat the “balancing” protocol more frequently, work over larger areas and more projects simultaneously, and reduce costs. When the “balancing” is applied correctly, disruptive vibrations are relieved and terrestrial and cosmic energy flows are renewed. Application to organizations may generate new solutions to old problems.

ECOtherapy can be learnt by anyone willing to make the effort. Andeweg’s Center offers short courses and workshops, as well as a four-year certificate training course in ECOtherapy.

Cathrien de Pater

See also: Ecopsychology; Steiner Rudolf – and Anthroposophy; Transpersonal Psychology.

Ecotopia

Ecotopia, a novel written by Ernest Callenbach in 1975, is a fictional depiction of the ideas espoused in

E.F. Schumacher's *Small is Beautiful*, *The Whole Earth Catalog*, and Callenbach's nonfiction. It presents a vision of an alternative, future society, located in the Northwestern United States, which is based on a sustainable economy, de-urbanization, political decentralization, alternative energy sources, feminism and a nature-oriented spirituality: "a seamless, stable-state web of living organisms" (47).

Subtitled *The Notebooks and Reports of William Weston*, it describes a skeptical reporter's descriptions of, and eventual conversion to Ecotopian values and practices, during the early twenty-first century, twenty years after independence. Weston is an advocate of "evercontinuing progress . . . a rising Gross National Product" and materialistic lifestyles (4). He is disturbed by what he considers a primitive society "led by those damn women" (2).

In Ecotopia sexism has been outlawed, white-collar crime is vigorously prosecuted, workers are owners, and cities have been reduced to self-sustaining communities of no more than 50,000 people, with no suburbs. Automobiles have been replaced by electric buses, taxis, and magnetically propelled high-speed trains, and chemical fertilizers with processed sewage and compost. Television is interactive, and videoconferencing reduces travel. Houses are integrated systems with passive solar power and heat pumps. The extended family has replaced the nuclear family, and sexuality is freer and more playful.

Religion and spirituality are not institutionalized in Ecotopia, but a nature-centered *Weltanschauung* permeates every aspect of everyday life. People have "a secure sense of themselves as animals," domestic animals are raised semi-wild, and wild game is valued for its physical and spiritual properties (32). The Protestant work ethic has been abandoned because, humans were meant to take their modest place in a seamless, stable-state web of living organisms, disturbing that web as little as possible. This would mean sacrifice of present consumption, but it would ensure future survival – which *became almost a religious objective, perhaps akin to earlier doctrines of "salvation."* People were happy not to the extent that they dominated their fellow creatures on earth, but to the extent that they lived in balance with them (47–8, emphasis mine).

Like the New Age movement that emerged in the 1970s, Ecotopian spirituality promises a New World, a new way of life, and is also highly syncretic, implying aspects of Buddhism and Taoism, while explicitly blending pagan and Native American philosophies. Weston is surprised to hear a young man hail "Brother Tree!" (63). His

first Ecotopian sexual encounter takes place in the forest “in some kind of shrine . . . this incredible woman is a goddamn druid or something – a tree worshipper!” (58). As Weston is slowly converted he notes, “Their little shrines are not merely pious nature-appreciation,” but are part of a more complex unity (90).

The strongest influence, though, is from Ecotopia’s earlier inhabitants.

Some Ecotopian articles . . . are directly Indian in inspiration. But what matters most is to live in balance with the nature, “walk lightly on the land,” treat the Earth as a mother . . . Who would use an Earth-mover on his own mother? (32)

Consequently, the Ecotopians do not feel “separate” from their technology. They evidently feel a little as the Indians must have felt: that the horse and the teepee and the bow and arrow all sprang, like the human being, from the womb of nature, organically (51).

Ecotopians also take a tribal approach to the arts, in which “there is almost no distinction between amateurs and professionals” (145).

There are also elements of Christianity, primarily in the ritual warfare that has replaced competitive sports and actual warfare. When a participant is seriously injured, the combat ends and he is placed on a “stretcher made of red cloth with a white cross on it. His body was arranged in a startlingly crucifix-like way, with straps on wrists and ankles” (79). When Weston inquires about the cross he is told,

Ecotopia came into existence with a Judeo-Christian heritage . . . We make the best of it. You will find many expressions of it in our culture still . . . There’s also a little ceremony for when a wounded man comes back from the hospital. You might guess what it’s called: the raising. He stands up and walks (81–2).

Christlike, the combatant has made a sacrifice, but one consistent with the Ecotopian ethos. He has arisen not for the sake of heavenly salvation, but for that of humanity’s continuing survival in the natural world.

As the novel approaches its conclusion, Weston still has his doubts about Ecotopia and is preparing to return to the United States with his reports. He is abducted to a hot spring for several days, and after initial resistance he experiences ego loss and psychic transformation.

I lost all sense of horizon, of place – all sense of anything except the steady gurgling of the water coming to me from deep inside the warm earth. I have no idea how long I remained in that state, but suddenly I heard my own voice saying “I am going to stay in Ecotopia!” (179)

Ironically, he has been “saved” and he tells his editor that his assignment in Ecotopia “led me home” (181).

Callenbach later penned *Ecotopia Emerging* (1981) to describe how the new society was created. In it, the Survivalist Party, dedicated to the biological welfare of all species, slowly gains power in local and state legislatures on the West Coast while infiltrating the National Guard and intelligence agencies. The unpopular reopening of a dangerous nuclear plant near Eureka, a nuclear disaster near Seattle, and the involvement of the governor of California in a massive water scandal precipitate an Ecotopian uprising.

Paralyzed by covert wars in Brazil and Saudi Arabia, facing revolt in other areas of the country, and fearing that stolen weapons-grade uranium had been used by Ecotopians to mine New York and Washington D.C., the United States government can do little to prevent secession.

The Survivalist agenda is encapsulated in a Ten Commandments-like “No More!” list:

No extinction of other species.

No nuclear weapons or nuclear plants.

No manufacturing of carcinogenic or mutagenic substances.

No adulterants in food.

No discrimination by reason of sex, race, age, religion, or ethnic origin.

No private cars.

No advertiser-controlled or broadcast television. No limited-liability corporations.

No absentee ownership or control – one employee, one vote.

No growth in population (35–6).

(It should be noted that while the original Ten Commandments focus on individual behavior, the Ecotopian version applies to corporations and society as a whole. In 1990 Callenbach promulgated a more individually oriented “Earth’s Ten Commandments.”)

The Ecotopian blend of Native American and pagan cosmology inspires people to consider themselves intrinsic parts of nature and act accordingly. “If you have holy traditions, you will not have to fight over everything every day; people will know what needs to be done” (74). Appropriate behavior is also a catalyst for personal transformation: “She didn’t exactly worship trees . . . But she felt, more and more, that trees partook of some mysterious Earth spirit in which she too shared . . . others would notice a quiet radiance from her. ‘Here comes the tree witch!’ ” (117)

Christianity is also part of the emerging Ecotopian ethos. “There were even Survivalists who spoke with the fervor of evangelists. Their meetings even acquired a name: Vision Bringing, from the ancient idea that where there is no vision, the people perish” (128). Their deep ecology version of Original Sin is the introduction of agriculture, with crop plants as the Tree of Knowledge. Eventually, “they turned the Garden into a Factory” (129). Although the Survivalists do not believe a return to The Garden is possible, they preach conservation and restoration as part of a conscious human participation in a “circle of being” (130). The Garden remains, in the words of President Vera Allwen, “a standard, a measure of our actions now, a holy ground on which to stand. Amen” (131).

The biblical parable of the rich man and the poor man is similarly transformed.

Now the moral of this story is that the rich man, even though he was trying to be good to the Earth, actually did a great deal of damage to it. The poor man, who was too busy trying to survive to pay much attention to ecology, caused far less damage

. . . Blessed especially are the thrifty and resourceful . . . Blessed are the producers of their own necessities . . . And I say unto you, verily it is easier for a camel to pass

through the eye of a needle than for a rich man to enter into a world of ecological sanity (147–8).

Simple living and self-sufficiency are considered not only ecologically and economically necessary to survive, but sacred. The Ecotopians use Christian rhetoric in a wry manner when they spray pesticide on the Raussen Chemical Company's lawn party "‘2,4,5-T is perfectly safe.’ – Raussen. ‘Ye shall reap as ye sow.’ – God" (213).

Utopian and evangelical modes are synthesized in the end: "We speak for life, not death. We speak for joy, not anxiety. We speak for voluntarily joining together to create a new one, not for military tyranny to preserve an old one" (319). The Ecotopians consider their vision to be a beacon to enlighten others and guide their way.

Future Primitive: The New Ecotopias (1994) is a fascinating collection of science fiction and fantasy stories inspired by *Ecotopia*. Contributors include Kim Stanley Robinson, Ursula Le Guin, Robert Silverberg, and Pat Murphy. Callenbach's story, "Chocco," might be subtitled "Ecotopia Prevails." A group of Ecotopians had migrated to an ancient Indian pueblo shortly before the Earth's human population was nearly exterminated by global warming, drought, disease, and radiation. Nearly a thousand years in the future they live a simple but culturally and spiritually rich lifestyle, using only environmentally benign technologies. Two young men vie for the position of Memory Keeper by recounting the collapse of the short-lived "machine people" civilization and the lessons learned from it. This seems to be a worst-case scenario wherein even though most of humanity continued down the path of extinction, a small group managed to adapt and survive.

Originally published in English, *Ecotopia* has been translated into ten other languages and has sold nearly a million copies. It has been criticized for romanticizing Indians, and more recently for sexual profligacy, which seems anachronistic in the age of AIDS. The overall reaction, however, has been positive. Many of the environmental and technological processes such as mass recycling, organic gardening, solar power, electronic publishing, and teleconferencing have become part of everyday life. It has inspired many individuals to simplify their lifestyles and become environmental activists, ecofeminists, and/or deep ecologists. Some of the principles and tactics used by radical environmental organizations such as "EarthFirst!" and animal rights groups are based upon those depicted in *Ecotopia* and another visionary novel published the same year, Edward Abbey's *The Monkey Wrench Gang*. The platform of the Survivalist Party is reflected in those of the American and German Green parties. *Ecotopia* continues to offer both an inspiring vision and some practical ideas about how to create a sustainable, positive future.

Jim Dwyer

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Ecotopian Reflections

From an Ecotopian perspective, the Moloch of our age is industrial consumerist capitalism. To it are being sacrificed the energies and joys of billion-strong generations of people – human cash cows – not to mention uncountable trillions of other living beings. What Marx called the “cash nexus” and moderns call “the market” is everywhere triumphant – a corrosive force so powerful that it dissolves social bonds and subjects all natural phenomena to economic “rationality.” Everything and everybody has a price. The emotional valences that have held together communities, companies, governments, churches, even families, attenuate.

The market’s priestly class, economists, endlessly glorify the dominance of the market over all other considerations. In truly religious terms they may be heretics, but their doctrines are supported by all corporate media, by the leashed-dog representatives in our moneyhumbled legislatures, and of course by our oil-industrybred leaders and their corporate cronies. It is an era blatantly corrupt.

These are, as Buddhists would say, evil times – a new Dark Age. We stumble headlong toward unimaginable ecological catastrophes: probably not sudden ones (although to genetically nimble microbes, six billion human bodies constitute a tempting new nutrient pool) but a long dimming down of the beautiful productivity of the planet’s living systems – with especially painful consequences for the majority of the human species, who depend on them directly. Citizens of the “Northern” advanced countries currently enjoy a hectic prosperity. Our better-off classes are submerged in a consumer glut fueled by ruthless exploitation of the Earth’s resources and a massive transfer of wealth from the “South” – exacerbated by globalization and its one-sided “free trade.”

But our long-term fate, like that of the Earth’s billions of poor, is to live through mostly irreversible ecological decline: desertification and impoverishment of soils, extinction of species, shortages of fresh water, atmospheric and ocean warming with its biological disruptions and spread of diseases, atomization of human societies, desperate migration fluxes, wars.

In such a dismal situation, can we find consolation and guidance in a new kind of faith? The puzzle and the challenge of our era lie in this: can relentlessly anthropocentric institutions like religion and capitalism be transformed into sustainability-enhancing new forms, so that some kind of stable civilization can be preserved? The answer is almost certainly No. Yet it is worth trying to envision positive alternatives – some kind of ideological/ theological jujitsu. Can our tendency to imagine we are the center of the universe, which condemns us to disaster, be converted to an ecocen-

tric regard for all our fellow travelers on Spaceship Earth which is at the same time self-serving and ecology-preserving?

Ecotopians like myself like to think it is possible. We know that most religions are resourcefully syncretic: they draw not only from earlier religions but from new ideas of their time. Several growing nodes in contemporary religious thought and practice seem promising.

One is the old Christian idea of stewardship. “Dominion” ought not to mean unlimited exploitation, in the fullbore capitalist mode that Lynn White thought Christianity authorized, relentlessly externalizing ecological and social costs from humans and our corporations outward, but responsible administration. To modify Stewart Brand’s famous declaration in *Co-Evolution Quarterly* that “We are as gods, and might as well get good at it,” we should come to believe that “We are sensible managers, with an eye toward long-term survival of all Earth’s creatures,” (no reference available) and had better get good at *that*. We have tried enough of it to know that it is not easy. We think we are planning “smart growth” and still sprawl our suburbs over precious wild or agricultural lands.

Sometimes our devoted marsh or prairie restoration efforts go awry. We are unable or unwilling to forgo war, now unimaginably destructive to the environment as well as human beings. Sometimes we inadvertently introduce fatal diseases into precious ecosystems. We fail to notice the long-term effects of our massive (and highly subsidized) global transportation system. We know that the sheer burden of human numbers is one of the major pressures toward environmental destruction, yet we are unable to stem the tides of reproduction and migration. Nonetheless, “stewardship” remains a useful ideal. Most people, when they are goaded to think about it – and this should be an overriding goal of a worthwhile modern religion – agree that God or Allah or the Great Spirit did not create the world so that our species could despoil it. We are not here merely to work, buy, and die.

Second, religions make it possible to codify righteousness. Sometimes they pervert it – into religious wars, for example. Sometimes they commercialize it – with highliving hierarchies or TV preachers, indulgences, unaccounted-for “contributions.” But we all need help to achieve some coherence in making choices about what is right. There is, of course, a wide range in how different faiths manage this, as well as in theological doctrines. The “sky god” religions of the West traditionally vest righteousness somewhere up above, in a super-patriarch who wreaks vengeance on lawless or defiant people, authorizes the oppression of women, and lays down the rules – obviously not a model with enormously productive implications for an ecological sensitive and responsible, not to mention democratic, civilization.

Eastern (or ancient Greek) religions are more polymorphous, with many gods and goddesses, including some up to no good and dubious as models.

The primordial goddess religions focused on productivity (human, agricultural, and animal), sometimes sought to amplify it through sacrifice, and did not support warlike or hierarchical leaders; we do not really know what their rules were. The only successful

“modern” religion, Mormonism, combines a theology as bizarre as Catholicism’s with rules that enforce socially supportive practices almost equivalent to a welfare state’s. Modern Westerners (suspicious of other peoples’ mysticism and unaware of their own) tend to think of Buddhism, Daoism, and Confucianism as little more than glorified and codified common sense, but in these religions’ sense of humanity as an integral part of a universal order we find much that is not only amenable to ecological wisdom but eerily parallel to ecological science, and practices of meditation, austerity, and right livelihood that are ecologically beneficial.

Thus it seems to me not inconceivable that as we continue on our trail of ecological tears during the twentyfirst century we will build a new kind of religious synthesis out of the “good parts” of all these religious traditions. It will be a formidable task, because it goes up against the dynamic of global capitalism, with its endless resources for propaganda endeavoring to convince us that all is well, or even if it isn’t well, that there is no alternative. I do not myself possess faith in any ordinary religious sense, but I do have faith that in the long run – fifty years, a hundred years – people will see through the propaganda, pay attention to the real emotional and social needs that no consumerist balm can salve, and develop beliefs appropriate to our actual ecological station. What theological shape this evolution will take, I cannot really guess.

“Pagan”-Christian-Islamic-Buddhist? It is easier to imagine, as I tried to do in *Ecotopia* and *Ecotopia Emerging*, some of the practices that might be involved. It is worth remembering that, on the level of everyday life, the elaborate Talmudic laws were a response not only to theological notions but to the concrete living conditions of a desert people. The laws dealt with hygiene and thoughtful ritualized relations with animals, as well as a proper posture toward God. It is surely possible that we can develop a modern, ecologically sophisticated set of equally specific rules for sustainable living in a global, industrialized society. For instance, Rabbi Arthur Waskow, author of *Down-to-Earth Judaism*, is a leading thinker in the “ecokosher” movement. At his website Waskow asks, “Is it ecokosher to destroy great forests, to ignore insulating our houses, synagogues and nursing homes, to become addicted to automobiles?” As Waskow has emphasized in many writings, these are moral and religious questions, inseparable from ecological ones.

In the perspective of endless-choice consumerism, attempts at codification may tend to seem silly, just as the ancient injunctions not to eat pork or shellfish may once have sounded. “Eat lower on the food chain” is not going to win prizes for memorable commercials – but it happens to be excellent counsel ecologically and nutritionally, and my prediction is that by the end of the century it will be considered old-hat and unexceptionable advice. Two decades ago, after all, anybody who urged neighbors to recycle was considered a crank. Now almost everybody feels it is a civic duty, and does it. In the long run, doing things right pays off, people notice, and their ideas change. Only two decades ago, any American business or social gathering was smoke-filled; now smokers huddle furtively outside offices – and lung cancer rates are dropping. Sky-god

religions do not pay enough attention to such mundane things, but our future depends on them.

Third, a new religion will restore heart to our emotional lives. I do not mean merely that getting the cash nexus off our backs (like the pods in *Invasion of the Body Snatchers*) will feel good. Acknowledging and celebrating our actual place in the universe can be inspiring and humbling and comforting. It has always puzzled me that some people who conclude that God is Dead say it makes them feel lonely. Here they are, in the midst of a stupifying wealth of miraculously interdependent living beings – so various, lovely, mysterious, and often friendly. They partake in their cells of an ancient heritage of other living beings, going back billions of years. They are gifted with the capacity for glorious joys and pleasures. They have minds capable of incredible feats of thinking, feeling, understanding. They have the emotional potential to form deep and lasting bonds with friends, lovers, spouses, pets, favorite plants, and far beyond. As members of a particularly resourceful species, they have the opportunity to play a key role in the healthy unfolding of the universe. Our new religion must help us to grasp and value this astonishing and very unlonely status. It needs to incorporate the mysterious and wonderful findings of ecological science.

It needs to relate them to a righteous way of living. And if it does these things, since there is probably an ecology of religions too, it should prove adaptive and survive.

Ernest Callenbach

See also: Callenbach, Ernest; *Ecotopia*; *Ecotopia – The European Experience*.

Ecotopia – The European Experience

Ecotopia is an annual, two-week-long event in Europe that began in 1988 and is held in various European venues. Organized annually by European Youth For(est) Action, based in the Netherlands, Ecotopia seeks to create an active environmentally friendly community. Its purpose is to teach people how to live a sustainable, ecofriendly and low-energy lifestyle by demonstrating how to do so. There is a strong disillusionment with the current material and selfish world, with its reliance on technology and science to solve problems. At Ecotopia, people are given space and encouraged to explore other solutions through political, environmental, and spiritual knowledge and methods.

In 2001, Ecotopia was held in Bulgaria and the year before in Finland. In August 2002, Ecotopia was held in County Clare in Ireland. This was the first time Ecotopia had come to Ireland and it was hosted by *Gluaiseacht*, an all-Ireland environmental and social justice activist movement with which I participate. The site chosen was Bealkelly Wood, a native woodland forest, on the shores of Lough Derg, in Co. Clare.

All Ecotopias strive to create an environmentally sustainable and participatory community. In preparing our site we tried to create a gathering place that would use renewable energy sources and leave little impact on the local environment. We built temporary structures such as tepees and geodesic domes to house our kitchen and meeting areas. Water was provided to the kitchen and toilet areas from a natural spring on site. We built compost toilets, which are dry, use no chemicals, and convert all waste into usable compost.

We also established a vegan kitchen. Cooking was done on wood-fired braziers, where the wood was collected from the forest using sustainable woodland management methods taught to participants by the site owner, and three meals were provided each day. An organic vegetable garden provided many of the vegetable needs for the community.

Ecotopians gather in Morning Circle after breakfast to plan the activities of the day ahead, to volunteer for chores that are necessary for the community, and to discuss any difficulties that people are having. Decisions are made by consensus. Morning Circle begins with a short game to awake and energize people, followed by an introductory round where everyone states their name and their country of origin. The list of workshops is announced and facilitators make short descriptions. Then discussion follows, centering on issues arising from the previous day or any difficulties people are experiencing. This inclusive atmosphere created a sense of ownership and involvement

in Ecotopia, giving all participants the experience of living in a community with attendant rights and responsibilities, contrary to the greed and individualism of modern Western society.

The days at Ecotopia are filled with activities including many workshops on topics ranging from environmental awareness and alternative medicines, to making your own compost and ecological building. Workshops ranged over a broad spectrum of political, environmental and religious or spiritual issues. Political issues included: cultural diversity, peace activism, conflict resolution, the feminist critique of industrialism, UN peace-keeping activities, the World Summit on Sustainable Development. Environmental topics included seed saving, climate change, ecovillages and green burials. Religious topics explored Celtic spirituality, the Falon Gong movement, the Holy Wells project, and Tibetan religious rites. There were also practical workshops on alternative healing, making tinctures, reflexology, and daily Qi Gong and yoga sessions.

One of my favorites was a smudging ceremony. This American Indian cleansing ritual was taught to an Irish woman when she lived in Canada, protecting their tribal lands from deforestation by logging companies. It was a very special ceremony, where we cleansed ourselves using sage and reciting poetry.

Workshops were held on Ireland's unique legal history, Brehon law, where the history of Brehon law and its principles were explained. Ireland, known as the Land of Saints and Scholars, has a strong history of scholarship in the many monasteries established here. These scholars had access to large libraries of Latin texts and Bibles. From these sources, they fused their teachings into Ireland's unique law, known as the Brehon Laws. For example, in relation to theft, they modified Exodus 22:1-4 to include economically important animals such as horses and pigs (O'Corráin 1989: 13).

Everyone who attends Ecotopia is asked to travel there by sustainable energy-saving ways. To facilitate this, a bike tour is organized annually. Participants spend four weeks traveling cross-country to arrive at the Ecotopia site. This year's tour began in Dover in the South of England, traveled across Wales and the Irish Sea, and on to Ecotopia. Along the way, the tour group participated in Critical Mass actions, where cyclists block city streets to slow down traffic and highlight the need for sustainable transport methods.

As Ecotopians we hope that by practicing inclusive politics, by learning more about spirituality and our connectedness with the Earth, and by learning how to reduce the impact our lifestyles have on the planet, we will demonstrate a path toward an environmentally sustainable and socially just world.

Mags Liddy

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See also: Callenbach, Ernest; *Ecotopia*; Ecotopian Reflections.

Eden and other Gardens

Gardens of “Eden” (Hebrew, “delight”) have represented the womb of human creation and culture, the expectation of happiness and desire for endless joy on Earth, and nostalgia for a safe harbor, a place of protection against humankind’s fear of nature. Across time, earthly gardens of milk and honey have been re-visioned and imagined by prophets, saints, mystics and philosophers, and by painters, from Islamic miniaturists to Europeans like Hieronymous Bosch, Albrecht Durer or Jan Breugel the Elder. Peaceable kingdoms, where all sentient beings lie down together have been repeatedly depicted by artists such as Henri Rousseau or Edward Hicks.

Poets from Hesiod to Edmund Spenser and John Milton have written with yearning of a golden age when the Earth itself was paradise. Explorers, cartographers and conquerors have sought the original biblical garden in the Middle East, as well as utopias and paradises relocated on Pacific isles or in the Americas. Kings, landscapers and dreamers have replicated them in parks and elaborate gardens.

Many ancient cultures placed the first humans in a primordial paradise. After a long epic struggle during which the roiling cosmos divides and separates to shape Earth, the Sumerian myth of Enkidu (ca. 2000 B.C.E.) rewards its hero with a peaceable kingdom, free of disease and distress. But until Enkidu can obtain water, life in the garden cannot advance. When he finally secures fresh water from the sun god Utu, civilization is allowed to develop. Civilization itself has been considered a paradise, its cities victories over of the anarchic forces of nature.

The Tower of Babylon reached from Earth toward the cosmos to touch the gods. The great Chaladean king Nebuchadnezzar II (ca. 605–562 B.C.E.) built this tall tribute to the divine, based on an earlier ziggurat form, in colorfully glazed brick terraces that coiled toward the heavens. The terraces were fed by the Euphrates and planted with trees and every flower and herb then known to gardeners. Like the spires of a cathedral, the Hanging Gardens resembled an upside-down root, piercing the firmament, or a lightning rod, a medium pulling the divine earthward. At the top stood the shrine of the fertility god in the midst of a cedar grove, personifying all-important vegetal forces.

In 1976, artist Alan Saret created *Ghosthouse*, a ziggurat in Artpark in Lewiston, New York. Like the ancient tower, *Ghosthouse* “was intended,” art critic Lucy Lippard writes in *Overlay: Contemporary Art and the Art of Pre- history* (1983: 205), “as an ethereal emblem of a life ‘where,’ [Saret says] ‘technology bows to the spirit of the natural world from which it derives its materials and inspiration.’ ”

The poet Hesiod (eighth century B.C.E.) and the philosopher Plato (ca. 428–347 B.C.E.), among other ancient Greeks – including Homer (eighth century B.C.E.) and Pindar (518–438 B.C.E.) – envisioned lands where nature’s generosity was unbounded, overflowing with sweet waters and glorious fragrances, where suffering was absent and humankind lived in harmony with other animals. In his didactic poem, *Works and Days*, Hesiod imagines a golden age of “merry feasting beyond the reach of evils.” Human beings “dwelt in ease and peace” on lands rich with flocks “and loved by the blessed gods” (vv. 111–21).

Nevertheless, on Hesiod’s island “untouched by sorrow,” humans are not immortal (vv. 170–5). There is death, but it is soft and soporific, free of pain, merely as if one were overcome by soothing sleep.

Plato, in *The Statesman*, recalls “fruits in plenty from trees and other plants, furnished by the Earth without help from agriculture” (272A). The Roman poet Ovid (ca. 43 B.C.E.–17 C.E.), in *Metamorphoses*, also pictures a primordial history in which “the Earth herself without compulsion, untouched by hoe or plowshare, gave all things needful.” Humans were “content with food that came without seeking” (1.90–112).

Archaic Greeks did not build pleasure gardens as such. They set their temples and theatres in natural landscape, amid fantastic vistas, surrounded by myrtle, lilies, honeysuckle and ivy. This was Arcadia, the wild playground of gods, where they acted out their dramas with each other and with mortals. Elysium, the Land of the Dead, was situated below the Earth, where shades dwelled in absolute contentment amid luxuriant vegetation.

The unity between humankind and nature in these Elysian Fields, Happy Isles, and diverse golden ages comes of nature controlled, manageable on a human scale. In *Earthly Paradise and the Renaissance Epic*, A.B. Giamatti notes three sorts of earthly paradises: gardens (more or less governable manifestations of nature), pastoral settings (which nourish romantic love), and “wilderness” that fully accommodates human well-being, created for and about humans (1966: 34–48). Regardless of the theme, each vision of paradise offers freedom, bliss, and effortless, constant communication with the divine. Its beauty dominates the rest of the world; there are no storms, and despite a constant flow of water, no rain. Winter is nonexistent, as is overbearing heat in summer, and even the roses have no thorns.

For pre-Christian Celts, “civilized” pleasure gardens belonged to the *sidhe*, or faerie clans, whose homes were elaborate, luxurious affairs complete with jeweled orchards: Tir na n’Og, the lands of Eternal Youth or Ever-Summer; the Fortunate Isles; and later, in Christian Arthurian legend, Avalon and the Blessed Isles. These might be entered by various means, including magical music or the seduction of a mortal by a faerie. They could be encountered by stumbling on a stone or into a cave, bush or well, or they might be reached after death. Ancient Celts embraced both agricultural and nomadic existences, both offering in poetry and song high praise to wild lands. They enthusiastically embraced their animal natures, not necessarily amicably with other

creatures rendered toothless and trustworthy, but able themselves to transform into ferocious, untamed beasts.

The 1953 Revised Standard Version of the Bible (Gen. 2:8–15) describes a garden filled with bounty and replete with “every tree that is pleasant to the sight and good for food,” as well as a tree of life and another of knowledge of good and evil. Human dominion over nature is immediately stated (Gen. 1:26), then reiterated when the first man, Adam (Hebrew, “Earth”), is given the task of naming each and every beast and plant (Gen. 2:19, 20). In Eden, there are no “brute beasts.” Elsewhere, in origin myths worldwide, animals are responsible for spiritual awakening and frequently for our creation. They are often siblings to humans. A mark of holiness from ancient Greece to St. Francis of Assisi was the ability to charm the animals. Here again we find the relentless human longing to civilize the wild, a romanticized relationship with animals, whereby they are reduced to pets. However, some theologians consider this charming of beasts a metaphor for taming our own undomesticated natures and feral behavior.

Ironically, it was that injurious behavior toward nature which exacerbated our craving for an earthly paradise.

The biblical Garden of Eden is a place of extreme fertility and perpetual springtime. Four rivers border the garden, for water is the key element to all earthly paradise, as indeed it is to all life. In desert lands, water is a precious commodity and thus the ultimate source of exhilaration. That Adam is placed in the garden “to till it and keep it” (Gen. 2:15) indicates humankind’s obligation to stewardship – a point made by some environmentalists, although others dismiss the notion as patronizing – and also makes agriculture, the cultivation of plants, implicit. Having observed the territorialism and destruction inherent in human survival, not to speak of agriculture, the fifth-century Gaulish poet Claudius Marius Victor posited in *Alethia* that Adam and Eve simply had no need for food, but lived “like angels” on air and ripe fruits that dropped from the trees.

(Others, of course, have looked at Eden as a foraging paradise, and the Fall as the historic point where agriculture begins.)

In Eden, too, there is gold, bdellium and onyx (Gen. 1:12), the first traces that this place of relentless goodness, isolated from the rest of God’s violent creation, carries within it resources precious to human trade and material wealth. Thus, inevitable corruption – with dissension and war – is built into the scene, notwithstanding temptation at the tree of knowledge of good and evil and the Fall.

In a Ngombe origin myth of Africa, human beings are also first situated in a garden, which they must till, having been ejected from the idle realm of the gods for complaining and talking too much. The mortals’ very appearance on Earth introduces or motivates ambivalence and other qualities that come of being human. Unlike the Judeo-Christian Fall, wherein the Earth and human life upon it, having come to know evil, are punished with hardship, toil and toxicity of every kind, the Ngombe tale accepts from the beginning that malevolence in the scramble to survive is simply part of

our legacy. The Earth is nevertheless beautiful and fecund, and wild nature innocent of malice. Eden reappears throughout the Old Testament. In Isaiah (51:3), God will turn Zion's desert into a garden like that of Eden. Ezekiel's prophecy recollects the garden, but adds "carnelian, chrysolite, and moonstone, beryl, onyx, and jasper, sapphire, turquoise, and emerald . . ." (Ezek. 28:12–14). The image conjures a stage-setting, glittering gems whose shadow is acquisitiveness, for rocks are attractive and useful to humans only when polished – "civilized" – from their rough state. Here, in Ezekiel's Eden, revisited with its lawns of jewels, is garden design, whose architectural features are further explored in the New Testament, in a new, cordoned, messianic Jerusalem, a city resembling a garden, shining "like jasper, clear as crystal," its walls adorned with emeralds, topazes and myriad other precious stones (Rev. 21:11–22).

In nearly every major religious drama, gardens appear to describe abundance, fertility, renewal and rebirth: "Now in the place where he was crucified, there was a garden" (Jn. 19:41).

Although we use the word to illustrate a place of limitless perfection, whether here or in the Otherworld, "paradise" comes from the Persian, *pairidaeza*, meaning simply "park" or an orchard surrounded by a wall. Paradise is the *hortus conclusus*, the enclosed or cloister garden. In Islam's holy book, the Qur'an, the Fall in the earthly Garden of Eden is covered quickly in a few brief verses (Surahs I, VII, XX); both humans are equally culpable and at each reference they are readily forgiven so long as they follow God's guidance and do "not go astray/ neither shall they be unprosperous" (Surah XX).

The Qur'an makes nine additional mentions of the Garden of Eden (Surahs IX, XIII, XVIII, XIX, XX, XXXV, XXXVIII, LXI, XCVIII), all describing it as the garden in *jannah*, heaven, the reward for a life spent in righteousness, where rivers flow and water is abundant. Pools in ancient Persia and Egypt were oases, earthly equivalents to paradise, and so became the garden's focal point. Egyptian garden ponds were channels used for irrigation as well as pleasure and refreshment. Rather than housewith-garden, wealthy Egyptians had gardens with houses in them. Kiosks or pavilions were built around the pool, the central feature of Persian gardens, where indoor and outdoor spaces were so artfully merged, that the division between them was nearly invisible. The pool is always the heart of the so-called "Islamic" garden.

In the Qur'an and various *Hadith* traditions (sayings of the Prophet Muhammad), Muslims are enjoined to appreciate without exception all God's creation and to grow gardens on Earth.

The paradisaical garden is outside time and space. Medieval European monastic gardens were dedicated frequently to the Virgin Mary, planted as her paradise on Earth. Their intention was to direct the soul to God. Renaissance attempts to restore or replicate Eden were meant on the other hand to exalt their owners. These artificial paradises, spanning hundreds of acres, were triumphs of technology over nature, built with grottoes, labyrinths and mazes, filled with statuary and carefully planted "forests."

Some even featured animals, the dangerous ones “peaceably” displayed in cages, while the less threatening, like deer, were free to wander, and be hunted.

In 1533, the first botanical garden was established at Venice, followed throughout the sixteenth century by gardens in Padua, Pisa, Paris and Leipzig, in the hope of recovering or at least mimicking the lost paradise. These places – with artfully placed fountains – became repositories for collections of the rarest plants found in all the “lands of discovery,” imagined to have been in Eden itself. As we have destroyed species, botanic gardens – and zoos – while no longer serving as manifestations of our melancholy for the garden of delight, have become useful in some kinds of preservation of plants and animals that we have rendered extinct or nearly so.

Around the world there are fabulous “gardens of revelation,” as John Beardsley calls them in his book, *Gardens of Revelation: Environments by Visionary Artists*. From Simon Rodia’s famous Watts Tower in Los Angeles to “Carhenge” in Nebraska to Nek Chand Saini’s rock garden of carved and mosaic Buddhas and Bodhisattvas in Chandigarh, India, to Reverend Howard Finster’s “Paradise Garden” and his “Plant Farm Museum” in Alabama and Georgia to “La Freneuse” created by Robert Tatin in France to extensive “Grottoes of the Holy Book” built by Roman Catholic priest Paul Mathias Dobberstein in Iowa and lay brother Joel Zoetl in Alabama, and many more, these folk-art landscapes are personal investigations of Edenic gardens, devotional and nostalgic acts of art making and construction in tribute to creation, in search of the divine (by the very act of making them).

Numerous contemporary artists, beginning in the 1970s, have created art on and sensitive to a site in nature, which, Lippard writes, seems to have been a reaction against disengaged art objects that can be moved from place to place, but rarely “belong” to any place . . . much “ecological art” reflects a . . . need to “return.” At the same time, our social restlessness demands a sense of movement. This gives rise to impermanence as a sculptural strategy well-suited to natural environments, allowing many different objects to enjoy a brief but relatively unobtrusive public existence (1983: 197).

“Belonging” seems to be a key to the wistful yearning for earthly paradise. The garden is a sanctuary *of* nature against nature’s terrifying power. Yet for eons, prophets have withdrawn “to the voice that cries in the wilderness,” as in Isaiah. Among the many wild men, saints, and hermits of Ireland, the twelfth-century recluse Suibne recited, “. . . Though you think sweet / your students’ gentle talk in yonder church / sweeter, I think, the splendid talking of the wolves in Glenn mBolcáin” (in Jackson 1951: 74).

Revelation and revolution begin in the true wilderness: countless heroes of mythology, numberless ascetics wandering homeless, Jesus in the desert, Muhammad in a cave on Mount Hira. The rebel flees into wilderness – into the divine, to god beyond the gods – and returns to civilization to claim righteousness and justice.

Jennifer Heath

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Eden's Ecology

Images of paradise reveal our muddled feelings about our place in nature: our guilty pride, our snug discomfort. By imagining a time or place of perfect harmony between humans and nature, they indict the discord we feel here and now.

The nineteenth-century American farming village, the medieval city, the desert pueblo, the allegedly woman-centered culture of Neolithic Europe, the hunter-gatherer band, the free-love revels of pygmy chimps – each of these has been seized upon as a lost paradise, as the point after which our lineage took a wrong turn.

Is it possible to get beyond this parlor game of “Pick Your Eden” – to make sense both of the near-universality of the paradise myth and of its maddening tendency to recede into an ever-mistier past? Let us begin by setting the myth of an earthly paradise against the broadest possible backdrop: not just humankind's history, but that of life on Earth.

We humans tend to think of ourselves, pridefully or guiltily, as unique in our re-making of the globe. But we have not remade it single-handedly: we have had the help of annual grasses, quadrupeds, perennial grasses (notably grains), and a host of other organisms. What is more, our various alliances are merely the latest of many examples, over the course of Earth's history, of conglomerates of species that conquered the Earth – from the various bacteria that united to form the eukaryotic cell to the axis of fur, feathers, flowers, and probosces that created the Cenozoic. Seen from this point of view, our own victories seem a shade less grand and a few degrees less shameful.

That is not to say they are harmless. For instance, by allying ourselves with annual grasses – which thrive in disturbed soil, and put their energy into seeds rather than roots – we have thrown into reverse a process of soil formation that had been going on, in fits and starts, for nearly half a billion years.

As the edge of a new wave of human-led change moves across the Earth, it first “improves” and then ruins each place it passes through. To make sense of these changes, we make up stories and assign names: Eden, Arcadia, the Golden Age. Though we may not use these names every day, the stories are always buzzing in the idle corners of our minds.

As our subject here is Eden, we must now move from Earth history to a narrower focus: the myths and ecologies of the Ancient Near East. In that time and place, two ways of looking at the world arose that are with us yet. For one, the heart of the world is wilderness. For the other, the world revolves around the city, the work of human hands.

The two great worldviews I am speaking of belonged to two kinds of civilization: those of the hilly uplands and those of the great river valleys. The first kind is best represented by the Canaanites, the second by the Mesopotamians.

The peoples of the hills, narrow valleys, and narrow coastal plains made their living from small-scale mixed husbandry. This was a refined descendent of the earliest farming known, which had developed in those same hills. The peoples of the great river valleys were more ambitious. They practiced large-scale, irrigated agriculture that was not so different, in essence, from what large corporations do throughout the world today.

Tied to these different ways of living on the land were different economies, different social structures, different political forms – and different world-poles.

The world-pole is the axis on which the world turns. It is the heart of the world, the source of all life. Nearly every people has a world-pole, but they do not all agree on its shape. For the Canaanites, the world-pole was the Mountain: the wild place sacred to the gods, the font of life-giving water. For the Mesopotamians, it was the Tower: the ziggurat that rose in the midst of the city.

Both sides were right, of course. Both wilderness and civilization are sources of life, of wealth, of weal. The question is whether one looks to the proximate source or the ultimate source. Looking to the proximate source is useful in many ways, but in the long run it is dangerous. Convinced that our well-being springs from our own cleverness in reshaping the world around us, we are tempted to reshape more and more of it, extending the reach of the Tower into every corner of the world. And that is biting off more than we can chew. An apposite instance is the irrigation that both nourished successive Mesopotamian civilizations and, through salinization of the soil, contributed to their downfall; but history is studded with hundreds of others.

For the myth of the Mountain is rooted in ecological fact. Manmade landscapes survive only at the sufferance of the wildness around them, or the wildness that remains in them. The flow of energy, water, nutrients, and genetic information; the maintenance of temperature and the mix of atmospheric gases within narrow limits; the fertility of the soil: all these are achieved by wild nature in ways we do not fully understand. As we do not know how the job is done, we cannot do it ourselves. Even if we could, we would end up spending most of our waking hours working for something that we used to get for free.

In other words, humans and their allies are able to conquer the world, but they are not able to run it all by themselves. If the waves of human advance go too far, or too fast, or run too deep, they may finally bring about their own undoing.

Where does the story of Eden fit in this framework?

The more we know about the Israelites, the clearer it is that they were Canaanite hill farmers who practiced a sophisticated and fairly sustainable mixed husbandry of grains, vines, livestock, and trees yielding fruit, nuts, and oil. They were neither desert nomads mistrustful of nature, nor proud hydraulic despots lording it over nature. They were good farmers living frugally on the margins and using the best stewardship they

knew. They were not so different, perhaps, from other peasants of the Mediterranean basin, past and present.

Being Canaanites, the children of Israel might be expected to have some notion of a World Mountain. So they did. It took several forms, but foremost among them was Eden.

Although the Bible never specifies Eden's elevation, it does make it the source of four great rivers that flow to the ends of the Earth. Armed with the knowledge that water does not flow uphill, scholars from Philo's time to the present have placed Eden in the mountains of Armenia, or other mountains vaguely north of Mesopotamia.

As the source of water, and therefore life, for the known world, Eden is a classic world-pole. Classically, too, it crowns its Mountain with a Tree of Life – a tree which, according to the Midrash, “spread over all living things.

. . . All the primeval waters branched out in streams under it” (*B'reishit Rabbah* 15.6). To walk around its trunk would take a man five hundred years.

Eden is the source of life in another sense: it is the navel of the world, the first home of humans and, arguably, of other creatures as well. It is even a home of sorts for God, who walks in the garden in the cool of the day. But while God and plants and animals get to stay in Eden, humans are ejected.

Modern scholars tend to picture Eden as a formal, irrigated garden in the Mesopotamian style. But while some of the sources of the Eden story may have had that shape, others were a good deal wilder and woollier. In the Mountain of God, we have a vision of paradise as a forested peak – the summa and last resort of wildness in a region chock-a-block with cities, fields, canals, herds, and armies. While the Hebrew word *gan* usually means an enclosed vegetable garden or fruit orchard, the phrase *gan Elohim*, “garden of God,” seems to be meant as a kind of analogy: just as we might call the prairie “God's lawn.”

In passages from Ezekiel (28:12–16; 31:1–18) and Isaiah (14:9–15) – in some of which Eden is explicitly called “the mountain of God” – scholars have glimpsed the glittering shreds of a lost Hebrew epic of Eden, having to do with an angel or god who rebelled against YHWH and was cast down to Earth or into the pit. If even gods and angels were cast out of Eden, what chance did humans have of lasting out their term?

Such wild places were not paradises for humans, but for gods. They were not meant for humans at all.

The cosmic center is not always thought of as a nice place for humans to live in or even to visit. Yet it is the source of life. “All the world is watered with the dregs of Eden,” the Talmud says (*Ta'anit* 10a); and the dregs are as much as it can take. We cannot see God's face and live.

As soon as we become fully human, we begin to “fill the Earth and subdue it.” We begin to destroy Eden, and thereby expel ourselves. Only by keeping our distance from some of the wilderness that remains can we keep from fouling the wellspring of our own life. The fiery sword (whatever it is: our awe of wilderness, our fear of its dangers, our dismay in the face of its grueling beauty) is the best friend we have.

The myth of the Fall, like that of the World Mountain, is based on ecological fact. We began to change our surroundings in a drastic way as soon as we mastered fire, but it was the second wave – the alliance with annual grasses – that sealed our self-expulsion. We stripped forests, troubled the soil, uprooted whole ecosystems. “Cursed is the ground for thy sake . . . In the sweat of thy brow shalt thou eat bread . . .” (Gen. 3:17–19). Indeed, the culture of barley and wheat – first for beer and toasted seedheads, then for bread – did apparently begin in the uplands of the Near East, some ten thousand years ago.

What was the forbidden fruit? In the Midrash (*Bereshit Rabbah* 15:7), a rabbi of the second century gives a remarkable answer: “Rabbi Meir said: It was wheat, for when a person lacks knowledge people say, ‘That man has never eaten bread of wheat.’ ”

The Hebrew phrase usually translated, “Cursed is the ground for thy sake” can, with a bit of license, be read to mean, “Cursed is the ground by thy passing over.” As the waves of human expansion move across the Earth, Eden is trampled underfoot.

Adam was put in the garden “to work it and protect it” (Gen. 2:15). The two jobs are complementary, but they are also contradictory. From what are we to protect Eden, if not from our own work? The more we work the Earth – by which I mean not only tilling but the whole spectrum of human meddling, from setting grass fires to splitting the atom – the more we are obliged to protect it. If we fail to do either, we fail to be fully human.

What light might such an understanding of Eden shed on the present environmental debate?

Two schools of thought dominate now that debate: I call them the Planet Fetishers and the Planet Managers. The Fetishers (including many deep ecologists and other radicals, as well as some old-fashioned romantics) dream of returning to Eden, restoring a state of harmony in which wilderness reclaims the planet and man is lost in the foliage, a smart but self-effacing ape. The Managers dream of a manmade paradise, an Earth managed by wise humans in its own best interest and, by happy chance, humankind’s as well. The Fetishers want to get past the fiery sword that guards Eden by crawling humbly under; the Managers, by vaulting over. Neither has learned the lesson of the Mountain.

At present, wilderness is so worn down and battered that there is no escaping the need to manage it. The best we can do is to follow this rule: so manage nature as to minimize the need to manage nature. To begin with, that means stepping back and giving wilderness a chance to breathe, to dust itself off, to get back on its feet.

If the first lesson of Genesis is that we cannot live in Eden, there may be some comfort in the second lesson: we can yet enjoy Eden’s blessings, if only we let them flow. That is a big if, however. The four rivers of Eden are symbols of the flow of wildness. Dam that flow, and the man-made world must dry up and blow away; and so, at last, must wilderness itself. Even the biggest wilderness preserves are not big enough if migration, gene flow, and the circulation of energy and nutrients are blocked beyond their borders by highways, dams, development, ranchers’ fences, the dredging

of wetlands, and the poisoning of waterways. (I do not mean to ignore the problem of biological invasion. At present we are blocking flow locally and encouraging it globally, which is exactly wrong.) Wilderness is the heart of the world, but a heart is not much good without arteries and capillaries that touch every cell of civilization with wildness.

This touching is more than mere contiguity. It involves learning from Eden – an activity that goes by such non-mythic names as agroecology, biomimesis, and industrial ecology.

Thus the dream of Eden remains alive, and instructive. The dream of living “in harmony” with nature, as animals do, is dangerous only if we forget that it is a dream. It is dangerous if we pretend that we are just animals; or that animals live in anything that one can seriously call harmony with other animals, or with plants, fungi, or microbes. But if we strive to decipher what this thing we want to call harmony really is, we can try to reproduce it – as far as humanly possible – in the humanized landscape.

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See also: Creation Myths of the Ancient World; Creation Story in the Hebrew Bible; Creation's Fate in the New Testament; Deep Ecology; Eden and other Gardens; Fall, The; Gardening and Nature Spirituality; Gardens in Islam; Japanese Gardens; Judaism (various); Mesopotamia – Ancient to 2000 B.C.E.; Restoring Eden.

Egypt – Ancient

The civilization of ancient Egypt provides a salient example of the ways in which attitudes to nature became embodied in religion, and of the effects of religion on treatment of the natural environment. Egypt's environment is dominated by the Sahara and the grand Nile River more than by the Mediterranean Sea that abuts its northern coast. The fertility of the land and the growth of crops depended on the Nile's annual flood, since rain was rare. The gods and goddesses of Egypt in large measure represented this overriding environmental concern. With unclouded sky as the rule, the orderly movements of the heavens were evident. Re, the Sun God, ascended each morning and sailed across the sky to his western harbor, the movement of his path to north and south showing the year's passage. Stars marked hours and seasons; when Sothis (Venus), star of the goddess Isis, rose just before the sun, it announced that flood time was at hand. The sky goddess Nut arched her body above her fertile consort, the male Earth god Geb, in perfect balance. When the stars, the children of Nut, showed the proper season, then Geb's children, the plants, bore fruit. This is a reversal of the identifications common in other societies, where Earth is feminine and Sky masculine. But the principle in Egyptian myth was a balance of sexual roles, not the dominance of either. Deities often occurred as pairs of male and female, like Geb and Nut. Sometimes pairs showed contrasting sides of the feminine, such as kind Hathor (nurturing warmth) and angry Sekhmet (withering heat), or aspects of the masculine, as, for example, Horus, hero-god of the black crop land, and his counterpart, the red desert-god Set, enemies whose battles ended, giving way to peaceful co-rule.

The land and its aspects were sacred, and therefore gods. Osiris, a preeminent god, embodied among other things vegetation and agriculture. Every stage of the agricultural year repeated an event in the life of Osiris, whose birth, growth, death, dismemberment, burial, and resurrection became planting, harvest, fallow, and new growth. Hapi was the god of the life-giving Nile. Though male, he was portrayed with breasts to show his power to nurture. He was called "father of the gods" because they depended on the Nile for offerings from humans, or for their very existence. He suckled Osiris and helped to resurrect him, a myth representing the reliance of vegetation on the Nile flood. When the flood came at an appropriate level, people rejoiced at the advent of Hapi.

The round of the agricultural year was marked by festivals honoring the recurrence of natural events. Originated by villagers in Neolithic times, these celebrations were formalized in the historical period. Farmers cared for the Earth and carried on a long-established tradition. At the harvest festival of Min-Amun in Thebes, Pharaoh cut the

first sheaf of wheat and a bull was led in procession. So the actions of the Egyptians in agricultural ritual reflected their sacred vision of the Earth.

Many aspects of the landscape, along with the river, were considered sacred. People planted trees around or adjacent to a pool, making sacred groves that were early places of worship. Even small villages possessed such locales where they observed religious occasions. Priests and their servants planted trees such as *ished* and palm in temple gardens beside sacred lakes. Ramses III (ca. 1184– 1153 B.C.E.) gave 514 gardens to various temples, which would have been considered incomplete without them. Trees were worshipped, and deities were shown in tree form. Isis, for example, was symbolized by a tree with breasts from which Pharaoh received milk. Mortuary paintings depicted the tree of life, with the deceased bowing low before it or drinking from a spring of water at its base. Planting a tree was considered to be a good work, aiding the soul on its progress toward life in the next world. Care was taken to plant and water trees near tombs and mortuary temples like the terraced monument of Hatshepsut at Deir el-Bahri.

Many animals were sacred to the Egyptians. Certain species were regarded as visible manifestations of deity: the jackal of Anubis, the ibis or baboon of Thoth, the hawk of Horus, the lioness of Sekhmet, the crocodile of Sobek, and others too numerous to mention. Groups of animals were often kept in temple precincts, and when they died were mummified and accorded an honorable burial. Tens of thousands of these mummies containing Horus hawks, Thoth ibises, and Bastet cats have been found in underground vaults. Worship accorded to animals did not, however, prevent wild animals from being hunted. Amenhotep III boasted that he had killed more than a hundred lions with his own hands, and still less did it save them from the effects of habitat destruction.

The numbers of birds, particularly waterfowl, were astonishing in Egypt, but as centuries passed their abundance was reduced. Nobles enjoyed bird hunting in marshes, but there were fewer marshes as drainage proceeded. Canals were dredged to draw off water and open land to cultivation, leaving fewer wetlands that birds could use for nesting and feeding. Ramses III gave 426,395 waterfowl to temples, including a bequest of 9350 per year to the Temple of Amun at Thebes. Some of these became part of temple flocks, while others were prepared as offerings. Thus bird life was diminished by the Egyptians. A similar fate afflicted the fish of the river, although some were protected; even Pharaoh was forbidden to fish in sacred temple lakes.

The sciences of sacred geometry, sacred astronomy, and sacred records (hieroglyphics) were marshaled to assure the dependability of relationship to the environment. Geometry, which was necessary to reestablish inviolable boundaries between fields when markers had been swept away in the flood, was not a mundane skill developed through trial and error, but a hallowed occupation that descended from gods such as Thoth and was entrusted to trained scribes. Although all Earth was holy, certain places had a more sacred character, and they and their produce were often holdings of

temples, which were located according to geomancy and oriented to important points in the revolutions of the sun and stars.

Irrigation was a form of sacred technology shown by art to be an activity of the Pharaoh and the gods themselves. Indeed, canal building was believed to be a major occupation of those in the blessed world beyond death. Laborers dredged channels, built earthen dams, constructed dikes and basins, and used buckets to raise water. These activities were considered to be parts of a holy occupation.

As centuries passed, technological inventions were made and incorporated into the sacred system of environmental regulation. Nilometers (instruments used to measure the height of the Nile river) inscribed with religious symbols and attended by special priest-scribes were installed near the First Cataract and elsewhere to help predict the extent of the annual flood.

The Egyptians' joy in their environment can be sensed in pictures of human activities such as plowing, hunting, and building. Active as these portrayals are, they show little realization that nature was being altered in the process. Egyptian art has little feeling of human progress or decay, nor of the conquest or destruction of nature. For them, the Earth was unchanging. Time ran in cycles, not along an inexorable straight line. But changes, some of them destructive, were nonetheless occurring. Dangers to sustainability included practices that produced salinization, deforestation, overdevelopment, and habitat destruction.

Environmentally, Egypt at the end of the ancient period was much changed, but still productive and full of life. The Nile still brought its annual floods, with sufficient water and sediment in most years to guarantee good crops. Grain, other foodstuffs, and crops such as flax for linen and papyrus for paper, were abundant enough to meet

Egypt's needs and to be exported as well. This is at least in part due to the attitude of reverence for the land and its denizens that was part of the Egyptian religious view. The principles of sacred space guided the division of land and the regulation of irrigation. Egypt was not lacking in environmental problems such as gradual loss of natural vegetation and wildlife, but in every case where the influence of the realization of the sacredness of the Earth and living creatures was felt, that influence helped to mitigate damage and to preserve life and the natural environment itself.

Egypt was in most respects self-sufficient, so that the Egyptians were content with their land. Some modern writers have interpreted this contentment as an attitude that was limited and complacent. That this was not the case is clear from the vigorous way in which Egyptians pursued the timber trade abroad in order to obtain a necessary resource in which they were not well supplied at home. Cedar wood from Mount Lebanon was called "a wood which [the God] (Amun-Re) loves" (Wilson 1956: 183), so that journeys undertaken to secure it were believed to please the god. At home as well, they understood their relationships to the land to be governed by the gods and sacred principles that were derived from them and from Ma'at, the universal order that controlled the Pharaoh and the gods themselves.

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See also: Egypt – Pre-Islamic; Greece – Classical; Mesopotamia – Ancient to 2000 B.C.E.; Roman Natural Religion; Roman Religion and Empire.

Egypt – Pre-Islamic

There is a clear correlation between landscape, nature and religion in pre-Islamic Egypt. Natural landmarks (hills, lakes, marshes, the Nile itself) could become objects of veneration, and such idealized but recognizable landscapes were portrayed as elements of the afterlife. Throughout the pharaonic phase of society in the Nile Valley (3000–330 B.C.E., excluding the Hellenistic and Roman periods), there was a clear and close association between the natural environment and the Egyptians' response to it. In its iconography, language, and use of social space, ancient Egyptian society acknowledged and venerated its landscape and even its towns as divine or semi-divine beings. Religious buildings were not only prominent architectural features in their own right, but were purposely situated across the landscape in such a way as to manage and exploit intervisibilities and to present themselves as closed or open (the most conspicuous example being the pyramids, not only as solar embodiments but also as man-made mountains, located within sight of Heliopolis, the centre of the sun cult). Similarly, the vegetal and animal worlds were evidently observed and explained in religious terms, though why certain regions emerged as being particularly associated with certain totemic objects and animalistic icons remains unclear.

Overfamiliarity with the map of Egypt has perhaps dulled our perception of just how strange a social context it provides: by 3000 B.C.E., when Egypt had developed politically into the world's first territorial state, it was essentially a hyper-arid desert with a river flowing through it, and the Nile Valley allowed only a ribbon-like pattern of settlement in a floodplain that is rarely more than 25 km across. Significantly, the Nile Delta, which differed from the Valley in several important respects, with its fan of distributary branches spreading to a breadth of

200 km along the Mediterranean, its relatively high coastal rainfall, and its land routes to North Africa and the Levant, was probably always a more ethnically mixed region; however, the relative lack of archeological investigation in the Delta, combined with the normative effects of a powerful state religious apparatus, combine to give the general impression that inhabitants of the Delta shared a single belief system.

The personification and deification of the elements and of the climate itself reflects some of the oddness of the Egyptian situation: while there were certainly sun, storm and wind deities, in contrast to the usual belief pattern around the eastern Mediterranean rim, the sky (Nut) is female and the Earth (Geb) male. Their relationship is conventionally shown as a post-coital separation in which Geb collapses exhausted beneath Nut, who arches over him with arms and legs outstretched, representing the four supports of heaven. There is thus a strongly architectural quality to this formal

conception of the structure of the universe: it has a roof, supports, and floor, and is “filled” by air (Shu). Celestial bodies (sun, moon, stars and constellations) were also personalized and incorporated in the regional cosmogonies.

The most important climatic event of the agricultural year in this overwhelmingly agricultural society – the annual flood, fed during late summer by monsoonal rains over the Ethiopian highlands and the swelling of the Blue Nile – was deified as Hapi, in distinction from the “normal” river (iteru). Within the state ideological system, the country’s economic vulnerability is reflected by the fact that an ideal flood event and a successful harvest were notionally the responsibility of the king, although many major and minor deities (Osiris; Ernutet the snake goddess; a cohort of androgynous “fecundity figures”) were also associated with the harvest at the state and household levels. Several major towns along the banks of the Nile competed or cooperated as theoretical “sources” of the river: Aswan, as the first (i.e., most southerly) town of Egypt proper; Memphis, as the notional source of the delta; and, oddly, Thebes, where the claim seems to rest on the town’s importance as the dynastic center in the New Kingdom. It is inescapable that the environmental conditions of the Nile inundation also directly fed the development of a creation mythology in which order and society in the form of dry land emerges from the waters of chaos, with a complex set of cultic references that dictated the architectural schemes of Egyptian temples throughout the pharaonic and even into the Ptolemaic and Roman periods, with the main ecological zones of the Nile floodplain being represented by the pylons, courtyards and columned halls, and even the white enclosure walls as simulacra of the desert cliffs defining the valley itself.

The sharp and constant division between the cultivated/populated/valley and the barren/depopulated/desert zones was recognized in ancient Egyptian terminology: “Black land” (Kemet) and “Red land” (Desheret) respectively, each of which was accorded its own assemblage of cult figures and its own exclusive topography, flora and fauna. Interestingly, the conservative nature of Egyptian iconography meant that images of landscapes were probably still being produced long after the environmental conditions for them had disappeared. The black topsoil of the Nile Valley was not surprisingly associated with fertility, birth and regeneration (and later on with magical, spontaneous generation): “Osiris beds” were mummiform miniature fields or gardens in which “crops” were planted in soil; “birth bricks” of Nile clay were a common adjunct to childbirth rituals, and it has been suggested that mudbrick remained a preferred building material for tombs, long after the introduction of stone, for this reason as well. By contrast the vast expanse of the Sahara desert on both sides of the river valley (except for the Red Sea coast and occasional pockets of settlement in the western Oases) was shunned and feared as a hostile acultural environment, into which the Egyptians only ventured at need and even then delegated the organization of travel to nomadic-pastoralist groups with local knowledge. Significantly, the cult of Amun, the dominant state cult during the New Kingdom, became established almost by default in some of

the outposts of Egyptian political control such as Nubia and the eastern and western deserts.

The geography of the Nile Valley dictates however that south of Cairo the desert escarpments are always visible (or were, before modern high-rise vegetation and building and air pollution). Within this essentially linear framework, desert-edge features as viewed from the valley floor assumed a particular importance, and it is clear that at intervals certain conspicuous localities became singularities associated with particular cults. A striking example of this is the Theban mountain – an impressive sheer cliff facing the main east-bank town – which had its own deity, the “Mistress of the Mountain” and was deliberately selected, perhaps because of the resemblance to an animal of the natural rock form, as the backdrop for some of the elite and royal mortuary temples of the eleventh and eighteenth dynasties; the nearby Qurn (peak) with its distinctive pyramidal shape formed a similarly evocative reference for others. Local prominent landscapes could often transcend the conventional need for cemeteries to be on the west side of the valley, as at the sites of Amarna, Bersha and Beni Hassan, where the imposing escarpments containing most of the elite burials are on the east. At Memphis, too, the most numerous (though not necessarily the most prestigious) burials are on the east bank until the Third Dynasty, with its establishment and promotion of the solar religion and the building of the first pyramids.

Other sites, notably Amarna, Abydos, and Memphis, show that equal attention was paid to local natural horizons. At Amarna, the only example available of a major archeologically recovered Egyptian town, the street plan and the distribution of social and sacred space have two main determinants: the river and the bankside road running parallel to it, and the eastern horizon containing the elite and royal tombs. In this instance the horizontal view is especially important because of the association of the king’s burial, located beneath the sunrise, with the new, royally sponsored solar religion of the Aten. At the preand proto-dynastic royal cemetery of Abydos, the arrangement of elite and royal tombs and funerary enclosures, and even the internal provisions of the tombs themselves, depend on the processional routes taken and the lines of visibility between the valley and the major wadi (desert valley) system behind the necropolis. At Memphis the western horizon was characterized as *tehen* (the peak) and was particularly associated with the city’s mortuary cults. The Memphite region is also singled out by the pyramid fields of the Old and Middle Kingdoms in which the western horizon, noticeably lower in elevation than the eastern, is redeemed by the construction of these artificial mountains (although the high-quality facing stone for them still came from the eastern hills).

At the other end of the country, the towns of Aswan at the first cataract and Semna at the second not only had distinctive landscapes but at different times were regarded as national frontiers. Local manifestations of deities might also be marked out by the produce or natural resources for which the region was known, as for example Hathor “Lady of Turquoise” in the Sinai Peninsula. Animal cults were often geographically specific: crocodiles for example, identified with the deity Sobk, held an almost canoni-

cal significance for the Fayyum region (hydrologically an overflow basin with its own residual lake, to the west of the Nile Valley just above Memphis-Cairo) from at least the third millennium B.C.E. to Roman times. Like the crocodile, some other animals became unique identifiers for the nomes or political units, such as the mormyrus fish at Oxyrhynchus in the nineteenth Upper Egyptian nome or the oryx of the sixteenth. On the national scale, the falcon, originally an emblem of the predynastic power centre of Hierakonpolis in southern Egypt, and the vulture, which symbolized the town of Buto in the western Delta, became icons of unitary rule over the two regions during the dynastic period, and an essential item in the royal regalia and official titulary.

Other animal deities became universal through their protective function in critically dangerous and potentially fatal stages in the life cycle. Apotropaic wands or clappers, probably used in childbirth, are engraved with a selection of hostile creatures and confabulations which were ritually destroyed by breaking the objects. One of those deities closely associated with birthing rites and appearing regularly on these wands was the figure of Taweret, combining features of both crocodile and hippopotamus, and typically shown standing, with distended abdomen and a fixed facial grimace, its weight carried by downstretched arms and hands gripping the protective *sa* (knot) talisman. In terms of regeneration on a national scale, the falcon god Horus and the desert deity Sutekh (Seth) in the form of a composite animal fight for the body parts of Osiris to ensure that natural order is restored and the harvest is successful.

Mortuary landscapes, or the natural scenery favored in the repertory of tomb scenes and models and in the Books of the Dead (magical funerary inscriptions on papyrus) from the Old Kingdom onwards, show a particular range of environments from the “tame” such as the Fields of Yaru and of Hetep – essentially a vista of agricultural activity amid horticultural land plots and canals – to the “wild” such as desert-edge hunting, trapping and fishing activities. An interesting example of different types of natural phenomena shown in juxtaposition is the tomb of Khnumhotep at Beni Hassan in Middle Egypt, in which upper registers of desert scenery and fauna contrast with scenes of farm produce being brought by the tombowner’s retinue of estate workers. In the middle, occupying a liminal position between the wild and the domesticated, is shown a group of humans, though in this case not indigenous but foreign interlopers (immigrants?) from western Asia, who carry their equipment and means of subsistence with them in nomadic style. On the one hand they are led in and presented by Egyptians as an exotic entity, but on the other, they themselves also lead in and present as their own contribution two gazelles, perhaps caught by and advertising their own specialist group skills as trappers. A common element in the repertoire of elite tomb scenes from the Old Kingdom (third millennium B.C.E.) onwards is the range of hunting, trapping and fishing scenes, emphasizing the vigor, ability and active life of the deceased; these take place in the extensive marshes that were a regular feature of the valley margins at that time.

Plants as well as the animal kingdom played a key role in the religious vocabulary of Egyptian society. Some were associated with particular forms of deities such as

Hathor “Lady of the Sycomore”; and there is the curious image of the tree suckling the dead king in funerary contexts. Like the falcon and vulture, emblematic plants and animals also stand for Upper Egypt (the Valley) and Lower Egypt (the Delta) in the royal titulary. Monumental architecture in stone was undoubtedly derived from vegetal forms, and two plants in particular, the lotus and the papyrus, feature as the prototypes for engaged and freestanding columns in temple and tomb construction. The lotus in particular held a special place in religious iconography, being routinely carried by officiants in tomb scenes and shown supporting the god Horus in his form as the infant Harpocrates.

David Jeffreys

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See also: Egypt – Ancient.

Ehrenfeld, David (1938–)

David Ehrenfeld is a biologist and philosopher of science best known for his critique of hubris in *The Arrogance of Humanism*. Humanism, Ehrenfeld has argued, has rationalized enormous destructiveness because it rejects all external limitations on human behavior. No God, gods, or nature can lay claim to human fealty – humanity is its own measure. It is freedom without responsibility to or for the world. Humanism, in Ehrenfeld’s assessment, places humanity – though in practice only some of us – at the pinnacle of the universe. It holds that we are the only beings with intrinsic value and all else is reduced to the utilitarian, existing for our purposes. As such, all else may be used, altered, even destroyed, to suit our designs.

Humanism’s sway, Ehrenfeld believes, is not just a coincidence of belief and interest, though, is a rationale for human hegemony. For Ehrenfeld, Humanism is more than ideology – it is *like* a religion and has the same power to shape and constrain vision and behavior. It is not a religion, he says, in the sense of belief in the divine or supernatural. But it is like a religion in that its major tenets are taken on faith, not questioned or critically reflected upon, and seen as timeless (i.e., sacred).

The religious attributes of Humanism, Ehrenfeld believes, are partly a result of its continuity with Christianity’s similar faith in progress and the centrality of humans in the universe. All one need do, he notes, is substitute “reason” for “soul” to see these striking similarities: humans are special because we have reason; we are different from all other species because we have reason; we *are* our reason; “I think, therefore I am”; those without similar capabilities are without intrinsic value. This continuity is masked by the modern tension between Christianity and Humanism, but originally there was little or no tension between Christianity and those in the forefront of the drive to control nature.

For Ehrenfeld, faith in reason is Humanism’s holy of holies. Such reductionistic faith is dangerous because it denies all that binds us to ourselves and to the natural world that sustains all life. Our emotions, not reason, Ehrenfeld argues, has been tested by millions of years of selection, teaching us right and wrong, good and bad. He says that to deny our experience apart from reason is to deny our bodies and the bulk of our lives. Humanism ends up, he believes, denying not only nature out there, but our own nature, our humanity.

Faith in reason gives rise to the illusion that through reason humans can understand and control nature. In *The*

Arrogance of Humanism Ehrenfeld examined a constellation of beliefs resulting from this faith in Man, the eternal conqueror: we can always solve the problems that

confront us; we can usually do so with technology; sometimes we need to alter our social organization to overcome problems; we can rearrange the Earth to suit ourselves without consequences that are beyond our ability to address; material growth and progress are endless – we will never run out of resources or the ability to fashion substitutes; and when push comes to shove, we will hunker down and do what needs to be done to ensure civilization survives.

In Humanism's Enlightenment infancy these beliefs were not testable, but now nature is unmistakably talking, though the faithful do not hear. What nature is "saying" Ehrenfeld argues, is that every solution creates more problems, and these problems are more complicated and difficult to solve. The Earth is finite and material growth has limits. When we seek to rearrange the Earth to maximize what we value most, the consequences usually cannot be managed. Nature invariably is degraded and civilizations do collapse.

Ehrenfeld's critics have attacked particulars. Left Humanists, like Murray Bookchin (1988), took exception to Ehrenfeld's notions that humans are just another species, and that if a species exists it has value. The Humanist Steven D. Schafersman and ethicist Peter Singer (1979) argued that the problem is anthropocentrism not Humanism and reason. Some who share Ehrenfeld's views about the pitfalls of excessive abstraction and reductionism rejoindered, pointing to positive changes in science and the creation of new disciplines like conservation biology, which Ehrenfeld himself helped to found.

The critics Ehrenfeld has responded to are those who say he offers little guidance on the way out of the current predicament. In *Beginning Again*, Ehrenfeld stated that a positive change in societal "heading" would recognize that rights always entail obligations; we would choose carefully where we place our loyalty; those with expert knowledge would step down from their pedestals, admit the limits of their knowledge, and engage the larger society over values and purpose. Feeding billions will continue to require agriculture, but it must be an agriculture that imitates nature and abandons the industrial model. Society itself must change – and drastically, he argued. In our daily lives we must seek to "creatively imitate" nature, abandoning fantasies of control and limitless wealth for values of resilience, beauty, right scale, honesty. These were Ehrenfeld's prescriptions, not his predictions; he remained skeptical of human's ability to learn short of catastrophe.

Ehrenfeld has contributed much to the development of the discipline of conservation biology by his many years as the first editor of the influential journal by that name, through a major text, *Orion* columns and a series of edited volumes. But it is his *The Arrogance of Humanism* that has earned him a much broader reputation and major influence. Along with Paul Shepard, Ehrenfeld's critique of hubris has been cited by many conservationists as a major influence on their thinking.

David Johns

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See also: Deep Ecology; Left Biocentrism; Shepard, Paul; Social Ecology; Radical Environmentalism.

Ehrlich, Gretel (1946–)

Gretel Ehrlich is a contemporary U.S. writer whose life and work were shaped by the California landscape of her childhood, as well as by the stories and Buddhist religion of the Japanese Americans who were part of the human landscape. References to her later studies of Zen Buddhism and her Tibetan practice, as well as to indigenous religious traditions, appear throughout her works. Ehrlich is best known for her prose reflections on her experiences within the natural world, especially *The Solace of Open Spaces*, which is set in the Wyoming landscape, where her writing first flourished. She has also written poetry and short stories that use Wyoming as indispensable context, as well as a novel, *Heart Mountain*, which brings together her childhood acquaintance with a Japanese community in California with a World War II internment camp in Wyoming. More recent work has grown from her travels in the Arctic, Asia, and Greenland, as well as returning to her native California. In all her work landscape is central and this is particularly true of her nonfiction works, which center on her spiritual journey in nature.

Unlike some nature writers who use nature as a catalyst to move to transcendent concerns, the natural world is never left behind in Ehrlich. It is the source of understanding the human and spiritual – which are fully embodied. Her art, too, is not apart from nature. “The truest art I would strive for . . . would be to give the page the same qualities as Earth: weather would land on it harshly; light would elucidate the most difficult truths; wind would sweep away obtuse padding” (1985: x). This is not an idealized Earth – suffering and death are very much a part of her landscape. She sees in nature the randomness of things, which threatens human meaning; the painfulness of life, which includes death. She knows the devastation of drought to the land and loneliness to the human heart. She has lost her partner to cancer and almost dies herself when she is struck by lightning – and has to live the anguished life of a survivor.

Yet her healing also comes from the natural world when she is able to give herself to the place, and to find her connectedness to a web of people, animals, and elements through the daily rituals of life – feeding animals, irrigating fields, working with neighbors. “Ritual,” she says, “goes in the direction of life” (1985: 103) and the sacred is found in the ordinary. As human ritual joins with the rituals of nature, she feels the assurance that all things are joined at their roots and this brings solace. But the healing is never complete. Even the phoenix after rising, she muses in *A Match to the Heart* two years after being struck by lightning when chest pains continue to recur, no doubt had to face new trials (1994: 197). But she is able to say, in spite of the darkness, “Yet

in all this indeterminacy, life keeps opting for life . . . How fragile death is, how easily it opens back into life” (1991: 82, 85). And in *Solace*, “The lessons of impermanence taught me this: loss constitutes an odd kind of fullness; despair empties out into an unquenchable appetite for life” (1985: x).

Ehrlich’s work affirms a sacramental landscape that interweaves Buddhist notions of impermanence and change, the giving over of herself to place (renunciation), and the nondualistic connectedness of all things with indigenous awareness of the embeddedness of human life

– including ordinary work and mystical visions – in the natural world.

Lynn Ross-Bryant

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See also: Autobiography; Memoir and Nature Writing.

Einstein, Albert (1879–1955)

Albert Einstein is the pioneer of twentieth-century physics. In 1905 he published his Special Theory of Relativity, which was followed by the General Theory of Relativity in 1916. In short, this theory states that time, mass and length all change according to velocity. Space and time are a unified continuum, which curves in the presence of mass. Einstein also was involved in the elaboration of quantum mechanics and had lively discussions with his colleagues, Heisenberg, Bohr, and Pauli, regarding its implications. Contrasting Niels Bohr and (even more) Wolfgang Pauli, Einstein insisted on what he once called “the grandeur of reason incarnate” (i.e., his conviction that there is no room for chance or irrational elements in the universe). Whereas this is exactly what quantum mechanics seems to imply, Einstein held that “God does not play dice.” Instead of accepting non-determinacy and a-causal relations in physics, he was sure that at one time there will be found a comprehensive and unified theory that will reveal the seemingly irrational to be part of a higher order.

Despite his attachment to rationalism it is important to note that throughout his life Einstein regarded himself as a “religious” scientist. While he rejected the idea of a personal god who might interfere with human affairs or with nature – this would have been a severe inconsistency with the notion of causality and lack of freedom – he definitely had a kind of pantheistic religious attitude. In a telegram of 1929, he expressed belief in “Spinoza’s God who reveals himself in the orderly harmony of what exists” (Einstein in Jastrow 1978: 28). And in his confessional *The World As I See It* (1934), Einstein dwelled on the idea of pantheism, talking about the mystery of the eternity of life, the inkling of the marvelous structure of reality, and his endeavor “to comprehend a portion, be it ever so tiny, of the reason that manifests itself in nature” (Einstein 1999: 5). In an almost mystical fashion he described his belief in a superior intelligence or transcendent spirit that reveals itself to every scientist who experiences a “rapturous amazement” at the harmony of natural law.

The “mystical” dimensions of physics and its pantheistic connotations have been an issue that Einstein discussed with major proponents of quantum mechanics. With regard to the more esoteric or “New Age” discourse, it is worth mentioning that Einstein debated the topic with David Bohm in the early 1950s. Later, Ken Wilber drew on his theories and pointed out that most of the quantum physicists came to embrace mysticism although simultaneously they rejected any parallelism between physics and mysticism. This is true for Einstein in particular, who remained a classical realist, finding something religious not in nature itself but in the *laws* of nature.

Kocku von Stuckrad

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Eiseley, Loren (1907–1977)

Loren Corey Eiseley was born in Anoka, Nebraska, on 3 September 1907, the son of Clyde and Daisy Corey Eiseley. In his early years he sought refuge from the loneliness of a turbulent home life by living among the books of the Lincoln City Library and observing the wonders of his native landscape. At the age of 14 he wrote an essay entitled “Nature Writing” in which he made the rather remarkable assertion that “Killing for the excitement of killing is murder.” He became interested in geology and paleontology, and was drawn by imagination and personality into creative writing. However, because of the poverty of his childhood he understood the need for practical employment and decided to become a scientist. He graduated from the University of Nebraska in 1933 with a major in anthropology.

After a period of drifting, Loren went east for graduate studies at the University of Pennsylvania, finishing his doctorate in 1937. In 1944 he became Professor of Anthropology and head of the Department of Sociology and Anthropology at Oberlin College, having served his scholarly apprenticeship at the University of Kansas. He spent three years at Oberlin before returning to Philadelphia to become chair of the department from which he had received his doctorate. Eiseley died on 9 July 1977 of pancreatic cancer.

For Loren Eiseley “nature” was not some exosomatic machine that awaited the tactical dexterity of the trained technician. The person who intends to learn what the surrounding world has to teach her must adopt the contemplative comportment of the poets, those “word-flight specialists” who are wary of self-evidence in thought and activity. “They probe into life as far as, if not farther than, the molecular biologist does, because they touch life itself and not its particulate structure” (Eiseley 1970: 125). The poets think across the ages, backward and forward, even sideways, according to Eiseley. They perceive more than the bumps of a recent scientific discovery – “this venerable, word-loving trait . . . is what enables [us] to transmit [our] eternal hunger – [our] yearning for the country of the unchanging autumn light” (Eiseley 1970: 125).

Eiseley’s thought is unique, but very difficult to accompany in “an age which advances progressively backwards” (Eliot 1952: 108), its eyes fixed upon the endless cycle of invention. Eiseley’s is no “nature religion,” if by that we mean the self-sufficient marvel at beautiful sunsets, awesome canyons, or the fascination with our latest attempt to escape what Eiseley calls “the cosmic prison.” The only escape is by the poet’s perception, which is somehow an awareness that what we perceive, what we know, is more than our perception, our knowledge. It is here that Eiseley’s thought gives way to revelation. “The fate of man,” he writes, is to be the ever recurrent, reproachful

Eye floating upon night and solitude. The world cannot be said to exist save by the interposition of that inward eye – *an eye various and not under the restraints to be apprehended from what is vulgarly called the natural* (Eiseley 1969: 88 [italics mine]).

Eiseley's is a "nature religiousness" that makes every measurement and calculation of the surrounding world a transparent observation – perhaps akin to Eastern Orthodox use of the icon.

With Thoreau, Eiseley "dwelt along the edge of that visible nature of which Darwin assumed the practical mastery. Like the owls Thoreau described in *Walden*, he himself represented the stark twilight of a nature 'behind the ordinary,' which has passed unrecognized" (Eiseley 1969: 122). Loren Eiseley does not propose or espouse a religion in the sense of adherence to a carefully articulated, defined, and preserved tradition. That is what he meant when he stated in his autobiography *All the Strange Hours*: "Ironically, I who profess no religion find the whole of my life a religious pilgrimage" (Eiseley 1975: 141). His was a religious pilgrimage, first, because he stood with one foot firmly placed in the discipline of the scientific enterprise, while his other foot probed the spinning dust cloud – Job's whirlwind.

It is not sufficient any longer to listen at the end of a wire to the rustling of galaxies; it is not enough even to examine the great coil of DNA in which is coded the very alphabet of life. These are our extended perceptions. But beyond lies the great darkness of the ultimate Dreamer, who dreamed the light and the galaxies. Before act was, or substance existed, imagination grew in the dark (Eiseley 1978: 120).

Eiseley's thought is religious in both style and content. In his prose, his historical studies of Darwin and Francis

Bacon, and in his poetry, words are the essential human domain. They are transcendental – they create, evoke, and test. They partake of meaning, examining the ideas engaged in inventing our "machines." Words are host to "the unexpected universe" and must be felt and heard as well as measured and nurtured. Style is fundamental to the imaginative power to be comprehensive as well as pragmatic.

In their content, words provide life orientation; they express ultimate order and meaning. We are liberated from bondage to the belief that the achievements of our disciplines somehow represent certitude on a cosmic scale. That is why Loren Eiseley was as interested in language as in bone hunting – his way of referring to his archeological responsibilities. It is why his reflections are mediated by consultation with theologians, philosophers, the works of Homer, Dante, Donne, Shakespeare, and Dostoevsky – and, of course, Emerson and Thoreau. It is why he was often forced to use the word God, or fashion substitutes like "the Player," "the Synthesizer," "the ultimate Dreamer." Whether or not we like the terms "religion" or "religious," Loren Eiseley insists that we become cultural heretics who move beyond certitude to a sense of the holy.

The term "nature" represents the paradox of the human mind. It is creative ambivalence, a heuristic necessity. We must have the biology and geology upon which the mind feeds. But, in feeding we recognize that nature is a fabrication; in reality there

is no such “thing.” The truly responsible mind, aware of the appositional pull – the impulse to reach out, receive, and change – will never assume the absolute claims of its observations. If there are rigidities in Darwin’s “take” on the evolutionary process, it is because he and the Darwinists were unable to observe their observations or to extend themselves into and beyond those observations. Eiseley quotes Pascal: “There is nothing which we cannot make natural; there is nothing natural which we do not destroy” (1978: 159).

According to Eiseley, there is more to the human mind than the pragmatic urge to take things apart or to be *homo faber*. Failure to nurture this sensibility leaves us in a physiological trap, faced with the difficulty of escaping our own ingenious devotion to making everything natural. Loren Eiseley revised his *Francis Bacon and the Modern Dilemma* and retitled it *The Man Who Saw Through Time* because Bacon has been misused by those who took him to be the advocate of making everything natural. “The world is not to be narrowed,” wrote Bacon in *The Parasceve*, “till it will go into the understanding . . . but the understanding is to be expanded and opened till it can take in the image of the world” (Bacon in Eiseley 1973: quoted on facing page to table of contents).

Loren Eiseley was a prolific author of scientific papers, poetry, and personal essays. He was a recipient of the Athenaeum of Philadelphia Award, the Phi Beta Kappa Award in Science, and was a member of the

National Institute of Arts and Letters. His many published works are host to the intellectual struggle to celebrate the ambivalence of “nature” and to expand the understanding, opening it to the image of the world.

Richard E. Wentz

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See also: Anthropologists; Anthropology as a Source of Nature Religion; Religious Studies and Environmental Concern.

Eisler, Riane (1931–)

North American cultural historian Riane Eisler analyzes the connection between contemporary ecological issues and the global suppression of women, which she thinks are both caused by the dominator model of social structures. The model is developed around *androcracy* – which she defines as the view that men and “masculinity” are superior to women, “femininity” and nature. Since ancient times the dominator model was symbolized by the power of the blade. An alternative suggested by Eisler is the partnership model, developed around *gylany*, a term she uses to describe a societal structure in which women and men are equally valued. Traditional “feminine” values, such as caring and nonviolence, are, however, given priority in Eisler’s partnership model and are taught to both biological sexes.

Instead of a domination hierarchy, the partnership model counts on actualization hierarchies wherein ecological and social systems are constructed out of a hierarchy of complex entities, from the most basic functions to the actualization of the highest potential of these systems. Eisler believes that the partnership model flourished in Neolithic goddess-centered cultures of southeastern Europe and Asia minor. She draws upon the archeologist Marija Gimbutas’ findings of Neolithic female figurines and symbols of female reproductive organs, which, according to Gimbutas, symbolize the life-giving power of the divine. The chalice is a symbol of these powers. Partnership spirituality is centered on life-giving, nourishing and empathy; mutual love and sexuality are ultimate expressions of life. Eisler also suggests that the partnership model is reflected in the community around Jesus and in Gnostic Christianity.

Maria Jansdotter

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See also: Ecofeminism (various); Feminist Spirituality Movement; Gimbutas, Marija; Goddesses – History of; Wicca.

Elephants

Cave and rock pictographs and petroglyphs of mammoths and elephants dated to 30,000–10,000 years ago show these large animals have long been of interest to humans. Paleontological analysis of cut marks on bones indicates proboscideans have been a source of sustenance for far longer, perhaps going back to *Homo erectus*. The debate over whether Paleolithic representations of animals were made for religious, utilitarian, or aesthetic reasons remains unsettled. Information linking gender and elephants is evident. Some early depictions show men hunting proboscideans. Connections of elephants with masculinity and economic/power themes continued in the following millennia. Elephants were used as living battle tanks by state societies in the Middle East, Europe, Asia, and Africa. Islam dates the birth of the Prophet Muhammad to the “Year of the Elephant,” so marked in the Qur’an because Ethiopian military mounted on elephants invaded Mecca, his birthplace, in 570. Judaism also links elephants to men and military might. 1 Maccabees recounts a 163 B.C.E. Syrian-led invasion, when war elephants turned violent with the “blood of grapes and mulberries,” against Jews. Going under it to strike “the belly of the beast,” Eleazar was crushed to death by the largest elephant, which he had thought carried the Syrian king, seeing it was adorned with a great tower and gold. The elephant became a symbol of freedom fighters resisting military might in Judaism. The Jewish holiday of Hanukkah, which commemorates the Maccabeans, sermonizes about and places the elephant on dreidels, menorah, and other Judaica. Contemporary Judaism, however, puts blame on the Syrian leadership, not their war elephants. One prayer recited when lighting the Hanukkah menorah goes as follows:

For the sake of the weak who are trampled underfoot by elephantine power, for the many forms of life that vanish every week from off our planet, I pledge to join with Noah and Naamah to affirm God’s covenant with all that lives and breathes – to save each species from extinction by making all of Earth an Ark of comfort (www.shamash.org).

1 Maccabees became part of the deuterocanonical books of the Old Testament for Catholics from the fourth century. Luther later placed it into the appendix of his German translation of the Bible. Scenes of “Eleazar under the Elephant” became a theme for Christian sacred art, taken up by Gustave Doré and others. The elephant came to symbolize “noble deaths” and male heroism for Christians as well as Jews.

Building upon actions modifying the environment, which elephants do on their own, men have also made elephants serve them as living tractors in the clearing of land, construction of roads, and getting of tree products. *The Book of Mormon* (Ether 9) contains a charter myth which makes Indians of the Americas of Semitic stock. It claims

North America was virgin territory until 2247 B.C.E., when immigrants from the land of the Tower of Babel built a “high civilization” using the labor of domesticated animals, “more especially the elephants.” Elephants have served state societies as mobile canvases in parades of civil religion, displaying wealth on their bodies and those of their mostly male riders, both adorned with ivory, gold, jewels, and fine cloth. Elephant masks and other regalia have been prominent in African “cults of masculinity” and chiefly/royal status. During the age of imperium over the non-Western world, Western males cultivated the mythos of the “great white hunter” able to bring down the elephant with their guns.

Cave and rock paintings, such as those of San of southern Africa, dated between 18,000 and 27,500 years ago, present female elephants protecting their young from predators. These images point to another strand of symbolism surrounding elephants: maternity and its powers. While the majority of contemporary archeologists exhibit wariness about “myths of matriarchy” which some feminists read into early human social organization and spirituality, matriarchy is readily associated with elephants. Female elephants do live in closely related groups of sisters, daughters, and their young. They are led by one or more experienced older females. Elephant “matriarchs” are said to be repositories of “local traditions” who guide kin through their “wisdom.”

African savannah elephants (*Loxodonta africana*) are the largest of living terrestrial animals. Adult males weigh up to 15,500 lbs. and are about 10–13 feet tall. Adult females weigh up to 7700 pounds and are 8–10 feet tall. The African forest elephant (*Loxodonta cyclotis*) and Asian elephants (*Elephas maximus*) are smaller with similar dimorphism. After they are about eight years old, “bull elephants” live largely outside “bond groups” in “bachelor herds” which have weak social bonds, or as solitary individuals. Females seem to develop larger “vocabularies” from their greater sociality. Males will reenter female-dominated groups when additional protection provided by their greater bulk is needed, or for sex. Despite greater size and strength, “big bulls” are not essential to bond groups on a daily basis. Female elephants remain inaccessible to males during their 18–22-month pregnancies, the maximum number of which seems to be a dozen, and while lactating. Since breast milk is the exclusive food of elephant young for six months and part of their diet until they are two or older, lactation and pregnancy put females out of reach of males for extended periods.

Elephants appear to show concern for wounded, handicapped, elderly, and “grieving” group members. Elephants have been seen burying their dead under branches, standing around corpses, and examining, caressing, and carrying group members’ bones. One interpretation of their smashing tusks and bones of their dead is that elephants want to release “spirits” indwelling in the bones and tusks. Another is that they are concerned to prevent the removal of the bones and tusks from their “home territory” by poachers and others. Elephants have been seen covering the corpses of other animals and humans. Some observers have “racialized” African and Asian elephants, claiming, for example, to see the map of Africa in the ears of the “proud” and “truculent” African elephants, and the map of India in “Asians,” whom they deem more “manageable” and “calmer.”

Others researchers, however, point out that Asian and African elephants demonstrate “altruism,” giving aid to and forming attachments with each other. In 1607, Edward Topsell, an English cleric-naturalist, proposed that “a kind of Religion” existed among elephants. While such views have been called “anthropomorphic fallacies,” beliefs that religion is not confined to humans persist into the present. The counterdefense calls for avoidance of “anthropocentrism” in the study of religion and ethics.

Elephant symbolism figures in a number of religions. Mother-son symbolism is evident in beliefs surrounding

Ganesh, Hinduism’s god of art, wisdom, and well-being. One account states that the first son of Shiva and Parvati gained his elephant head after losing his human one while protecting his mother from Shiva’s unwelcome sexual advances. Parvati showed such “maternal rage” at what had happened to her son that Shiva sent emissaries to find a replacement. Parvati is a symbol of the Earth. Sharing in this symbolism, elephant-headed Ganesh has become a patron for Hindus concerned with the environment. Scholars feel that belief in Ganesh helped preserve elephant numbers in India and Sri Lanka, and link the rise of large-scale killing to the period of British colonial rule.

Elephantine maternal strength is also represented in Hindu beliefs about female elephant caryatids supporting the Earth on their backs. The elephants rest upon a giant turtle, which stands in a pool of milk encircled by a giant snake, a further female symbol. Shri-Gaja, also called Megha (Cloud), is the Divine Elephant associated with rain, fertility, and Lakshmi, Hinduism’s Lotus Goddess. Lakshmi is herself associated with moistness, good harvests, and the fertilizing dung of cows, in which she dwells while retaining her purity. It is women especially who show devotion to Lakshmi in the form of dung. In Hindu history, the breasts and gait of female elephants have been beauty ideals for women to emulate. Mithila house art of Hindu India and Nepal, which is produced in private rituals by women, gives elephants prominence on walls, floors, and household goods. Ayurvedic medicine has made use of elephant urine and dung. As with many other religions, there is more to elephants in Hinduism than male war, work, hunting, civil religion, and political pageantry.

Mother-son symbolism linked to elephants is found in Buddhist beliefs that the Buddha was an elephant in one of his incarnations. His mother is said to have conceived Buddha after dreaming an albino elephant came from heaven and touched her with a white lotus blossom that he held in his trunk. Mahavira, the twenty-fourth and final “ford-maker,” or great teacher, in the Jain religion, who was a contemporary of Buddha, also has a biography with an elephant motif. Jains believe Mahavira was born to Queen Trishala after she had a series of fourteen dreams. The first involved an “auspicious” albino elephant. The Tantric religion of Nepal reveres Ganipatihardaya, who is elephant-headed like Ganesh, and a manifestation of Shakti, the female creative cosmic force.

Judaism and Christianity both place elephants in the Garden of Eden and on Noah’s Ark. One “old Jewish legend” recounts that dung from the elephants shifted in the Ark,

which led rats and mice to run out of the dung and start to eat the Ark's wood walls, whereupon Noah beseeched God for help. He was instructed to strike a lion on the nose, who sneezed out cats, which kept the rodent population in balance. Christianity shows greater use of elephant symbolism than Judaism. Male elephants' testes are internal, their penises normally withdrawn. Female elephants' relatively long clitorises can be stiffened like penises, but this too is evident only in amorous moments. Female elephants put plant materials into their vaginas during their "monthly cycle." This has been seen as their observing a "menstrual taboo." Some Christian writers have made elephants symbols of "chasteness." The *Physiologus*, compiled between the second and fifth centuries, depicted the female elephant "cajoling" the male with whom she wished to mate to eat of a male mandrake root, while she ate a female root. Biblical references record uses of mandrake (*Atropa mandragora*) to promote fertility and as an aphrodisiac (Genesis 30; Song of Songs 7). Maintaining elephants only became amorous after ingesting mandrake, the *Physiologus* described elephant mating as "free from wicked desire." It presented female elephants giving birth in water and providing offspring with "something like baptism." The twelfth-century *Worksop Priory Bestiary* described elephant conception taking place without intercourse – standing beside mandrake sufficed.

Elephant caryatids and other elephant statuary gained placement on church fonts, bishop's chairs, choir misericorde, buttresses, in nativity crib scenes, and other locations. Elephant ivory, a rare material that reinforced notions of purity and durability, was used for statues of Christ and Mary; receptacles for the host, missal covers, crucifixes, and other sacred objects. In the late 1400s, the Portuguese started commissioning artists in Sierra Leone to create "hybrid art" in the form of salt-cellars, horns (oliphants), and other items, often dictating the designs. The ivory decorations incorporated animals, including Asian elephants, men and women caryatids, human mother-child scenes, and male hunters. Ivory crucifixes and vessels were also produced. The Portuguese bestowed these "exotic" ivories upon important personages. Seeking papal favor for his colonial agenda in 1514, the King of Portugal sent Pope Leo X Hanno, a living, young, rare, Asian, albino elephant. The elephant participated in church processions and stayed in one of the Vatican gardens until its death on 8 June 1516. Pope Leo had Raphael, renowned for his Madonna and Child paintings, make a memorial fresco for Hanno, and himself composed the elephant's obituary. In 1667, Bernini, recognized for his sculptures of Mary, designed an elephant caryatid for Pope Alexander VII. The Egyptian obelisk placed on the elephant's back had once stood by Rome's "Temple of Isis." The work was placed in front of Rome's Saint Mary over Minerva church, where elephantloving Pope Leo was buried. Elephants, both real and transformed by artistic imaginations, have a long hybrid history connecting them to Christianity. While Martin Luther censured Pope Leo and Hanno as symbols of excess in *Against the Papacy of Rome* (1545), this did not stop Protestants in later times from succumbing to "tusk lust" and acquiring ivory.

Almost five centuries after Hanno's burial in Vatican gardens, Anglo-Nigerian and Roman Catholic artist Chris Ofili's revisited the complex symbolic mix surrounding elephants in his painting, "The Holy Virgin Mary." His "hybrid" work became the subject of global debate extending to Europe, Turkey, India, Nepal, and other places, after it was shown at the "Sensation" exhibition in Brooklyn, New York in 1999. Ofili affixed elephant dung to Mary's right breast. He used white-headed map pins to fashion concentric circles on the dung ball on her breast. Her face is African visaged, more masklike than representational, and said by Ofili to be based on a rap singer he saw having "tons of power." The large 8 ´ 6 foot painting is supported on two feet, also made of elephant dung. White map pins spell out the word Virgin on the left support, Mary on the right. Some critics called the work "The Elephant Dung Madonna." Some Western detractors declared elephant dung did not belong in the art of "civilized" societies, and labeled Ofili's use desecration. Some African critics charged Ofili with reinforcing the stereotype "Africa is indeed the jungle." The London Zoo was the source for the dung, which came from an African elephant with an Igbo name, and an Asian elephant with a Chinese name. The dung was treated to prevent decomposition. Since elephants are herbivores, their dung has far less odor than that of humans whose appetites are omnivorous. Westerners who claimed to "smell the scent of Africa" in Ofili's painting were relying on their imaginations and not the dung's origins and actualities.

For many Africans, animal dung does not have negative connotations. Elephants have been called "gardeners of the tropics." One aspect of this role is their sowing while defecating. Elephants produce 300–400 pounds of dung daily. They engage in synchronous defecation "greeting rituals." Their dung contains plant seeds. It serves as a matrix for insects and beetles useful to humans and their ecosystems. For elephants, coprophagy is ingestion of a "health food" that adds essential bacteria and nutrients to their diets. In Africa, animal dung has been used as a plaster in building, basketry, and flooring. Mixed with mud and clay, plant-fiber-rich dung is a material providing stability and waterproofing. Dung and clay, in contrast to ivory, are "soft substances." In Africa, working with soft substances is associated with women, and women are especially associated with dung-based sculptures. Dung fuel has been utilized to fire clayware and for other purposes. Dung also has served as a poultice, an ingredient in indigenous medicines, and as a cleansing substance when turned into ash. The elephant dung on the breast of Ofili's Mary can be seen as a multivocalic compliment, rather than a sacrilege.

The Luo of Kenya, for example, used to use elephant dung as a fertilizer and put it into "strong medicines." Elephant dung was part of medicines Luo used for the protection of crops, the treatment of eye ailments, and for other purposes. Luo women would eat a bit of elephant uterus cooked in soup to treat placental retention following childbirth. Luo believe female elephants utilize the bark of *Albizia coriaria* and *Kigelia africana* to stop their flow of menstrual blood. These plants have also been used by Luo women to treat menorrhagia and other reproductive problems. Luo appreciation

for the parallelism between elephant zoopharmacognosy and human ethnobotanical knowledge is shared by other ethnic groups in Africa.

When elephant had been available for the Luo to eat, there had been proscriptions against eating breast meat. The reason given was the resemblance between female elephants' breasts, which hang between their front legs, and women's breasts. Luo say that elephants form groups that can be called by the same term they use for lineages. This terminology cannot be applied to cattle because cattle "are controlled by men." Elephants have been seen as capable of organizing themselves into matrifocal groups, of living contiguous to but apart from humans, while contributing to the ecosystem and humans with their dung and in other ways. Several Luo narratives feature old women found living among elephants, or deciding to go among them. These old women possessed spiritual powers enabling communication with elephants with whom the women shared commonalities.

Some African groups proscribe all elephant meat out of respect for the "grey matriarchs." Samburu of Kenya present an explanation like those who prohibit only breast meat: the correspondence between the bodies of women and elephants. Members of the Orkor clan of Gabbra in Kenya explain that Gabbra build their houses to look like an elephant's body because in the past a new mother, displeased with her marital family, left the community with her house on her back and turned into an elephant. In Sierra Leone, Liberia, Senegal, and the Gambia, women's secret societies identify with elephants and use elephant masks as symbols of female strength, maternity, and wisdom. In Onitsha, Nigeria, it is praise to call an old woman an elephant, and proper for her to dance in rituals with the ponderous steps of a pachyderm.

The near "genocide" of elephants has reduced the frequency of human encounters with elephants. For many Africans, wild elephants are but a memory. However, even now some Africans have fields trampled or devoured by nature's "ultimate harvester." Family compounds and school grounds are "invaded." People lose their lives in clashes with elephants. Killing "rogue elephants" and "culling" elephants to prevent problems have the approval of some Africans, who see some conservation efforts as "eco-colonialism." Yet elephants who keep their distance from human settlements remain highly regarded by many Africans.

In the last few decades, elephants have become creators and not just subjects of art, largely at the prompting of people who have raised funds from the sale of their paintings and music to help pay for their upkeep. The colors in the paintings elephants make may match those of things in their environment but are otherwise abstract, at least so they appear to human sensibilities. Most of the elephant artists are female, as are most of the elephants in zoos, circuses, and elephant sanctuaries. Females are held to be easier to keep in captivity. Some female elephants have turned away from "bad girl behavior" linked to their captivity, including masturbation and amorous encounters with large trucks, when given art as an outlet. In 1607, Topsell said of elephants, "They have a wonderful love to their owne Countrey . . . in memory thereof they send forth teares" (Topsell in Sillar and Meyler 1968: 70). With the distance from their homelands

and bond groups so great that their complex infrasound communications and other social signals cannot reach far enough to recreate all they have lost, elephants seem to find that art helps them deal with the boredom and stress of being away from their own creative social worlds.

Nancy Schwartz

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See also: Animals; Animals in African Legend and Ethiopian Scriptures; Art; Bestiary; Dolphins and New Age Religion; Gimbutas, Marija; Hinduism; Hyenas – Spotted; Nile Perch; Primate Spirituality; Whales and Whaling.

Eleventh Commandment Fellowship

The Eleventh Commandment Fellowship (1980–1988) played an early but significant role in the creation of a viable national movement of environmental activists working from within the mainstream American Christian churches during the late twentieth century. The fellowship was also successful in fostering awareness and implementation of an ethic of ecology that was firmly rooted in traditional Christian teachings and doctrine.

The group derives its name from a 1979 article by Vincent Rossi, “The Eleventh Commandment: Toward an Ethic of Ecology.” Rossi was the director general of the Holy Order of MANS, an independent Christian service and teaching order that had been founded in 1968 in San Francisco. The order practiced a Theosophical and Rosicrucian-based system of initiatory spirituality and proclaimed the dawning of an age of spiritual enlightenment. Group members took traditional monastic vows, observed daily periods of meditation and prayer, celebrated cyclical festivals such as winter solstice and the full moons, and lived in common in over 46 centers throughout the United States and Europe. In the wake of the Jonestown mass suicides, the group moved away from its esoteric and Theosophical origins toward a more mainstream Christian identity. Rossi’s article in the order’s new journal, *Epiphany*, was an attempt to communicate the group’s vision of a spiritually informed ecological lifestyle to a mainstream Christian audience.

The article indicted American materialism and consumerism for the wholesale desecration of the Earth. Rossi declared that the dire condition of the Earth’s biosystem called for a profound alteration of human values and goals, a revolution of consciousness that would reawaken humanity to the presence of the divine throughout the natural world. Toward this end, he proclaimed an eleventh commandment: “The earth is the Lord’s and the fullness thereof: Thou shall not despoil the earth, nor destroy the life thereon.” In grafting a new commandment on to the Ten Commandments, Rossi was following in a tradition that began with Walter Lowdermilk’s famous 1939 address on Jerusalem Radio, which outlined an eleventh commandment of eco-justice.

Rossi also issued a call for environmental action that included education concerning the ecological crisis, the use of appropriate technologies, the elimination of personal actions harmful to the environment, and the formation of environmental action groups. In 1980, The Eleventh Commandment Fellowship was organized to carry out this action plan. Between 1980 and 1984, the fellowship promoted a broad, ecumenical approach to educating Christians about the ecological crisis. It organized local chapters in major cities throughout the country, set up food cooperatives, planted community

organic gardens, and convened public educational meetings. The fellowship's national office published a newsletter, sponsored annual Earth Stewardship symposia in the San Francisco Bay Area, and organized environmental conferences in retreat facilities nationwide. The fellowship's symposia and conferences were open to the general public and attracted members of diverse environmental groups and churches.

The most significant of the fellowship's initiatives was its central role in organizing the North American Conference on Christianity and Ecology (NACCE). This large-scale ecumenical conference of environmental activists included, among others, the Au Sable Institute, the National Catholic Rural Life Conference, the EcoJustice Working Group of the National Council of Churches, and the Threshold Foundation. Despite major disagreements during planning meetings in 1986 over the meaning of Christianity and the Church's relationship to the broader environmental movement – in particular Wiccans and secular ecologists – enough agreement was reached to schedule a major conference.

In August 1987, over five hundred people representing nearly every major Christian denomination in North America attended the North American Conference on Christianity and Ecology in North Webster, Indiana. The stated purpose of the conference was to stimulate a Christian response to the global ecological crisis. The conference's 63 sponsoring organizations represented a broad cross-section of secular and religious organizations. Its working document stated the conferees' belief that God was calling humanity to: 1) preserve the Earth's diverse life forms; 2) create an ecologically sustainable economy;

3) overcome the despoliation of nature wherever it was occurring.

Deep divisions between moderate and conservative Christian groups in the NACCE that were simmering during the Indiana conference led to the formation in 1989 of the North American Conference on *Religion* and Ecology (NACRE). NACRE founder Don Conroy hoped to foster an ecospirituality that was open to interfaith cooperation on ecological issues. The North American Conference on *Christianity* and Ecology (NACCE) – strongly influenced by the Eleventh Commandment Fellowship's Fred Kreuger, who, like the Holy Order of MANS' successor organization, Christ the Savior Brotherhood, had embraced a traditional Eastern Orthodox worldview – rejected this splinter group and argued that NACRE's creation-centered spirituality substituted evolution for repentance and was anti-Christian in nature and intent. By 1991, the Eleventh Commandment Fellowship's influence on NACCE was waning. Kreuger, who had edited NACCE's publication, *Firmament*, left the conference after funding for the magazine dried up. Christ the Savior Brotherhood and the Eleventh Commandment Fellowship continued to organize local and regional conferences on Christian ecology during the early 1990s, but these conferences had a more exclusivist and anti-modern Eastern Orthodox tone. The Eleventh Commandment Fellowship's brand of hard-edged, apocalyptic Eastern Orthodoxy isolated it from both NACRE's and NACCE's more ecumenical and interfaith approach.

During its early years, the Eleventh Commandment Fellowship's writings, workshops, and conferences helped a diverse array of regional and local religious/ecological groups organize themselves into what became, by the mid-1990s, a national and international movement. It also helped mainstream Christians to formulate a response to Lynn White's charge in a 1966 address to the American Academy of Arts and Sciences that "Christianity bears a huge burden of guilt" for the ecological crisis.

Phillip Charles Lucas

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See also: North American Conference on Christianity and Ecology [and the] North American Coalition on Religion and Ecology; White, Lynn – Thesis of.

Eliade, Mircea (1907–1986)

Mircea Eilade was a dominant figure in twentieth-century history of religion studies. Born in Romania, he graduated from the University of Bucharest in 1928. He then studied yoga and Vedanta in India until 1931. Throughout the 1930s, the young scholar was a much-discussed Romanian writer, professor, and newspaper commentator. In the latter part of this period he had a controversial relation to the fascist Iron Guard. During the Second World War, Eliade served as cultural attaché to the Romanian legations in London and Lisbon. In 1945, no longer welcome in his now-communist homeland, the historian of religion became a professor at the Sorbonne in Paris, and in 1957 joined the faculty of the University of Chicago.

Eliade was a prolific writer whose works include fiction, memoirs, and treatises on the history of religion. Among his most important publications in the last category (with date of major English edition) are *Cosmos and History: The Myth of the Eternal Return* (1954), *Patterns in Comparative Religion* (1958), *Yoga: Immortality and Freedom* (1958), *The Sacred and the Profane* (1959), *Myth and Reality* (1963), and *Shamanism: Archaic Techniques of Ecstasy* (1964).

Fundamentally, Eliade as historian of religion was concerned to recover the mind of *homo religiosus*, the ideal type of traditional, pre-modern persons acting and thinking religiously. Basic to this perspective was the experience of the world as “non-homogeneous,” contoured by the “dialectic” between the sacred and the profane. Certain times and places, such as those of festivals and temples, were experienced by traditional humanity as “sacred,” of a different character from the ordinary “profane” world. Above all, the sacred revealed itself in the sites, often situated amidst nature, of “hierophanies” or spontaneous/mythical manifestations of divine power. The sacred, according to Eliade, was seen as participating in some way in the energy of *illud tempus*, the “strong” time recorded in creation myths, the time of the beginning when God or the gods made the world. Especially important were sacred sites that could also be identified as an *axis mundi*, a “center of the world” that was also a way of access to heaven. These sacred axes could be an actual or mythical sacred tree or mountain, the sanctuary of a temple, or even a holy city like Jerusalem or Mecca.

Such dimensions of the sacred were especially prominent in their nature-oriented form in what Eliade called “cosmic religion,” the form of religion which obtained prior to the emergence of religions like Judaism, Buddhism, Christianity, or Islam that are centered on historical event. Cosmic religion was focused instead on hierophanies [manifestations of the sacred in nature, in such phenomena as the turn of the seasons, or holy mountains, trees, rocks, and waterfalls. To cosmic *homo religiosus*, the gods

might dwell atop a mountain like Olympus, the New Year's festival may be the principal temporal "opening" to the divine as in Shinto or ancient Babylon, and the land of the immortals an island just visible on the horizon.

In Eliade's view of the history of religion, nature appears as powerful but ambivalent. In cosmic religion, nature and natural sites exuding power are likely locales for hierophany. Yet nature was also the realm of chaos and danger, the abode of demons and the terrain into which apprentice shamans or those on a vision quest would venture to engage in spiritual warfare and gain the favor of a divine patron. At the same time, in the camp, later the town and finally the city, with their symbols of demarcation between the human and natural worlds, and their *orientation* toward controlled sacred space and time, the natural as well as the supernatural could be "tamed" and integrated into the rhythms of human life.

Later, as the great historical religions perceived the most important hierophanies to be events in human history rather than in nature – the Exodus, Bethlehem, the Bodhi Tree, the Hegira – nature and the attributes of cosmic religion were still more marginalized and regarded with suspicion, although Eliade was aware that the Enlightenment and Romanticism had set in motion a recent reversal of that tendency. Deeply sensitive to humanity's lingering "nostalgia for the sacred" and aware of the distortions of human life attributable to its modern "eclipse," he believed that study of the history of religion could lead to a recovery of human fullness.

Robert Ellwood

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See also: Religious Studies and Environmental Concern.

Ellul, Jacques (1912–1994)

Jacques Ellul, social historian and biblical theologian, author of some fifty books, influenced many resisting the assault on the natural environment, including many neopagans, primarily because of his radical critique of technocracy.

Born in Bordeaux, France, on Epiphany, 6 January 1912, to parents of eclectic European ancestry, Ellul was pushed by his father into the study of law and excelled. As a youth he became a Marxist (though not an uncritical one) and went through an obscurely mystical conversion to Christianity, two commitments which he could neither reconcile nor entirely abandon. After being removed as a professor of law by the Vichy government in 1940, he spent World War II in the French Resistance, peasant farming and spirited Jews to safety across the border. His post-war assessment was that Hitler won the war. The Nazi spirit had triumphed. The atom bomb was emblematic of the necessary “fact,” the apotheosis of “technique” – of means overwhelming and supplanting ends.

In this terrible dance of means which have been unleashed, no one knows where we are going, the end has been left behind. Humanity has set out at tremendous speed – to go *nowhere* . . . Everything that “succeeds,” everything that is effective, everything in itself “efficient,” is justified (Ellul 1967: 69).

Ellul elaborated this prescient theological reflection with a lifetime of sociological examination. These remarks presaged a major critical project of his life: analyzing the emergent technocratic system. *The Technological Society* (1954 French; 1964 English), was the first book of a trilogy which examined the mechanisms by which technology takes on a life of its own. He identified the “automatism” of technical choice. Efficiency in and of itself, rationally calculated, in effect preempts human choice, and by this process the technical movement becomes self-directing, and self-augmenting. Things occur as if the system were growing by an intrinsic, internal power, without decisive human intervention. It seems to operate by a selfgenerating logic of necessity. Techniques and technologies recombine in incessant new innovations which preclude any external value, ethic, or judgment apart from efficiency itself. Supplanting the natural environment, they act as if exempt from it.

Ellul was often criticized for making this technological pessimism an article of faith, a nearly dogmatic presumption. There was some basis for the argument. However, he tended to publish simultaneously on parallel tracks: a sociological work would be matched with a separate biblical study. This reflected a rigorous methodology partially rooted in his early tension between Marx and the gospel, but there was more. Ellul desired the scathing sociological works (including others about political power, propa-

ganda, or ideology) to stand on their own as analyses, but he also wanted Christian readers to live with the dialectical tension of the two tracks. Eco-pagan anarchists to whom his analysis of the technological juggernaut has strong appeal, are often oblivious to if not dumbfounded to discover his biblical theology.

By way of example, *The Meaning of the City* (1960 French; 1970 English), a topical survey of the scriptures, radically pessimistic about human works and radically hopeful about God's grace in history, was the theological counterpoint to the first technological study. It mines the etymological roots of the Genesis pre-history to find the city, especially the imperial city, an act of rebellion against God, a rejection of the creation in favor of a selfconstructed world of security. In the alienation seeded by the violence of Cain, who was the first city-builder, the city takes on a life of its own. It becomes in effect a power on the spiritual plane. (Critics would add that the totally consistent theology of the city which Ellul manages to unearth in scripture, comports entirely too well with the totalizing view of technological culture that he proclaims.) Marva Dawn has shown convincingly that the biblical concept of "the principalities and powers" indeed figured programatically in Ellul's overall work, and that he contributed to the recovery of "the powers" in social ethics. He was among the first to apply the notion to structures other than the state, such as money, law, technology, or, as here, the city. Biblically, he understood the principalities to have active agency in dominating and possessing human beings, precisely at the moment human beings imagine they control and possess the powers. Moreover, it can be demonstrated that this comprehension of the principalities is precisely the bridge between Ellul's twin tracks of social criticism and theology. For example, the dominating "logic of necessity" in his sociological stream of thought, parallels and verifies the bondage of fallenness in the theological stream.

The powers are a concern of environmental theology. They are proving useful in analyzing the structures of globalization, both the technology which has so compressed time and space, and the new structures of political economy such as the global corporation and the overarching institutions of world trade. Where ecological theology has stressed awareness of relationship and has rejected an overemphasis on fall and redemption often at the expense of naming the aggressive ascendancy of these structures, Ellul's theology of the powers can identify their contemptuous assault on human community and the planetary environment.

Jacques Ellul thought and wrote globally, but he lived and acted locally. Despite incessant invitations he never traveled to the United States. He lived almost his entire life in and around Bordeaux, the place of his birth. As part of the environmental movement he engaged a long-standing and largely losing struggle to defend the Aquitaine coastline against overdevelopment. He was indeed an anarchist, generally of the Anabaptist variety, formed in French Personalism. This he defended and explained biblically. It seemed no contradiction to a French Calvinist who was, paradoxically, also a universalist. He advocated a social ethic of radical freedom. And in that freedom he died and lived.

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See also: Anarchism; Anarcho-Primitivism and the Bible; Kropotkin, Peter.

Elves and Land Spirits in Pagan Norse Religion

The best-known deities of the pre-Christian, pagan religion of the Norse peoples of old Scandinavia are Odin, god of wisdom, war and poetry, and Thor, god of thunder, strength and protection, of the Aesir family of gods, and the brother–sister pair of fertility deities, Freyr and Freyja, of the Vanir group. There are however many other types and classes of deities and supernatural beings known from Old Norse texts and folklore. These include the fate-ruling Norns, the protective Dísir, the metalworking Dwarves, and the generally malevolent Frost-Giants. Two further categories, the *Álfar* (Elves) and *Landvaettir* (Land Spirits) are of special interest as divine beings closely related with the natural landscape. It is notable that while the worship of the major gods and goddesses of past times was suppressed by Christianization, belief in the Elves and Landspirits has remained popular in the religious imagination of Icelanders to the present time, at the level of folk religion and oral tradition.

The nature of the Elves and Land Spirits is not straightforward. They cannot be precisely defined nor sharply distinguished from one another, from the gods, or from the spirits of dead. It is advisable to conceptualize the Norse pantheon of divine and semi-divine beings as a continuum; a spectrum of divine powers and presences some of which are close at hand, others more remote.

The Poetic and Prose Edda collections, the primary Icelandic literary documents for Old Norse mythology, contain quite a few references to the Elves. These are generally not sustained discussions and descriptions, but brief formulaic phrases whose matter-of-fact repetition establishes their grounding in long-held beliefs and tradition. In a number of different texts, the Elves are listed alongside the Aesir in phrases in which the two classes of gods represent the entirety of Norse divinity, in the manner of a synecdoche (a figure of speech in which the word for part of something is used to mean the whole). For example, the Seeress, describing the fate of the gods and of the cosmos in *Voluspá* 48, poses the question, “What of the Aesir? What of the Elves?” to introduce her account of the final collapse of the gods and their world. In *Hávamál* 159, Odin illustrates his broad range of knowledge with the boast, “Aesir and Elves, I know the difference between them; few who are not wise know that.”

The description of the Elves as the primary category of divine beings other than the Aesir places them into the position in Norse cosmology that is normally assigned to the Vanir, the class of gods that includes the fertility deities Njorðr, Freyr and Freya. There are certain indications that Elves and Vanir may be synonymous. *Grim-nismál*

names “Álfheim” as Freyr’s home (*Grimnismál* 5), and the humorous poem *Lokasenna* includes Loki’s taunt to Freyja, “Of the Aesir and Elves that are in here, each one has been your lover” (*Lokasenna* 30). As the deities gathered in the hall are otherwise described as the Aesir and the Vanir, the “Elves” to which Loki refers to can only be the Vanir. However, the Eddic poem *Fafnismál* clearly distinguishes the Aesir, Elves and Vanir as three separate categories of beings (*Fafnismál* 13), for which reason a straightforward identification of the Elves with the Vanir is not tenable.

Nonetheless, there would seem to be considerable overlap between the Elves and the Vanir, particularly in regard to the fertility function explicitly identified with the Vanir but also shared by the Elves. The sun, the mightiest power in all nature, is a feminine being called *Álfrodull* (Elf-disc). Fated to be devoured by the monstrous wolf Fenris in the cataclysm of Ragnarok, Elf-disc will first give birth to a new sun who will shine on the new world that will rise from the ashes of the old (*Vafþrúðnismál* 47).

A complex of beliefs centered on fertility links together the Elves, the dead, the god Freyr and deceased kings. According to *Ynglingasaga* (chapter 10), the god Freyr provided the blessings of fair weather and rich harvests during his life, and was after his death worshipped in his grave-mound in the hope of continuing the benefits of his past reign. Similarly, *Flateyjarbók* reports that when the Norwegian king Olaf of Geirstad died, his subjects worshipped him as the “Elf of Geirstad” for the same reasons as with the legendary worship of Freyr. In *Gíslis Saga* (chapter 18), Thorgrim, a pious worshipper of Freyr, is buried in a grave-mound, which remains free of snow and ice in the worst of weather, as a kindness of the god toward his fallen devotee. In each case, worship is offered to the dead for the sake of fertility and related benefits, with reference to both Elves and Vanir in different cases. Of the three major seasonal *Blóts* (literally “bloodsacrifices,” but actually meaning solemn community feasts in honor of the gods) described in the *Ynglingasaga* and believed to have been practiced across Scandinavia, one was the *Álfablót*, dedicated to the Elves. Jormundur Ingi Hansen, *Allsherjargoði* (High Priest) of the Icelandic Neopagan association *Ásatrú* from 1994 to 2002, says he once knew old women who would put out offerings of food to the Elves, hoping to thereby secure future prosperity.

The association of benevolent supernatural powers, whether of the dead, of Freyr or Elves, with grave-mounds is highly significant and suggests linkages with other religious traditions of Europe and beyond. In Celtic Irish myth, there is a similar belief in sacred hills, which are often grave-mounds, called *Sídh*, which are gateways to the Other World. On the night of *Sámhain*, the *Sídh* were believed to open wide, enabling the living, the dead and the gods to cross into one another’s domains. In ancient Russia, persons of high status were buried in immense grave-mounds called *Kurgans*. The late archeologist Marija Gimbutas theorized that such burials were a distinctive trait of Indo-European culture, spreading from the Russian steppe region toward Europe through a series of migrations or invasions over thousands of years, possibly as early as the fifth millennium B.C.E. *Eyrbyggja Saga* tells of *Helgafell* (Holy Mountain, a rocky hill with an impressive view, located in the Snaefellsness peninsula)

opening to welcome the newly deceased into the community of ancestors (chapter 11). The saga literature also describes other cases of the dead buried in sacred hills. It is tempting to see such tales as a far-flung extension of the Indo-European Kurgan idea; even if they are not, the commonalities remain of interest.

Turning to Land Spirits, these beings are mentioned less often in the Edda collections than the Elves and are more in evidence in the Sagas and other later Norse texts. An oft-cited passage which very well illustrates the importance of the Land Spirits in the early history of Iceland is an injunction against ships with dragon-head ornaments on their prows coming into port, for fear that the dragon-heads might upset the native Land Spirits of Iceland (*Landnámabók*, *Hauksbók* version, chapter 268). This and other passages express the belief that it is vitally important to maintain the goodwill of the Land Spirits, the native powers of any given region, as their enmity can spell disaster. In *Egils Saga* (chapter 58), Egil Skallagrimsson attempts to purposely rouse such supernatural ill-will by composing a poem in which he calls on the Land Spirits to curse the Norwegian king Eirik Bloodaxe and his wife Gunnhildr.

The same belief is still influential in modern-day Iceland, where a special division of the government highway commission is entrusted with the task of determining whether Elves, Land Spirits, or other such invisible beings inhabit particular hills, boulders or other natural formations. If such a place is believed to be the dwelling-place of a Land Spirit or other divine being, then that area is held off-limits to road construction. Folk belief holds that whoever disturbs the dwellings of the Land Spirits will suffer illness or other calamities, possibly including death. The location of the Land Spirits in large stones and hills is again reminiscent of the Celtic *Sídh* and the Russian Kurgan.

An important common feature of the Elves and Land Spirits is their lack of individual identity. They are generally referred to not as named individuals but as anonymous, divine collectives, in contrast to such distinctive individual personalities as, for example, Odin, Thor, Freyja and Loki. The lack of distinctive identity of the Elves and Land Spirits may be among the factors that enabled belief in such beings to survive suppression by Christian authorities over the centuries.

Modern Icelanders are of two minds about displaying their belief in Elves and Land Spirits. Most are quite guarded about openly admitting to such beliefs, for fear of seeming foolish or superstitious, and it is more common to hear statements that other Icelanders believe in such things than to meet with a direct confirmation of these beliefs.

On the other side of the spectrum, there are certain entrepreneurial Icelanders who have come to see local customs concerning Land Spirits and Elves as a business opportunity, and have taken it upon themselves to market maps, books and tours to foreign visitors.

The Elves and Land Spirits are linked both with the power of nature and with the world of the dead. This is most clearly borne out in the association of the Elves and Land Spirits with hills and mountains, which resemble and are in some cases identical with grave-mounds where ancestors are believed to continue their existence.

This linkage echoes very early levels of Indo-European religion, with reference to the Kurgan grave-mounds of southern Russia. The myths, beliefs and folklore concerning Elves and Land-Spirits suggest an enduring connection between fertility and death and between gods and ancestors in the Nordic religious imagination, which survived the official suppression of Old Norse Paganism and continues to the present day.

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See also: Earth First! and the Earth Liberation Front; Heathenry – Ásatrú; Middle Earth; Odinism; Seidr (adjacent to Heathenry – Ásatrú); Trees (Northern and Middle Europe).

Emerson, Ralph Waldo (1803–1882)

Ralph Waldo Emerson can rightly be called the first American “man of letters.” By the end of his life, Emerson had published nine books of essays, had served as the editor of the Transcendentalist journal *The Dial*, had traveled and lectured in Europe on three occasions and had regularly delivered a series of lectures on the Lyceum circuit almost every year between the mid-1830s to the late 1860s.

The son of a Boston Unitarian minister and heir to a long ancestral line of Protestant leaders, Emerson trained for the same career in his early youth. Nevertheless, significant personal losses (the early death of his father and of his first wife Ellen Tucker) helped to shape his increasing theological doubt, which included a growing disbelief in the idea of immortality, in the “miracles” of Christ’s ministry and in the efficaciousness of such rituals as the Lord’s Supper (Communion, the Eucharist). Emerson’s intellectual development also turned him away from his early fascination with Scottish “Common Sense” theologians and philosophers and toward the writings of Plato, Swedenborg, Kant and the European Romantics. These personal, theological and intellectual transformations all mutually reinforced Emerson’s growing sense that he must re-create his life according to his own sense of intellectual and spiritual truth.

Emerson was perhaps the single person most responsible for what has come to be called “The American Renaissance,” a flowering of literary and artistic production of the mid-nineteenth century which consciously strove to establish a unique “American voice,” distinct from the constraints and conventions of European culture. His two most famous lectures, both delivered at Harvard, established his particular contribution to this Renaissance. In “The American Scholar” (1837), Emerson voiced the call for American intellectual independence from Europe, urging on his audience the importance of individual self-expression, though importantly, a kind of self-expression that is contained and tempered by the disciplined pursuit of self-culture (a theme he later elaborated in his essay, “The Poet”). His 1838 Divinity School Address was much more controversial, challenging not only the theological orthodoxy of the time, but even its most liberal expressions in the form of New England Unitarianism. Calling the Unitarianism of his day “corpse-cold,” Emerson literally faced-down his ancestors and teachers, arguing for the spiritual authority of individuals in communion with their own consciences and deemphasizing the role of Jesus as a source of authority. He emphasized the importance of discerning spiritual truth from everyday life, a wide range of reading and ongoing experience in nature.

Emerson’s first published work, the extended essay *Nature* (1836), is particularly important for our understanding of Emerson’s contribution to the many and varied

“spiritualized” visions of nature in American culture. While one of Emerson’s first career ideas (after rejecting the ministry) was to become a naturalist, it is clear that his understanding of nature is weighted more toward nature’s symbolic, rather than scientific importance. Throughout his life, however, Emerson continued to weave together a complex reading of nature that was informed by both his own amateur experiments as a botanist and his more sophisticated intellectual meditations on the meaning of nature as a source for human, spiritual growth.

Written as he was setting into a second marriage, a new home in Concord, Massachusetts and a newly launched career as a writer and lecturer, *Nature* can be seen as Emerson’s personal manifesto, a claim to his self-fashioned spiritual and intellectual vocation. While entitled “Nature,” the essay is much more than a study of the natural world (though it includes moments of precise, naturalist observation); rather, it is a broad-ranging inquiry into language, art, beauty and spiritual experience as these are informed and illuminated by what we commonly think of as “nature” (landscape, mountains, rivers and so on).

While physical nature is the touchstone throughout the essay, Emerson’s text ultimately concerns itself with the figure of the ideal Poet (whom Emerson both creates and embodies) whose task it is directly to experience the spiritual lessons inherent in nature and then to transform the language of the natural world into the written word for a wider audience. The Poet, in Emerson’s view, replaces the minister as the modern version of the ancient biblical prophets, open to direct, spiritual experience and called to share that experience with others.

While drawing on the Christian concept of the “Book of Nature,” Emerson disavows Christian traditionalism and argues that the human mind (consciousness) and the natural world are the only necessary foundations for genuine, spiritual experience and the cultivation of the self. Nature is portrayed by Emerson as a democratic medium, available to all, for a broad range of uses. The common use of nature is that of “commodity,” nature as a resource for shelter, food, tools and other human creations. But nature’s more important and authentic uses, Emerson argues, is as a medium for immediate, spiritual revelation that provides each individual with a vision of truth, beauty and goodness. Like other Romantic and Transcendentalist thinkers, Emerson includes in his definition of nature almost anything that can be defined as the “not me.” Not surprisingly, then, his essay is as much about the effects of the “not me” on the development of self as it is about bio-physical nature as such.

The vision of “The Poet” (and his or her proper relationship to the natural world) that Emerson first outlined in *Nature*, would become a centering point in his life and his writing throughout his career. At the same time, while *Nature* can be said to be more “about” the self than about the natural world as such, it played a significant role in a growing shift in American culture toward attentiveness to nature, rather than seeing the physical world as primarily a stage in the human–Divine drama, or as a resource for human use.

Emerson's writings set the intellectual foundation for Henry David Thoreau's, John Burroughs' and John Muir's own arguments on behalf of nature as a beneficent force which must be respected, studied and protected. While it would be a mistake to see Thoreau's *Walden* (1854), Burroughs' *Locusts and Wild Honey* (1879), or Muir's *My First Summer in the Sierras* (1911) as merely "Emerson put into practice," all are "conversion narratives" that testify to finding a new spiritual life "close to nature" which depend heavily on Emerson's earlier insights. In this sense, the ripple effects of Emersonian thinking about nature extended far beyond the reach of his immediate contemporaries to include early conservationists such as George Perkins Marsh, as well as environmentalists Aldo Leopold and Rachel Carson in the twentieth century. While Emerson is remembered most broadly as a literary figure who set the terms of a new flowering of American writing in the nineteenth century, his influence on liberal religious life and his unintentional contribution to American environmentalism continue to this day.

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See also: Back to the Land Movements; Book of Nature; Burroughs, John; Muir, John; Pantheism; Romanticism; Thoreau, Henry David; Transcendentalism; Whitman, Walt.

Emissaries of Divine Light

In the 1930s, Lloyd Meeker, also known by the spiritual name Uranda, gained a following as a lecturer on human potential. In 1939, he met Martin Cecil, a hereditary British Lord, and together the two visionaries began to develop a network of intentional communities. The first was opened in 1945 at Sunrise Ranch, near Loveland, Colorado. By 1948, a second community, known as 100 Mile House, had opened in the remote interior of British Columbia. By the 1980s, the movement had about a dozen intentional communities worldwide and well over 100 other organized centers, although later some of the communities and centers closed. A distinctive type of New Age spiritual outlook that embraces both body and soul characterizes the Emissary movement, which sees its central task as the spiritual regeneration of humankind and attempts to embody its spiritual values in all parts of daily life.

A strong connection to the natural world has always been central to the Emissary outlook. Individual members seek to attune themselves with the divine force that is held to permeate everything. The communities have worked toward self-sufficiency, with extensive organic gardening and farming operations, including hydroponic installations. Through a strong outreach program of publications, seminars, and retreats they have spread their spiritual message to the general public.

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See also: Back to the Land Movements; New Age; New Religious Movements.

Entheogens

The history of religion is intertwined with the use of drugs believed to facilitate the religious experience. Such substances are best referred to as “entheogens,” a term coined in 1979 by a group of scholars including R. Gordon Wasson, Carl A.P. Ruck, and Jonathan Ott to denote “drugs which provoke ecstasy and have traditionally been used as shamanic or religious inebriants, as well as their active principles and artificial congeners” (Ott 1996: 15). The term’s Greek roots translate as “god generated within,” which better describes the drugs’ religious use than do such words as “intoxicant” (literally, poisonous), “hallucinogenic” (causing hallucinations), “psychotimimetic” (mimicking psychosis), “narcotic” (sleep-producing) or “psychedelic” (soul-showing).

In both traditional and contemporary societies, entheogen users believe that they experience a more primal and unmediated spirituality than those persons not using them. Their human spirituality is connected to and mediated by the plant world, rather than transcending it. Yet at the same time, many entheogen-based religions speak of another world that is more real and true than our three-dimensional world.

Nor is the entheogenic experience essentially different from other religious experience, argues historian of religion Huston Smith in *Cleansing the Doors of Perception* (2000: 37), any more than a religious experience introduced by physical danger or illness. However, Smith suggests that, lacking a supportive spiritual community, entheogenic ecstasy could be less likely to effect permanent life changes.

Modern study of the relationship between entheogens and religion began in the 1890s, when the American psychologist William James wrote about changes in consciousness produced by inhaling nitrous oxide. His English contemporary, Havelock Ellis, experimented with peyote (from which mescaline was chemically extracted in 1919), as did a variety of other Americans and Europeans, mostly physicians and psychologists. The British writer Aldous Huxley experimented with mescaline in the early 1950s and described his reactions in an influential short book with a title taken from the mystical eighteenthcentury poet William Blake, *The Doors of Perception*. LSD was first synthesized in 1938 but not extensively investigated until the 1950s, first by psychiatrists who thought its use replicated schizophrenia and then by scholars of religion who investigated parallels between entheogenic experience and other reports of mystical experience.

A famous experiment took place on Good Friday, 1962, at a Christian religious service in the Boston University chapel. Walter Pahnke, M.D., who was completing a Ph.D. in religion at Harvard University, conducted a doubleblind study of psilocybin (found in the psilocybian mushrooms) by giving it to half of a group of twenty theology

professors and students before the service, while the other half received a placebo, nicotinic acid. Participants recorded their experiences in writing the following day, and the reports were scored for mystical traits by independent raters on a scale of zero to three. Almost all of those receiving psilocybin reported significantly higher scores for mysticism, based on a list of seven traits (Smith 2000: 100–6).

Researchers began to consider the influence of entheogens on ancient religions, particularly Hinduism during the Vedic period and the Eleusinian Mysteries of Classical Greece. In addition, Renaissance and Early Modern accounts of possible entheogen use by European witches were reexamined to see if such substances played a part in the witches' poorly understood activities.

Richard Schultes (1915–2001), a botany professor at Harvard University, had learned in the 1930s that the use of entheogenic psilocybin mushrooms survived in remote southern Mexican villages, despite four centuries of effort by the Roman Catholic Church to eradicate their use. The British writer Robert Graves (whose book *The White Goddess* played a significant role in the contemporary Pagan revival) put mushroom researcher R. Gordon Wasson in touch with Schultes. Wasson and his associates visited Mazatec Indian healers who used psilocybin mushrooms and other entheogens in their ceremonies. From Schultes' and Wasson's research flowed a stream of publications describing an unbroken tradition of shamanic use of entheogens in Mexico.

In the 1960s, Wasson asserted that *soma*, a miraculous substance celebrated in the Vedas (holy texts dating from the second millennium B.C.E. and fundamental to the Hindu religion) was actually the mushroom *Amanita muscaria*. The Brahmans, priests of the Aryan tribes who moved into northwestern India in this period, composed numerous hymns mentioning *soma*, a substance that was pressed, mixed sometimes with milk, and then drunk by the Brahmans, but which was not alcohol. Hymns describe the war god Indra, in particular, delighting to consume vast quantities of *soma* before battling demonic opponents. One Vedic hymn (RV 8.48) proclaims, "We have drunk soma . . . we have become immortal; arrived at light. We have found the Gods."

Examining the textual evidence, including such hints that *soma* was associated with mountains and that its active principle remained in the drinker's urine, and comparing that evidence with ethnographic descriptions of modern *Amanita muscaria* use by Siberian shamans, Wasson and his associate, the Indologist Wendy Doniger, argued that the Aryan tribes had used the mushroom in the homeland. After they expanded into India, however, they were only able to acquire it through trade, since it did not grow in India, and eventually *soma*'s actual nature was forgotten.

Subsequently Wasson, together with research chemist Albert Hofmann (discoverer of LSD) and Classics professor Carl A.P. Ruck, advanced a theory that the Greek mystery religion of Eleusis, practiced from about 1500 B.C.E. until 395, had at its climax a ritual ingestion of a water solution of ergot, *Claviceps purpurea*, a psychoactive fungus that grows on wheat and barley, from which LSD was chemically derived.

Entheogens provide evidence for the persistence of an “Old Religion,” some form of pagan religion persisting in Europe until relatively modern times. Roughly 40,000–60,000 accused witches were executed between the fourteenth and eighteenth centuries, and almost all were at least nominal Christians. Nevertheless, some accused witches were found to use ointments containing such psychoactive plants as *Atropa belladonna* (deadly nightshade) and *Hyoscyamus niger* (henbane), plants, which can be deadly if misused. These findings suggest the presence of an underground tradition of their ritual use.

The chief North American religious tradition employing entheogens is the Native American Church, whose rituals include consumption of its sacrament, the peyote cactus. Used for millennia in Mexico, peyote’s use spread into the United States in the 1890s as Plains tribes were fractured and relocated onto reservations. In its teachings, the church combines Plains tribal religious ideas with Christianity, thus competing with the Christian missionaries who flocked to the new reservations to make converts. As one church member said, “Our favorite term for Peyote is Medicine. To us it is a portion of the body of Christ, even as the communion bread is believed to be a portion of Christ’s body for Christians” (Smith 2000: 117).

An ancient South American entheogen, *ayahuasca* or *yagé*, has also spawned formalized international religious organizations. Ayahuasca (“vine of the souls” in the Quechua language of the Peruvian Amazon) is the vine *Banisteriopsis caapi*, containing the alkaloid harmine, frequently mixed with other psychoactive plants to increase its potency. (Harmine is also present in a Eurasian plant, Syrian rue, *Peganum harmala*, which has also been put forth as the source of *soma*.) Its use continues unabated today.

Two Brazilian churches employing ayahuasca sacramentally were founded in the twentieth century. The *Santo Daime* church originated about 1930 and the *União do Vegetal* was founded in 1961. Like members of the Native American Church in North America, followers of the Santo Daime religion speak of their sacramental entheogen in Christian terms: the Daime, the sacred drink, is described as giving them a form of Christconsciousness. Yet its followers also say that their religion incorporated the spiritual force of the indigenous Amazonian peoples. Santo Daime reaches out as well to the Spiritist and Afro-Brazilian religions and urges activism on behalf of the rain-forest. *Daimistas*, like many other entheogen users, see their sacrament as “both a shortcut and a medicine” that helps them to discover their spiritual identity (Polari de Alverga 1999: 131). “There are no human intermediaries in the Daime” (Polari de Alverga 1999: xxiii).

In Peru and Brazil, since the 1970s in particular, *Aya- huasca* has also become a component of ecotourism, as outsiders visit Amazonia to study with local shamans and partake of their sacrament. Santo Daime in particular has spread to other South American countries outside the traditional ayahuasca-using region and also to the United States and Western Europe, where Dutch members won in court after being arrested as “narcotics users.”

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See also: Ayahuasca; Ethnobotany; Huxley, Aldous; Leary, Timothy; Peyote; Umbanda.

Environmental Ethics

Environmental ethics can be defined, in very general terms, as efforts to articulate, systematize, and defend systems of value guiding human treatment of and behavior in the natural world. Philosophical and religious reflection on human obligations toward nature or “otherkind” has a long pedigree in human cultures, whether occidental, Asian, or indigenous. Environmental ethics as a distinctive subfield within Western philosophical and religious ethics, however, did not emerge until the last three decades of the twentieth century.

The roots of modern environmental philosophy predate the emergence of “environmental ethics” as an academic field. In North America, for example, there are critically important antecedents that can be traced to the second half of the nineteenth and early twentieth century, perhaps especially in the writings of American naturalists HENRY DAVID THOREAU and JOHN MUIR;. Both Thoreau and Muir influentially promoted environmental preservation and the setting aside of forest reserves. This encyclopedia is replete with additional examples of the many, global tributaries to contemporary environmental ethics.

From Leopold to Earth Day

But among environmental ethicists in the West, at least, there is widespread agreement that the forester and ecologist ALDO LEOPOLD provided a benchmark against which subsequent environmental ethics can be measured. His short essay “The Land Ethic” in *A Sand County Almanac* (1949) provided an evocative and profound effort to articulate ethical guidelines for human interactions with nature. In it Leopold defined ethics as guidelines for social or ecological situations, based on individual membership in “a community of interdependent parts.” Applying this definition to the environment, a “land ethic,” he claimed, “simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land” (239). This enlargement of humans’ moral community transformed their place in relation to the natural environment, “from conqueror of the land-community to plain member and citizen of it” (240).

Leopold’s land ethic provided a model of and foundation for a type of environmental ethics now known as “ecocentrism” (ecosystem-centered ethics), or alternatively, “biocentrism” (life-centered ethics). Such ethics assert that the well-being of entire ecological communities, not just individual species (like *Homo sapiens*) or individual

organisms, should be the axial moral concern. Ecocentrism therefore challenges most Western philosophical ethics, which tend to be “anthropocentric,” namely, focused on human welfare. For such ethics, nonhuman life is valuable at most indirectly, to the extent it satisfies some human need or preference. For ecocentric ethics, human interests do not trump that of all other life forms and the well-being of the biosphere as a whole. An ecosystem, rather than its constitutive parts, is the axial point of moral concern.

The ecocentric approach presented by Leopold and his progeny, challenges environmental ethics to specify which individuals and groups should be given moral consideration, that is, have their interests considered or protected in some way. It also implicitly demands justification for claims limiting moral consideration to individuals or groups that are less than wholes. Indeed, much environmental ethics is engaged in the effort to determine the extent and nature of the moral community and to develop principles for deciding hard cases, such as when the interests of morally considerable organisms conflict.

It would be difficult to overestimate the importance and influence of Leopold’s land ethic, although this influence took some time to germinate and grow. To understand its influence, however, the affective, aesthetic, and even religious underpinnings of his writing need to be fully recognized. But the religious dimensions of Leopold’s writings are often overlooked in the environmental ethics literature, making it difficult for some fully to apprehend the evocative resonance Leopold has had with readers. Curt Meine’s biography of Leopold revealed what can be discerned by the perceptive reader throughout his work: Leopold had a deep spiritual connection to the Earth’s living systems and a profound sense of their sacrality, this being the foundation of his land ethic (Meine 1988: 506–7, and in his biographical entry in this volume).

Following Leopold’s untimely death in 1949, the next intellectual landmark in the development of environmental ethics was the work of ecologist RACHEL CARSON. In the late 1950s Carson began publishing magazine articles exposing the dangers of radioactive materials, pesticides and herbicides, the creation and use of which had boomed in America after World War II. In her now-famous *Silent Spring* (1962), Carson argued that industrial society was decimating avian populations and threatening the health of many other organisms, including humans.

Less well known are two of Carson’s books on oceans, published in 1951 and 1955, in which her own nature spirituality is more obvious than in her exposés of chemical culture. These books illustrate the most powerful themes in Carson’s work: a religious reverence for the sea, which she considered the womb of life, and a belief in the connectedness of all living things. The sea, she believed, was the generator and the grave for all: the alpha and omega of the planet. The life of the sea controls the life of the land and thus human life, an axiom that Carson believed should humble human beings (McKay, this volume).

This humility coheres with Leopold’s sentiment that humans should act as plain members of the land community, and it subtly conveys her own ecocentric spirituality.

It also reflects how important such humility has been in much of the subsequent evolution of environmental philosophy, religious or otherwise. Carson not only helped set the stage for explicitly ecocentric environmental ethics, she also criticized the reductive and instrumental methodology that characterized (male-dominated) Western science since Francis Bacon (1561–1626), thus tilling the soil for ecofeminism, which would emerge as a particularly vital form of environmental ethics a decade or so later.

While many events and thinkers contributed to the ferment shaping the field of environmental ethics, several additional critically important figures who published in the second half of the 1960s deserve to be singled out for playing a decisive role. Two articles in particular had an immediate impact because they were published in the widely read journal *Science*.

Lynn White's 1967 argument blamed much of the environmental crisis on ideas that he believed had incubated for centuries within Christianity. White was hardly the first to suggest such a connection, of course. The historians Perry Miller in *Errand into the Wilderness* (1956) and Roderick Nash in *Wilderness and the American Mind* (1967) had argued that Christianity fostered antienvironmental attitudes and behaviors. And in *The Rights of Nature* (1989) Nash showed that a number of Christians, including Walter Lowdermilk, Joseph Sittler, and Richard Baer, had earlier criticized their tradition's complicity in environmental decline before White had.

A year later the biologist Garrett Hardin argued in *Science* that there is a "tragedy of the commons" wherein, given an ecosystem open to all, individuals pursuing their own interests degrade that ecosystem's resources and their own life-prospects if there are no mutually agreed-upon constraints to limit self-interested behavior and prevent overexploitation. Combined with apocalyptic environmental predictions such as in the ecologist Paul Ehrlich's *The Population Bomb* (1968), Hardin's much debated 1974 article "Living in a Lifeboat" – which infamously argued that aiding the poor intensifies population growth, environmental degradation, and human suffering – generated additional controversy. It forced many to consider, for the first time, the environmental dimensions of public policies and ethical decision making.

Two other works published in the 1960s, one by ERNEST FRIEDRICH SCHUMACHER, the other by Gary Snyder, merit special attention when considering the antecedents to the discipline of environmental ethics and its religious dimensions. In 1966, first as an article in a book, then republished two years later in the first volume of *Resurgence*, which would become a leading venue for the discussion of religion, mysticism and nature, Schumacher published "Buddhist Economics." In it he argued that "The teaching of the Buddha . . . enjoins a reverent and nonviolent attitude not only to all sentient beings but also, with great emphasis, to trees" (1966: 699). Such reverence, he asserted, offers a Buddhist approach to economics that rejects economic growth and material acquisition and strives instead for "highly self-sufficient local communities [which] are less likely to get involved in largescale violence than people whose existence depends on world-wide systems of trade" (1966: 698). Reflecting and promoting a decentralist ideology that would become common among environ-

mentalists, Schumacher's essay was republished widely and included in the economist Herman Daly's influential, edited works promoting a "steady state economy" (1973: 231–9; 1980: 138–45). Such economies, wrote Daly, Schumacher, and the other contributors to these volumes (discussed below) are more ethical and fitting for a world of limited resources. Schumacher's influence increased dramatically after the publication of *Small is Beautiful* (1973), which is now considered a classic environmentalist text, and includes his essay on Buddhist economics.

Meanwhile, the poet GARY SNYDER began his influential publishing career in his own way by promoting decentralized bioregional economies, and what in America were alternative spiritualities, as a pathway toward sustainability. Snyder considers himself a "Buddhist-Animist" (Taylor 1995: 114) and his remarkable book, *Turtle Island* (1969), focused on the ecological spirituality and wisdom of North America's indigenous cultures, becoming the first of many writings in which he offered a religious green alternative to occidental religions. His influence grew rapidly after he was awarded the Pulitzer Prize for this work in 1975.

While much of the religion-and-nature-related intellectual work during the 1960s was critical of occidental religions and/or proffered supposedly greener alternative spiritualities, an important dissent was published by the geographer Yi Fu Tuan in "Discrepancies Between Environmental Attitude and Behaviour: Examples From Europe and China" (1968). Tuan rejected as facile the assumption of a close connection between nature-related beliefs and ideals and actual practices. Specifically, he rejected the claim that occidental cultures before Christianity were relatively benign by pointing to the environmental devastation caused by the Greeks and Romans, and he argued that the Chinese devastated their environment long before Western civilization could have exercised any influence in this regard.

A significant portion of the subsequent debate over religion, ethics, and nature engaged the arguments advanced by all of the above figures. The ferment they created contributed to the social forces that precipitated the world's first "Earth Day" in 1970, which further focused attention on environmental values. Soon the term environmental ethics would come into common usage and the related scholarly field would develop rapidly.

Environmental Ethics beyond the First Earth Day (1970)

Ecocentrism and Deep Ecology become focal points of debate

In 1971 philosopher J. BAIRD CALLICOTT placed environmental ethics as a discipline on the academic landscape, teaching what may have been the world's first course with this title at the University of Wisconsin, Stevens

Point, where he then taught. In the following decades Callicott became the world's leading interpreter and promoter of Leopold's land ethics. A central part of his constructive efforts was engaging the LYNN WHITE THESIS. In his many articles, eventually collected in books, Callicott argued that generally speaking, Asian and indigenous religions provide more fertile ground than occidental religions for generating an environmental ethics compatible with Leopold's land ethics. In this way, he supported the outlines of White's thesis and implicitly contradicted part of Hardin's argument, at least insofar as he was convinced that indigenous societies, which traditionally held land in a commons, generally develop environmentally sustainable lifeways and religious mores (now often called "TRADITIONAL ECOLOGICAL KNOWLEDGE") that help to protect their habitats – a point that the naturalist Gary Paul Nabhan and many anthropologists also argued.

The next watershed in environmental ethics occurred in 1972 when the Norwegian philosopher ARNE NAESS coined and explained the term "DEEP ECOLOGY" at a conference in Bucharest, publishing his thoughts in *Inquiry* the following year. He contrasted "deep ecology" with anthropocentric, "shallow ecology" (which he later more diplomatically called "reform ecology"), by which he meant environmentalism concerned only for human well-being and unwilling to radically reconfigure society toward sustainable lifeways. Naess called his own approach and pathway toward deep ecology "ECOSOPHY T" – "ecosophy" was another Naess neologism meaning "ecological philosophy." In his discussion of "Ecosophy T" one can see the religious dimensions to his belief that nature has "intrinsic" or "inherent" value. (Environmental philosophers variously define and debate the terms "intrinsic" and "inherent" value; specific reasoning about such terms involves "meta-ethics," a task beyond the present purpose. Here these terms are used simply as synonyms for the idea that nature has in some way value in and of itself, independent of human need.)

"Deep Ecology" rapidly became a catchphrase for most environmental ethics claiming nature had intrinsic value. The wider extension of the term and its growing popularity obscured some of deep ecology's distinctiveness, which was frustrating to Naess and some of his collaborators. But in its generic, easy-to-understand version (Naess's own writing, by his own admission, is difficult reading), in which deep ecology is equated simply with a belief in the intrinsic value of nature, the trope found a widespread resonance among environmental activists, scientists, and scholars. "Intrinsic value theory" thus became an important element in the growing environmental ethics debate. Indeed, Naess himself was influential upon scientists developing CONSERVATION BIOLOGY, a field which, like environmental ethics, had important antecedents (in this case in earlier conservation science) but which emerged with a catchy name and thus a stronger identity in the 1970s.

The next watershed in the evolution of environmental ethics in general, and of non-anthropocentric environmental ethics in particular, was the "Rights of Non-Human Nature" conference held in California in 1974. The conference was convened by John Rodman, a political theorist at California's Claremont Graduate School, who would

later declare himself a “radical environmentalist” and articulate his own theory of intrinsic value (Rodman 1983). But the conference was at the time inspired by a 1972 law review article entitled “Should Trees Have Standing?”, written by University of Southern California law professor Christopher Stone. Stone argued in this article and a subsequent book that natural objects, including trees, have interests and should have standing in the courts, represented by sympathetic humans. Although the claim that nonhuman nature has rights had been made before Stone’s better-known argument, the conference nevertheless was a landmark because it drew together for the first time many of those who were or soon would shape the emerging environmental ethics field.

Indeed, speakers at this conference included several whose publications in the 1960s have already been noted, for example, Gary Snyder, Garrett Hardin, and Roderick Nash. Others included professor of human ecology PAUL SHEPARD, who in 1973 published *The Tender Carnivore and the Sacred Game*, the first in a series of books arguing that the spiritualities and lifeways of the world’s foraging cultures are superior to the world’s agricultural societies and the religions that accompany them. Shepard’s contributions to deep ecology and radical environmentalism can hardly be overestimated. Dave Foreman, the most charismatic of Earth First!’s co-founders, for example, considers Paul Shepard to be “the most brilliant and provocative intellect of our time” (promotional blurb inside Shepard 1998). Native American scholar VINE DELORIA added his complementary argument, first published in *God is Red* in 1972, accusing Christianity of waging a genocidal war against Indians and nature and arguing that only indigenous wisdom could save the planet. George Sessions and Bill Devall were also present; they became influential deep ecology proponents upon their publication of *Deep Ecology* in 1985.

Sessions, a philosophy professor at a small college in the foothills of California’s Sierra Nevada Mountains, during this conference and in subsequent publications, joined the bandwagon, blaming anthropocentrism and its most forceful bearer, Christianity, for repressing the ecologically sustainable lifeways and spiritualities of the world’s indigenous, foraging peoples. He suggested that Western humans could work their way back to a proper understanding of the “God/Nature/Man relationship” via the pantheism of the seventeenth-century philosopher BARUCH SPINOZA. Sessions also likened the presumed nature-beneficent spirituality of indigenous peoples to what ALDOUS HUXLEY (following Leibnitz and others) called THE PERENNIAL PHILOSOPHY (1945), the nature-mysticism and feeling of oneness with the universe that some believe is a widespread, crosscultural human experience. Sessions credited not only Huxley but also the anthropologist LOREN EISLEY (1970) for recognizing the ecological sensitivity of “primitive man” (Sessions 1977: 481–2), and lauded the poet ROBINSON JEFFERS as “Spinoza’s twentieth-century evangelist” (Sessions 1977: 509). Arne Naess had also been influenced by Spinoza, and this provided one of the affinities with Sessions that led to their collaboration on a “deep ecology platform” (Naess 1989: 29), which shaped the identity of this branch of environmental ethics.

While many of the voices at this conference had affinities with what would soon afterward be understood as deep ecology (Snyder, Shepard, Sessions, Devall, and in some ways Deloria), there were other perspectives as well. Another Claremont professor, process philosopher and theologian JOHN COBB also presented, providing an environmentally sophisticated version of Christianity. His presentations suggested that the prevalent critiques of Christianity might well be overbroad. In his conference presentation he drew on *Is It Too Late? A Theology of Ecology* (1972) the first of his many publications exploring Christian environmental responsibility. Also presenting was Roderick Nash whose work reinforced White's thesis about the ecological calamities brought on by Christianity (1973). Observing the greening of Western philosophy and religion in the 1970s and 1980s, however, Nash eventually argued differently in *The Rights of Nature*, asserting that environmental ethics can be well built on occidental cultural roots.

Not long after this conference, in 1976, George Sessions began publishing the first of six issues (the last in January 1983) of *Ecophilosophy* (a term borrowed from Naess for "ecological philosophy), an irregular newsletter distributed to about 150 scholars around the world. Many of these scholars consider this to have been an important incubator for the emerging field. But by 1979, another philosopher, Eugene Hargrove, with the support of the John Muir Institute for Environmental Studies (illustrating the field's continuity with early conservationism), began publishing *Environmental Ethics*, which would become the discipline's flagship journal, and facilitate the rapid development of the field. The journal regularly engaged religion, and Hargrove facilitated such discussion not only in its pages, but also in *Religion and Environmental Crisis* (1986), which examined a number of religious traditions. On the tenth Earth Day in 1980, a colloquium on environmental ethics held at the University of Denver was organized by Donald Hughes, who had himself joined the fray as early as 1975, analyzing occidental culture's contributions to world environmental degradation. (See

EGYPT, GREECE, and the ROMAN EMPIRE for his current perspectives on these cultures.)

Animal Welfare Ethics add to the ferment

Not all environmental ethics, of course, express ecocentric or deep ecological values, as did so many of those drawn to the 1974 conference. The mid-1970s were also a time of creative approaches that focused on the welfare of individual animals or certain kinds of animal species. In 1976, for example, philosophers Tom Regan and Peter Singer coedited *Animal Rights and Human Obligations*, introducing to a wide audience both animal rights and animal liberation. Regan's "animal rights" theory endeavored to convince others to extend individual rights to those other beings who were "subject of a life," that is, basically conscious of their own good. Singer, an Australian philosopher, borrowed from the English utilitarian Jeremy Bentham for his secular theory of animal

liberation. Singer argued that the pleasure and pain of all sentient organisms deserves moral consideration and that actions are right that, on average, increase the former and decrease the latter. He used the argument to defend both illegal and extra-legal campaigns to reduce animal suffering. His later hiring at Princeton University into a prestigious academic position drew strong protests from those who rejected his view that humans deserve no more moral consideration than other sentient creatures.

Others followed with theories of their own focusing on the rights or interests of animals. Paul Taylor, for example, drawing on the early twentieth-century work of physician ALBERT SCHWEITZER, argued that moral agents owe respect to all organisms, as individual “teleological centers of life,” which properly pursue their own ends and should be allowed to do so.

The role of primatologists (first and especially JANE GOODALL) and other ethologists (scientists who study animal behavior), contributed decisively to theories of animal welfare. They did so by overturning a wide variety of common assumptions regarding human uniqueness (such as that only *Homo sapiens* use and fashion tools, or have emotional lives and suffer), and the notion that animals are mere moving machines, “automata,” as French philosopher Rene Descartes famously put it in *Discourse on Method* (1637).

Although animal rights ethics have usually been articulated in non-religious terms (arguing essentially that there are no morally relevant differences between humans and sentient animals), it is common to find in publications or interviews that those advancing such ethics have had profound experiences of connection with the animal subjects they seek to protect. Such experiences can often be understood in religious terms, and sometimes are expressed in them. Tom Regan, for example, thinks that while most drawn to animal rights activism slowly grow into the needed awareness, others are “like Franciscans who just seem to be able to enter into an “I–thou” relationship intuitively,” while others have a “road to Damascus” experience and are suddenly “infused with animal consciousness.” Not a few animal activists recall that their beliefs really began suddenly, or intensified greatly, upon the occasion of eye-to-eye contact with an animal, where its full personhood seemed immediately obvious. Examples can be multiplied, including many in this encyclopedia, such as the biographies of CAPTAIN PAUL WATSON or JANE GOODALL, or in Goodall’s own reflections upon PRIMATE SPIRITUALITY.

Regan’s own presentations can involve a kind of ritualizing. He often urges his audiences to choose a “totem animal,” and make a commitment to its well-being. He thinks this is one way to facilitate an emotional reconnection to our earthly animal companions and to ensure long-term participation in the animal rights movement (Regan’s views are from a 14 February 2003 interview with the author).

Such examples suggest that more research into dimensions of environmental ethics that are not at first glance religious might well prove fruitful. Clearly, environmental ethics that may not be *necessarily* religious often make sense to people either *because* of religious experiences or as the result of religious cultural influences they have had.

The forester GIFFORD PINCHOT, for example, who articulated an anthropocentric and utilitarian rationale for forest protection, was significantly influenced by America's politically progressive social gospel movement. Nevertheless, few recognize the religion-related roots of his environmental ethics.

Environmental Ethics Debates from Earth Day 1980 and Beyond

The discussion thus far has identified antecedents to the decade in which environmental ethics became established as an important field for exploring moral and religious aspects of nature–human relations. It spotlighted some of the diverse influences that pushed these developments forward, including certain ecological sciences (especially population dynamics and ethnology), anthropology, and environmental economics (and below we will add environmental history). The analysis suggests that environmental ethics is necessarily interdisciplinary.

“Environmental ethics” emerged during a time of cultural upheaval affecting people with a wide variety of religious perceptions and backgrounds. Many religionists and scholars of traditions not singled out for special blame nevertheless began their own reappraisals during this period. These developments, which intersect with the present analysis, are described in RELIGIOUS STUDIES AND ENVIRONMENTAL CONCERN and are discussed in detail in the many tradition-focused entries analyzing contemporary developments.

This discussion concludes by summarizing important religion-related issues that emerged in the environmental ethics field since *Environmental Ethics* began publishing in 1979. The major issues are related to (1) ecofeminism,

(2) social philosophy, (3) the idea of wilderness and the social construction of nature, (4) the relationship between science and religious ethics and, (5) the relationship between environmental values and practices.

1) Ecofeminism

Two arguments made by some ecofeminists are particularly relevant to *religious* environmental ethics. One is the assertion that the oppression of women and nature are closely connected and that establishing proper human relationships among humans and other creatures requires an overturning of patriarchal civilization and the corresponding breach between men and women. The other is the claim that women *are* essentially closer to nature, more naturally able to appreciate its sacredness, and that this ability needs to be recognized and nurtured as an important resource in the struggle to reharmonize life on Earth. The latter claim is controversial among ecofeminists (some of whom reject any assertions that women are “essentially” one way or another)

and those unsympathetic to such a perspective. The vitality and diversity of these approaches are discussed in ECOFEMINISM and related entries.

2) Social philosophy

So much environmental ethics has been invested in debates regarding moral considerability (anthropocentrism vs. ecocentrism vs. animal rights), and over the relative merits of Western vs. Eastern philosophies and religions, that relatively less attention has been devoted to social philosophy. Indeed, many environmental ethicists seem unaware of a rich literature in political science that has struggled over the relative merits of different political arrangements. Environmental ethics, however, needs a strategy, and since the environmental diagnosis generally involves a claim that there is something wrong with society, the prescription must also be political. There is no avoiding social philosophy, therefore, which seeks to analyze, discover and defend the social arrangements and political systems that best cohere with morality. *Green* social philosophy adds environmental sustainability as an essential litmus test for any social philosophy; the effort to discern what sorts of social arrangements are most likely to ensure the flourishing of all species and ecosystem types is crucial to this investigation.

This is not to say social philosophy has not been discussed or debated. Two contributors to Herman Daly's steady-state economy books, Garrett Hardin and the political scientist William Ophuls, did so explicitly. Ophuls surmised that a benevolent green dictatorship was needed to arrest environmental degradation and ameliorate social conflicts exacerbated by environmental scarcity. In a more democratic vein, Hardin urged mutually agreed-upon coercion. These kinds of perspectives have made many nervous, even leading to charges that environmentalism can promote FASCISM or ECOFASCISM.

Vermont-based communitarian anarchist Murray Bookchin pioneered one school of thought focusing on social philosophy. Known as "Social Ecology," this approach could be described briefly as communitarian anarchism. Social ecology resists hierarchy in general and capitalist market societies with special intensity. It offers as an alternative decentralized community self-rule, and voluntary federations of these participatory bodies, as the path to social justice and environmental sustainability.

Bookchin has been sharply critical of the nature mysticism he accurately perceived as animating much contemporary environmentalism, including that of radical environmentalists. But Bookchin's antipathy to such spirituality does not mean anarchism and social ecology cannot provide fertile ground for religious environmental ethics. As the work of the anarchist scholar John Clark has shown (in his books and in ANARCHISM and SOCIAL ECOLOGY in this encyclopedia), and certain direct action environmental groups such as the DONGA TRIBE, many anarchistic environmental ethics are sympathetic to if not grounded in nature spirituality. These forms of environmentalism generally view the animistic, pantheistic, and/or panentheistic spiritualities of

indigenous peoples, or certain religions originating in Asia, as offering positive environmental values superior to those found in largescale, centralized, monotheistic societies. Indeed, especially in the mid-1980s in the United States and Europe, “green anarchism” has become one of the most rapidly growing popular fronts within RADICAL ENVIRONMENTALISM.

On the one hand, this is unsurprising, for to be “radical” an ethics must purport to get to the root of the problem and offer a solution that does more than address symptoms, but eradicates causes. This is unsurprising as well because much environmental ethics has criticized largescale industrial civilization, especially in the Occident, and because many of the earliest proponents of such critiques, such as GARY SNYDER and BIOREGIONALISM, a movement he helped inspire, trace their roots to anarchistic thinkers and movements and see affinities between such movements and indigenous cultures. On the other hand, this is ironic, for deep ecology, a form of radical environmentalism in many minds, has been criticized for refusing to be specific about which political systems are warranted, while other forms, such as EARTH FIRST! AND THE EARTH LIBERATION FRONT, are often viewed as one or more of the following – antidemocratic, violent, terrorist, Malthusian/anti-poor, racist, sexist, or in general fascistic – for putting concern for the whole biosphere and ecosystems over the well-being of particular groups or individuals.

Many environmental ethicists and activists, of course, simply take for granted the existing political systems and institutions, viewing these as the structures within and through which they must work toward environmentally sustainable lifeways. With such a presupposition, there is little impetus to focus on social philosophy. Most of those in Western democratic countries, for example, who focus on ENVIRONMENTAL JUSTICE AND ENVIRONMENTAL RACISM, do not seek to overturn existing political institutions, but rather, to hold them accountable to their own, stated ideals.

Since societal majorities do not think revolution desirable or feasible, this may help to explain why social philosophy, despite pressure from more radical groups, has not received more attention than it has. It may be, however, that if political scientists such as Thomas HomerDixon are correct in their projections of intensifying environmental deterioration, scarcity and concomitant social conflict, that increasing attention to social philosophy in environmental ethics will follow. This would seem to be a likely response as frustration intensifies regarding the inability or unwillingness of existing political institutions to respond to environmental crises. One possible piece of evidence in this regard is the draw that green anarchism seems to hold for many frustrated radical environmentalists. Another example of this kind of dynamic might emerge based on the assertions of those Muslim intellectuals who have begun to argue that ISLAMIC LAW provides the best ground upon which to establish environmental and human well-being.

There are many other possible futures, of course, including the repressive green government that in the 1960s Ophuls and others asserted would become necessary. This much is reasonably clear: to the extent that liberal democracies are viewed as tethered

to anti-nature religions, religious environmental movements will offer competing social philosophies; moreover, as people struggle for power and over social arrangements in order to arrest ecological catastrophe, religion and politics will be intertwined.

3) The social construction of nature

In 1992 Neil Evernden published *The Social Creation of Nature* and with it debates about the social construction of reality spread rapidly into environmental disputes. In a nutshell, the resulting battle has been over whether, given the widespread impact of human activities, any “non-human” nature remains available to function as a base-line reference point for environmental conservation or restoration, and even whether there was ever any legitimacy to such endeavor.

The controversy intensified when the environmental historian William Cronon published “The Trouble with Wilderness; Or, Getting Back to the Wrong Nature” in 1995, including an abridged version in the *New York Times Sunday Magazine*. Cronon argued that the idea of a wilderness (defined as a place “untrammelled” by humans in America’s 1964 Wilderness Act) where humans have no impact is wrong and ethically problematic. It is wrong because there *is* no such place, and it is ethically problematic because it distracts people from caring for the environment every place else, which on Cronon’s reading, is actually everywhere. The sometimes vitriolic debate that followed was well captured in the first volume and issue of *Environmental History* (1996), which reprinted Cronon’s article alongside critiques of it by conservation historians Samuel P. Hays and Michael P. Cohen. Soon after that, even broader discussions occurred in the *The Social Siege of Nature* (Soulé and Lease 1995) and *The Great New Wilderness Debate* (Callicott and Nelson 1998), as well as in a variety of environmental journals.

Cronon, assailed if not shunned by some in the environmental community whom he considered his allies and friends, offered both an unusual apology and a religious confession in his response to the uproar his article had precipitated:

One problem with “The Trouble with Wilderness,” then, is that in reminding those who worship at the altar of wilderness that their God (like all deities) has a complicated and problematic past, I have perhaps not been as respectful of this religious tradition as I ought to have been. I mean this quite genuinely: to the extent that I have given offense by treading too carelessly on hallowed ground, I sincerely apologize. Had I been writing about Judaism or Christianity or Islam or Buddhism, or about the spiritual universes of native peoples in North America and elsewhere, I certainly would have been more careful to show my respect before entering the temple to investigate and comment on its architecture and origins. The reason I did not do so in this case is that the religion I was critiquing is my own, and I presumed a familiarity which readers who do not know me can be forgiven for doubting.

...I criticize wilderness because I recognize in this, my own religion, contradictions that threaten to undermine and defeat some of its own most cherished truths and moral

imperatives. I have *not* argued that we should abandon the wild as a way of naming the sacred in nature; I have merely argued that we should not celebrate wilderness in such a way that we prevent ourselves from recognizing and taking responsibility for the sacred in our everyday lives and landscapes (Cronon 1996: 56, 57).

Cronon's pledge of his allegiance to the wilderness church in America was revealing in a number of respects. First, he recognized that only a member of this church could effectively speak to it. Second, wilderness religionists, like their counterparts in institutional religions, are capable of sanctioning their own and forcing recantation. Third, scholars play important roles in nature-related religious production and ethical reflection, even those who rarely if ever write in a religious genre. And fourth, the perception that nature is sacred, especially the Earth's remaining wildlands, is resilient, even against constructive attack that would relativize such claims. Further discussion of the implications for both religions and secular environmental ethics regarding such issues is found in the entries on WILDERNESS RELIGION and THE SOCIAL CONSTRUCTION OF NATURE.

4) Science and religious environmental ethics

Conflicts between religious and scientific claims are as old as Galileo and science itself. The cosmogonies of scientists (perhaps especially evolutionary biologists) are always difficult to reconcile with those cosmogonies in which a divine being or beings are responsible for how the world came to be the way it is. Moreover, new scientific theories and understandings often create new cosmogonic conflicts, and this has been occurring in environmental ethics. While many encyclopedia entries explore religion, science and environmental ethics, in this overview it may be helpful to mention several religion-and-science-related issues that promise to preoccupy environmental ethics for a long time to come.

J. Baird Callicott, already discussed as an environmental ethics pioneer who found greater environmental potential in indigenous and Asian religions than occidental ones, went on to publish *Earth's Insights: A Multicultural Survey of Ecological Ethics from the Mediterranean Basin to the Australian Outback* (1994). In the main, he repeated his earlier perception, but in this case, he also described themes within Judaism and Christianity that could undergird positive ethical approaches to nonhuman nature. More importantly with regard to the present conundrum, however, was Callicott's proposed method to resolve conflicts between religion and science. When religious and scientific understandings conflict, he asserted, scientific beliefs should trump religious ones.

This is certainly one way to deal with the problem, privileging science over religion, but Callicott's claim proved controversial. In *Worldviews: Environment, Nature, Culture* (vol. 1, no. 2, 1997), a special issue devoted to Callicott's book, he was criticized along two major lines. First, he was faulted by some who argued that science is not

sacred, but rather, it is an ideologically shaped cultural construction that often serves anti-human and anti-nature interests and should therefore not be privileged. A related critique was that Callicott was offering a hegemonic narrative that could not fully respect religious or cultural diversity. Secondly, he was faulted for failing to ground his ethics in a religious perception of the sacredness of life. Purely scientific narratives cannot provide an independent ground for ethics in general, let alone environmental ethics, according to this line of criticism (Taylor 1997b). The proper balance between scientific and religious understandings, of course, remains contested, and promises to provide indefinitely a lively debate.

Other scientific theories offered different challenges for religious environmental ethics. Ecologists and evolutionary biologists advanced theories that explained human moral sentiments, including ones establishing a basis for environmental concern, without reference to an explicit need for religion. For example, EDWARD O. WILSON (later with Stephen Kellert) propounded a theory he called BIOPHILIA, as well as another called sociobiology, that viewed our affective and moral connections to nature as adaptive behaviors explainable as evolutionary outcomes. David Sloan Wilson in *Darwin's Cathedral: Evolution, Religion, and the Nature of Society* (and in EVOLUTIONARY BIOLOGY, RELIGION, AND THE STEWARDSHIP OF NATURE), as well as anthropologists (see especially ECOLOGY AND RELIGION and ECOLOGICAL ANTHROPOLOGY and the cross-references provided in them) argued similarly that religion at its best is a mode through which human organisms successfully adapt to their environments.

These theorists are generally either agnostic or do not believe that the associated metaphysical beliefs of religions are true, even the ecologically adaptive ones. Such perspectives do not seem, therefore, to provide for anything other than a short-term rationale for religion, for it is valuable only to the extent that it promotes environmental sustainability. A question naturally follows, then: If there are compelling non-religious grounds for environmental ethics, then is religion really needed? And if religious metaphysical beliefs are incredible anyway, then does not intellectual integrity and a concern for veracity require that they be jettisoned, even if they might serve other interests?

Of course, such perspectives and reasoning would be troubling, to say the least, to religionists, and would make them suspicious of scientific perspectives they might otherwise embrace, as Anna Peterson points out in *Being Human: Ethics, Environment, and Our Place in the World* (2001), a book-length study by a religious ethicist and feminist that wrestled seriously with these kind of evolutionary perspectives without dismissing them out of hand. That this was an exceptional effort underscores that a fully interdisciplinary discussion of such issues had barely begun by the early twenty-first century.

5) The relationship between environmental values and practices

Already mentioned was Yi-Fu Tuan's assertion of a bifurcation between environmental values and practices. To the extent that this is true much of, if not all of the ferment over "environmental ethics" will be largely or entirely a waste of time. For whatever else it is, environmental ethics is not only about understanding environmental values; it is also about promoting these in such a way that behaviors follow. What if achieving the former does not accomplish the latter? This is one of the least explored areas of inquiry in environmental ethics, perhaps in part because philosophers and religious ethicists are usually not very well equipped to ask such questions.

J. Baird Callicott and Roger Ames did respond to Tuan's argument, asserting that "there is less evidence for Tuan's skepticism than for White's optimism about whether environmental ideas and values can exert a significant influence on environmental behavior" (1989: 287). Little empirical data was assembled in the rebuttal, however, and the studies that have been done on the relationships between environmental attitudes and behaviors do not suggest a close correlation. Glenda Wall, for example, found that environmental action is unlikely "regardless of [levels of environmental] concern, unless an environmental issue is linked to immediate personal concerns, or societal arrangements exist that help to reduce the costs of compliance and facilitate cooperative action" (Wall 1995: 465). She also summarized the growing literature on environmental attitudes and concluded as a result that the correlation between attitudes and behaviors, when present, is low. Similarly, in a broad study of the American Public published in *Environmental Values in American Culture* (1995) Willett Kempton and his team of researchers found a significant disconnection between environmental values and changes toward environmentally sustainable lifestyles or environmental protection actions. As the geographers James Proctor and Evan Barry show in *SOCIAL SCIENCE ON RELIGION AND NATURE*, "empirical work in environment as religion is relatively scarce" and "Social science has done a tremendous service to the study of religion and environmental concern, but it has failed to deliver the conclusive chapter to the story." They are among those working on getting more definitive answers. Certainly what social science discovers about the various conditions under which environmental ethics, including religious ones, produce concrete environmental action should be and presumably will be important in the evolution of environmental ethics. Equally important, however, are qualitative and historical studies which are better at explaining why small groups and movements break out from the normal patterns and engage in dramatic environmental action, sometimes if not usually motivated by religious perceptions and ideals, as was seen, for example, in the numerous case studies scrutinized in *Ecological Resistance Movements: The Global Emergence of Radical and Popular Environmentalism* (Taylor 1995), which was itself informed by what has become known as "social movements theory."

Rather than assuming a close connection between religion, environmental values, and environmental behavior, any practical environmental ethics will have to go further than has been the case to this point to understand the connections between values and actions. Why are these connections apparently weak usually and in general, but in some cases apparently strong and directly motivating?

Conclusion

The preceding introduction to environmental ethics, although far from comprehensive, does provide a sense of the religious dimensions, tributaries, evolution, vitality, fecundity, and conundrums surrounding it. It also illustrates that the lines between non-religious and religious environmental ethics often blur as they play off of and influence one another. Cross-disciplinary and crosscultural ethical and religious influence has become an important characteristic of the evolving field of environmental ethics.

Bron Taylor

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See also: Anarchism; Bioregionalism and the North American Bioregional Congress; Callicott, Baird; Carson, Rachel; Conservation Biology; Deep Ecology; Ecofascism; Ecofeminism; Ecosophy T; Leopold, Aldo; Mountaineering; Naess, Arne; Natural History as Natural Religion; Pinchot, Gifford; Radical Environmentalism; Religious Studies and Environmental Concern; Rolston III, Holmes; Shepard, Paul; Social Construction of Nature; Social Ecology; Spinoza, Baruch; Thoreau, Henry David; Traditional Ecological Knowledge; Virtues and Ecology in World Religions.

Environmental History

– See Environmental Ethics.

Environmental Justice and Environmental Racism

Environmental justice refers to a broad range of issues that combine values of social justice with environmental values and practices. Environmental justice pertains when the cause of social injustices are mediated by environmental conditions, or the environmental burdens that threaten human health are bound by social injustices of marginalization, exploitation, discrimination, racism, sexism, and various forms of imperialism. Examples of environmental burdens include exposure to hazardous materials and toxic wastes, pollution, health hazards, workplace hazards, as well as the exploitation and loss of traditional environmental practices and depletion of local natural resources. Environmental benefits include a safe workplace, clean water and air, easy access to natural surroundings or parks, fair compensation for environmental burdens, and the preservation of traditional environmental practices connected to local natural resources. Concern for environmental justice grew as a grassroots movement of people of color and poor communities. Various populations including African-Americans, Hispanic Americans, Native Americans, and Americans of Asian and Pacific Island decent, as well as the urban, rural, and industrial poor populations – who make up their own local cultures – actively defended against the inequitable distribution of environmental burdens and the lack of participation in environmental decision making. The religious and spiritual importance can be addressed in four general arenas of environmental justice: distributing environmental burdens according to religious affiliation; organizing grassroots reactions to environmental threats from the religious community base; struggling to protect sacred spaces and places; and comprehending spirituality through values of environmental justice.

The first arena of religious environmental injustices pertains to the direct targeting of religious affiliation as a criterion for the location of environmental burdens. One of the most dramatic instances of religious targeting for environmental discrimination exists in the report authored by the Cerrell Associates, a public relations firm for the State of California. The now-infamous 1984 *Cerrell Report* argued that a community with reduced capacity for resistance, rather than geological and other scientific characteristics, would best determine the location of environmental burdens. In the report, characteristics such as high unemployment, high school or less education, and Catholic congregations would prove to be likely sites of least resistance. Identifying the faith of a community exposed a sanctioned religious discrimination in the distribution of environmental burdens.

The second arena of religious and spiritual significance for the environmental justice movement pertains to grassroots organizing around a religious community base. Communities in environmental justice cases often rely upon the moral center and congregational core of their religious organizations. A critical example is also one of the focal points in the movement's origins in the community of Afton in Warren County, North Carolina, where in 1981 it was chosen as the site for a toxic landfill. At the time, Afton had an 84 percent African-American population; Warren County had the highest percentage African-American population in North Carolina. In 1982, Dr. Charles E. Cobb, Director of the United Church of Christ's Commission for Racial Justice (UCC-CRJ), spoke out against this landfill, arguing it demonstrated how African-Americans and the poor are forced to assume heavier environmental burdens than white communities. Other important national organizations, such as the Southern Christian Leadership Conference and the Congressional Black Caucus also protested. This support inspired a campaign of nonviolent civil disobedience culminating in protest of activists and residents bodily blocking the trucks hauling toxin-laced soil, which led to over 500 arrests and drew national media attention. The Warren County protest represented one of the first public mobilizations against environmental racism. Although the protest was unsuccessful in stopping the toxic landfill site, the incident sparked the environmental justice movement, and two decades later the state closed the landfill and attempted to compensate the community for the long period of environmental injustices.

As its legacy, the Warren County incident introduced a new set of environmental obligations in the United States: the first of which was to decipher the extent of the disparate distribution of environmental burdens on communities of color and poor communities. For instance, the 1983 General Accounting Office study, *Siting of*

Hazardous Waste Landfills and Their Correlation with Racial and Economic Status Surrounding Communities, focused on the Southern states that make up Region IV of the United States Environmental Protection Agency (US-EPA). This study noted a strong correlation between the location of poor and African-American communities and hazardous waste sites. The study still left many questions about the extent of the problem beyond this region, which prompted the United Church of Christ's own nationwide study, *Toxic Wastes and Race in the United States*. It confirmed the disparate distribution of hazardous waste facilities suffered by minorities and lower socioeconomic groups, concluding "Race proved to be the most significant among variables tested in association with the location of commercial hazardous waste facilities" (UCC-CRJ 1987: xiii). Upon the 1987 presentation of this study to the National Press Club, in Washington, D.C., Reverend Ben Chavis, Director of the UCC-CRJ coined the first official definition of *environmental racism*: racial discrimination in environmental policy making, and the unequal enforcement of environmental laws and regulations . . . the deliberate targeting of people of color communities for toxic waste facilities . . . the official sanctioning of the lifethreatening presence of poisons and pollutants in people-of-color communities for toxic waste facilities . . . the history of excluding

people of color from the leadership of the environmental movement (*Hearings Before the Subcommittee* 1993: 4).

At the same time that studies were confirming the extent of the problem, religious organizations created their own networks as an obligation to protect these communities. The National Council of Churches created the Eco-Justice Working Group in 1983 and later The Environmental Justice Covenant Congregation Program, as way to promote environmental justice. The Black Church Environmental Justice Program established community support among seven historically black denominations. Spiritual and religious support in environmental justice struggles also occurred in many diverse, localized forms, including expressions of cultural heritage. An example of the former is the Mothers of East Los Angeles (MELA), which began as a group of Latina grandmothers who, with their local priest, organized a neighborhood watch group. During one of their meetings, they organized MELA to block the building of a prison in their neighborhood. MELA continued in strength, by blocking an oil pipeline planned to traverse a local schoolyard, successfully derailing plans for a hazardous waste incinerator, and building a women's grassroots organization capable of leading voting drives for representatives and introducing community improvements on multiple environmental justice fronts. Another front of religious community support in cultural heritage can be found in the struggles against pesticides and labor injustices fought by César Chávez and the United Farm Workers. These struggles were often based on principles found in Catholic papal encyclicals, the Mexicano religious heritage of suffering and penance, and an iconic following of the Virgin of Guadalupe.

The environmental justice frame expands into territories beyond the waste and pollution issues; since, vital cultural, spiritual, and natural resources concern social justice and ecological sustainability around values of place. The third arena of environmental justice, therefore, pertains to the protection of sacred spaces and places of ritual. Many examples of indigenous land struggles occur at the intersection of place and spiritual values. Such struggles often are articulated around issues of resource use. In the United States, indigenous peoples struggle for water use that connects them to their spiritual heritage. Acoma poet Simon Ortiz, for example, reflects, water defines our culture, water from the skies, and groundwaters, which are really part of each other. In terms of religion, the gods and the kachinas bring the water, of course they bring it in terms of the weather forces, the climatic conditions that provide that water (Adamson, Stein, and Evans 2002: 21).

In the same conversation, Chicano anthropologist Devon Peña has observed, “for the Pueblo Indian and the Hispano Mexicano alike, water was not a commodity. It was not the exchange value that was important, it was the communal and spiritual value that was important” (Adamson, Stein, and Evans 2002: 22). The overall struggle is spiritual: for sacred values, practices, and resources are unfairly distributed to large population centers.

Other kinds of examples include the preponderance of high-level nuclear waste facilities slated and proposed for Indian lands. Sites typically offer attractive economic

compensation; however, debates about land rights and respect for sacred lands still ensue. The Shoshone Indians have long debated the Yucca Mountain nuclear waste facility and the extent to which it impacts sacred land. The appeal to ritual spaces and sacred land is a vital sticking point in environmental justice cases for indigenous peoples. Given such values cost-benefit analysis cannot easily be used for such decision making, for resource economics and the values of sacred spaces are construed very differently. Hence, Rep. Lindsey Graham (R-SC) commented to the Shoshone: “God made Yucca Mountain for the express purpose of storing high level nuclear waste. There’s nothing within a 100 miles of the place” (LaDuke 2002: 26).

A fourth example of a religious arena in the environmental justice movement pertains to the emergence and expression of spirituality through values of the movement itself. In 1991, the First National People of Color Environmental Leadership Summit convened in Washington, D.C., and adopted *The Principles of Environmental Justice*, heralded as the truest example of the movement’s self recognition. Within it are multiple references to spirituality emerging from the movement. For instance the Preamble stated,

We, the people of color, gathered together at this multinational People of Color Environmental Leadership Summit, to begin to build a national and international movement of all peoples of color to fight the destruction and taking of our lands and communities, do hereby re-establish our spiritual interdependence to the sacredness of our Mother Earth (Hofrichter 1993: 237).

Additional examples of spirituality growing from concerns of environmental justice are identifiable in many works of ecological theologians, which span a number of themes. Among some examples of this scholarship, we can include Rosemary Radford Ruether’s observation of the interrelation between the dominance of human activity upon the Earth with the social dominance around gender, racial, and economic inequities. She has called for a language of eco-justice that spiritually connects and addresses these forms of domination. Sallie McFague has measured the religious concept of the “good life” in contrast to the damaging effects of distributive inequities of environmental burdens and the Western over-consumption of resources that have causal status to these inequities. One of the critical features of the environmental justice movement is that 70–80 percent of the grassroots leadership has come from women who are mostly blue-collar women and predominantly women of color. Karen and Garth Baker-Fletcher expand upon this backdrop and utilize environmental justice concepts in their interpretation of Black womanist theology:

The entire cosmos, then, is engaged in God’s activity of providing resources for survival and wholeness. Not only do we see Jesus in the faces of Black women; we see Jesus in the face of the earth, in the face of the waters, in the faces of wind and sun and moon. One of the forms of captivity that keeps human beings enslaved, womanists must add, is environmental racism and the global problem of environmental justice (Baker-Fletcher and BakerFletcher 1997: 84).

The history and scope of the environmental justice movement is often mistaken as a recent, merely anthropocentric cause. However, the purpose for conceptualizing environmental problems in terms of environmental justice is fundamentally to resist the separation of environmental degradation from social justice. The environmental justice movement, now recognized by its veteran voices as the largest and fastest growing social movement in the world, refuses the final distinction of anthropocentric and nonanthropocentric concerns. Many global environmental crises, such as global warming, ozone depletion, climate impacts, acid rain, desertification, and downstream pollution are transnational problems that leave the poorest peoples, often previous colonies and indigenous peoples of the world, as the sufferers of environmental burdens produced by the wealthiest, previous colonial powers, of the world. For many communities and peoples worldwide, environmental justice is a matter of protecting ways of living that view religious, environmental, economic, and social values as inseparable. Thus, in Chiapas, Mexico, indigenous struggles are about land rights, sustainable agriculture, cultural self-determination, and spiritual heritage. In India, sacred groves must be protected against new land-use pressures from industry and growing populations. And, in San Jose, Phillipines, farmers struggle against invasive chemical farming and genetically modified seeds from American biotechnology corporations, in order to sustain their heritage of organic land management. Such diversity in global environmental justice movements involves comparably broad connections between religion, ecology, and social justice.

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See also: Chávez, César – and the United Farm Workers; Christianity (7c) – Liberation Theology; Christianity (7g) – Womanism; Christianity and Sustainable Communities; Ecojustice in Theology and Ethics; Environmental Ethics.

Environmental Sabbath

The Environmental Sabbath grew from two seemingly unrelated events: the Assisi Declarations on religion and nature, written by representatives of five major world religions at a 1986 meeting in Italy, and a declaration by the United Nations that 1987 would be the Year for the Homeless.

To the UN Environment Programme, these events were connected. The religious leaders at Assisi wanted to awaken followers around the world to the spiritual dimension of the environmental crisis by declaring how each faith reflects on and celebrates the natural world as a manifestation of the sacred. Similarly, UNEP reasoned that since Earth is our only home, we must preserve it, not destroy it, or we all could become homeless.

In the autumn of 1986, soon after Assisi, John J. Kirk, Director and Professor of Environmental Studies at the New Jersey School of Conservation of Montclair State University, met with Noel J. Brown, Director of UNEP's Regional Office for North America. Dr. Kirk asked if a dialogue with representatives of some religions might help UNEP in its efforts to protect the planet. Spiritual and ethical values were essential for equitable environmental policy making, they agreed, since science and technology could not provide all the answers. They decided to invite the leaders of several faith communities to the United Nations to initiate a project that would inform North American congregations about the serious environmental problems facing life on Earth.

The planning group of fifteen had just seven months before the first Environmental Sabbath in 1987. Their goal was to create a sabbatical for the planet – an Earth Rest Day to be celebrated annually by faith communities at any time, but especially on the weekend nearest World

Environment Day, June 5th, to commemorate the first major UN conference on the environment which took place in 1972. In the spring of 1987, the group sent kits to 1500 religious leaders in the U.S. and Canada, with ecological information and liturgical suggestions from several faiths, inviting them to use the material in special Environmental Sabbath services.

Letters lauding the initiative came in, not only from those on the mailing list, but also from others who wanted to know more: grassroots groups, garden clubs, colleges, the Scouts and other youth groups.

Following this encouraging reaction, the planning group was enlarged to become the Environmental Sabbath Steering Committee with a wider religious scope and greater access to grassroots organizations. In 1988, a more substantial package containing fact

sheets on the state of the environment and liturgical suggestions was sent to 3500 faith and grassroots communities.

Although the event had been promoted only in North America, the response was surprisingly international with letters coming in from as far away as the Philippines, India and Australia. By 1989, the number of participating groups had nearly tripled with 10,000 requests for the Environmental Sabbath kit, and the number kept growing. By 1990 the mailing list again had more than doubled to 25,000. The Sabbath network grew so fast that a newsletter began publication in 1989 as a conduit for ongoing action and interaction, and, over the next few years, the simple kit became an annual magazine – an Earth Care Day guide for the faithful, teachers and students alike, in all settings.

As a result of this success, representatives of other faiths expressed interest in participating. A great deal of consideration was given to changing the name from Environmental Sabbath to something more suitable for faiths that do not celebrate a sabbath. During this time – the mid-1990s – both the newsletter and annual Earth Care Day guides were discontinued and there was no UN outreach, although people continued working independently within their faith communities.

In 1999, the new director of UNEP's New York Office, Adnan Amin, began working with the recently expanded and renamed group, the Interfaith Partnership on the Environment, to develop a new series of initiatives. The following year *Earth and Faith: A Book of Reflection for Action* was published; within a year, nearly 40,000 copies were in use in religious institutions, schools, community groups and people's homes worldwide.

What began as an Environmental Sabbath evolved into much more than an annual observance. For many it has become a way of life that has melded scientific knowledge and spiritual values in a new covenant with the Earth.

Libby Bassett

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See also: Bahá'í Faith and the United Nations; Earth Charter; Environmental Ethics; United Nations' "Earth Summits".

Epic of Evolution

The Epic of Evolution, like its synonymous terms, “cosmic evolution” and “the universe story,” encompasses what Eric Chaisson has labeled “the broadest view of the biggest picture.” This epic tells the sprawling story of the evolution of the cosmos, from the first moment of creation to the present state of the universe. It is the attempt to construct a unified and comprehensive narrative of systematic development throughout the history of the universe, including the origins and the diverse organization of matter, life and consciousness. The Epic of Evolution is premised on the insight that the universe as a whole is best understood as a single unfolding event, beginning with the big bang, about 14 billion years ago, and continuing through the emergence of macroscopic structures (e.g., galaxies, stars, solar systems), and microscopic structures (e.g., atoms, molecules, cells).

The Epic of Evolution has been inspired by the remarkable theoretical unification of scientific disciplines taking place during the course of the twentieth century. The most exciting theoretical advances in science in recent decades are those enabling an integration of the sciences of the large with the sciences of the small. In physics, astronomy has been theoretically coupled with particle physics to produce quantum cosmology. In biology, evolutionary theory has been coupled with molecular biology to produce a grand synthesis. Theoretical breakthroughs have continued into the social sciences, where behavioral genetics and neurobiology are being integrated with cognitive, developmental and social psychology. These advances have gradually revealed what Edward O. Wilson has called “consilience,” that is, a fundamental continuity and theoretical coherence among the physical sciences, the life sciences and the behavioral sciences. Consilience among scientific disciplines now makes it possible to construct a coherent narrative of the emergent properties of matter, life and consciousness. Implicit in contemporary science is an Epic of Evolution.

The task of making the Epic of Evolution explicit is not itself a part of science, although it is directly informed by scientific disciplines. It may rather be said that the Epic of Evolution is a product of imaginative mythmaking under the critical and watchful eye of contemporary science. As such, we must allow for a relatively wide range of variation on the central theme of cosmic evolution. Here follows an attempt to summarize the broadest view of the biggest picture.

In the beginning was singularity. Everything that would eventually become the universe was contained in an unimaginably small and dense region. About 14 billion years ago the singularity was released in an expanding burst of pure radiant energy, out of which particles of matter distilled into copious amounts of hydrogen and helium

atoms. For about a billion years the universe billowed forth in an expanding cloud of cooling gas. Under the influence of gravity, irregularities in the expanding cloud fragmented into billions of galaxies, and within galaxies matter was condensed into stars. At this point in our cosmic history, physics was the only science that would have made any sense. Many stars eventually exploded in supernova events, synthesizing the nuclei of diverse atomic elements in the process. As exploding stars emptied their contents into space, chemistry would begin to make sense. Atoms of many types commenced to form molecules in interstellar space. Second and third generation stars were condensed out of interstellar matter, and around some of these new stars there swirled disks of particulate matter, gradually accumulating into orbiting planets. Our own solar system was formed in this process about 4.6 billion years ago. The young Earth was a semifluid cauldron of physical and chemical activity, allowing heavier elements to gravitate toward the center and lighter elements to be pushed toward the surface. By 3.8 billion years ago the Earth had sufficiently cooled and settled so that distinct regions of Earth (lithosphere), water (hydrosphere), and air (atmosphere) were formed. Chemical interactions at the interfaces of these regions eventually produced the biosphere, the region of the Earth's surface where living systems emerged from the prebiotic soup. The prebiotic soup was a chemical quagmire of molecular evolution, wherein molecules competed for the attention of unbound atoms. The big winners in this chemical free-for-all were large molecules having special properties, such as those for catalyzing chemical reactions (metabolism), making copies of themselves (replication), or both. Once the functions of metabolism and heredity were coordinated within the membranes of primitive cells, biology would begin to make sense. Living systems diversified aggressively. The earliest prokaryotic cells specialized in pioneering diverse metabolic pathways. Drawing on these biochemical breakthroughs, eukaryotic cells introduced a stunning diversity of shapes, sizes and movements – all variables that prepared organisms to adapt to new environmental niches. The next frontier for bioexperimentation was to diversify behavior. This eventually led to multicellularity and sexual reproduction. The evolution of behavior took a dramatic leap forward when some organisms developed cell lines (nerve cells) specialized for processing information. Increasingly complex neural systems enabled the capacity for learned behavior and conscious experience. Psychology would now begin to make sense. About a million years ago our human ancestors acquired the rudiments of language, thus introducing potentials for organizing consciousness in diverse ways. Social systems, technologies and ideologies would now develop and diverge rapidly as cultures responded to environmental challenges.

The Epic of Evolution is inherently controversial because it has astringent implications for traditional religious worldviews. Every cultural tradition is nourished by a distinctive myth, a metanarrative providing individuals with a shared orientation in nature and history. Myths engender a collective identity by informing us about our ultimate origins, our common human nature and our shared destiny. The meanings embedded in our cultural stories give us the essential resources for thinking and acting

with a unity of purpose. Epic of Evolution enthusiasts have found many of the elements of a religiocultural myth implicit in the story of cosmic evolution. Any story telling us that we are star-born, Earth-formed creatures, who are absolutely dependent on the integrity of the Earth's (now threatened) natural systems, cannot fail to arouse religious and moral sensibilities. Moreover, the Epic of Evolution engages the imagination in a way that relativizes prescientific mythic traditions. The Epic of Evolution is religiously controversial because it affronts the intellectual plausibility and the moral relevance of traditional religious worldviews.

The many ancient religious traditions of the world originated in historic circumstances very much like our own, that is, moments of deepening crisis when nothing short of a transformation in human consciousness would save the day. Human beings are presently faced with an emergency of global proportions. Every natural life-support system on the planet (air, water, soil, climate, ozone, biodiversity) is in a state of serious and rapid decline, creating a suicidal trajectory accelerated by the very social institutions we have invented to safeguard the future. Human beings presently lack the intellectual and moral resources required to achieve solidarity and cooperation on a scale commensurate with the problems we collectively face. We find ourselves spiritually maladapted to our environmental circumstances.

When faced with comparably dire prospects our ancestors did the reasonable thing: they turned to new sources of wisdom and fashioned new myths of enduring promise. It is in this spirit that Epic of Evolution enthusiasts have turned to the scientifically informed narrative of cosmic evolution as a point of departure for proselytizing a new religious orientation that sanctifies the natural order. What they hope for is the emergence of Religious Naturalism; that is, new forms of ritual and practice that celebrate and serve the sacredness of the Earth. It remains to be seen whether religious naturalism might eventually replace traditional religious orientations, merely stimulate their radical self-transformation, or prove to be of little influence on religion and environmental practice.

Loyal Rue

Breakout Box Begins: P Epic Ritual

The "Epic of Evolution" is the 14-billion-year narrative of cosmic, planetary, life, and cultural evolution – told in sacred ways. Not only does it bridge mainstream science and a diversity of religious traditions, if skillfully told, it makes the science story memorable and meaningful, while enriching one's religious faith or secular outlook.

In the early through mid-twentieth century, the Jesuit paleontologist Pierre Teilhard de Chardin promulgated a Christian version of the story, while Julian Huxley (biologist), Aldo Leopold (ecologist), and Loren Eiseley (anthropologist) wrote eloquent tomes from what could be called a "religious naturalist" perspective. But it was

not until the 1970s and 1980s that the intellectual and literary expressions of the Epic of Evolution began to be celebrated in ceremony and ritual.

The first ritual expressions were associated with the deep ecology work practiced and promoted by Joanna Macy (California) and John Seed (Australia). Although “The Council of All Beings” is the most familiar of their productions, Macy and Seed (as well as Jean Houston in New York) created solemn processes and guided meditations that helped participants connect with their primate, reptilian, and fish heritage.

In the early 1980s, Sister Miriam Terese MacGillis of New Jersey, a student of Thomas Berry who founded Genesis Farm, created “the cosmic walk,” which has become perhaps the most common way in which the Epic of Evolution is celebrated in ritual format. A rope or pathway is laid out in a spiral on the ground, with stations representing major evolutionary events, scaled (arithmetically or geometrically) to the actual time of their occurrence. Thus 14 billion years of evolution is represented along the length of the spiral. Those who take the walk begin their journey at the center of the spiral, at the birth of the known universe, and then advance toward the present as they walk the spiral outward. Scientists refer to this beginning as the Big Bang, but Epic practitioners prefer more sacred terms, such as “Great Radiance” (a term from Philemon Sturges) or “Primordial Flaring Forth” (drawing from Brian Swimme and Thomas Berry). Variations of MacGillis’ initial walk are still in use, as well as completely new texts, though still using the spiral format. Many examples of such ritualizing are available on the internet, which is a good place to track the evolution of such spirituality and ritual processes. Catholic retreat centers are increasingly building permanent outdoor cosmic walks on their grounds.

In his book, *Hidden Heart of the Cosmos*, cosmologist Brian Swimme selects several components of the Epic of Evolution and offers practices for bodily awareness of several of them, including: 1) how to experience the Earth turning rather than the sun “setting”; 2) how to experience the center of the Milky Way Galaxy. To experience Earth turning, Swimme suggests going out at sunset and envisioning oneself “standing on the back of something like a cosmic whale, one that is slowly rotating its great bulk on the surface of an unseen ocean” (1996: 27). To experience the center of our galaxy, Swimme invites us to lie on our backs under the night sky, to gaze at the constellation Sagittarius (which aligns with the center of the galaxy), and then to imagine the stars not as “up” but “down.” Earth’s gravity is the only thing that holds the viewer from falling “down” into the gravitational attraction at the center of the Milky Way. “You hover in space, gazing down into the vault of the stars, suspended there in your bond with Earth” (1996: 52).

Around the turn of the millennium, several people in the United States independently originated a way to experience the Epic of Evolution in a new and very personal way: through the stringing of “Great Story Beads,” “Universe Story beads,” or a “Cosmic Rosary.” Beads are purchased (or made from clay) and strung in a loop to signify major moments of transformation (“grace moments”) in the long journey of evolution. Unlike the public “Cosmic Walk” these loops or necklaces of beads enable individuals

to personalize the story: choosing which events are most meaningful to them, including significant events in their own life story as beads in the loop. Instructions for creating Great Story Beads, including a suggested timeline, are available online to facilitate this process.

Seasonal celebrations are yet to develop for the Epic of Evolution. The creation of the chemical elements (carbon, oxygen, iron, gold, and so on) inside of stars that lived and died before our sun swirled into existence is beginning to be celebrated at the winter solstice. But it is such an alluring aspect of the epic that it is celebrated also throughout the year. In a sort of “Cosmic Communion” (which has been performed at Sunday services of Unitarian Universalist churches), participants are anointed with “stardust” (glitter) to signify, as Carl Sagan pointed out in the 1980s, that we are quite literally “made of stardust.”

Connie Barlow and Michael Dowd (whose “The Great Story” website details the stardust ritual) have brought the Cosmic Communion into Unitarian churches and spiritual retreat centers, along with an experiential process to “celebrate your cosmic age.” Barlow also emphasizes how one can see the constellation Orion in a new way: the Red Giant star Betelgeuse, in Orion’s right arm, is fusing helium into carbon, oxygen, and nitrogen right now (all are elements that we breathe in and out). The blue-white star Rigel (in Orion’s left leg) is fusing carbon and helium into silicon, calcium, potassium, and will one day forge silver and gold when it expires in a brilliant supernova explosion.

Other forms of Epic Ritual, still evolving, are designed to keep the memory alive, and thus honor, extinct organisms – from dinosaurs to passenger pigeons. One example is the “Coming Home to North America” ritual, designed by Connie Barlow which leads participants through a playful and reverential reenactment of the comings and goings of plants and animals in North America for the last 65 million years, since the extinction of the dinosaurs. In it, participants learn that camels and horses originated in North America fifty million years ago, were isolated on this continent until spreading into Asia and Africa just three to five million years ago, and then became extinct in their land of origin just 13,000 years ago.

In 2001, Epic enthusiasts began writing “evolutionary parables” for teaching values congruent with ecological/ evolutionary awareness. In these, a major moment of transformation (such as vertebrates venturing onto land) is rendered into an engaging story and scripts for acting out. Although ancestral creatures may be depicted in dialogue, and thus anthropomorphized, the science underlying the narratives is accurate and up-to-date. Because the Epic of Evolution is “the story of the changing story,” as new advances occur in the sciences, these parables, rituals, and other experiential forms will necessarily evolve.

Connie Barlow

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Esalen Institute

Michael Murphy and Richard Price founded the Esalen Institute in 1962 and it quickly became a Mecca for the human potential movement. The institute itself sits on 163 acres of California's Big Sur coast, located in central California, 38 miles south of Carmel. The property, noted for its natural hot springs, belonged to the Murphy family and had been a sacred place for the Esselen, one of many California tribes driven to extinction by waves of European immigrants.

Murphy had studied philosophy at Stanford University and he later spent a year at the Sri Aurobindo ashram in Pondicherry, India. Aurobindo saw the evolving universe as a manifestation of the divine. In humanity, nature becomes conscious of itself and this consciousness is the key to further evolution. Aurobindo called for a yoga practice combining Western scientific method and a personal discipline that seeks illumination from within. We are called, he said, to a greater consciousness that participates in its own transformation and the world's advancement. Aurobindo's thought, through Murphy, shapes Esalen philosophy.

Dick Price, also a Stanford graduate, met Michael Murphy at an ashram in San Francisco. Price had spent a year and a half in a mental hospital and reacted to what he felt was dehumanizing treatment. Price worked with Fritz Pearls, the founder of Gestalt therapy and a resident at Esalen. Gestalt uses imagination, dialogue and movement to more fully enter one's present emotional state. The process is an effort to break through psychological blocks and allow for natural healing and growth. Together, Price and Pearls made Gestalt an Esalen staple. In 1964, the workshops at Esalen shifted from a verbal format to become more participatory. The emphasis was on Gestalt therapy and bodywork (massage and movement exercises).

During the 1960s, the celebrities who came through Esalen represented the driving forces of the human potential movement and included Aldous Huxley, Gerald Heard, Arnold Toynbee, Linus Pauling, Gregory Bateson, Joseph Campbell, Bishop James Pike, Ansel Adams, Norman O. Brown, Virginia Satir, Rollo May, Carl Rogers, Carlos Castaneda, Michael Harner, Ashley Montagu and Paul Tillich. Abraham Maslow, the father of humanistic psychology, stumbled on Esalen by accident during its first year and gave several workshops there, and it remained a guiding force throughout his life.

As a place, Esalen holds a strong attraction. Thickets of redwood trees rise sharply on the Santa Lucia Mountains behind the institute's facilities. A rocky coastline lies at its base while fog and sunlight interact with land and sea throughout the day. Selig Morgenrath was the gardener during Esalen's early days and he brought a special

touch to his work. Today, some six acres at Esalen are devoted to an organic farm that produces a considerable variety and quantity of food for the kitchen.

The El Nino storms of 1998 created landslides that destroyed the baths, damaged buildings and closed the access road for three months. The crisis became a turning point in Esalen's development. In rebuilding, the organization shifted its focus to include, not only work on individual human potential, but also efforts to become a model community in harmony with its environment. Plans are underway to conserve energy and preserve the land. The aim is eventually to give back to nature more than we take. The hot springs will be used to provide geothermal heat. Members of the institute are installing solar panels and placing buildings in better positions to utilize the sun. Wastewater treatment will use organisms rather than chemicals and recycle the water to gardens and lawns. Footpaths are replacing paved areas and native grasses are being planted.

Andy Nusbaum, Esalen's executive director, says that they want, "to utilize nature's teaching, to mimic life's underlying proportions in shaping our environment." He cites discoveries that have uncovered and copied natural structures: fuel cells that imitate plant cells, fibers as hard as abalone shells, and computers that work like the human brain. Michael Murphy calls for a sustainable society that balances inner and outer resources. Personal and social developments are inextricably linked.

Today, Esalen has two major components. There are the public programs, some 450 seminars and workshops that draw 10,000 people a year. There are also research projects sponsored by the institute's Center for Theory and Research (CTR).

Since 1967, Esalen's CTR has sponsored conferences dealing with experience-based techniques in education, Russian-American relations, the place of the body in spirituality, and government systems that would allow for greater equity among people and better stewardship of the environment. The institute has also undertaken a long-term exploration of evolutionary theory. Here, they bring together physicists, cosmologists, biologists, sociologists, psychologists, historians, contemplatives and philosophers to study the evolutionary processes in the physical, biological, and human worlds. Since 1998, Esalen's CTR has also explored the empirical evidence for post-mortem survival.

Esalen today can be viewed against the backdrop of the philosophies of David Thoreau and John Muir. But whereas "nature" with Thoreau and Muir could be experienced at Walden Pond and in the Sierras, "nature" with Esalen is the whole cosmos, which has a history and a future. "Nature" also includes human consciousness and its efforts to understand itself as part of that evolutionary process.

Thomas Splain, S.J. tradition), presents intercultural stories and myths, along with Jungian interpretations of these tales. She based the book on a study of wolves and begins by stating that "Wildlife and the Wild Woman are both endangered species," thus linking the "instinctive nature" of woman with the wilderness. Estés' roots in Mexican culture and Hungarian culture, specifically in women folklorists and storytellers in these two cultures, lead her to engage story as "medicine." She understands storytelling as a form of activism, with healing powers and possibilities. Estés' other

published works include *The Faithful Gardener: A Wise Tale About That Which Can Never Die* and *The Gift of Story: A Wise Tale About What is Enough*.

Another genre in which she works is the spoken-word performance. In this area, she has produced a series of audio works, among them the twelve-part live performance *Theatre of the Imagination*, and performed *woman-*

In addition to practicing Jungian psychoanalysis and engaging in various modes of storytelling (both oral and written), Estés founded and directs La Sociedad de Guadalupe, a human rights organization.

Estés holds a doctorate in clinical psychology and intercultural studies from The Union Institute. She served as director of the C.G. Jung Center for Education and Research and has received numerous awards including the Las Primeras Award from MANA (The National Latina Foundation), the Joseph Campbell “Keeper of the Lore” Award (she was the first recipient), the Spirit of Women Award (National Consortium of Health and Hospitals) and the President’s Medal for Social Justice (Union Institute).

Laura Hobgood-Oster

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See also: Findhorn Foundation Community (Scotland); New Age; Sri Aurobindo.

Estés, Clarissa Pinkola (1945–)

Clarissa Pinkola Estés, a Jungian psychoanalyst, storyteller and poet, is the author of numerous books and articles, including *Women Who Run with Wolves: Myths and Stories of the Wild Woman Archetype* (which remained on the *New York Times* best-seller list for three years and has been published in thirty languages). In this book, Estés, a cantadora or keeper of the old stories (Latina

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See also: Campbell, Joseph; Ecofeminism; Feminist Spirituality Movement; Jung, Carl Gustav; Men's Movement; New Age.

Ethics and Sustainability Dialogue Group

The Ethics and Sustainability Dialogue Group (ESDG) is an ongoing series of exchanges in the United States between a contingent of environmental and social ethicists and representatives of the Chlorine Chemistry Council and its member companies. The purpose of the dialogue is to explore the ethical issues associated with the processes, products, and by-products of the chlorine chemistry industry. The partners and their purpose make this dialogue an unusual model of moral engagement.

The ESDG has had religious connections from its inception. The catalyst for the dialogue was a U.S. church's resolution in favor of "sunsetting" most chlorine chemistry products. Four persons with ties to this denomination – a social and ecological ethicist, an industry executive, and two chief officers in a business consulting firm – designed the dialogue to focus on the ethical issues in this controversy. Moreover, industry representatives in the ESDG have generally been participants in Christian churches. Similarly, all the ethicists have been students of Christian social and ecological ethics, and most have been associated with Christian churches – of diverse denominations. Specifically Christian values and norms, however, have rarely, if ever, been invoked in the dialogues. Nonetheless, given the Christian connections of the participants, this moral tradition, in all its diversity, has undoubtedly shaped the character of the conversations.

The ESDG has met twice per year, for a day and a half each time, since November 1998. Some dialogues have included panels of scientists, discussing the state of scientific knowledge on designated problems. Several have used case studies to enhance understanding of the moral dilemmas in decision making.

The agendas have covered a variety of issues, including pesticides, water disinfection, dioxins and other persistent organic pollutants (POPS), endocrine disruption, and national security concerns about the industry. The "precautionary principle" has been a major topic in a couple of sessions. Yet, the central concern, permeating all the others, has been the moral meaning of sustainability for this industry and the global community. The dialogue has begun to outline some of the social and ecological indicators of sustainability.

The Secretariat for the dialogue is Millian Byers Associates, a business consulting firm in Washington.

To encourage candor, participants agree not to quote or otherwise attribute statements to any other participants outside of the dialogue without their expressed consent. No formal records of the conversations are kept by the ESDG – though for reasons

of practicality, not principle. Moreover, the partners understand that participation in the ESDG does not preclude public advocacy on the divisive issues under discussion.

The ESDG has had no preconceived “products.” These depend on decisions emerging out of the process of dialogue itself. Otherwise, the ESDG has viewed the dialogical process itself as a “product” – a way to discover and deal with differences effectively while enhancing human connections.

For the ESDG, dialogue is not negotiations to reach agreements. Nor is it a consultant–client relationship.

Instead, the ESDG understands dialogue as a process of communication between equal partners with strong commitments and often divergent perspectives for the sake of mutual growth. Such dialogue is a demanding discipline – requiring, for instance, respect for both the rules of rationality and the rules of fairness, as well as a mutual openness to the partners’ perspectives on the truth.

The effects of this dialogue on the participants and their institutional behavior are impossible to measure. Some, however, have testified to changes they see in themselves and others – not as transformations in worldviews or even as resolutions of some major differences, but rather as growth in understanding moral problems and responsibilities.

The ESDG offers industry representatives a fuller understanding of the moral dilemmas and responsibilities they face, prompted by the challenges and counsel of the ethicists. Equally, the ESDG offers the ethicists a fuller understanding of the moral dilemmas and responsibilities associated with chlorine chemistry, enabled by the challenges and counsel of the industry representatives. The main value of the dialogue depends on the partners being, and perceiving themselves as being, both givers and receivers in a dynamic that finally contributes to social justice and ecological integrity. Indeed, the bottom line for evaluating the ESDG will be its broader social and ecological benefits.

H. James Byers James A. Nash

See also: Eco-justice in Theology and Ethics; Environmental Justice and Environmental Racism; Stewardship.

Ethnobotany

Ethnobotany is the study of plants and people in their historical and geographic totality. Ethnobotany traditionally has been restricted either to economic botany on the one hand or to cognitive and linguistic anthropology on the other. Economic botany focuses on the utility of economic plants (such as food, fiber, and medicinal crop plants) in specific cultural contexts and often on the systematic biology of these economic plants, namely, the place of these plants in nature. Cognitive and linguistic anthropology have tended to focus historically on how people in diverse cultural milieus name, classify, and in some cases manage and manipulate plants according to coded and usually orally transmitted folk knowledge. Combining the efforts of both botanists and anthropologists, it can readily be seen that plants constitute an irreducible realm of human experience.

Even though plants pertain to a kingdom of the natural world, plants – at least some plants – have been affected in their distribution, reproduction, and morphology by the ways people have utilized and managed them over time. As such, many plant resources represent cultural as well as biological artifacts that highlight the intimate connection between people and their local environments over time. Likewise, human cultures have been conditioned by the plants occurring in their environments. The motivation for human use and management of plants is diverse, and essentially represents basic material needs for food, medicine, fiber, fuel, and construction materials. Yet plants not only provide a wealth of material resources for subsistence and economic use (the more traditional focus of ethnobotanical research), they also function as important objects of thought, in the same sense that animals are also “good to think,” as Claude Lévi-Strauss said in *A Savage Mind*. Being important objects in the immediate environment, plants are “named, classified, studied, interpreted, and responded to” (Alcorn 1995: 26). Salient plant forms and botanical processes provide important material for symbols, metaphors, mythologies, and legends. Culturally important plants may even exert important influences on religious beliefs and practices. Entire landscapes, such as sacred groves or forests, likewise play an important role in the cosmologies of different peoples.

Certain plants and vegetative associations have been reified in various cultures, such that they are perceived to harbor and radiate supernatural powers, independent of biological needs. To the individual carriers of ethnobotanical knowledge within any human community, plants are experienced as a constellation of different biophysical, economic, social, and mythical connotations from a particular social vantage point within a given cultural setting. Although constituting an understudied aspect of eth-

nobotany, religious understanding and use of plant resources is therefore embedded within these overlapping spheres of plant use and knowledge. In a sense, religion is the premier locus of human experience, in which plants and people not only interact as mutually important actors in the puzzle of existence, but in which their identities are transmuted. Plants from nature are incorporated into the cultural world, and humans bearing culture are turned into plants. Plants in countless cultures have been perceived and used as fundamental markers of mythology, divinity, and ritual.

The very life cycle of plants provides a rich metaphorical counterpoint to human existence. Whereas human death results in a return of the body to the soil, plants emerge from the Earth and represent the eternal cycle of life springing forth from death. Trees, shrubs, herbs, flowers, fruits, grains and other plant products often appear in mythologies and legends as general symbols of rebirth, decay, and immortality. The ancient Mesopotamian legend of Gilgamesh and his search for the herb of immortality provides an example of the way in which plants symbolize life and the nourishing power of nature.

Certain plants have acquired more specific associations in religious folklore. The mistletoe, familiar to EuroAmerican culture as both a parasitic epiphyte and as a plant that when properly hung at Christmas time can catalyze romance, was historically associated with mystical qualities. For the ancient Norsemen the mistletoe represented the Golden Bough, a protector-spirit against sorcery and the reincarnation (in plant form) of a priest – the King of the Wood – who was believed to have been slain during a specific ritual of rebirth and renewal.

The origin myths and creation stories of many societies likewise invoke the mystical properties of plants. Frequently egalitarian peoples believe themselves derived from particular plants. In the Brazilian Amazon, the Ka'apor culture hero Mair made the original Ka'apor ancestors from logs of *Tabebuia impetiginosa*, a hardwood tree used in making bows, along with other hardwoods. On the other side of the world, Andaman Islanders of the Indian Ocean believe that the first human being was born inside a giant bamboo stalk. Among societies characterized by totemism, plants, animals, or other natural phenomena that represent group identities (called totems) are believed to be founding members of a unilineal society or clan. In addition to claiming descent through one sex from the group's totem, members of the group may also observe taboos related to their particular plant or animal emblem, generally refraining from killing, eating, or dis-respecting it. Spirits or deities may likewise incarnate themselves in the form of a plant or animal totem. Yet while these features of totemism are found among many of the world's traditional societies, they are not present everywhere, nor even necessarily found together. The supernatural forces that traditional peoples associate with plants, animals, and other natural phenomena invoke more than merely special ties between a social group and its totem. Furthermore, plants play an important role in most world religions, not simply those deemed to be totemistic.

At the most basic level, religious beliefs and cosmologies encompass orientations toward the natural world that inform people's responses to plants. Showing respect

may be the most commonly prescribed behavior toward plants, and it underlies many religious tenets regarding appropriate relations with the natural world. Conversely, taboos may be imposed on the use of plants to ensure the continued availability and vitality of culturally revered species. Humanizing attitudes and feelings of respect may be interpreted more directly as anthropomorphism, the belief that plants and animals have human qualities. More commonly, religiously prescribed behaviors toward plants imply the ascription of a soul.

According to E.B. Tylor, many religious belief systems are founded upon notions of animism, or the belief in souls. The ascription of souls to plants is most likely for plants of great economic or experiential significance. Both the Balinese of Indonesia and the Ifugao of the Philippines ascribe souls to their staple food crop, rice. Beliefs concerning the souls of rice plants form part of a complex system of religious belief and practice throughout Southeast Asia. The Huichol of Northern Mexico likewise believe that the sacred peyote cactus, which produces a powerful hallucinogenic drug, yields a soul visible to their shamans. Perhaps more widespread than the notion that plants have a soul is the idea that spirits or deities are associated with them. Supernatural beings associated with plants include ancestor spirits as well as masters or guardian spirits that protect vital plant resources. Among the Dyak of Borneo, the sacred tree *mahong* is believed to harbor a benevolent spirit that represents the ancestral woman of Dyak legend. As with the ascription of plant souls, plant deities often represent an extremely important economic plant, especially domesticated food plants of high caloric importance. Beliefs in a deity of corn are common in ancient Mesoamerica, as are beliefs in a deity of rice in Southeast Asia. These deities are portrayed unmistakably in iconography so that they impart both human and specific plant properties to the viewer and to the worshipper. In some cases, not all indicators of a deity are plant-related; some deities with essentially human qualities have various markers, both from plants and from animals.

In addition to the spirits and deities affiliated with food plants, religious associations with stimulants and other mind-altering plants are recognized crossculturally. The psychoactive qualities of these plants, in certain instances, have given rise to beliefs in their divine origin and purpose. These plants are literally perceived of as “gifts of the gods, if not gods themselves” (Schultes and Hofmann 1992: 61). The ancient Indo-European god Soma, immortalized in the Rig-Veda manuscripts, provides the most outstanding example. Long considered a mystery, the identity of Soma was discovered by R. Gordon Wasson to be that of the hallucinogenic fly agaric mushroom (*Amantia muscaria*). Ritual use of this species may have spread from Siberia, where it is incorporated in the shamanic practices of reindeer-herding tribes, to India by the second millennium B.C.E. While most hallucinogens function as sacred mediators between humankind and the supernatural, *Amantia muscaria* was deified.

Other supernatural associations with hallucinogenic plants can be found throughout the pantheons of the ancient world. Among the Aztec pantheon of deities, *Xochipilli*, the Aztec Lord of Flowers, was also considered the divine patron of stimulants and

hallucinogens. Hallucinogenic mushrooms were known to the Aztecs as *teonanacatl* (“god’s flesh”), and were ritually ingested. In the neighboring Mixtec region, Seven Flower was an equivalent deity in charge of cacao, tobacco, sacred mushrooms and other poisonous substances. In the mythology of the Mediterranean, the gods of the classical world were associated with particular plants or plant products: Athena with the olive, Apollo with the laurel, Demeter with a sheath of grain, and Dionysius with wine. Before these more common co-identifications, however, the botanical associations of the gods may have served as more than just symbolic entheogens. In particular, the Greco-Roman gods were associated with plants having chemical properties that made them function psychoactively in religious rites. Plants that lacked the original chemical properties may have been adopted as surrogates during a time when corporeal components to the experience of spiritual enlightenment were devalued. As the religious use of hallucinogenic plants in the Mediterranean was abandoned or submerged within secretive initiation practices, these plants were gradually replaced by the cultivated icons of civilization.

Religious beliefs about plant resources are clearly embedded within particular cultural and historical contexts. Religious beliefs are manifested and negotiated within ritual contexts that utilize plants both directly and indirectly (symbolically). Plants play a variety of different functions within ritual contexts crossculturally, from providing the central focus of ceremonial activity to performing numerous adjunctive roles within religious activities. Plants may be directly consumed to reach an altered state of consciousness, consulted for divination, prepared as offerings, used for ritual cleansing or healing, and may even supply the sacred landscapes or raw materials for the sanctified spaces in which such rituals are conducted.

Plants with psychoactive or hallucinogenic properties have influenced the ideology and religious practices of numerous cultural traditions throughout the course of history and continue to play an important role among contemporary indigenous religions as well as syncretic revitalization movements. Botanical hallucinogens are perceived to harbor supernatural power due to their extraordinary physiological effects, which can be attributed scientifically to the presence of alkaloids. Within ritual contexts, these properties are directly employed in order to induce altered states of consciousness that are perceived to place the individual in contact with the supernatural realm.

The basic function of the psychedelic experience in non-Western cultures is to integrate the individual into society and revalidate traditional belief systems. By ingesting hallucinogenic plants (via eating, smoking, snuffing, or the use of ritual enemas), the individual experiences symbolic death and then rebirth “in a state of wisdom” as a full member of society. The psychoactive properties in the plant transport the user to the spiritual realm, whose geography is anticipated through folklore and socially shared experiences; what is encountered on “the other side” therefore serves to substantiate the validity of the religious belief system. The use of hallucinogenic plants for magical or religious purposes is strictly controlled by taboos or ceremonial circumscriptions, and

while the general (usually adult male) population may share in their use, these sacred plants are more commonly administered by shamans or other religious specialists.

The ability to transport the user to culturally validated spirit realms is particularly important within the context of shamanic practices. Religious shamans throughout the world act as intermediaries between the seen and unseen realms, and must learn to master the induction of altered states of consciousness to do so. Although ecstatic states may be accomplished through ascetic means, plants with hallucinogenic or similar psychoactive properties may be employed to induce visions and trances. Anthropologist Michael Harner prefers to call these “shamanic states of consciousness” in order to stress the cultural and religious context of these botanical drugs, and to differentiate the experience from the more recreational use of these species. Native peoples in the New World alone have utilized nearly a hundred different psychoactive plants, not counting the numerous plants (such as corn, manioc, or mescal) brewed for alcoholic beverages that, in turn, are used to induce ritual intoxication.

Probably the most famous sacred hallucinogen in the New World is the peyote cactus (*Lophophora williamsii*), which is rich in the psychoactive alkaloid mescaline. As an important part of the peyote-deer-maize ceremonial complex of the Huichol Indians of Northern Mexico, the peyote quest serves to prepare initiates to “learn what it is to be Huichol.” The ritual use of peyote, however, has spread far from the Huichol homeland into the United States and Canada, where it functions as an important entheogen in the Native American Church. In South America, the vine *Banisteriopsis caapi*, known as *yajé* or *ayahuasca* (“vine of the soul” in Kechwa), is a powerful botanical hallucinogen used by indigenous groups, such as the Jívaro, throughout the Upper Amazon. Traditionally restricted to the Upper Amazon, the use of this hallucinogen recently has spread into the adjoining lowlands to the east of the Jivaroan area and has been incorporated into religious revitalization movements in urban Brazil. The drug is heavily used in the Santo Daime cult of Brazil, a millenarian offshoot of folk Christianity, founded by a prophet named Mestre Irineu in 1930, whose adherents profess to be able to travel, see, and know phenomena otherwise removed from them in time and space upon taking the drug. Only the proper, group-based ingestion of the “vine” (the “*cipó*”, as it is called in Portuguese) affords such visions. Outsiders who refuse to ingest the “vine” are not permitted to attend Santo Daime ceremonies.

Non-hallucinogenic, yet mildly psychoactive plants play a similar role in religious beliefs and practices. Throughout the Andes, coca (*Erythroxylum* spp.) is both a medical stimulant and a unifying cultural and religious symbol among peasant and indigenous populations. The religious and shamanistic use of coca is also very ancient and associated with the psychoactivity produced by chewing the alkaloid rich leaves. Although mild in comparison to the physiological effect of hallucinogenic plants such as peyote or ayahuasca, or even tobacco, ritual coca chewing enabled religious practitioners to enter trance-like states and communicate with the supernatural world. Although many of these traditions disappeared from the Andes after European contact, shamanic use of coca prevails among the Kogi of Colombia and several tribes of the Northwest Ama-

zon (who prepare coca in a powdered form), where coca consumption is considered vital for communication with the ancestors.

Despite the occurrence of true hallucinogens, and out of the wide variety of aboriginal New World stimulants and narcotics, alcoholic beverages and tobacco have the widest distribution of mind-altering plant products, being particularly associated with farming practices. From precontact times well into the colonial era, tobacco primarily served magico-religious and related medicinal ends. The incredible diffusion of tobacco as a ritual intoxicant may be due in part to the ability of nicotine bioactivity to furnish empirical support, in many ways, for shamanic beliefs and practices throughout the Americas. Although the vision-producing alkaloids in hallucinogenic plants are effective in inducing the imagery of the shaman's celestial journey, the biphasic qualities of nicotine as a stimulant-convulsant help to manifest the continuum of dying and rebirth that is so fundamental to shamanic practice. The consumption of large quantities of tobacco via smoking, snuffing, chewing, or eating induces physiological changes experienced mentally as a journey of the soul outside of the body. The tobacco shaman is believed to serve as an intermediary able to travel into the world of the spirits and direct the divine energies of the cosmos toward social ends. Recognizing these powerful qualities, the Warao of Venezuela consider tobacco to be an indispensable part of their spirituality, and have incorporated this pharmacological phenomenon into a complex shamanic lore that involves different ritual specialists and the reverence of a Tobacco Spirit. A parallel example of this form of tobacco religion is found in North America, where the Gitche Manitou (or Great Spirit) complex of the Eastern Woodland Indians was based on the intoxicating and healing effects of tobacco.

Aside from their direct consumption, plants may communicate important worldly and otherworldly information to people through mechanisms unknown to noninitiates in the relevant culture and religion. Through keen observation of the local environment, the behavior of particular plants may be read as portents of the weather, harvest, or community well-being. The responses of plants or plant parts to direct manipulation are also employed for the purposes of divination. Among the contemporary Maya of highland Guatemala, *tz'ite* beans (various legume seeds) are used for divination, and are considered especially powerful when found at archeological ruins or other sacred ceremonial sites. Throughout the Andes and adjacent Amazonian regions, reverence for the sacred coca plant is reflected in the widespread use of its leaves in elaborate divination rituals, conducted for both shamanistic healing practices and predicting the future (Plowman 1984). Even tobacco smoke, or smoke produced from the ritual burning of other sacred plants, may function as a divination tool.

Plants or plant products that are considered sacred may likewise be used in ritual offerings. Offerings of coca leaves are considered necessary to appease the gods on numerous occasions. In fact, there are few domestic or social acts conducted by indigenous peoples in the Andes that are not solemnized by making offerings of, or by chewing, coca (Plowman 1984). Offerings of plants may also be likened to animal or blood offerings. For instance, the vital energies of fresh sacred plant leaves are believed

to possess “blood” (as opposed to dry leaves of the same plants) needed in offerings to gods in the Afro-American Candomblé Religion of Bahia, Brazil. Several South American tribes consider tobacco to represent a food, referring to their shamans as “tobacco eaters,” who offer vital tobacco substances to the spirits. Many religious traditions of egalitarian peoples involve the exchange of spiritual food between humankind and supernatural beings according to cosmological principles of reciprocity, principles that are not at all foreign to people living in non-surplus-oriented societies.

Maintaining balance between the natural, social, and spiritual worlds is an important aspect of healing practices, including purification rites that utilize plants to effect changes in the mind, body, and soul. Throughout history there has been a strong overlap between healing practices and spiritual belief systems. Medicinal plants may be directly ingested or topically applied as poultices that function to extract or suck out ailments. Plants may also be utilized by shamans and healers to blow out and expel demons or ailments in the body as well as divine their existence and location. Tobacco smoke is often employed in indigenous and folk healing practices throughout the Americas. Smoke is also blown to demonstrate visibly the life-giving breath of the healer or to feed the supernaturals, or it may be swallowed (“eaten”) in enormous quantities to induce trance states that allow the healer to enter the spirit realm for guidance. Tobacco smoke is also used more generally to purify the air during religious or healing ceremonies.

Ritual purification of the air is a common aspect to many religious ceremonial practices. Fragrant plants, flowers, and derived oils and resins play an important role in many purification ceremonies. These may be carefully placed as offerings, burned to release fragrant smoke, or even placed on the floors of temples and churches to be crushed as people walk over them, releasing volatile oils into the atmosphere. Elaborate flower carpets are laid down for *semana santa* (Holy Easter Week) and on other Catholic/syncretic processions in Mesoamerica they have such an effect. In ancient Mesopotamia, oil-producing plants, many of which may have bactericidal or mycocidal virtues, were placed on hot coals in order to produce fragrant smoke. This ancient ritual from the Near East may be rooted in the censers of contemporary Catholic churches and the spicers found in Orthodox synagogues.

In summary, the knowledge and uses people have acquired about plants have been incorporated into religions worldwide – regardless of the scale of these religions

– and in a variety of ways. Plants, like people, live, reproduce, and die, thereby providing important material for religious thought and practice. Under certain circumstances, cultural traditions have devised plant models to stand for patron deities, ancestral spirits, and guardian spirits, such as of rice and maize, in societies where those crops have been very significant economically. Plants also have served to represent people totemically in their origin myths, wherein the original beings are conceived in local systems of thought as plants of one sort or another. In addition, plants may more generally stimulate attitudes of respect and deference, and are sometimes ascribed possession of souls. Sometimes, sacred plants actually contain profoundly hallucinogenic

properties that are sought after in religious ceremony (as with fly agaric, ayahuasca, and peyote cactus), whereas in other contexts, the bioactive principle desired for attainment of religious ecstasy and communion with other-worldly divinities is more of a stimulant (as with tobacco and coca). In numerous religious traditions, psychoactive plants are deemed to be central and indispensable, in terms of the physiological and spiritual effects they induce, with regard to the users' ability to contact and negotiate with beings and gods in the supernatural world. Plants also play multiple biophysical and symbolic roles in ritual practices, including the sanctification of ceremonial space in many world religions. Plants represent critical aspects of ceremonial behavior and thought, not only in reference to so-called world religions, but also in the context of numerous shamanic and other egalitarian (non-state) religious systems worldwide. As such, in the comparative study of religion, a distinctive and important role exists for ethnobotany more generally.

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See also: Amazonia; Animism (various); Ayahuasca; Entheogens; Ethnoecology; Peyote; Plants and the Spirit World; Shamanism (various); Traditional Ecological Knowledge; Tukanoan Indian (NW Amazonia); Umbanda.

Ethnoecology

Ethnoecology – the study of cultural explications of nature – generates insights into the interface between peoples and the more-than-human world. Ecology is the scientific study of the interrelationships between plants, animals, and the environment, and it has developed into the study of interdependent communities of organisms and their environments. But while most ecologists have been trained to seek knowledge solely from scholarly books or nonhuman nature, tremendous environmental information is stored in the minds, cultures, and arts of indigenous peoples. Ethnoecologists combine ecology and ethnology to shed light on diverse cultural ways of understanding the natural world and the supranatural cosmos. They strive to formulate theories about how people perceive, organize knowledge about, and then act upon the environment.

We are human, in good part, because of the discrete ways we affiliate, not only with each other, but also with the natural world. Ethnoecology entails focused research on what is termed “traditional ecological knowledge,” “indigenous knowledge,” or “local knowledge.” Such knowledge is being lost rapidly as elders die and their cultures undergo tremendous change. Ethnoecology – the recording, understanding, and appreciation of this knowledge – is thus a pressing matter. Traditional ecological knowledge includes those aspects of culture that relate to environmental concerns directly (such as resource exploitation) and indirectly (for example, totemic proscriptions and religious beliefs). Thus, a culture’s ecological knowledge affects subsistence, adaptation, cosmology, and aesthetics, and these things in turn affect the knowledge base. Ethnoecology offers a way to record and analyze human interactions with the natural world. Emphasizing local understandings of environments, it focuses on the importance of cognition in shaping behavior. By pursuing ethnoecology, we are able to gain understanding of the interactions between humans and the natural world.

Ethnoecology entails investigation of systems of perception, cognition, belief, symbols, and uses of the natural environment. It illuminates cultural interactions with the environment, thereby giving us greater appreciation of the depth and scope of knowledge systems as they relate to the more-than-human world. Vignettes of ecological knowledge are precious in their own right, but they also provide grist for a new environmental ethic that we so urgently need. In this light, some of the goals of ethnoecology are to help us: 1) be exposed to the diversity of indigenous perceptions of “natural” divisions in the biological world; 2) understand and appreciate the origins and uses of ecological knowledge and resource management practices; 3) appreciate the connections between aesthetics, religion, and human ecology; 4) develop the tools to acquire effective ways of recording, analyzing, and applying traditional ecological

knowledge; 5) discern the variant approaches that peoples have developed cognitively to understand the world around them; 6) recognize the intersections and disjunctions between knowledge and practice; and 7) explore ecological beliefs about relationships between humans and the environment that are shared by Western sciences and Native cosmologies.

Ethnoecology shows us that indigenous practices of land use and resource management are not only adapted to local ecosystems, but have sometimes shaped those ecosystems in ways that have made them more diverse and stable. Examples of such mutualism are found more often among indigenous groups that have lived in particular places a long time than among recent arrivals. In most indigenous cosmologies, the human and the nonhuman are interdependent, and ecological limits, restraints, and responsibilities are readily apparent and cannot be externalized. The norm is that indigenous religions and cultural ecologies are based on beliefs in the intrinsic value of the land and all that it contains. Romanticized notions of traditional ecological knowledge, however, will help neither the people themselves nor the lands they inhabit, and a realistic assessment of environmental knowledge is essential for appropriate and effective conservation.

Indigenous perceptions of nature, as expressed through social and cultural processes, enrich our collective environmental understanding by providing regional specificity to global issues. Likewise, the application of ethnoecological research can benefit indigenous peoples by helping them gain greater political and economic control over their lands through articulating and exercising their unique environmental knowledge. Ethnoecology provides insight into environmental ideologies and management practices, and gives us greater appreciation of the options available in addressing contemporary concerns. Understanding ethnoecologies can also enable us to grasp more fully our collective humanity while revealing cultural differences.

Indigenous religious ideologies and ecological knowledge often translate into resource management practices, including such activities as performing ceremonies to ensure the well-being of the land, enacting restrictions to ease the strain of resource exploitation, and prescribing burns to “clean up the country.” Understanding the environmental knowledge of diverse cultures is beneficial in our consideration of issues of development, human rights, and ecological integrity. The application of ethnoecological research to conservation management and cultural survival thus warrants intensive exploration.

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See also: Entheogens; Ethnobotany; Traditional Ecological Knowledge.

Etsheni Sacred Stones

Scattered about the Port Shepstone area of KwaZulu Natal's South Coast are a series of natural sandstone outcrops that have, over recent years, become the center of religious fervor among local Zulu-speaking communities. Sandstone outcrops are typical of the lower South Coast and, being a soft stone, are easily weathered into the most curious shapes and forms. Some of these resemble human or bizarre animal shapes, while others resemble faces. On yet others are interesting markings, interpreted as numerals or mystical signs. Also characteristic of such outcrops are shelters and caves hollowed out of the rock face, some of which were inhabited by the southern San in prehistoric times. Evidence of this is still to be seen in the remains of stone tools and faded paintings, including depictions of eland, an antelope held to be sacred by the San.

It has recently been brought to national attention that some of these sites at Etsheni are being used by local communities as ritual centers and attributed religious significance. Certain caves and shelters are regarded almost as shrines, with offerings being placed and candles burnt. These sandstone outcrops act as focal points of prayer and communication with the deity and the ancestors.

Due to the church's presence in the area, a strong Catholic influence is seen in this religious center with the face of the Virgin Mary supposedly manifesting upon one particular rock face. The Virgin, in this instance, is a modern interpretation, under years of missionary influence, of an ancient Zulu deity, the goddess Nomkubulwana. This goddess, also "princess of the Heavens," is associated with fertility of both the land and people. She is often described as an exquisite young maiden, barebreasted and with long hair of forest plants and flowers. On occasion she is said to manifest in sacred pools as a mermaid. However, the concept of Nomkubulwana is itself a transformation of the much earlier southern San belief in the spirits of the dead who now live in their own complete world under the water. Indeed, certain Zulu traditionalists still hold that Nomkubulwana is a beautiful young San woman.

Yet other images at sacred sites in this general area are said to be apparent as fixed features, and these include, among many others, faces of baboons, an animal associated with witchcraft in Bantu-speaking belief, and even a rock shaped like a huge passenger liner and likened to the *Titanic*. Living animals, both real and mythical, are said to haunt the site. A large antelope known as reedbuck, is said to guard the likenesses of babies situated in a hollow, and a mythical horse-headed snake, the *inkanyamba*, is said to bask on the heat of the rocks.

Clearly these sites have become a religious node, said to date to the late 1800s, but having become most significant in recent years. San paintings, widely recognized as being religious in nature, do indicate to pilgrims that at least some sites have, for hundreds of years, been used as a religious center, and in this way fuel the religious fervor exhibited by the cult's adherents. Indeed, in an attempt to establish continuity some followers claim that Zulu groups obtained their religion from the San, and that the South Coast sites were "created" by the San. However, the majority, if not all these sites are natural and not manmade formations.

Indeed, the entire area in which the particular site of Etsheni lies is perceived symbolically by adherents to this belief system. The landscape and the features upon it are interpreted in terms of Christian religious concepts. The valley in which the rocks are situated is known as *KwaSatani*, or the "place of Satan," while the river which flows through and below the rocks, is known as *nkulunkulu*, or the "river of God." Clearly, as in the case of Nomkubulwana, these names and associated concepts are based upon a much older African belief system.

African traditional healers venerate the spirits of the autochthonous San at some rock-art sites in southern Africa. Such places are often used as training schools for apprentice diviners. It is possible that the Etsheni sites had just such an origin as African traditional religion is very fluid, incorporating new, and often alien elements, without any observed contradiction. It is this aspect of African religion that explains the presence of Christian elements today at the sacred rocks.

This fluid reorganizing and transposing of religious concepts and blurring of doctrines eliminates any possible contradiction in the adoption of novel religious concepts. Adherents apparently have no difficulty in incorporating into a single belief system elements from ancient San and Zulu belief and from the later Catholic missionary influence. Indeed, it is true that there are similarities between shamanistic religion as practiced by the San and certain aspects of Christianity and Judaism. For instance, visions and audiosonic experiences so often associated with prophetic practice in the Bible are a regular feature of shamanism. Reusing ancient religious sites is practiced world-wide, with Stonehenge on Salisbury Plain perhaps being the best-known example. This ancient lithic site acts as the scene of a New Age Druid and Mother Earth movement but, like the South Coast cult, there is no real thread of continuity between the original builders/artists and later religious groups. However, in both instances some relationship is sought in an attempt to validate the adherents' beliefs.

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See also: San (Bushmen) Religion.

Evangelical Environmental Network

Despite opposition from conservatives, the Evangelical Environmental Network (EEN) has become a consistent advocate for environmental care among United States evangelicals, engendering the support of many prominent evangelical leaders and lobbying successfully against national anti-environmental legislation. One of four religious groups comprising the National Religious Partnership for the Environment (NRPE), EEN is a ministry of Evangelicals for Social Action, a small but influential advocacy group that was founded by Ronald J. Sider to promote left-leaning politics from within a conservative theological framework. EEN was created in 1993 specifically to include evangelical representation on the NRPE.

The defining document of the EEN is the “Evangelical Declaration on the Care of Creation,” which affirms such characteristic evangelical tenets as the “full authority of Scriptures” and the need for evangelism while also rejecting nature worship and positing stewardship as the biblical rationale for environmental care. Human sinfulness caused a perversion of stewardship, resulting in seven “degradations of creation”: 1) land degradation; 2) deforestation; 3) species extinction; 4) water degradation;

5) global toxification; 6) the alteration of atmosphere;

7) human and cultural degradation. Christ came to “heal and bring to wholeness not only persons but the entire created order.” Christians are to assist in this task by being “faithful stewards of God’s good garden, our earthly home.” Although attacked by conservatives minimizing environmental problems, the Declaration received the support of many mainstream evangelical leaders, who lent credibility to the EEN’s tacit claim to represent evangelical opinion.

Starting in 1994, as part of an NRPE plan to provide churches and synagogues with “environmental awareness kits,” the EEN mailed copies of *Let the Earth Be Glad: A Starter Kit for Evangelical Churches to Care for God’s Creation* to more than 30,000 congregations. This booklet detailed contemporary environmental threats, presented a theological justification for environmental concern, and suggested ways for churches to integrate environmental themes into worship.

Although primarily an educational outreach organization, in 1996 the EEN waged a successful campaign to prevent congressional Republicans from weakening the Endangered Species Act. At a press conference heavily covered by national media, EEN representatives called the Act the “Noah’s Ark of our day,” and charged, “Congress and special interests are trying to sink it.” Influential Republicans, who thought they

could count on the support of evangelicals, were caught off guard and quickly distanced themselves from the proposed changes. The Sierra Club later acknowledged the EEN as instrumental in this fight. Such political activity raised the ire of prominent members of the Religious Right, who sought to counter the EEN and the NRPE by forming the Interfaith Council for Environmental Stewardship in 2000.

The EEN successfully weathered such criticisms and continues to promote evangelical environmentalism through its *Creation Care* magazine, its recycling programs, and its efforts to convince congregations to observe an annual, ecologically oriented, “Creation Sunday.” It has formed partnerships with 23 moderate and progressive evangelical organizations, including InterVarsity Christian Fellowship, Youth with a Mission, Habitat for Humanity, World Vision, and the Council for Christian Colleges and Universities. Attempting to capitalize on the conservative commitment to “family values,” EEN launched a Healthy Families, Healthy Environment campaign in 2001.

David Larsen

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See also: Au Sable Institute; Biblical Foundations for Christian Stewardship; Christianity(2) – Jesus (and adjacent, What Would Jesus Drive?); Christianity(7i) – An Evangelical Perspective on Faith and Nature; Religious Campaign for Forest Conservation; Stewardship; Wise Use Movement.

Evola, Julius (1898–1974)

Julius Evola is the primary Italian representative of the Traditionalist school of metaphysical thought, who further established himself as one of the most radical right-wing and anti-modern spiritual philosophers of the twentieth century.

Born Giulio Césare Andrea Evola in Rome on 19 May 1898, little is known concerning his background or early years. As a young man Evola developed strong artistic interests, and was influenced by iconoclastic writers such as F.W. Nietzsche and Otto Weininger. In World War I he served as an officer in an Italian mountain artillery unit; these and subsequent alpine experiences provided powerful inspiration for some of his later spiritual writings. Following the war he made contact with leading avantgarde intellectuals and produced poetry and paintings as the main Italian exponent of the Dada art movement.

Evola's subsequent philosophical period (1925–1930) saw him issuing detailed expositions of “Magical Idealism” and a theory of the “Absolute Individual.” In these works Evola posited the existence of an Absolute Self – a liberated higher Self that the awakened, active individual may become aware of and identify with only through disciplined, ascetic spiritual practices. His studies of Tantra (1925), Hermeticism (1931), and Buddhism (1943) all reflect this outlook. Of the diverse esoteric thinkers who Evola interacted with in the 1920s – often through his work as the leader of a magical order, the UR Group – the greatest impact upon him was made by French writer René Guénon, whose influence resulted in Evola's permanent identification with the Traditionalist movement. In 1935 Evola published his own Traditionalist *magnum opus* in the form of *Rivolta contro il mondo moderno* (*Revolt Against the Modern World*).

Evola's attitudes toward the natural world and modern life can only be fully understood within their larger Traditionalist context. Fundamental to this is a nonlinear view of time, in which history unfolds according to an immutable law of cycles. Humankind is now living in the (Hindu) Kali Yuga, or age of conflict, equivalent to the Greek Age of Iron or the Norse *ragnarök*, and thus the modern world is inevitably defined by dissolution, chaos, and rampant materialism. At the conclusion of this cycle the impure remnants will be swept away as a new Golden Age takes precedence. Some affinities may be seen between this nonlinear view and the theories of Oswald Spengler, who set forth a cyclical “organic” interpretation of history in his *Der Untergang des Abendlandes* (*The Decline of the West*, 1918–22; Evola was influenced by the work and translated it into Italian).

Traditionalism rejects evolutionism, positivism, materialism, and the entire notion of progress. It was also on spiritual-Traditionalist grounds that Evola vehemently op-

posed humanistic socio-political doctrines such as democracy and egalitarianism. In contrast to the biological racial theories being promoted in Germany and elsewhere, Evola formulated a spiritual doctrine of race that rested upon neither materialistic nor scientific foundations. Although Mussolini officially endorsed

Evola's racial theories in 1942, Evola himself had long harbored mixed feelings about the fascist regime. He held onto a hope that with time the new political system might suppress its plebian tendencies and strive to embody higher spiritual principles, becoming a sort of "transcendent Fascism." But the reality of the situation was a source of perpetual disappointment. In diametric contrast to modern notions of the separation of Church and state, for Evola the ideal expression of true statehood would always remain the sacrally sanctioned empire.

In accordance with its technique of "intellectual intuition," Traditionalist philosophy places greater weight on myths and legends as opposed to the details of profane history. The former are viewed as vestiges of a perennial, sacred tradition with prehistoric origins. (Evola believed that this tradition had emanated from the "Hyperborean" or polar north.) Evola was particularly fascinated by ancient Roman rites and often drew upon Indo-European pagan mythology and religion to illustrate his ideas, although he never espoused any sort of nature religion. To the contrary, his vision was always centered upon the spiritual realm of "pure being," at a vertical apex and high above the material world of "becoming." Evola goes even further in his own interpretations, characterizing the higher realm as a regal, masculine solar culture which is superior to that of the chthonic, feminine, earthly world of the "mothers."

This dualistic symbolism mirrors the physical aspects of human sexuality, but Evola's conclusions bear no commonality with a naturalistic outlook – hence his elevation of the "magical" or transcendental dynamics of sexual activity, and his insistence that mere procreation is not the aim of such drives when these are understood in the highest sense. In later writings he addressed strongly the issue of overpopulation, calling it the "problem of births." He opposed this not on strictly environmental grounds, but rather as a gross proliferation of quantity (masses of rootless individuals) at the expense of quality (higher human beings connected to a transcendent ideal).

In his writings Evola spoke of two "natures," oriented as opposing poles of existence, but "leading from one to the other." The natural world of matter represents a "fall" from the higher realm; it "included everything that was merely human, since what is human cannot escape birth and death, impermanence, dependence, and transformation, all of which characterized the inferior region" (Evola 1995: 4). The higher realm, possessed of a "superrational and sidereal brightness," represents "liberation" from the material world, which it also possesses the power to shape and consecrate. This metaphysical view parallels Platonic doctrines and is intrinsic to the Traditionalist school of thought.

He notes that unlike modern man, primordial man's impressions of nature were not "poetic and subjective," but rather "real sensations . . . of the supernatural, of the powers (*numina*) that permeated [natural] places" (Evola 1995: 150). Evola acknowledges the importance of geomancy and the performance of rites and placement of temples in

terms of “sacred orientations.” Such actions established an analogous relationship to higher realms and served to sacralize human affairs by infusing spirit into matter. The relationship between traditional man and the land was, therefore, of a “living and psychic character.”

For Evola there is almost nothing of value to be found in today’s science, industry, or technology:

In modern civilization everything tends to suffocate the heroic sense of life. Everything is more or less mechanized, spiritually impoverished . . . The contact between man’s deep and free powers and the powers of things and of nature has been cut off; metropolitan life petrifies everything, syncopates every breath, and contaminates every spiritual “well” (Evola 1998: 4).

Nevertheless, certain remote features of the natural world exist as an uncontaminated antithesis: these are the harsh and lonely mountain tops, imbued with majesty and offering a rare opportunity for select individuals to test themselves to the core of their being, thereby gaining transcendent knowledge of the spirit.

Only nature can help in this task. I mean nature in whose aspects no room is left for what is beautiful, romantic, picturesque . . . nature [that] ceases to speak to man . . . nature that is substantiated by greatness and pure forces (Evola 1998: 32).

In the icy, unforgiving realm of the peaks – accessible only to those few with the discipline and stamina to make the requisite ascent – Evola found his strongest connection to the natural world and its elemental powers.

Toward the tumultuous end of World War II, Evola left Rome and travelled to Vienna. During a 1945 Russian bombardment there, he was injured by an explosion while deliberately walking alone through the streets to “question his fate,” and was permanently crippled as a result. After 1948 Evola was mainly confined to an apartment in Rome where he received visitors, some of them young neofascists in search of an ideological guru. In the post-war years Evola wrote critical commentaries on the fascist and National Socialist era, and *Gli uomini e le rovine* (*Men among the Ruins*, 2002), a book detailing his idealized socio-political visions. In 1951 he was arrested in Rome for allegedly “glorifying Fascism” and inspiring extremist groups through his writings; at the trial he was acquitted of all charges. In *Cavalcare le tigre* (*Ride the Tiger*) he advanced the concept of *apoliteia*, advocating a detached spiritual bearing that rises above temporal political entanglements. Other later works include *Metafisica del sesso* (*Eros and the Metaphysics of Love*, 1983) and a spiritual autobiography, *Il cammino del Cinabro* (*The Path of the Cinnabar*, 1963). After stoically enduring great physical pain in his final years, he died on 11 June 1974. His final requests were to be brought to a window overlooking the Janiculum, the sacred hill where a temple to Janus had once been, and that he might die upright – for Evola this was emblematic of the heroic manner in which a man should confront his mortal end. In accordance with his wishes he was given no Christian funeral and his cremated ashes were later deposited in a crevasse on Monte Rosa, deep within a glacier covering the spot where a legendary town was said to have existed.

Interest in Evola's philosophy has grown since the time of his death, in scholarly as well as esoteric and rightist milieus. Nearly all of his main books have now been translated into the major European languages, and in Rome the Julius Evola Foundation endeavors to increase awareness of his work. As a forceful antithesis to a contemporary Western world that places great value on science, progress, and humanism, Evola's brand of Traditionalism continues to fascinate new generations of radicals who question the entire metaphysical basis of modern secular thought and behavior.

Michael Moynihan

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See also: ATWA; Devi, Savitri; Fascism.

Evolutionary Biology, Religion, and Stewardship

Religious believers frequently compare their communities to single organisms and even to beehives, metaphors that invoke selfless dedication to corporate goals. Recent developments in evolutionary biology suggest that these comparisons are more than metaphors. Like single organisms and beehives, religious groups are products of evolution that are adapted to survive and reproduce in their environments. Much of the evolution is cultural in the case of religious groups, but that does not alter their fundamental nature as corporate units adapted to their local environments.

This pragmatic interpretation of religious groups is obscured by the other-worldliness of religious belief. How can religious believers function adaptively in this world when their heads are filled with beliefs about an afterlife, supernatural agents whose desires must be appeased with time-consuming rituals, and so on? The answer is that the other-worldly side of religion begins to make practical sense when we ask what these beliefs cause people to do. We must distinguish between what in *Darwin's Cathedral* I termed "factual realism" and "practical realism." A belief is factually realistic when it describes the actual structure of the world. The goal of science is to be factually realistic. A belief is practically realistic when it causes the believer to behave adaptively in the real world. The goal of religion, I claim, is to be practically realistic.

It might seem that the best way to be practically realistic is to be factually realistic, but a little thought reveals many exceptions to this rule. Fictional beliefs can be far more powerful and decisive in the behaviors that they motivate than factual beliefs. Since fictional beliefs can potentially motivate any behavior, there must be some mechanism for winnowing the few beliefs that motivate adaptive behavior from the many that do not. The raw process of natural selection provides one mechanism. If all beliefs are transmitted with equal facility (like genes), then those that cause the believer to survive and reproduce will increase in frequency and ultimately will replace maladaptive beliefs. However, brains are organs that evolved to anticipate the outcome of natural selection and arrive at adaptive solutions without a costly birth and death process. The human brain is designed to filter beliefs rather than transmit them with equal facility. These mechanisms will probably prove to be both numerous and sophisticated when understood in detail, but in many cases they need be no more sensitive to factual realism than the raw process of natural selection.

Suppose, for example, that you observe one person who is bursting with vitality and another who is sullen and withdrawn. You might be attracted to the first person and avoid the second without knowing anything about the causes of their conditions. You might find yourself imitating the first person, not only consciously but unconsciously (e.g., speech patterns and body language). In this fashion, psychological and cultural processes might be intricately designed to identify, amplify, and transmit adaptive beliefs without knowing anything factually about why they are adaptive (Richerson and Boyd 2004).

I do not mean to underestimate the human ability to understand the factual basis of reality. According to anthropologists, all indigenous people possess the ability to reason on the basis of detailed factual knowledge that we associate with scientific thought. The important point is that practical realism has been the bottom line in human psychological and cultural evolution and that factual realism must be understood as part of this larger picture. Rational thought is not the gold standard against which all other modes of thought must be judged. Adaptation is the gold standard against which rational thought must be judged along with other forms of thought.

I have presented this evolutionary view of religious groups as adaptive units in more detail in *Darwin's Cathedral*. It is not the only evolutionary view of religion. For example, Boyer (2001) regards religion primarily as a non-adaptive by-product of mental facilities whose adaptive value resides in non-religious contexts. For the remainder of this essay, I will explore the implications of the adaptationist view for the “fundamental human question” posed by the editors of this encyclopedia: “What are the relationships between *Homo sapiens*, their diverse religions, and the Earth’s living systems?”

If religious groups are well adapted to their local environments, it might seem that they would be responsible stewards of their environments. However, the relationship between adaptation in the evolutionary sense of the word and the kind of stewardship at a large temporal and spatial scale envisioned by this encyclopedia is very complex indeed. Adaptation is a relentlessly relative concept. It does not matter how well a unit of selection survives and reproduces; it only matters that it does so better than the other units in its vicinity. This gives the evolutionary concept of adaptation a short-sighted quality that often results in highly maladaptive outcomes at larger spatial and temporal scales. A male lion who takes over a pride and attempts to kill the offspring of the previous male is not benefiting the females, the group, the species, or the ecosystem – only his own reproduction – relative to males who help raise the young of other males. Virtually every behavior that we call anti-social enhances the shortterm interests of the anti-social individual in the absence of punishment and other forms of social control. Similarly, the behaviors that we call prosocial typically involve benefiting others at the expense of ourselves, which make them locally maladaptive. When we appreciate the relative nature of adaptation in the evolutionary sense of the word, we can begin to understand why it is so difficult for our species to achieve the kind of far-sighted

stewardship of the environment that so clearly would be adaptive in the everyday sense of the word.

However, the situation is not hopeless. Anti-social individuals gain at the expense of prosocial individuals within their own groups, but groups of pro-social individuals robustly outcompete groups of anti-social individuals. Natural selection is a multilevel process and higher levels of selection expand the spatial and temporal horizons of biological adaptations (Sober and Wilson 1998). One of the most important recent discoveries in evolutionary biology is called the major transitions of life (Smith and Szathmary 1995). It used to be thought that evolution takes place entirely by mutational change – individuals that vary in a heritable fashion, with some surviving and reproducing better than others. Now it is known that evolution also takes place along a second pathway – by social groups becoming so functionally integrated that they become higher-level organisms in their own right. The single organisms of today, such as you and I, are the social groups of past ages. Each transition requires the evolution of mechanisms that suppress fitness differences within groups, concentrating natural selection at the group level. Social insect colonies represent another major transition, from groups *of* organisms to groups *as* organisms. Human social evolution represents the newest major transition, or rather series of major transitions, first at the scale of hunter-gatherer society and then at increasingly larger scales since the advent of agriculture (Boehm 1999). The fact that most of the recent evolution is cultural rather than genetic does not change the fundamentals.

Each transition creates a new corporate unit that manages to limit (at least to a degree) the selfish impulses of its members in favor of corporate goals. The mechanisms required to accomplish this transformation go beyond beliefs that encourage altruism and the abandonment of self-will. Successful religions bristle with social control mechanisms that reward cooperation and punish cheating in material terms, and sociological studies show that actual participation in organized religion (e.g., the number of services attended per year) is more important than religious belief *per se* (e.g., personal feelings of religiosity) in encouraging self-restraint and adherence to group goals (Stark and Bainbridge 1997).

Although a transition makes it possible for individuals to exercise self-restraint in favor of collective goals, even the collective goals are often short-sighted with respect to the kind of stewardship of the Earth that forms the inspiration for this encyclopedia. When we examine the relationship between any particular religious group and its environment, we need to ask the following question: When does self-restraint and wise stewardship of the environment actually feed back to increase the fitness of the group, compared to groups that exercise less restraint? It quickly becomes clear that adaptive self-restraint should be highly selective and that groups will frequently be as rapacious as individuals in their treatment of the environment. This is true of indigenous religions no less than modern religions. The idea that indigenous people are more respectful of their environments in some general sense is profoundly mistaken from an evolutionary perspective and is not born out by the evidence (Krech 1999). For example, in many

cases it is more productive to exploit a local area and move on rather than managing the local area for long-term productivity. Human groups that have the option of moving on should not evolve a conservation ethic, although they might exercise self-restraint in other respects such as sharing the work and profits of environmental exploitation.

The distinction between practical and factual realism makes it necessary to exercise extreme caution when evaluating the content of any religion, indigenous or otherwise. Expressions of respect toward nature cannot be accepted at face value but must be evaluated in terms of what they cause the believer to do. If we want to find examples of religions that genuinely encourage wise stewardship of nature, we need to find situations in which wise stewardship actually feeds back to increase the fitness of the group, relative to less responsible ways of interacting with the environment. Even then, the solutions that work for these groups may not work for the much longer-term and larger-scale environmental problems that confront us today.

Solving the environmental problems of today requires self-restraint and collective action at a larger temporal and spatial scale than at any other time in human history. Modern evolutionary theory and the study of religions can provide insight by showing how collective action problems can be and have been solved at smaller spatial and temporal scales. The challenges of expanding the scale further are daunting but still possible. The human mind is genetically adapted to cooperate in tiny face-to-face groups. No one could have imagined 10,000 years ago that cultural evolution would expand the size of cooperative groups to the modern nations of today and there is no reason to think that the upper limit has been reached. However, a key insight of evolutionary theory, amply supported by existing religions, is that a belief system that sanctifies the environment is only necessary and not sufficient. The Protestant reformer Martin Bucer wrote, “Where there is no discipline and excommunication, there is no Christian community” (in Wilson 2002: 105). By this he meant that even the most compelling belief system must be supplemented by a social control system to restrain the many temptations for short-term gains that undermine long-term collective welfare. Those far-sighted enough to work toward the next major transition in human cultural evolution need to adopt Bucer’s tough-minded stance to achieve the tender-minded objective of the stewardship of nature.

David Sloan Wilson

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See also: American Indians as "First Ecologists"; Anthropologists; Darwin, Charles; Domestication; Ecological Anthropology; Ecology and Religion; Harris, Marvin; Hunting and the Origins of Religion; Rappaport, Roy A. ("Skip"); Religio-Ecological Perspective on Religion and Nature; Traditional Ecological Knowledge; Wilson, Edward O.

Evolutionary Evangelism

Evolutionary evangelism tells as an inspiring sacred narrative the 14-billion year story of cosmic, planetary life and human evolution that comes to us through mainstream science. This story is inspiring in that it helps people find meaning and connection within a universe that is vaster and older than humans have heretofore believed. Such a story is deemed sacred because it addresses the nature of ultimate reality and deals with the ultimate concern and commitments people have. It also provides an overarching context, a grand narrative, and can be used for value instruction in ways similar to the functional roles of creation stories born of pre-scientific times and situations. Evolutionary evangelists come from a wide range of religious and philosophical traditions. They share a passion for communicating the “epic of evolution” in ways that many find inspiring. Evolutionary evangelists appeal to the heart as well as to the mind, telling our common creation story in ways that offer listeners guidance and that respond to their emotional, cognitive, and spiritual needs, while honoring bedrock beliefs and faith structures. They seek to transform cold scientific facts and theories into narratives consistent with the science but that also uplift the soul, empower the psyche, and offer comfort and assurance of deep connection with the whole of Reality. They provide ethical exhortation as well regarding the roles each and every one of us might constructively play in the continuing saga of evolution.

Consistent with Thomas Berry’s portrayal of the evolutionary narrative as a “metareligious” story, evolutionary evangelists do not see this grand narrative as threatening to replace long-standing religious traditions. Rather, they view the evolutionary story as enriching and enlivening to diverse religious and secular traditions by providing the “big picture,” or “great story,” that contextualizes the old stories and teachings in ways consistent with contemporary conditions and understandings.

What distinguishes evolutionary evangelism from other forms of evangelism is its grounding in mainstream evolutionary and ecological sciences rather than the Bible or any other religious text. “Evangelism” (proclaiming the “good news”) is deeply rooted in American religious culture. Evangelistic revivals in the eighteenth and nineteenth centuries, often referred to as the “First and Second Great Awakenings,” transformed the religious and social landscape of America on a large scale, and subsequently spread beyond its borders. History suggests considerable potential impact of a green-spirited, evolutionary evangelism within and beyond North America.

In 2002 Michael Dowd and Connie Barlow launched an itinerant teaching and preaching ministry as evolutionary evangelists, “sharing the Great News of The Great Story and fostering the Great Work” in colleges, churches, and other religious and

educational settings as well as living rooms and to outdoor gatherings across North America. Their mission was to promote the marriage of science and religion for personal and planetary well-being. In the first two years of this itinerant ministry, they delivered sermons and lectures in more than 200 churches and other organizations in the United States and Canada, from environmental groups and botanical gardens, to Unitarian-Universalist and Unity/New Thought churches, to a multitude of Protestant and Roman Catholic churches and retreat centers.

Much of the strategy for this revivalism was grounded in Dowd's religious background and experience. Dowd, who grew up Roman Catholic and had a "born again" experience in his youth, becoming a devoted evangelical Christian, developed during this time an interest in and appreciation of the American revivalist tradition.

His own conversion from an anti-evolutionary form of Christianity toward the launching of a form of itinerant revivalism began while he was majoring in biblical studies and philosophy at the Assemblies of God-

Affiliated Evangel University in Springfield, Missouri. It was there he began to embrace evolution as an expression of God's creativity and began to feel God's call to devote his life to sharing the evolutionary epic as an expression of the gospel. Particularly influential was an evening in 1988 when he was first introduced to the Universe Story through a course titled "The New Catholic Mysticism," taught in Boston by Albert LaChance, who had studied with Fr. Thomas Berry.

After seminary Dowd served for a time as a United Church of Christ pastor, an ecumenical peace and justice activist, and a sustainable community organizer. He also wrote *EarthSpirit: A Handbook for Nurturing an Ecological Christianity* (23rd Publications, 1991). Today he seeks to tell the evolutionary epic in ways that audiences, regardless of their theological and philosophical beliefs, will find hopeful, inspiring, and empowering, and he stresses what he calls seven "post-biblical revelations":

1. Evolution is a grand unifying and empowering worldview.
2. Human language is inherently symbolic, meaningful, and consequential.
3. "The universe" is a sacred story of nested creativity and cooperation at ever-wider scales and levels of complexity.
4. "God" is a legitimate proper name for that Ultimate Creative which transcends yet includes all other levels of reality.
5. "Creation" (the cosmos as a whole) is in a process of becoming more than it was before and becoming more intimate with itself over time, and humanity is now an integral part of this process.
6. As a species and as individuals, we are maturing and our self-interest is expanding.
7. Death, destruction and chaos are natural and generative. Said another way, death and resurrection are integral to the cosmos and are necessary for the continuing evolution of life and consciousness.

Such understandings, Dowd believes, provide a basis for reinspiring the faith in his listeners and, with Christian audiences, they offer new ways of understanding death,

resurrection, sin, salvation, heaven and hell, the apocalypse, the second coming of Christ, and the kingdom of God.

Evangelism in any form is meant to positively transform lives and lift individuals to commit to higher callings. Something of vital importance is at stake. Beyond personal salvation is a religious zeal for the common good. In the case of evolutionary evangelism, the consequence of such transformation *en masse* would be a transformed relationship between humanity and the living planet. Evolutionary evangelism invites a this-world communion with the divine and a wholehearted participation in what

Thomas Berry calls the Ecozoic Era, a vision of human beings living in “a mutually enhancing relationship with the entire community of life.”

Michael Dowd and Connie Barlow

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See also: Berry, Thomas; Epic of Evolution (and adjacent Epic Ritual); Genesis Farm; Macy, Joanna; Religious Naturalism; Seed, John; Swimme, Brian.

Explorer Petroglyphs (Western United States)

Indigenous peoples were not the only ones who either inscribed rocks (petroglyphs), or painted or wrote upon stone surfaces (petrographs) to mark their presence upon the land. As Euro-American explorers, missionaries, and pioneers ventured into the western half of the North American continent, they too left many such traces. In the nineteenth century Lewis and Clark recorded in their journals several instances of men inscribing rocks or trees with their names or initials, and well-documented sites such as Names Hill and Independence Rock in Wyoming contain thousands of inscriptions carved into the soft rock surfaces by explorers, trappers, and pioneers moving west. Every western state has its own sites where people seemingly felt impelled to record their names and/or the dates of their passing through new territory.

Unlike the immense diversity of inscriptions and paintings left behind by indigenous populations, however, the overt religious context of Euro-American rock art is mostly limited to instances in which the Christian cross was either inscribed or painted onto rock surfaces. Although a few such sites may be funerary in nature, the vast majority seem not to be associated with graves at all, but with travelers employing the cross as a calling card of empire, the mark of a foreign culture staking claim in a new land.

This type of religious context may be subdivided further into two categories, the first consisting of those crosses probably carved by priests, especially those made by Spaniards in the southwestern part of the United States. These carvings come from an overt and declared religiosity, and have corollaries with ancient religions that see cultural conflict as a result of spiritual conflict. Thus, the crosses represent a physical manifestation of a new spiritual presence. The Catholicism of the eighteenth and nineteenth centuries encouraged priests to plant crosses wherever their missionaries were likely to encounter indigenous peoples, and the veneration of the cross as icon was well established as part and parcel of the missionary experience.

The second religious context bridges the gap between the widespread veneration of the cross encouraged among the Catholic laity, and the common piety and ambition exhibited by many explorers of the period. Not only were laity encouraged to erect crosses in their everyday travels, but explorers also were known to follow this practice. Kit Carson and John C. Fremont carved a cross and a date on an island in the middle of the Great Salt Lake in Utah, and Fremont himself carved another cross on Independence Rock. In his memoirs, Fremont explained he was simply following “the custom of

early travelers and explorers in our country,” and this expression of religiosity is a vital link between westward expansion and how such explorers and travelers viewed nature itself. Like the Catholic priests of the Southwest, these explorers also saw the land as something to be “conquered,” but their crosses had less to do with other-worldly hopes for the salvation of natives and more to do with the opening of routes for the fur trade, commerce, and the capture of nature by European immigrants.

Michael McKenzie

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See also: Rock Art (various).

F

Faerie Faith in Scotland

Beneath formalized religious structures of many societies rests a bedrock or vestige of nature religion. In Scotland and other Celtic countries, faerielore fulfils this quasitotemic function. The literary representation of the faeries as winged “little people” is largely a Victorian British development. Kipling’s “Puck of Pook’s Hill” maintains he was the last faerie (or fairy) in England, so a measure of reinvention may have been justified. Nineteenth-century artists like Joseph Noel Paton (National Gallery of Scotland) found inspiration in the “fairy faith” for rich erotic sublimation that might otherwise, with more worldly muses, have shocked Victorian sensibilities.

Traditionally faeries could vary in size from the miniscule to the superhuman. R.H. Cromek, in an ethnographic account, describes those of southwest Scotland as, of small stature, but finely proportioned; of a fair complexion, with long yellow hair hanging over their shoulders and gathered above their heads with combs of gold. They wear a mantle of green cloth, inlaid with wild flowers; green pantaloons, buttoned with bobs of silk; and silver shoon . . . They ride on steeds whose hoofs “would not dash the dew from the cup of a harebell” (Cromek in McNeill: 111).

Irish legends, also influential in Gaelic Scotland, portrayed the faeries as aboriginals who were driven into hollow hills – knowes, raths or forts – when iron-age humankind conquered with tree-felling axes. As such, faerie faith conveys a submerged Arcadian or idyllic green consciousness. Various Scottish tales account for the faeries as those angels who were too good to follow Lucifer all the way to hell, but not good enough to remain in heaven. In *The Secret Commonwealth of Elves, Fauns and Fairies* (ca. 1690), the Rev. Robert Kirk documented Gaelic beliefs and provided a biblical underpinning. The faeries, Kirk believed, are a species of creation that, like humankind, also await salvation.

Care must be taken not to offend these *daoine sìthe* – the “people of peace.” They can cause mishaps and even replace healthy human children with sickly, troublesome, faerie “changelings,” thereby perhaps conveniently allowing blame for genetic misfortune or parental neglect to be displaced. This has diminished the esteem in which the “gentle folk” might otherwise be held. But W.B. Yeats in *The Celtic Twilight*, first published in 1893, makes impassioned “remonstrance with Scotsmen for having soured the disposition of their ghosts and faeries” (Yeats 1990: 92–5). Scots, he says here, have been “too theological, too gloomy.” In contrast, he continues, the Irish “exchange civilities with the world beyond,” and are accordingly more richly blessed.

In recent years some such “Twilightist” sentiments, boosted by New Age and green mystical seeking, have been attacked as inventive romanticism by such “Celtosceptic”

scholars as Professor Donald E. Meek, who holds a chair of Celtic studies at Edinburgh University. Meek's concern is with cultural appropriation, invasion and distortion, and while anger about this would be shared by many Gaelic thinkers, views of what is genuinely traditional, or authentically evolving, vary, and some thinkers understandably feel divided within themselves on such shifting numinous ground within the cultural psyche. The Faerie Hill is, suggests Gaelic scholar John MacInnes, "a metaphor of the imagination" (personal communication, 1997); a liminal and imaginary realm, where musicians or poets would fall asleep, accepting they would awake either mad, or inspired. As such the faeries may represent the interface of natural and human creativity: nature personified, true nature's child born to be wild and perhaps being reborn in the nascent green consciousness of our times.

"Yes, about the fairies and all that . . . They say they are here for a century and away for another century. This is their century away." So said Nan MacKinnon, traditionbearer of the Hebridean Isle of Vatersay, interviewed for the Scottish studies journal, *Tocher* (vol. 6–38, 1983: 9). She said it in 1981!

Alastair McIntosh

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Breakout Section: The Rotting Tree Faerie

What is it that keeps faerie traditions alive? One answer, suggests Alastair McIntosh, is numinous experience. The stories keep reasserting themselves, as he suggests with this account adapted from his article, "Rainforests and High Finance," in *World Rainforest Report* 26 (October 1993), 18–20.

It was our last day deep in the Australian forest. And there, like out of a child's picture book, in an arched door-like entrance to this hollow rotting tree, was quite the most exquisitely beautiful mushroom any of us had ever seen.

It had a slightly bulbous, pristine white stem, and a perfectly circular, mottled grey cap with a ring of white spots as crisp and fresh as God in the morning light.

We gazed in wonder. And I said for a laugh – for the kind of laugh that you need when wrestling with the pain of nature undergoing destruction – “What kind of a faerie lives here?”

Everyone smiled. I mean, it’s kind of ridiculous, to be enquiring after . . . faeries!

The other protestors from John Seed’s Rainforest Information Centre gradually move on. But I stay, alone. And again, the question, burning now: “What kind of a faerie lives here?”

In the back of the tree lay some termite-eaten wood. It was annoyingly distracting me, for I could vaguely make out in it the face of a grim old man staring, motionless, down at the soil, like a New Guinea spirit mask. This was not what I was looking for.

Again, my question. But this time, the old man spoke. Yes, he actually spoke! Clearly, subjectively objective in my mind’s ear.

In a big, empowered, booming voice, he spoke. He said: “I am the faerie who lives here.”

“No, no,” I replied, bemused. “You’re just a sour old face I’m imagining in rotting wood. I’m looking for flower faeries. You’re not that!”

“Oh,” he responded, quizzically. “But I thought you were the one who’s always going on to your students about radical feminist theology?”

“What’s that got to do with it?”

“Just that you’re always telling them about calling one-another into being; that a person becomes a person in community inasmuch as they’re heard, listened to, and *allowed* to be visible.”

Well! I tell you . . . he had me by my own ideals! To deny his reality would have been to deny one of the insights that I most value.

“Fair enough,” I said to him. “But if I accept that, I’m going to start seeing faeries all over the place!”

He laughed and laughed. He said that faeries *are* all over the place! God has many masks and I was presently face to face with one of them.

“Tell me then,” I enquired. “What kind of a faerie are you?”

He swelled with pride and delight at being asked. “I,” he said, “am the Rotting Tree Faerie!”

“But,” I protested, “I always thought faeries looked joyful. You look like an undertaker. So what kind of things give *you* joy in life?”

This was the question he’d been waiting for and his voice shook the forest. “Rotting trees give me joy in life! This mushroom,” he said, “is at my door precisely because I AM the Rotting Tree Faerie.”

And as he said it, he let me feel the great processes of death and decay going on in this old tree, indeed, in the whole forest. He let me feel the mushroom’s mycelia reaching from the roots into every part of that dying tree, and beyond. I could even feel the molecular processes of rot taking place, composting what had reached the fullness of its time and had died to create new soil and therefore new life.

The mask and the mushroom were, indeed, his Janus face. One side expressed decay and death. The other, in its beauty, was his veritable flower faerie self.

Alastair McIntosh

See also: Re-Earthing; Seed, John.

See also: Animism (various); Celtic Christianity; Celtic Spirituality; Earth First! and the Earth Liberation Front; Ireland; Scotland; Seed, John.

The Fall

The Fall story of Genesis 1–11 is not only a theological text. It is also an aetiological narrative (a story about origins) concerning the rise of civilization in the late Neolithic period. Since the mid-nineteenth century the modernist–fundamentalist culture war in North Atlantic Christianity has generated two highly polarized approaches to the biblical creation story: one that insists upon its putative historico-scientific content, and the other that views it as legend/folktale with no historical value. To move beyond this historicist straightjacket we might instead consider this story in terms of mythas-memory. Might it be similar in character to origins narratives of indigenous peoples, which postmodern anthropology is finally beginning to appreciate as legitimate “testimony” about prehistoric life?

Until recently there were few anthropological alternatives to post-Enlightenment evolutionary positivism’s perspective on origins. There is no grander narrative in modern culture than the myth of “Progress,” and this ideology is grounded in the story of humanity’s emergence from the swamp of ignorant *Homo erectus* to the triumph of increasingly rational, technologically adept and socially complex cultures of *Homo sapiens sapiens*. Recent revisionist paleoanthropological reconstructions of human “pre-history,” however, are challenging assumptions about the intrinsic nobility (or inevitability) of the so-called “Ascent of Man.”

In particular, the “Neolithic revolution” of ca. 10,000

B.C.E. that led to what the dominant historiography calls the “dawn of civilization” is being reassessed in light of a very different paradigm. It is being argued that human lifeways throughout the Pleistocene – which were universally characterized by a social, environmental and spiritual symbiosis – represented a viable and sustainable cultural model, albeit one that the rise and relentless spread of civilization dramatically and progressively disrupted and destroyed.

Below are three anthropological hypotheses regarding this traumatic transformation during the late Neolithic period:

One interpretive stream pioneered by paleoarcheologist Marija Gimbutas and popularized by Riane Eisler concentrates on gender. It sees widespread goddess-worshipping, egalitarian Neolithic cultures from Sumer to Minoan Crete to Old Europe that were peaceful, horticultural, and symbolically “advanced.” It is argued that these cultures were steadily wiped out by “Kurgan” invasions from the Asian steppes beginning ca.

the fifth millennium B.C.E., which imposed iron technology, patriarchal institutions and the politics of war. Cynthia Eller has critiqued this view from a different feminist perspective.

A more widely accepted hypothesis focuses on the eclipse of hunter-gatherer lifeways by the domestication of plants and animals beginning ca. 9000 B.C.E., which led inexorably to the rise of the first cities in Asia Minor and Mesopotamia from 5000 B.C.E. Jared Diamond explores environmental explanations for why domestication arose in the Middle East first, whereas Jacques Cauvin attributes it to symbolic/ideological transformations. Paul Shepard focuses on the reciprocal nature of domestication: the more humans breed out wildness, the more we become “dull and mean” like our cattle. Evan Eisenberg examines how Mesopotamian urban agriculturalists substituted the artificial mountain of the ziggurat for the traditional *axis mundi* of the mountain wilderness. Daniel Quinn posits an archetypal struggle between “Taker” and “Leaver” cultures, and like Shepard, laments the triumph of the former.

A third hypothesis moves behind agriculture to culture itself, placing the decline of Pleistocene symbiosis further back into the Middle Paleolithic with the rise of symbolic thought. Direct somatic and sensory perception of the world began to atrophy – according to David Abram due to written language, and to John Zerzan because of the power of representation, in which symbols first mediated reality and then replaced it.

These studies differ significantly in methodology, detail and explanation, but all share one crucial perspective with the Genesis account of origins (which they each reference with varying degrees of depth). This is the conviction that there was some sort of epochal “rupture” that signaled the beginning of the end of the widely dispersed, clan-based hunter-gatherer culture that had likely prevailed since “the beginning” of human life on Earth. The implications of this rupture have been devastating not only for the natural world, but also for human social life and spiritual competence.

In the “primeval history” of Gen. 1–11, Israel’s sages – redacting older sources and probably writing in the aftermath of the failed monarchy – also attempt to explain this “rupture.” Eden can be interpreted as a mythic memory of the old symbiotic lifeways: humans, creatures and God dwell intimately and richly together (Gen. 2). In radical contrast to the modern view, but not to other indigenous creation myths, this primal world is described as unqualifiedly “delightful” (Hebrew *tov*, Gen. 1:31). This ancient equilibrium was/is shattered, however, by the primal human impulse to “reengineer” the world in order to control and “improve” it (Gen. 3).

What follows is a litany of woes: humans are relegated to painful agricultural toil (3:19); the first city is attributed to the murderous farmer Cain (4:17); violence spreads widely and rapidly (6:5ff.). God and nature fight back in the great flood which (temporarily) scuttles civilization (6:9ff.). Could the Flood myth – found in varying forms throughout the great cultures of the Ancient Near East – represent a collective memory of the catastrophic breach of the Bosphorous straits and creation of the Black Sea in the mid-sixth millennium B.C.E., as William Ryan and Walter Pitman have argued?

But civilization prevails again, and a “genealogy” attributes the spread of predatory imperial city-states to Nimrod, the “powerful warrior-hunter” (10:8ff.). The nadir of the “Fall” is thus narrated in the tale of the Tower of Babel (Gen. 11:1–9). It symbolizes the archetypal project of urbanism, in which human social, political and economic power is concentrated rather than dispersed. The warning fable is a thinly veiled parody of Mesopotamian ziggurats, as Eisenberg points out, in which the making of bricks (11:3) alludes to Israel’s experience of slavery in Pharaoh’s Egypt (Ex. 1). Such “civilizational” projects are thus resolutely “deconstructed” by the divine council in favor of the older vision of a dispersed, tribal humanity living in diverse bioregions (Gen. 11:5–9). The biblical counternarrative of redemption from the Fall then commences with Abraham’s call to abandon Mesopotamian cities for the new archetypal journey of liberation: following God’s call back to the wilderness (12:1ff.), a pattern that recurs in the subsequent stories of Jacob, Moses, Elijah, Isaiah and even Jesus.

The “Fall” in Gen. 1–11, then, is not so much a cosmic moment of moral failure as a progressive “history” of decline into civilization – exactly contrary to the myth of Progress. Its polemical perspective is plausible when correlated with various aspects of the Neolithic “rupture” hypotheses noted above. The biblical primeval history thus should be considered not only as “mythic memory,” but also as perhaps the first literature of resistance to the grand project of civilization – rightly warning against its social pathologies and ecocidal consequences.

Ched Myers

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See also: Animism – Humanity’s Original Religious Worldview; Anarcho-Primitivism and the Bible; Creation Myths of the Ancient World; Creation Story in the Hebrew Bible; Creation’s Fate in the New Testament; Eden’s Ecology; Shepard, Paul.

The Family (Children of God)

This international, communal missionary movement emerged in California in the late 1960s, as the family of evangelist David Brandt Berg ministered to the needs of hippies and young people who were on spiritual quests. In consequence, it is a cultural amalgam of the traditional Holiness movement and the radical youth counterculture of the sixties. For example, the Family emphasizes both spiritual communion with Jesus and erotic experimentation. It is oriented toward millenarian biblical prophecy, but it is also interested in astrology.

A journalist called the group *The Children of God*, and under this name it became famous. Hippies, religious seekers, and disaffected wanderers joined by the hundreds, as Family teams crisscrossed the continent. Calling himself *Moses David*, Berg led the dispersed group via colloquial scriptures called *Mo Letters*. A few horrified parents hired deprogrammers to rescue their sons and daughters forcibly, and a national anti-cult movement arose to combat the group. Moses David and most followers went to Europe and then spread out across the globe.

While headquartered in the Canary Islands in 1974, Moses David developed a new form of evangelizing, called *flirty fishing* or *FFing*, in which women of the Family offered their sexual love to an estimated 200,000 emotionally needy men, as a sample of God's love. After a decade, the group abandoned this practice, for a variety of reasons which included health hazards and the vehement opposition of critics in the surrounding societies.

In 1978, police raided a commune in Mexico, and over the following years a series of government raids attacked communes in Argentina, France, Australia, and Spain. Altogether, authorities seized six hundred of the group's children under the suspicion they were victims of sexual abuse. However, in each case the charges were eventually dropped and they were returned to their parents, after being traumatized by forced physical exams and often weeks of separation from their families.

Today, the group practices a form of open marriage. Married members feel a responsibility to meet the erotic needs of single adult members, and they view sexual intercourse as a sacrament of God's love. With the permission of the other spouse a husband or wife will have dates with a member of the opposite sex that involve sexual sharing as well as heart-to-heart conversation and other qualities of enduring friendship. Opposed to artificial birth control, the group has a high fertility rate and considers children to be gifts from God. It raises them communally and educates them within the commune.

The death of Moses David in 1994 brought an end to what members believed was his constant channeling of messages from Jesus and lesser spirits. Therefore they undertook a vigorous campaign to develop the sensitivity of all members, and the overwhelming majority now believe they personally receive messages from the spirit world. In their sexual sharing and spiritual channeling, they seek to integrate the natural and supernatural realms.

William Sims Bainbridge

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See also: New Religious Movements.

Fantasy Literature

Modern fantasy describes the predominantly literary/ written fiction that grew out of the popular reception of

J.R.R. Tolkien's *The Lord of the Rings* in Britain and the

U.S.A. in the 1960s, and has since become a genre in its own right, with fantasy themes and content found in roleplaying and computer games, film and television media. The basic narrative and stylistic form of literary fantasy is that of romance: generally heroic, quest-centered stories drawing on Western folk and fairy-tale traditions, Norse and Celtic myth, Arthurian legend, and medieval romances. Its roots lie in the Romantic revival of interest in the "Gothic" Middle Ages from the second half of the eighteenth century to the Victorian medievalism of William Morris. However, as it is understood here, fantasy as a distinct literary genre is a phenomenon specific to late twentieth-century Western society. Archetypal fantasy texts often look to a mythical European medieval past, constructed as a time when people lived harmoniously with their environment. This is the inheritance of J.R.R. Tolkien's medievalist vision; but it also continues, and functions within, a Romantic philosophical and ideological framework where the "medieval" was constructed around a set of oppositions pitting nature and "the primitive" against urban civilization, the supernatural against scientific rationalism.

This Romantic construction of the medieval as iconic "Other" is one of the lasting myths of modernity, and has retained its deep symbolic and cultural value as a medium for social critique. This anti-modern impetus is exploited vigorously in modern fantasy. Sheri S. Tepper's (1991) novel, *Beauty*, uses the Sleeping Beauty fairytale as a framework to present the Middle Ages as an idyllic Eden retaining a sense of the sacred and magic which vanishes with the advent of "electric lights" and "science" – industrialization and modernization. The discourses of both environmentalism and religion are invoked in a Romantic aesthetic conflating "beauty," the medieval, and nature, implicitly critiquing the rational materialism and skepticism of modern capitalist society. "The Creator makes whales who sing in the deep, and men kill them to put their oil in lipsticks" (1991: 438). Progress is assumed to be dependent upon the exploitation of nature, and is regarded as ultimately dehumanizing and destructive.

Concern over the ecological crisis is becoming a much more insistent and common theme in fantasy literature, particularly explicit in Sheri S. Tepper's works such as *Beauty* and *The Family Tree* (1997), also in Stephen R. Donaldson's *Chronicles of Thomas Covenant* (1977–83), Ursula K. Le Guin's *Always Coming Home* (1985) and *Buffalo Gals and Other Animal Presences* (1988) and Alan Aldridge's *The Gnole* (1991).

However, most fantasy expresses these concerns indirectly through the use of myth and symbol. The creation of coherent alternative worlds such as Tolkien's Middle-Earth or Ian Irvine's Three Worlds in *The View from the Mirror* (1999–2002), is one of the hallmarks of archetypal fantasy which foregrounds to an unusual degree the importance of environment. Even when it is used predominantly as a background for human action, nature or the land in fantasy is always implicitly understood as being alive and meaningful in some way. The land or world thus becomes like a character, intimately connected to the action of the story, and more importantly, exerting a presence or consciousness demanding respect. The influence of James Lovelock's Gaia hypothesis can be felt in Sheri S. Tepper's *True Game* series (1985–1986), where the magical planet Lom is not only sentient and conscious, but actively incorporates humanity into its unique ecosystem.

Nature in fantasy is imbued with symbolic content, reflecting the emotional or moral charge of the story; a common theme is the Land which may die or thrive according to nature of its people or ruler, as in Patricia McKillip's *Riddle-Master* trilogy (1976–1979) which draws upon Robert Graves' *The White Goddess* (1948) through the notion of sacral kingship intimately tied to the land. Nature itself becomes inextricable from the ethical dilemmas and characterization presented in the story. Another common motif is the anthropomorphizing of the physical environment through magical beings closely connected with or personifying aspects of nature, such as Tolkien's Ents, sentient trees, elves, nature spirits and deities (the Green Man, the Goddess). It is notable that fantasy draws on the same corpus of myths and sources used by popular Western esotericism, and that both have their roots in Romanticism.

Fantasy should also be considered a text-centered *community* of readers, writers, critics, audiences and media producers, which has arisen as a social phenomenon primarily in highly industrialized, urban environments among a young, socially mobile audience, paralleling the growth and mainstreaming of the New Age movement since the 1960s. Not only do the texts draw upon the same Romantic values and discourses as alternative spirituality and environmentalist movements, but there is also a considerable overlap in community: Margot Adler notes that many Pagans and Witches not only read, but also write fantasy and science fiction (e.g., Marion Zimmer Bradley, Diana Paxson, and Juliet Marillier). Fantasy can thus be understood as participating in or intersecting with the broader social movement of the "New Age" described by Wouter Hanegraaff as an identifiable (though diffuse) cultural group constituting a sub-stratum of alternative values critical of the dominant worldview in contemporary Western societies through an ideological opposition to the two main institutions of knowledge and morality: scientific rationalism and Judeo-Christian (monotheistic) religion. Concurrently, environmentalism has sought to alter humanity's perception of nature as an exploitable resource by raising reverent awareness of human interconnectedness with the environment. Often the behaviors and goals of New Age and environmentalist movements may be indistinguishable, though their motivations may differ.

This shared Romantic ideology and attitude toward nature forms a nexus between fantasy, alternative religiosity and environmentalism. The separations between mind/body and culture/nature are seen as related aspects of the same problem: that of a fundamental duality in Western thinking brought about by the materialism and mechanization of philosophical rationalism (institutionalized in modern science) and the dualism of traditional Christianity. Hence the emphasis on holism and the idea of an organic, interconnected universe is simultaneously a solution to and a critique of these underlying dualities. Ursula Le Guin's *Earthsea* books (1968–2001) depict a dynamic cosmos where the interconnectedness of all things is maintained through a magical equilibrium or balance. The movement is toward reestablishment of a harmonious state, where not only the individual hero/psyche is made whole, but the imbalances between men and women, humanity and nature are also overcome through the shift toward a more egalitarian and ecologically balanced society. The post-apocalyptic Australian landscape of Sean Williams's *Books of the Change* (2001–2002) paradoxically emphasizes these interconnections by exploring the cataclysmic changes wrought on the environment through a massive rupture within the human life and psyche.

Reconnecting with nature and changing humanity's attitude toward the natural world is seen by both environmentalists and alternative spirituality movements as the solution to relieving the existential alienation of modern Western urbanites, which is also regarded as the root of ecological destruction – the mind–body dichotomy is echoed in the separation between human culture and nature. Fantasy problematizes this separation.

J.R.R. Tolkien (“On Fairy Stories”) states that fantasy expresses the desire to communicate with other living things. Humans with “the Wit” in Robin Hobb's *The Farseer Trilogy* (1995–1997), for example, have magical telepathic bonds with wild animals, and the dragons of *The Liveship Traders* (1998–2000) are an endangered species which not only communicate with but cause physical mutations in humans: human and non-human blend and merge. The emphasis is on continuity with rather than separation from nature: there are no sharp distinctions; the boundaries are blurred. However, the shapeshifters and werewolves of fantasy, such as the Metamorphs of Robert Silverberg's *Majipoor* books (1980–) and Patricia McKillip's Earth-Masters (in *Riddle-Master*), point to the ambiguities in humanity's relationship to wild, chaotic, dangerous nature. As Verlyn Flieger notes, there is an acknowledgement that nonhuman life has its own agenda and survival at stake that is not necessarily compatible with human society. This uneasy coexistence reflects tensions and contradictions found within the Green Movement and in wider society, and points to the fundamental cultural paradox inherent in the cultural construction of the natural.

By tapping into the emotional and imaginative substratum at the foundation of religious experience, fantasy can express alternate ways of perceiving reality. It is eminently able to express the holistic visions at the heart of New Age and environmentalist critiques centered around altering humanity's relationship to the Other: its estranged self, and nonhuman nature. In so doing, fantasy has become one of the imaginative

discourses of “alternative culture,” its motifs, symbols and ideological substructure influencing and itself feeding into what Meredith Veldman describes as a sub-current of Romantic anti-modern ideological protest. Fantasy literature can therefore be seen as part of a commercial and creative substructure that plays a part in the dissemination and acceptance of heterodox beliefs and ideas into wider society. However, fantasy is in the end a literary manifestation, not a religious one. This is an important distinction: the focus is on ethical responsibility, the individual, generalized “spirituality” not localized to any particular creed or religion. Fantasy presents internally coherent moral dramas without reference to a formal moral code or to any kind of religious institution. Its characters are faced with existential moral choices of the same quality as those faced by modern Western individuals. It works through constant adaptation to contemporary cultural contexts in order to be acceptable to modern audiences and mentalities – in short, it involves the mainstreaming of countercultural impulses.

Kim Selling

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See also: Celestine Prophecy; Church of All Worlds; Disney Worlds at War; Earth First! and the Earth Liberation Front; Le Guin, Ursula; Middle Earth; New Age.

The Farm

In 1971, a motley caravan of countercultural idealists arrived at a borrowed farm in southern Tennessee to start a commune based on the spiritual teachings of Stephen Gaskin, who had gathered about him hundreds of young seekers in a rambling series of lectures and discussions called Monday Night Class in San Francisco. Settling into their new home, the idealistic hippies began to build a commune that would eventually reach a population of some 1500. Central to their aspirations was the conviction that they could make the world a better place to live by living low-impact, cooperative lives and sharing their surplus with others. In the Farm's first dozen years its residents ran an extensive agricultural operation, worked to develop innovative kinds of natural foods (many of them based on soybeans), and operated a natural birthing clinic whose services were offered free to the public. Central to it all was a nature-oriented religious spirit drawing on the teachings of the world's great religions and spiritual masters and articulated by Gaskin, whose Sunday morning services anchored the entire enterprise.

Economic problems led to a shift, in the early 1980s, from a large community with a completely communal economy to a smaller, more decentralized one. However, the environmental and natural commitments of Farm members have remained central. They have developed solar energy and alternative fuels for vehicles. Through Plenty, their charitable foundation, they support grassroots, low-impact construction and agricultural projects in developing countries. Their Ecovillage Training Center offers instruction in alternative building construction, permaculture, and other such things. They have preserved hundreds of acres of native forest. After three decades they continue to be proudly devoted to natural living.

Timothy Miller

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See also: Back to the Land Movements; Beat Generation Writers; Bioregionalism; Hippies; Radical Environmentalism.

Fascism

Fascism is a political ideology driven by a vision of the nation's total rebirth from decadence (its "palingenesis"; see Griffin 1995). In the interwar period it typically assumed a charismatic ritual form of politics that for some scholars is reminiscent of Early Modern millenarian movements, and for others represents an outstanding example of modern "political religion." Moreover, in some of its manifestations fascism has apparently exhibited a deep concern with nature and even with ecological issues. Both "religion" and "nature," the principal themes of this encyclopedia, are highly contested terms embracing a vast range of phenomena. This article sets out to convey something of fascism's complex relationship to both terms by concentrating on the degree to which it took the form of a "religion of nature." A generalized pronouncement on even this relationship is hazardous, however, since, compared to liberalism and Marxism, fascism is a peculiarly protean force, capable of assuming a wide range of sometimes contradictory forms even within the same movement. This is because the national revolution envisaged by fascists embraces a wide range of permutations in what constitutes the nation's indestructible core, in the types and virulence of the racism which it incorporates, and in the temporal and geographical scale of the coming revolution. In the same way its relationship to established or new religions can assume many contradictory guises, as can the degree to which it deliberately seeks to incite a sense of mystic participation or self-transcendence in its followers. Equally, the place which a transformed relationship to nature occupies within the fascist scheme for national regeneration, as well as the role played in it by pagan, "immanentist," or cultic concepts of nature, can vary enormously depending on which specimen of the genus is considered.

Yet even when a particular example of fascism or moment in the "fascist experience" seems to display a profound religiosity bound up with an all-pervasive cult of nature, closer examination suggests that both are specious when compared to those authentic religions in which a significant role is played by a spontaneous sense of awe (or what is known in German as *Ehrfurcht*, a synthesis of "veneration" and "fear") at the unfathomable forces of creation and destruction which are unceasingly at work in shaping the cosmos (Griffin 1998). A true "religion of nature" cultivates a spiritual, metaphysical, and aesthetic awareness of the unimaginable scale, both microscopic and macroscopic, on which nature's laws have acted in the epic miracle play whose plot has been unfolding since the beginning of life and the universe itself, and perhaps beyond. It is a scale that dwarfs the strivings of the whole of humanity, let alone individual peoples or races, in the total scheme of things, and relegates national history to little

more than a footnote in the Book of Life. This perspective shrinks to insignificance the importance of “the new order” which fascists aspire to bring about in the life of their people or race, and reveals the genius of charismatic leaders to be little more than ephemeral displays of mortal hubris. The “thousand year empires” about which their daydreams revolve, and even the realm of “immortality” to which they consign their national heroes, are but a twinkling of the cosmic eye in comparison. A chilling, but unusually lucid glimpse into the abyss which yawns between the religious, genuinely metaphysical, concept of a higher reality and the fascist one is summed up in the following pronouncement reportedly made by Adolf Hitler during one of his interminable “table talks”:

To the Christian doctrine of the infinite significance of the individual human soul . . . I oppose with icy clarity the saving doctrine of the nothingness and insignificance of the individual human being, and of his continued existence in the visible immortality of the nation (in Rhodes 1980: 78).

Conceptual Problems and Premises

The problem inherent in all *ex cathedra* pronouncements of the sort made above is that their clarity and authority are achieved at the cost of drastically simplifying definitional issues of mind-teasing complexity and subtlety. An article on fascism in the context of this encyclopedia involves juggling conceptually with three terms all of which are so deeply contested that they resemble fluffballs rather than discrete objects. In other words their taxonomic boundaries are not only fuzzy to the point of evanescence but so mobile that, according to which expert is consulted, clear tracts of solid no-man’s-land between “fascism,” “religion” and “nature” can suddenly be engulfed, while equally unpredictably new stretches of common terrain may emerge where they all overlap.

Fortunately, a partial consensus is currently gaining ground about the definitional role played in fascism by the myth of the nation’s rebirth from decadence within historical time and through human agency, the modern variant of an archetypal human preoccupation with accessing a “higher” time and “spiritual” rebirth. This allows it to be dissociated “ideal-typically” from Christianity as a creed postulating the existence of a supra-historical and supra-temporal Being. From this perspective the extensive collusion between the Churches and both Fascist Italy and the Third Reich which came about in the interwar period, and the many fascist movements (e.g., the Falange, the Romanian Iron Guard, the South African AWB) which have sought to exploit Christianity’s mythic power for their own ends, point not to fascism’s deep kinship with religion, but rather to the perpetual propensity of human beings and their political leaders to pervert religion by appropriating it and bending it to strictly temporal and temporary goals. Fascism thus transforms metaphysics into a form of metapolitics,

whose horrendous human implications can only be fully grasped when translated into the realm of politics and social engineering.

It is when it comes to the wider question of fascism's relationship, not to the relatively concrete topic of "established religion," but to the far more nebulous notion of "a religious apprehension of nature," that the issue becomes inextricably tangled. For heuristic purposes it might be possible to locate the core of this phenomenon within what has generally been referred to under the heading of "pantheism" or "nature mysticism," but what one major authority on comparative religion and preternatural experiences, R.C. Zaehner, more precisely identified as "pan-en-henism" (Zaehner 1961). By this he referred to the non-rational, emotionally overwhelming, languagedefying sense of "all-in-oneness" encountered in variegated forms in the writings of countless mystics and poets the world over. It is an experience that opens up the intuitive mind ("visionary faculty," "third eye," "pineal gland," "four-fold vision," "soul," etc.) to the pullulating interconnectedness of all organic and inorganic reality, to the intrinsic, transcendental beauty of a hypostatized "Life." It brings human beings in tune with the sacred, numinous quality of organic nature as the manifestation of a single, continually unfolding dynamic act of creation, both material and spiritual, whose origins, mechanisms, and sublime purposes can never be fully divined by the human mind.

Testimonies to such an experience can be found in the context of dualistic religions (e.g., the poetry of St. Francis of Assisi and William Blake), "monistic" or "philosophical" religions (e.g., Daoism, Zen Buddhism), shamanistic religions (e.g., the cosmology of the Navaho or Amazonian Indians), Romanticism (e.g., the poetry of Coleridge or the paintings of Caspar David Friedrich), and the types of ecology informed by "New Age" spirituality (e.g., the books of Fritjof Capra or the courses on "Buddhist ecology" taught at the Schumacher College in Devon, UK). Its hallmark is a feeling of being transfixed by the inscrutable mysteries of the cosmos in a moment of what the German poet Goethe called "Ergriffenheit," a state of being seized by awe, by the realization of Being itself. It is an ecstatic yet terrifying moment of revelation, of *anagnorisis*, of breaking through the "cloud of unknowing" to be face to face with life and see its immutable laws written on one's own flesh. It is one which in its purest form acts as an antidote to human vanity, makes the wanton destruction of life in any of its incarnations unthinkable. It is thus the arch-enemy of all forms of anthropocentric, ethnocentric or "race supremacist" mindset, stripping the senses to the point where they become receptive to a bottomless oneness and boundless compassion with all living and mortal creatures. Ecofascism is inevitably a travesty and betrayal of genuinely "green" politics.

It is the (inevitably contentious) thesis of this article that once the yardstick for a "genuine" religion of nature is established in these terms then it follows that fascism is incompatible with anything remotely resembling it. When fascism and any other form of organized ultranationalism or politicized racial hatred which is not firmly rooted in an orthodox religious tradition – whether such sentiments are not themselves perversions of religion even when rooted in a religious tradition is a matter for theologians

to judge – employ the discourse of a “religion or nature” they do so *metaphorically*. In other words they create an insidious verbal register which exploits the mythic power of both constituents purely as a source of mystification and legitimation, and thereby guts them of their original or “true” significance. A venerable precedent for this procedure within the liberal tradition is the way the American Declaration of Independence of 1776, despite being purportedly based on “Reason,” invokes “the Laws of Nature and Nature’s God,” “the Creator,” and “the Protection of Divine Providence” (note again the use of hypostatizing capitals) in order to endow the idea of “self-evident truths” and “inalienable rights” with an aura of Higher Authority and Higher Destiny, and thus the American Revolution itself with an incontrovertible legitimacy. In doing so its authors revealed themselves as true children of the Enlightenment, which made extensive use of the concept of “Nature” and the “Supreme Being” to endorse its absolutist claims for the power of rationalism. The systematic elision of “God” with “Country” to create a synthetic mobilizing myth disseminated by the propaganda machines of all the states involved in the First World War provides another instructive example both of how readily genuine religion can be contaminated and how an *ersatz* religion (in this case hyper-nationalism) can be fabricated in the modern age – though the *perversion* of religion by secular vested interests is arguably something as old as religion itself. The “higher” purpose which this ideological confabulation served between 1914 and 1918 was anything but divine, but rather the strictly down-to-Earth one of using religion as ideological bellows to sustain the white-hot patriotism vital for turning ordinary men into human weapons of mass slaughter and mutual destruction.

When encountered in the powerful gravitational field of fascist fanaticism, allusions to “the sacred” and to “nature” will generally prove on close inspection to be little more than thinly disguised simulations of a “genuinely” religious appreciation of nature and the laws of life. Wherever history throws up cases of a modern, partially secularized nation that cries out for “redemption” or “renewal” through the revitalization of the healthy forces of nature, then theocentric/metaphysical and ecocentric/ biological axioms have been ideologically modified in the pursuit of narrow anthropocentric and ethnocentric ends. Just like some branches of nineteenth-century science (Darwinism, anthropology, genetics) were corrupted into scientism (Social Darwinism, Aryanism, racial hygiene), so the *mysterium tremendum* of nature mutates within the fascist mentality into a vacuous kitsch filled with sinister intent. A telling example of this is to be found in a pamphlet on the mission of the SS written by its leader, Reichsführer Heinrich Himmler, who went on to oversee the setting up and running of the Third Reich’s tentacular system of extermination camps. In it he stresses the supreme importance to the cohesion of the SS of the belief in “the value and holiness of the soil” and “in a God who rules over us, who has created us and our Fatherland, our people and our Earth, and who sent us our leader” (Griffin 1995: 147–8).

Samples of Fascism's Specious Affinity with a Religion of Nature

By now it should be clear that by definition (or rather by the definitions proposed here) fascism precludes a genuinely religious sense of nature. However, it has also been implied that, like an ideological scavenger or vampire, fascism is irresistibly drawn to any vital cultural or ideological forces which it can feed on or seduce in order to enhance its revolutionary force as a mobilizing power. On a par with history and the biological sciences, nature and religion readily provide deep reservoirs of such forces.

Thus fascism repeatedly generates images which evoke a specious kinship with a "paganistic" communion with nature: the landscapes of woods and lakes so beloved of "Aryan" painters, Blood and Soil visionaries, and the Hitler Youth; the Führer greeting Dirndl-clad peasant-girls or musing on his plans of world conquest against the backdrop of sun-kissed Bavarian mountain crests; the idyllic portraits of rural life cultivated by the *strapaese* current of fascism and the local harvest festivals or "*sagre*" celebrating the olive or the anchovy promoted by the regime; the South African Ossewabrandwag's reenactment of the Great Trek using ox-drawn wagons driven across the veldt in the quest to restore the Boer to his rightful place in God's own country; the nocturnal initiation ceremonies held deep in the Transylvanian forest by so called "nests" of the Legionaries of the Archangel Michael to forge bonds of Romanian blood brotherhood; the landscapes and wildlife undefiled by the modern metropolis so lovingly described in the novels both of Henry Williamson, author of *Tarka the Otter* and propagandist for the British Union of Fascists, and Knut Hamsun, Nobel prize winner for literature and supporter of Quisling's Nasjonalsamling. As for post-war fascism, it is symptomatic of its repeated attempts to cover tracks which lead straight back to the railway sidings of Auschwitz that contemporary Third Positionist ("Strasserite") groups of national revolutionaries have made links with radical ecology groups such as the "Green Anarchists." Similarly, the French (and now European) New Right embraces Green politics as part of its bid to bring about a "pagan liberation" of the modern world by reestablishing a pre-Christian cosmology and so restore a healthy "IndoEuropean" bond with nature.

Nor is there any shortage of texts documenting the place that an *ersatz* religion of nature has so often played in fascist ideology. Thus one of the many Nazi choral songs celebrating communal devotion to the Third Reich set to solemn, hymn-like music:

Earth creates the new, Earth takes away the old. Holy German Earth, may we alone be saved. It is she who bore us, we belong to her. Eternal loyalty is emblazoned on her banner. We walk on believing, turned towards the sun.

But it is contemporary US fascism in its more overtly pagan neo-Nazi incarnations such as Odinism and in its various hybrids with the racist heterodoxies of Christian Identity which is particularly rich in examples of bastardized fusions of fascism with the imagery of religion and nature.

Thus the tract “Aryan Destiny: Back to the Land” written in the 1970s by Jost, a Vietnam veteran and neoNazi, ends with the vision of a new Aryan homeland in the mountains of North Carolina, the Volksberg. There, Whites inspired by “a true idealism and a sound spiritual philosophy” would finally “begin a new life close to nature, and away from the degeneracy of the urban cesspools” (Kaplan 2000: 491). A structurally similar *Weltanschauung* (worldview) underlies David Lane’s “88 Precepts” (in neo-Nazi contexts the number 88 signifies the letters HH or Heil Hitler). These encapsulated the rationale and “vision” of the notorious US Aryan terrorist group, The Order, which was active in the early 1980s and contained such Mosaic axioms as (3) “God is the personification of Nature proved perfect by the evidence of Natural Law . . .”; (15) “In accordance with Nature’s Laws, nothing is more right than the preservation of one’s own race”;

(33) “Inter-specie [sic] compassion is contrary to the Laws of Nature” (Kaplan 2000: 494–6).

To cite another contemporary example from the contemporary British racist right, David Myatt, leader of the Reichsfolk, and one of the influences on David Copeland, the London “Nailbomber,” claims that the movement is fighting in the name of Adolf Hitler himself and for the holiest cause of all . . . that of the Cosmic being itself, manifest to us in Nature, the evolution of nature that is race and the evolution of race that is individual excellence, civilization and enlightenment (in Kaplan 2000: 514).

Elements of a mongrelized “religion of nature” also inform the “Cosmotheism” of the late William Pierce, author of the (since the Oklahoma bombing of 1995) infamous *Turner Diaries*, as well as Ben Klassen’s *Nature’s Eternal Religion* (1973). The “Sixteen Commandments” of his Church of the Creator include the injunction: “You shall keep your race pure. Pollution of the White Race is a heinous crime against Nature and your own race;” and “It is our duty and privilege to further Nature’s plan by striving towards the advancement and improvement of our future generations” (in Kaplan 2000: 474).

The Dance of Shiva

This article has adopted a consciously conservative, “purist” position on fascism’s religious credentials. As a result it takes issue with the considered judgment of several academics on this topic. It suggests, for example, that Robert Pois’ interpretation of National Socialism as a “religion of nature,” while impressively scholarly and containing many valid observations, obscures the sinister political and eugenic purposes which informed apparent acts of communion with nature staged by the Third Reich: namely to forge a racially conceived and wholly imaginary national community or *Volksgemeinschaft* while mystifying the ritual destruction of humanist ethics and humanitarian reason. The function of Nazi “religion” was to bless and sanctify the categorization of humanity along a sliding scale stretching from the pure, “immortal” Aryan to sub-

human levels of existence fit only for extermination. However, the line taken by this article broadly endorses Michael Burleigh's account of Nazism as a "political religion" (Burleigh 2000a) because of the stress he puts on it being a modern political movement which operated as an *ersatz* theology, commenting, for example, that the ritual "Commemoration of the Movement's fallen 'saturated the proceedings with quasi-religious emotion,' and must have prompted 'nausea in any person of genuine religious faith'" (Burleigh 2000b: 264). At the same time, he also suggests that it would have been more fruitful to explore the links between the Nazi vision of the "new order" and the palingenetic myths of other fascist movements rather than suggest direct parallels with the millenarian fantasies of sixteenth-century Anabaptists.

The approach adopted here also rejects as wrongheaded Anna Bramwell's attempt to portray as a forerunner of contemporary "Green" politics Walter Darré, Hitler's Reich Farmers' Leader and Food Minister, who reconciled his commitment to organic farming and the revitalization of the peasantry with his readiness to oversee the Aryanization of Polish farming (Bramwell 1985). It also regards as misguided Daniel Gasman's thesis (Gasman 1971) that the genesis of Nazism is to be located in Ernst Haeckel's "Monism" (he later extends this thesis to the whole of fascism). Monism was Haeckel's name for the overarching "philosophy of life" which resulted from his highly syncretic fusion of Darwinism, Social Darwinism, biologism, vitalism, *völkisch* Aryanism, and anti-Semitism which became influential at the turn of the nineteenth century. The resulting pseudo-scientific (scientistic) "worldview," whatever direct impact it had on some contemporaries, was just one of many totalizing cosmologies of decadence and rebirth which helped shape the cultural climate of the *fin-de-siècle* in which fascism's palingenetic fantasies first crystallized as a rudimentary political vision. Moreover, though Haeckel apparently coined the neologism "ecology," his racist brand of nationalism caused him to be unfaithful to any genuinely ecological, and hence "panenhenistic," moments of epiphany which he might have had in the course of his meditations about the dynamic processes shaping the world.

In this respect Haeckel stayed true to the spirit of his mentor Nietzsche, who, though not a nationalist, had somehow managed to extract from a series of powerful revelations induced by direct contact with unspoiled nature the myth of the *Übermensch* or "superior man" who would redeem Western civilization from its moral decadence and loss of vision in a spirit far removed from any form of ecological humanism, articulating his vision in texts that readily leant themselves to being appropriated by Nazi propagandists. Thereby he betrayed his fleeting experiences of the interconnectedness and intrinsic beauty which he recorded in his private correspondence and which inspired the section in *Thus Spake Zarathustra* called At Noontide:

Take care! Hot noontide sleeps upon the fields. Do not sing! Quiet! Quiet! The world is perfect . . . It is the most inconspicuous, softest, lightest thing, the rustling of a lizard in the leaves, a breath, a twinkling of an eye . . . it is the little that makes for the greatest degree of happiness. What has happened to me? Has time flown away?

Listen! Did I fall – listen! – into the well of eternity? . . . Did not the world just become perfect? (Nietzsche 1969: 288)

Such epiphanic moments can act as portals leading to the realization – that has a deep resonance both with ancient Hindu cosmology and with modern astrophysics – that the whole of nature, in fact the universe itself, is one vast controlled explosion of amoral cosmic energy performing on every scale of reality the infinitely intricate and aesthetically structured “dance of Shiva” (Capra 1983). It is a vision of the world that reveals a deep structural affinity or symbiosis between the experience of the sacred, mystic religion, and nature. It is one that cannot be grasped by a mindset that finds beauty instead in the choreographed march of uniformed troops or the stage-managed acclamations of the mob celebrating the renewal of an all-too-human history in which even more demonized enemies of the new order will inevitably be persecuted and “sacrificed.”

Roger Griffin

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See also: Anarchism; ATWA; Darré, Walther; Devi, Savitri; Haeckel, Ernst; Hegel, G.W. Friedrich; Nietzsche, Friedrich; Radical Environmentalism.

Fauna Cabala

Fauna. *n.* animal life.

Cabala. *n.* an esoteric, secret matter or mysterious art.

Science can be a looking-glass into the sacred, a window to a world outside the confines of human perception. It can be a tool to see beauty that would otherwise remain hidden, to uncover rather than explain mystery. For some scientists, the study of nature is a means to spirituality, is delving into the secrets of the sacred, is empowering, sustaining, transformative, infused with a sense of awe. It is a discovery of what is precious and most important in life. To dabble with systems larger than self and witness the interconnectedness of life is an honor, and such research is necessarily respectful, non-invasive, and a reflection of the equality of all living beings.

Animal perceptions, ways of being, decisions in the face of ecological pressures and evolutionary constraints are where I find magic. As a behavioral and molecular ecologist I want to see the world through a beetle's eyes, I want to know what home means to a wombat. My science trundles along in the footsteps of my childhood, striving to understand questions completely unrelated to humans. I am stunned by the bee's waggle dance, by snail love darts, by senses foreign to the human experience. Often the biggest secrets, the most important concepts, are most clearly seen in the minutiae. And often they are seen in reproductive biology and mating systems, the evolutionary currency of life. It is on these that I tend to focus in my column *Fauna Cabala*, an endeavor to convey wonder glimpsed through science.

Aphids

High overhead on cottonwood leaves, pregnant aphids are kickboxing. Springtime on the Colorado Plateau induces aphid females of the genus *Pemphigus* to emerge from eggs in the bark of cottonwood trees. The insects, who are initially wingless, march up the trunks by the thousands. When an aphid arrives at the top, she wanders about to select the perfect leaf, and when found, prods and sucks along the midrib at the leaf's base until a gall (a hollow sack of leaf tissue) forms.

Within this protective gall the female births 50 to 100 daughters parthenogenetically (that is, her egg cells do not undergo meiosis, and thus, without mating, she can produce daughters identical to herself) and feeds on phloem sap with them until they burst out at maturity. A female can increase her reproductive success by selecting a large leaf, because leaf size predicts sap content, and by settling near a leaf's base, the

site of nutrient inflow. This creates a stampede for large leaves, and vicious territoriality. If a female comes along while another is forming her gall, they engage in a lethal bout of kicking, which can last for two days.

Among aphids, males are an afterthought. Even before a female is born she has daughters developing within her. Throughout the spring and summer, generations of females, some winged and others not, are cranked out every ten days. It is not until fall, when the drop in temperature prompts meiosis to occur, that females birth sons. The female's sex chromosomes separate imperfectly, such that some embryos just have one, producing sons. The males then mate with females, who lay eggs in the bark of cottonwood trees. The eggs destined to become males perish, while those that will hatch into females overwinter into spring. Thus, asexual reproduction enables a multitude of females to explode onto the scene, and sexual reproduction results in new gene combinations, some of which may be better adapted to environmental conditions the following year.

Dung Beetles

Dung beetles (superfamily Scarabaeoidea), who rival the entire class of birds in species number, have for 250 million years exploited the nutritionally rich resource that drops from intestinal tracks. Before dung beetles flourished with the radiation of mammals, their ancestors may well have trooped after terrestrial dinosaurs. Modern beetles locate excrement by odor, and for those who eat monkey poo, by that peculiar thud on the forest floor.

Thereafter, beetles eat, bury, steal, and otherwise frolic among the fecal matter according to their specialty. They are of three behavioral types: dwellers, rollers, and tunnelers. Dwellers set up their household in dung, feasting and ovipositing in the fresh globs. Rollers mold fecal balls and roll them away; tunnelers sequester caches of excrement beneath the pat. Both rollers and tunnelers make nests by burying poop for baby food, and can provide elaborate parental care. Other beetles, the kleptoparasites, thieve from these nesters to maintain their coprophagous (feces-eating) lifestyle.

Driven by fierce competition for excrement, some beetles don't wait for feces to fall. Anus-dwelling dung beetles of monkeys, wallabies and sloths eat dingleberries around the anus, occasionally following the poop earthward to lay eggs in the pat. Some anus-dwellers clutch the perianal hairs of wallabies, stretching to catch that which cannonballs them to the ground. In India, several beetle species forage directly in the human intestine. Another beetle with its own fecal factory is a South American who rides large snails and sups on their slimy dung. This is unusual because most dung beetles prefer the nutritionally superior scat of mammals. In fact, mammalian population declines and extinctions have the potential to kick the crap out of dung beetle diversity.

When not plunging into poo pats for dinner, some beetles are meticulously sculpting dung balls. Males of *Kheper nigroaeneus*, a large African dung beetle, mold brood balls from carefully selected feces and flaunt them as a sexual display. Once a female is attracted, she climbs aboard the ball and the male rolls both away. At a suitable spot, the male buries himself, the brood ball and his partner, after which they mate and he leaves, closing the hole behind him. The female proceeds to remold the ball, inserting a bit of her own feces and plastering it over the ball's exterior to form a layer that decreases desiccation. She then lays a single egg within it, her sole offspring that year.

Upon hatching, the larva munches on its mother's excrement, thereby inoculating itself with the microbial strains necessary to digest dung. It then begins to mold a pupation chamber within the brood ball with its own feces. Mother and offspring spend the next three months eating and excreting, the larva from within and the mother from without. They are able to communicate through a small, unplastered region on the brood ball. A pheromone released by the larva diffuses out of this window and elicits broodcaring behavior from the mother. The solid diet of brood ball, and its own and its mother's feces, brings the young beetle into adulthood. Come the first spring rains, the new adult emerges from its subterranean haven. Thus, with an extraordinary amount of effort yielding only a single offspring, this beetle species has one of the highest levels of parental care among insects.

Gartersnakes

The red-sided gartersnake (*Thamnophis sirtalis parietalis*) is right-handed. Upon emergence from their winter dens they get down to business in a frenzied mating ball that consists of a female and ten to a hundred males. Death by smothering is a very real and common end. Within this mating mass a male must tackle four questions: how can he outcompete his rivals, how can he copulate with a cylindrical companion, which penis shall he use, and how can he keep his mate from mating again? Some males outcompete their rivals by mimicking the scent of the opposite sex. Such a male produces the female pheromone, causing other males in the mating ball to court him instead and allowing him meanwhile to get close to the true female. Once a male does so, however, he must determine which is the head end and which the tail end before he can mate, a difficult thing to do since males are much smaller than females and females are enmeshed in the male mob. He overcomes this by pressing his chin against the female's scales. If the snakes are oriented head to head, his tongue will be able to flick underneath her scales, where her pheromone is highly concentrated, and his chin will scrape onto the next overlapping scale. If not, he will simply slide smoothly over her overlapping scales.

Once oriented correctly, the male must decide which penis to use. Most animals tend to favor the use of one hand or paw or hoof over the equivalent one on the other side of the body, and, though limbless, these snakes are no exception. They

just favor one penis over the other. Together called hemipenes, each hemipenis is linked to its own testis and kidney. The right unit is bigger, and the one they prefer, particularly when warmer temperatures enable them to maneuver into complex mating positions. However, if they're lucky enough to mate with a succession of females they will alternate between the two because otherwise they deplete their kidney secretions. These secretions are important because they form a hard copulatory plug that prevents females from remating. Other males find the smell of a plugged female unsexy, and leave her be as she slithers on her way.

These frequently mating males have the largest plug and the shortest copulation among snakes. Instead of trying to prevent females from remating during the fertile period by guarding them or copulating for an extensive amount of time they give them corks, which stay in place for about two days. This red-sided, right-handed, scent-parroting, mate-stopping serpent can thus rapidly re-enter a mating mob.

Anemonefish

Some coral reef fish pack a dress in their testes. Anemonefish of the genus *Amphiprion*, who inhabit the tropical and subtropical Indopacific, live out their lives protected by the swaying tentacles of sea anemones. It is thought that the anemones avoid harpooning them to death because the fish have somehow smeared themselves with their hosts' mucus so that they are recognized as just another appendage. Though this world is sheltered from the outside, inside it is a den of aggression. A large female and smaller male form a monogamous unit, the female being older and dominant. Also present are up to eight unrelated sub-adults and juveniles who are constantly attacked by the breeding pair. They are in such a highstress state from these attacks that their sexual organs remain tiny. The adult male is aggressive to other males because he does not want them to sneak a spawn. The female is aggressive to her mate and the other males in order to prevent them from becoming females. All males have this ability to change sex thanks to immature eggs hiding in their testes. If the female dies, her mate becomes female and the largest of the males becomes the new female's mate. It only takes a month for the male to lay an egg.

This pattern of sex change is unusual among fish. It likely evolved because the patchy and unpredictable distribution of the host anemone made it necessary to be monogamous and easier to change sex than to risk predation while searching for an anemone occupied by an unpaired member of the opposite sex. Most sex-changing fish follow the pattern of the polygynous bluehead wrasse, in which there is intense competition for access to females. Males get more matings, as many as 100 per day, as they get larger and more able to defend a territory. Because males have the potential of far greater reproductive success than females, the largest females turn into males when there are few large males and many small females around. The switch is rapid. Upon the death of a dominating male, a large female immediately begins courting smaller

females, and in just over a week she sports superb sperm. Thus, though these two species differ in male-to-femaleness and female-to-maleness, their brand of sex change reflects their social system, not ambisexual chaos.

Garden Snails

In a finale of fervent foreplay, brown garden snails (*Helix aspersa*) impale each other with love-darts. Being hermaphrodites, these animals sport both male and female tackle and swap sperm in both directions during eight hours of slippery sex. Most sperm are immediately digested by a specialized sperm-destroying gland, although a few sneak past to a storage organ, where they dwell for up to four years. The point of the sharp, calcareous, centimeter-long snail nails is to short-circuit the gland. A swooning snail will aim for the genitals, located to the right of the head, and push the dart out of its body and into its partner. Darts are coated with a slimy cocktail that causes contractions in the female reproductive tract, closing the entrance to the devouring gland and allowing sperm to pass freely into storage. If a snail has a poor aim or is caught empty-handed, which is quite possible since darts take ten days to produce, it compensates by delivering extra sperm to its prickly partner. This species exemplifies a rarity: an intersexual arms race in which individuals are both genders. The male portion has evolved to impart increasingly more sperm while the female portion has evolved to digest it.

Fairy Wrens

Superb fairy wrens (*Malurus cyaneus*) are true blue in color only. These tiny residents of eastern Australia are socially monogamous, meaning that breeding pairs cohabit and raise young, yet enjoy more romances outside this union than any other species. A male will maintain a year-round territory in which he lives either with just his mate or with subordinate males as well who assist with chick-rearing. At the commencement of the five-month breeding season he sheds his drab brown winter feathers and dons brilliant, luxurious, multi-hued blue plumage and flits about to other territories. With a yellow petal in his bill, and crown, cheek and back feather flared, he displays with fervor to all females except for his mate. A female is usually quite unimpressed but occasionally solicits copulations. She finds it particularly endearing when a beau's blue 'do is enduring. Because it is extremely costly energy-wise to sport blue feathers (especially in winter), only the most fit males can maintain blueness for a long period of time. The most successful males are those who begin their blue displays at least two months prior to the beginning of the breeding season; only the studliest of the studs can molt directly from old breeding plumage into new come the end of the breeding season in February. A female can thus, by noting how long a male is blue,

assess vigor, which translates into genetic quality when making a mating decision. The result of this means that 72 percent of the chicks from her seven or so annual clutches are fathered by males other than her mate. This has, in turn, led to intense sperm competition among males. They lug around huge sperm storage containers called cloacal protuberances which, together with testes, comprise up to 10 percent of their body-weight. When a male is lucky enough to receive a cloacal kiss, he can release a massive ejaculate, possibly swamping out the sperm of his rivals. These small, libidinal birds thus have the dual honor of being the most polyamorous of socially monogamous vertebrates and having the greatest sperm reserves, relative to weight, of any bird or mammal.

Honeybees

Honeybees (*Apis mellifera*) give precise directions while they sing and dance for a trembling crowd in the dark. After finding a particularly inspiring food source, a nectar-laden bee flies back to the hive where, on the vertical surface of the comb, she dances. Usually this is in the shape of a figure eight, and is called the waggle dance. The angle that the figure eight departs from the vertical conveys which direction the food is from the hive. It is the same angle as between the sun and the food, from the hive. For instance, if she dances straight upward, the food is directly toward the sun, straight downward, it is directly away from the sun, and 45 degrees to the right means it is 45 degrees to the right of the sun. The bee communicates distance in addition to direction by speed: the faster she dances, the closer the food source.

As she waggles, a gaggle of her nest-mates observe, but because it is dark in the hive they do this via sound. Her song enables bees to first find her among the masses, and then to interpret the angle of her dance. They can do this because their hearing organs, in antennae, can be moved to and fro to decipher her comings and goings in relation to their position and gravity. Meanwhile, her audience members employ a signal that does not compete with hers: they vibrate the comb with their thoraxes. When there is a whole lot of shaking going on she stops to pass out titbits from the food source. Those who are suitably impressed make a beeline for the food. If these nectar collectors remain impressed they will join in the dance, so that over time many bees in the hive will be singing the same song and dancing the same dance, and the food source will be heavily used.

Potential pitfalls to this system are not problems for these bees: because they are sensitive to the plane of polarized light they can determine sun position even on overcast days, and if inclement weather or nightfall delays return to a food source, dances later compensate for the change in sun position. The refined communicative prowess of honeybees, their ability to convert gravitational information in the dark hive into visual information in the world, is unrivaled among living beings.

Mongoose/Hornbill

The dwarf mongoose (*Helogale undulate rufula*) forms a foraging community with yellow-billed (*Tockus flavirostris*) and Von der Decken's (*Tockus deckeni*) hornbills in the Taru desert of Kenya. This thornscrub habitat has a large termite population, the mounds of which are used as mongoose refuges and foraging group staging areas. The carnivorous dwarf mongoose eats insects (beetles, termites, grasshoppers) and occasionally small vertebrates. When foraging, the mongooses fan out a meter or less apart and generally walk in a straight line, thus covering as much ground as possible. The hornbills (whose diet, except for fruits and herbs, overlaps completely with their companions) follow on foot, eating the jumping and flying insects that the mongooses disturb.

The foraging day begins at a termite mound, where mongooses and hornbills rendezvous. Typically, the hornbills fly to a mound where mongooses are sleeping and wait for them to wake, although if the mongooses emerge with no birds present, the mammals will delay foraging until the birds arrive. A mongoose lookout emerges first, followed by the rest of the group (3–32 animals). After twenty minutes or so of stretching, grooming, sunbathing and playing, the group sets off, with the hornbills in tow. If, however, the hornbills wait extraordinarily long (over an hour) for the mongooses to emerge, they fly to the mound, peek down a ventilation shaft and wake the sleepy mongooses with loud, squawking “wok”s.

The hornbills benefit from this mutualistic relationship by increased foraging efficiency, particularly of prey that would be difficult to find if not flushed out by mongooses. In return, the mongooses benefit because the hornbills are able to detect and warn of predatory raptors earlier than the mongooses are able to. The more birds in a group the fewer mongooses need to take up the dangerous job of lookout. Furthermore, hornbills and mongooses make several concessions to each other. Hornbills warn mongooses about predators even if the particular raptor does not prey on hornbills. Hornbills also refrain from consuming mongoose young, who are the same size as the rats in their diet, even though they have plenty of opportunities to do so. When competing for food, mongooses do not attack the hornbills as they do other species. Instead, they growl and hip-slam, responses normally reserved for fellow mongooses.

In other areas of Africa, the dwarf mongoose and yellow-billed and Von der Decken's hornbills live without each other's aid. Their relationship in the Taru desert is the tightest known mutualism between social vertebrates that usually live independently.

The laborious, sometimes high-tech, and often tedious methodology of scientific investigation can yield more than conventional insight. For me, using behavioral and genetic data to witness ecology and evolution in action inspires awe, engenders passion, and enables recognition of the sacred. My hope is that the above wanderings among the intricacies and refined beauty of other systems impart a sense of the magic and mystery inherent to worlds not our own.

Faith M. Walker

See also: Animals; Conservation Biology; Dogs (various); Elephants; Hyenas – Spotted; Nile Perch; Primate Spirituality; Serpents and Dragons.

Feminist Spirituality Movement

The name “feminist spirituality movement” is something of an “umbrella” term used for many Pagan movements that are specifically feminist in orientation. One of its best-known variants is feminist Wicca, a branch of goddess worshipping paganism that is explicitly feminist, unlike some Pagan groups. The feminist spirituality movement is part of second-wave feminism and began in the latter third of the twentieth century. It is an Earthoriented, pro-women spirituality that explicitly rejects male dominance in religion, solely male images of the divine, and the limited value accorded to nature in much conventional Western religion. Furthermore, many of the movement’s leading spokespersons argue that male dominance in religion, exclusively male images of the divine, and indifference to the sacredness of nature are three variations on the same theme – parts of a single religious vision.

Like new religious movements throughout history, the feminist spirituality movement has generated its share of controversies. Some of the negative comments made about it are simply part of the general denunciation of pagan religions common among some more fundamentalist members of more established religions. Others, who are feminists themselves, are also unsympathetic to the feminist spirituality movement. Often their criticisms are simply part of the anti-religious sentiments that are part of much of the general feminist movement. Religions have been so bad for women, such critics claim, that spending time creating theology and ritual, a high priority for members of the feminist spirituality movement, simply takes time and energy away from more important political and economic projects.

Depending on the interests and needs of its participants, feminist spirituality can include a number of concerns. Some groups consist primarily of enthusiastic participants in ritual who believe in a matriarchal past and in “the Goddess,” generically conceptualized and named. Such practitioners care little for the scholarly and theological controversies in which others are deeply involved.

But whether it is plausible to posit a “matriarchal prehistory” is a matter that learned archeologists and historians must debate, as the work of Cynthia Eller has shown. And exactly how “the Goddess” is connected with the myriad goddesses known to historians of religion, or how naming the divine in feminine terms changes our concepts of the divine are difficult theological issues. Carol Christ, among other feminist theologians, has devoted much of her life to asking such questions.

Though most historians of religions would regard feminist Wicca and the feminist spirituality movement as a new religious movement, its own adherents often claim an ancient “matriarchal” past for it. They claim that before the rise of patriarchy, women

participated fully in religion and often were religious leaders, that goddesses were worshipped by all members of society, and that people, deeply immersed in natural rhythms and in awe of nature, lived in peace and harmony with each other. This, they would say is the “old time religion” that existed before Christianity and other monotheistic religions, the “old religion” (another name Wiccans use for themselves) which they seek to recover and restore. In their sacred history, the true “fall” occurred when male dominance came into being, when male deities completely replaced female deities, and when nature was no longer regarded as sacred and divine. Therefore, the feminist spirituality movement gives equal emphasis to women’s leadership in religion, the importance of goddesses, and the religious significance of nature.

The theology of the feminist spirituality movement is a theology of immanence. That is to say, in common with many other religions, members of this movement claim that the divine is to be found within the world of nature, including human bodies and spirits, rather than in a transcendent realm separate from the world. The natural world in which we live is alive with spirits and every aspect of nature is divine and sacred. Also in common with many other religions, the feminist spirituality movement claims that it is natural and normal to imagine deity as female. They would also claim that when theologies of immanence are replaced by theologies of transcendence, when deity retreats from nature and the Earth to a transcendent and unknowable heaven and when women’s bodies no longer are seen as fitting images of the divine, then human society inevitably degenerates into war, alienation and social oppression. Thus, according to feminist spirituality, questions of the religious status of nature are not merely theoretical; human well-being rides, in part, on recognition of the sacredness of nature. Human well-being also rides on appropriate recognition of the sacredness of femininity, whether divine or human. Many in the feminist spirituality movement would claim that the current difficult world situation is due to centuries and millennia of neglect of the Goddess embodied in the natural world and the oppression of her human counterparts.

The ritual practices of the feminist spirituality movement mirror its immanent theology which, while not ignoring male deities, focuses more on female deities and the natural world than do the religions more familiar to North Americans and Europeans. Ritual is more important to many in the feminist spirituality movement than are theology and other theoretical pursuits. They affirm that ritual “works,” that practicing rituals correctly and with the proper attitude does have an effect on the natural world around us. Practitioners of feminist spirituality have a very sophisticated understanding of how and why ritual works.

Proper attention to nature is an important component of the movement’s understanding of ritual. The preferred arena for ritual activity is out of doors in nature, even if the only “nature” available is a city park, though a living room will do if need be. Many ritual circles celebrate the human body through ritual nudity. Every ritual opens with casting the sacred circle that honors the four directions and the four basic elements. The ritual cycle of the feminist spirituality movement is grounded in the

seasonal cycle of nature in the northern hemisphere, which is said to mimic the life of the Goddess and her consort. The major holidays are the four major points in the sun's journey through our Earth atmosphere – the solstices and the equinoxes. The minor holidays are the intermediate points between these holidays. These holidays mirror holidays familiar to many people in the contemporary world – Christmas, Easter, Passover, Halloween, Ground Hog's Day, and Thanksgiving. Wiccans would say that these familiar observances derive from pre-monotheistic celebrations characteristic of nature and goddess-centered religion. The sun at its lowest point for the northern hemisphere signals birth, the spring equinox renewal, the summer solstice abundance, and the autumn equinox death leading to renewal, the birth celebrated in winter solstice rituals. However, this basic pattern of birth, death, and rebirth is interpreted in many different ways, depending on the understandings developed by a local group of practitioners or a specific leader or teacher within the feminist spirituality movement. The human life cycle is also celebrated and ritualized. The movement is especially famous for the way in which it honors older women for their maturity and wisdom in a "crowning" ritual often performed for a woman to mark her sixtieth birthday.

Both the theology and the ritual practices of the feminist spirituality movement are grounded in a different evaluation of nature and human life than is found in many religions. Its practitioners often accuse other religions of being unduly pessimistic and negative about life. A common analogy is that nature is more like a nurturing, loving mother than like a judging, punishing father. Nature and life are basically trustworthy, not a mistake or a perilous journey on the way to better times in another world. Negative events can be experiences through which valuable lessons are learned, or they can be dispelled ritually. Even death is viewed as simply part of the overall rhythm of life, not a punishment for human errors. Thus, it is not surprising that this religious movement is attractive to many people, especially women, who find more dominant European and American religions to be unsupportive, even oppressive.

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See also: Adams, Carol; Christ, Carol; Daly, Mary; Ecofeminism – Historical and International Evolution; Ecofeminism and Biblical Interpretation; Eisler, Riane; Estés, Clarissa Pinkola; Gimbutas, Marija; Goddesses – History of; Griffin, Susan; Merchant, Carolyn; Paganism – Contemporary; Reclaiming; Ruether, Rosemary Radford; Sexuality and Green Consciousness; Shiva, Vandana; Spretnak, Charlene; Starhawk; Theosophy and Ecofeminism; Walker, Alice; Women and Animals; Wicca; Z Budapest.

Fengshui

Fengshui is the common name for various techniques originating in China that bring good fortune to people when the environments in which they reside are properly oriented. Akin to the divinatory arts by which humans seek the assistance of gods or spirits, practitioners of fengshui seek an unseen life-force called *qi*. In Chinese cosmology, the human anatomy is a microcosm of the Earth, and the blood veins of one correspond to the rivers of the other. When the ground is broken for a new house, or when a grave is excavated, such action taps the *qi* meridians of the Earth – called dragon veins – just like an acupuncture needle. Regardless of the type of fengshui, all site-orientation methods seek to locate *qi* in the geophysical plane. When *qi* is located, in the burial tomb it energizes the bones of the ancestor, who thereby bestows good fortune on the descendents.

Two different procedures for locating *qi* were developed by the Han dynasty (206 B.C.E.–220 C.E.). Form School theories are based on the idea that water collects and stores *qi*, while wind captures and scatters it. Fengshui literally means “wind-water,” but the term is shorthand for the principle of “(hindering) wind (and hoarding) water.” The landscape features in a given locale that influence the flow of wind and water around a site are the primary arbiters of fortune in this theoretical system. Compass School methods, on the other hand, are based on the theory of the five elements. This correlative system analyzes *qi* as a force that progresses through five elemental processes. In the *yang* or productive phase, Earth harbors metal, metal condenses water, water nourishes wood, wood feeds fire, and fire burns to Earth. In the *yin* or destructive phase, Earth dams water, water quenches fire, fire melts metal, metal cuts wood, and wood saps Earth. These elements are correlated with the eight-directional trigrams of the *Yijing* or *Book of Changes*, while a person’s year of birth also corresponds to a particular trigram. It is thus possible to avoid destructive *qi* by orienting dwellings or arranging rooms in productive directions *vis-à-vis* an individual’s natal *qi*. For example, a woman born in the year 1982 correlates to the element of metal and the trigram, *qian* (northwest). A productive direction would be southwest, the direction of the element Earth, which harbors metal. A destructive direction would be south, the direction of fire, which melts metal. So the woman in question might place her bedroom or living room in the southwest portion of her house where she spends the majority of her time, and the bathroom or closets in the south.

After the Chinese communist revolution of 1949, fengshui was branded as superstition in the People’s Republic of China. The practice of fengshui was subsequently prohibited, which forced it underground for some fifty years. Although not officially

rehabilitated, fengshui is now openly practiced in China and, while still vilified by most intellectuals, it is the subject of some scholarly study. During the half century of prohibition, the practice flourished in Taiwan, Hong Kong, and Singapore. Many of the purported masters in the West were born and trained in these Chinese communities.

Fengshui became accessible to the English-speaking world in the nineteenth century when the British missionary, Ernest Eitel, published his landmark study, *Fêng-Shui: Principles of the Natural Science of the Chinese* (1873). But the public at large did not discover this ancient system until the last decades of the twentieth century. One of the earliest proponents in the United States was Thomas Yun Lin who founded a temple for American Black Sect Tantric Buddhism in 1986. Lin's brand of fengshui largely dispensed with traditional practices and relied instead on intuition and mystical knowledge, thereby transforming an ancient science into a modern religion. Every major city in the Western world now has its own community of fengshui consultants, many of them trained by Lin or his disciples.

Stephen L. Field

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See also: Chinese Traditional Concepts of Nature; Confucianism; Daoism; Geomancy.

Ferality

Human *ferality* – going *wild* from a *domestic* or “cultivated” condition – is a transitional theme as deeply rooted as the nature/culture divide. In the late twentieth century, with the raising of *ecological consciousness*, and the emergence of reenchantment-seeking youth cultures in North America, Europe and Australia, *ferality* became a radical environmentalist career. As is particularly apparent in settler populations, radicalized youth minorities – heir to the idealism of 1960s counterculturalists, the confrontationalism of punk and the pantheistic sensibility of paganism – have grown conscious of their separation from nature. The eco-radical desire to reconnect, to be absolved from consumerist “needs,” to transgress the nature/culture boundary, represents a deliberate response to the imperatives and consequences of late modernity. Accessing a range of ecosophies (deep ecology, ecofeminism, bioregionalism, social ecology), they expresses outrage over the growing threat to, or “loss” of, nature, sacralized as Mother, with whom intimate connection is acknowledged, and to whom dutiful commitment is owed. While often reflecting a romantic primitivism, contemporary *ferality* evidences an empathetic post-colonialist sensibility, extending to a raised awareness of the devastating impact of corporate-driven globalization on indigenes – leading eco-radicals to identify with and defend beleaguered native ecology *and* peoples.

By the late 1980s, “feral” was employed as a selfdescriptor by activists within the radical green movement. At the end of that decade of grassroots forest blockades, for US Earth First!ers (who used the rubric in the periodical *Live Wild or Die*) and their Australian counterparts, it designated an anarcho-primitivist Earth guardianship. Throughout the 1990s, the metaphor came to experience popular application in Australia, as thousands of activists protesting forest and mining industries, combating the loss of species diversity and championing Aboriginal land rights, were designated, or self-identified as, “feral.” For these eco-activist youth minorities, “going feral” amounted to the development of a deep *identification* with nature under threat. Inhabiting forests for prolonged periods, where affinities with native biota were formed, enabled a strong attachment to place and, furthermore, an uncompromising commitment to its protection. The process was best conveyed by Earth First! co-founder Dave Foreman: by “reinhabiting a place, by dwelling in it, we become that place. We are *of* it. Our most fundamental duty is self-defense. We are the wilderness defending itself” (Foreman in Taylor 1994: 204).

Ferality is thus akin to a *rite of passage*, a process of becoming “closer to nature” from a “cultivated” or

domestic condition, a kind of eco-radical “conversion.” Mounting “tree-sits” in the canopy of the threatened forests of Australia’s East Gippsland in the late 1990s, the experience of Bandicoot is exemplary. Raised in Melbourne, Bandicoot worked nine-to-five as a timber and hardware salesman. His recollections are that of inherent detachment:

My life took me away from the earth. It put me into a four bedroom house, it fed me. You know, meat and three vegetables every night. Showed me a TV. Taught me how to live and how to protect myself . . . to put a roof over my head, and a doona [quilt] around me. And I wasn’t exposed to the outside. And when we did it was in a car, you know and in a cabin (Interview with the author, April 1998).

Yet, with a “desire to understand more about the earth,” in his mid-twenties Bandicoot shed his suit, grew dreadlocks and gravitated toward the temperate rainforests of East Gippsland. “Out there,” he reveals somewhat skittishly, he found “something magical,” a “specialness.” And, with a realization that we are “of the earth,” he became ensconced in the forest’s defense. Bandicoot’s nascent eco-activism saw him travelling between forest and city on a regular basis to gather support. This movement, from detachment to an awareness that “you’ve gotta live in a nice harmonic balance” with nature, coupled with the constant migration between forest and city, makes for an identity that is liminal and remarkably uncertain.

Like many other conscientious youth in the pursuit of such *terra-ist* liminality, Bandicoot found a sense of belonging in an anarchic collective formed to combat the loss of natural and cultural heritage. Emerging from blockades mounted in East Gippsland’s Goolongook Forest in 1993–1994, and recognizing the prior occupancy of the Bidawal, Geco (Goongerah Environment Centre) represents the last line of defense of remnant high-conservation-value forest in the state of Victoria. Like many other Earth First! affinity groups in Australia, Europe, and America, Geco strives to be a non-hierarchical *eco-tribe* whose members rally to the defense of local “old-growth,” water catchments and threatened species, all of which constitute sacred terrain. One Geco activist, Belalie, conveys a common perception:

[There is] a really hostile local community [in East Gippsland] . . . I mean they’re living on massacre sites. It’s just an area of such dark history. It’s an area where colonization continues. They continue to destroy the sacred things. They continue to wipe out the native species. It’s the same attitude which [early settlers] approached this country with, and it’s just ongoing (Interview with the author, December 1996).

Mobilizing and networking to combat mining, forest and road-building industries, eco-activist collectives like Geco draw on a range of ritual-like tactics. These include consumer boycotts, theatrical media stunts, and acts of civil disobedience such as blockading – where individuals choose to become flesh and blood “bargaining chips.” Usually maintaining the principles of nonviolent direct action (NVDA), common obstructions include “lock ons” (attachment to earth-moving machinery using chains, bike locks and home-made devices), “tree-sits” (occupied platforms built high up in trees marked for felling and usually in the path of access roads) and “tripods” (occupied

tall structures straddling machinery and/or blocking access roads). Participation in these and other rites of endurance and dedication (like laying “hair tubes” designed to gauge the prevalence of threatened species) is commonly experienced as something of an induction rite

– initiating eco-neophytes into a community of defenders. While the destruction and loss of landscape to which deep attachments have been formed occasions a devastating sense of despair and grief amongst feral eco-defenders, the perpetration of what they view as desecration effectively unites those who have borne witness to it.

The rites and practices outlined here are distinguishable from the nature/culture boundary transgressions promoted by earlier wilderness philosophers. Activists do not seek immediate encounters with remote landscapes for the singular purpose of becoming “recreated,” achieving “harmony” or *authenticity*, in the mould of a Thoreau or as a “wilderness experience.” Nor is it the case that feral activists necessarily seek the total rejection of “domestication” – the technologies, labor and leisure practices of “civilization” – for a permanent “feral embrace of wildness,” as is advocated by anarcho-primitivist John Zerzan, whose writings are sometimes cited by members of the Earth Liberation Front. Dwelling in threatened landscapes in a labor to protect the Earth, *eco-tribes* are not only organized social structures, but they adopt, for example, new digital telecommunication technologies used to form and mobilize networks and disseminate information. Furthermore, as new historical and ecological sensibilities have inspired the perception of “humanized” landscapes – that is landscapes recognized to have been occupied, altered and enchanted by First Peoples for millennia – a non-humanized “wilderness” (conceptualized as *terra nullius*, or a place untrammelled by man) has become a less than desirable theme.

Ferality embodies the desire for “heritage” guardianship in an era of mounting ecological crisis. The process involves *detachment* from the parent *culture*, and a *becoming* closer to, or identification with, beleaguered “country” (*nature*). Such is a committed practice of (re)connecting with sacralized nature – a passport toward chthonic citizenship. Undertaken by thousands of self-marginal youth over the course of twenty years, this is a contemporary rite of passage toward reconciliation with indigenous ecology and peoples.

Graham St John

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See also: Anarchism; Anarcho-Primitivism and the Bible; Donga Tribe; Dragon Environmental Network; Earth First! and the Earth Liberation Front; Paganism – Contemporary; Radical Environmentalism; Raves; Re-Earthing.

Fertility and Abortion

It should not be surprising that religions contribute to the desire for large families. The ancient religions were spawned in a world where the problem was depopulation. It is estimated that prehistoric persons, factoring in infant death, lived on average about eighteen years, and in ancient Rome and Greece the average was in the low twenties. The Emperor Augustus penalized bachelors and rewarded families for their fertility. Widowers and divorcees (of both sexes) were expected to remarry within one month. Only those over fifty were allowed to remain unmarried. It was a society where, as historian Peter Brown says, death fell savagely on the young. Only four out of every hundred men – and fewer women – lived beyond their fiftieth birthday. As a species, we formed our fertility habits in worlds that were, in Saint John Chrysostom’s words, “grazed thin by death.”

Such judgments are deep-rooted. If, as Teilhard de Chardin said, nothing is intelligible outside its history, the fertility thrust, especially in stressful conditions, is the defining story of our species. Interestingly, the ancient religions born in these conditions also contain the cure for excess fertility, for they all came to see that fertility, which is a supreme blessing, can also in certain circumstances become a curse. Still, for most of history the concern of religions was for more not for fewer children.

Religion Defined

Religion has to be taken seriously when any social problem is addressed. Two-thirds of the world’s population affiliate with some religion and the other third could not but be affected by the imaginative power of these symbol systems. Religion is difficult to define, so we may not use the term and expect a universally accepted understanding of its meaning. Often, in the social sciences, the term is used descriptively and includes everything that humans label religion, however innocent or guilty, bizarre, magical, or superstitious it may be. The advantage of this is that it allows a consideration of all of the shadow forms of expressed religiosity as well as mainstream manifestations. Many scholars of religion work out of a normative definition: *religion is a positive, life-enhancing response to the sacred*. By this definition, movements like the peace movement or the green movement can be considered religions since they are responses to the values in life that are so precious as to be called sacred.

The sacred may be interpreted theistically, as in Judaism, Christianity, and Islam, or non-theistically as in Buddhism and the Chinese religions. No religion is a pure classic;

all are burdened with negative debris from their journeys through time. Good religious studies do not fudge the downside – the sexism and the patriarchy, the authoritarianism, and, at times, the unnuanced pronatalism found in religions. The critical task is to ferret out the good amid the corruption.

The world's religions are all philosophies of life. As Morton Smith says, in the ancient world there was “no general term for *religion*.” Thus, as Smith notes, Judaism to the ancient world was a philosophy. It presented itself as a source of wisdom, as seen in Deuteronomy: “You will display your wisdom and understanding to other peoples. When they hear about these statutes, they will say, ‘what a wise and understanding people this great nation is!’ ” (Deut. 4:6). Similarly, other religions, such as Hinduism, Buddhism, Daoism, and Islam were quests for enlightenment and betterment. They contain ore from which rich theories of justice and human rights can be extracted. Often these treasures have not been well applied to issues like sexuality, sexism, family planning, or ecological care, but they all contain wisdom regarding the human right and obligation to bring moral planning to our biological power to reproduce. This would include the right to contraception and to abortion when necessary.

Fertility as Blessing or Blight

It took ten thousand generations to produce the first two and a half billion people simultaneously living on Earth; it took only one generation to double that number. We also have right now the highest number of fertile persons in the history of the Earth, a number equal to the total number of people on Earth in 1960. That there are too many people in too little space with not enough to meet their needs is not a brilliant insight. Three and a half thousand years ago, Babylonian tablets, known as the Atrahasis epic, found in what is now Iraq, gave a history of humankind. The story it told was already old when it got carved on stone. It said that the gods made humans to do work unworthy of the divinities, but huge problems developed when the humans over-reproduced. So the Gods sent plagues to diminish the population and made it a religious obligation for the remaining humans to limit their fertility. Joel Cohen says that this may be the earliest account of human overpopulation and the earliest interpretation of catastrophes as a response to overpopulation. Over two thousand years ago, Aristotle sensibly insisted that the number of people should not exceed the resources needed to provide them with moderate prosperity. Thomas Aquinas, the thirteenth-century Catholic saint, agreed with Aristotle that the number of children generated should not exceed the provisions of the community, and he even went so far as to say that this should be insured by law as needed. If more than a certain number of citizens were generated, said Thomas, the result would be poverty, which would breed thievery, sedition, and chaos.

All this was centuries before Thomas Malthus in the eighteenth century proposed that human population is caught in a vicious cycle of population exceeding food supply, leading to famine and disease which would bring population back to a manageable level. Then the process would begin again. Many scholars feel that Malthus underestimated the capacity of the planet to produce food and that he was insufficiently informed on the complex dynamics of fertility increase and decline. There is enough, as Gandhi said, for our need, but not for our greed. The 2.9 million people in Chicago consume more than the more than 100 million people in Bangladesh. If, with an eye on consumption, you compare Germany with a poor African country, Germany consumes roughly the equivalent of one billion people. Around 75 percent of the world's pollution is caused by the "well salaried and well caloried." Many earlier commentators on population did not see how the need for children could be changed by technology and by the move to cities. (You don't need as many children in the city as you did on the farm. As recently as 1800, only 2.5 percent of humans lived in cities. By the 1980s that figure had risen to more than 50 percent.)

Still, numbers do count. Too many overconsuming people on a finite planet create massive problems. We also face the problem that as the poor move toward what we call “the middle class,” their patterns of consumption tend toward mimicking the consumptive patterns of the affluent.

How Many is Too Much?

Professor Joel E. Cohen in his monumental book, *How Many People Can the Earth Support?*, concluded that this is a questionable question; a question that imports an army of other questions. But it is a question that started teasing the human mind in the seventeenth century when the first estimates were made of the population that the Earth’s “Land If fully Peopled Would Sustain.” The estimate back then that the Earth could support at most 13 billion is not far off from contemporary estimates. Most estimates today range from four to sixteen billion. If we were content to live at the level of Auschwitz or the Arctic Inuit or the Kalahari bushmen, you would get certain numbers. If you face the reality that most people today have rising not lowering expectations, you get other numbers.

Most nations live beyond their means. Take the Netherlands, for example. It is estimated that the Dutch require the equivalent of 14 times as much productive land as is contained within their own borders. To consume the way they consume takes the equivalent of 14 Hollands. Where does it get the other 13 Hollands? It imports from the rest of the world. In a significant misstatement, we refer to the gluttonous nations of the world as “developed” and the poor nations as “developing,” implying they can consume like us and some day will. But if we can return to reality, where is Zimbabwe going to find 13 Zimbabwe’s if it would try to match us in overconsumption.

Professor Cohen concludes sensibly that the Earth has reached, or will reach within half a century, the maximum number the Earth can support in modes of life that we would prefer. Family planning is necessary now lest population momentum carry us into chaos, and it will be necessary when population stabilizes to keep families and overall population at sustainable levels. As biologist Harold Dorn notes with elemental logic: no species can multiply without limit and there are two biological checks to stop that – a high mortality and a low fertility. Only the human species can choose the latter. When it does not do so, the other check kicks in, which has already happened in parts of the world.

Family Planning and Religion

Anrudh Jain, a demographer at The Population Council, notes that most of the world religions originated at a time when the global population was 50 to 450 million people in comparison to the six billion at the beginning of the second millennium. The

problem for these religions is to adjust to the new demographic realities and to the new needs for family planning.

Family planning means contraception. Since there is no perfect contraceptive, abortion as a back-up is associated with family planning. Contraception is sometimes rejected on religious grounds, especially in theistic religions where it is seen as a lack of faith in God's Providence. This can be seen, for example, in some forms of Christianity, Islam, and African native religions. Christianity was seriously affected by an anti-contraceptive bias within Stoic philosophy, which championed an emotion-free rationality as the human ideal. Sex, being emotional, had to be justified by some reason and reproduction came to be that reason.

Abortion is more of a tortured issue in religions, as elsewhere. Those religions that believe in reincarnation such as Buddhism and Hinduism would seem to have an insuperable problem with abortion since "the being about to be born" preexisted and brings with it its own distinctive karmic history. Also in Buddhism one of the rules of the Eightfold Path is: "I will not willingly take the life of a living thing." This is found also in religions such as Jainism in which some practitioners will not even swat a fly out of respect for life. How then could such religions justify abortion? Some in these religions do not. Others find ways to do so. William R. LaFleur, in his book *Liquid Life: Abortion and Buddhism in Japan*, shows how many Buddhists see abortion as deferring birth to another time where the being can be born in better circumstances. Other Buddhists say there is some negative *karma* from an abortion but that it can be neutralized by positive *karma* from other good deeds. Still other Buddhists say that abortion is morally abhorrent and they will not seek to justify it. This illustrates a pattern found in all the world religions. A conservative view banning abortion can usually be found coexisting alongside a more liberal view permitting abortion for serious reasons. This is comparable to the pluralism in world religions on issues like war, where some profess an absolute pacifism and others find in the same religion grounds for a just defensive war. Given the complexity and richness of religious moral traditions and the differing perceptions of people in changing conditions, such pluralism is inevitable and worthy of respect.

Not all religions are equally open to change. Hinduism, as some interpret it, has historically shown itself quite malleable in facing new situations. The revelations of the Vedas were not capped as final and binding for all time. The eternal demands of righteousness, *dharma*, can be seen as a river that is constantly renewed with new sources, changing course as needed while giving the appearance of changelessness. Adaptation is thus at home in the theories born of Hinduism. Even the Hindu and Jain concept of *ahimsa*, doing no harm, is sometimes interpreted to justify abortion because giving birth to a baby without the means to care for it can be more harmful, more of a violation of *ahimsa*, than an abortion. Abortion in such cases would be justified. The Hindu openness to family planning (including abortion) translates into policy as seen in the 1971 Medical Termination of Pregnancy Act, permitting abortion in India for a variety of reasons. Hindu authorities have been supportive of this and have not opposed

extending this right of choice to girls under the age of eighteen. As in other religions, there is no unanimity on the right to an abortion and there are specific prohibitions in the ancient *dharma sastras* on abortion, even of an illegitimate child. This illustrates again the pluralism in religious ethics on reproductive ethics.

Judaism's creation myth includes the divine mandate to be fruitful and multiply. However, as Jewish theologian Sharon Levy points out, the fact that there is a command given indicates that reproduction is not genetically controlled in humans. The divine mandate addresses people as reasonable moral agents with moral obligations who must respond reasonably. Thus the command can be understood to dictate reasonable, human self-control in all moral matters such as reproduction. As Professor Laurie Zoloth says, we humans are not the ones who swarm over the Earth like insects. She says that it is particularity, and not abundance, that is stressed in Judaism.

Many rabbis historically justified the use of contraceptives. They said that the *mokh*, a soft cotton pad worn internally against the cervix, may be worn during coitus or it might be used after intercourse as an absorbent. Various justifications for contraception are given, including the need for young girls to protect themselves from pregnancy since it might harm them physically.

The Oxford Companion to the Bible notes that abortion as such is not mentioned in the Bible. However it is clear that the fetus did not have the moral status of a born person. In fact, the lives of children under the age of one month were not accorded moral value, according to Leviticus 27:3–7. The Torah, in Exodus 21, speaks of two men fighting and one causing an accidental abortion. It is not treated as a capital crime as it would be if he had caused the death of the woman. Instead monetary damages are imposed as would be in a property loss. Many Jews hold that a fetus is not a fully-fledged person until the birthing process itself begins. Thus various reasons could justify its termination.

In Islam both restrictive and permissive views are found on contraception and on abortion. There was support for contraception from the beginning in Islam. There are many documents from early Islam that indicate that contraception was practiced at the time of the Prophet, that some of his companions exercised it to prevent pregnancy, and the Prophet said nothing to imply that it was unlawful. Islam stresses that it is the quality of offspring, not the quantity, that is the prime moral concern. Islamic authorities stress that human life should thrive and not merely survive and that having fewer children makes possible the thriving that all children deserve. Only the most compelling reasons could justify sterilization in Islam since it forestalls having a child when circumstances permit it at a later time.

Many Islamic authorities also justify abortion for serious reasons. Some Hanafite and Shafite jurists have allowed abortion within the first 120 days of pregnancy for good reasons, while the Shi'ite Azidiva approve of such early abortions even if there is no serious reason for it. Some jurists in the Malikite and Dhahireya schools would prohibit all abortions. All Islamic jurists consider abortions after four months as justifiable only to save the woman's life.

Islam illustrates again the divisions within world religions on family planning. Both the conservative and the liberal views have strong authorities supporting them. Thus civil societies that accept religious freedom should allow for both positions (i.e., permitting abortions to those who approve of them on religious grounds and protecting those who disapprove from having to have an abortion or participate in one if they are medical personnel).

The most influential Chinese religions are Daoism and Confucianism. Buddhism is also present in Chinese life. Daoism and Confucianism have been shaping Chinese culture since the Chou Dynasty (1066–256 B.C.E.). Both traditions saw peace and harmony as the ultimate goal of life. This implies the absence of conflict between nature and human beings, between heaven and Earth, and between the individual and society. This led both traditions into the issue of fertility management. The Chinese saw family planning as essential to the preservation of peace and harmony in society. This position coexisted alongside the belief that one of the worst of calamities was not to have any posterity. As in other cultural and religious traditions we can see that fertility was perceived from experience to be both potential blessing or potential blight.

The temporary and sometimes harsh “one child” policy, without which it is estimated there would be some 250 million more Chinese, was broadly accepted by the Chinese. The drop in fertility rate from six children per woman in 1970 to near replacement level in 1990 was uniquely rapid and some scholars attribute half of this to government policies. Its harsher sanctions and abuses that sometimes accompanied this policy have merited harsh criticism. Still Westerners are surprised at the general cooperation with this policy, a cooperation with deep roots in the cultural commitment to the common good. Thus the Chinese were ready to reproduce in greater numbers when that was thought by national leaders to be good for China. In a similar vein of civic virtue, the Chinese were also generally ready to restrict births by contraception and abortion when that was asked for and seen as needed.

China has been involved in family planning for thousands of years, perhaps longer than any nation in recorded history. Many rules appeared in early China regarding marriage and reproduction, including stipulations on the right age for marriage and the spacing of children. This was seen as a matter of government concern since the government was the prime caretaker of the national family. Chinese culture has had positive attitudes toward sexuality, not seeing sex as dirty or obscene, and thus it was not something that had to be justified by reproduction. Daoism stressed its health-promoting qualities more than its reproductive potential. The influential Confucian writer Han Fei (297–233 B.C.E.) argued that the state would be happier and more prosperous if it maintained a modest population.

In Christianity, Protestantism has long been open to both contraception and abortion, and most of the mainstream Protestant churches have made statements to that effect. Increasingly, fundamentalist Protestants have opposed abortion.

Roman Catholicism is often misrepresented as opposed to both contraception and abortion. Actually, the tradition contains strong views on both sides of the question.

Although Pope Paul VI in his 1968 Encyclical *Humanae Vitae* declared all artificial contraception immoral, a number of Catholic bishops' conferences offered quiet but noteworthy demurrals. They were supported by the vast majority of Catholic theologians and people, and the ban on contraception is adhered to by only a minority of Catholic people. Regarding abortion there is a long tradition espoused even by one canonized saint, Saint Antoninus, permitting abortion for serious reasons. The Catholic scholars Daniel A. Dombrowski and Robert Deltete in their book *A Brief, Liberal Catholic Defense of Abortion* demonstrate the permissive view on contraception and abortion that coexisted alongside the nonpermissive view with equal credentials. They also show the long Catholic tradition of not according personal moral status to the fetus until some three months into the pregnancy or even as late as quickening. For Sts. Augustine and Thomas Aquinas, principal shapers of the Catholic moral tradition, the early fetus had the moral status of a plant or vegetable, not that of a person. It could not, if miscarried or aborted, be baptized or given Christian burial.

Religions are all characterized by their appreciation of life and the need to revere and enhance it. They all also came to recognize that family planning is essential to life. Laws that honor only the conservative religious view are therefore violative of the religious integrity of the world's major religions. The views for and against choice for abortion and family planning can find warrant in the complex tapestries of world religions.

Daniel C. Maguire

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See also: Abortion; Breeding and Contraception; Fertility and Secularization; Population and Consumption – Contemporary Religious Responses; Population, Consumption, and Christian Ethics.

Fertility and Secularization

Religion, which regulates family life and sexuality, would seem to be a powerful social force affecting the propensity of believers to have children. Fully nine times, Genesis reports God's wish that his creatures "be fruitful and multiply." However, different religions have different beliefs, and all of them may be fading away in modern secular society. Thus it is difficult to predict the role that religion will play in the future growth or decline of human populations.

This is especially true for new forms of spirituality that celebrate the sacredness of the Earth. If they are rooted in secular environmentalism, then they may promulgate low fertility as a way of preserving the Earth from human pollution. However, if they spring from an awareness that humanity is part of nature, they may sanctify increased fertility.

Secularization

A scholarly debate had raged for years over whether secularization is likely to bring about the demise of religion. Perhaps the most ingenious argument holds that secularization is a real but self-limiting process. Mainstream denominations are under great pressure from secular institutions of modern society to become more worldly. For example, highly educated clergy are trained in the same values of doubt and pluralism that are promoted by the leading secular universities. Therefore, the dominant religions weaken in faith, fail to provide spiritual guidance, and lose membership.

But the collapse of one religion merely leaves room for another to expand. Dissatisfied laity and disaffected clergy in secularizing denominations launch sectarian movements that break away from the original organization. These sects revive faith in the supernatural and are able to resist the secularizing forces for a long time. If they do become more worldly, fresh sects will erupt from them as well, continuing a cycle in which the wheel of religion turns, but moves neither forward nor back.

Occasionally, as in the Roman Empire two millennia ago, an entire religious tradition secularizes, and the birth of sects is insufficient to sustain the average level of faith. But this merely opens up opportunities for wholly new religions to arise. Thus, extreme secularization stimulates religious innovation and an increased birth-rate of new religious movements that are significantly different from the surrounding religious tradition. The most successful of these movements become the standard religious traditions of future centuries.

Today, many spiritual movements, both within traditional religions and outside them, are reviving a sense of wonder, awe, and devotion toward nature. To the extent that their beliefs and practices are new, it will be difficult to predict how they will affect the fertility of their adherents. However, if they draw converts back to the conventional denominations, then it will be instructive to see how well-established religions have shaped the birth-rate.

Contrasting Theories

Demographer Nathan Keyfitz has noted that the fertility rate is dropping rapidly in most advanced industrial nations, far below the level required to sustain the population. He attributes the fertility collapse to the increased freedom women enjoy in secular society, and the economic opportunities that entice many of them away from the traditional child-bearing role. In contrast, Islamic societies have retained much higher fertility rates, and may be able to resist secularization. The reason Islamic societies have high fertility, Keyfitz says, is because the religion facilitates male dominance over females. Highfertility societies tend to overwhelm those with low fertility demographically, so male-dominant religions may ultimately conquer the world.

A distinctly different explanation of how religion might promote fertility was offered by sociologist Rodney

Stark in his analysis of the rise of Christianity. In its earliest centuries, Stark maintained, Christianity was especially favorable to women, and most Christians were female. Many of them married non-Christian men, converted them to Christianity, and raised their children in the new faith. Christianity favored nurturance and encouraged its believers to take care of sick and helpless members, thereby improving their health and reducing mortality, including among infants, pregnant women, and mothers. In addition, the relatively restrictive sexual morality Christianity inherited from Judaism discouraged a number of erotic behaviors that do not result in pregnancy, thereby channeling sexuality into fertility.

Thus, Keyfitz says religion can support fertility by suppressing women, whereas Stark claims it can do so by empowering women. One can imagine a third argument, that religion might actually reduce fertility by promulgating puritanical values and conferring spiritual honor upon people who remain celibate or who do not procreate. Thus, it is necessary to look at some empirical evidence to see whether traditional religion is in fact associated with high levels of fertility.

Empirical Evidence

The General Social Survey, administered periodically to a random sample of Americans, is ideal for examining the connection between religion and fertility in advanced

industrial nations, because it includes many questions about family structure and faith. The table shows a very simple analysis, using two measures of fertility and two of religion.

Table 1: Religion and Fertility in the US General Social Survey

	<i>Ideal Number of Children is 3 or More</i>	<i>Age 45 and Over: Actual Number of Children is 3 or More population.</i>
Religious Preference:		
Protestant	43.2%	47.2%
Catholic	50.8%	48.8%
Jewish	47.0%	28.8%
None	32.7%	39.4%
Attend Religious Services:		
More than Once a Week	57.6%	52.8%
Never	34.7%	41.3%

The first column of figures is based on the question, “What do you think is the ideal number of children for a family to have?” Out of 25,385 people who answered this question, the largest number, 52.1 percent, said “two.” A fertility rate of two children per woman is just slightly less than the 2.1 children generally required to sustain the population from generation to generation (more than two because some die in childhood and slightly more boys than girls are born). Another 3.5 percent said “one” child was ideal or “zero” children. Other answers (three or more) would contribute to population growth. The second column of figures looks at how many children the respondent has actually had, considering just people 45 years of age or older, who have probably completed their families.

The top portion of the table reveals that Protestants, Catholics, and Jews tend to want more children than do non-religious people (who say their religion is “none”). The second column of figures confirms that Protestants and Catholics tend to have more children than the nonreligious. But Jews tend to have even fewer children than the non-religious, and apparently fewer than they consider ideal. In the United States, this probably reflects a high degree of secularization among those who identify themselves as ethnically Jewish. The bottom of the table shows that people who attend religious services more often than once a week tend to favor bigger families than those who never attend.

Another way of evaluating how religion shapes fertility is to compare across nations. In the late 1990s, a team led by political scientist Ronald Inglehart administered the

World Values Survey to citizens of 23 nations, asking how often respondents attended religious services. In 12 of these nations, less than a third of the population attends religious services at least every month: Russia, Sweden, Finland, Japan, Norway, Belarus, Bulgaria, Latvia, Germany, Switzerland, Australia, South Korea. Data from the United Nations show that on average in these 12 low-attendance nations, a woman will have only 1.4 children, far lower than the average 2.1 required to sustain the population.

In six other nations, more than half the population attends religious services at least monthly: Brazil, India, United States, Mexico, South Africa, Nigeria. The average woman in these nations will have 3.2 children, more than twice as high a rate. Thus, secularized nations, many of which are in Europe, seem destined to shrink in population, while more religious nations continue to grow. The statistical correlation between religion and fertility for all 23 nations is very high (0.83 out of a possible 1.00).

United Nations estimates predict that 19 nations of the world will each lose more than a million in population by the year 2050: Russia (loss of 41 million people), Ukraine (20 million), Japan (18), Italy (15), Germany (11), Spain (9), Poland (5), Romania (4), Bulgaria (3), Hungary (2), Georgia (2), Belarus (2), Czech Republic (2), Austria (2), Greece (2), Switzerland (2), Yugoslavia (2), Sweden (1), and Portugal (1 million). The United States has resisted the trend toward secularism experienced by Europe and Japan, and its population has not begun to shrink.

Meanwhile, many other societies continue to grow. The UN report notes that half the world annual population growth occurs in just six nations: India (21 percent of the annual growth), China (12 percent), Pakistan (5), Nigeria (4), Bangladesh (4), and Indonesia (3). All of these except China have the reputation of being religious. Because it has the largest population, China adds a substantial number of people each year, despite having a birth rate far lower than those of the other five countries.

Conclusion

About two-thirds of the way into the twentieth century, a consensus arose among educated people that it was vital to limit population growth. At the dawn of the twenty-first century, there is good reason to reexamine the assumptions of this orthodoxy. In many rich nations, fertility has already dropped far below the replacement level, and as a group (including the relatively fertile United States) the prosperous nations have essentially achieved zero population growth and are poised on the edge of demographic collapse. However, the poorer nations, which may also be described as developing countries or traditional societies, are experiencing population explosion.

Extreme disparities in fertility across societies would seem to be a prescription for war and other forms of conflict. Fertility is affected by secularization as well as by religious revival and innovation. Perhaps revival in the rich nations and secularization

in the poor ones will achieve a peaceful balance. Perhaps innovation will create powerful new religions with unique orientations toward fertility.

Ideally, we need a new sensitivity to the human role in nature that will adjust the fertility rate so that population neither explodes nor collapses. Existing social-scientific data, such as from major surveys and government censuses, are not detailed enough to let us measure the birth rates of people who are involved in the various wings of the movement to reunite religion and nature. This is a question of the utmost importance, and new research to answer it would be extremely valuable. The future of humanity and the Earth's living systems are literally in the balance.

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See also: Abortion; Breeding and Contraception; Fertility and Abortion; Judaism and the Population Crisis; Population and Consumption – Contemporary Religious Responses; Population, Consumption, and Christian Ethics.

Findhorn Foundation/Community (Scotland)

Founded by Eileen and Peter Caddy and Dorothy Maclean in 1962, the Findhorn Foundation is an international spiritual community of approximately 150. Located in northeast Scotland, the Foundation is near the fishing village of Findhorn and Kinloss Royal Air Force Base. Cluny Hill College, the Foundation's second "campus," is in the town of Forres.

The New Findhorn Association (NFA), of which the Foundation is one group member, comprises what is loosely called the wider community. Membership in the NFA includes like-minded groups and individuals within a fifty-mile radius. Some NFA groups support green initiatives (the Eco-Village Project, "Trees for Life," etc.).

Espousing no formal creed, the Findhorn Foundation today recognizes the essential truths of all religions and spiritual teachings. Fourteen thousand people visit the Findhorn Community per year. Predominating interests at Findhorn since its founding have included: traditional and non-traditional forms of meditation, positive thinking, healing, metaphysics, mediumistic contact, and psychological "growth" activities. Dubbed "the grandmother of the New Age" by the media, the Foundation distances itself from that distinction today. At odds with certain occult ritualizing aspects of the New Age Movement – "Atlantean crystals," for example – the Foundation prefers "sensible" techniques of spiritual transformation.

A term increasingly used by British religious studies scholars to describe the eclectic, experimental milieu of groups like Findhorn is "alternative spirituality." Religious studies researchers Steven Sutcliffe and Marion Bowman believe experientially friendly folklore methodologies may prove more successful than traditionalist ones in the area of alternative spirituality. Challenging the notion of

Dorothy Maclean (1920–)

Raised and educated in southern Ontario (Canada), Dorothy Maclean was recruited into the British Secret Intelligence Service after completing University. After working in New York, Panama, and several locations in South America she was posted to London in 1943. During this time she encountered the Sufi movement and throughout the 1940s and early 1950s studied various spiritual traditions – orthodox and otherwise. During a time of personal crisis, she experienced what she refers to as "an inner experience of

knowing God.” Shortly thereafter, a repetitive prompting to “stop, listen, write” led to regular periods of meditation and writing.

Her book *To Hear the Angels Sing* describes her experiences of listening to, and then writing out, what she believes were direct communications from God. She also recounted the events that led to the creation of the Findhorn Foundation Community in northern Scotland. There Maclean experienced what she refers to as “an inner connection with the creative intelligence behind nature,” an intelligence she later named the “Devic/ Angelic presence.” The practice of “listening and writing” continued, the contents providing practical instructions concerning the gardens and offering perspectives on the relationships between human and nonhuman realms. This connection was a significant factor in creating the extraordinarily lush and productive gardens, which generated much of the early interest in the community. Two tenets lie at the heart of what Ms. Maclean writes and teaches. Those tenets are 1) personal and direct contact with God is possible for everyone/ anyone and 2) nature has an innate intelligence and a willingness to work directly with humanity to address the ecological issues facing the planet.

Judy McAllister

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Maclean, Dorothy. *Talking Trees*. The Park, Forres, Scotland: Findhorn Publications, Findhorn Foundation, 1970. scholarly “objectivity,” they argue that skepticism directed at belief stories of contemporary spiritual groups does not constitute a value-free stance, but instead may conceal strategies for securing privilege or prestige.

The miraculous story of large vegetables flourishing in poor soil made the Findhorn Community internationally famous in the 1960s. Intuitive messages received during meditation by founder Dorothy Maclean in 1963 suggested that the surprise success of the Caddy vegetable garden was due to the “co-creative activity” of devas (Theosophical Sanskrit for “shining ones”) and the Landscape Angel – each answerable to God or “the Beloved.” Invited to participate in an experiment of “co-cooperation with Nature,” Findhorn’s three founders agreed to follow practical and spiritual instructions given in the messages. At issue was the growing degradation of the planet. Results exceeded

expectation. Drawn to Scotland by rumors of a fabulous garden thriving next to a garbage dump, British Soil Association consultant Professor Lindsay Robb reported: “. . . the bloom of the plants in this garden at midwinter on land which is almost barren powdery sand cannot be explained by the moderate dressings of compost . . . There are other factors, and they are vital ones” (in Hawken 1975: 170).

British adult education pioneer Sir George Trevelyan concluded similarly. In a 1968 letter to Peter Caddy, he stated that “Factor X,” the deva/elemental conscious contact, was “the most tremendous step forward, indeed the step which mankind must take” (Caddy 1996: 281).

Some Foundation and community members still engage in the original “work of Findhorn.” Through meditation, they “feel into” contact with nonhuman species believed to “overlight” and inform the spiritual direction of the Foundation. Disinterested in intellectual evaluations of direct experience, most Foundation members do not label their inner experiences as examples of nature mysticism or animism. They prefer to call it “tuning in.”

The greening of Findhorn has been a gradual process. Some members of the community perceive Foundation ecological projects as a complementary expression or “natural outgrowth” of the founders’ early spiritual commitment to God and nature. Some of these eco-initiatives include conferences, workshops on permaculture design, deep ecology (on one occasion taught by Australian deep ecology advocate John Seed), and a month-long eco-village training program offered in partnership with GEN-Europe and the Global Eco-village Network.

Begun in 1981 at Findhorn by John Talbott, the EcoVillage Project is a constantly evolving model and a synthesis of current thinking on sustainable human habitats. United by a common goal, an eco-village is based on shared ecological, social and/or spiritual values. Working with the principle of not taking more than one gives back, Talbott believes eco-villages are potentially sustainable. The Findhorn Foundation is a founder member of the Global Eco-Village Network (GEN). In 1998, the Foundation’s Eco-Village Project received the “Best Practice” designation from the United Nations Center for Human Settlements (Habitat).

Although many in the community prefer to accentuate and model “the positive” in all things (sometimes suffering from “the tyranny” of its overemphasis), some acknowledge the planet’s current ecological degradation and work to relieve it. Inspired by Dorothy Maclean’s early experiences with “the intelligence of nature,” former Foundation member Alan Watson Featherstone believes ecological restoration is a natural process. In 1985 he founded the Scottish conservation charity “Trees for Life.” Since then the charity has planted over 420,000 native trees in the Highlands of Scotland. In 2001 Featherstone received the United Kingdom’s Schumacher Award in recognition for his work “conserving and restoring degraded ecosystems.” The community’s impact on international green organizations continues to grow – Perelandra, a nature research center founded on Findhorn principles in the United States is a notable example. Registered as a Charitable Trust in 1972, the Findhorn Foundation was granted association

with the Department of Public Information of the United Nations in December 1997 and received associate-member non-governmental organization (NGO) status in 1999. Since then it has become increasingly involved with various UN environmental initiatives. Recognizing its “green contribution” to Scotland, the Scottish Tourist Board awarded the Findhorn Foundation its highest honor – the

Gold Award – in 2001.

Katherine Langton

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See also: Deep Ecology; Earth Mysteries; Esalen Institute; New Age; Schumacher, Ernest Friedrich; Scotland; Seed, John.

Fire

The Primal Worship of Fire

According to Peter Byrne, the essence of primal religion is nature mysticism. Natural places, beings and objects representing the four elements (Earth, air, water, and fire) have been the object of religious devotion by primal peoples since time immemorial, but the earliest of all the elements to become imbued with mystical power and religious meaning was fire. Indeed, fire worship may be the original religion, for the life-sustaining hearth fire provided early peoples with the physical space for developing language and culture; accordingly, fire served as the psychic source for developing rituals, ceremonies, and religions.

Homo sapiens became human beings with their knowledge, control and use of fire. Along with stones and bones, fire was an essential tool that enabled early peoples to migrate into previously uninhabitable regions, alter their environments, and form sustainable hunting and gathering societies. Fire played a critical role in the development of early agriculture outside of flood plains through its ability quickly to clear and fertilize land. Fire also played a role in hunting and led to the domestication of large animals through its ability to herd game and stimulate forage for grazers. Given the many beneficial uses, effects, and products of fire that were vital to human social life, it was entirely natural for fire to become a central element of early religious ceremonies celebrating life-forces. The more ancient the religion, the more prevalent the religious role of fire seems to have been.

The life-giving qualities of fire to transform matter into energy must have been god-like to early peoples, but unlike the other basic elements which exist in the natural environment ready for use, fire must first be discovered and then maintained to be of human usefulness. Creation myths abound in many cultures describing the primordial quest for fire: first, there were “dark ages” when people were without fire, but then, fire was delivered to people, usually through a Promethean act of stealing it from other beings, spirits or gods. As Stephen Pyne observes, the Judeo-Christian myth of genesis has humankind gaining the knowledge of good and evil through tasting the forbidden fruit, but in the myths of many nature-based cultures that knowledge was gained by stealing the forbidden flame. Thus, fire has this peculiar quality of being a natural element that is part of our cultural heritage, but it is not considered part of our natural heritage. Instead, even long after people discovered how intentionally to

kindle flame, the ultimate source of fire's creative and destructive powers has often been attributed to some sense of the divine.

Ceremonial Fires

Beyond the primordial worship of fire, the use of fire for various sacred rituals and ceremonies is ubiquitous to the point of becoming almost a universal religious practice. These diverse ceremonies and their associated religious institutions can be organized under the categories of the sacred altar fire, perpetual fire, new fire, and sacrificial fire. Sacred altar fires were core elements of some of the earliest monotheistic religions. For example, the ancient Egyptian worship of the sun god, Ra, kindled a sacred fire every day to reenact the rising of the sun, and the fire on the altar represented the omnipotent eye of Ra. Daily ritual lighting of sacred altar fires also played a central role in Zoroastrianism, in which fire was considered to be a visible sign of god's presence, and a symbol of Truth and Right Order in the cosmos. Among peasants in northern Siberia, all huts included a hearth in one corner for domestic purposes, and in the opposite corner a sacred altar in which the fire provided protection from evil spirits. Over the millennia, fire has played a predominant if not central role in sacred altars for a multitude of religions.

The perpetual fire was another religious institution with ancient roots. The difficulty of kindling fire for early peoples led to the institutionalization of the perpetual fire, and various rites, ceremonies, and temples were constructed around it. The occupation of fire-keeper was one of the earliest specializations in human society, and evolved into an official state function most commonly practiced by priests. The best-known example is the altar of Vesta, the Roman goddess of the hearth, where a perpetual fire was tended by the famous Vestal Virgins whose purity of the flesh symbolized the purity of the flames. The uniquely designed shrine of Vesta was the oldest Roman temple, and its perpetual fire supplied the sacred flames for lighting other temples' altars. The Olympic Games fire ceremony is a modern-day secular expression of the perpetual fire, vestigial in its essence.

The perpetual fire was sometimes extinguished in order to kindle the new fire, a ritual intended to keep the energy of fire fresh and pure, and to renew the human spirit. For example, every year at Beltane (May 1) the Druids extinguished all fires in their villages, and then lit two new sacred bonfires. Numerous spells were canted, and then their cattle were driven between the two fires in order to purify and protect them from disease. Priests would then take coals and kindle hearth fires in a ritual symbolizing new life. New fires kindled for sustaining new life were especially vital religious ceremonies for northern coastal California Indians, such as the Karuk, Yurok, and Hupa peoples. In the spring and autumn, when the salmon were running and the acorns were ripening, new fires would be lit as part of a rite that the Karuk called the "world renewal ceremony." The new fire symbolized the regenerative powers of natural

fire, and, mirroring the ecological function of renewing the soil, it served a religious purpose in renewing the soul.

The sacrificial fire has deep roots in a number of religions, too, with fire being the prime force used to consume and deliver offerings to the divine. The behavior of the flames or smoke is often believed to be a sign of the divine's reaction to the burned offerings presented by believers. Gruesome examples of sacrificial fires include ancient Israelites burning their children as sacrifices to the god, Moloch. Human fire sacrifices were also practiced in ancient times by the Druids, Peruvians, and in more recent times by Euro-American Christians as part of the witch craze. The most well-known contemporary religious practice is the Hindu funeral pyre in which the body is cremated as the final sacrifice. The consumption of flesh liberates the spirit and carries it to the divine.

Vestiges of the ancient ceremonial use of fire live on in religious rituals today, such as the Jewish practice of kindling the Sabbath candles and the Chanukah Menorah, and the Buddhist practice of lighting incense. However, the votive candle and incense stick provide a very different human experience than the altar fire. Whereas a candle offers a safe, stable flame, a bonfire continuously changes in a spontaneous, unpredictable, animated dance of forms. It commands attention, and must be carefully attended with proper devotion or else it will die out. Thus, altar fires created sacred ceremonial space with a sense of great drama and potential danger, further embellished by priestly rituals. Either as a ceremonial tool or the object of worship itself, ancient fire-tenders always treated sacred altar fires with great respect and reverence.

Fire as Divine Manifestation

From Zoroastrianism to Judaism and Christianity, fire has often been deemed as a divine manifestation, symbolizing the direct presence if not virtual face of the deity. For example, the Zoroastrian deity, Ahura Mazda, resides in endless light and created fire; the sacred altar fires of the Yasna are regarded as the manifestation on Earth of this divine celestial light. Zoroastrian priests refer to their altar fires as "Avestan" or the son of God. Throughout the Hebrew Bible and New Testament, too, God and Jesus are often depicted with fiery imagery. Perhaps the most famous example is when God appeared before Moses "in the flame of fire in the midst of a bush" atop Mount Sinai, provoking both awe of God and fear in Moses. In the Psalms, "the voice of the Lord flashes forth flames of fire." Jesus is portrayed with a face "like the sun shining in full splendor" with eyes "like a flame of fire" (Apocalypse 2 and 3). The close presence of the divine can be both a gratifying and terrifying thing to experience. Fire whose heat and light both attracts and repels was a natural symbol to use to graphically depict the presence and experience of the deity.

The Fire of Heaven and Hell

In Judaism and Christianity fire is alternately associated with both heaven and hell. For example, Elijah is taken up to heaven in a chariot of fire. Daniel sees God in heaven sitting upon a throne of fiery flames, with streams of fire coming forth. In the Apocalypse, the blessed are seen in heaven as a sea of glass shot through with fire. On the other hand, Mathew associates fire with hell or “hell-fire.” Sinners condemned to hell are cast into eternal flames of many sorts: they are immersed in rivers of fire, boiled in cauldrons of fire, hung by flaming chains, pummeled with fiery stones, and officials who abused their power are forced to sit upon fiery thrones. The vision of hell as an abyss of fire has ancient origins in Gehinnom, a valley near Jerusalem in which Israelites burned their children as sacrifices to the god, Moloch, and garbage was burned by a perpetual fire. The specter of hell-fire was vividly reinforced by burning heretics at the stake during the Christian inquisition. These public executions by fire, often employing other gruesome techniques of torture sanctified by the Church, helped condition a dread fear of hell among the common people. As a precursor to hell, the souls of sinners are believed to burn from the torment of knowing they are living apart from God.

Fire as Purgatory and Apocalypse

In the Western tradition, fire is also employed as an instrument of God’s angry judgment and punishing wrath, and has come to depict visions of purgatory and the apocalypse. For example, Isaiah (66:15–16) announces to the people that,

For behold, the Lord will come with fire, and with his chariots like a whirlwind, to render his anger with fury, and his rebuke with flames of fire. For by fire and by his sword will the Lord plead with all flesh.

The legendary example of Sodom and Gomorrah, destroyed for the sinfulness of their peoples when God rained down brimstone and fire, had origins in the age-old use of fire as a weapon of war and revenge, in which the cities of the vanquished were routinely razed by fire. Fiery punishments also play a role in visions of the Apocalypse where the world ends in a vast conflagration.

The association of fire with purgatory is also prevalent, although purgatory is alternately viewed as a form of both punishment and purification. On the one hand, purgatory is seen as a meeting with the glorified Christ whose eyes are fire, penetrating, searching, and judging the soul for all sin. Woe be to the wicked and sinful who are scorched by the Lord’s fiery gaze, for purgatory as punishment condemns them to eternal damnation in the fires of hell. An alternate view of purgatory sees it as purification and spiritual maturation, a burning away of all egotistical attachments and a cleansing of all past sins as a means of preparing the spirit to be fit to dwell in the eternal light of God’s presence. Given the power of flame to consume matter

and convert it into energy, it serves as an apt metaphor to describe the process of purgatory.

Fire and Religion

Among contemporary Earth-based spiritual practitioners, such as Wiccans, Goddess-worshippers, neo-pagans, and spiritual Greens, sacred altar fires and bonfires play a central role in many religious rituals and ceremonies, particularly in outdoor gatherings. Starhawk, for example, has popularized “The Fire Song” as part of a repertoire of neo-pagan rituals for use during nonviolent civil disobedience actions protesting nuclear power and environmental destruction. As well, in the midst of a renaissance of new scientific research and discoveries emerging in the field of fire ecology, the U.S. environmental movement has developed a new-found respect for the role of wildland fire in restoring and sustaining forest and grassland ecosystems. Using assumptions that harken back to physicotheology and the belief that there is a divine design to the Earth, ecologists now consider fire to be a vital, dynamic disturbance process maintaining the diversity and sustainability of healthy forest ecosystems. Thus, against the view of industrial forestry that wildfire is an external agent of tree death and destruction, ecoforestry recognizes wildland fire as an intrinsic element of forest life and regeneration. This is exemplified by the slogan, “Ancient Forests are Born in Fire!”, which is increasingly voiced by eco-activists who articulate both spiritual and scientific discourses in their adulation of wildland fires right alongside their labeling of post-fire “salvage” logging as desecrating acts.

No discussion of religion and nature would be complete without an analysis of the important role of fire. As one of the oldest natural objects of ritual and worship, fire has played a fundamental if not foundational role in religions across the globe. The religious views of primal peoples and prehistoric cultures evolved around sacred altar fires. Embers from ancient rituals devoted to the perpetual fire, new fire, and sacrificial fire still glow in religious ceremonies today. Fiery metaphors and ceremonial practices help give vivid expression and somatic experience to religious beliefs. The creative and destructive powers of fire have inspired Western religious visions of both heaven and hell, and myths about the beginning and ending of the world. Although at each and every instant the flames of any given fire are a unique expression of spontaneous combustion, at the same time the flames offer a universal, transcendent form that has made fire an enduring if not eternal source of religious inspiration and meaning throughout the ages.

Timothy Ingalsbee

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See also: Buddhism (various); Christianity (various); Druids and Druidry; Judaism; Paganism – Contemporary; Wicca; Zoroastrianism.

Fishers

Water is a potent symbol that may trigger nearly universal associations to life and death. All people need sweet water to quench their thirst. Plants need water to grow, but too much water and violent floods threaten to disturb many lifeways, even to extinction.

Fishermen frequent the seas, rivers and lakes to catch fish and marine mammals and to gather various other food objects. Anthropologists view the nature of fishing activities to be similar to hunting and gathering on land. With just a few exceptions, for instance among the seafarers or Bajau People in Malaysia, Indonesia and the Philippines, fishing is generally regarded as a typically male occupation. There are often culturally elaborated restrictions to prohibit women from moving freely on board or to enter fishing vessels, even to touch fishing equipment. Women are thus regarded as matter out of place in many fishing contexts. Their presence is at times regarded as polluting and potentially spoiling to the efficiency of fishing boats and gear. Generally women may be seen to threaten the fishermen's luck. This is still the case, although the assumptions connected to the negative impact of mature women on many fishing activities are somewhat reduced in North Atlantic fishing communities. Thus some few women are allowed as crew, even skippers, for instance on small Norwegian fishing vessels (*shark*).

Whereas many mysteries of fertility and growth are more or less controlled by the science and technology of modern agriculture, this is not to the same extent the case with fish stock management. Whether agriculture or fishing is in focus, the need for luck in order to succeed is not yet under rational control, and may never be. It is repeatedly documented that luck and luck management has been and still is of central concern for hunters and fishermen across cultures. In spite of modern navigation and fish locating instruments, the success of fishermen, now as before, is regarded by the fishermen themselves and others to depend on their luck.

Supernatural beliefs and reason in the pursuit of fish

Generally speaking, there is a significant difference in the strategies that it is possible to apply in pursuit of land animals that leave tracks and other signs of activity, which hunters can observe, and the fish that leave few observable traces in the water they inhabit. The seas, rivers and lakes are more or less unknown worlds to humans. These

worlds are fascinating, unreachable and mysterious. The fish sometimes abound, at other times they disappear or move to unknown depths or locations. To locate the prey, fishermen are helped by their experience, but at times even know-how is not enough to eradicate uncertainties about fish behavior and their whereabouts. It is a general tendency that fishermen, regardless of where they live, tend to compensate for lack of fish prediction with magical spells and rituals. Further, firm beliefs in supernatural intervention causing luck or misfortune, adherence to taboos, and offerings to cultural images of the rulers of the seas and waters are widespread among fishermen and in their communities. Such beliefs are generally operative regardless of the particular religious faith of the fishers.

The maritime activities of the Trobriand Islanders in Melanesia served as empirical inspiration when Bronislaw Malinowski developed his seminal analysis about the social function of ritual and magic. Malinowski observed that when the Trobrianders fished in their home lagoon, where fish were abundant and easily gathered without risk to the fishermen, use of magic was nearly absent.

However, when the islanders fished off the northern shore their success to obtain certain species was, according to them, entirely dependent upon strict observance of numerous taboos and selected rituals. Off the northern shore, the outcome of any fishing expedition was far from obvious and elements of chance and risk were prominent in the fishing activities. This observation contributed to Malinowski's classic statement in which he declared that the rituals surrounding fishing and sailing have the primary function of relieving anxiety and uncertainty. This interpretation has dominated anthropological studies of ritual in maritime settings. For instance, the documented persistence of a considerable amount of magic and ritual activities, also in technologically sophisticated fisheries, has been related to how fishing remains a risky and uncertain economic activity.

Small-scale fishers in Sulawesi, Indonesia firmly believe that all success in life, including fishing activities, is based on combinations of skill, luck, industriousness and cunning. However, no one prospers solely by their own efforts. Everybody needs help or assistance from other people and/or from spirits. Thus when some fishermen make exceptionally good catches or do well for an extended period of time, this is interpreted as a sign of supernatural support. When fish disappear, catches are bad, or accidents during fishing take place, this is usually understood as reproaches or punishments from spirits for neglecting to distribute the right offerings, breaking taboos, or trespassing a spirit-protected location.

That prayers and Christian symbols, such as holy water, crucifixes, and Bibles, are thought to influence the catch and safety among contemporary European, North American and other Protestant and Catholic fishers is well documented. Many Norwegian fishermen say they place their faith in the hands of God whose will is believed to determine the fishermen's safety, catch, and spiritual well-being. Pious fishermen accompanied by close family members always go to church before they set out for an extended expedition. On their return the church is visited again to praise the Lord.

Ethnologists and anthropologists have been more concerned with tracing ancient and pre-Christian influences on the thoughts governing modern fishermen than investigating the impact of contemporary religious beliefs. The connections between faith and fishing in any of the world religions should be a topic for future research.

Resource management, conservation, and fishing

It is often argued that fishermen, hunters and gatherers, and other people who live off the land or sea are resource conscious. This is taken to mean that these people know they must take active measures to secure their own livelihoods and those of the next generation. Some religions are taken to advocate ideologies of community sharing and sustained resource management. For example, it may be argued that the Protestant spirit, confirmed by the church, aims at a rational management of nature. Thus an unlimited exploitation of the sea and its resources is deemed as morally unjustifiable greed. There is an inherent plea for the preservation of the natural environment to the benefit of current and future generations. However, it is well known that it is far from the case that behavior coheres with expressed ideologies.

It has also been pointed out that religious ideas and beliefs sometimes have unrecognized consequences. These consequences may serve sustainable resource harvest, for instance by protecting spawning areas for certain fish. James McGoodwin observed, for example, that this can happen when fishing certain seascapes and locations is enjoined by taboos, because they belong to spirits. This was the case at Bonerate in Indonesia, where the islanders refused to fish or collect mollusks along an extensive part of the fringe reef because the location was inhabited by aggressive spirits, some in the shape of white sharks. Near Timpaus Island, also in Indonesia, there were coral reefs located at depths of approximately fifty meters that never were fished. In the old days many fishermen had been lost in these waters and during rough weather sailors made detours to avoid the locations. These reefs, it was believed, were inhabited by a malicious sea devil (*hantu laut*) by the name of Molokoimbu. Another consequence for fishing from religion on Timpaus Island was observed when foreign fishermen arrived and made good catches at the locations where Molokoimbu previously ruled. Muslim leaders told Timpaus fishermen that they should not pay attention to ancient spirit beliefs. Then the bravest fishermen began to harvest the reefs and important fry and fish refuges were lost.

Fishermen, like most other people, tend to adjust their view on the environment and the robustness of nature in accordance to their own activities in nature. According to Mary Douglas, people live by prototypical myths about nature that contribute to legitimize their use of and value orientation toward nature. One such myth would be that the sea is robust, but only within limits. Many fishermen around the world share this view. In essence the attitude may serve to free protagonists from responsibility for stock depletions. Their own activities are not threatening the environment, but those

of others do, it is often believed. Thus small-scale coastal fishermen blame the large trawlers for reduced stocks of fish. However, some owners of trawlers blame the coastal fishers for damage because they fish at the spawning grounds of many species.

At the micro level, Indonesian fishermen who fish for domestic and local markets justify their own use of explosives. They say it is impossible for them to deplete fish resources. But they are worried about the behavior of other fishermen, especially foreign ones, who are operating from larger vessels when they utilize poison and bombs. The same local Indonesian fishermen (and many more) apply a different myth when it comes to shark fishing with long lines: the myth of the sea as unpredictable. The fishermen agree that large sharks have become rare where they used to abound. This is not because of overharvesting, but because the sharks have moved somewhere else, the fishermen say.

At the macro level, a myth about the sea as excessively robust seems to apply. Only such a myth can justify local and multinational companies massively polluting rivers, lakes and oceans with chemicals or radioactive materials.

Harald Beyer Broch

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See also: Fly Fishing; Mongolian Buddhism and Taimen Conservation; Nile Perch; Traditional Ecological Knowledge; Water Spirits and Indigenous Ecological Management; Whales and Whaling.

Fisk, Pliny (1944–)

Pliny Fisk III's work in appropriate technology, systems design and sustainability has earned him international recognition and the title "Guru of Green." After graduating from the University of Pennsylvania with Master's degrees in Architecture (1970) and Landscape Architecture (1971), and teaching in the School of Architecture at the University of Texas, Fisk's interest in environmental issues prompted him to co-found the Center for Maximum Potential Building Systems, in Austin, Texas in 1975. His practical engagement with diverse environmental issues had won him earlier the respect of R. Buckminster Fuller, who wrote to him that "your various research and development projects [are] lucid, intelligent, economic and in every way gratifying" (Fuller letter to Fisk, 1973).

Pliny Fisk's international work, which has brought him to forty states and six foreign nations, is based in the Center, a nonprofit organization engaged in research, education and demonstration projects for sustainable planning and design. Co-directed by Fisk's wife, Gail Vittori, the Center's work focuses on four areas: 1) *green architecture*; 2) ecologically balanced *land use planning*;

3) sustainable development *policy initiatives* for local, state, and federal agencies; and 4) tools and methodologies for *green development*. Fisk's projects have earned him such honors as the National Center for Appropriate Technology "Distinguished Appropriate Technology Award" for significant work in environmental protection, and the United Nations 1992 Earth Summit "Local Government Honours Programme Award," shared with the city of Austin, for developing a Green Builder Program and a "GREEN-RATING GUIDE" for energy, materials, water, wastewater, and solid waste for new residential and commercial construction in the Austin area.

Pliny Fisk's work links religion and nature. Around the globe, religious concerns about care for God's creation have become concretized in specific projects and programs as faith communities and environmental organizations

– including the Center for Maximum Potential Building Systems – have collaborated to effect an integrated relationship between people and their regional ecosystems. Fisk sees a natural tie between religion and ecology:

Religion, in its ecumenical way of trying to bring people together on significant issues, could be the most powerful tool that we have to win the conceptual space/time race, the competition over which set of ideas will guide human life and activity in the future before nature's systems begin to fail because we lack an understanding of her needs and thus our own.

The connection that religion has with most humans on Earth is a significant tool for the future. If an environmental ethic could be folded into religious understandings, religion could become *the* significant tool in the conceptual space/time race, since it can gather and incorporate most of the other tools used to try to restore ecological balance. If religion does not help the planet and its web of life to recover from current environmental crises, then it is possible that in the future humans would not be included among God's surviving creatures.

In the biblical story of the Garden of Eden, "God's garden" is a place with an abundance of resources which are appreciated and used by humans. It would be wonderful if that garden, representing people in past eras living in harmony with nature, could be conceptually restored and concretely realized. People at times are forced to exist on the worst land, in the worst conditions, with the worst water. But sometimes these places of total degradation in the present were once fertile garden areas in the past. People might conceptualize a relationship between past and future gardens, and consider how human behavior might be transformed such that the gardens would exist again and continue into the future (Fisk interviews with Hart, 9 March 2002 and 11 March 2002).

The Center for Maximum Potential Building Systems has numerous programs, and urban and rural projects incorporating them, that are models for responsible linkages of religion and nature and could be incorporated into or adapted to varying natural and social contexts. These include Life Cycle Environmental Design and Balancing of Energy, Water, Waste and Material Systems (Nursing & Biomedical Sciences Center, the University of Texas, Houston); establishing minimum requirements for environmental-economic conditions as the basis for the greening of public facilities using Baseline-Green, a software program CMPBS developed with Environmental Protection Agency (EPA) funding that has data on more than 12 million businesses and their products, and uses Geographic Information Systems (GIS) software to link data and digital maps to analyze the impacts of products from source to sink, region by region, throughout the

U.S. (City of Seattle Government Center); revision of state Architecture and Engineering guidelines to include recycled content and "green" building material specifications, sustainable architectural practices, energy efficiency, construction site and office recycling systems, and procedures to ensure indoor air quality (State of Texas); and development of an Ecological Footprint game that enables local communities to analyze the extent of their resource use impacts on their local land base.

John Hart

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See also: Architecture; Fuller, Buckminster.

Floresta

Floresta is an interdenominational Christian agency, based in California, working with local partners in developing countries to reverse deforestation and poverty by transforming the lives of the rural poor. Tom Woodard, an American businessman, founded Floresta in 1984 after working for a Christian relief agency in the Dominican Republic. Woodard, with his Dominican partners, recognized that deforestation was both a root cause of rural poverty and one of its consequences, creating a vicious cycle.

Motivated by hunger and short-term economic necessity, slash-and-burn farmers were cutting trees to clear agricultural land, or to sell as fuel wood. This resulted in catastrophic soil erosion and long-term disaster for these same farmers, who depended on the land for their livelihood. Farmers frequently knew their behavior was destructive, but without access to credit or other alternatives, they were helpless to change.

One of Floresta's first projects was Los Arbolitos, a large-scale, for-profit tree nursery, with a production capacity of five million seedlings annually, which continues to provide high-quality tree seedlings and jobs for rural Dominicans.

In 1987, Floresta began its Agroforestry Revolving Loan Fund (ARLF) to provide loans, training, and marketing services for poor farmers who wished to start treerelated agroforestry businesses, utilizing fast-growing trees. In 1996 Floresta opened programs with local partners in the state of Oaxaca in Mexico and in Haiti, offering assistance in community forestry as well as credit for agriculture and small businesses which would help to diversify

Fly Fishing the rural economy.

Since 1997, Floresta has developed a more holistic approach to its work, recognizing that there are many factors that contribute to deforestation and poverty. In combating deforestation, Floresta uses four principal tools:

1) Community Development – Floresta works to empower the local communities, encouraging them to take responsibility for their own problems and build confidence in their own ability to change their situation. This provides long-term sustainability.

2) Sustainable Agriculture and Forestry – Floresta assists communities in sustainable agriculture, sustainable forest management and reforestation, helping farmers to move away from slash-and-burn agriculture.

3) Microcredit – Floresta provides economic alternatives to destructive forest practices. Loans may be used to implement new agricultural techniques or to diversify fuelwood-based economies.

4) Discipleship – To interested participants, Floresta offers Christian discipleship programs, sharing Christ's love and developing a biblically-based ethic of stewardship for God's creation.

As Floresta has grown, an essentially pragmatic concern for the health of forest ecosystems has developed into a better understanding of the role of stewardship and the importance of restored relationships between humankind and creation in God's ultimate plan.

Floresta has also found that the rural poor have a tremendous amount to offer in solving their own problems. When provided with economic opportunity and agricultural alternatives, subsistence farmers can prosper, live sustainably and contribute to the regeneration of their environment. As of 2003, farmers working with Floresta had planted approximately two million trees, received nearly 2000 small business loans and established ongoing community-based reforestation projects in over seventy villages in Haiti, Mexico and the Dominican Republic.

Scott C. Sabin

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See also: Biblical Foundations for Christian Stewardship; Stewardship.

In the autobiographical story, turned 1992 Academy Award-winning motion picture, *A River Runs Through It*, Norman Maclean's family centered their lives around two sacred practices: religion and fly fishing:

In our family, there was no clear line between fly fishing and religion. We lived at the junction of great trout rivers in western Montana, and our father was a Presbyterian minister and a fly fisherman who tied his own flies and taught others. He told us about Christ's disciples being fisherman, and we were left to assume, as my brother and I did, that all first-class fishermen on the Sea of Galilee were fly fisherman and that John, the favorite, was a dry-fly fisherman (Maclean 1967: 1).

For many fly fishers, fly fishing itself is a religious practice. Just as any religious person approaches his/her respective tradition, the devout fly fisher approaches fly fishing with the same discipline and respect. It is not unusual to hear people speaking of fly fishing in ways that invoke the religious dimensions of life, as they commonly deploy terms like religious or spiritual, the sacred or divine, ritual, pilgrimage, meditation, priests, community, or notions like the sanctuary of religious space, to describe the experience.

As I reflect more deeply on the fish's history as a mythic symbol and religious icon, I begin to wonder if having fish shapes around me is a way to stay in touch with the ideas of Jesus without having to go near people who do business in his name (Duncan 2001: 14).

Reflecting on the relationship of his fishing passion to his Christian heritage, Oregon-born author and fly fisher David James Duncan turns to the words of Howell Raines in *Fly Fishing Through a Midlife Crisis*. These words recall the mysterious and divine symbolism surrounding the fish itself, referencing Jesus' miraculous act of turning two loaves of bread and two fishes into enough food to feed a large crowd in Matthew 14:17, Luke 9:13, and John 6:9, which made the fish into a divine symbol of God's provisions for humanity in the natural world. While many fly fishers are not Christian, fly fishing spirituality resonates with the sacredness of the fish in the Christian tradition.

In the quest for experience with the divine, religious persons often embark on a journey or pilgrimage. For the fly fisher this is the journey to a new fishing spot, or an old favorite. The American fly fishing writer Nick Lyons, for example, has written in a way that views the pilgrimage to rivers, streams, and their sources as a quest for life's deeper meanings.

A lot of people have been tracking rivers to their sources lately; it's surely a desire to find some further meaning in all this sloshing around in streams. People seem to be saying, "There must be more to it than catching of fish – and perhaps those meanings are to be found in the headwaters" (Lyons 1992: 139).

These words suggest that the pursuit of fish is not the only reason for fishing – that journey or pilgrimage itself can be as powerful an experience as the catching of fish. Indeed, for some fishers, fly fishing facilitates spiritual perception; it is a way to apprehend one’s connections with something greater than one’s self. As David James Duncan put it,

When the trout are happening, I can kneel on merciless stones *happily*, for hours and hours; I can stare into blinding glare, withstand heat or cold, be chased by bears, cow moose with calves, or redder necks than my own, and still rush gratefully back for more. I don’t understand the *why* of all this. I don’t try to understand. I just pull on my waders and merge via a spirituality so thrashing, splashing, cursing, casting, and Earth-engaged it doesn’t feel spiritual at all: it just feeds the spirit (Duncan 2002: 303).

There is something about being out on a stream in the mountains or in the plains that draws some people to pursue experiences in such places with great passion, and I think it has something to do with the desire to directly experience and engage the Earth. The solitude and sounds of a stream, the careful turning over of rocks so as to see what bugs the fish are eating, and many other aspects of fly fishing, easily, indeed naturally, seem to foster a sense of connection with and belonging to nature.

Such feelings are not uncommon in nature-oriented religion. They are emphasized, for example, in movements such as deep ecology, as well as in a wide variety of nature-related activities not always recognized as “religious.” Religion scholar Bron Taylor, for example, argues that Earthand nature-based spiritualities generally involve experiences and perceptions of connection and belonging to a living, sacred Earth. Quoting Alan Drengson, he asserts that people and groups often turn to nature “for wisdom, for strength, for maturation, for spiritual comradeship, and for lessons in devotion and humility,” creating thereby a spirituality or religious practice based upon “being-in-nature” (in Taylor 2001: 181).

Fly fishing is an example of such spirituality, a form of Earth engagement that takes place through a meditative, ritual practice. The sounds of the stream and the rhythmic casting facilitate the meditative experience of the fly

fisher. As Norman Maclean put it, fly Fishing “is an art that is performed on a four-count rhythm between ten and two o’clock” (Maclean 1967: 2–3). Maclean’s point is, in part, that like any other form of meditation, fly casting requires discipline and practice. “Fly fishing teaches patience and attentiveness in the most literal way imaginable: without both, you get skunked” (Duncan 2002: 302). Like other forms of religious and spiritual practice, there is an important material aspect to fly fishing – the “gear” matters. Flies, reels, waders, vests, and ideally, an old, worn oil-cloth raincoat affect the fly fisher sensually

– they become more than tools of the art. The sensuality of the experience, in a way, its earthiness, is found in the aroma wafting upward upon the opening of the storage tube to a bamboo cane rod, or in the packing and unpacking of the coat and clothes, as one’s memory recalls moments on the stream in past trips. These smells function

similarly to the use of incense in ritual and meditation: they focus the mind on the sacred.

Fly fishers often advise one another, especially novices, to seek out spiritual guides to lead them properly, even reverently, into the practice. Indeed, the best fly fishing guides are ritual specialists who are eagerly sought when learning the art of pilgrimaging to unknown waters. Fly fishers generally believe such guides hold secret knowledge of specific streams and their inhabitants. But beyond this, they are figures with whom they can identify, sharing sacred experiences, and reflecting on life. And this is not only of interest to the one who has sought out the guide. Once on the San Juan River in New Mexico, a guide told me how nice it is to guide someone who already knows the river and how to fish, for “this leaves room for contemplating and discussing life, philosophy, and religion.”

Such activity with guides and other practitioners fosters community in a way similar to most religions. Attending the fly fishing store and patronizing guide and other fishing-focused businesses provides concrete material support for the religious community, resembling the providing financial support congregants give to a local church or shrine. Local communities arise surrounding the practice, from hanging out at the local fly shop or bar to sharing information or stories of the day. The local fly-tying group is comparable to a Bible study, meeting regularly to sit around, tie flies, and discuss fishing and life’s deeper mysteries.

American author Tom McGuane writes, “If you fish, there is an implied responsibility to care for the environment” (Lyons 1998: 120). Like all religions, there are ethical implications and dimensions to fly fishing, and specific groups have been invented as ethical expressions of them. Trout Unlimited, for example, is one of the most effective conservation and education groups in North America. Their mission is to conserve, protect, and restore North America’s trout and salmon fisheries and their watersheds. As stated in their literature, Trout Unlimited accomplishes this mission on local, state and national levels with an extensive and dedicated volunteer network. Trout Unlimited’s national office, based just outside of Washington, D.C., and its regional offices employ professionals who testify before Congress, publish a quarterly magazine, intervene in federal legal proceedings, and work with the organization’s 125,000 volunteers in

500 chapters nationwide to keep them active and involved in conservation issues. Groups like Trout Unlimited seek to educate the wider public on conservation and environmental issues at least in part so that generations to come can continue to have the spiritual experiences and perceptions that accompany the practice of fly fishing.

It may be that I can see the religious dimensions of the practice of fly fishing because it has long been my own practice. Like Maclean, I was taught at a very young age the importance of patience, discipline, and respect that are necessary to be a successful fly fisher. My father had me stand in the long driveway beside our house to practice my cast before we could make the journey to a stream in New Mexico or Colorado. He would tell me to be patient and feel the cast, allowing the rod to be an extension of my arm and self. On journeys to various waters he would tell me stories from his

many years fly fishing, teaching me lessons on how to read the structure of a stretch of water and all its surroundings, how to approach rivers, and most importantly to fish with quiet calm, subtlety, and respect.

I was also taught, and have learned more deeply with each year of fishing, that it is not the catching of fish that is the chief objective of the practice. My cousin once remarked, for example, that he realized that he had reached a special place in his fly fishing practice when he could walk away from rising fish without feeling a desire or pressure to catch them. This seems to resemble the ideal of non-attachment associated with religions originating in Asia. What was important to him at that moment was simply to sit, watch, and lose himself in the sounds of the river, in watching the fish in their own belonging to it, sipping flies off of the surface of the water.

Fly fishing brings to many such Earth-engaged spirituality. I have often felt similarly, as the sounds of the stream and the rhythm of casting blend me into a reality so much greater than my own self. On one occasion on the Frying Pan River in Basalt, Colorado, I became so enraptured with the pursuit of a certain trout that I hardly noticed two elk who had moved into the stream not more than a few yards away. There was a moment in which we seemed to acknowledge each other's presence, neither of us spooking or running away. That day it was not the fish caught which made the day special, but the sudden realization, sharing a space on that stream with those magnificent elk, that I was a part in something more. In agreement with

McGuane, who stated "fly fishing is a road to nature based spirituality," these are among the spiritual meanings I and many others have found in the pursuit of the wonderful and mysterious trout. And like many others, these moments of engagement with nature lead me to conservation work, seeking to defend and improve the natural living habitat of all of the Earth's creatures (Lyons 1998: 12).

Samuel D. Snyder

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See also: Fishers; Mongolian Buddhism and Taimen Conservation; Mountaineering; Nile Perch; Surfing; Whales and Whaling.

Foreman, Dave

– See Earth First! and the Earth Liberation Front; Ferality; Radical Environmentalism.

Forum on Religion and Ecology

– See Religious Studies and Environmental Concern.

Fox, Matthew (1940–)

Matthew Fox is known for being the founder of the University of Creation Spirituality in Oakland, California and for authoring 24 books, including *The Coming of the Cosmic Christ*, *Original Blessing*, *Passion for Creation: The Earth-Honoring Spirituality of Meister Eckhart* and his most recent, *One River, Many Wells*. He is the founder and editor-in-chief of the magazine *Original Blessing* and hosts Techno Cosmic Masses: events intended to reinvent worship, which are structured like a Mass including techno music and multimedia. What he is perhaps most well known and notorious for, however, is having been expelled from the Dominican order. The reasons for this expulsion are the same reasons he is important when considering religion and nature.

Fox had been an ordained priest since 1967, but in 1991, as a result of extensive research by the Catholic Church, he was ordered to leave his California school or face dismissal from the Dominican order. The Vatican objected specifically to Fox's refusal to deny his belief in pantheism, his denial of original sin, for referring to God as "mother" and for promoting a feminist theology. There were additional scandals, one of which was caused by Starhawk's presence as a staff member at the University of Creation Spirituality. Fox has now found a home within the Episcopal Church.

Fox focuses on reinventing worship, art, human sexuality and most importantly embracing wilderness, both internal and external. He emphasizes the need for humanity to change its relationship to the Earth, or else risk losing it completely to pollution and environmental destruction. One of his most potent and fascinating ideas related to this idea is presented in *The Coming of the Cosmic Christ*. He suggests that we rethink and reacquaint ourselves with the concept of the Cosmic Christ and the crucifixion story of Jesus Christ in a way that is relevant to the global environmental crisis. What he suggests is a paradigm shift, which he defines as a new Paschal Ministry for the third millennium.

This paradigm shift can be described in one way as a shift from the quest for the historical Jesus to a quest for the Cosmic Christ. The historical Jesus is the individual whom we encounter in the Bible. Fox explains that Jesus was, among other things, a mystic. He specifically cites Jesus' *Abba* experience, or his nondualistic experience of God. This nondualism is exhibited in John 10:30, when Jesus states, "The Father and I are one." This is not a mysticism of the Fall-Redemption tradition, which favors mysticism of the sacraments. It is creation-centered mysticism, which is an act of reentering the mystery of the universe and human existence in it. Power is not elsewhere, outside ourselves, but is within us, just as it was within Jesus Christ the man.

In defining the Cosmic Christ, Fox makes the basic assumption that the Cosmic Christ is cosmic, preexistent wisdom. Among the many books of the Old Testament and New Testament that he says contain passages referring to the Cosmic Christ are Job, Baruch, and Proverbs, Philipians, Romans, Colossians and Ephesians. The Cosmic Christ is not an individual, anthropomorphic character, but rather an eternal, penetrating and changing energy that has the potential greatly to affect our world and our human lives. Most importantly, Fox states that the emergence of the Cosmic Christ will usher in a paradigm shift: a shift from the Enlightenment mentality, which denies mysticism and lacks a cosmology, to the new paradigm, which represents a return to mysticism, a reinvention of work, sacred sexuality and an immanent rather than transcendent creator.

Fox makes what the Catholic Church sees as a radical leap when he suggests that we see and understand Mother Earth as Jesus Christ crucified, as well as the “mother principle” being crucified. By mother principle, he means that nurturing and mystical part of ourselves that is intimately connected to the Earth. By proposing this, he writes that he is invoking the ancient Jewish, and Christian tradition of the Paschal Ministry, meaning, the resurrection and ascension of Christ, the salvation foreshadowed in the Old Testament and the sacraments. Fox suggests that in a Cosmic Christ context, the Paschal Ministry takes on new power, deeper meaning and moral passion. This occurs because the Paschal Ministry will be understood as Mother Earth conceived as Jesus Christ, crucified, resurrected and ascended. “It is the life, death and resurrection of Mother Earth” (Fox 1988: 149).

Fox’s vision is about collective not personal salvation. It occurs on an earthly, if not universal level. Fox believes that the Cosmic Christ will usher in a new era of self-expression and “the reinvention of the human.” What follows is an inevitable compassion for all creatures and the Earth itself.

Andrea A. Kresge

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See also: Berry, Thomas; Cathedral of St. John the Divine; Christianity (2) – Jesus; Christianity (7e) – Creation Spirituality; Gaian Mass.

Francis of Assisi (ca. 1181–1226)

Francis of Assisi through the centuries has been one of the Catholicism's most popular and inspirational saints. His embrace of a life of poverty, simplicity, and charity has inspired many both inside and outside the Roman Catholic Church. But he is perhaps best known for his exuberant stress on our kinship with animals and all of creation. Francis' life was chronicled by his followers in *The Little Flowers* and in biographies by Thomas of Celano and later by Bonaventure. These hagiographical accounts are replete with stories of Francis preaching to "my little sisters the birds," to fish, and to wild flowers of their need to praise God. In another famous story, Francis addresses a fierce wolf at Gubbio as "friar wolf" and miraculously persuades him to cease killing and to live in peace with his human and animal neighbors. Though these accounts mix myth and legend with biography, they remain the primary vehicle through which each generation has envisioned Francis and associated him with a vital sense of kinship with creation. Preaching was central to Francis' mission, and the image of Francis preaching even to nature underscores a sense of identification with all of creation. Likewise the stories of Francis' ability to speak to animals and to tame wild ones fit a common medieval hagiographical motif that sees the holiness of saints as allowing a brief recovery of the peaceableness and harmony between the species once enjoyed in Eden but lost in humanity's fall (see Sorrell 1988: 52–4).

Francis was born in Assisi, Italy, to a wealthy cloth merchant and his wife. Francis received some liberal arts schooling and as a young man fought in Assisi's war with Perugia. He was captured in battle and imprisoned for almost a year. He suffered a long illness and, on recovery, joined a military expedition to Apulia in the south. We are told that after a vision in a dream, he returned to Assisi and embarked soon thereafter on following the example of Jesus. After a dramatic break with his father, Francis committed himself to poverty, begging, and preaching. He gave away his (and many of his father's) possessions, withdrew from his family and friends, served lepers and the poor, and repaired a church. A growing band of companions joined Francis and the pope gave his official blessing to the new order. This small band of friars grew over the centuries into today's array of Franciscan orders.

In recent decades, growing environmental concern has prompted many to look to Francis' powerful sense of kinship with nature for inspiration. Pope John Paul II in 1979 proclaimed Francis to be the patron saint of ecology. Some have called Francis a pantheist, but that misses how deeply traditional his religious views were. His vision was primarily theocentric, not ecocentric. His core focus centered on Christ, giving praise to God, and love and service to humanity. He expressed his affection for, and

closeness to, animals and the rest of nature with rare exuberance, but he never wavered from the medieval church's teachings on the hierarchy of creation with humanity as its crown.

A number of influences may have helped Francis to stress the goodness of creation. His era saw a growing interest in the observation and artistic depiction of nature. He was deeply impressed by the ideal of chivalry and he loved a number of popular French troubadour songs and poems that praised both knightly virtue and the beauty of nature. He came to refer to his friars as "God's troubadours." He may well have heard stories of the lives of Irish saints which commonly depicted even animals as recognizing a saint's gentleness and authority. Francis' decision to become a wandering preacher and frequent hermit meant that he had close and sustained contact with nature and animals. He and his companions often lived in caves, hovels, and forest huts, and these stays likely deepened his identification with nature and its species.

Early and medieval Christianity had long emphasized the goodness of creation, but an equal emphasis on human superiority tended to undercut any emphasis on humanity's kinship with the rest of creation. Francis and a few other Christian nature mystics were distinctive in celebrating God's presence throughout the natural world and humanity's kinship with the animals and the rest of nature. Francis employed chivalric and familial terms of address to animals and natural elements to emphasize the intimacy of the communal bonds between humanity and the rest of creation. For example, in *The Canticle of Brother Sun*, (also known as *The Canticle of the Creatures*), Francis spoke of "Sir Brother Sun," "Sister Moon," "Brother Fire," and "Sister Mother Earth" (in Armstrong 1982: 38–9). Some interpret the *Canticle* as a call to humans to praise God for the goodness, beauty, and usefulness of creation, while others read it as an exhortation to all of nature to praise God for God's blessing upon it. In either reading we are left with a strong sense of our need to respect the entire community of creation (Sorrell 1988: 128).

The intimacy of our connections to the rest of creation is emphasized in a number of Francis' other writings. Francis' prayer, *The Praises to be Said at All the Hours*, is primarily a collection of diverse biblical praises, many from the Psalms. It exhorts both humans and all of nature to praise God. Another important prayer, *The Exhortation to the Praise of God*, was at least partly written by Francis and is a compilation of biblical passages attesting to our relatedness to the rest of creation. "Heaven and Earth, praise Him (cf. Ps. 68:35). All you rivers, praise Him (cf. Dan. 3:78). All you creatures, bless the Lord (cf. Ps. 102:22). All you birds of the heavens, praise the Lord (cf. Dan. 3:80; Ps. 148:10)" (in Armstrong 1982: 42–3).

What inspires is not so much Francis' corpus of writings, which is quite sparse, but the charm of the accounts and legends of his exuberant energy celebrating the whole of creation. Francis' writings have not had much of an impact on the development of mainstream Catholic theology or ethics, for he had no great *Summa Theologiae* to impress later generations of the learned, but his great text was his life, which has continued to inspire many across the ages. He lacked the education to invoke

Aristotelian or neo-Platonic metaphysical understandings of the natural cosmos, but he did have a literalist power in his direct appropriations of the Hebrew Scriptures, especially

Psalm 148, and the Gospels concerning specific birds, animals, fish, stars and planets. Francis was a medieval friar; not an ecologist. But it is not surprising that many today who are ecologically minded find in him a kindred spirit.

William French

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See also: Christianity (5) – Medieval Period; White, Lynn – Thesis of.

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– See Introduction to the Encyclopedia of Religion and Nature.

Freeport (West Papua, Indonesia)

The site of the richest gold and copper mine in the world, Freeport lies where the rugged southern slopes of the West Papuan Highlands approach the coastline. The removal of entire mountains has been extremely lucrative for both the American mining company Freeport McMoRan and the Indonesian Government, yet devastating to local inhabitants and their natural environment.

The mountains of the region are the source of intricate belief systems that link the Amungme and Nduga people to the natural world. For these peoples, each peak and valley, and all the forests and rivers, are repositories of the ancestors. Indeed, the ancestors shaped the spine of the central mountain range with their bones and their heroic endeavors created the rivers and gorges. They also released the first humans from the ground and grew the first food plants. The ancestors' spirits – the traveling female creators Situgimina and Ugatame, and Manu the creator snake, and others, such as the guardian spirit Dingiso, a tree-kangaroo – inhabit trees, rocks and pools. Though seldom seen, they are always there. The landscape created by the ancestors and all its valued elements must be maintained in order for life to continue. This is the responsibility of the people and the elders who are entrusted with the task of ensuring that the proper rituals are performed.

Even what is worn personally, by way of feathers, fur, bone and teeth, deliberately denotes connection to the ancestors and embodies experience of the land they created. No ceremony, moreover, is complete without the slaughter of pigs, their blood expressing the health of the land, their flesh imparting prosperity to all partaking of it.

The outside world came relatively late to the mountains with the arrival of Dutch Franciscan missionaries in the 1950s. Whereas they came barefoot with only a few essentials, starting educational and health facilities, American fundamentalist evangelists badly damaged local leadership structures and the possession of local knowledge during the next decade. Still worse was Indonesia's takeover of Irian Jaya (1963–1969), and American mining to remove mountains for gold, copper and other minerals at Grasberg near Timika (from 1967 onward).

The physical assault upon the mountain, the military assault upon its people and the undermining of their spiritual knowledge is a familiar story of devastation. And yet the cultural and religious lives of both the Amungme and Nduga have proven remarkably resilient and adaptive. Even those among them who work in mining towns continue to participate in initiation ceremonies, funerals, marriage exchanges, hunting, fighting, and trading expeditions, and thus take periodic refuge in village life. Independence

fighters, members of the OPM (Organisasi Papua Merdeka) who resist Indonesian control over West Papua, also frequent the forests above and around the mine, and join the local people in affirming the ancestors and the land itself as powerful protectors and weapons of defense against environmental despoliation. The OPM groups seem more comfortable in combining their ancient beliefs with helpful passages from the Bible and new rituals dedicated to bringing about West Papua's independence. Efforts at resistance against the mining, however, have been put down ruthlessly, with the use of Indonesian or American helicopters (the mining company paying protection money to the Indonesian government).

Mark Davis Alexandra Szalay

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See also: Penan Hunter-Gatherers (Borneo).

Freud, Sigmund (1856–1939)

Austrian physician and neurologist Sigmund Freud, as the founder of psychoanalysis, developed not only a general theory of psychology, but also both a therapy and a method of research. Freudian psychoanalysis seeks to maintain an individual's psychic equilibrium between the demands of the *id* (instinctual impulses and primitive needs), the *ego* (consciousness) and the *superego* (the conscience as largely shaped by unconscious understandings of communal moral standards). Freud argued that if the child's developmental stages are not satisfactorily completed, various pathologies emerge. These become manifest as neuroses or psychoses when and if the individual's defense mechanisms (rationalization, sublimation, projection, regression) become inadequate in the face of internal and/or external threats. If one's conscious tolerance cannot cope with the degree of excitation occurring, threatening elements remain unconscious, but are then liable to contribute to or exacerbate the potential for defense mechanism breakdown. Freud employed the term *eros* for one's life instincts toward self-preservation and reproduction. The psychic, emotional and sexual energies associated with instinctual biological drives are referred to as the *libido*. By contrast, the *thanatos* or death instinct encompasses an individual's impulses toward selfdestruction and death. This last is chiefly understood as a person's innate aggressiveness and destructiveness. On the animal level, aggression occurs in relation to needs of habitat, food and/or reproductive necessities. In humans, aggression ranges from anger in private disputes to mass dysfunction and social war.

Therapeutically, Freudian psychoanalysis employs the patient's use of free association as well as his or her emotional transference to the analyst. Because of an alleged circularity between Freudian practice and theory in which confirmation of the latter is suggested by the evidence produced by the former, the methodology is not widely accepted as rigorously or logically "scientific." Freud has nevertheless become an immense contributor toward the popular Western view of human nature.

Freud is also significant in articulating his "Civilization Thesis" that has since come to underlie all Western debate relating to the "role" of the natural world *vis-à-vis* humanity. His seminal works that establish the foundations of this discussion are *The Future of an Illusion* (1927) and *Civilization and Its Discontents* (1930, 1961). While religion for Freud becomes essentially a device employed by the immature individual who refuses to confront the nature of reality in sober fashion, Freud also presents nature as an entity that civilized humanity seeks to subdue, dominate and utilize for its own benefits. Civilization, as the replacement of individual power by community power, is founded upon renunciation of instinct. As such, it is a community superego.

Inasmuch as Freud's culture versus nature polarity posits that the super power of nature is a major source of human suffering, civilization is what sanctions whatever socially condoned activities and resources are employed for making the Earth useful. According to Freud, the first acts of civilization consist in the use of tools, the domestication of fire and the construction of dwellings. However, in the contemporary emergence of popular forms of spirituality, the contended conflict between nature and culture is the central issue that has come to be challenged. The current spectrum of nature religions denies Freud's two options, namely, either hiding from nature or subduing it. Nature becomes less and less simply a resource and something to be exploited as well as tamed. With growing awareness of industrial pollution and technological fallibility, the destruction of nature – or at least an ecologically balanced and sustainable Earth – is being increasingly recognized. It is this perception of the "loss of nature" and a planet capable of supporting a rich diversity of living forms including the human that constitutes the immediate focus behind the contemporary emergence of "nature religions" as distinct forms of spirituality. The development of a consciousness that embraces nature and religious culture as symbiotes rather than opponents takes its cue from reinterpreting Freud's "Civilization Thesis" that claims culture serves merely "to protect men against nature."

Michael York

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See also: Ecopsychology; Jung, Carl Gustav; Transpersonal Psychology.

Friends – Religious Society of (Quakers)

The Religious Society of Friends (Quakers) was established in the 1640s and currently has about 336,000 members in Europe, the Middle East, Africa, Asia, the West Pacific, and the Americas. As with many Western religious traditions, Quakers today express the pluralism reflective of our time with four divisions including Friends General Conference, Friends United Meeting, Conservative Friends, and Friends Evangelical International. These divisions span a range of belief from New Age through Christian conservatism. In this regard, Barbour and Frost (1988) maintain that the search for a tie that binds the Quakers is very difficult. In 1937 the Friends World Committee for Consultation was established to improve communication and understanding among Quakers of various persuasions, and it continues to function in this capacity.

The Quaker affinity with nature began with founder George Fox, who encouraged the study of “whatsoever things was civil and useful in nature.” In his 1680 Wheeler Street sermon, Fox preached that it is not God’s intention that humans use other creatures in a “lustful” manner, exhorting Quakers to “leave all creatures” as they found them. In 1693 Quaker William Penn, Governor of Penn’s Colony, later the U.S. State of Pennsylvania, encouraged Quakers to exercise “caution” in their “use of the world.”

John Woolman (1720–1772) has exercised substantial influence on the development of contemporary Quaker ecological and environmental thought, viewing the creation with awe and Earth’s resources as a gift from God. Woolman’s position appears to be rooted in the Quaker view that God created the world and remained in it (Cooper 1990: 28). During his 1760 visit to Nantucket Woolman reflected, “. . . the earth, the seas, the islands, bays, and rivers . . . were all the works of (a God) who is perfect in wisdom and goodness” (in Moulton 1989: 114). Similar to Penn, Woolman cautioned against “impoverishing” Earth’s resources because of the impacts such acts might have on future generations. During his visit to England in 1772, Woolman noted the disparity between rich and poor in England, the repressive ways in which the poor were treated and, in the same context, objected to the way stagecoach horses were often driven to their deaths or overworked until they grew blind. Woolman’s compassion was inclusive. In several places in his journals he spoke of a “universal love” for his fellow creatures (in Moulton 1989: 29). In a unique reflection on environmental conditions, Woolman

wondered if the polluted air of the cities of his time might “hinder the pure operation of the Holy Spirit” (in Moulton 1989: 190).

The focus of contemporary Quakers is on the decline of nature due to human activities. As with other denominations and sects, Quakers are addressing questions about the nature of environmental crisis, the fitness of humanity to occupy Earth and the requirement to live in harmony with other life. Much of this is being done within the context of what Quakers refer to as living in “right relations,” a term referring to an equitable sharing of resources through simple living and sustainability.

Among the themes that reveal themselves in current Quaker thinking on environmental and ecological issues, and nature in general, are the assumptions of the goodness of creation and support for the unity, interrelatedness, and community of humanity with nature. These positions are generated from the belief, on the part of those referred to as “liberal” Quakers, that the truth and meaning of a God-centered spiritual universe is available through continuing revelation occurring to individuals or to those gathered in corporate worship.

Those Quakers with a developed environmental awareness often call for a revision of outmoded concepts of God. They view the universe as an interconnected community of being in which the inward dwelling of God’s spirit provides the unity and continuity of the universe and where the spiritual and the material laws governing the universe are closely related.

Quakers closely link belief and action and, although somewhat slow to start, environmental activity in the Monthly and Yearly Meetings began increasing dramatically in the 1990s. Environmental issues treated in the Meetings include population growth and control, environmental witness, living in unity with nature, spirituality, environmental education, finances and investments, global warming, cosmology, sustainability, military impacts, consumption patterns, native peoples, lifestyles, legislation, and environmental justice, among others, in order to develop a new vision of a community of living things.

Quaker organizations have long expressed their concerns or positions about issues by proclaiming or publishing comments called “Minutes,” “Queries,” or “Advices.” Over the past several decades, Quakers have also expressed their concerns or positions on environmental issues in these ways.

In 1987 the Friends Committee on Unity with Nature (FCUN) was founded to integrate Quaker positions on simplicity, peace, and equality with the environment. FCUN is a primary supporter of La Bella Farm in Costa Rica, a sustainable agricultural project and sponsor of Quaker Eco-Witness, a project to promote government and corporate policies on biological integrity and sustainable and ecologically integrated human communities.

In 2000, the Quaker Environmental Action Network was formed as a committee of the Canadian Yearly Meeting. Other Yearly Meetings host environmental groups including, but not limited to, the Philadelphia Yearly Meeting’s Environmental Working Group and the Southern Appalachian Yearly Meeting’s Ecological Concerns Network.

Until 2001, Pacific Yearly Meeting, among other environmental activities, also sponsored the publication *Earthlight*, currently published by an independent non-profit organization acknowledging links to its Quaker heritage. Another Quaker organization, Right Sharing of World Resources, based on a model of self-help and sustainability, funds a number of projects, primarily in less-developed countries. The primary function of most of these groups is to raise environmental awareness among Quakers, couple environmental awareness to Quaker religious faith and practice, and expand Quaker environmental thinking into the general population.

Tom Baugh

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See also: Quaker Writers in Tasmania (Australia).

Friends of the Earth

– See Brower, David; A Christian Friend of the Earth; Salvadoran Reflection on Religion, Rights, and Nature; Sierra Club.

Friluftsliv

Friluftsliv, a Norwegian word, is pronounced “FreeLoofs-Leaf,” and can be literally translated as “open air life,” although it is usually translated as “outdoor recreation.” However, for some of the most vocal pioneers of the deep ecology movement, it has been taken up as something much more: a near-religious call for a spiritual inhabitation of the natural world as we enjoy our time out in it – more than recreation, it is a poetic and philosophic kind of re-creation of our original natural home.

The word first appears in print in Henrik Ibsen’s epic poem *Paa Vidderne* (1859): “In the lonely seter-corner,

/ My abundant catch I take. / There’s a hearth, and a table,

/ And *friluftsliv* for my thoughts” (Ibsen 1957: 62). The great explorer and humanitarian Fritjof Nansen extolled its virtues, particularly the fact that it is best practiced alone, where the soul can personally confront the grandeur of nature without human distraction. Turning outdoor activity into socializing or sport is counter to the spirit of *friluftsliv*, which has much more in common with the deep solitude of the Romantic era, where poets and painters discovered the sublime through an individual encounter with the magnificence of nature.

In recent years the mountaineering educator Nils Faarlund has done the most to uphold the soulful and philosophical side of *friluftsliv* in his native land, at the same time as various bureaucratic and political forces were turning it into a simple sporting activity that could be easily managed. Faarlund retorted with this manifesto of what it is not:

It is not sport, in the sense of physical activity in a selfish, competitive way. *It is not tourism*, in the sense of the business and practice of rapid transit through different places. *It is not a scientific excursion*, collecting specimens of objective interest. *It is not a “trade-show” style of Himalayan mountaineering*, using nature as a sparring partner. *It is not outdoor activity* in the sense of a safety valve for a fundamentally antinatural aggressive lifestyle (1992: 164).

What, then, is it? “*An unselfish I-Thou relationship* that tries to come away from the anthropocentrism of a nature-dissonant society,” (1992: 164): Faarlund concludes. Inherently, *friluftsliv*, as Faarlund, Ibsen, and Nansen want to define it, is a fundamentally spiritual belief that simply getting out into nature, enjoying the hike, the climb, the ski, the swim, is an essentially personal religious experience that gives the greatest possible meaning to human life.

This remains a minority definition of the term within Norway, but it is this definition that has gained some support and adherents in the rest of the world, either as part of

the deep ecology movement, as taught by Arne Naess, John Seed, Bill Devall, George Sessions, and others, or in some of the literature in outdoor recreation studies that recognizes that a walk in the woods can be a very deep experience indeed.

David Rothenberg

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See also: Deep Ecology; Ecosophy T; Mountaineering; Muir, John; Naess, Arne; Rock Climbing; Surfing.

Fruitlands

A. Bronson Alcott and Charles Lane, influenced by the Transcendentalist idealism then current in New England, founded the Fruitlands community in 1843 at Harvard, Massachusetts. Fruitlands ranks as one of the very first communes to be devoted to sustainable, low-impact living. Industrialization was just beginning to enter American life when Fruitlands was launched, but the community's founders could see that alienation and exploitation of workers would characterize the way of life the factories portended and sought to create a better model for living.

Fruitlands, unusually in its time, refused all exploitation of animals. The residents did not eat meat or dairy products and did not use animals or their manure in farming. They also espoused a variety of lifestyle practices that they believed to be nonexploitive and sustainable. They declined to use not only alcoholic beverages, but also coffee and tea. They bathed in cold water. They generally woke and slept with the sun, minimizing their use of candles and lamps. They avoided the use of money, engagement in business, and involvement with politics and religion. They wore only linen clothing because cotton was produced with slave labor.

The community, which received its name from its founders' plan to grow fruit as their main food, was the object of some derision, given the eccentricity of its members (one, Samuel Bower, was a nudist; another, Joseph Palmer, was once jailed for refusing to shave his beard). It lasted less than a year and was dissolved later in 1843.

Timothy Miller

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See also: Back to the Land Movements; Brook Farm; Transcendentalism.

Fuller, Buckminster (1895–1983)

Buckminster Fuller is best known as the designer of the geodesic dome. The world's first geodesic dome was unveiled to the public at the 1965 International Trade Fair in the city of Kabul, capital of Afghanistan. It took untrained workmen no more than two days to complete the structure, which served as the American Pavilion for the fair. Its "skeleton" was composed of interlocking aluminum triangles, and its "skin" was nylon cloth stretched over the skeletal frame. The building was lightweight and easily assembled; moreover, the dome's component parts had arrived by air, flown in on a single airplane.

Since then, the principals of the geodesic dome have been used in the construction of many buildings worldwide. The distinctive shape of Fuller's dome even inspired the naming of a newly discovered carbon molecule – buckminsterfullerite. This is a large carbon molecule (C₆₀) whose close physical resemblance to a geodesic dome provides an appropriate illustration of Buckminster Fuller's belief in the fundamental interconnectedness of the universe, on a macro and micro scale.

Richard Buckminster Fuller, Jr. was born 12 July 1895 into a respectable Massachusetts family who traced their lineage back to the Puritan settlers. The Fuller men were ministers, war heroes and state representatives. The Fuller women counted among their number Buckminster's great-aunt Margaret Fuller, a leader in the Transcendentalist movement.

Extremely far-sighted from birth, "Bucky" Fuller could see few details near to hand, though he could perceive larger shapes in the distance. In a sense, he was "blind," until the age of four, when he received his first pair of corrective lenses. In adulthood he always wore a distinctive pair of black-rimmed glasses.

Buckminster Fuller credited his early visual impairment for his unique perspective on the world, namely, a personal philosophy of attempting to grasp the whole of an idea before taking it apart to analyze the component parts. In later life he traveled the world speaking to university audiences everywhere, warning against overspecialization and urging consideration of the "ecology of man." Fuller called his work "comprehensive anticipatory design science" and told people his goal was to employ all the power of science to enable humankind to achieve its highest potential on Earth, simultaneously preserving, utilizing and renewing Earth's resources.

Fuller briefly attended Harvard, but he was unable to conform to the discipline of higher education. Formal education on the whole, he felt, was a waste of time. He looked forward to a day when children would educate themselves via television, without the repressive influence of a set curriculum.

Buckminster Fuller's inventive genius was apparent from an early age. In kindergarten he was asked to build a house of toothpicks and peas. Five-year-old Fuller constructed a stable lattice of four-sided triangles (tetrahedrons) alternating with eight-sided figures (octahedrons). Many years later the adult Fuller patented this design under the name "octet truss," and argued that the tetrahedron was the simplest three-dimensional shape possible, and the basis of all other material systems. He called his octet truss the "Coordinate System of Nature."

Among other childhood inventions was an oar for Fuller's rowboat, based on what he knew of jellyfish locomotion, which required less strength to use and allowed him to face forward and see clearly where he was going. Throughout Buckminster Fuller's adult career, he continued to use the principles of design he observed in nature to make technology more efficient.

A publicist promoting Fuller's exhibitions coined the word "Dymaxion" using a blend of the words "dynamism" and "maximum" to mean getting the most use from all materials at hand. Fuller liked the term, and eventually copyrighted it himself. When he designed his portable house, entirely self-contained, with no wasted space, the bathroom using a fraction of the usual amount of water, he named his creation the Dymaxion house. Similarly his Dymaxion car was streamlined, fuel efficient, and extremely maneuverable.

The map of the Earth he designed, called the "Dymaxion Airocean World," minimized the distortion so common in most flat maps, and enabled ocean navigators to plot their courses more accurately. Buckminster Fuller coined the phrase "Spaceship Earth" to express his sense of the planet as a closed system moving through space.

Buckminster Fuller criticized the scientists of his day for overspecializing in narrow fields of study. He felt that studying details without first comprehending the whole picture led to widespread waste of natural materials, and contributed to a mistaken belief that resources were scarce. Fear of want, not lack of resources, was the source of war, cruelty and conflict. He further argued that there are enough resources on this planet to support all the peoples of the world in comfort, without the need for constant competition, if we would only use science and technology wisely.

Fuller recommended the study of synergetics as an alternative to the traditional disciplines of science. He used the word "synergy" to mean that all events are interrelated, such that the whole is greater than the sum of its parts. Synergy encompasses synchronicity, which is easily observable in the ordinary day-to-day world, when suddenly unconnected events in our lives come together and are revealed, suddenly and unexpectedly, to be part of a larger pattern.

Synergetics is therefore a "comprehensive design science" which first attempts to identify the larger pattern of the cosmos, then separates out specific instances of this pattern, turning them to human use. Fuller strongly felt that humans cannot afford any longer to focus only on individual portions of their immediate environment, while ignoring the effects of their actions on the larger system.

In Buckminster Fuller's worldview, God is synergy. God is simultaneously everything that was, is, and ever will be. The energy of the eternal indestructible universe is constant, and what we perceive as change is in actuality the interaction of two macro forces, one integrative (gravity or love) and the other disintegrative (radiation). The stuff of the universe is constantly coming apart and being remade into new form.

Fuller said that "belief" is the opposite of knowledge. Belief holds an untested, illegitimate claim to reality. Buckminster Fuller claimed to "believe" nothing and to "know" only what he could prove to his own satisfaction. He "proved" God's existence through his understanding of pattern. To Fuller's mind it was obvious that pattern could not exist without reason.

He saw patterns in beehives and waves, molecular structures and star systems. He said that all matter in the universe consisted only of patterns of energy that had temporarily assumed a given form. How they interact with other patterns of energy (such as how light can pass through a seemingly "solid" pane of glass, whereas your hand cannot) can vary, but the fundamental material of creation does not. Our ordinary concepts of "solidness" and "separateness" are therefore mistaken notions, perpetuated by our imperfect sensory equipment.

All things in the universe are connected in some way as part of a larger pattern. Patterns imply design and design implies the existence of a designer, and therefore the reality of God can be irrefutably proven.

If the simple existence of an ordered, patterned, universe proves God exists, then what sort of god was Fuller talking about? Evidently, a metaphysical, omnipotent, omnipresent god who heard prayers.

From 1927 to the end of his life, every night before falling asleep, Buckminster Fuller meditated. He called this meditation, "Ever Rethinking the Lord's Prayer" and he published one version of it as a poem in *Critical Path* (1981). He said that humanity can glimpse fragments of the totality of creation in those fleeting moments between waking and sleeping, between consciousness and unconsciousness. Just as in ancient times, God exists on the borders of the unknown.

Fuller felt that if he were doing what he termed the "Great Intellectual Integrity" (a concept that embraced both God and the universe) intended, then life would take care of all his needs. To all appearances, it did, for remarkable coincidences seemed to follow Buckminster Fuller throughout his life, and he took all of it as further proof of the existence of a universal intellect.

As a field of study, Fuller's synergetics holds intriguing possibilities and may be as lasting a legacy as the octet truss and the geodesic dome. Buckminster Fuller saw interrelations in fields previously assumed to be unrelated. He refused to be bound by any one single discipline, and he can be compared to the original thinkers of ancient Greece, for whom philosophy meant only the search for knowledge, whether it is mathematical, scientific or religious. He has also been called the first ecologist and the first eco-theologist – although, given his rarified notions of a cosmic "greater intellectual integrity," one might hesitate to label Buckminster Fuller a *theologist*.

Richard Buckminster Fuller, Jr. died 1 July 1983, having written 22 books, published more than 60 articles, held 25 patents, and been awarded 48 honorary degrees and the Medal of Freedom from the United States government.

Meghan Dunn

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See also: Architecture; Fisk, Pliny.

G

Gaia

Gaia (“Earth”) is the name of a Greek goddess also called Ge, from whose name words like “geology” and “geography” are derived. The ninth-century B.C.E. Homeric Hymn calls Gaia “mother of all, eldest of all beings,” while the *Theogony* of eighth-century B.C.E. Greek poet Hesiod describes the simultaneous birth of Eros (“love . . . breaks the limbs’ strength”) and “broad-breasted” Gaia, “immovable foundation of all things forever.” Gaia immediately began to reproduce, “without any sweet act of love,” her children, including the mountains and seas. Her most-beloved parthenogenetic child was Uranus, the sky, with whom she mated to produce Oceanus (ocean), Themis (justice), Mnemosyne (memory), and the other divine beings called the Titans.

Other classical writers offer creation myths in which Earth is not the primary actor. Pliny describes a primordial goddess, Eurynome, who whirled into existence a wind from which she created the serpent Opion, with whom she produced an egg from which the world hatched. Orphic literature calls the primordial mother Nyx (“night”), consort of the wind. But the myth of Gaia was favored by authors including Homer, Euripides, and Pindar. Such frequent literary use does not prove that the Greeks gave priority to the Earth-goddess as the universal creative matrix; there is little known of Greek rituals to Gaia, who is presumed by some to be a pre-Hellenic divinity barely absorbed into the later pantheons.

Contemporary awareness of Gaia dates to 1969, when physician and inventor James Lovelock, researching with Dian Hitchcock ways of determining from afar the probability of life on Mars, argued that the red planet’s atmospheric equilibrium – its elements rarely changing in proportion to each other – showed it unlikely to host life, while Earth’s atmospheric signature is disequilibrium. When Lovelock expanded this observation into a vision of the Earth as a self-regulating system, his neighbor and friend, Nobel prize-winning novelist William Golding, named the hypothesis “Gaia.” Prominent biochemist Lynn Margulis brought her knowledge to bear on the emergent theory and is now, with Lovelock, generally recognized as its co-founder. The hypothesis has inspired many contemporary theologians and theologists, its founders remaining aloof from, although not publicly disapproving of, such religious use of their ideas.

The non-mechanical vision of the Earth had been previously suggested by the Scottish founder of geology,

James Hutton, in the eighteenth century, and again by nineteenth-century Ukrainian scientist Vladimir Vernadsky. Like those forebears, Lovelock and Margulis argued that the Earth is understood better as a living being than as a machine. Rock, sea, cloud, tree, animal are, they argued, in continual and complex relation, with each affecting

and subtly altering the others. Thus the exchange of planetary atmospheric gasses can be compared to an individual's breath, the water system to the circulation of blood, the ozone layer to the skin. Biota, atmosphere, ocean, and soil interact through feedback loops to maintain conditions conducive to life, a process known as homeostasis.

Both "living Earth" and "great machine" are metaphors that can be, and have been, understood literally. Lovelock and Margulis's use of the ancient goddess' name drew both fame and notoriety: general scientific scorn as well as an enthusiastic (although sometimes misinformed) embrace by nature mystics and citizens concerned about ecological issues. The controversial hypothesis – often stripped of the name of the goddess to become Earth System Science or Geophysiology – has gained increasing respect among some scientists but is derided by others as lacking sufficient scientific rigor.

While scientists debated, spiritual seekers embraced Gaia, often arguing that it descends from a primal religion. Paleolithic and other early human artifacts – especially the tiny but robust figurines called "Venuses" – are described as expressions of early worship of Earth's fecundity. The poetic language of Native American spiritual leaders like Claude Kuwanijuma (Hopi), who said that "The Earth remembers; the stones remember," similarly support contentions that tribal people sustain a connection or "participation mystique" (the term is from French anthropologist Levy-Bruhl) with the Earth. The sense of being part of a universal unity is traditionally associated with religious mysticism, which Evelyn Underhill and William James both describe as an experience of timelessness and a lack of boundary between self and world.

That Lovelock chose the name of a goddess for his living Earth derives from a consistent Western bias toward seeing the Earth as feminine. Under the influence of Greek Orphism, Persian Manicheism and other dualistic sects, "Earth" was set in opposition to "heaven." Other oppositions followed: evil/good, flesh/spirit, dark/light, moon/sun, with the former typically associated with the Earth and the female, the latter with the heavens and the male. The vision of the Earth as feminine attached itself to essentialist visions of "femininity," so that the Earth was often transformed into a maternal, nurturing being. Some theorists, such as Rosemary Radford Ruether, Carolyn Merchant, and Shirley Nicholson, have turned this dualism on its head, arguing for an ecofeminist view of nature that claims traditionally feminine values (relationship, cooperation) as more natural than those traditionally accepted as masculine (domination, individualism). Rather than domination of the Earth by humanity, Gaian ecofeminists call for a modest recognition of humanity's place within a living Earth system.

The widespread public acceptance of the Gaia hypothesis – even while scientists argued over its merits – led to controversy in established religions, for acceptance of Gaia implies a pantheism or polytheism unacceptable to believers in established monotheisms. Yet some Christian thinkers, notably the Catholic monk Thomas Berry, see no opposition between honoring the Earth and worshipping a transcendent divinity, although such thinkers typically enforce the traditional distinction between "creator" and "creation." Non-theistic Buddhism has had an easier time with the Gaian vision,

with the conception of *sangha* (community) easily enlarged to include the community of earthly life and that of *dharma* (duty) embracing ecological responsibility.

Less orthodox religious thinkers have eagerly explored the philosophical possibilities of the Gaia hypothesis; most prominent has been William Irvin Thompson of the Lindisfarne Association, who has articulated a Gaian politics and economics. Many neo-pagan groups in the

U.S. and European countries employ Gaian vocabulary, including the Unitarian-Universalist “Gaian Community” of Kansas and the “Gaia House” meditation center in rural Devon, England. Some neo-pagans specifically employ the name of the Greek goddess in their ceremonies, while others, especially the ReClaiming Collective founded by Starhawk and the ReFormed Congregation of the Goddess established by Jade River, make ecological awareness a primary part of their worldview. Finally, a general interest, Pagan, ecological magazine bears the name PanGaia and declares itself dedicated to “an Earth-wise spirituality.”

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See also: Berry, Thomas; Environmental Ethics; Epic of Evolution; Holism; Gaia Foundation and Earth Community Network; Gaian Pilgrimage; Lovelock, James; Merchant, Carolyn; Reclaiming; Ruether, Rosemary Radford; Starhawk; Wicca.

Gaia Foundation and Earth Community Network

The Gaia Foundation (henceforth Gaia), a small international non-governmental organization based in London, is committed to the protection of cultural and biological diversity, ecological justice and Earth democracy. Gaia was established in 1984 by environmental and social innovators, mainly from Southern Hemisphere countries including José Lutzenberger (Brazil), Wangari Mathaai (Kenya) and Vandana Shiva (India), known as Gaia Associates. Their common vision is for a holistic approach to human development, with respect for cultural and biological diversity and the primacy of nature. Gaia, Earth Mother Goddess, is also the name chosen by James Lovelock for the hypothesis that the Earth operates as a living organism. This convergence of mythological and scientific thought is the basis on which indigenous knowledge systems are founded, and one of the underpinning messages of the Gaia Foundation (Gaia). Gaia was privileged to begin its work in Amazonia through José Lutzenberger and Martin von Hilderbrand (Colombia) where it was initiated into the indigenous world of Earth-centered cosmologies, still intact. Common to all these cosmologies is the recognition that the Earth is part of a bigger universe, all of which is animated by “thought,” consciousness, and spiritual force. Each element of the universe has guardian spirits with whom the shaman learns to communicate. Before any activity takes place, such as hunting, fishing, collecting food or medicine, the shaman asks permission from the guardian spirit of the species or the area to ensure the timing is appropriate. One of the fundamental principles which govern relationships within the human community and with the wider Earth Community is reciprocity. This is the basis of all interactions in the universe, exchange and reciprocity.

This experience gave Gaia’s founders an appreciation of how the modern human can nurture a sacred relationship with the Earth, where everything in the universe is understood to be imbued with the same spiritual energy, manifesting in different forms and levels of consciousness. While Gaia’s work takes on many forms, the search is always for ways of stimulating a reverence for the Earth as a living being of which we are part.

Gaia’s colleagues share the belief that industrial society has forgotten that we are an integral part of the wider community of life that has flourished on Earth. Our actions are based on the misperception that we are separate from and superior to the natural world. Consequently the way that industrial society functions is proving to be

unsustainable and deeply damaging to the human spirit, other species, and the Earth herself.

There is a need for radical change in our worldview, behavior and understanding of the human role in the world. We need to recognize that we are members of the Earth Community: a spectacularly beautiful and intimately interrelated community of plants, animals, atmosphere, water, earth and energy. Each member is an expression of the ceaselessly creative whole that is the universe, and each has its unique part to play in the ongoing evolution of the Community.

As Einstein said, we cannot solve a problem at the same level at which it has been created. More efficient technology, recycling and reusing will not change the underlying cause of the problem: the crisis in the human–Earth relationship. We are an inextricable part of the wider Earth Community of species and elements, and if we harm any part of the whole we diminish the viability of the whole, and thereby ourselves.

The challenge facing our species as we move into the new millennium is to carry out the transition from a period of human devastation of the Earth to a period when humans are present to the planet in a mutually enhancing manner.

Toward this end, Gaia Associates met in 2003 to explore innovative ways of dealing with our escalating crisis in human consciousness. They asked themselves: What is it that will trigger enough of us to change our behavior to tip the balance away from self destruction? They concluded that the source of the problem is not that we need more information, but that we need to become conscious of the awesome evolutionary process of the Earth in which we are participating. The challenge is how to entice ourselves away from the mesmerizing industrial promises of instant gratification, and expose ourselves to experiences which transform our understanding of our role as humans in the wider Earth Community, such that our behavior changes.

It was out of this process that the “Earth Community Network” was founded – to provide individuals and communities with an experiential learning process in Earth Citizenship, and to promote Earth-centered systems of governance at all levels of society. The main sources of inspiration are nature (the primary text) and those cultural traditions that reflect equity and respect for the whole Earth Community. This is based on the understanding that for most of human history, our species evolved cultural systems that were highly adapted to their ecosystems through generations of accumulated knowledge, founded on observation and spiritual dialogue with the Earth Community over the millennia. During the last century, widespread documentation of these knowledge systems became available. Comparative analysis shows common archetypal patterns which provide us with the possibility of developing a unifying story. The Earth Community Network aims to explore this possibility together with Lovelock’s Gaia Theory and the Universe Story of Thomas Berry and Brian Swimme.

Human transformation to a viable mode of being will require imagination and willingness to explore the unknown, so that fresh thinking can emerge.

Learning is not simply a logical conceptual process. We learn through all our senses, through experience and fullhearted engagement. Real learning is a transformation pro-

cess. The learning centers in this network have evolved through decades of work with local communities from diverse cultural livelihood systems, mainly in Africa, Asia and South America. Against the ever-growing tide of industrial globalization, the challenge has been to enhance those governance systems that embody intergenerational equity, restorative justice, exchange and reciprocity with the community of life. These have been learned through observation of the Earth's laws, as basic principles by which the community and its relationship with the Earth is regulated. They therefore provide the foundation from which to develop a global governance system that coheres with the living Earth system, and can guide the industrial human back to Earth.

At the founding meeting of the Earth Community Network in Gaia House, London, May 2003, Thomas Berry spoke as a visionary for the Earth:

In the Twentieth Century the glory of the human has become the desolation of the Earth. The desolation of the Earth is becoming the destiny of the human. All human institutions, professions, programs and activities must now be judged primarily by the extent to which they inhibit, ignore or foster a mutually enhancing Earth-human relationship.

In these words he reminded us that sustaining life for future generations requires a more complex understanding of the dimensions that need to be nurtured by the life process, as he pointed out that the universe provides beauty for the soul, wonder for the imagination, and intimacy for the emotions. It is simply a matter of awakening.

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See also: Berry, Thomas; Epic of Evolution; Gaia; Kenya Greenbelt Movement; Lovelock, James; Shiva, Vandana; Swimme, Brian.

Gaian Mass

In 1981, the Cathedral of St. John the Divine in New York City, the mother church of the Episcopal Diocese of New York, commissioned musician Paul Winter's "Missa Gaia" or "Earth Mass," an ecumenical liturgical composition aimed at expanding the traditional Christian celebration of the death and resurrection of Christ into a broader, consciously Earth-referent context. The Mass, recorded both in the institutional space of the Cathedral and in the wild space of the Grand Canyon, harmonizes human and non-human elements in a way that non-verbally communicates the message of a unified "whole Earth community." Drawing upon the voices of human chorus and sounds from humanmade instruments in conjunction with the "songs" of whales, wolves, and wind, the Mass embodies a theology of the senses that opens the way for participants to experience an intimate connection to the life community on a sensory, non-theoretical level.

The Mass itself has been performed each October since 1985 at the Cathedral of St. John the Divine on the Feast Day of St. Francis of Assisi (the patron saint of animals and, more recently, of ecology). An animal blessing is held in conjunction with the Mass, in which various beings from elephants and llamas to dogs and cats, even to fish and blue-green algae, process with humans down the aisle of the Cathedral to receive the Bishop's blessing. Over the course of two decades, the Mass has become a staple of "green worship," a common liturgy shared among humans of diverse religious backgrounds and in solidarity with other species. Winter's *Missa Gaia* has also come to stand for a kind of ecospiritual "interspecies ecumenism" that is intended, ideally, to be translated from the worship space into practical "on the ground" action on behalf of the life community.

Winter has structured *Missa Gaia* explicitly as a "mass" and in doing so, he makes use of traditional, recognizable forms of liturgical music, such as a canticle, the Kyrie, the sanctus and the benedictus. The content of these traditional forms, though, has been "greened" to reflect the embrace of an ecological and cosmic consciousness. The canticle, for instance, takes the form of St. Francis's "Canticle of Brother Sun." There is also a "Sun Psalm" and other sections of the Mass that bear titles such as "Return to Gaia" and "For the Beauty of the Earth." The Mass' Earth anthem, "The Blue Green Hills of Earth," takes the conventional form of "anthem," but Winter infuses that form with "greener" content to emphasize planetary allegiance. This flexibility of form and content in composition not surprisingly translates into a flexibility of worship that includes liturgical dance and other modes of movement and gesture that enable the participants to play an active role in co-creating the ritual. There is also a flexibility of

symbol, as evidenced by Gaian Mass celebrations, in which a 28-foot “world tree” has been pulled down the aisle of the nave, as a man stationed inside the tree beats a drum that has been built into its trunk. In other Mass celebrations, a gigantic planet Earth hangs above the transept and functions as the celebration’s central sacred symbol.

The first performance of the Gaian Mass initially met with marked criticism from various institutional sources within the Christian community in the U.S. and Canada. This criticism is indicative of ongoing clashes in a number of religious communities between those who see the “greening” of religious practice as a force for spiritual and institutional regeneration and those who deem “greening” movements to be “heresy” and expressions of a dangerous “paganism.” The late New York Roman Catholic Archbishop John Cardinal O’Connor castigated the Episcopal Diocese for promoting “biocentricity” through the Gaian Mass and for turning what are intended to be “celebrations of mankind” into celebrations of “snails and whales” (in Naar 1993: 24). Conservative clergy within the Episcopal Church were also rattled by the introduction of the Gaian Mass. A vocal clergy member from Pennsylvania chided the Cathedral of St. John the Divine for commissioning the Mass and quickly dismissed it as “a New Age gimmick whose novelty would soon wear thin” (in Naar 1993: 24). However, over time, it is telling that the same clergy person who initially dismissed the Mass eventually came not only to support its celebration but to refer to Reverend James Parks Morton, the former Cathedral Dean who commissioned the mass, as “a pioneer with the courage to challenge orthodoxy that was outdated” (in Naar 1993: 24). This shift in perspective highlights the fascinating negotiation process between tradition and change, in which clerical perspectives on the Gaian Mass have morphed over the years from characterizing the celebration as “New Age apostasy” to embracing it as “innovative liturgical renewal.”

The mainstreaming of the Gaian Mass both at the Cathedral of St. John the Divine and within the Episcopal Church reflects a climate of increased public acceptance of the growing partnership between religious organizations and the environment. Year after year, sold-out performances accomplish the formidable task of actually filling what is, incidentally, the largest gothic cathedral in the world, by packing 3000 to 4000 participants into each celebration. At a time when sociologists of religion cite grim statistics on the decline of mainline Christian congregations in the U.S. that suffer from anemic church attendance, the Gaian Mass’s ecological message and bodyactive worship seem to have struck a chord with those who resonate with the comfort and beauty of traditional liturgical forms infused with ecospiritual content.

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See also: Cathedral of St. John the Divine; Christianity (6c4) – Anglicanism; Christianity (7e) – Creation Spirituality; Francis of Assisi; Gaia; Music (various); Winter, Paul.

Gaian Pilgrimage

A great pleasure I share with my wife, Sandy, is walking in the countryside enjoying the natural world. We are singularly fortunate to live in the southwest region of England where we can walk on the 630-mile path that winds its fractal way from the seaport town of Poole in Dorset. It goes west along the channel coast to Lands End and travels back east over the rugged cliffs of Cornwall and Devon to end where Exmoor meets the Bristol channel at Minehead in Somerset. This path is more than our longest trail, it is a contemporary pilgrim's way.

A pilgrimage implies something more than just a walk through the countryside. It suggests a goal, or a purpose, something spiritual. This trail, whatever the weather or the season, always has the sea in view with its ever-changing color and motion. Such a view never ceases to uplift and enliven; but more than this, in the course of its undulations the path climbs a total of 91,000 feet, over three times the height of Everest. The effort sets free those natural opiates, the endorphins, which course through the blood and enhance the senses, so that we become aware of our part in the great system of the Earth, and then the trail is the pilgrim's way to Gaia.

The coast path proceeds uninterrupted for its whole length and it travels over rocks of widely different ages, from the fairly recent at Poole to the 300-million-year-old Devonian, where else but in Devon. To walk the path is to see displayed the fossil history of evolving life on its evolving planet, as in a live museum. At a time not accurately known, but over 600 million years ago, the Earth woke from its long three billion year sleep during which it was a habitat for microorganisms alone. The awakening brought forth the lively world we know of plants and animals, and our journey takes us back through more than half of the history of life forms such as animals and trees. But there is more to the coast path than a display of geology. What makes it so suitable as a pilgrim's way is that the shore and coastal strip between sea and land is the only remaining natural part of England where the plants and animals are primeval. All other parts of this densely crowded island people use for their own needs, as they do most of the inhabited Earth, so that everywhere it reflects their history, not the Earth's. Not only this, but the sea is also forever cutting away the land so that on the fresh faces of the cliffs we can see the timeline of the Earth's history revealed in the rocks and the fossils they bear. There is no better place to get to know our living planet, Gaia, and begin to glimpse our part in it.

The scientific Gaia theory views the Earth as a selfregulating system comprising all life, the air, the ocean and the rocks, that has always kept itself habitable. The theory has been much misunderstood by scientists and some have been unwise enough

to condemn it without knowing what it was they condemned. The eminent physicist, Richard Feynman, said “Anyone who claims to understand quantum theory probably does not.” The same is true, although for different reasons, of Gaia theory. Quantum theory is incomprehensible because the universe itself is far stranger than the human mind can contemplate. Gaia theory is difficult to understand because we are not used to thinking about the Earth as a whole system. We often forget that almost all of the science of the nineteenth and twentieth centuries was reductionist. The triumphs of evolutionary and molecular biology that revealed the nature of our genes, the fact that we can almost see the edge of the universe and know the intricate details of inner parts of atoms, all this has come from the patient professional dissection of nature into its component parts. Systems science, which is about the whole not its parts, has illuminated physiology, the understanding of the way our minds and bodies work, but its successes are lost in the omnipresence of reductionism. Modern science is so steeped in reduction that it is often unaware that there is any other science; the Nobel Laureate biologist, Jacques Monod, even called holists (system scientists) stupid. Gaia theory is a systems science of the Earth, geophysiology, and it requires knowledge of the sciences ranging from astrophysics to zoology and with most other disciplines of science included.

Soon after the start of the trail in the county of Dorset we walk over chalk cliffs, a layer of white rock, more than 1000 feet thick, and made entirely of the shells of algae that lived in the ocean during a period before 65 million years ago. From the cliff-top vantage point we can look out to sea where the similar microscopic algae are now living in its surface, and wonder about their remote ancestors, whose shells sedimented onto the sea floor only to be uplifted and dried by the Earth’s tectonic forces so as to become these cliffs. The path we tread is not dead ground; we tread on the living Earth. The chalk cliff represents the sequestering of about thirty atmospheres of carbon dioxide gas. Were most of the carbon dioxide in the atmosphere instead of in those fossil shells we would be on a dead planet half as hot as Venus. These algae did their part over tens of millions of years and so made sure that the carbon dioxide of the air was kept at a level conducive to a favorable climate and yet still sufficient for the needs of plants. Their skeletons, on which we stand, are the record of their contribution. Like the algae, all life, including us, evolves in a world that is made from the breath, the blood and the bones of our ancestors.

All living things are recondite and they are difficult to understand because we are not used to the circular logic of systems where cause and effect are inextricably tangled. Consider the complexity of the connection between blooms of algae living in the ocean, these chalk cliffs, and the climate. We could start by researching the way the different species of organisms in the ocean surface live with one another, but we would soon find that we needed to know the chemistry and physics of the ocean surface and the way the algae use the carbon dioxide to make their shells, and the way that CO₂ in the air keeps the Earth warm. But this would be less than half the story that the algae could tell. Through the inspiration of Gaia we discovered that algae could powerfully affect

the climate in another way. Their response to the saltiness of the ocean causes them to synthesize the precursor of a gas, dimethyl sulphide, which plays a vital part in the cycle of the essential element sulphur between land and sea, but this gas is also part of Gaia's climate-control mechanism. Dimethyl sulphide oxidizes in the air to become tiny droplets of sulphuric acid, and without these, clouds would be fewer and less dense and the Earth a much hotter place. So we also need to know the chemical reactions in the air, the physics of cloud formation, the way that clouds affect the Earth's radiation balance and the way all these related processes affect climate. More than this we still have to understand how climate feeds back on the growth of algal blooms, and this is just a small part of Gaia. No wonder the denizens of separated scientific disciplines are uncomfortable with this four-letter word, Gaia, which requires the understanding of a dozen or more apparently unconnected sciences.

As we walk on and leave the chalk cliffs behind we travel further back in time to the Jurassic period, made so familiar by Michael Crichton's novel *Jurassic Park*. We come first to the Purbeck limestone brimming with the man-sized spirals of fossil ammonites, and then on to the dark and somber cliffs of Kimmeridge shale. I recall the thrill of excitement felt when walking on a beach in this region and seeing, as if drawn in chalk, the white skeleton of an ichthyosaur on a flat black slab of shale. Walking on westward we come to Devon with its red sandstone cliffs dating back close to the time when the multicellular life of our world began. After Devon the westward trail takes us on to Cornwall and to Lands End. The cliffs now are of basalt and granite, there are no fossils in these rocks. They are the slag of past volcanoes and tectonic events. These dead rocks were once orange hot and molten but they are still part of our living planet. According to Gaia theory, plate tectonics and the persistence of water are the unique properties of a planet with abundant life. Further on, the trail turns east along North Cornwall's rugged coast until we reach the Cambrian rocks of Devon again where the uplands of Exmoor reach the sea. The trail ends in rocks of the Jurassic period at the Somerset town of Minehead, and from here we return home to the present and to think about our own relationship with Gaia.

Our planet is a unique member of the solar system. It is special not just because it bears life. The moon did not become a living system when the astronauts walked on it, nor would the discovery of an oasis of bacteria on Mars or Europa make them living planets. What makes the Earth special is not just the abundance and diversity of life but that our planet has always kept its material conditions habitable for them. On Earth the evolution of the living organisms and the evolution of their material environment have, since life began, gone forward tightly coupled together, and from this single evolution has emerged the self-regulation of the climate and chemistry, so that always the Earth was habitable. A consequence is that now and in the past the air, the ocean, and the rocks that go to make up the Earth's surface are utterly and impossibly different from those of a dead planet like Mars. They are as different as we ourselves are from a stone statue.

The coast path is a fine place to sense the presence of Gaia but a full understanding is probably beyond the most capable minds alive today. Gaia theory is not contrary to Darwin's great vision; but I suspect that it will be some time before biologists and geologists collaborate closely enough for us to see the emergence of a truly unified Earth System science. The Oxford biologist, William Hamilton, in a television interview, referred to the Gaian view of evolution as Copernican, but added, we await a Newton to explain how it works.

Science is often said to be ethically neutral and the good or bad consequences of its application are attributed to those who apply it. The philosopher, Mary Midgley, reminded us that Gaia has influence well beyond science. She said,

The reason why the notion of this enclosing whole concerns us is that it corrects a large and disastrous blind spot in our contemporary world view. It reminds us that we are not separate, independent autonomous entities. Since the Enlightenment, the deepest moral efforts of our culture have gone to establishing our freedom as individuals. The campaign has produced great results but like all moral campaigns it is one sided and has serious costs when the wider context is forgotten (2000).

One of these costs is our alienation from the physical world. She went on to say:

We have carefully excluded everything non-human from our value system and reduced that system to terms of individual self interest. We are mystified – as surely no other set of people would be – about how to recognise the claims of the larger whole that surrounds us – the material world of which we are a part. Our moral and physical vocabulary, carefully tailored to the social contract, leaves no language in which to recognise the environmental crisis (2000).

President Havel of the Czech Republic expressed similar thoughts when he was awarded the Freedom Medal of the United States, and he took as the title for his acceptance speech, "We are not here for ourselves alone." He reminded us that science had replaced religion as the authoritative source of knowledge about life and the cosmos but that modern reductionist science offers no moral guidance. He went on to say that recent holistic science did offer something to fill this moral void. He offered Gaia as something to which we could be accountable. If we could revere our planet with the same respect and love that we gave in the past to God, it would benefit us as well as the Earth. Perhaps those who have faith might see this as God's will also.

Four billion years of evolution have given us a planet unsurpassed in beauty. We are a part of it and through our eyes Gaia has for the first time seen how beautiful she is. We have justified our ancient feeling for the Earth as an organism and should revere it again, and what better way to do it than by a pilgrimage. Gaia has been the guardian of life for all of its existence; we reject her care at our peril. We can use technology to buy us time while we reform but we remain accountable for the damage we do. The longer we take the larger the bill. If you put trust in Gaia, it can be a commitment as strong and as joyful as that of a good marriage, one where the partners put their trust in one another and since they are, as Gaia is, mortal, their trust is made even more precious.

James Lovelock

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See also: Epic of Evolution; Gaia; Gaia Foundation and Earth Community Network; Gaian Mass; Science.

Gandhi, Mohandas (1869–1948)

It is tempting to think that Gandhi may have been an “early environmentalist” and yet there seem to be insuperable problems in embracing this view. He was remarkably reticent on the relationship of humans to nature, and it is striking that he never explicitly initiated an environmental movement, nor does the word “ecology” appear in his writings. Though he was greatly animated by the subject of cow protection, the 50,000 pages of Gandhi’s published writings have otherwise little to convey about trees, animals, vegetation, and landscapes.

It is also doubtful that Gandhi would have contemplated with equanimity the setting aside of tracts of land, forests, and woods as “wilderness areas.” The enterprise of retreating into the forest was familiar to him from Indian traditions, but Gandhi spent an entire lifetime endeavoring to remain other-worldly while wholly enmeshed in the ugly affairs of the world. The problems posed, for example, by the man-eating tigers of Kumaon, made famous by Jim Corbett, would have left less of a moral impression upon him than those problems which are the handiwork of humans who let the brute within them triumph. It is reported that when the English historian Edward Thompson once remarked to Gandhi that wildlife was rapidly disappearing in India, Gandhi replied: “wildlife is decreasing in the jungles, but it is increasing in the towns.”

And yet, few people acquainted with Gandhi’s life, or with environmental movements in India, would cavil at the suggestion that Gandhi has been supremely inspirational for Indian environmentalists, and even for the exponents of deep ecology. Arne Naess has testified that from Gandhi he learnt that the power of nonviolence could only be realized after the awareness of “the essential oneness of all life.” To comprehend the ecological dimensions of Gandhian thinking and practice, we shall have to go well beyond the ordinary implications conveyed by the categories of “ecology” and “environment,” for ethics, ecology, and politics were all indistinguishably interwoven into the fabric of Gandhi’s thought and social practices.

The ecological vision of Gandhi’s life opens itself before us in myriad ways. First, as nature provides for the largest animals as much as it provides for its smallest creations, so Gandhi allowed this principle to guide him in his political and social relations with every woman and man with whom he came in contact. Peasants and politicians received his equal attention; and in the midst of important political negotiations with senior British officials, he would take the time to tend to his goat. His own grandniece, pointing to the meticulous care with which Gandhi tended to her personal needs, all the while that he was engaged in complex discussions on Indian independence, tellingly called her short book about him, *Bapu – My Mother*.

Secondly, without being an advocate of wilderness as that is commonly understood today, Gandhi was resolutely of the view that nature should be allowed to take its own course. He scarcely required the verdict of the biologist, wildlife trainer, or zoologist to hold to the view that nature's creatures mind their own business, and that if humans were to do the same, we would not be required to legislate the health of all species. On occasion a cobra would come into Gandhi's room: there were clear instructions that it was not to be killed even if it bit him, though Gandhi did not prevent others from killing snakes. "I do not want to live," wrote Gandhi, "at the cost of the life even of a snake." He was quite willing to share his universe with animals and reptiles, without rendering them into objects of pity, curiosity, or amusement.

Thirdly, Gandhi transformed the idea of waste and rendered it pregnant with meanings that were the inverse of those meanings invested in it by European regimes, which represented the lands that they conquered as "unproductive" and "wasteful," purportedly requiring only the energy and intelligence of the white man to render them useful to humans. Gandhi, contrariwise, was inclined to the view that humans were prone to transform whatever they touched, howsoever fertile, fecund, or productive, into waste. He was pained that people would "pluck masses of delicate blossoms" and fling them in his face or string them around his neck as a garland, as is still common in India. Nor did he shy away from the subject of human waste. Gandhi made the dreaded subject of the disposal of human waste, a task relegated in India to the "untouchables," as much a matter of national importance as the attainment of political independence and the reform of degraded institutions. Unlike the vast majority of caste Hindus, Gandhi did not allow anyone else to dispose of his waste. His ashrams were repositories for endeavors to change human waste into organic fertilizer, and he was engaged in ceaseless experiments to invent toilets that would be less of a drain on scarce water resources.

Fourthly, and this is a point that cannot be belabored enough, Gandhi did not make of his ecological sensitivities a cult or religion to which unquestioning fealty was demanded. One writer credits him with the saying, "I am a puritan myself but I am catholic towards others." His attitude toward meat is illustrative of his catholicity in many respects. He was himself a strict vegetarian, but European visitors to his ashram accustomed only to meat were served their customary diet. Gandhi construed it as unacceptable coercion to inflict a new diet upon them. He partook of milk and milk products, and his reverence for life and respect for animals did not border on that fanaticism which is sometimes another name for violence. Gandhi's ecological legacy survives in part among sarvodaya workers, the activists of the Chipko and Narmada Bachao (Save the Narmada) movements, antinuclear peacemakers, and many others. Though he was no philosopher of ecology, and can only be called an environmentalist with considerable difficulty, he strikes a remarkable chord with all those who have cared for the environment, loved flowers, practiced vegetarianism, cherished the principles of nonviolence, been conserving of water, resisted the depredations of developers, recycled paper, or accorded animals the dignity of humans. He was a deep ecologist long before the term's theorists had arisen, and one suspects that even the broadest conception

of “deep ecology” is not capacious enough to accommodate the radically ecumenical aspects of Gandhi’s life.

He wrote no ecological treatise, but made one of his life.

Vinay Lal

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See also: Ahimsa; Bhagavadgita; Bishnoi; Chipko Movement; Deep Ecology; Earth First! and the Earth Liberation Front; Environmental Ethics; Hinduism; India; Macy, Joanna; Naess, Arne; Sarvodaya Shramadana Movement.

Gardening and Nature Spirituality

One summer day, a child of 11, I woke early, went to my bedroom window, and was embraced by dawn's rose-and-gold. For a timeless moment I was held in the light; I was part of everything and everything was part of me. I did not think of God. God was ill-spoken of in our household, especially by my atheist ex-seminarian father. My family had no religious practices, no sense of the sacred. But that memory has stayed with me as an experience of sacredness and connection, of being held in the world's perfection.

We lived on a farm in south-central Pennsylvania. We kids worked in our father's vegetable garden and spent a lot of time roaming fields and hills, wading in streams, climbing fences, rocks and trees, sliding down leafy ravines. Always a scribbler, I wrote poems about sunsets, clouds and thunderstorms, oak trees, the moon. Sensing something greater than myself, I conceived it as Mother Nature, as Gaia the great mother, and Persephone, bringer of springtime and flowers. These early experiences developed my sense of wonder, and my love of and respect for what David Abram calls the animate Earth – that Earth, reliable and unpredictable, known and mysterious, which has always called me to it and revealed itself as embodying and emanating sacredness.

At age 13, I made my first wildflower garden with plants dug from our woods. This was followed, in my parenting years, by various tiny backyard city gardens. Over the years, gardening taught me that hope and faith are reasonable even in times of drought and despair, and that we humans must not value ourselves too highly, since one small-as-dust seed holds the secret of life and is a key (one of uncountable such) to infinity and eternity.

Even before Rachel Carson's *Silent Spring*, I figured pesticides could only poison our planet and ourselves and chose to garden organically. But, like many gardeners, I grew what I liked or what was in fashion – for my own pleasure. In the mid-1980s I acquired my own acre of that ecological disaster, the great American lawn, and went through a “get one of everything” phase, indulging passions for hostas, lilies, sedums, and other plants. Grass gave way to gardens. When I met the idea of gardening with native plants and creating spaces reflecting the

genius loci, the spirit of the place, I became a native plant gardener. I forgot conventional garden design principles of color, line, texture, balance, and so on (though, in truth, I had never paid much attention to them). I began trying to make my pleasure fit Earth's needs. I focused on incorporation of my gardening into Earth's ways of planting abundantly and irregularly, cycling and recycling through growth, decay and reincorporation.

Now I am trying to make my gardens into biologically diverse, agro-ecological communities – plants (natives or not) growing in sync with each other, feeding us, feeding other life and Earth itself. As these ideas have grown, my reading has shifted from gardening books and magazines to the more philosophical and spiritual approaches of deep ecology, ecofeminism and natural history writing.

Today I live eight miles east of my parents' farm. My garden is several acres of woodland, full of native plants, and an acre of sun gardens. Here I am an Earth mother. Of course I am not *the* Earth mother – just her helper. I call myself a spiritual gardener. That does not mean my gardening is ethereal. It is handwork, hard work, broken nails and grimy knees work. It is practical: I grow food as well as flowers. But my aim is to be in harmony with Earth, with the natural world, to be included in it as a gentle partner – to live in community with the land, as Aldo Leopold said. I am trying to create a healing landscape, a place that heals the human spirit and also heals our Mother Earth. I also aim to create beauty, not the beauty of conventional garden esthetics, but the wilder beauty of the Eastern Deciduous Forest, a beauty that was here before me and will, I hope, continue after me. For me, that is spiritual gardening – concerned with essences, with the eternal cycles of life and death, mystery and wonder.

Maria G. Cattell

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See also: Eden and other Gardens; Gardens in Islam; Japanese Gardens.

Gardens in Islam

The Qu'ran refers frequently to paradise as a garden that awaits the faithful on the day of judgment. Many passages elaborate upon this theme, describing the forms, water features, plants, companions – and, most importantly, the spiritual qualities – of paradise. These ideas, along with historic gardens built by Muslims, have contributed to ideas about what has been called “the Islamic garden.” Some of these ideas are

unfounded, while other relationships among gardens, Muslim societies and cultures deserve much more attention. It is useful to distinguish between gardens in Islamic religion, historic gardens associated with Muslim societies, and the cultural forms such as painting and poetry that mediate between them.

The gardens of Islamic scripture may be considered under three headings: the garden of creation (ḥadn = Eden); the gardens of this world (*dunya*); and the paradise gardens (*jannah*) reserved for those who have faith, do good works, fear God, and are righteous. What distinguishes Islam from the other Abrahamic religions is its limited concern for the garden at the beginning of time and its absolute dedication to the garden at the end of time. Only a few passages in the Qur'an refer to the Garden of Eden (e.g., Qur'an 2:35), and while Adam is the first of the prophets, his expulsion from paradise is a relatively minor theme.

The Qur'an devotes somewhat more attention to gardens on Earth, as signs (*ayat*) of Allah's beneficence, providing sustenance for humans as well as for all creatures. Everything that sustains a garden, from rainfall to soils and plants and fruits themselves are provided by Allah who transforms the "land that is dead" (*mawat*): "We do give it life, and produce grain therefrom, of which they do eat / And we produce gardens with palm trees and vines / And we do cause springs to gush forth therein" (36:34). However, worldly gardens are also signs that are "wrongly demanded by the unbelievers" (25:7), which are destroyed and replaced by "bitter fruit, tamarisks, and a few nettle shrubs" (37:17). "How many are the gardens they left behind?" (26:57).

The Qur'an devotes by far the most attention to an eschatology that contrasts a beatific paradise garden with a torturous hell. Those admitted to paradise are righteous, truthful, and faithful. Among their many virtues, they "curb their anger," "forgive their fellow men," "seek forgiveness," "fear Allah," "attend to prayers," "keep from evil," "humble themselves before their Lord," "avoid profane talk," "give alms to the destitute," "follow the straight path," and "strive for a Paradise as vast as heaven and Earth." Although some militant and anti-Islamic groups stress the martyr's (*shahid*) place in paradise, drawing usually upon *hadiths*, their arguments obscure the broader *Qur'anic* vision of paradise as a place where, "they shall hear no idle talk, no sinful speech, only the greeting,

'Peace! Peace!' "(56:20). Those admitted to paradise shall dwell "in gardens watered by running streams," in "a cool shade," "in peace and safety," "nor shall they ever leave." They shall "eat therein of every fruit" (47:17), "sit with bashful dark-eyed virgins, as chaste as the sheltered eggs of ostriches" (37:47), and find "two gardens planted by shady trees . . . And beside these there shall be two other gardens of darkest green" (55:46). Most important, they shall be "brought near to their Lord in the gardens of delight" (56:11).

Compared to these scriptural passages, the historical gardens built by Muslim societies have complex cultural origins and associations with Islam. As with other forms of art, architecture, and landscape, they had pre-Islamic and non-Islamic roots. The Prophet's simple grave was open to the sky in a garden (*rawda*) in Medina. *Shari'a*

law proscribes monumental funerary monuments of the sort constructed by dynasties in Persia, Central Asia, and Mogul India. The latter historic gardens were more frequently places of political conquest, social control, and personal pleasure than the places of sober piety enjoined by Islam. Gardens of Andalus and the Mediterranean had antecedent Roman influence while the gardens of Turkey have Byzantine influence, those of Persia have Achaemenid influence, and those of South Asia, Indic influence. Garden forms varied across cultures, and common forms, such as the fourfold *chahar bagh* garden, had changing meanings in space and time.

Arguably, the art, craft, and sciences of gardening have mediated between religious ideals and human behaviors. While Muslim poets and painters often evoke garden scenes and flowers in stock phrases, in the best cases they reinfuse those forms with religious significance. And when anonymous gardeners humbly tend the plants, soils, and creatures of a garden, however mundane or magnificent, they draw daily attention to the true signs of Allah's mercy, beneficence and provision for those who understand and are grateful.

James L. Wescoat Jr.

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Spirituality; Japanese Gardens.

Gebara, Ivone (1944–)

Ivone Gebara is a Brazilian Sister of Our Lady (Canonesses of St. Augustine) and one of Latin America's leading theologians, writing from the perspective of ecofeminism and liberation theology. For nearly two decades Gebara has been a professor at the Theological Institute of Recife. The author of *Longing for Running Water: Ecofeminism and Liberation*, Gebara articulates an ecofeminist perspective that combines social ecofeminism and holistic ecology, promoting an "urban ecofeminism" shaped by her experiences of working with poor women in Brazilian *favelas* (slum neighborhoods). Gebara claims that ecofeminism is born of "daily life" and thus considers garbage in the street, inadequate healthcare, and other daily survival crises faced by poor women as they provide for family sustenance to be central issues in ecofeminist liberation theology. Gebara proposes a new theological anthropology, model for God, trinitarian language, Christology, and "religious biodiversity" from the perspective of Latin American ecofeminism.

Gebara received notoriety when silenced by the Vatican for two years in 1995. Her difficulties with the Vatican began in 1993 with an interview in the magazine, *VEJA*, in which she said that abortion was not necessarily a sin for poor women. Given the extreme poverty of many women in Brazilian *favelas* and the overpopulation in cities like Sao Paulo and Rio de Janeiro, more births would result in extreme hardship for mothers and children, increased strain on natural resources due to population pressures, decreased access to potable water, etc. For these reasons, Gebara claimed that the "preferential option for the poor" demanded by liberation theology called for more tolerance of women's choice for abortion than that of the official Roman Catholic Church. Following numerous meetings with the President of the Conference of Bishops of Brazil during 1994, Dom Luciana Mendes de Almeida reported the case closed, citing Gebara's commitment to the pain of poor women. The Vatican's Congregation of the Doctrine and Faith disagreed and began a review of her theological writings, interviews, and courses. On 3 June 1995, Gebara was instructed to refrain from speaking, teaching, and writing for a period of two years. She was ordered to move to France for two years of theological reeducation.

Following her period of theological reeducation,

Gebara returned to Brazil and again became active in writing and speaking about ecofeminism. Her strong critique of the anthropocentric and androcentric view of the world found in the Christian tradition continued after her theological education, as she took on the project of reinterpreting "key elements within the Christian tradition

for the purpose of reconstructing earth's body, the human body, and our relationship with all living bodies" (Gebara 1999: 6). In 1997–1998, she organized the *Shared Garden* theological program with the Latin American ecofeminist collective, Con-spirando, based in Santiago, Chile. During each of the three "Gardens," which were held in Santiago, Chile (January 1997), in Washington, D.C. (June 1997), and in Recife, Brazil (July 1998), participants from throughout the Americas met to explore themes and principles of an ecofeminist liberation theology. Gebara remains a central figure for the Con-spirando ecofeminist collective and organizes numerous classes, workshops, and conferences throughout Latin America.

Ivone Gebara and the Costa Rican theologian, Elsa Tamez, chart three phases of feminist theology in Latin America, placing themselves in the third stage. The first phase (1970–1980) coincided with the growth of Christian base communities and of liberation theology. Women theologians tended to identify with liberation theology and see themselves as oppressed historical subjects. During this stage the word "feminist" was rejected as a concept imposed from the North. Construction of a more explicitly feminist consciousness grew during the second phase (1980–1990). Efforts were made toward the "feminization of theological concepts" as well as the reconstruction and questioning of biblical texts from a feminist perspective. The third phase (1990 onward) is characterized, according to Gebara and Tamez, by challenges to the patriarchal anthropology and cosmovision in liberation theology itself and by the construction of a Latin American ecofeminism. Gebara in particular has been critical in articulating the premises of holistic ecofeminism in a Latin American context. By holistic ecofeminism, Gebara means that the daily lives of women in slums of the south show the ways "that the exclusion of the poor is to linked to the destruction of their lands" (Gebara 1999: vi) and to women's oppression. For Gebara, just as holism in ecology means that all things are interdependent, so all forms of oppression are interdependent. All oppressions however, are not the same and not experienced by all groups with the same intensity. Her concern is with the most oppressed, which in her context means poor women in urban slums. Thus, Gebara self-consciously articulates an "urban ecofeminism" shaped by the absence of sewers and safe drinking water, poor nutrition, and the numerous daily survival needs of poor women.

Lois Ann Lorentzen

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See also: Christianity (6a) – Roman Catholicism; Christianity (7c) – Liberation Theology; Christianity (7d) – Feminist Theology; Con-spirando Women’s Collective (Santiago, Chile); Ecofeminism (various).

Genealogy and Spiritualities of Place (Australia)

Across the Western world many people are engaging in family history research. The internet abounds with sites and email lists for genealogical investigation. Large public libraries and records offices have areas set aside for such research. In post-colonial societies such as Australia, both indigenous and non-indigenous peoples conduct genealogical searches, often for different purposes. For indigenous people who were forcibly removed from their families as children, this research may provide information that will help them reconnect with family and country. For those seeking to make native title claims to traditional lands, genealogical research may offer evidence of connection with place acceptable in a Western court of law. For non-indigenous people, however, the search for origins inherent in genealogical quests involves journeying either imaginatively or actually out of place to the places from which ancestors emigrated.

At the same time indigenous peoples are sometimes seen as bearing a sense or spirituality of place which non-indigenous people both lack and desire. The nonindigenous desire to articulate a spirituality of place can tend toward an appropriation of indigenous spiritualities of place. In this context the genealogical quest emerges as an alternative mode of identification with place, reminding the researcher that she or he is not indigenous to, but nevertheless connected with, both a home place and perhaps a myriad of other more distant places. But the scope of this connectedness to place may be limited by the patterns of genealogical research.

In a particular way family history narratives, both fictional and nonfictional, suggest settler spiritualities of place. Notable among these are the two volumes by Australian poet and environmental activist, Judith Wright. The first, *The Generations of Men* (first published 1959; revised, 1995) traces the story of Wright's grandparents May and Albert. May's settler ancestors are likened to the patriarchs and matriarchs of biblical religion, and both the country left behind and the home they build in Australia are figured as Eden. Wright's genealogical narrative, like Frederick McCubbins' painting, *The Pioneer*, describes a family history that appears to begin in the place of immigration without reference to the conditions that made possible that immigration. Wright's second genealogical narrative, *The Cry for the Dead* (1981), retells the story of this immigration as a narrative of Aboriginal dispossession and displacement. It relates as well the economic and social circumstances that occasioned the other (albeit voluntary) displacement of her settler ancestors from their former English homes. An

acknowledgment of the conditions of being in place for non-Aboriginal Australians forms a context for the articulation of spiritualities of place which involve not only a loving attentiveness to place as displayed, for example, in Wright's poetry, but also an openness to the relationships, responsibilities and claims to place of indigenous peoples.

In Australian Aboriginal contexts, such as that of the Yarralin people described by anthropologist Deborah Bird Rose in *Dingo Makes Us Human* (2000), linear patterns of genealogy are enfolded within the more complex patterns of kinship that describe connectedness to and responsibility for country. For Nyoongah writer Kim Scott in his novel *Benang* (1999), country is the locus for a meandering family history narrative that resists linear patterns, remembers Aboriginal dispossession and displacement, and calls into question non-indigenous narratives of a settler genesis.

As Scott's work suggests, the genealogical quest itself is destabilizing. For family history researchers the search for origins has no end-point: there is always another great someone to discover. But the question of an origin in place remains. Settler relationship to place in Australia has been marked by profound changes to country, such as the destruction of ancient forests and the salination of land. How might our senses of ancestry create new ways of connecting with place?

For poet Gwen Harwood in "Mother Who Gave Me Life" (Harwood 1990: 161–2) the ancestral trail takes us back to our nonhuman primate ancestors. This suggests an intersection between genealogical imaginings and theories of evolution. This kind of genealogical intersection opens a way for Westerners to reimagine their kinship with other-than-humans and to experience their connectedness with the Earth community in new ways. Although a pattern of linearity remains, the paradigm is less the biblical line of fathers and sons than a tree of life.

But this sense of a wider connectedness within the Earth community, while promising much in terms of an ecological spirituality, does not speak directly to a spirituality of place. What might be needed as well is a sense of the ancestry and agency of place. Judith Wright's poem "The Ancestors" (Wright 1994: 111) offers a way to re-imagine our genealogies in conversation with a spirituality of place. In a poem evoking the lush fertility of a rainforest, a curled fern frond waiting to open is an ancestor, whose fetal-like appearance recalls in human generation "the old ape-knowledge of the embryo." The sleeping ancestors that the place summons gather "round the spring / that feeds the living."

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See also: Aboriginal Spirituality and the New Age in Australia; Australia; Sacred Space/Place; Wright, Judith.

Genesis Farm

Genesis Farm is an ecological learning center and community-supported organic farm located on 220 farmland-preserved acres in western New Jersey. Founded by Dominican Sister Miriam MacGillis in 1980, Genesis Farm has been an important “seed community” for the growth and development of the Green Sisters Movement by providing critical training, informational resources and networking support, all of which have helped Roman Catholic religious sisters start their own ecological ministries across North America. MacGillis is a long-time disciple of Father Thomas Berry, who speaks of the ecological healing of the planet as “the Great Work” of our time (Berry 1999). For Berry, this Great Work involves a resacralization of nature and an embracing of Earth as primary revelation. It also necessitates a conscious recognition of the fundamental interconnectedness of the universe – a consciousness awakened by a greater appreciation of cosmogenesis (the “universe story” as revealed through modern science) as the central and defining sacred narrative of our time (Swimme and Berry 1992). Berry draws inspiration on both of these points from the work of Saint Thomas Aquinas and French priest-paleontologist Pierre Teilhard de Chardin (Berry 1988).

Genesis Farm’s ecological learning center offers programs that embody Berry’s philosophies and perspectives yet translate them into “on-the-ground” practices such as organic farming, permaculture (sustainable landscape design), natural foods cooking, bioregional activism, straw bale construction, and voluntary simplicity. The farm’s “Earth Literacy” courses introduce students to the Earth community in its many variations. There are modules, for instance, on geology, natural history, plants, star constellations, vermicomposting (worm-based organic waste recycling), seed saving, and even on basic organic chemistry and evolutionary science.

An intensive course called “Exploring the Sacred Universe” immerses students in the cosmic epic of evolution as told by Western science but does so through varied creative media: storytelling, “bodyprayer,” ritual, drawing, sculpting, walking meditation, contemplative gardening, and mindful cooking and eating. Miriam MacGillis’ work is dedicated to spreading Berry’s vision of an interconnected sacred cosmic community; however, she is also a thinker and prophet in her own right, and Genesis Farm’s learning center programs reflect MacGillis’ unique creativity and perspective as a green visionary.

Some programs, such as MacGillis’ popular “ReVisioning the Vowed Life” course, as the name would suggest, are selectively targeted toward vowed members of Roman Catholic religious congregations. This particular program helps participants explore their religious vows within a broader ecologically conscious context. MacGillis also

extends this premise to the need for all of Earth's citizens, regardless of affiliation, "to re-vision the committed life." She explains that "the committed life is about the deep spiritual call to all people, especially those of industrial, non-sustainable cultures, to reconnect with the natural world in our spiritual, ethical, emotional and intellectual roots" (Genesis Farm 2002).

Although sponsored by the Dominican Sisters of Caldwell, New Jersey, Genesis Farm is neither an intentional community nor a religious order. The ecological learning center staff at different times has been made up of sisters from a variety of communities, including Sisters of Charity, Sisters of St. Joseph, Franciscan sisters, Dominican sisters, and even a Brigidine sister from Australia. The staff also includes Protestant and Jewish laymen and laywomen, among those from other religious backgrounds. Many of those who come to study at Genesis Farm are Roman Catholic religious sisters, but the programs also attract (and increasingly so) laypeople from both Catholic and non-Catholic backgrounds. Students from the local area, from all over the United States, and from abroad come to live and study at the farm for anywhere from a weekend to twelve weeks at a time, although interns may commit to one or two years of working there. Through Saint Thomas University in Miami, Earth Literacy students can earn credit toward a Pastoral Ministries Master's Degree.

The farm's mission statement and published materials identify Genesis Farm specifically as "a learning center for *re-inhabiting* the Earth." ("Re-inhabiting" is a term that comes from the philosophy of bioregionalism and is about finding more sustainable ways to live in place in order to heal and reclaim that place from ecological damage. "Re-inhabiting" is thus the antithesis of "making a mess" and then moving on to colonize new ground.) At Genesis Farm, various examples of reinhabiting dot the landscape. A section of woods and brush where humans are directed *not* to go has been specifically designated a non-human wildlife area in order to conserve vital habitat.

A central feature of Genesis Farm is its "Earth Meditation Pathway," a wooded trail on which the traveler stops at various stations to contemplate his or her spiritual connection to the Earth. The winding trail, designed as a pilgrimage, works with the natural features of the landscape and culminates in a large altar filled with decorated stones that lie under the shelter of cedar trees. Those who travel the trail carry a stone with them from the beginning, holding it in their hand during the progression of meditative stations. At the end, they stop and decorate it with a design that represents their unique commitment or gift to the Earth. The trail configuration thus forms a kind of "stations of the Earth" that opens up the traditional Roman Catholic meditative practice of walking the "stations of the cross" to ecological meanings and green interpretations.

The biodynamic garden, which provides shares of organic produce 52 weeks out of the year to over 250 local families, replaces conventional food that would otherwise be trucked thousands of miles and consume large quantities of fossil fuel. The garden itself is planted with organic heirloom varieties, native to the region – some of the seeds circulated through seed-saving networks. Through biodynamic methods pioneered by

Austrian mystic philosopher Rudolf Steiner, Genesis Farm's gardeners work on increasing the vitality of the soil and conserving its minerals and microbes, reinhabiting the farmland in ways that restore and revitalize the soil rather than deplete it.

Modes of "re-inhabitation" on the farm also include two straw bale structures on the property, including a hermitage that was made from straw grown and baled by local farmers. In giving a tour of these structures, MacGillis speaks of how we must look to the Earth's ways of sheltering and providing, and learn from them as our models. For a growing number of student-seekers, Genesis Farm itself has become a model for reinhabiting landscape, culture, community, and religious tradition in ways that are more ecologically sustainable and spiritually satisfying.

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See also: Aquinas, Thomas; Back to the Land Movements; Berry, Thomas; Bioregionalism; Bioregionalism and the North American Bioregional Congress; Christianity (7e) – Creation Spirituality; Community Supported Agriculture; Epic of Evolution (and adjacent Epic Ritual); Green Sisters Movement; Re-Earthing; Seed, John; Snyder, Gary; Steiner, Rudolf – and Anthroposophy; Swimme, Brian; Teilhard de Chardin; Pierre.

Geomancy

Geomancy is today the Western equivalent of the Chinese fengshui, but previously it referred to the system of divination based on signs derived from the Earth. Configurations of Earth could be either natural (such topographical contours as hills, crevices, large stones, water formations, etc.) or artificial (as in the random patterns made by throwing down a handful of Earth or making markings in sand). By Napoleonic times, geomancy comprised simply predicting on the basis of interpreting lines of haphazard dots made by a pencil on a piece of paper. The contemporary understanding of geomancy, however, is captured by Nigel Pennick who describes it as the “detection of various subtle qualities of land and place, and the modification of those qualities so as to harmonize human activity there with the inherent natural character of the place” (1990: 189). More broadly, geomantic art is understood as psychic communication with nature spirits. Consequently, geomancy embraces the various nuances of sacred geography that explore and interpret megalithic stone circles and alignments, shrine distribution, creation through augury of the *templum* as marked out sanctuary or temple space, and such hypotheticals as ley lines. Related to this paranormal sensitivity is the practice of dowsing – the esoteric use of a forked stick to locate underground water, minerals or lost objects. “However absurd such an institution as a college of Augurs may to us seem, . . . it had, in part, its origin from nature” (Bell 1790: 253). The underlying principle of geomancy is the acceptance of talismanic meridian currents interlacing the Earth. These are understood as invisible but natural formations of telluric energy that inform any immediate surroundings and that influence behavior and outcomes within that locale. The geomancer – whether dowser, pagan augur or

Earth Mysteries seeker – attempts not only to discern these subtle patterns but also to harness or modify them for an optimal holistic environment.

Michael York

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See also: Earth Mysteries; Fengshui.

Geophilia

Extrapolated from E.O. Wilson's concept of biophilia, geophilia asserts that humans have an organic propensity to find wildlands emotionally compelling. It exists as a human tendency to emotionally connect with natural landscapes. While the biophilia hypothesis proposes that humans have a propensity to focus on life and lifelike processes, geophilia relates to our tendency to find compelling the landscape and its component features. This inherent inclination emotionally and spiritually to affiliate with a landscape is, perhaps, part of our evolutionary heritage, associated with genetic fitness, and related to the human propensity for symbolic reasoning. The geophilia hypothesis suggests that landscapes are compelling for humans, and exert significant influence on intellect, intuition, and action. Its cultural expressions are often complex and bear upon prospects for the preservation of wild places.

If geophilia exists as part of our species' evolutionary heritage, then it is probable that there is evolutionary advantage to emotional, intellectual, and spiritual affiliation with land. Research in this area is young, and findings have yet to appear that irrefutably support the proposition that positive response to nature has a partly genetic basis. The most convincing findings are the decisive patterns across diverse cultures, which reveal a preference for natural scenes over urban scenes, as well as the remarkable predilection for geophysical settings that presumably offered survival-related advantages for humans.

Landscape is part of the iconography of every culture. It provides an "image" of the invisible, a physical link to the creative forces contained within it. Not only are there practical bonds of subsistence between peoples and landscapes, there are also potent religious, social, and emotional bonds. It is through these bonds that people develop a sense of place and affinities with particular locales.

Part of the human quest for meaning involves the ordering of landscape into places. Places are centers of cultural and personal meaning; they exist as foci of emotional attachment. A sense of place unfolds through the religious, moral, and aesthetic discernment of specific locations. Through the sense of place, the boundaries between person and "other" become blurred. People develop a sense of responsibility to the land, which suggests that geophilia is an important element of a land ethic.

Places are fundamental expressions of human involvement with the world. They provide foundations for existence, imparting not only a geographic context to activity, but providing physical and spiritual security and identity. Through natural places humans gain insight into their existence, for there is self-discovery in place. Landscapes are ontologically significant; people are components in the continuation of the land. An

individual exists not only in relation to other individuals, but also in concert with the landscape. Through geophilia, self-and-other exist as a continuous and extended entity.

Geophilia is different from bioregionalism in that it just might be inscribed in our DNA; if it indeed exists, it expresses tens of thousands of years of evolutionary encounters with landscape. It is part of our deep psychology, and is rooted in the essential patterns of human life on Earth. Geophilia suggests that humans are *of* the landscape, and that as a species *Homo sapiens* belongs to the land in ways profound. Geophilia reminds us that it is our nature to be resourceful and attentive to the world in which we live. Through reinhabitation we can begin to dwell in ways that respect ecological limits and engender social justice.

In contemporary industrialized cultures, wilderness as sacred space can be understood partly as expression of a land ethic informed by a deferred geophilic response to nature. On some level – perhaps deeply subconscious – geophilia is the motivating force behind the establishment of wildlife refuges, national parks and other conservation lands, and a variety of sacred sites.

Various research projects have documented humankind's strong preference for natural settings, and the literature in environmental perception is rich with examples. People give aesthetic preference to landscapes in which they can function effectively. People tend to prefer, for example, landscapes with water features, trees with broad canopies, and both panoramic views and sheltered refuges. Aesthetic reactions, then, are not trivial; indeed, they form a template for human behavior that is both ancient and far-reaching.

People in both Western and Eastern societies consistently dislike spatially restricted environments but respond positively to landscapes with moderate to high visual depth. This preference can perhaps be related to our common evolutionary heritage in which our hominid ancestors found abundant plant and animal food on the savannah, as well as lower risk because of visual openness and escape opportunities. Modern humans prefer landscapes with savannah-like properties such as openness, scattered trees, and grassy ground cover, and this may be a partly genetic predisposition. Biology tells us that nonhuman vertebrates show a widespread preference for the kind of environments in which their species prospers. Humans, too, express aesthetic preference for habitats conducive to survival, which suggests that geophilia is a characteristic of our species.

Land is the organic, emotional, and aspirational core of culture. Peoples from diverse geographical regions and cultural traditions express geophilia (or something close to it) through religion; their myths, rituals, totemism, sacred sites, and the like. For many indigenous peoples, this shared identity is sagaciously articulated through the mythologies, wherein people, spirit-beings, natural species, and localities are viewed as interconnected. This extension of self onto landscape enables the articulation of personal traits in terms of graspable phenomena. Not only is landscape understood as the material manifestation of the highest values and ideals, but it is also understood as a psychological and physiological continuance of the individual.

Rituals and myths arouse emotions; they heighten awareness, bring fresh insight, and enable us to become conscious of connections between the world and ourselves. People construct mythologies to fit the land; to affirm and express their place in the world. In the industrialized world, the substitution of these Earth-based mythologies for materialism parallels the loss of fundamental contact with the land, and it relates to a host of problems that are becoming increasingly apparent and dangerous. Often, our solutions are inadequate to solve the ecological problems facing us – the very directions of our thoughts and policies repeatedly lead us deeper into trouble. Any solution derived from the same paradigm as the problem seems only to worsen things. Moreover, our emotions are no longer structured to make us *want* to deal adequately with those problems. We seem unable to stop desiring the very things that are destroying the world we long to treat with respect.

Geophobia, the corollary of geophilia, is the fearful response to landscapes. In some cases, geophobic responses sharpen perceptions and make us physically and emotionally more agile; fear of exposed heights and dark caves have, in some instances, adaptive value. Geophobia may correlate with some sacred sites (special caves, mountains, etc.) through the notion that visiting these sites by overcoming our earthly fears can bring us closer to spiritual enlightenment. Mediating between the ancestral realm and the human realm, such landscapes serve as indexes of sacred as well as secular events.

Geophilia may provide the basis for the ethics of both radical ecology and mainstream environmentalism. Radical ecology purports to be largely altruistic, concerned with preserving the *intrinsic integrity* of nature.

Mainstream environmentalism, on the other hand, is most concerned with preserving the *utilitarian value* of nature. Combining the strands of these two perspectives, an ethic based on our affinity for landscape can be understood partly as an ethic of altruistic selfishness.

Paul Faulstich

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See also: Biophilia; Bioregionalism (various); Biosphere Reserves and World Heritage Sites; Conservation Biology; Wilson, Edward O.

Ghost Dance

While the Ghost Dance is widely known and has been studied in great detail, scholars have often emphasized social, political, and symbolic interactions between Indians and non-natives in the context of the dances without paying enough attention to the role and significance of a tremendously important third party: the Earth itself. Our present task, then, is to chart a broad map of the profound religious and discursive relationship of the Ghost Dance to nature.

James Mooney's classic assessment of Ghost Dance doctrine offers a reasonable starting point for understanding the phenomenon:

The great underlying principle of the Ghost dance is that the time will come when the whole Indian race, living and dead, will be reunited upon a regenerated earth, to live a life of aboriginal happiness, forever free from death, disease, and misery. . . . The white race, being alien and secondary and hardly real, has no point in this scheme of aboriginal regeneration, and will be left behind with other things of earth that have served their temporary purpose, or else will cease entirely to exist (Mooney 1991: 777).

In terms of a bare historical sketch, the Ghost Dance came toward the end – in ways, marked the end – of a long history of Native American millennial movements and was practiced widely throughout the West by groups as diverse as the Ute and the Arapaho, who embraced the dance according to specific needs and channeled it through preexisting traditions. The dance had two seminal leaders: Wodziwob, whose version of the dance was promulgated in 1869, and Wovoka, whose dance emerged twenty years later. The phenomenon culminated in tremendous violence on 29 December 1890. Suspected by government officials, who were in turn driven by inflated and inflammatory media reports and public panic, to be mobilizing armed resistance to the local non-native population, an exhausted group of several hundred Lakota Indians were surrounded and killed at Wounded Knee Creek in South Dakota. Few survived, dashing the hopes of a despondent people who sought spiritual relief from earthly suffering in the Ghost Dance.

While the Ghost Dance signaled a nadir in Indian/white relations and the end of physical resistance to non-native domination, it marked the florescence if not beginning of a new form of political resistance to the dominant society: Pan-Indianism, wherein native peoples self-consciously emphasize their solidarity *vis-à-vis* a common history in order to seek a better common future. Moreover, while the millennial agenda of the dance was not realized, it did represent a this-worldly triumph of sorts in symbolic and rhetorical terms. Through the appropriation and recasting of tropes drawn in part from the dominant culture (namely, messianic apocalypticism), Ghost dancers refined

a strategy of cultural criticism that has become one hallmark of Native American political and legal agitation to the present. Speaking in the oppressor's terms – of paradise lost, for example – has enabled Native Americans to make their grievances audible to an otherwise inattentive and detached nation. Their grievances, more often than not, concern a paradise lost in concrete, historical terms: the land.

Violation of the land was the ultimate source of Native American anxieties expressed through the Ghost Dance. The 1860s–1890s was an era of unprecedented non-native incursion into the West. Railroad tracks cut the land, treaties were crafted and recrafted, territories and states came into being, and Indians were pushed onto ever-shrinking reservations. This process had profound economic and political effects on all tribes. Traditional modes of subsistence were rendered untenable and old alliances and antagonisms took on new and unpredictable configurations. Along with economic and social chaos, Native American religious life was threatened by the newcomers and their treatment of the land. Generally speaking, Native Americans view themselves – now as then – in a kin relationship to nature, which entails obligations of responsibility and reciprocity. Non-native effects upon the landscape imperiled this relationship, causing many Indians to look for novel remedies to their predicament.

If violation of the land was a cause of the Ghost Dance, restoration of the land was its goal. Moreover, religious restoration of the land was imagined to be thoroughgoing, eliminating all traces of pollution and decay and restoring nature and her kin to their rightful place. Here we see an inversion of the moral order of European savagism, even while its basic structure is reproduced. That is, Indians aligned themselves with and as nature *vis-à-vis* civilization and its representatives. Thus, the restoration of nature and “natural” Indian traditions entailed and would be catalyzed by explicit rejections of certain markers of “civilization,” including, among other things, metal and elements of Western dress (though not including train travel, writing, and messiah imagery). In this way, restoring “nature” was both a goal and a mechanism of the Ghost Dance.

What is more, nature herself was understood to be the primary agent – final cause – of millennial justice. In a radical eruption of the natural order, the land would consume and cover all traces of non-native society. Consider an Arapaho song recorded by Mooney:

My children, my children,

Look! The earth is about to move, Look! The earth is about to move. My father tells me so,

My father tells me so (Mooney 1991: 973).

Such imagery suggests comparison with other apocalyptic movements, including Christian ones, wherein social order is imagined to be restored through and as the restoration of the natural order of the world. With the Ghost Dance, as with so many religious movements that image a better world, nature takes on mythic proportions, acting as the hero in an all too historical drama.

Greg Johnson

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See also: Dance; Lakota; Lakota Sun Dance.

Gimbutas, Marija (1921–1994)

Marija Gimbutiene/Gimbutas, a Lithuanian archeologist, contributed to major advances in the understanding of Bronze Age Indo-European migrations. Author of 22 books and more than 200 articles, she directed five excavations in Europe. As Professor of Archeology at the University of California, Los Angeles, Gimbutas became director of its Indo-European Studies program. She was the first prominently to propose an identity between the *kurgan*-burying peoples of Central Asia and the speakers of proto-Indo-European. The *kurgan* or "barrow" refers to the prehistoric burial mounds used in the steppes of South Russia. While the Indo-European homeland remains a contentious and debatable question within the fields of archeology and comparative linguistics, Gimbutas' locating the *Urheimat* with the lower Volga steppe lands and Kazakstan remains the most plausible among alternate possibilities (e.g., central or northern Europe, Anatolia or in the Balkans.) As the chief articulator of the conventional conquest theory of language, she became a leading opponent to Colin Renfrew's "wave-of-advance" theory, namely, that the Indo-European languages spread gradually across Europe with the diffusion of new agricultural techniques. Gimbutas coined the term "archeomythology" to describe her own methodology as a multidisciplinary approach that combines the study of mythology with archeology, linguistics, comparative religion, ethnology and cultural history. In this respect, she adverts the growing diversity and trend toward a less exclusively specialized focus within the academic study of prehistoric society

On the other hand, Gimbutas' later theory concerning a goddess-centered belief system underlying East European Neolithic communities is much more controversial and unaccepted in archeological circles. Gimbutas claims that the non-belligerent matrifo-

cal societies stretching from the Balkans to Crete were later destroyed by patriarchal Indo-European invaders in a westward expansion between 4000 and 3500 B.C.E. from their original homeland. For the matrilineal societies of Old Europe themselves, Gimbutas posited the existence of three goddesses: the Bird and Snake Goddess – principally a water-mother, the Great Goddess of Life, Death and Regeneration; a moongoddess; and, with the emergence of agriculture, the Pregnant Vegetation Goddess – an Earth-mother who develops from the Great Goddess. She argued that these Goddess worshippers delighted in nature and the crafting of sophisticated pottery and avoided war and the production of military weaponry. Her critics reject what they consider subjective and partial interpretations. Nonetheless, this lack of overall academic endorsement has not prevented Gimbutas from becoming an iconic champion in the eyes of many within contemporary goddess spirituality. Her later works, *The Goddesses and Gods of Old Europe, 6500–3500 B.C.* (1974, 1982), *The Language*

of the Goddess (1989), and *The Civilization of the Goddess* (1991), as well as *The Living Goddess* (1999) edited by Miriam Robbins Dexter, form the corpus of goddess feminists' belief and/or focus on a "golden age" in "Old Europe" consisting of sedentary, peaceful, egalitarian societies who worshipped a female deity. In this respect, Gimbutas continues to play a central role in the contemporary movement that values femininity and nature in contrast to industrial pollution and its supporting belief systems in which the Earth becomes allegedly devalued as simply something to be technologically used rather than organically nurtured.

Michael York

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See also: Christ, Carol; Ecofeminism (various); Eisler, Riane; Feminist Spirituality Movement; Goddesses – History of; Griffin, Susan; Merchant, Carolyn; Paganism – Contemporary; Sexuality and Green Consciousness; Wicca.

Glacken, Clarence James (1909–1989)

Clarence James Glacken authored what many consider to be the most important book on the history of Western ideas about nature, *Traces on the Rhodian Shore: Nature and Culture in Western Thought from Ancient Times to the End of the Eighteenth Century* (1st edn, 1967). A Professor of geography at the University of California, Glacken produced his magnum opus through the long-standing support of the Institute of Social Science at Berkeley. Declining health prevented him from fulfilling his dream of bringing his monumental study up to contemporary times.

Glacken's long-term interest in how ideas affect the landscape arose out of his own role in public service and his exposure to a variety of cultures during decades of social and environmental crisis. Upon graduating from college at Berkeley in the early 1930s he worked with Dust Bowl refugees in California's Central Valley, and traveled through Europe and Asia. During World War II he served in the Army as a specialist in Japanese language and culture, and afterward authored studies of deforestation in Korea, and *The Great Loochoo: A Study of Okinawan Village Life* (1955).

Glacken's great work examined the depths to which early Western thinkers focused their interests on nature. He included important chapters on both classical GrecoRoman ideas of nature (derived from various philosophical treatises and evocative poetry) and those central to the biblical tradition, which frequently extol creation's marvels and beauties. He laid bare the remarkable extent to which medieval religious writers paid attention to *natura* and environmental custodianship, writing over 350 pages before turning to Renaissance thought (including the later Renaissance and thus seventeenth-century ideas), and after that, to the eighteenth-century Enlightenment mind. In the main, he covered religious thought, and a key argument in the book is that much in the medieval literature reveals applied theology, or the practical stewardship of God's world, while modernity is marked more by theoretical constructs to explain natural laws, sometimes (but actually not that often) with a view toward controlling nature. *Traces* presented an alternative way of viewing environmental history, giving new attention to Western spiritual and ecological insights about the care and management of environments through three and a half millennia. Glacken demonstrated what cannot be as clearly shown from any other part of the world: that, in the West, there was a continuous concern among thinkers either to care for environments or create better ones. The implication is that "Environmentalism," then, has been born out of the Western

tradition and its religious lineaments. The book is thus a neglected yet brilliant foil to the (earlier, pre-qualified) claims of the medievalist Lynn White, Jr. that Christianity was basically an anthropocentric, environmentally unfriendly tradition, responsible in the long run for the present environmental crisis. Not only does Glacken's account of medieval (especially monastic) environmental ideals reveal White's neglect of vital materials, but the history of post-medieval environmentalism is shown to be littered with Christian thinkers of one type or another. Glacken is well aware, however, that Western ideas and principles cannot be properly understood without attending above all to both the symbioses and enduring tensions between the Greco-Roman and Judeo-Christian apprehensions of the cosmos. Both these major trajectories have impetuses that are sacralizing and secularizing, nature-conserving and utilitarian, cyclical and linear.

Glacken's work did not examine the modern wilderness movement; it stressed how the image of the cultivated garden prevails in Western environmental conceptions. Thus wild places are thought to be capable of being transformed into utopian spaces because they are away from areas already "spoilt." Yet we must remember that he was documenting the thoughts of intellectuals, not the conditions of environments themselves. Whole wilderness areas were left unsubdued for centuries even to the eighteenth century, inhabited by subsistence dwellers, and had a profound impact on others (let us say on the edges of forests) who did not reflect on their surroundings. Glacken's greatness lies in bringing religion and nature into interface with a patient attention to the resulting complexities, and in his clever detailing of the threads that make up a rich historical tapestry. Unfortunately, his declining health in the 1970s limited the amount of attention he could give to the Americas in the nineteenth and twentieth centuries.

Garry W. Trompf

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See also: Ecological Anthropology; Ecology and Religion; White, Lynn – Thesis of.

Glastonbury

The small southwest English town of Glastonbury, located in the lowlands and reclaimed wetlands of Somerset county, touts a long history as a center of religious pilgrimage. In medieval times it attracted pilgrims from across Europe, and its abbey was, for a time, the second most powerful landowner in all of Britain. When the abbey's fortunes had fallen in the late twelfth century, monks purportedly discovered the remains of King Arthur in the abbey grounds. Further legends – about Joseph of Arimathea's voyage with his nephew, the young Jesus, to nearby Wirral Hill, and about the visits of Saints Patrick, Bridget, Columba, and others – are traced back by historians to this time, though they purportedly occurred centuries earlier.

Glastonbury has attracted scattered bands of poets, artists, and mystics throughout the last two centuries, its spiritual and antiquarian reputation promoted by Alfred Lord Tennyson, John Cowper Powys (author of *A Glastonbury Romance*), occultist Dion Fortune, and more recently Arthurian scholar Geoffrey Ashe and author Marion Zimmer Bradley (*The Mists of Avalon*). In the 1930s Canadian artist Katherine Maltwood claimed to find the remnants of a massive terrestrial zodiac carved into the landscape surrounding the town. Since the 1960s Glastonbury has become established once again as a mecca for pilgrims, not only Christians but an eclectic variety of New Age believers, neo-pagan and Theosophical occultists, Goddess devotees, neo-Druids and Celtic revivalists, for many of whom it is equated with the legendary Isle of Avalon. With its strangely shaped 500-foot-high tor (rocky peak) and its numerous wells and springs, it is variously believed to be a center of mysterious Earth energies, a convergence point of ley lines, an ancient place of Druid learning, a preChristian Goddess-worshipping site, and a center of UFO activities.

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See also: Celtic Spirituality; Druids and Druidry; Earth Mysteries; New Age; Paganism – Contemporary; Stonehenge.

Globalization

What is called globalization today has deep roots in history. We find first expressions of it in the empires of the Ancient Near East and the Hellenistic-Roman empires, which subjugated peoples and occupied their land in order to exploit their resources and labor. Even in these early cases the conquest went hand in hand not only with socio-economic extraction of wealth (tribute) but with a legitimizing imperial religion (e.g., Roman emperor worship) and ecological destruction (e.g., the deforestation of Italy). In imperial systems there is always a complex interaction between economic, political/military, social, ecological and ideological/religious dimensions.

In modern times since the fifteenth century we have observed different phases of empire-building. The *conquista* of the sixteenth century is characterized by direct violence. Mercantilist colonialism (seventeenth and eighteenth century) dominated and exploited by triangular trade (manufactured goods–slaves–raw materials/ monocultures). The national liberal imperialism of the nineteenth and early twentieth century linked industrial capitalism, waged labor and finance-dominated trade. In the second part of the twentieth century the transnational economy dominated by the USA emerged, eventually leading to global neo-liberalism.

It is capital accumulation on the basis of private property which drives and determines the modern interaction of globalization, religion and nature. This is not only true in macro-economic terms but also in regard to human behavior. In the early days of the money economy, Aristotle differentiated between the need-oriented household economy and the money-accumulation economy. The former includes local markets and confines itself to the limits of the natural environment and the life of the community. The latter concentrates on long-distance trade and the business of interest-bearing loans. As money creates the desire for limitless growth in individuals, giving the illusion of eternal life, it destroys the community and is against nature. Therefore, according to Aristotle, money accumulation including charging interest is to be rejected. Jesus in a similar way calls for the decision between God and Mammon, adding the *religious* dimension to the argument, but religion not as one dimension beside others

– as in bourgeois religiosity. Rather, Mammon is seen as the fetish, the idol, asking for the sacrifice of the whole of life. For the followers of God all human needs will be cared for by nature given abundantly by God's grace and full of beauty, while worshipping Mammon is destroying life (Matt. 6:19–34; 16:26).

The ideologists of the modern age promote the contrary. Human beings by nature try to expand their power and wealth (Hobbes). Francis Bacon in his *New Organon of the Sciences* (1620) introduces science and technology as instruments bringing greater

power – for one’s own nation and over other nations and nature. Being responsible for the trials of the women known as witches, he recommends torturing nature in order to extract her secrets. Violence against nature goes hand in hand with the violence against women and indigenous peoples (in German *Naturvölker*).

It was John Locke who in his *Second Treatise of Government* (1690) showed how money helps to increase power and wealth beyond need. The key category is “property.” Because man has property in his own person and, therefore, his labor “whatsoever then he removes out of the State that Nature has provided, and left it in, he hath mixed his Labour with, and joyned [sic] to it something that is his own, and thereby makes it his Property” (§27). So the Earth is being regarded as absolute private property. In §36ff., he develops the thesis that money, because it is durable, has been introduced by “tacit agreement” (§50) in order to allow industrious people to get “larger Possessions, and a Right to them” beyond use. As a motive he identifies the “desire of having more than Men needed” (§37). “Government has no other end but the preservation of Property” (§94). Locke religiously legitimizes the appropriation of the Earth by quoting Gen. 1:26–28: “God, by commanding to subdue, gave Authority so far to appropriate” (§35). And God gave the Earth to the “Industrious and the Rational” (§34).

Behind Locke’s concept of property lies the Roman legal idea of “dominium.” This means absolute power and gives the owner the right to do as he pleases with his property: “Ownership is the right to use and to consume (*ius utendi et abutendi*.)” This concept was taken over by the Code Napoleon (Art. 544), which was the basis for later constitutions in Europe: “Ownership is the right to enjoy and use things in the most absolute manner.” All these arguments contain the Western capitalist system in a nutshell: industrious and rational men have the absolute, religiously justified right to use the Earth (and slave and waged labor according to Locke) limitlessly to follow their desire to increase their possessions by money mechanisms to lead a comfortable life – not taking into account the consequences for people and nature. And government has to protect this accumulation of property by money mechanisms.

Karl Marx was the first to analyze the fetishist (i.e., religious character of money and capital accumulation on the basis of private property). He also saw that it leads to the destruction of people and nature: “The capitalist production develops only the technique and the combination of the production process in society by at the same time undermining the fountains of all wealth: the Earth and the worker” (Marx 1969: 529f.).

Neo-liberalism – winning the day since the 1980s and even more after the breakdown of the competing system – is the attempt to globalize this fetishist system of unfettered capital accumulation by turning all of life into a commodity. The legal instrument for doing so is the Trade Related Intellectual Property Rights (TRIPs) Agreement in the framework of the World Trade Organization (WTO). By the right to patent plants, animals and now even the genes of human beings, transnational corporations (TNCs) increasingly control all natural resources (e.g., seeds, therapeutic plants and bacteria, more and more forests and even the human genome) for the single purpose of private

capital accumulation. Consequently more and more biodiversity is being destroyed and the nutrition and medical care of the world's population endangered.

Politically U.S.-led Western state power is being used to deregulate, privatize and liberalize the economic mechanisms dominated by finance capital. Its agents are undemocratic international institutions like the G8, WTO, IMF and World Bank. Their institutional policies are speeding up capital accumulation by speculation, tax flight, pressurizing governments by the threat of capital flight to cut taxes and subsidize profits, and using the privatized media to induce the pseudo-religious, neoliberal values of limitless consumption and money into people's hearts and minds ("cult-marketing"). The result is ever-increasing poverty, exclusion, social degradation, violence, ecological destruction and the decline of democratic participation of the people, not only in the impoverished but also in the rich countries. One example of imperial politics consciously tolerating natural disaster is the decision of the Bush administration in 2001 not to ratify the international Kyoto Protocol asking for the reduction of CO₂-emissions, with the simple argument that this would be bad for the economy, (i.e., capital accumulation).

As the large majority of governments has been coopted or disarmed by the power of capital and public deficits, opposition and alternative vision and spirituality mainly come from civil society. There has been some support from the UNDP's Human Development Reports. These have developed the "Human Development Index" measuring economic success not only as growth in monetary terms like the GNPs, but adding social and ecological indicators. Since the UN is becoming increasingly weakened by capital and the Western powers, the main actors remain the social, ecological and human rights movements. In industrial capitalism it was the labor movement that created countervailing power. In neoliberalism, capitalism has become global and total, affecting all dimensions of society and life. Consequently all sectors have started to organize resistance: women against the feminization of poverty, Indian farmers against the manipulation and monopolization of seeds and against dams, and indigenous people in Latin America against the destruction of the rainforests and their own social, cultural and religious life. Fishing communities protest against the commercial overfishing of their waters, the majority of Bolivian society against the privatizing of water, French farmers against the "McDonaldization" of the globe – and a growing part of the labor movement is joining in.

What are these people's movements worldwide asking for? There is no blueprint for one alternative top-down system as real socialism thought. The key demand is to give people back the control over their culture and economies, building the economy from the bottom up based on social, ecological and democratic criteria. The key question is: how to serve the concrete life of people in harmony with nature? Given the present power situation a double strategy is being followed.

On the one hand, people can satisfy their basic needs in harmony with nature as much as possible by themselves at the local and regional level, breaking the fetishist totalitarianism of capital accumulation. Douthwaite (1996) has identified four crucial

areas: interest-free exchange (LETS); cooperative banking leaving people's savings in the region; decentralized ecological energy production (sun, water, wind, biomass); local ecological food production and marketing. The latter has gained even broader support in Europe after the disasters of industrialized agriculture (BSE etc.).

On the other hand, new beginnings at the local level will be constantly destroyed if the macro-structures of the markets are not politically regulated according to social, ecological and democratic criteria. Therefore, the movements will have to form alliances at all levels, including the global, as has been shown in the successful campaigns against the total rule of TNCs through the Multilateral Agreement on Investments (MAI), the new liberalization round of the WTO (Seattle 1999), the (often illegitimate) debt (Jubilee 2000) and the undemocratic structures of IMF, World Bank and G8 (Prague 2000, Genoa 2001). A special emphasis will need to be given to the democratic control of the financial markets including the taxing of speculative capital transactions (Tobin tax), the drying out of tax havens to curb tax flight, regaining the control of capital flows in order to stop the "hot money" which caused the Asian crisis (Kairos Europa, Pax Christi, ATTAC and other movements).

Breaking the absoluteness of property is the underlying issue at the local as well as the global level. Even the Romans had the concept of "*patrimonium*" besides "dominium." It means the property which has to be preserved as a legacy for children and grandchildren. So we need legal systems with a variety of property forms: personal property for basic needs-related use, cooperative, communal and national ownership of public goods and services, and private ownership of the means of production – this being linked to the obligation to also serve life and the common good (e.g., as expressed in the German and Swiss constitutions). This will help humanity protect nature from being exploited, polluted, degraded, and communities from losing control over their public goods (like water) and services. This will also allow nations to redistribute privately produced wealth through progressive tax systems. At present globalization is increasingly eroding these basic rights.

The political will to implement changes has to be created by the people affected. Here the religions have a pivotal role. There is no religion allowing for the basic values of capitalism like greed, egoistic individualistic competition, consumption and a limitless accumulation of wealth at the cost of people and the Earth. Particularly, indigenous peoples clearly state that the Earth does not belong to human beings, but human beings belong to the Earth. In 2000 there was a colloquium which brought together people from the Judeo-Christian traditions, Buddhism, Islam and Hinduism who expressed their determination to work for the redirection of the global economy and the capitalist culture in order to stop the destruction of people and nature. Over the last century the ecumenical movement has challenged the adaptation of the post-Constantinian churches to power and money. Since 1997/1998 the World Council of Churches and the denominational world communions have been engaging the churches in a "committed process of recognition, education and confession (*processus confessionis*) against economic injustice and destruction of nature" (World Alliance of Reformed

Churches, The 23rd General Council). This means that the issue of globalization, religion and nature has been qualified as a question of the same seriousness as Nazism in Germany and apartheid in South Africa – affecting not only the practice but also the being of the Church.

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See also: Anarchism; Bioregionalism (various); Earth First! and the Earth Liberation Front; Environmental Ethics; Environmental Justice and Environmental Racism; Radical Environmentalism; World Council of Churches and Ecumenical Thought.

G-O Road (Northern California)

As early as 1963 the U.S. Forest Service began considering plans to build a two-lane, paved road 55 miles from Gasquet to Orleans (G-O Road) through a remote and rugged area of northern California, rich in Douglas fir and in the traditions of Karuk, Tolawa, and Yurok peoples. The Forest Service claimed it needed the road to maintain the Six Rivers National Forest, to help control fires, to provide access to recreation, and to allow loggers to haul timber to mills in Crescent City. After creation of the Redwood National Park preserved 70,000 acres of the Forest in 1968, the timber industry increased pressure to build the road.

The Indian peoples believed that some 13,500 acres in the Blue Creek Unit of the Forest, a span of about six miles in the middle of the proposed G-O Road corridor, were sacred, places where they could engage in spiritual activity. There, approximately 140 elders meditated and guided adolescents through rites of passage, and tribal healers made medicine, gaining power to lead such rituals as the White Deerskin Dance of the World Renewal Ceremony. These rituals were meaningful only if leaders became empowered by visiting the sacred sites in solitude surrounded by unspoiled natural environment. They contended that any manmade interference with nature in this area prevented their exercising religion freely as guaranteed by the First Amendment of the U.S. Constitution.

This belief was explained and documented by the *American Indian Religious Freedom Act Report* and by an anthropological consulting firm hired by the Forest Service. The consultants concluded that “intrusions on the sanctity of the Blue Creek high country are . . . potentially destructive of the very core of Northwest [Indian] religious beliefs and practices” (Theodoratus 1979: 420).

Then, in 1981, the Keeper of the National Register of Historic Places declared the area eligible for special status, and the national Chairman of the Advisory Council on Historic Preservation wrote a letter to the Secretary of Agriculture, superior to the Chief of the Forest Service. He maintained “. . . it is fundamentally wrong to so seriously impact an area held sacred by a group of American citizens, if any feasible alternatives exist” (Aldrich 1982: 1). Yet the Forest Service ignored these admonitions and proceeded with plans to build the road. It claimed it could mitigate the adverse impact on Indian religion by not building the road over any “archeological areas” and by protecting specific religious sites from logging activity.

With their administrative remedies exhausted, Indian leaders turned to the judiciary. The U.S. District Court found evidence to support the Theodoratus Report and issued

an injunction to stop the road. The Court of Appeals affirmed, but a 5–3 U.S. Supreme Court reversed.

Writing for the Court’s majority, Justice Sandra Day O’Connor relied on a rational basis test rather than strict scrutiny, which is usually applied in cases involving fundamental rights or insular minorities. Instead of demanding that the government justify the road on grounds that it was necessary to achieve a compelling state interest, she said the road could be built if it were rationally related to a legitimate governmental purpose. While she acknowledged that the G-O Road “could have devastating effects on traditional Indian religious practices,” she perceived that building the road was merely an internal governmental decision related to the use of its own property. Further, she wrote,

. . . the affected individuals [would not] be coerced by the Government’s action into violating their religious beliefs; nor would . . . governmental action penalize [religious] activity by denying any person an equal share of the rights, benefits, and privileges enjoyed by other citizens (*Lyng v. Northwest Indian Cemetery Protective Association* 1988: 485 U.S. 439,

450).

She claimed the road was merely an “incidental” interference with religious freedom, not a deliberate government attack on a person’s faith. Therefore, it was permissible.

It is true that members of the Indian community were not prohibited from going through the motions of meditation, making medicine, or performing ceremonies. In that sense the G-O Road would not infringe upon the free exercise of religion. But the Supreme Court decision failed to take into account the nature of Indian religions. Unless the high country remained sacred, where leaders and members of the community could find privacy, silence, and undisturbed natural conditions, their religious acts were meaningless.

Nearly two years after the Court’s decision, on 2 January 1990, the Northwest Indian Cemetery Protective Association and three individuals appealed to the InterAmerican Commission on Human Rights of the Organization of American States. They stated that they had spent their legal remedies under U.S. law and requested the OAS to intervene and protect their basic, human rights. They supported their petition by citing provisions in two international documents.

American Declaration of the Rights and Duties of Man, Article III: “Every person has the right freely to profess a religious faith, and to manifest and practice it both in public and in private.”

American Convention on Human Rights, Article 12: “Everyone has the right to freedom of conscience and of religion. This right includes freedom to maintain . . . one’s religion or beliefs . . .”

Further, the Tolowa Nation Tribal Council adopted a formal resolution supporting the request, which the parties attached to their petition.

Eleven months later, on 27 November 1990, the petitioners wrote to OAS, withdrawing their request. They said, Congress has “passed certain legislation that prohibits

construction of the G-O Road.” This legislation, the Smith River National Recreation Area Act, signed by President Bush on November 16, preserved most of the natural surroundings in the region (PL101–612).

It was a long struggle with an abrupt and curious conclusion. Persons from three Indian tribes failed to persuade the Forest Service and the U.S. Supreme Court to guarantee the right to exercise their religion in a national forest. But, finally, they were able to join with environmentalists and convince Congress to prevent the government from building a paved road through their sacred lands in northern California.

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See also: Black Mesa; Deloria, Vine, Jr.; Devils Tower, *Mato Tipi*, or Bears Lodge; Indigenous Environmental Network; Law, Religion, and Native American Lands; Manifest Destiny.

Goddesses – History of

Books with titles such as *The Rebirth of the Goddess* are now common but were unheard of thirty years ago, at least as serious offerings to theological literature written in European languages. While there were Pagan groups who worshipped goddesses before the second wave of feminism, beginning in the late sixties and early seventies of the twentieth century, there is no question that, at least in Euro-American contexts, feminism spurred the growth and acceptability of female imagery and language about deity immensely. Today, the “rebirth” of the goddess is not only commonplace in Pagan religions, but is also a theological issue for Jews and Christians, as is demonstrated by the many controversies about non-sexist liturgies in those religions.

A title such as “rebirth of the Goddess” contains two theses that deserve examination. First is that it is proper and permissible to imagine the deity in female terms. Second is that this language represents a “rebirth,” a return to something familiar; it is not a new phenomenon or an unheard of feminist innovation. However, a title such as “rebirth of the Goddess” hides another thesis important to the history of goddesses: some religions are not experiencing a “rebirth” of the goddess because they never lost her in the first place. This third thesis strengthens the cogency of the first thesis while demonstrating the anomaly of a religious context in which the “rebirth” of the goddess could be necessary or controversial.

However, the first two theses *are* contentious for large segments of the European and North American public, who take for granted the convention that deity could only be properly addressed in male terms and regard it as silly, offensive, or both to suggest the deity could be addressed as female. But at the beginning of the third millennium, many passionately religious people in the Euro-American context do call the deity with whom they relate “she” and “goddess.” They also often claim that such namings of deity are a vast improvement over the male-only language and imagery for deity with which they grew up, especially concerning reverence for nature and environmentally sound practices. However, many other people who care passionately about the environment and about the dignity of women regard goddess worship and discussions about the antiquity and ubiquity of such practices as a diversion from dealing with more critical issues, a luxury that is costly when so much is at stake environmentally and politically.

Many feminist theologians and scholars of religion who work to reconstruct goddess worship base their case on logic, on knowledge of how religious symbols work, rather than on historical precedent. Feminist Christians and Jews rely on the argument that gender cannot be an attribute of deity but is only an analogy based on familiar human experiences. Therefore, the acceptability of female analogies for deity has much more to

do with society than with deity, and the horror with which some religious people react to the image of “goddess” says a great deal about their views of society and of women. For obvious reasons, historical precedent is not the first line of argumentation for such Jewish and Christian theologians, though they do appeal to the nearly universal use of female images of deity in world religions.

But what of the claim that contemporary Paganism represents a “rebirth” of the Goddesses worshipped in ancient times? This argument is more complex and difficult to sustain. For some contemporary Pagans, it is important to claim that their practices involve direct historical continuity with ancient religions practiced in pre-Christian times and, perhaps, in an underground fashion, throughout the Christian era until it was safe for them to be practiced openly again in recent years. Some contemporary Pagans, especially in some feminist spirituality movements, combine their fervent belief that they are practicing an ancient goddess-worshipping religion with an equally fervent belief that these ancient religions fostered societies of equality and peace in which women were honored equals, if not rulers. Some would claim that a “matriarchal golden age” existed before the rise of patriarchy and male monotheism.

Other contemporary Pagans are less concerned with claims of direct historical continuity and more likely to regard their religion as a new religious movement partially inspired by and drawing upon the sacred stories and religious practices of ancient religions. They would also state that the validity of their practices and beliefs does not depend on their antiquity and that some or even all their religious forms may be of recent origin even though they resemble ancient myths and rituals. Such practitioners also make strong arguments about the contemporary worth and value of goddess worship, without necessarily claiming that such religious practices led to a social utopia in ancient times.

The weight of opinion among scholars of religion, whether or not they may also practice some form of goddess worship, favors the second version of this hypothesis. Direct historical continuity with ancient goddess worship and the secret practice of goddess-worshipping paganism throughout the Christian era are difficult, if not impossible, to prove. In addition, most scholars of religion are well acquainted with the historical nature of all religious beliefs and practices and regard religions as ever changing and developing collections of ideas rather than static entities having an unchanging essence that endures through time.

The claim, so important to some feminist spirituality groups, that ancient goddess-worshipping societies were ideal peaceful and egalitarian societies has been controversial even among religious feminists. Most versions of the so-called matriarchal hypothesis attribute the rise of male dominance to invasions of peaceful Old European societies by male-dominant warrior societies who worshipped male deities. This event replaces the “Fall” of Christian sacred history in the narratives told by many goddess-worshipping groups. Many critics have pointed out that no explanation has been offered for the emergence of male dominance among the invading warriors, which means the fundamental riddle of why male dominance is so common has not been solved. Further-

more, it is pointed out that evidence about the character of earlier societies is scant, making it difficult at best to assert much about their social and religious practices. Finally, this sacred history still relies heavily on one of the core myths of Christianity, in that it posits a fall into “sinful” history, simply changing the story of how that fall happened. Many religious feminists have questioned the relevance of that motif for feminist forms of religion and many feminists would claim that the appropriateness of naming deity as “she” does not depend on the accuracy of this sacred history.

Thus, one could claim a contemporary “rebirth” of the goddess, if one means a contemporary recurrence of an almost universal religious form among Euro-Americans, rather than a phoenix-like resurrection of ancient deities or direct historical continuity with ancient religions. It is important to set this “rebirth” in global context. Nothing is more useful to these debates than a dispassionate look at the data of world religions in longer and bigger perspective than the history of monotheism or Christianity. The most important fact learned from such study is that the absence of goddesses in monotheistic religions, not their presence in all other religions, ancient or contemporary, is the unusual situation, the religious practice in need of explanation. In other words, contemporary pagans and other goddess worshippers, including Jews and Christians who address the deity using feminine pronouns, are doing nothing remarkable or innovative if their practices are looked at from the bigger perspective of human religious activity overall, rather than through the much narrower lens of familiar Abrahamic, monotheistic religions.

Goddesses were important in the earliest known religions and all the religions of the ancient world in which monotheism grew up, a point well known to the many religious groups that reject monotheism as part of their advocacy for the rebirth of the goddess. Many have pointed to numerous female figurines found in archeological sites from at least 25,000 years ago, among the oldest religious artifacts known, even though their exact significance cannot be ascertained. All the great ancient civilizations, so thoroughly studied by Western scholars and so beloved by many, were familiar with numerous goddesses. The Sumerian Innana, who became the Mesopotamian Ishtar, was a goddess who celebrated her love for her husband Dumuzi (Mesopotamian Tamuz) in lusty poetry that still inspires many. The Egyptian Isis also loved her husband Osiris, who she revived from the dead to conceive their son Horus, whom she raised in secret. Representations of her with her great wings outspread or her son seated in her lap are still common. The goddesses of the Greek pantheon – Athena, Aphrodite, Artemis, and Demeter – are also still well known and their stories are often retold. The story of Demeter and her daughter Persephone is one of the few mother–daughter stories in classical mythologies around the world. Other mythologies of pre-Christian Europe, such as Celtic, Germanic, and Nordic mythologies also included goddesses.

These stories vary greatly, but all of them involve, in some form or another, death and resurrection, which most scholars think is an analogy for the changing seasons and the growth of the crops on which life depended. Sometimes the male deity dies and is reborn in some fashion, but just as often the dying and rising deity is a goddess.

Innana descends into the underworld, and growth stops until she returns. Persephone is abducted into the underworld, and while Demeter wanders in search of her, drought and famine prevail in the world of humans. Parallels with the basic Christian story have been noted many times.

Goddesses are also found in the great Asian religions, including contemporary forms of Hinduism and Buddhism, undercutting the contemporary Westerner impression that goddess worship is an archaic or ancient phenomenon outmoded in the modern world. Hinduism is the most “goddess friendly” of the major contemporary religions, and the goddesses are at least as popular and important as the male deities to most Hindus. Their images are everywhere in India and are even becoming familiar in the West.

Perhaps the best known is the beneficent Durga riding her tiger, her many implements displayed in her many arms. But the wrathful Kali is also well known, as is Sarasvati, who especially patronized art and scholarship. Every Hindu businessperson attends to Laksmi, the goddess of wealth and well-being.

More surprising is the presence of “goddesses” in Buddhism, which is a non-theistic religion in its philosophical forms. But Buddhism also involves a great deal of symbolism, mythology, art, and ritual. In these dimensions of Buddhism, various anthropomorphic forms, both male and female, abound. As in Hinduism, the female mythological figures are at least as popular and important as the male figures. Tara, a peaceful helper, is especially popular among Tibetan Buddhists and Kwan-yin, her counterpart in Chinese Buddhism, is universally venerated, especially by women. Many Westerners have now begun to do meditation practices associated with both these popular female figures. These are only two of the best-known Buddhist female figures in a mythological universe populated by hundreds, if not thousands, of female figures. In addition to these female compassionate helpers and saviors, the esoteric schools of Tibetan Buddhism use the image of sexual complementarity to convey many of their central teachings. The deities portrayed in their esoteric art are often interpreted as representations of enlightenment, and the female deities convey this message as much as the male deities.

Many have pointed out that even the monotheistic religions imagine deity as female and call upon her. Even in the Bible, the wisdom literature includes the image of personified Wisdom as a feminine dimension of deity. Many contemporary Christians searching for traditional but feminine ways to think of deity have turned to this image and studied the literature about her. In many Christian contexts the Virgin Mary has been the most accessible and beloved divine figure for most ordinary churchgoers, both historically and in many parts of the contemporary world. Some would argue, correctly, that Mary is not really a goddess, but only a human. Nevertheless, if one looks, not to theological judgments, but to how Mary functions in the religious lives of many Catholics, one would have to say that she functions as a goddess, whether or not formal theology regards her as such. Jewish mysticism in the Kabbalah also contains significant female imagery of the deity. In the complex diagram of the flow of divine life used by Kabbalists, a number of the deity’s attributes are female, including the Shekhinah, the indwelling presence of deity who goes into exile with her people.

Clearly, most religions have never lost the practice of goddess worship. For reasons that are still not completely understood, monotheistic religions that developed in the Middle East did begin to regard goddess worship with horror at some point in their development and, as a result, it became unthinkable to many adherents of those religions that deity could be called “she” as easily as “he.” Until the second wave of feminism, most Jews and Christians took it for granted that masculine language would be used about the deity, even while they also believed that God does not have a body and could not be imaged. But when people began to question other aspects of Abrahamic religions, it was inevitable that they also questioned its peculiar use of gendered images for the deity. Some who are dissatisfied with male monotheism have rejected those religions for a neo-pagan identity, inspired in many cases by our relatively scant knowledge of ancient goddess worship. That is one kind of “rebirth.” Others have tried to reintroduce feminine pronouns and imagery into traditional monotheistic contexts. That is another kind of “rebirth.”

In view of this information, contemporary Western goddess worshippers, whether Pagans or theological radicals in Judaism and Christianity, certainly can sustain the thesis that it is normal, permissible, appropriate, and traditional to imagine deity as female. The weight of religious traditions globally and historically is on their side, not on the side of advocates of male monotheism.

The “rebirth” of the goddess in contemporary Western religious contexts is a deliberate religious innovation set in the context of rebellion against a traditional religious form, male monotheism. As such, its reference point is more often what it is *not* – the worship of a singular deity spoken about through male analogies – than extant traditional practices of goddess worship, which most of those attempting to midwife this rebirth have never experienced. All varieties of goddess worshippers are definite about the sociological and psychological value of imagining deity as female for a culture which had forgotten how to do that. The goddesses invoked may take many forms and have many antecedents, but the most important thing about these deities for the followers is their *female-ness* itself, which is probably not the case in religious contexts in which goddess worship is traditional. Additionally, especially in many Pagan contexts, a deliberate effort to speak of “goddesses” rather than “the goddess” is now common. This represents a deliberate attempt to distance goddess worship from religiously familiar monotheism, whereas in religious contexts in which goddesses are traditionally worshipped, a single female figure is often the central deity even though doctrinal insistence on monotheism is not the norm. Western goddess worshippers emphasize many other contrasts with monotheism. They usually claim that ritual is more important than belief; they pride themselves on their lack of creeds and their doctrinal flexibility.

Many contemporary goddess worshippers, whether they are overtly feminist or not, and whether they are Pagans or non-pagans, claim that their religions are decidedly more ecological than their more traditional counterparts because of ideas and practices common to goddess religions. They claim that theologies of immanence, in which the deity is seen as immersed in nature rather than separate from it, foster concern for this

Earth. They point to their sacred story which celebrates the seasonal rhythms of nature and a ritual cycle that focuses on the sun and the seasons. For Pagans, the preferred setting for religious activity is out-of-doors. Many goddess worshippers as well as many Jews and Christians who favor female imagery for deity are also environmental activists. Many advocates of goddess worship would claim that this link between worship of female deities and ecological consciousness is inherent in the symbolism of female deities. Others would dispute such a claim, disagreeing with the gender essentialism implied in positing an inherent link between goddess worship and reverence for nature. The evidence of world religions also undercuts this claim. Goddesses tend to mirror and validate the concerns of those who worship them, and the propensity of goddesses to patronize warriors when they are worshipped by warriors is only the most obvious case in point. Thus the tendency of contemporary Western goddess worshippers to be unusually environmentally aware is probably due more to their social location than to anything inherent in the worship of female deities. Contemporary goddess worshippers are iconoclasts who critique the received tradition in many ways; breaking with the ecologically irresponsible ways of mainstream culture is just one way they break with tradition; imagining deity in female ways and relating with her is another. Reverence for nature and female imagery for deity converge in contemporary Western goddess worship, but it would be difficult to sustain that link for all religious contexts in which female deities are worshipped.

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See also: Christ, Carol; Daly, Mary; Ecofeminism (various); Estés, Clarissa Pinkola; Feminist Spirituality Movement; Gimbutas, Marija; Griffin, Susan; Merchant, Carolyn; Paganism – Contemporary; Reclaiming; Sea Goddesses and Female Water Spirits; Sexuality and Green Consciousness; Shakti; Shiva, Vandana; Sjöö, Monica; Spretnak, Charlene; Starhawk; Walker, Alice; Wicca; Women and Animals; Z Budapest.

Golden Dawn

The Hermetic Order of the Golden Dawn was founded in England on 12 February 1888 by William Wynn Wescott, Samuel Liddell Mathers, and William Robert Woodman. It was a graded initiatic magical order that based its structure on the Kabbalistic Tree of Life – a diagram purporting to show the structure of the universe and its relationship to the divine – and placed itself within the tradition of Rosicrucian spirituality. Its members included a number of prominent figures, including poet William Butler Yeats and the controversial figure Aleister Crowley. The Golden Dawn is also notable in that, from its inception, it accepted women on equal footing with men. In 1892 Mathers founded a second order, within the structure of the Golden Dawn, to teach practical magic, the *Rosae Rubeae et Aureae Crucis*. In 1900, because of a controversy over the legitimacy of Crowley's initiation into the second order, Mathers, who then resided in Paris, was expelled from the order by the British contingent. Further political conflicts over revising the constitution after Mathers' expulsion led to multiple schisms by 1903, and with the closing of the original Isis-Urania temple in London in 1914 the Golden Dawn's life as an institution ended. A number of initiates founded derivative orders, some of which remain active through their successors in the present day.

Although rooted in a Christian worldview, the Golden Dawn presented a spiritual paradigm which both affirmed engaged work with the world and approached the cosmos as a manifestation of the divine. Its course of study synthesized wide-ranging European esoteric lore, including alchemy, astrology, tarot, and the Kabbalah. One of the key rites of the Golden Dawn, the Adeptus Minor initiation, identified the "Great Work" of the individual as "to purify and exalt my spiritual nature that with the Divine aid I may at length obtain to be more than human." This encapsulates much of the teaching of the Golden Dawn; rather than rejecting material existence and human will, it sought to transform them through ritual, meditation, study, and ethical living.

Although its institutional life was relatively brief, the Golden Dawn had a great influence on twentieth-century magical movements in the United Kingdom, Europe, and the Americas. It provided basic liturgical structures and esoteric assumptions for Thelema, the religious tradition founded by Crowley, as well as many of the particular symbolic systems and magical approaches for contemporary Pagan and Wiccan spirituality. A clear example is the method of consecrating a ritual space, common in most Wiccan traditions, by calling upon the Aristotelian elements in four directions, which derives from the rituals for invoking the four elements in the Golden Dawn's Ritual of the Portal and the later Watchtower Ceremony. Numerous early writers and

leaders of the Pagan and Wiccan world participated in Golden Dawn-derived groups, and early twentieth-century occult writers who were members of the Golden Dawn, such as Crowley and Dion Fortune, continue to be very influential. Both traditional esoteric groups and contemporary Pagan traditions benefit from the Golden Dawn's synthesis of Western esoteric systems that revere the natural world as both a manifestation of spiritual mysteries and a key to their understanding. By synthesizing this lore and providing a context for the study of practical magic, the Golden Dawn opened the door for later magical religions, which not only used the natural world as a path to the divine, but located divinity there.

Grant Potts

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See also: Alchemy; Magic; Magic, Animism, and the Shaman's Craft; Paganism – Contemporary; Western Esotericism; Wicca.

Goodall, Jane (1934–)

London-born primatologist Jane Goodall is most famous for her ground-breaking study of chimpanzees in Tanzania, but by the turn of the twentieth century, and into the twenty-first, she had become one of the world's leading conservationists. She founded the Jane Goodall Institute

(founded in 1977) and its “Roots and Shoots” program (in 1991) to reach out to young people and get them involved in protecting animals, vulnerable humans, and the environment. She has become increasingly open about her belief in God, in part to bring hope to those who experience despair as they learn about and cope with environmental degradation, species extinctions, and human violence.

Goodall's fascination with animals and the natural world began early, during her childhood in Bournemouth, England, and waxed stronger as she matured. Encouraged by her mentor, the legendary anthropologist and paleontologist Louis Leakey, Goodall began her landmark study of chimpanzees on the eastern shore of Lake Tanganyika, East Africa in 1960 at the age of 26. This began what would become the longest continuous field study of animals in their natural habitat.

Early in her fieldwork Goodall observed chimpanzees making and using tools by stripping leaves off twigs to fish termites out of a nest. This tool-making behavior, previously believed to exist only in humans, represented so significant a discovery that Leakey concluded: “Now we must redefine tool, redefine man, or accept chimpanzees as humans.” Goodall's discoveries and unconventional methodology, which included living in her subjects' habitat, distinguishing them by personality, and giving them names instead of numbers, revolutionized the field of primatology. Her methods were also criticized, however, by many scientists, as insufficiently objective.

Although not formally trained when she began her research, Goodall later earned a Ph.D. in Ethology at Cambridge University in 1965 and then returned to Tanzania to establish the Gombe Stream Research Centre. This began a lifelong pattern of establishing institutions to carry out and continue scientific and conservation work that would benefit science, humans, and the natural world. In 1971 Goodall began working as a professor at Stanford and then later at Tufts, the University of Southern California, and Cornell. She subsequently published more than sixty scientific articles and has been involved in numerous videos and films produced by National Geographic, Discovery, HBO, Public Broadcasting Service (PBS), and others. She also authored more two dozen books, including *My Friends the Wild Chimpanzees* (1967), the best-selling *In the Shadow of Man* (1971), and her autobiography *Reason for Hope: A*

Spiritual Journey (1999), which explored her religious and ethical pilgrimage. Her writings have been published in more than a dozen languages.

Goodall's philosophy is expressed in one of her oftenquoted aphorisms: "Only if we understand can we care. Only if we care will we help. Only if we help shall all be saved" (2000: 5). Through her work and activities she strives to foster understanding of the connection between environmental conservation and human development, while calling on people to care, take responsibility, and act heroically for the sake of all living creatures. Goodall's message also includes sharing some of the lesser-known characteristics and abilities of chimpanzees, such as being omnivorous, expressing violent behavior at times, and being capable of learning sign language. Some that she has encountered also enjoy painting and like to watch sunsets. By describing how chimpanzees express emotion, communicate, and share to some degree the human trait of abstract thinking, and perhaps even religious feelings, Goodall has helped change many people's perceptions about wild animals and the acceptability of species loss as a cost of progress. In *Reason for Hope* Goodall envisioned a future of ever more environmentally sustainable human progress. She grounded this optimism in the energy, enthusiasm, and commitment of young people, in the potential of humans to solve problems and overcome great odds, and in the "indomitable human spirit."

Goodall embodies what some have called the "civic scientist" – one who goes beyond teaching and research to educate and actively engage society in solving pressing problems. She has received more than a dozen honorary doctorates and fifty awards of distinction including, most recently, the Ghandi/King Award for Non-Violence and the Benjamin Franklin Medal, the United States' oldest science award. In 2002 United Nations Secretary General Kofi Annan named Goodall a United Nations Messenger of Peace, noting her "dedication to what is best in mankind." Well into the twenty-first century Goodall continued touring the world (averaging 300 days a year on the road), promoting grassroots development and conservation work in more than seventy countries. In 2002 she was appointed to a United Nations advisory panel to the World Summit on Sustainable Development in Johannesburg, South Africa. As she put it during the summit itself, she was there to bring "the voices of the animals" into that important human council (author Taylor's fieldnotes, August 2002). She did so in part by speaking strongly in favor of the Earth Charter, as well as by participating in pilgrimages celebrating the nearby Cradle of Humanity, where ancient human ancestors were found. The comments made there by Goodall and the other luminaries constituted a kind of consecration of the Earth's evolutionary story, and had many affinities with the so-called Epic of Evolution.

Goodall's message and writing have broad appeal in part because they are suffused with a religiously inclusive spirituality; her theism is not sectarian and is panentheistic in tone. She believes animals have spiritual significance and are able to communicate with humans, even bringing their own messages of hope, oracle-like, into the human world. A lifelong observer of chimpanzees, she also believes that some of them may even have their own forms of nature-related spirituality. It is in such spirituality that

her ethics is grounded, namely, an ethics that understands all life has intrinsic value and is related as kin in the evolutionary story. It is also from her spirituality that she finds her optimistic expectation of a significant world improvement through individual empowerment. Through numerous media and her continuing efforts, Goodall has inspired countless people at all levels of influence around the world to make wider and deeper exertions on behalf of each other, the environment, and life on Earth.

Paula J. Posas Bron Taylor

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See also: Animals (various); Animism (various); Cognitive Ethology, Social Morality, and Ethics; Earth Charter; Epic of Evolution; Environmental Ethics; Primate Spirituality; Tree Music; United Nations' "Earth Summits".

Gordon, Aharon David (1856–1922)

Aharon David Gordon was one of the leading ideological figures of the labor Zionist movement. Born in Troyanov, Russia in 1856, Gordon received a classical Orthodox Jewish education from private tutors, while studying secular subjects on his own. He found employment for 23 years helping to manage the estate of his celebrated relative, the great banker and philanthropist Baron Joseph Guenzberg. In 1903 ownership of the estate changed hands. Gordon, 48 years old and out of a job, made the remarkable decision to leave Russia in order to join the young *halutzim* (pioneers) who, through strenuous physical labor, were creating the material basis for the Jewish return to Palestine. He was to be joined by his wife and daughter only five years later. Working until cancer drained his physical strength, Gordon died in Kibbutz Deganyah in 1922.

Although Gordon never held any official posts in the Zionist movement, his ideas, writings, and personal example made a powerful impression which still continues to influence Israeli thinking. In his single systematic treatise, *Ha'Adam ve'HaTeva* (*The Human Being and Nature*) and many occasional essays and letters, he advanced a general philosophical anthropology, a critique of modernity and a theory of religion, which he constantly applied to the immediate challenges faced by the Zionist community in Palestine.

Gordon held that human beings relate to their world in two essentially different ways. Firstly, we experience the world through the intuitive, inclusive, and largely unconscious activity of *living* as integral components of the cosmos. Secondly, we critically inspect our lived experience in order to formulate limited, rational, and fully conscious *knowledge* of the world. The role of religion is to reintegrate us with the natural world, to reestablish the proper balance between life and knowledge. Agricultural work takes on tremendous religious importance. By physically working the land, people take their place as part of nature and make their uniquely human contribution to its creative organic processes. Gordon felt that the human connection to the cosmos must be mediated through membership in an ethnic national community whose culture and religion reflect the connection made to the cosmos through the experience of life in a particular geographical setting. This doctrine did not admit of any innate superiority of one group over another, but rather rejected universalistic systems (e.g., Marxism and Christianity) which eschew ethnic identity and call for individuals to see themselves purely as members of the human race.

Gordon's program for Jewish renewal in Palestine was a direct application of his broader philosophy. Judaism and the Jewish people had both been alienated from nature during their 2000 years of exile from Palestine. The Jewish people had been cut

off from the natural environment which constituted their original and particular link to the cosmos. In the Diaspora, Jews had been further alienated from nature by anti-Semitic restrictions on Jewish land ownership and Jewish employment in agriculture. By returning to Palestine and working the land, Gordon hoped that the Jewish people could be revitalized and even serve as a moral exemplar to other members of the human family of nations.

Berel Dov Lerner

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368–86 are devoted to Gordon and include translated excerpts from his works.

See also: Eco-Kabbalah; Gush Emunim; Israel and Environmentalism; Jewish Environmentalism in North America; Jewish Law and Environmental Protection; Judaism; Kabbalah.

Gore, Albert Jr.

– See Cathedral of St. John the Divine.

Gorman, Paul

– See Cathedral of St. John the Divine; Religious Partnership for the Environment National.

Goshalas

The Hindi word *goshala*, literally “place for cows,” means cowshed, dairy, or pasture, but also specifically refers to institutions in India and Nepal which are homes for aged and non-productive cows.

Respect for animal life has deep roots in South Asian civilization. The doctrine of *ahimsa*, or non-injury to sentient creatures, first appears at the very end of the Vedic period (ca. sixth century B.C.E.) and in the following centuries becomes central to the philosophies of Hinduism, Buddhism and Jainism. The specific Hindu focus on the inviolability of the cow, however, does not emerge until the fourth century, and is not accepted by the general Hindu populace until much later. It is the Hindu concept of the cow’s sanctity that provides the rationale for the existence of goshalas.

Many scholars see the Hindu sacred cow concept as essentially religious in nature. W. Norman Brown, for example, cites as contributing factors ancient associations of the cow with the Mother Goddess and fertility; the role of the cow in Vedic ritual; the figurative use of words for cow in the Vedic literature and their subsequent literal interpretation; Vedic prohibitions against violations of a Brahman’s cow; and the *ahimsa* concept. Other theories of origin, however, invoke a variety of political, economic and ecological factors. The most controversial of these, anthropologist Marvin Harris’ cultural ecological explanation put forward in the mid-1960s, initiated a spirited debate in the social sciences over the nature of India’s sacred cow concept. In Harris’ view, the sacred cow concept is not so much a religious phenomenon as a cultural mechanism that evolved to protect an important economic resource in the context of the Indian subcontinent’s specific ecologic and political setting. However, in challenging this interpretation, Frederick Simoons argues that religious factors play a significant, if not necessarily all-encompassing role, in explaining Hindu attitudes toward the cow.

Whatever the origins of India’s sacred cow concept, modern goshalas reflect the complexity of their origins. Thus, many temples dedicated to the Hindu god Krishna, for whom the cow is a favored animal, operate goshalas to provide milk for temple rituals. Before independence, Hindu rajas (kings) maintained goshalas at their courts as expressions of Hindu piety. But most numerous in number are the goshalas maintained by India’s business castes (*vanias*). These Hindu merchant communities (many of whom are Vaishnavas, followers of Vishnu in his incarnation as Krishna) provide financial support for cows which are beyond milking age or are sick, lame, or ill. The reasons given for this support are service to the cow (*go-seva*) and cow protection and development (*go-rakshan*). The goshalas are also the locale of Hindu rituals such as cow worship and Krishna-related festivals such as Gopashtami and Goverdhan Puja.

Vania goshalas are concentrated in northwestern India (Gujarat, Rajasthan, and the Bombay region), where vania communities are concentrated. (Jains in this region also shelter cattle in animal refuges called *pinjrapoles*.) Wherever vanias have migrated in India, they have taken the institution of the goshala with them. Hence, goshalas may be found as far afield as Assam and Tamil Nadu.

Two modern forms of the goshala are the Gandhian goshala and the gosadan. Service to “Mother Cow” and cow protection were central to M.K. Gandhi’s (the Mahatma’s) philosophy and teaching, and ashrams founded in the Gandhian tradition often maintain goshalas. These serve both as refuges for “useless” cows as well as dairies providing milk for the ashram’s inhabitants. The most recent incarnation of the goshala is the *gosadan*, reserves for unproductive cattle established since the 1950s in remote rural areas as part of the Government of India’s Five Year Plans.

Goshalas were estimated to number around 3000 in the mid-twentieth century. Three decades later, this writer observed that the institutions were declining in numbers and importance as India modernized and became more secular in outlook (Lodrick 1981). However, recent events in India may require this view to be reevaluated. The emergence of Hindu revival movements (the Vishwa Hindu Parishad [VHP], for instance, has incorporated support for goshalas into its political platform) has given goshalas increased significance as symbols of traditional Hindu religious values.

Deryck O. Lodrick

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See also: Animals; Domestication; Ecological Anthropology; Ecology and Religion; Gandhi, Mohandas; Harris, Marvin; Hinduism; India.

Graves, Robert von Ranke (1895–1985)

Robert Graves was an English poet, novelist and critic, author of about 140 works ranging from poetry to biography, anthropology, and mythology. His “grammar of poetic myth,” *The White Goddess* (1948) has been especially influential for nature religion in the twentieth century, and remains his most famous spiritual work.

Born in Wimbledon, South London, Graves was the son of the writer and folklorist A.P. Graves (with whom W.B. Yeats quarreled over his treatment of Irish folklore), and a descendant of the German historian, Leopold von Ranke. As a baby, he had his head patted by Algernon Swinburne, and in later life he joked that something of the poet’s unconventional spirituality was passed on to him at that moment. After service in the First World War, in which he was badly wounded and read his own obituary in *The Times*, Graves studied at Oxford University and was briefly Professor of English Literature at the University of Cairo before becoming a full-time writer. Accompanied by the American poet and critic Laura Riding (1901–1991), with whom he had a complex and often troubled relationship (1926–1940), he moved to Mallorca in 1929. This lifelong residency was broken only by a return to England during the Second World War. He was Oxford Professor of Poetry from 1961 to 1966.

Graves is known for his love poetry and his historical fiction, the latter of which is distinguished by its willingness to offer creative interpretations of myth and history. This is well illustrated in novels such as *I, Claudius and Claudius the God* (1934), *The Golden Fleece* (1944), *King Jesus* (1946) and *Seven Days in New Crete* (US title, *Watch the North Wind Rise*, 1949). Graves’ complex scholarly works such as *The Nazarene Gospel Restored* (co-authored with Joshua Podro, 1953), and his two-volume compendium *The Greek Myths* (1955) are similarly imaginative, with the latter restoring some of the violence and even barbarity of the original legends and perhaps encouraging modern Pagans to de-sentimentalize the ancient world. “Poetry is a condition, not a profession,” he was wont to remark, and throughout his life he emphasized the bardic, even sacred function of the poet, often linking the art of poetry with its pagan origins.

His famous investigation of poetic myth, *The White Goddess*, has proved extremely popular with practitioners of nature religions for a number of reasons, although it has also been challenged. Graves’ fondness for Celtic literature, especially ancient Irish and Welsh poetry, helped to generate contemporary interest in these literatures and the

spiritual practices of their creators, while his central argument that the One Goddess is the great Muse of Western culture has won widespread support within nature religions. Building on the work of Jane Harrison, Graves linked the faces of the Goddess as Maiden, Mother, and Crone to the phases of the moon, and saw her as eternally contested by the God of the Waxing and of the Waning Year. For Graves, the Goddess and the poetry she inspires is a profound challenge to rationalist and patriarchal thought, epitomized by Christianity and the industrialized, war-torn Europe that so horrified him.

The book has been seen as eccentric in academic circles, where it has been challenged on historical, literary and political grounds, and it has also met with criticism in the wider world. Laura Riding was particularly critical, perhaps because many of Graves' readers believed her to be the book's inspiration. In 1975 she denounced Graves, claiming that he misappropriated her ideas about women and spirituality and served up "a foamy grandiose effusion of nothingish spiritualistics" rather than a work of genuine profundity and feminist consciousness. The essentialism of Graves' thinking about gender, neatly expressed in the title of his poem, "Man Does, Woman Is" (1964), has also generated considerable debate. Graves himself was ambivalent about *The White Goddess*, perhaps because parts of it were, he felt, magically inspired rather than consciously researched and written. In 1955 he is said to have written to a stranger: "Some day scholars will sort out the White Goddess grain from the chaff. It's a crazy book and I didn't mean to write it" (Seymour-Smith 1982: 405).

Despite or even because of such criticism, the influence of *The White Goddess* continues to be far-reaching. Its impact on Wicca, Paganism, Druidry and contemporary Celtic spiritualities has been especially profound. Graves' biographer Martin Seymour-Smith has called him "a kind of prophet of 'the Return of the Goddess.' "

Nick Freeman

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See also: Celtic Spirituality; Druids and Druidry; Feminist Spirituality Movement; Goddesses – History of; Paganism – Contemporary; Wicca.

Greco-Roman World

The notion of nature was used in several different ways in the history of the Greco-Roman world. This had much to do with the semantic range of the original terms themselves. The Greek term *physis* comes from the verb *phyein/ phyesthai*, which means “originate,” “spring from”; the Roman term *natura* is semantically equivalent to the Greek, which it probably translates, as it derives from the verb *nasci*, meaning “give birth, origin.” The Greek term in particular was used in at least five senses in antiquity; first, to indicate the origin of plants (*phyton*), which literally spring from the Earth (*phyton* < *phyein*), and in this sense it contrasts what comes into being otherwise, which is indicated by the verb *gignesthai* (= come into being, be born). Secondly, the term is used more generally as a noun to indicate the origin of everything (i.e., like *gignesthai*) and also the principle that gives rise to everything. Thirdly, the term is used, especially by early Greek philosophers, to indicate the process of becoming, growth, and differentiation of things. Fourthly, the term is used to indicate the result of this process of differentiation; that is, the essence of a thing, its special constitution, which makes it the particular kind of thing it is. In this sense the term is used in expressions such as “the nature of man,” “the nature of trees,” and so on, and involves a contrast between the essential characteristics of a thing and its acquired or imposed ones. Used in this sense, nature is contrasted with artifacts and conventions, and natural entities are distinguished from what man creates, such as tables and statues, but also laws, constitutions, the principles of economy and trade. Finally, the term “nature” is used to indicate the natural condition of a thing (i.e., the condition which is determined by its essence).

This conception of nature determined the attitude that ancient man took toward nature. On the one hand he respected nature and its powers, toward which he felt fear and anxiety, and this combination of respect and anxiety led the ancient man to assign divine qualities to natural powers and personify them as gods. Yet on the other hand, the ancient man also felt the urge to inquire into nature. Such an inquiry was usually called *ta physika* or *physike* (i.e., *episteme* = science), and had a philosophical and religious dimension but also what we now call scientific character. It typically included an inquiry into the origins of the universe, the nature of man and all animal beings, the nature of heavens and the celestial bodies, the nature of gods and so on. This kind of inquiry had been fascinating Greek philosophers and scientists from a very early stage, that is, from the sixth century B.C.E. to the end of antiquity, and it progressively became quite elaborate, complex, and systematic.

Archaic and Classical Age (Eighth–Fourth Century B.C.E.)

Literature

In early Greece nature was a power that inspired awe, as it was beyond man's control, and this awe often gave rise to a religious feeling. Traditional Greek gods were to some extent connected with natural powers, such as the sea, the heaven, the fire and so on. This belief in the divinity of natural powers can be found in the early Greek literature. In the Homeric poems some gods are presented as masters of specific natural elements (e.g., Poseidon is the god of the sea). Although Greek gods are not always identifiable with natural powers (e.g., Zeus), it is quite significant that natural elements such as rivers and springs are gods and nymphs respectively, while we also know that winds, Earth, sun, and the ocean enjoyed widespread cults. In the Homeric poems natural elements are often described, sometimes in quite some detail. Yet nature is never described for its own sake, but is almost always considered in connection with man's activity. Natural scenes when introduced have a metaphorical value aiming to highlight certain qualities of a hero. We can discern a Homeric predilection for the wild side of nature, which serves comparisons pointing to a hero's manliness or bravery. Nature is not depicted as sympathetic to man, but rather as having little influence on man's mind. Nevertheless the Homeric man can look at nature as such and appreciate its beauty, especially of flowers, trees, rivers, but also of heavens and the stars, and this becomes particularly evident in the *Odyssey*.

We find a similar attitude to nature in the rest of early Greek literature and also in that of the classical age. Nature was still considered in connection with man's activity, but now its beauty was more highlighted. We often find descriptions of the nature of spring, of the rising or setting sun, of the night with or without moon, of the sea, and animals. Tragic poets in particular often give expression to man's dependence on nature and also to man's feeling of belonging to nature. Further, nature is often personified and ascribed human emotions.

Early Greek philosophers, sophists, and scientists (sixth–fifth century B.C.E.)

Early Greek philosophers were engaged in giving a comprehensive and rationalistic explanation of the natural world. This concern was so central to them that later generations used to call them *physiologoi* or *physikoi*, that is, natural philosophers, and invariably gave to their books the conventional title *On Nature*. They were characterized by their tendency to give rational explanations of natural phenomena instead of the traditional mythological ones by appealing to the nature of a thing, which they

contrasted with what is fake or conventional. Heraclitus, for instance, talked about what is according to the nature of a thing, and also claimed that real nature loves to hide. The process of change in natural entities was central for those philosophers. Heraclitus stressed that change is inherent in all natural beings and at no point is a thing identical with itself. This was a starting point for Parmenides. He contrasted actual beings, which he considered as everlasting and unchangeable, from natural ones, which are always in a fluid state, and as such they cannot be thought of or expressed linguistically. In support of Parmenides' views Zeno tried to show through a series of paradoxes that the world of nature (i.e., of change) is illusory and unreal. Anaxagoras came to suggest that everything is actually unborn and unchangeable, and change arises because of reapportionment of certain ingredient features. In a similar spirit Empedocles maintained that everything consists of four primordial, imperishable elements, which are blended in different portions due to the motive forces of Love and Strife, and change is to be reduced to the different allocations of these elements. The atomists like Democritus on the other hand suggested that all things consist of an infinite number of corpuscles, which are eternal and indivisible (atoms), and change is due to their motion and collision in the void.

In fifth-century Athens, sophists rejected religious explanations of natural phenomena and devoted themselves to educating young Athenians in how to give rational ones. The notion of nature plays an important role in their thought. They understood nature as a power that includes everything and recognized it as a source of value. Being concerned with the question of whether ethical and political norms exist by nature or by convention – that is, whether they are absolute or relative to the species or the individual – they argued that man must conform with nature rather than with the conventional law. This appeal to nature most of the time was specifically to human nature; in their view something is good if it advances human nature. But the sophists did not seem to have given clear answers to the question of what is nature's way, if we are to judge from the extant fragments including sections from Plato's *Gorgias*, *Republic I*, and the *Protagoras*, where the antithesis between nature and convention is discussed. Yet most sophists appear to have retained a place for convention and law; Protagoras apparently argued that man began in a natural state and proceeded to civilization in which law was necessary for the maintenance of the community. Other sophists also seem to have been concerned with substituting misplaced norms with more natural ones instead of rejecting them entirely.

The desire to inquire into nature in a more systematic and detailed way gave origin to scientific disciplines, most importantly to medicine, historiography, and geography. Early Greek medicine sought to investigate nature with a purely empirical method and explicitly opposed the speculative investigation of the natural philosophers (cf. the Hippocratic work *On the Art of Medicine*). The Hippocratic doctors understood nature as the original and normal state of a thing against which all divergences are to be measured. In the case of human health, they considered diseases as divergences from a model of a healthy living body by reference to which they can be assessed

and eventually reversed, and yet these are neither sent by gods nor do they have causes other than natural ones which cannot be explained by scientific means (cf. the Hippocratic treatises *On the Sacred Disease*, *On Airs, Waters, Places*). Hippocratic doctors proposed a physiological theory according to which the well-being of the human body is determined by four humors that have to be in balance. They were the first to examine the role of climate on humans and also the first to investigate scientifically the female body and its particular functions (e.g., menstruation).

Plato and Aristotle

With Plato and Aristotle the inquiry into nature took a new turn. Plato elaborated on the thought of Parmenides and Heraclitus and was concerned with the question of what there is, and whether something that comes into being and changes, as happens with natural entities, is also a true being. In his mature period Plato suggested a distinction between sensible particulars in the world around us, which are subject to change, and their intelligible, eternal forms which constitute their essences. This view has much to do with Plato's conception of matter, according to which matter is inherently chaotic and in need of taking shape. Most probably Plato studied nature systematically with his students in the Academy, but his conception of sensible reality as a realm of change which cannot be the subject of scientific, that is, secure knowledge, suggested to him that the results of such inquiry do not constitute science (*episteme*). This is why he considered the account of the origins and the nature of the world, which he set out to give in a late dialogue, the *Timaeus*, as merely a "likely one" (*Timaeus* 29d). According to this account, the world has come into being out of chaos by a divine intelligence, a creator God, who brings into being all sensible entities by imposing form onto matter. This process takes place in the receptacle, a peculiar Platonic notion, which constitutes a third kind of being next to the intelligible forms and the sensible particulars, where the forms are reflected and imprinted in matter. According to the *Timaeus*, the world as such is a being with intellect, soul, and body. Noticeably Plato tried to explain the constitution of the world, which he considered as an harmoniously ordered whole, by means of mathematics and geometry, an idea which was favored by the Pythagoreans; the world's body is presented as consisting of four elements bound properly and as moving in circles. The Creator also brings into being four kinds of animals, the ones who live in heavens (i.e., the stars), in the air, in the sea, and in Earth. A special section of the *Timaeus* describes the creation and constitution of man; we are told that man has a soul with an immortal and a mortal part which are located in specific bodily parts.

Plato's immediate successors did not seem to have shown much interest in natural science, and apparently suggested that the *Timaeus* was a fiction meant for pedagogical purposes (e.g., Xenocrates). Aristotle, however, showed much zeal in the study of nature (later generations called him "the student of nature"), and his efforts to cultivate

natural science became evident in his many relevant writings. Aristotle distinguished sharply between natural science (i.e., physics) from theology and the science of abstract numbers (i.e., mathematics). For Aristotle, the inquiry into nature was the study of things which do not exist independently of matter; more specifically, it is the study of the entities which are self-caused and self-moved (i.e., have the cause of their existence in themselves). He was the first to write a work with the title *Physics* in which he discussed the first principles of the natural world, but also investigated the origins, behavior and interactions of the natural objects; Aristotle examined in detail the nature of physical existence, of weight, change, types of motion, and also time and space. He criticized all earlier attempts to explain change and substance; in his view each substance has an essence (i.e., a set of features that make it the thing it is). He agreed with Plato that the essence of a thing is its form. But the question is how Aristotle understood forms. He argued against Plato that there are no universal forms, but each substance is a composite of a particular form and matter, which the form actualizes. Yet this allows for the possibility that general forms as a theoretical abstraction may play an explanatory role, and this seems to be supported from parts of Aristotle's work. Aristotle's understanding of substance informed his conception of change; in his view, for a change to take place there has to be a change of something, which means that there exists a subject that in part changes but in part also persists. Besides, he argued that a thing changes according to its nature (i.e., its essence); if a man, for instance, becomes a musician, this does not mean that he has ceased to exist in his previous form, but rather that it is in his nature (i.e., his essence) to change thus. To understand why a thing is the way it is, Aristotle argued, there are four basic factors which play a causal role: the matter of a thing, its form, the agent or the agent's ability, and finally the reason for the sake of which the thing has come into being. The last factor is particularly crucial. For Aristotle something comes into being because it is motivated by a particular end, which determines its nature. But this also means that the features of a thing are to be explained in terms of its distinctive end; if a bird has a beak, this is not to be explained primarily as a feature which serves its feeding, but rather as a feature which determines the bird's distinctive essence. Aristotle considered this so-called teleological explanation (from the Greek *telos*=end) as the proper way to study nature. In these terms he tried to study natural kinds, especially animals, and to explain their basic features in his several zoological tractates such as his *Researches about Animals*, *Parts of Animals*, *On the Movement of Animals*, but the coherence of his theory is open to discussion. As regards the universe, Aristotle considered it as finite and without a beginning. In his view all things in the universe are moved, that is, come into being and change by something else. More specifically, all motions originate from the first heaven, which is placed in the outer sphere of his geocentric universe; this first heaven in turn is moved by the unmoved mover, which is the ultimate origin of all "motion" (i.e., change in the universe), which is identified by Aristotle with God.

The heirs of Aristotle's school, most importantly Theophrastus and Strato, continued their teacher's studies into nature. Theophrastus made pioneering inquiries in

botanology, and his work *Historia Plantarum* is the first herbal manual in Greek to survive. He was the first to distinguish between monocotyledons and dicotyledons and to maintain that geography accounts for the differences in shapes and properties of plants.

Hellenistic Times (Third–First Century B.C.E.)

Hellenistic literature

Hellenistic poets showed much more attention to nature than their predecessors and described nature in a more detailed fashion. This time descriptions served as a means not only of illustrating man's emotions, but also of indicating man's desire to return to nature. In this period we have the origins of the bucolic poetry, which is set in the countryside and which has as its subject herdsmen, their animals, their loves, and their songs. The countryside is highly idealized: specific indications of places and times are avoided in favor of timeless scenes which emphasize the beauty of the countryside and the pleasures of its colors, smells, and sights. Poets like Moschus, Callimachus, and especially Theocritus, implicitly or explicitly contrast the world of nature (i.e., the countryside) with the world of civilization in which they live. Nature is often presented as animate and also sympathetic to man, especially to one's erotic adventures.

Philosophy – Stoics

The Stoic inquiry into nature was an essential part of their philosophical concern with the world and the place of man in it. For the Stoics the universe is a unity organized to the last detail by divine laws and is also maintained by divine providence. In their view there are two basic principles in the world which exist always joined, a passive one (i.e., matter) and an active one, which they called *logos* (reason) or nature. For the Stoics nature embodies reason and is present in the entire universe in a specific sense (i.e., as a power that gives form to things). In this sense nature exists everywhere and is both the created universe as a whole and the creative force behind it. Since nature is the ultimate rational force in the universe, the Stoics identified it with God, and, as a result, they held that natural philosophy promoted true piety. As regards the world as such, the Stoics confined existence solely to bodies and rejected the view taken by Plato and Aristotle that there exist incorporeal entities. Even their active, divine principle (i.e., nature) is material, and the Stoics identified it with a form of fire. This element transforms the other three (i.e., air, water, and Earth); more specifically, every single thing is constituted by fire and air in different proportions. The divine fire, known as *pneuma*, they argued, exists in all beings (even the human

soul is part of the *pneuma*), and makes the world a coherent whole and also interacting. According to the Stoics, the world is a finite body surrounded by an infinite void and results from a series of transformations of the divine fire (i.e., various cosmic phases, in which the world contracts and expands). They contended that the world is perishable and will end in a total conflagration, but it will be reconstituted. As the world is ruled by reason, nothing in their view happens by chance. The Stoics held that there are causes for everything and, given these causes, nothing else could happen. In their view, everything is determined by the divine providence, that is, reason or nature. Yet in their view there is still quite some space for free human action; something may be triggered by a set of causes but is not necessitated, as man himself is one of the causes and actually the primary one, so whether something will happen or not is up to him/her. Given the Stoic conception of nature as a divine all-comprising power, Stoic philosophers had both philosophical and religious reasons for studying it closely. Posidonius (2nd c. B.C.E.) exemplified this tendency. He was an accomplished scientist whose interests ranged from geography to history and astronomy. Noticeably the Stoic conception of nature exercised much influence in contemporary and later philosophy and science.

Philosophy – Epicureans

Epicurus tried to return to the conception of nature of the early Greek philosophers, especially of the atomists like

Democritus and Leucippus. He maintained that “nothing comes from nothing” (*Letter to Herodotus* 38, Lucretius, *De Rerum Natura I* 152–3) and, like Parmenides, he contended that the sum of beings never changes, and yet, in his view, within the beings themselves change takes place. Epicurus denied Aristotle’s distinction between matter and form arguing that matter carries form in itself. He distinguished two aspects of natural reality, the body and the void. In his view, bodies consist of atoms which have size, form, and weight, yet in his view bodies also have features which the atoms do not have, such as color, temperature, etc. The atoms, he argued, move vertically in the void and sometimes clash; their unpredictable motion can explain all natural phenomena and there is no need to postulate the interference of the divine. Epicurus explained the creation of the world in terms of random collisions of atoms, while he explained sensation in terms of influxes or effluxes of atoms moving across the void, and this suggested to him that sense perception provides us with reliable knowledge; according to Epicurus even the soul consists of atoms which disperse at death. Yet Epicurus tried to avoid the risk of postulating a purely mechanistic universe like the Democritean one, in which everything is explained in terms of moving atoms, by introducing an uncaused swerve that some atoms make at random times. This would allow for the exercise of human free will, but how exactly this works in the Epicurean universe is a matter of debate.

Science

In the Hellenistic period scientists made remarkable steps toward understanding nature. Two Alexandrian doctors, Herophilus and Erasistratus (fl. early 3rd c. B.C.E.), were the first to perform systematic scientific dissections on human cadavers, and as a result they made numerous anatomical discoveries including the discovery of the nerves and a better understanding of the role of the pulse and the function of the heart. An expansion of geographical knowledge also took place, partly because of the expedition of Alexander the Great. Further, we witness the development of a tradition of writings on wonders of nature. In astronomy, noteworthy is the theory of Aristarchus of Samos of the heliocentric system, which was proposed in order to explain the variations in the apparent diameter of the sun and the brilliance of the heavenly bodies. Yet this theory was far less influential than the competing theory of Theon of Smyrna, according to which two planets, Mercury and Venus, orbit the Sun, while the latter orbits the Earth. Quite characteristic of astronomy at this age but also of the other sciences is the systematic observation of natural phenomena and the collection of data before the construction of any scientific theory.

Imperial Times (First Century B.C.E.—Second Century C.E.)

Literature

As in Hellenistic literature, in the imperial centuries nature continued to be a central theme and often is described in detail. Entire poems deal with nature, such as Meleager's epigram. Life in the countryside is contrasted again with life in the city. Horatius for instance contrasted the peaceful life of the countryside with the noise of the city (*Satire* II.6), and elsewhere he asked what is more beautiful, the channels of the city or the murmur of the little rivers. This close attention to nature has much to do with the fact that Latin poets, who loom large in this period, imitated Hellenistic models such as Theocritus and Callimachus, as can be seen at best in the *Eclogues* and the *Georgica* of Vergil. Some of them also expressed nostalgia for the time when men had been living closer to nature. Quite characteristic of Latin poets is their appreciation of beautiful landscapes conducive to a life of reflection. Notable as an exception is Lucan's representation of nature in his *Pharsalia* as full of mysterious forces which can be manipulated by witches to terrifying effects.

Science

Natural science made significant progress in the imperial age. Particularly significant among the scientific treatises of this period is Pliny's work *Historia Naturalis* (*Natural Researches*) in 37 books. The author wrote this comprehensive work being influenced by the Stoic conception of nature according to which nature is divine, and as such, rational, providential, and benign. The work contains material for many disciplines ranging from geography to botanology and zoology. The structure of Pliny's inquiries is dictated by that of the natural world, as viewed by man whose existence allegedly nature means to support; the work starts with the cosmos as a whole in book two and progresses through all its subdivisions, animal, vegetable, and mineral. Greek astronomy and geography reached their peak with Ptolemy (2nd c.); his *Almagest* discusses all known astronomical phenomena of the time, while his *Planetary Hypotheses* deal with the motions of the celestial bodies. In medicine Galen is an extremely prolific author who wrote on almost all medical questions. He made some steps of progress in several issues but he largely remained faithful to the Hippocratic tradition; his physiological theory, for instance, is an elaboration of the four-humor system of the Hippocratic doctors.

Philosophy

The Stoic view that man must live according to nature gained wide acceptance at this time, but was construed in different ways. Cicero argued for a theory of natural law, according to which legal rules are based on reason, which he, like the Stoics, considered as permeating nature. Several Platonists, like Antiochus of Ascalon, Taurus,

Apuleius, and also Peripatetics like Xenarchus, Boethius, Aspasius, and Aristocles, endorsed the Stoic view of a life according to nature, and integrated it into the doctrinal system of their school-authority. Philosophers at this age showed much interest in Plato's *Timaeus*. Platonists, but also Peripatetics (e.g., Adrastus) and also others (e.g., Galen), commented on it by writing commentaries or monographs on specific issues (e.g., Plutarch *On the Creation of the Soul in the Timaeus*). One of their prominent concerns was the sense in which the world is created according to Plato. Platonists tried to articulate an interpretation of the dialogue which would escape Aristotle's criticism, according to which the world of the *Timaeus* cannot come into being and also be eternal, because, in Aristotle's view, what comes into being also perishes. Some Platonists suggested as a solution that the world in Plato's *Timaeus* is prevented from destruction through God's will, while others argued that the world was not created in the sense of coming into being at a certain point in time out of nothing, but rather has always existed and is created only in the sense that a principle, namely God, accounts for it.

Late Antiquity (Second Century–Sixth Century)

Literature

The tendency to describe nature in detail, which, as has been mentioned, started with the Hellenistic poets, took on striking dimensions during this period. Authors of novels like Longus, Achilles Tatius, Heliodorus, or pseudoCallisthenes described landscapes, especially exotic ones, in great detail; on the one hand they tend to give an idyllic character to their descriptions, and in this they were influenced by the Hellenistic bucolic poets, yet on the other their descriptions are quite realistic. Such realistic descriptions can be found also in the epic poems of Quintus Smyrnaeus and Nonnus. Further, rhetoricians, representatives of the so-called second sophistic, such as Themistius and Libanius, composed entire treatises in which they set out to describe or to praise nature or aspects of it.

Philosophy

Philosophers of this age are mostly Platonists who continued to show much interest in the cosmogonical account of the *Timaeus*. Their cosmological interests are tightly connected with metaphysical concerns, and as a result they examined the *Timaeus* in connection with the *Politicus*, *Republic X*, especially the myth of Er, and *Laws X*. They were concerned with the status of the creator of the *Timaeus* and his relation to the forms which he imposes on matter so that the world can come into being. Since Porphyry (3rd c.), Platonists paid considerable attention to Aristotelian works on natural science, and they wrote commentaries on Aristotle's *Physics*, the *De caelo*, the

De anima. Yet Aristotle's science was also attacked vehemently by Philoponus (6th c.). His criticism first concerned Aristotle's assumption of the eternity of the world. Philoponus argued for a Christian conception of creation according to which the universe had a beginning in time. He further criticized Aristotle's doctrine that the celestial bodies are made of indestructible *aether*, making reference to astronomical observations which spoke against such a theory. Finally, he criticized Aristotle's explanations of dynamics, arguing that the void is possible and that velocity in void does not have to be infinite. At this time we also find the culmination of a debate which had started already in classical times on the question of whether the world is mathematically describable. The Pythagoreans had always contented that the world is a harmonious whole that can be expressed in mathematical terms, a view which Plato largely shared. Pythagorean Platonists like Iamblichus (3rd c.–early 4th c.) and Proclus (5th c.) returned to this idea and tried to express the harmony of nature in mathematical terms by exploiting the mathematical parts of the *Timaeus*.

Christianity

Early Christians relied on the Bible for their views on nature and the universe. Since they believed that God created the world out of nothing, they considered the natural world as being sacred in some strong sense. They considered human nature even more sacred, as they believed that man is created in the image of God, and they agreed with the Stoics that man is the center of the universe. Early Christian thinkers like Clement, Eusebius, and Origen found the biblical account compatible with the Platonic conception of the world, and often argued for this quite explicitly. Christians agreed with Platonists that the world is essentially good, as it has been created by a benevolent God.

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See also: Creation Myths of the Ancient World; Delphic Oracle; Greece – Classical; Greek Paganism; Ovid's *Metamorphoses*; Roman Britain; Roman Natural Religion; Roman Religion and Empire.

Greece – Classical

The religion of classical Greece was based in reverence for various aspects of nature, and can provide many examples of how attitudes to nature affected treatment of the natural environment in positive and negative ways. The deities of the ancient polytheistic beliefs of the Greeks reflected the natural forces they experienced in the Earth, waters, atmosphere, and forms of life. They regarded certain features of the landscape as sacred, and established rituals associated with activities that involve human interaction with nature, such as agriculture, hunting, and consumption of food and drink. Their religious views and practices affected, if they did not always determine, the ways they used natural resources and reshaped their environment.

Greece is a mountainous country, both the mainland and the islands, with many high peaks culminating in Mount Olympus, almost 3000 meters (9600 feet) high. Only one-fifth of Greece's territory consists of arable lowlands. Agriculture faces difficulties because rainfall is generally light. Athens, for example, averages about 380 mm (15 inches) of annual precipitation, and most falls in the winter. The climate, typical of the Mediterranean, has a dependably hot, arid summer extending from April to October and a cool, moist winter the rest of the year. The environment is everywhere affected by the presence of the sea; there is no place in Greece further than 110 kilometers (70 miles) from the nearest sea-coast.

The gods of the Greeks reflect the environment; Zeus, the chief god, personifies storms and rain and was worshipped on high mountain peaks. Poseidon, in early times an underworld god who shook the mountains with earthquakes, became the chief sea-god. Athena concerned herself with birds (the owl being only the most famous), snakes and olive trees. Her helmet, spear, and shield are later additions. Artemis frequented woods and mountaintops, which she protected along with wild animals, especially their young. She expected her worshippers to exercise care when they hunted, avoiding waste and impiety. The music of her twin brother Apollo, also called Smintheus, the mouse-god, charmed lions, lynxes, fawns, and other beasts, causing them to dance with delight. The fruitfulness of the fields was the grain-goddess Demeter's work. Asclepius, the physician-god, healed through snakes and dogs. Indeed, all major gods had associations with nature, and many minor ones were spirits of natural features like winds, rivers, trees, and springs.

Two gods with paramount roles in nature are of special interest. The worship of Ge or Gaia, Earth herself, mother of gods, mortals, and every living thing, can be traced from the Neolithic. The Greeks believed they were born from her, nourished by her, and returned to her at death. Her law was a natural law deeper than human enactments

and impossible to repeal. As Xenophon put it, “Earth is a goddess and teaches justice to those who can learn, for the better she is served, the more good things she gives in return” (*Economics* 5.12). Those who treat her well receive blessings, but those who treat her badly suffer adversity. Gaia forgives, but only to a certain point, when the balance tips and it is too late: famine, disease, and death ensue.

As Greek religion developed, Pan became recognized as a universal god of nature. His name was partly responsible for this identification, since *pan* means “all” in Greek. Originally a god of herd animals and the environment of pastures, he became Great Pan, the all-god, nature personified, who ruled all things.

The Greeks felt that certain places in their surroundings were sacred landscapes hallowed by traditions. Usually these were localities of innate charm. Great gods and lesser spirits haunted wild, beautiful locations such as springs, caves, groves, and viewpoints. Each sanctuary had an orientation dictated by its natural setting. The oracular temple of Delphi, for example, was located in a spot commanding a spectacular scene, looking up at the shining cliffs of Mount Parnassus and down a deep gorge to the Gulf of Corinth. The healing shrine of Asclepius is set within a comforting natural amphitheater at Epidaurus. The sacredness of these places, the Greeks were sure, existed before they were dedicated or temples constructed, and anything built there would take cognizance of powers present in Earth, waters, and sky.

The Greeks knew wilderness as *eremos*, a place with few or no human inhabitants. But gods were present there. People erected altars on mountain summits for Zeus or other deities. Olympus, the highest mountain in Greece, was home to the gods of the upper world, but many other mountains had divine presences. Apollo haunted Parnassus, and mountain-born Dionysos roamed the forest on its flanks. Poseidon held forth with Athena on the high cape of Sunium. Mount Helicon sheltered the Muses, goddesses of the creative arts. Tortoises on Mount Parthenium might have been made into sounding boxes of lyres, but “the men on the mountain [were] always afraid to capture them, and [would] not allow strangers to do so either, thinking them to be sacred to Pan” (Pausanias, *Description of Greece* 8.54.6–7). Artemis outdid the others; when her father, Zeus, allowed her as a girl to choose her own presents, she asked for all the mountains in the world, and he gave them.

Many rituals involved the enactment of a connection between the participants and nature. The most renowned was celebrated every four years at Eleusis. There thousands saw and heard the enactment of the myth of Demeter, whose daughter Kore (or Persephone), had been seized by Pluto and carried off to his underworld kingdom. Desperately searching for her beloved child, Demeter stopped the crops from growing, threatening to destroy human life and thus end sacrifices to the gods. Zeus relented, ordering Kore to be restored to her mother as long as she had not eaten anything in the underworld. She had tasted only four pomegranate seeds, so the gods worked out a compromise: Kore would spend four months each year underground, when the crops would not grow, but for the other eight months she would live with her mother, seeds would sprout, and Earth would be clothed in living green. The myth signified

the origin of the seasons, the four months underground being the dry season between the grain harvest and planting, when the winter wheat does not grow. These mysteries identified the life and death of humans with the dying and rising of vegetation and its goddesses in the cycle of being: people die and, like seeds, are buried in the Earth, but as seeds send forth shoots in response to the rains, the initiates of the mysteries would live a happy life in the other world.

Another nature initiation ritual was the Arkteia, an Athenian festival dedicated to Artemis at Brauron, a rural sanctuary. Little girls, and sometimes little boys as well, covered with bearskin robes and called “bears” (*arktoi*), performed a dance with slow, solemn steps imitating the movements of bears. Bears became rare in Attica by the fifth century B.C.E., and saffron-dyed linen replaced bearskins. The festival was appropriate for Artemis, since she cared for the young of humans and animals. Sculptures and vases show children affectionately holding small animals such as rabbits and doves, sometimes kissing them. These were not killed; the sacrifice was only a symbolic drop of blood from a small cut. This initiation inculcated respect and love for wild creatures. So Artemis might be seen as a patron of environmental education. A renewal of the festival was held on the Acropolis for young women of marriageable age.

In Greece from earliest times, sacred groves dotted the landscape. These outdoor sanctuaries were the first temples of the gods. In Greek, an *alsos* or grove consecrated to a deity was called a *temenos*, a demarcated place. They were used for worship and supervised by local authorities. As time went on they took on the aspect of parks, with planted or cultivated trees. On the island of Lesbos, for example, there was a grove of apple trees dedicated to Aphrodite.

Some tree species were considered sacred to individual deities. Oaks belonged to Zeus, willows to Hera, olives to Athena, the laurel to Apollo, pines to Pan, and so forth. But there was no automatic identification between the species in a grove and the deity to whom it was dedicated. The people of Colophon worshipped Apollo in an ash grove, while a grove of laurel, usually sacred to Apollo, was sacred to the Dioscuri at Pharae.

In the earliest period the grove itself was the temple, and sacrifices were offered without benefit of statues or buildings. Later, statues of gods or goddesses were erected in the groves, and then shelters were built over these images to protect them and to provide a place for votive offerings. This shelter, originally of wood but later of stone with fluted columns and carved reliefs, became the temple building. But the Greeks continued to conduct public rituals and sacrifices out-of-doors. The association of grove with temple was never lost. Every temple, it was felt, needed to have trees around it, and where there were none, they were planted. When the Athenians chose the Acropolis, a barren limestone outcropping, as the site for the Parthenon, they excavated two rows of pits in the rock, filled them with soil, and planted cypresses. Similar holes have been found beside other temples.

The groves varied in size. Some were only a few trees, but the sacred land of Crisa near Delphi covered many square kilometers, and a grove near Lerna stretched down

a mountainside to the sea. Since sacred groves numbered hundreds, the total area was considerable.

Laws forbade injuring sacred groves in any way. Specific rules varied in different places and times, but the pattern is consistent. There was a boundary and a prohibition against trespass. To step over the line was to pass from ordinary ground to holy ground, and was allowed only for those who would not pollute it. In a few, only priests could enter, but usually ordinary persons could do so if they were ritually clean. Sometimes women, or more rarely men, were forbidden to enter. A law found everywhere forbade felling trees or cutting branches. "Men call them the holy places of the immortals and never mortal lops them with the axe" (*Homeric Hymn to Aphrodite* 257–72). Even the removal of dead, fallen timber was prohibited. Individual trees in them were often of remarkable dimensions. This resulted from the religious feeling that notable trees in the groves were uniquely cherished by the gods, and served as dwelling places for venerable tree spirits, or dryads. If a tree was felled, it was believed that its dryad died, and that the god might leave the sanctuary. These trees were allowed to live out their lifespans until wind or rot brought them down. At Pharae, the plane trees were hollow with age and big enough to sleep or picnic inside. The Maidens, cypress trees at Psophis, were said to overshadow a mountain.

The other living denizens of the groves were protected, and hunting was not allowed. Hunters could not take dogs into a sacred enclosure, and had to stay outside if their quarry fled into a grove. At Mt. Lycaeus, it was believed, a hunter who violated this rule would die within a year. Most groves contained springs, streams, or lakes. Pollution of these was strictly forbidden, and there was usually a ban on fishing. While wild animals were granted haven, domestic ones were excluded. Penalties were set for herders who allowed cows, sheep, goats, swine, or horses to graze in the precincts. Other rules prevented plowing, sowing, or erection of unauthorized buildings. Setting fire to a sacred grove was a heinous crime, even in wartime, although it did happen. Human beings, even slaves, who sought shelter in a grove were granted sanctuary. Cleomenes, who burned five thousand Argives to death in a god's forest, was driven mad by the thought of divine retribution.

Exceptions to rules were allowed under certain conditions. Sometimes wood might be taken for a sacrifice, or animals in the grove, such as goats and deer, might be captured and offered. At times trees in a grove were used in building a temple. The magistrates of Carpathos once ordered a tall cypress to be felled in the precinct of Apollo and sent to Athens for use in rebuilding the temple of Athena. The Athenians raised an inscription of thanks, recognizing that such use of a sacred tree was appropriate. Other buildings of religious and public character were erected in groves. Public meetings and elections were held there. If the amount of environmental damage done to sacred groves was limited, however, the same thing cannot be said of the land outside them, where a religious motive leading to practices of conservation did not operate to the same degree.

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See also: Creation Myths of the Ancient World; Delphic Oracle; Egypt – Ancient; Egypt – Pre-Islamic; Greco-Roman World; Greek Paganism; Mesopotamia – Ancient; Roman Natural Religion; Roman Religion and Empire.

Greek Landscape

Greek landscape was and still is for the most part represented topographically, symbolically and institutionally by its religious features, the most salient of which are the ancient temples dedicated to one of the Olympian deities or the whitewashed churches of the Aegean islands. Such features, however, are not the physical expression of a deep-seated religiosity characterizing Greek people, but rather an indication that religion was and is pivotal to the Greeks' perception of their identity in relation to outsiders. Indeed, religion is what still "exoticizes" Greece.

The natural landscape of ancient Greece had an ample mythical and religious structure. Mount Olympus, the highest Greek mountain, was considered to be the residence of the twelve predominant deities. Many of them were representing specific natural forces and elements – such as Zeus, the god of thunder and lightning; Poseidon, the god of the sea; or Dionysus, the god of vegetation and fertility in nature. Taking into account the characteristics of the Olympian deities, one may make a distinction between two types of landscape, the natural and the social. Thus, Athena, the goddess of wisdom, was associated with city life that provided the ordered landscape for social reproduction, while Artemis with wilderness and natural female reproduction. The population of each city usually honored a different tutelary divinity and certain patronal festivals were used to promote a feeling of community, thus forbidding non-citizens to participate. The temple of Parthenon, dedicated to Athena, still remains the most important centerpiece of Athens today.

Equally important religious markers of the landscape of ancient Greece, which were also Panhellenic in character, were the sanctuaries of Apollo at Delphi – the Earth's *ομφαλός* (navel) uniting the heavens with the underworld and the most famous oracular site – and that of Zeus at Olympia. It is worth noting here that the sanctity of such places and of others of lesser importance was preserved in Byzantine and modern times by building Christian churches on them. Apart, however, from the sacred places devoted to major divinities, the natural landscape of ancient Greece was believed to have been inhabited by other supernatural beings, such as Nymphs who were found and actually embodied the spirits of mountains, trees and rivers. The belief in such spirits still exists in many provincial places of modern Greece. The "wild" space outside human settlements, especially that near water, is considered to be the dwelling of dangerous and demonic female spirits called *νεράιδες* or *ξωτικά*.

As in Classical so in Christian Greece the landscape is given meaning in relation to what exists above and below it. The capricious ancient divinities were replaced by those of Orthodox Christianity: God, Jesus, the Mother of God, the saints and holy

ascetics. As the religious landscape changed, so did the natural one. The marble Doric and

Ionic temples were substituted first by basilicas and later on by the Orthodox domed churches. In Byzantine times the marvelous architectural constructions of the cenobitic monasteries gave the land an intense mystic atmosphere. Such constructions culminated in the great monasteries of Mount Athos resembling a medieval town with its fortress, towers and the domes of its main church and chapels. But while in the Byzantine era and under Ottoman rule, monasticism was very influential in the organization of the social landscape in Greece, today monasteries have largely lost this strong authority. Most of those existing in Greek cities became historical monuments, while the new ones built in remote rural areas provide basically an oasis of spirituality away from the profane urban environment. The big voluminous domed churches, however, still occupy a central position in spatial organization. Every urban Greek belongs to a parish church, which is at the same time the center of neighborhood and a spiritual and social one. In rural areas, the village church is found at the center of the village and together with the square becomes the axis for the organization of social life. A characteristic feature of the rural landscape is also the *εικονοστασι* (shrine). Shrines are usually found at the four edges of the village, marking its boundaries and protecting it from the demonic forces of the wilderness surrounding its space. Such shrines are also erected at the sides of roads as fulfillments of a vow by those who miraculously survived a serious car accident or in memory of those who died. Shrines are not the only material markers of death or of boundaries. Cemeteries with tall cypresses and pine trees surrounded by high walls are found at the outskirts of the cities or villages, marking a distant “other” world, the world of the dead, which should be kept separate from the world of the living. The cemetery is a miniature city symbolically reflecting the existing social structure as well as the different attitudes of modern Greek society toward death. In Greece the egalitarian structure of the village cemeteries strongly contrasts with the material display of wealth in the urban cemeteries, reflected in the elaborate graves and markers in the ossuaries. Finally, the institutionalized sacred space is not the only place where one comes into contact with the supernatural in Greece. Many sites exist in nature bearing the seal of apparitions by the Mother of God or various saints that sanctify wilderness and that one can visit and be filled with divine grace.

While markers of sanctity abound in the Greek landscape and many rituals exist in the Greek Orthodox religion that purify nature and encourage people to consider it as blessed, one can still observe many sets of practices within the Greek Orthodox Church that are at odds with environmental concerns to which the Church has devoted the first of September, namely the start of the ecclesiastical year. To mention but one example, this can be clearly seen at modern Greek burial practices. Greece is the only country in continental Europe that does not allow cremation on religious grounds. Spurred on by an ever-increasing urban population, cemeteries no longer exist outside the city limits – a sound practice used in the past to save valuable

space and to prevent the spread of diseases. Cremation, which may be considered as a “cleaner” practice than the decomposition of the body and more in line with the reasonable use of urban landscape, is seen by the Church as a violation of the natural order and its doctrine of the body. This ban on cremation results in overcrowded urban cemeteries, whose overworked soil is unable to properly decompose the corpses, making those who prefer cremation “migrants in death” by being cremated in another country. The Church’s uncompromising attitude on this issue indicates that protective environmental practices fostered by the Church on certain occasions come second when its own traditions are threatened.

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See also: Christianity (6b1) – Christian Orthodoxy; Christianity (6b2) – Greek Orthodox; Delphic Oracle; Greco-Roman World; Greece – Classical; Greek Paganism.

Greek Paganism

Pagan (or neo-pagan) currents in contemporary Greece exhibit a unique characteristic, namely a close relation to the primordial and native faith of the ancient Hellenes. Hellenic paganism generally enjoys a prominent status within the international pagan scene, while Hellenic culture as a basic pillar of Western and world civilization continues to exercise major influences upon many domains. These facts bestow special importance upon this revival in Greece, which has been initiated by ethnic Greeks proud of their ancestors. It claims allegiance to and continuity with the spiritual values bequeathed by the ancient forefathers. It opposes the established Orthodox Church and promotes a Hellenic understanding of nature as a sacred entity. This Earth and nature-based spirituality has not developed in Greece as a broader environmentalist countercultural movement, but rather within the specific context of Hellenic paganism.

Modern Greek paganism is not a mass and widespread phenomenon. Rather, it is represented by different groups and associations and has not yet overcome its social marginality. Up to today there has been no major organization to coordinate the varying pagan endeavors. This lack of institutionalization has caused the fragmentation of the entire movement and the dispersion of its potential. In addition, paganism has had to fight against the established official ideology of the country concerning the historical fusion between Hellenism and Christianity. This ideology has not left enough room for the flourishing of pagan endeavors, although there have been such isolated revivals in various contexts from the nineteenth century onwards (e.g., the “Delphic Feasts” organized by the poet Angelos Sikelianos in 1927 and 1930). Hellenic traditions and elements do survive today both explicitly and implicitly in popular customs, rituals and worship, even within a Christian framework. Some of these idiosyncratic trends are related to specific concepts of nature, and this is manifested in the flirtations of popular novelist A. Papadiamantis (1851–1911) with paganism and the continuing sanctity of place.

Within this loosely structured landscape of contemporary Greek paganism, a distinction must be made between pure pagan and broader Hellenic-oriented groups. It concerns related but differing trends. Both of them are concerned with the quest for pre-Christian national identity and roots. But the latter pertains more to a wider Hellenic revival, expressed in various non-homogeneous forms, with an emphasis on Greece’s indigenous heritage and usually at the expense of the Orthodox Christian tradition. The most characteristic current is centered around the monthly journal *Δαυλ6<* (*Torch*), published since 1982 and devoted to all aspects of Hellenic civilization. The promotion of the unique and unparalleled contributions of the Hellenes to

universal civilization and the superiority of Hellenic race, spirit and culture worldwide are particularly stressed. The incorporation of esoteric trends, “New Age” spirituality, nationalistic ideas or anti-Semitic propaganda within a *bricolage*-context is not out of the ordinary. Nature and environmental issues are occasionally taken into account by attracting public attention to or by organizing protests against environmental degradation, while Christianity is held responsible for the desacralization and the devaluation of nature.

Yet, the above currents do not belong clearly to Greek paganism. Even the fundamental opposition to Christianity is in some cases blurred and room is left for a potential coexistence of Hellenism and Christianity. In addition, there is no systematic attempt to revive Hellenic religion and culture, including nature religion and an Earth-respecting spirituality. This is basically true for the pure pagan groups that accept the Earth as the primordial locus of reality and of the forces of life. A particular aspect of Greek paganism differentiating it from other forms of paganism worldwide is its predominant ethnic character. Further aspects include: worship of nature as a divine element in its entirety, because the divine dwells everywhere in nature; polytheism including many gods, goddesses, myths, symbols and rites; lack of specific founders, because the native faith has evolved out of the natural beliefs of the indigenous people; and the importance of sacrifice as a gift to the gods, who are basically understood not literally but as archetypes. Based on their particular scope, sacrifices may be offered to some specific gods of the polytheistic pantheon and are accordingly structured (animal sacrifice, libation of wine and other products, etc). The term “(Neo)Pagans” is not usually accepted by the groups under discussion, for it is considered a negative and bigoted label on the part of their opponents. In turn, they prefer other terms such as Ελληνες < Εθνικοί (Gentile Hellenes) or Αρχαϊθρησκοί/ Αρχαϊτροποι/Ελληνθροποι (followers of the ancestral Hellenic religion and way of life). They also prefer to use the term “Hellas” and its derivatives instead of “Greece.”

The bearers of such ideas are dispersed in various groups, which despite common orientations are not identical. One such group is Δύπετλ< (Fallen from Zeus/ from heaven), which since 1991 has published a homonymous bi-monthly journal with the subtitle “In the Defense of the Ancient Psyche.” This is an organized effort to restore Hellenic religion, to de-Christianize and de-Byzantinize Greece, and to create modern Hellenes in the literal meaning of the word. Hellenic religion is not considered a “religion” in the Judeo-Christian view, but as something much broader; namely, as a comprehensive system, worldview and way of life aimed at providing humans with a serious religious-philosophical meaning of life. The ancient psyche is understood not as a dogmatic and authoritarian revealed religion, but as an internal fire existing in and leading every person. It signifies the possibility of deification of human nature, which in turn is seen as a consubstantial element of the Great Goddess or the Great Mother, the Nature of the Universe.

Nature (Gaia) is considered a giant living organism and interdependent unit (ecosphere), whose appropriate stewardship is necessary for enabling life to persist. Related

modern theories (James Lovelock) are not usually drawn into the account, because emphasis is usually placed upon the ancient Hellenic background of such ideas. Thus, all nature has a great value and must be protected by humans, who must locate themselves properly within it. This entails an optimistic understanding of life, leading humans to enjoy every aspect of life and nature as a whole, broadening human perspectives and seeking inner peace and harmony. Christianity is held responsible for turning these ancient coordinates upside down by desacralizing and consequently degrading nature. The variety of species in nature is also seen as a model for sustaining a wealth of human cultural expressions and toleration. The need to worship nature is not only expressed theoretically. It has also been put into practice by following a Hellenic calendar with holidays and organizing meetings with appropriate outdoor rituals (libations, prayers, hymns, songs), usually in natural settings under sun or moon (mountains, forests, springs) to celebrate seasonal changes and astronomical rhythms (agrarian holidays, summer and winter solstices, spring and autumn equinoxes, full and new moons). There also are activities directed toward the location of ancient sacred places and monuments (groves, trees, stones, buildings, temples). This attests also to the strong environmentalist sensitivities of the movement, which remains in contact with analogous groups abroad (the *World Congress of Ethnic Religions*) and which occasionally organizes protests and campaigns to protect such places from the negative effects of the modern, desacralized, utilitarian and consumerist culture. In addition, there exist other major or minor pagan groups such as the Ελληνική Εταιρεία Αρχαιοφίλων (Societas Hellenica Antiquariorum) devoted to the revival of the Hellenic religion of the twelve Olympian gods and the pantheon of demons and heroes. This nonprofit society offers quite a large variety of activities for its members including rituals and worship of the gods in the traditional manner, and the quarterly magazine Ελληνικόν Πάνθεον (Hellenic Pantheon) published on the solstices and equinoxes. Its cosmological views are derived from the Orphean theology and hymns, while the worshipping of nature as a whole occupies a central place in its cultic milieu. Further, in 1997 there was an attempt to create a higher coordinating body entitled Υπάτο Συμβούλιο των Ελλήνων Εθνικών (Supreme Council of the Gentile Hellenes) for the preservation and restoration of the genuine Hellenic tradition, which has become publicly active in various domains since then. Yet, this forum lacks the necessary credentials to undertake this major task.

The problem of the dispersion of Greek paganism is accentuated by the fact that some groups are mainly the personal constructs of certain individuals. Such is the case with Tryphon Kostopoulos-Olympios, an economist, who back in 1987 was married according to the Hellenic ritual on Mount Olympus, causing a negative reaction from the Orthodox Church. Kostopoulos criticizes sharply the present socio-political and religious situation in Greece and intends to transform Greece into a sacred place and a model for the entire world. He also regularly organizes rituals and feasts in Hellenic style in his country-house situated near Litochoro at the foothills of Mount Olympus. Another person presently following an individually created path is the writer Vlassis Rassias. He has published a lot in recent years, criticizing the Christian attitudes

toward the Hellenic spirit and intending to render the present, tormented Hellenic soul a new and promising way of life.

Despite the marginal character of Greek paganism, its limited activities have not escaped the attention of the Orthodox Church, which has on several occasions condemned the revival of Hellenic religion including the worship of nature as idolatrous (e.g., the aforementioned festivities organized by Kostopoulos). In this context, there was also in 1995 an official condemnation of the *Anastenaria*, the fire-walking practices in Northern Greece, although these are practiced within a predominantly Christian framework. Generally, the Church fears that this revival could be detrimental to the established ideology concerning the harmonious fusion of Hellenism with Christianity throughout history, which is officially propagated in the modern Greek state. This fear among certain Orthodox circles is sometimes extreme, as they even condemn ceremonies like the lighting of the flame in ancient Olympia for the Olympic Games as a potentially dangerous pagan ritual.

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See also: Delphic Oracle; Gaia; Greco-Roman World; Greece – Classical; Paganism (various).

Green Death Movement

Perhaps one of the most evocative areas of “greening” ritual and ecospiritual practice today can be found in the greening of burial practices. In his comparative work on religious attitudes toward death, dying, and the afterlife, historian of religions Kenneth Kramer observes that dying is “the final ritual. The last opportunity we have to discover life’s ultimate meaning and purpose” (Kramer 1988: 1). For this reason, says Kramer, religious traditions ascribe acute importance to ritualizing the death process and teaching the faithful “how to die artfully.” For those who have spiritually and ethically committed their lives to environmental sustainability, ensuring a comparably “eco-friendly” death is increasingly becoming an art unto itself. In response, the so-called “Green Death Movement” or “Natural Death Movement” promotes low-impact, environmentally sound ways to recycle human remains back into the biosphere.

The catalysts for the growth of “green burial” have been primarily twofold. First, the environmental consequences of conventional burial have become untenable to those morally and ethically devoted to caring for the Earth. For green Christians, green Jews, and neo-pagans alike, among others, the ideal of a “dust-to-dust” death is a considerable challenge in an age of widespread use of formaldehyde and other toxic embalming fluids, steellined caskets, and concrete-lined vaults or graveboxes.

More than 800,000 gallons of toxic embalming fluid and 30 million board feet of prime hardwoods are buried per year (Warchol 2002). The run-off of toxic chemicals into nearby rivers and streams, the use of particle board and plywood caskets laden with leaching chemical glues, the use of endangered hardwoods (like mahogany) for luxury caskets, and even the use of large volumes of pesticides and herbicides on cemetery lawns, all pose ethical difficulties for the environmentally conscious.

The second motivation for choosing a “green burial” is less tangible but no less compelling. It is about allowing for a spiritual corporeal connection to the ecosystem and to the natural cycles of decay and rebirth. In short, for some individuals, “getting back to nature” in death becomes just as important as “getting back to nature” in life (Albery, et al. 1997). The Green Death Movement has thus been nurtured by those who view “walling away” one’s remains from the reclaiming and recycling forces of water, soil, and worms as yet another manifestation (indeed a literal and perhaps ultimate manifestation) of modern humans’ problematic alienation from the rest of the Earth community.

There is clearly nothing “new” about natural burial. The fairly recent evolution of contemporary embalming methods in the U.S., for instance, can be traced back to the need to transport large numbers of dead bodies over long distances back to their

home towns during the Civil War (Laderman 1996; Mitford 1963). In its most recent revival, natural or “green” burial has been particularly enthusiastically received within the United Kingdom. In 1991, “The Natural Death Centre” formed in London as an organization dedicated to providing guidance and resource assistance with planning inexpensive, do-it-yourself, environmentally friendly funerals. For instance, for families who do not wish to embalm with Earth-polluting chemicals but who would still like to conduct a traditional wake, the Centre provides suggestions for portable electric “cold plate” rental to preserve the body until burial and/or non-toxic saline solution embalming. The UK is now home to over 160 “natural” burial sites where unpreserved bodies are wrapped in simple shrouds or put in biodegradable caskets (“ecopods” made of cardboard or 100 percent recycled hardened paper) that are then buried within wooded nature preserves where they can decompose naturally and “return to the Earth.”

The Green Death movement has been slower to gain momentum in the U.S., in part because of powerful funeral directors’ lobbying organizations. However, in 1996, a couple in Westminster, South Carolina, opened “Memorial Ecosystems,” a forested wildlife preserve where no toxic embalming fluids are permitted and only biodegradable caskets are allowed. Memorial Ecosystems’ literature speaks, for example, of one lifelong outdoorsman who was simply buried in his favorite hiking poncho. Graves are marked by natural rock cairns, flowering trees, gardens, and eco-sculptures that also provide habitat for wildlife. Other states with wildlife preserves offering “natural” burial sites include Florida and New York, and there are similar movements afoot in California, Vermont, Utah, Ohio, Wisconsin, and Washington. The “rural cemetery movement” in the nineteenth century that gave rise to such famed parks as Mount Auburn Cemetery in Boston (1838) and Laurel Hill Cemetery in Philadelphia (1836) sought to provide “cultural uplift” through the aesthetic beauty of a meditative landscape (McDannell 1995). These older “garden cemeteries” retain much more of a “natural” feel to the landscape than do their contemporary offspring. New “green burial” solutions certainly retain the Romantic sentiment toward nature so present in the early rural cemetery movement; however, they place a greater value on wildlife habitat conservation than on the manicured and manipulated landscapes of the conventional cemetery.

A Georgia-based company called “Eternal Reefs” has responded in a different way to the growing interest in “green burial.” The company provides a service that mixes the ashes of the cremated deceased with concrete and then casts the mixture into the form of an artificial reef that will create new habitat for threatened marine wildlife. The memorial concrete reefs are sunk to the bottom of the ocean in places where they are most needed, but each reef still bears a nameplate of the loved one so that family members can identify their relative on scuba diving visits.

Cremation, although it provides a “greener” solution for some because it avoids many of the problems of inefficient land use, deforestation, and groundwater pollution, is still an area of intense debate within the movement. The cremation process itself still releases dioxin, hydrochloric acid, hydrofluoric acid, sulfur dioxide, and carbon dioxide into the atmosphere, although the pollution is worse if the body has been embalmed

prior to cremation. Green Death advocates suggest that those who do choose cremation seek ovens with updated “airscrubbing” capabilities to minimize air pollution (Albery, et al. 1997).

If Buddhist teacher Sogyal Rinpoche was right that “You die exactly the way you live,” then the growing number of those choosing “green burial” provides valuable insights into shifting trends in contemporary culture. One of the central themes of ecological spirituality today, as it had been historically within the Romantic movement and subsequently Transcendentalism, is the importance of healing the alienation of humans from the natural world. If steel-lined, durable caskets and concrete-lined graves signal a culture of death-denial, fear of nature, and the realities of mortality connected with it, then perhaps burying bodies in “ecopods” left to decay naturally in wooded wildlife preserves, or transforming bodies into coral reefs, signals an important countercultural response. If nothing else, it reveals the tensions between the consequences of modernity and the persistent appeal of “getting back to nature.”

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See also: Church of Euthanasia; Death and Afterlife in Robinson Jeffers and Edward Abbey.

Green Man

Green Man is the name given to the leaf or vine-covered faces peering out from hundreds of medieval cathedrals scattered across Europe. Usually portrayed as a human face with skin blending into leaves or vines, Green Man is also shown disgorging vines or leaves out of his mouth and nose.

His face blurs the distinction between vegetation and human, hinting at an ancient closeness to nature, now lost. The leafy fertility of many portraits – the vines or leaves bearing fruit – shows the male figure as a protector/ lover of the Earth goddess. This interpretation has made Green Man into a modern day patron saint of the men's movement, which seeks to emulate his ecological intimacy and closeness to mother nature.

Literature as diverse as J.R.R. Tolkien's *The Lord Of The Rings*, with its Ents and Entwives, and the anonymous *Sir Gawain and the Green Knight*, with its Green Knight, play with these half-tree, half-human images.

It is surprising, given the number and geographical range of the faces, that their origin and identity remain a mystery. Folklorist Lady Raglan coined the name Green

Man, citing a similarity with folk traditions of Jack-in-the-Green, Robin Hood, the King of May, and the Garland, all of which perform in leafy dress costumes.

Later studies question Raglan's association of the leafy folk characters with the leafy faces; nevertheless the name has stuck. Some of the folk traditions she cites are recent creations failing to explain the ancient history of the faces.

The overwhelming historical record of Green Man is the hundreds of foliate heads sculpted into stone or wood in European Christian architecture. None are named, except one leaf face on a fountain made in 1200 for the Abby of Saint-Denis, Paris, France. The face is named Silvanus, Roman god of the woods. However, nowhere is Silvanus depicted with the same leaf face in antiquity, and the portrait is considered mistakenly titled.

French stonemason, Villard de Honnecourt, drew up a book of architectural notes and drawings in 1236. He includes two leafy human faces that he simply labels Têtes de Feuilles, with no further indication as to any related tradition.

Foliate faces similar to those in European cathedrals are traced to Roman times, such as those found in friezes on the arches of Septimius Severus and Aurelian's Temple of the Sun, both in Rome. The faces are found throughout the Roman empire, many in the context of Dionysian mysteries, and may represent the use of ivy leaf masks in Dionysian initiation ceremonies.

The earliest face found in a Christian setting is the Green Man face carved into the tomb of Sainte Abre, in the church of St-Hilaire-le-Grand, Poitiers, France. Usually dated to 400, the face disgorges vegetation, possibly representing a transitional stage from the leaf masks of earlier art. Pictures of dolphins on the tomb suggest a connection with Dionysus who is said to have disgorged ivy, thereby fouling the plans of pirates whom he turned into dolphins. In Germany, when Bishop Nicetius rebuilt Trier's cathedral in the mid-sixth century, he reused columns containing Green Men carvings on the capitals from a nearby Hadrianic temple, Am Herrenbrünchen. He set the columns up around the crossing of his cathedral, which may have housed Christ's robe and nails from the crucifixion.

The important role of Trier's cathedral in the spread of Christianity and the central display of its Green Man-topped capitals surrounding such sacred relics did more to integrate Green Man into Christian architecture than any other event. Green Man proliferated to such an extent in subsequent years that he may outnumber portrayals of Christ in some locations.

Gothic architecture's use of a line of columns on either side of the nave to imitate a walk of trees leading up to the altar may have been inspired by Green Man topped capitals. Architectural details branch off from gothic column capitals to form treetops over the heads of worshippers recreating sacred patriarchal groves.

Many tie Green Man to various Mediterranean fertility deities, depicted with green skin or spouting leaves and responsible for renewing life each spring. Green-skinned goddesses like Neith and Isis, both mother gods, were responsible for creation and restoring life.

Male gods like Dionysus, Tammuz (Dumuzi) and Cernunnos, and others depicted like Green Man, use their vegetative virility to renew life. Dionysus is often entwined in ivy or grapevines, sometimes stealthily peering through the leaves. The Celtic god Cernunnos, usually portrayed with antlers springing from his brow or head, occasionally sprouts vegetation for hair or a beard.

These vegetative gods and goddesses share power over death: Isis pieces together her lover's severed body; Osiris and Dionysus go into the underworld to rescue life. Their fertility and self-sacrifice for others is a strong parallel with Christian tradition.

Vegetative attributes of the Hebrew God are found throughout biblical books, most frequently in the prophets. God brings rain and wine as well as new life in spring. Prophets Elijah and Elisha call God down to bring the dead to life, and Ezekiel witnesses revivification of thousands of skeletons in the valley of dry bones.

The strongest biblical connection mixing vegetation with divinity comes from the prophet Ezekiel. He not only tells of trees that nurse famished Jews returning from Babylonian exile (Ezek. 34:25–27), but in his vision, God's rebuilt temple is constructed increasingly of wood until one enters into the holy place – the heart of the sacred tree – a wood-paneled room containing a wooden box bearing the presence of God. From this tree/temple/god, water springs forth, bringing life to the land (Ezek. 41:15–26).

Revelation 22 picks up Ezekiel's tree images, putting the Tree of Life – with a spring at its base – back in place, nourishing and sustaining God's loyal followers. Christian imagery of Christ as the vine or Tree of Life builds on these images of a vegetative deity nourishing humanity.

To balance Green Man's regenerative aspect, Kathleen Basford points out the pained and demonic look of many of the carvings. Like the leaves covering the sin of Adam and Eve, many faces grimace in pain or look to be wasting away their mortal existence. She also documents Green Man's portrayal as a Satan figure, one opposed to life, and points to depictions of Satan disgorging leaves like Green Man in many cathedrals. For Basford, Green Man's pain warns us of the fragileness of nature, both human and vegetative.

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See also: Christianity (5) – Medieval Period; Men's Movement.

Green Politics

As Green Politics has emerged around the world it has often been intertwined with religion and spirituality. This has been especially true in the United States where discussion and debate over spiritual matters played a central role.

In many countries, proportional voting systems granted fledgling Green Parties early access to seats in parliament, focusing internal discussions on the details of party-building, legislation, and policy. But in the U.S., where electoral margins of twenty-five and even forty percent can yield little in the way of tangible results, Greens spent the better part of the 1980s debating values and principles, including the role of spirituality in the development of the movement. This was not entirely unprecedented; for example, after several years as a political prisoner in East Germany the Green Party pioneer Rudolph Bahro arrived in West Germany in the early 1980s, and soon became a prominent voice for an ecological, cultural, and spiritual revolution. His writing decried the degradation of personality and ethics under industrial capitalism, and heralded what he viewed as an inevitable, ecologically-driven economic contraction as a grand opportunity to assert spiritual values over mere “necessity.” During the mid-1980s, as his disillusionment with the increasing pragmatism of the German Greens grew, Bahro advocated the development of rural communes that would offer a spiritual foundation for a new biophilic culture and sustain progressive cultural values in the midst of declining empires. His primary inspiration was the role of the Benedictines in preserving culture following the collapse of the Roman Empire.

From the outset, U.S. Greens distinguished themselves by placing discussions of values at the center of their work, articulating “Ten Key Values” of Ecological Wisdom: Grassroots Democracy, Personal and Social Responsibility, Nonviolence, Decentralization, Community-based Economics, Postpatriarchal Values, Respect for Diversity, Global Responsibility and Future Focus. With immediate electoral success a distant prospect, most early U.S. Greens embraced a movement-building and culture-transforming role, highlighting local and bioregional campaigns and focusing on ecological and social issues rather than pursuing electoral success. Thoughtful and idealistic people from many walks of life embraced the idea of an American Green movement as a symbol of hope and renewal, and the focus of a new kind of political community, even as the conservative trend epitomized by the Presidency of Ronald Reagan dominated politics in Washington.

Charlene Spretnak’s popular booklet, *The Spiritual Dimension of Green Politics* (1986), sought to place a distinctly Christian spirituality at the center of the emerging Green political movement in the U.S. Other early U.S. Greens advocated a wider-

ranging spiritual diversity, inviting speakers such as Anishinabe (Chippewa) elder Walt Bressette to keynote numerous local, regional, and national Green gatherings. Ecofeminist-inspired rituals – both the neo-pagan and more eclectic varieties – were a feature of many Green events. Meanwhile, more secular Greens voiced an increasing discomfort with all the talk about spirituality in the movement, viewing it as exclusionary and, at worst, coercive. Spirituality is a personal matter, they suggested, asserting that neither overt religiosity or quasi-religious ritualizing should be brought into the public sphere. The contemporaneous rise of the Christian Right was cited by both camps: for some as a mandate for the Greens to contribute to filling the spiritual void in American life; for others a harbinger of the inherent authoritarianism of any overtly spiritual politics.

The first national gathering of the U.S. Greens, in Amherst, Massachusetts in 1987, brought a heated debate around these issues. Social ecologist Murray Bookchin presented a strong polemic, widely reprinted as “Social Ecology vs. Deep Ecology,” in which he denounced the increasingly misanthropic outlook of several leading Earth Firsters as well as the “New Age” spiritual leanings of many Greens. Charlene Spretnak and other spiritual Greens voiced dismay over the stridency of Bookchin’s attack. In the years that followed, social ecologists in the Greens became the main voice for a radically decentralist political strategy, in which emerging Green locals would seek to become an incipient counter-power to the centralized nation-state, while sustaining their involvement in a wide array of local eco-political struggles.

When the Greens in the United States adopted their first national program in 1991, both outlooks on Green spirituality were represented. The Spirituality statement in the Green Program advocated freedom of worship and the removal of religious practices from governance – the classic separation of church and state – but also affirmed spirituality as “a way of being in the world that acknowledges and celebrates our connectedness to the Earth, to each other, and to all life.” Within a few years, as U.S. Greens aimed to follow their European counterparts into the electoral realm, both spiritual and social-ecological Greens tended to drift away. As the particulars of policy, ballot access, fundraising and voter turnout took center stage, these early debates conjured memories of a much more idealistic time in U.S. Green history.

Brian Tokar

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See also: Anishinabeg Culture; Bioregionalism; Earth First! and the Earth Liberation Front; Ecofeminism (various); New Age; Radical Environmentalism; Social Ecology; Spretnak, Charlene.

Green Sisters Movement

Historically, when orphanages were needed in North America, Roman Catholic religious sisters' communities built orphanages. When hospitals were needed, sisters built hospitals and staffed them. When schools were needed, sisters built schools and taught in them. When peace and social justice concerns intensified, especially in the context of the Vietnam War, the Civil Rights Movement, the violence in Central and South America, and the widening economic disparities between wealthier countries and the world's poor, sisters formed ministries to respond, including commissions on peace and justice that took sisters' lobbying efforts to Congress and to the United Nations. Now, in today's times, an increasing number of religious sisters are hearing and answering a call from the Earth, and it is to these needs that they are directing their efforts. Founding numerous ecological learning centers, community-supported farms, and other Earth ministries on their lands has been one such response.

Popularly referred to as "green nuns," "green sisters," or even "eco-nuns," Catholic religious sisters are building new "Earth ministries" and are reinhabiting their traditional community lands in "greener" (that is, more ecologically conscious) ways. Some sisters (the term "nuns" technically refers only to monastics) are sod-busting the neatly manicured lawns surrounding their motherhouses to create community-supported organic gardens where they engage in "sacred agriculture." Others are building alternative housing structures from renewable materials, using straw bale, rammed Earth, and cobbing materials instead of forest products. They are building composting toilets, heating their buildings with solar panels, cooking with solar ovens, and opting for new "hybrid" vehicles when replacing older cars. They are putting their community lands into land trusts and creating wildlife sanctuaries on their properties. They are disrupting shareholder meetings of corporate polluters, contesting the construction of garbage incinerators, and combating suburban sprawl. They are developing "green" liturgies that honor the whole life community, and they are adopting environmentally sustainable lifestyles both as daily spiritual practice and as a model to others.

In 1993, Sister Mary Southard (CSJ) and a handful of women religious concerned about ecological devastation to the planet founded a loose, decentralized network called "Sisters of Earth." Sisters of Earth co-founders stress the "informal nature" of the network and their aim to provide support and informational resources for ecologically concerned sisters (and some lay women) without becoming a centralized hierarchical institution. There is no headquarters for Sisters of Earth, no president, and no central leader. Although there is a rotating conference planning committee, this committee issues no policy statements and does not require that members adhere to any tenets.

Although many Sisters of Earth have been inspired into Earth activism by their encounter with the work of Passionist priest and “geologist” Thomas Berry, members are affiliated with a wide variety of women’s religious congregations and espouse a diversity of thought. Sisters of Earth’s biennial conferences serve, in particular, as gathering sites for sisters involved in many different forms of Earth activism – organic farming, land trusts, anti-toxics work, eco-justice, farmland renewal, food safety, heritage seed conservation, Earth literacy education, ecospirituality, and so forth.

Not all “green sisters” are members of Sisters of Earth, but many of them are, and the network itself is one of the more visible manifestations of the larger movement of ecologically active religious sisters. Green sisters – many of them athletic, Levi-clad, sun-tanned, out digging vegetable beds, pruning fruit trees, building “ecovillages,” launching clean-water campaigns, and celebrating planetary seasons and cycles – defy popular media stereotypes of the pinched, priggish, and passive nun. In the process of finding new ways to “reinhabit” their community lands, sisters are also creating more sustainable ways to “reinhabit” the spiritual landscapes of Catholic tradition and vowed religious life. For centuries, religious women have periodically created movements to reinvent and reinvigorate religious life; the culture of green sisters is arguably one of these movements.

Sarah McFarland Taylor

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See also: Bioregionalism (various); Community Supported Agriculture; Genesis Farm; Roman Catholic Religious Orders.

Greenpeace

Greenpeace is an international, non-profit organization dedicated to protecting the global environment and promoting peace worldwide. Founded in 1972 by a small group of peace activists in Vancouver, Canada, it has since grown to become one of the most recognized activist organizations throughout the world. In 2003, Greenpeace drew members from 101 nations and maintained an active presence in over 40 countries. It is known for, among other things, its confrontational style of nonviolent, direct-action campaigning, built on the Quaker tradition of bearing witness and the Gandhian and King traditions of resistance.

Greenpeace grew out of the Don't Make a Wave Committee (DMWC), a group of peace-oriented journalists and media people, committed to stopping the United States from testing nuclear weapons under the Aleutian Islands in Alaska. The group feared that the tests would create great tidal waves or an earthquake since the Islands sit near a fault line that runs from Vancouver and emerges as the San Andreas Fault in California. After failing to dissuade the U.S. through traditional forms of protest, the group decided to sail a ship to the testing zone in an attempt to disrupt the detonations or, failing this, draw widespread attention to the environmental, health and security dangers involved. This strategy was not an entirely novel one: it had been used twice before by Quaker groups but, because the operators of the two previous ships were Americans, the ships were vulnerable to arrests by U.S. officials. DMWC sent a Canadian-registered ship staffed by mostly Canadians and this allowed it to proceed as long as it stayed in international waters. The ship, *Phyllis Cormack*, never made it to the site and neither did a second, *Edgewater Fortune*, but the actions enjoyed so much media attention that they galvanized citizens in both Canada and United States against nuclear weapons testing and created enough public pressure to convince the U.S. to cancel future, previously planned tests. Aiming to expand their activities, DMWC formally dissolved in 1972 and became Greenpeace.

This initial victory prompted Greenpeace to undertake similar protests throughout the 1970s against French nuclear testing in the Pacific and, in time, against a range of threats to the planetary ecosystem. The hallmark of Greenpeace is its dramatic exploits: Greenpeace has become expert at grabbing media attention through the use of creative, nonviolent, visually spectacular campaigning. Greenpeace action teams have, for example, scaled buildings and smokestacks to drape accusatory banners, sailed hot-air balloons into nuclear test sites, plugged-up industrial discharge pipes, and situated themselves in small craft between whaling ships and their targets. The media attention afforded to these daring displays has been central to Greenpeace's success in mobilizing

public opinion against environmentally harmful activities and raising awareness about threats to peace.

While Greenpeace has no explicit religious affiliations, three of its founding members were Quakers and its style of protest drew inspiration from the Quaker philosophy of “bearing witness.” Bearing witness requires that, when someone observes a morally objectionable act, he or she cannot turn away in ignorance but must take action to prevent further injustice or stand by to attest to its occurrence. Greenpeace bears witness by trying nonviolently to disrupt environmentally unjust behavior and by broadcasting its actions worldwide through various forms of media. Greenpeace ships, for instance, have satellite hook-ups that allow video footage to be sent instantaneously to media outlets throughout the world and almost all its actions take place in front of photo-journalists. A guiding intention of Greenpeace’s actions is to bring previously hidden activities into public view and enable as many people as possible to know about and become outraged at environmentally unjust activities.

A central principle behind Greenpeace’s work is a commitment to nonviolence. Drawing on the traditions of Mahatma Gandhi and Martin Luther King, Jr. as well as the Quakers, Greenpeace seeks to prevent wrongs without harming the perpetrators. Greenpeace acts in ways that prefigure the more peaceful world it works to bring about. This unwavering commitment to nonviolence has at times created rifts within the organization. Most notably, Paul Watson, an early Greenpeace member, advocated and at times practiced aggressive tactics considered violent by some – most notably against baby harp seal hunters.

After being voted off Greenpeace’s Board of Directors for various reasons and intent on fostering a more radical type of environmental activism, Watson broke with the group and founded the Sea Shepherd Conservation Society. Over the years, the society quarreled with Greenpeace over how aggressive tactics should be and what counts as violence. This led them to take different approaches to similar issues. In the 1980s, for example, Greenpeace organized a boycott of fish products from Iceland to protest Icelandic whaling policies. In contrast, the Society sank half of the Icelandic whaling fleet.

Greenpeace’s executive board is based in Amsterdam, the Netherlands, and oversees an extensive network of members and offices. Greenpeace has an international membership of some 2.8 million people and an annual budget of close to US\$160 million. A notable feature of Greenpeace is that its entire international budget comes from voluntary donations (rather than funding from governments or industry), with over 90 percent of total funds coming as contributions from individuals. From its original focus on nuclear disarmament, Greenpeace has gradually expanded its areas of concern. Greenpeace’s activities are presently organized around six, primary issues or campaign areas: 1) global warming;

2) ancient forests; 3) oceans; 4) global production of persistent organic pollutants (POPS) and other toxic chemicals; 5) nuclear materials and other dangers of the nuclear age; and 6) genetic engineering of food.

Many of Greenpeace's international protest activities in these areas are supported by one of the four ships in its "eco-navy." The flagship of the Greenpeace fleet is the *Rainbow Warrior II*. This ship was commissioned to replace the original *Rainbow Warrior* after the French government bombed and sunk the vessel in 1985 in an attempt to prevent Greenpeace actions against its nuclear tests in the South Pacific. The name of Greenpeace's flagship vessel, and a fair amount of the inspiration for Greenpeace, comes from a 200-year-old Native American prophecy. A Cree grandmother, named Eyes of Fire, foretold that the greed of the white man would lead to a time when birds would fall from the sky, fish would die in the streams, and the seas and forest would become blackened. The legend suggests that such destruction could only be reversed by a rediscovery of a widespread reverence for the Earth. With a renewed Earth-based spirituality, the various peoples of the Earth could unite under one banner, becoming "Warriors of the Rainbow."

At a general level, Greenpeace is concerned with changing the way people around the world think about and act in relationship to the environment. Greenpeace, through its literature and activities, promotes the idea that every person on the planet must bear some personal responsibility for the environment's well-being. By promoting this "ecological sensibility" – the heightening of a worldwide concern for the environment – Greenpeace works to alter the social practices that support environmental harm. Greenpeace is in the business of consciousness-shaping: by changing people's attitudes, Greenpeace hopes to affect their actions.

Greenpeace is also concerned with changing the behavior of governments. When Greenpeace participates in meetings involving world governments or otherwise lobbies government officials, the organization's wide constituency base, knowledgeable experts and a history of effective action lend its views significant legitimacy. Greenpeace has played a central role in securing international legal agreements concerning such issues as whaling and ocean fishing, burning and dumping hazardous substances at sea, international trade in toxic waste and POPs. In recent times its campaigns have been credited with bringing about a moratorium on the planting of genetically engineered crops in Europe, promoting an international ban on the trade in so-called "conflict timber" from West Africa, and encouraging a European phase-out of soft PVC.

While not a religiously based organization, Greenpeace draws direct inspiration from various spiritual traditions. Its Quaker roots and ongoing commitment to Quaker principles like bearing witness, its unwavering dedication to nonviolence in the Gandhian and King traditions and its connection to Native American religiosity make it a curious blend of spirituality and progressive politics. It recognizes that, while science and reason can provide invaluable information about the world we live in, deeper principles, orientations and values must frame our understanding of such information and require us to act in the service of human and ecological well-being.

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See also: Biocentric Religion – A Call for; Earth First! and the Earth Liberation Front; Friends-Religious Society of (Quakers); Gandhi, Mohandas; Green Politics; Radical Environmentalism; Watson, Paul – and the Sea Shepherd Conservation Society.

Griffin, Susan (1943–)

With her imaginative prose and poetry, Susan Griffin characterizes the dominant mythos of Western civilization as separation from and control over the Earth. This dominant mythos is informed by Judeo-Christian theology and creation narratives. She attempts to disrupt this mythos, by articulating a different vision of embeddedness in the Earth.

Griffin's work links ecological destruction and gender oppression. Her observation that the burdens of "cleaning up" the ecological crisis have been unduly placed upon women inspired her most influential work, *Women and Nature: The Roaring Inside Her* (1978). In this book, she experiments with two voices: one the "objective, detached, and bodiless" voice of Western patriarchal logic, and the other an embodied and impassioned voice of women (1978: xv). The dialogue of these two voices traces the historical association of men with eternal reason and divine soul and women with earthly sin, corruption, and death. Out of this dialogue emerges a perspective that Griffin describes as a women's "consciousness" of earthly connection (1978: xvi). It is this consciousness that we are "made from this Earth," which Griffin's later essays and poems affirm (1987: 223).

In *The Eros of Everyday Life: Essays on Ecology, Gender, and Society* (1995), Griffin suggests that a consciousness of earthly connection has implications for epistemology and psychology as well as gender and ecological relations. She refers to a "commingling" of the abstract and concrete in thought and claims that identity is an experience of interdependence rather than an assertion of independence (1995: 81, 91). In contrast to the distorted knowledge and divided self of the dominant Western mythos of separation from nature, Griffin insists that "[e]very movement, every breath, every response, the least thought" depends on the Earth (1995: 75).

Molly Jensen

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See also: Daly, Mary; Ecofeminism (various); Feminist Spirituality Movement; Gimbutas, Marija; Merchant, Carolyn; Paganism – Contemporary; Sexuality and Green Consciousness.

Grim, John

– See Religious Studies and Environmental Concern.

Grof, Christina and Stanislov

– See Breathwork; Re-earthing.

Gulen, Fethullah (1938–)

Fetullah Gulen was born in 1938 in Erzurum, in eastern Anatolia. In the region of his birth, near the mountains of Ararat and the Aras River, Gulen was surrounded by the beauty of nature. He completed his formal education in Erzurum in his early twenties, and then began to educate himself in the Islamic sciences and in Eastern and Western classics, from Sa'di of Persia to Dante of Italy. Today he is considered a prominent intellectual, religious, and spiritual leader in Turkey and is known worldwide. He is the author of dozens of books and articles and writes editorials for several journals. In 2001, he went to the United States for medical treatment for his heart problem. He has remained there since then.

Gulen's view of nature developed during the course of his education. In his early life, Gulen tried to instill in his students an appreciation of nature. He took his pupils on lengthy camping trips in which he encouraged them to be in harmony with nature by exposing themselves to the natural world and removing themselves from the conveniences of the modern world for a time.

Gulen's ethic of nature is different from both anthropocentric and biocentric views. Gulen once wrote,

This miraculous art of nature shows something more subtle, something beyond its own beauty, something that points to the One who created it so beautifully, who wants to be felt through His art, yet not felt thoroughly because of His majesty (Gulen 1991: 110–14).

Here Gulen focuses on the two aspects of nature: nature as a veil and nature as a revelation. It is a veil, because it veils the majesty of God. We do not see God himself, but only the natural world of cause and effect, which he has created. However, nature is also revealing, as it reveals the art of God in the most beautiful manner, reflecting the majesty of God.

In Gulen's understanding there is a triangle, composed of God, the Creator; nature, the book; and humans, the contemplators. Gulen once wrote, "We read [nature] as a book, we feel it, and we watch it, alive with its color and beauty" (1991: 110). Gulen refers to al-Ghazzali's (d. 1111) statement: "In the realm of possibility there is no better form than that which God has created," saying that "it is as if every form of nature is competing to demonstrate its beauty" (1991: 112).

Gulen writes not only of the amazing beauty of nature, but also of "pure-hearts," those who are capable of contemplating nature. The result of this contemplation is an understanding of God. This view is derived from a Qur'anic verse: "Lo! In the creation of the heavens and the Earth and (in) the difference of night and day are signs (of

His sovereignty) for men of understanding . . ." (3:190). The "men of understanding" referred to in this verse are the "pure-hearts" of which Gulen writes. According to Gulen, humans finally realize that the beauty of nature is not the eternal beauty, but an indication of the eternal beauty of God. The life of a human is not long enough to experience all the beauty that nature holds. Therefore, the "awakened hearts" turn to the eternal beauty of God. In Gulen's understanding, "The spirits who are aware of this beauty see the creation in a deeper manner, listen to the music of every creature, a music beyond imagination . . ." (1991: 112). To Gulen, in the sight of these "awakened hearts," "all trees say 'Hu!' [The Qur'anic pronoun used for God, which means 'He'] Roses, flowers, in their own languages declare the Most Holy Creator" (1991: 112). Similarly, Gulen writes, "The rivers run, saying, 'Wahdet, Wahdet' ['You are the One']; can also be translated as 'Oneness']" (1991: 111). Thus, as the rivers run they express the oneness of God.

Gulen expresses his regret toward today's civilized society's behavior toward nature, writing,

Nature which is given to humanity by the Most Merciful One, for contemplation, as a mighty book, how it is painful that it is not cared for as much as a can of trash . . . Not only is nature not cared for, it is attacked on all sides, by deserting, and by trashing. Therefore, it is battered and bruised (1991: 113).

Gulen believes that because of humanity's behavior, air is polluted, water is contaminated and alarming, and the soil is losing its fertility. If the appropriate steps are not taken soon, the ecological balance will collapse and the Earth will become "the land of death." Gulen, then calls upon humanity, Muslims in particular, to be more responsible, saying, "the protection of nature is among the duties of every Muslim" (Gulen 1997: 239). Gulen refers to the Prophet of Islam's declaration, after his immigration from Mecca, that Medina was to be a "Haram," which in modern terms can be translated as a National Park, in which "grass is not to be taken, animals are not to be killed, and trees are not to be cut." Gulen warns again, saying, "If we do not take lessons from what we have done, our beautiful world will be an amount of debris after disasters as destructive as the floods of Noah" (1991: 113).

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See also: Gardens in Islam; Islam.

Gurdjieff, Georges Ivanovitch (1866?–1949)

The notion of the “biosphere” – the thin organic film that covers the surface of our planet not only as a single integrated unit but also as one that has been the greatest force shaping our planet – coined by the Russian geochemist V.I. Vernadsky in 1926, is arguably the most significant idea that modern Russian thought has contributed to the ongoing interpenetration of the ecological and the religious.

Vernadsky’s intellectual ambition, though, ranged wider. As a “cosmicist” within the historical ambit of Russian mystical philosophy, like that of many of his scientific and artistic contemporaries, far from being simply a precursor to James Lovelock’s Gaia hypothesis or an influence upon the likes of Lynn Margulis, Vernadsky was at pains to emphasize that the “biosphere” was in some important way involved in the transformation of cosmic energy pouring forth from the Sun, which was also in some way its source.

It is unlikely to be simply a coincidence that in 1916, a decade before Vernadsky published his revolutionary work, G.I. Gurdjieff, a Russian who began his mystical career in the West as a refugee from the Bolshevik revolution formulation, also saw organic life, nature as a whole, as forming “something like a sensitive film which covers the whole of the Earth’s globe” which serves as a “transmitting station of forces” (Ouspensky 1949:

138) and which also “began in the sun” (Ouspensky 1949: 139).

Despite little verifiable information about Gurdjieff until his arrival in Moscow in 1911, at the very least this similarity suggests the ubiquity of “cosmicism” in the Russia of the time. As a “key ancestor” (Heelas 1996: 48) to the New Age, Gurdjieff’s “cosmicism” has achieved a widespread if diffuse influence. For example, the author of the environmental classic *Small is Beautiful*,

E.F. Schumacher, was a friend of one of Gurdjieff’s English disciples, John G. Bennett, and many of Gurdjieff’s ideas came to influence him deeply.

Emigrating to Western Europe via Istanbul in 1920, in 1922 Gurdjieff and his followers moved to Fontainebleau, south of Paris, where he operated the Institute for the Harmonious Development of Man into the late 1930s. He visited the United States in 1924, where he also found followers, and again in 1930. From the early 1930s until his death in 1949 Gurdjieff lived in Paris with occasional trips to America. The Work, as

the spiritual movement initiated by Gurdjieff has come to be known, continues to this day.

It is Gurdjieff's compatriot P.D. Ouspensky, one of his most dedicated but wayward followers, to whom we owe almost our entire knowledge of Gurdjieff's teaching in Russia. It is in Ouspensky's record of this form of the teaching, *In Search of the Miraculous* (1949), that we find Gurdjieff's earliest formulation of his ideas about the function and source of organic life as a planetary whole. While on the one hand superficially resembling a "protoecological" stance in arguing that humanity "like the rest of organic life, exists on Earth for the needs and purposes of the Earth" (Ouspensky 1949: 57–8) which is itself a "living being" (Ouspensky 1949: 25), Gurdjieff makes it clear that soteriologically his teaching is also "against nature, against God" (Ouspensky 1949: 47).

Gurdjieff's seemingly contradictory positions are reconciled in his idea of the "Ray of Creation," the backbone of his early cosmology which later became a staple of the Work. Like many exemplars of Western mysticism before him, Gurdjieff held a broadly post-Neoplatonic emanationist schema in which the manifold emerges and descends hierarchically from a unitary source and through to which it can once again ascend – which he termed "involution" and "evolution" respectively. This process unfolds through the actions of two fundamental principles: the "Law of Three," which determines all manifest relationship, and the "Law of Seven," which determines all manifest transformations, which Gurdjieff at this time also referred to as the "Law of Octaves."

The "Ray of Creation" is our own particular "involutionary" octave or "cosmological *solfeggio*" "in which Do is God or the Absolute, Si is the universe, La is our own constellation, Sol is our Sun, Fa the sun's planets, Mi the Earth and Re the moon" (Moore 1991: 45). As "there is nothing dead or inanimate in nature" (Ouspensky 1949:

317) that meant that, like a branch from a tree-trunk, the Ray of Creation was also alive and growing. The Earth for example, is growing "not in the sense of size but in the sense of greater consciousness, greater receptivity" (Ouspensky 1949: 305). This growth was a direct effect of organic life which Gurdjieff described as "the Earth's organ of perception" (Ouspensky 1949: 138).

However, unlike the classical emanationist pattern, the transition from unitary source to the manifold and back is not a smooth one. Rather, the "Ray of Creation," like all processes under the Law of Octaves and also like the musical scale after which it is named, is discontinuous between the notes Do (in this instance, God) and Si (the universe), and the notes Fa (the planets) and Mi (the Earth) (Ouspensky 1949: 137).

It is at these points that the development of processes can be retarded. To overcome these junctures, a "shock" or additional force must be applied. The juncture between God and the universe was filled by the will of the Absolute (Ouspensky 1949: 132). In order to fill the juncture between the planets and the Earth, continuing the descent of energies along our Ray of Creation to the Moon undeflected, "a special apparatus" – i.e. Life – "is created for receiving and transmitting" (Ouspensky 1949: 132). This led to one of Gurdjieff's more startling claims that the "moon is a huge living being

feeding upon all that lives and grows on the Earth” (Ouspensky 1949: 85), receiving a particular energy or “soul” stored in every plant, animal and person upon its death.

While the deterministic effects of descending energies is indeed pessimistic for the majority, life’s higher origins in the Sun also constitute the beginning of the evolutionary ascension back toward the Absolute for the few. Here Gurdjieff’s cosmology dovetails into his soteriology, for liberation “from the mechanical part of our life” is “liberation from the moon” (Ouspensky 149: 85). Involutionary processes, conscious in their origins in the Absolute, become more mechanical the further they travel from the Absolute. As the “evolving part of organic life” (Ouspensky 1949: 306), only human beings can struggle against the general downward flow. As a microcosm of the universe, having “in us the matter of all other worlds” (Ouspensky 1949: 88) which “undergo the same transformation . . . on the same plan and in accordance to the same laws” (Ouspensky 1949: 191), we have the possibility, only with the expenditure of constant self-initiated effort, of increasing the production of the more refined matters within us, which Gurdjieff associated with greater consciousness and a conditional immortality.

Nature or organic life as a whole “transmits to us through our impressions the energy by which we live and move and have our being” (Ouspensky 1949: 181). While it is all for her own involutionary purposes, we could also use that energy to participate in the evolutionary flow back to the Absolute.

Gurdjieff later mitigated this severity somewhat in his own posthumous opus *Beelzebub’s Tales to His Grandson*. Though it recontextualized the core of his earlier cosmological ideas, more importantly it introduced a complex cosmogonical theodicy entirely absent from his previous formulations. He ended this book with the image of life as a river dividing in two: one stream terminates in the crevices of the Earth and is lost forever, while the other stream empties into the boundless ocean. Here Gurdjieff argued that so long as we remain passive, not only shall we have inevitably to serve solely as a means for Nature’s “involutionary construction,” but for the rest of our lives we shall have to submit slavishly to every caprice of all sorts of blind events . . . [but] even for you, it is not too late . . . The foresight of Just Mother Nature consists . . . in this, that the possibility is given us, in certain inner and outer conditions, to cross over from one stream into the other (Gurdjieff 1950: 1231–2).

For Gurdjieff this could only be achieved by “honorably fulfilling my duty to Great Nature” (1950: 39). This obligation to nature is carried out within a complex mythological narrative in which the chains of worlds were created to provide God with a means whereby he could escape the action of time through “the exchange of substances or the Reciprocal-feeding of everything that exists” (1950: 136–7). For Gurdjieff, everything is “eating” something lower and “feeding” something higher in the circulation of an open living system.

Moreover, only in a certain class of beings, humans among them, can the necessary “transmutation of cosmic substances” (1950: 140) take place. This effort not only will “pay for their arising” (1950: 386) but also allows them to absorb some of these substances themselves to create “higher-being-bodies” which survive the death of the

“planetary body” we are born with (1950: 775). Such beings become “free to lighten as much as possible the sorrow of our COMMON FATHER” (1950: 386) in his struggle against time and to be his “helpers in the ruling of the enlarged World” (1950: 792) which continues to grow and “feed” him.

In Gurdjieff’s estimation, it is only because we do not conform to this cosmic purpose that Mother Nature, the consciousness of our planet, is then further constrained to implement the process of “reciprocal destruction” of human beings in the forms of epidemics and more terrifyingly through war in order to make up for the energetic imbalance in the context of universal interdependence (1950: 959–60).

More recently, this obligation, coupled with his notion that if “by a certain time, what ought to be done has not been done, the Earth may perish without having attained what it could have attained” (Ouspensky 1949: 25), which ties into contemporary ecological concerns, has led some in “the Work,” such as James George in *Asking for the Earth* (1995), to see the evolution of humankind, as a road whereby the Earth might be saved.

David Pecotic

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See also: Bennett, John G.; Gaia; Lovelock, James; New Age; Ouspensky, Pyotr Demianovich; Russian Mystical Philosophy; Schumacher, Ernest Friedrich.

Gush Emunim

Gush Emunim, “the Bloc of the Faithful,” led the pioneering Jewish movement to settle the West Bank in the wake of the Israeli victory in the Six Day War in 1967. The organization was not in fact named until a meeting in February 1974 at Kfar Etzion, although settlement undertaken by founding Gush personalities Rabbi Moshe Levinger and Hanan Porat began in 1967 when Levinger and Porat “settled” the Park Hotel in Hebron by checking in disguised as intrepid Swiss tourists who oddly spoke only Hebrew shortly after the conclusion of the War.

For Gush Emunim, the Land of Israel (*Eretz Yisrael*) occupies the central concern of the movement, and in the view of its adherents, the Land is the key to messianic redemption, not only for the Jewish people, but for the entire world. Gush Emunim’s “religion of nature” should therefore be understood through two facets of the organization’s teaching. First, the Land itself is sensible, ensouled, and capable of feeling pain when hurt or joy when united as God intended with the Jewish people. The Land in this sense is numinous and imbued with inherent sacrality. Second, and of greater importance, Gush theology proposes an almost mathematical formula by which the unfolding process of messianic redemption can be measured, centimeter by centimeter, as the Jewish people slowly reacquire control of the full biblical patrimony of *Eretz Israel* as promised to them by God in the Hebrew Bible.

The Sacrality of the Land

The numinous character of *Eretz Yisrael* is perhaps best expressed by Rabbi Yochanan Fried, a senior Gush personality:

[T]he significance of the holiness of the Land is indeed the concept of sanctity in the Jewish world

. . . the Land cannot suffer bad deeds, since its very essence is holy. Therefore, whoever does not adjust to its (the Land’s) character, is pushed away from before it (Y. Shilhav in Newman 1985: 122).

The basis for Gush Emunim’s focus on the Land is a reductionist or fundamentalist application of the complex theology of Rabbi Abraham Isaac Kook (1865–1935), the first rabbi of Mandatory Palestine, as filtered through the fundamentalist teachings of his son, Zvi Yehuda Kook (1891–1982), who from his yeshiva, Mercaz Harav, would become the spiritual mentor – and indeed, a prophetic figure – to the founding members of Gush Emunim, many of whom were Mercaz Harav graduates.

For the elder Kook – a man learned in Kabbalah as well as Talmud – every Jew, however secular, has within himself “the sacred spark,” a link with God as one of God’s covenanted people. Rabbi Kook explicitly linked this teaching with the view that the bond between the Jewish people and the Land was uniquely different from what binds all of the other world’s peoples to their lands. The holiness of the Land of Israel calls out to the holiness of the Jewish people, linking them forever as one. Zvi Yehuda, carried on the elder Kook’s teaching, but with a particular focus on the Land as the key to messianic redemption. The 1967 war, giving Israel control of vast tracks of the biblical patrimony which had been under the control of Egypt, Jordan and Syria, created the conditions under which the Land could be reunited with its people, thus paving the way for the emergence of the settlement movement.

The Full Biblical Patrimony

In 1967, only weeks before the outbreak of hostilities, at the annual reunion of Mercaz Harav graduates held on Israel’s national day, R. Zvi Yehuda Kook rose to give a speech on the topic of Psalm 19. Suddenly, in the midst of his oration, the rabbi began loudly to lament the loss of the biblical patrimony of Israel, torn from the “living body” of *Eretz Yisrael*:

“They divided up my land.” Yes – this is true. Where is our Hebron? Do we let it be forgotten? And where are our Shechem [Nablus] and our Jericho? Can we ever forsake them? All of Transjordan – it is ours. Every single inch, every square foot . . . belongs to the Land of Israel. Do we have the right to give up one millimeter? (Aran 1988: 265)

The unexpected onset, and surprising success, of the Six Day War was interpreted by Rabbi Kook’s students as nothing less than miraculous, and the words of Rabbi Kook quoted above were thus rendered prophetic.

The first, and still most important, Gush Emunim settlement is Kiryat Arba in Hebron, which grew out of an Israeli government compromise with Levinger and Porat aimed at getting them to leave the Park Hotel, where they had long overstayed their welcome (and never actually paid their bills). It remains at this writing (2003) the focus of the most militant settlement activities in the West Bank, and Rabbi Levinger remains there as the settlement’s most important rabbinical authority.

The “earthquake” was the term many Israelis use to describe the elections of 1977 when the Labor Party – the party of government since independence in 1948 – was swept aside and the right-wing Likud coalition led by Menachem Begin came to power. Under Begin, settlement was for the first time encouraged. Under government sponsorship, a ring of settlements – in reality vast apartment blocks – were created around Jerusalem on formerly Palestinian-owned land. Financial incentives brought Israelis of every religious and political hue to live in these suburban “settlements,” while Begin in private urged Gush Emunim to continue its settlement activities in the West Bank and the Sinai. Gush Emunim sources quote Begin as saying, following a lecture on the

sort of domestic and international pressure he was under with regard to the Occupied Territories:

Do it [found settlements] clandestinely, and get organized once you're there. Then, after the fact, it will be easy for me to say "They got the better of me!" After all, nobody would imagine that I, Menachem Begin, would drive Jews off of Jewish land (Segal 1988: 37).

The theological dilemma which would grow with the passing years was starkly illustrated on 7 September 1978 when the same Prime Minister Begin who had encouraged Gush Emunim settlement signed the Camp David Accords. The agreement returned the Sinai to Egypt, and necessitated the dismantling of the settlements which had sprung up there after 1967. Gush activists made a symbolic stand against the Israeli Army at the Sinai settlement of Yamit, but this was soon abandoned and, from the perspective of Gush Emunim's theology of the Land as the measure of messianic redemption, the redemptive process had for the first time in a generation suffered a dramatic reversal. The disastrous 1982 Israeli invasion of Lebanon further demoralized the Gush faithful, as did two waves of the Intifada, the uprising against Israeli occupation (in 1987 and 2003). The Israeli withdrawal from its self-imposed Security Zone in southern Lebanon on 24 May 2000 made the sound of the footsteps of the messiah yet more faint to ears of the Gush faithful.

These reverses have served to obscure an ongoing, but vitally important, internal hermeneutical debate among senior Gush personalities. The question that had to be answered if Gush Emunim's theology of the Land was ever to be realized was this: what exactly constitutes the full biblical patrimony of *Eretz Yisrael*? The key text upon which the imagined map of *Eretz Yisrael* is drawn is far from clear. According to Exodus 23:31, "I will establish your borders from the Red Sea to the Sea of the Philistines, and from the desert to the River." The Red Sea is clear enough, and archeological evidence could be marshaled to make a case for locating "the sea of the Philistines," but which desert (the Sinai in present-day Egypt, the Empty Quarter in contemporary Saudi Arabia, the Mojave in present-day New Mexico?), and what river (the Nile, the Tigris, the Euphrates, the Mississippi?) is far from clear.

The argument however, is becoming increasingly irrelevant in the face of events in the Middle East. The idealistic young founders of Gush Emunim are, today, neither idealistic nor young. The organization has declined considerably in recent years, supplanted by a more militant generation of settlers for whom the teachings of the Rabbis Kook hold little allure. These sons and daughters of the original wave of settlement have come to be known as the "Hilltop Youth" in the Israeli press, and are famed for their zeal at establishing illegal and military indefensible settlements, as well as for their physical violence directed at Palestinians and their property, secular Israelis, the Israeli press, and most strikingly, their fellow settlers who voice disapproval of their behavior. The Hilltop Youth retain the original Gush Emunim's messianic zeal, but have little interest in the Kookist ideology of the sacred spark as being inherent in even the most secular of Jews. In ecological terms, the violence associated with these

young settlers has resulted in significant damage to the Land through the uprooting of olive branches and orchards belonging to Palestinian families – actions that the first generation of Gush adherents would never have countenanced.

In terms of Gush Emunim's theology of redemption through reconstituting *Eretz Yisrael*, however, all this means little. Israel's borders show little sign of again expanding, so for the remaining adherents of Gush

Emunim's unique "theology of the Land," the messiah yet tarries.

Jeffrey Kaplan

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See also: Gordon, Aharon David; Israel and Environmentalism; Judaism; Kabbalah and Eco-theology; Vegetarianism and Rabbi Abraham Isaac Kook.

H

Haeckel, Ernst (1834–1919)

A physician, zoologist, and evolutionary biologist known during his lifetime as “the German Darwin,” Ernst Haeckel was born on 16 February 1834 in Potsdam, Prussia, and died in Jena, Germany, on 9 August 1919. Haeckel died in his beloved home, Villa Medusa, after having lived in Jena for the last 58 years of his life. For most of that time he was Professor of Zoology at the University of Jena. His scientific perspective on the origins and development of organisms was based on an uneasy syncretism of the archetypal Romantic biology of Goethe and the evolutionary theories of Lamarck and Darwin. Haeckel was one of the earliest proponents of Darwinian theory in Germany. The two men met three times during their lives and corresponded. Haeckel is credited for being the first explicitly to state in print, in his *Generelle Morphologie der Organismen* (*General Morphology of Organisms*, 1866), that “Man has evolved from apes just as these have evolved from lower animals” – an explosive admission that Darwin deliberately avoided in his *On the Origin of Species* (1859). It is also in his *Generelle Morphologie der Organismen* that Haeckel introduced the idea – now considered incorrect – for which he is most famous, the “Biogenetic Law”: ontogeny (biological development of the individual following conception) recapitulates phylogeny (the evolution of species and lineages from the first appearance of life on Earth). His famous illustrations of a developing human embryo replicating the analogous sequence of stages of the evolution of life on Earth still appear in college textbooks (although there is a lingering controversy over whether they were falsified by Haeckel). Haeckel is also the first, in 1874, to use the drawing of the “phylogenetic tree” visually to represent the Darwinian view of advanced forms of life emerging from more primitive species. As an accomplished visual artist who celebrated the truth and beauty of nature in drawings, watercolors and oil paintings, Haeckel reproduced his throbbing, almost psychedelic, vision of sea microorganisms as eccentrically observed through his microscope in an influential volume of illustrations, *Kunstformen der Natur* (*Art Forms in Nature*, 1899). The spiny, mandala-like images in his book were borrowed by many Art Nouveau (*Jugendstil*) artists, including the Parisian architect Rene Binet (1826–1911), who used the form of one of these microbes as the inspiration for a pavilion built for the 1900 Universal Exhibition in Paris. The “Barefoot Dancer” Isadora Duncan (1877– 1927) was an ardent admirer of Haeckel, and during her tour of Germany in 1903–1904 she based some variations of her “dance of the future” on Haeckel’s evolutionary ideals. In science, art, and culture, Haeckel was unquestionably one of the most famous and influential men of the nineteenth century.

By 1904, the year of his seventieth birthday, Haeckel had achieved enormous international acclaim as a popularizer of science, rivaled, perhaps, only by recent scientists such as Carl Sagan and E.O. Wilson. His rapid rise to fame followed the publication in Germany in 1899 of *Die Weltraetsel* and its English translation in 1900 as *The Riddle of the Universe*. Within five years of publication each of those editions had sold more than 100,000 copies. The unprecedented success of this book was due to its vivid and apparently convincing philosophy of life based on Haeckel's concept of Monism, "the connecting link between religion and science." Although Haeckel had first proposed his scientific religion of Monism in a lecture he gave in Altenburg, Germany, on 9 October 1892, other than Roman Catholic priests enraged by his anti-Christian (and especially anti-papist) polemics, these ideas did not catch fire in the general public. *The Riddle of the Universe* changed all that. Monism was to replace dualisms in science (vitalism, a form of materialistic dualism) and religion (distinctions between psyche and body, natural and supernatural, nature and God). More importantly, an explicitly pantheistic and atheistic "Monistic Religion" based on "the good, the true, and the beautiful" in nature would replace Christianity. There would be no chapels or cathedrals in this new science-based faith, for nature itself would be worshipped through a new aesthetic vision in science. All scientists would develop the skills and sensitivities of artists, and artists would sing, paint and dance the eternal flame of life as reflected through the prismatic truth of evolution.

Due to the overwhelming popularity of Monism among "free-thinkers," artists, scientists, and pantheists – particularly those in the German youth movement who were already practicing sun worship, nudism, vegetarianism and Aryan mysticism – in January 1906 disciples of Haeckel in Jena formed an organization to promote the scientific religion of Monism. The German Monistenbund, as it was called, grew by 1915 to 6000 members in 45 cities. Membership fell during the First World War and again after Haeckel's death in 1919. As they did with many other competing organizations and political parties, the Nazis banned the Monistenbund in 1933.

Perhaps Haeckel's most detailed statement of his pantheism and his contempt for Christianity can be found in his short 1914 book, *Gott-Natur (Theophysis): Studien ueber monistische Religion (God-Nature [Theophysics]: Studies in Monistic Religion)*. In it, he proposed his universal God be named the "All-God" (*Allgott*), "Pantheos," or "Deus intramundanus" (God Within-the World). The revered prophets of the new Monistic religion are to be Giordano Bruno, Spinoza and Goethe instead of Jehovah, Christ and Allah. According to the seven principles of Theophysics: 1) God is nature itself, eternal and imperishable; 2) God is the laws of nature itself, impersonal, unconscious, unyielding; 3) God possesses no free will; 4) God does not perform supernatural miracles or wonders;

5) God as a universal substance is a Trinity of Attributes (Mater, Energy, and the Psychom – a word Haeckel coined for the unity of psyche and body); 6) God is blind fate;

7) God is no judge and knows no difference between good and evil.

Haeckel's last major work was *Kristallseelen: Studien ueber des anorganischen Leben* (*The Souls of Crystals: Studies of Inorganic Life*, 1917). In it Haeckel argued that life sprang from non-life, and the fact that crystals grow, move, transform, and have a symmetric internal structure like biological beings suggests that they, too, have a soul or psyche and are probably the inorganic source of life on this planet. This was an extension of an idea Haeckel had proposed as early as 1877 about living cells and microbes known as protozoa, that each cell or protozoa had its own psyche and that the totality of organic matter was "ensouled" (*beseelt*). Haeckel may have been prescient when he speculated about the origins of life from non-life, for current scientific speculation also points to crystals as the form of inorganic matter from which life sprang almost four billion years ago.

Richard Noll

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See also: Conservation Biology; Darwin, Charles; Fascism; Holism; Nietzsche, Friedrich; Pantheism; Philosophy of

Nature; Restoration Ecology and Ritual; Sagan Carl; Wilson, Edward O.

Hardy, Thomas (1840–1928)

Thomas Hardy, an English novelist and poet, was a major Victorian novelist of rural life, hugely influential upon nature writing and the rural novel to this day. He was one of the famous Victorian cases of loss of religious faith, but his relationship with Christianity remained ambivalent. From his mid-twenties onwards his attitude was a mixture of rationalist disbelief in the existence of an external God, anger at the cruelty perpetrated by Christian morality taken in the letter rather than the spirit, and a lingering and sometimes wistful sympathy with Christian rituals and aspirations.

Nature, in his writing, is a surface on which these different attitudes meet each other. There is occasion for hope, or revived hope, as in the chapters of *Tess of the d'Urbervilles* where Tess begins work at Talbothays dairy, or the section of *The Return of the Native* (1878) in which Clym Yeobright begins working as a furze-cutter on Egdon Heath. In both of these cases a character who has been wounded finds a rebirth of innocence through absorption in primitive rural labour in a pastoral setting. To identify nature as Eden entails the idea of a coming Fall, however, and this registers its presence almost from the outset. Clym finds his unexpected peace working on the heath after damaged eyesight has forced him to give up his studies. To the external observer, traveller or reader, Clym becomes “a brown spot in the midst of an expanse of olive-green gorse, and nothing more” (Hardy 1975a: 262). He discovers nature as a paradise temporarily and inadvertently regained: a release from self-consciousness and alienation. The perspective afforded by reading, which he has lost, is tacitly compared to the knowledge Adam and Eve gained from the forbidden fruit. Renouncing it, Clym gains an unfallen world where the animals no longer fear him. Yet Hardy is insistent about the cost of this return to innocence. Closeness to nature means vulnerability (as a brown spot on the heath he is as defenceless as an insect) and loss of vision – loss, for example, of the longer scientific perspectives so new and troublesome to the Victorians. Edenic optimism in Hardy’s nature writing repeatedly reasserts itself, to be crushed by circumstances suggestive of a Darwinist or Malthusian view of nature, yet to come springing up again in its season. None of these positions stabilizes as the belief system of the writing. In *The Woodlanders* (1887), a tragically inflected Darwinism informs the nature writing. The “lichen ate the vigour of the stalk, and the ivy slowly strangled to death the promising sapling” (Hardy 1975c: 82). Yet even in this drama of thwarted purpose and “Unfulfilled Intention” the idea of nature as symbol of persistent hope and vitality remains.

Early in *The Return of the Native* is Hardy’s famous description of the music made by the wind blowing through the tiny dry heather-bells of Egdon Heath. In this mourn-

fully elegiac reworking of the Romantic trope of the Eolian harp, he evokes not only “the ruins of human song” but the delicate ghost of an omniscient God, able to see and touch each tiny thing but only faintly and purposelessly. The heather-bells are reminiscent of Dante-esque lost souls and of the innumerable perishing individuals and species revealed by Darwin’s vision of evolution: “One inwardly saw the infinity of those combined multitudes; and perceived that each of the tiny trumpets was seized on, entered, scoured and emerged from by the wind as thoroughly as if it were as vast as a crater” (Hardy 1975a: 78).

Hardy sometimes argued sardonically that the evolution of sensibility and intelligence in human beings had done little more than increase their capacity to suffer: “This planet does not supply the materials for happiness to higher existences” (in Florence Hardy 1975: 218). Prolonged contentedness, in his fiction, tends to be attributed to characters of stolid or subdued intelligence. Later he developed, as part of his philosophy of “evolutionary meliorism,” the fanciful hope that what he called the Immanent Will – the unconscious drive and causality of life – might one day evolve a form of consciousness. Another hope was that there might be an alliance between religion and rationality, “by means of the interfusing effect of poetry” (1976: 562).

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See also: Memoir and Nature Writing.

Harjo, Joy (1951–)

Joy Harjo, a member of the Muscogee (Creek) nation of Oklahoma in the central United States, has always seen the world in multifaceted ways. Beginning her college studies in painting, she has made a name for herself as a poet, and later took up the saxophone and combined music and poetry into performance art. She has also written film scripts, and in her most recent book, *A Map to the Next World*, has mixed together poems and “tales.” Her interest in the multisensory dimensions of art reflects her stated perception that human beings possess far more than five senses and that if we were to open ourselves to these additional senses they would allow us to experience not only the material aspects of the world more tangibly but also the supernatural aspects as well. Perhaps that perspective helps to explain the genres found in a book she recently co-edited, *Reinventing the Enemy’s Language: Contemporary Native Women’s Writing of North America*, which contains, as she notes, “poetry, fiction, personal narrative, prayer, and testimonials.” The titles of some of her books, such as *A Map to the Next World* and *The Woman Who Fell From the Sky* reflect the centrality of Native American spirituality in her understanding of the world that is repeatedly expressed in her writing through attention to the need of all people, and the attempts particularly of native people, to live in balance with the rest of the world in the face of “the destruction” wrought by modern civilization. This vision is perhaps nowhere more strongly expressed than in the series of prose poems she has written to accompany Stephen Strom’s photographs of Navajo country in *Secrets from the Center of the World*. Adjacent to one photo she writes of an “old man” who “has already been outside to pray, recognized the morning star and his relationship to it, as he stands at the center of miracles” (1989: 14).

Harjo’s efforts to promote readers’ recognition of such relationship can be found in her first two poetry collections, *The Last Song* and *What Moon Drove Me to This?* In the former she introduces a recurring motif of native people trying to “find a way back” from the current crisis of culture–nature separation, while in the latter she introduces ritual into her poems, as with the opening one, “Early Morning Woman,” where she notes that “the sun / the child / are the moving circle / beginning with the woman / in the early morning” (1979: 3). Over twenty years later, she opens *A Map* with “Songline of Dawn,” which begins with “We are ascending through the dawn” and ends with “We are closer to the gods than we ever thought possible” (2000: 13). The accompanying prose tale, “The Psychology of Earth and Sky,” clarifies these lines emphasizing the need for community and ceremony in order to build a world that is “more than a

contract between buyer and seller” (2000: 15). Harjo’s work, then, from first book to current writing, reflects a belief in a spiritual ecology that can heal the world through community-building rituals that both grieve over the destruction that has occurred and celebrate the beauty and balance that can yet be achieved.

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See also: Memoir and Nature Writing.

Harmonic Convergence

If not one of the largest, as its organizers claimed, the Harmonic Convergence was probably one of the most widely dispersed religious (or spiritual) events of recent decades. Organized primarily through word of mouth and through New Age, holistic-health, art, and alternative media channels, this coordinated day of prayer, meditation, and ritual was instigated by art historian and New Age philosopher José Argüelles. According to his calendrical calculations and idiosyncratic decodings of ancient texts, the dates 16–17 August 1987 marked the synchronous occurrence of several significant events: the beginning of the final 26-year period of the Mayan calendar's 5200-year Great Cycle, the return of Quetzalcoatl, the Mayan god of peace, and the culmination of the Aztec calendar; the “dancing awake” of 144,000 Sun Dance enlightened teachers (according to the Rainbow People of the Intertribal Medicine Societies); the return of the Hopi Indians' lost white brother Poha'na; a Grand Trine in the astrological fire signs and the first time since the early 1940s that the seven planets have been so closely aligned; an anchoring of divine energy into the power points of the planet for their subsequent transmission through the “planetary grid system,” and a “calibration point in a galactic and planetary harmonic scale.”

To mark this convergence, Argüelles called for 144,000 people to meditate, pray, chant and visualize at sacred sites and power spots throughout the world in order to create a “complete field of trust” by “surrendering to the planet and to the higher galactic intelligences which guide and monitor” it. Humanity would thereby launch the final 25-year transition into a new age of peace, harmony, solar energy, spiritual enlightenment, and galactic convergence with other civilizations, all to begin in the year 2012. Argüelles' vision combines a Gaian ecological sensibility with a cosmic New Age eschatology: humanity's role as planetary stewards – a role we have allegedly abdicated through the misguided application of technology and inaccurate sciences (to which Argüelles counterposes new ones) – is subsumed within a larger community of benevolent overseeing galactic intelligences.

According to media reports, by 17 August 1987, some 6000 people had gathered at Mount Shasta, California, more than 1500 came together at a site in New York's Central Park, and analogous numbers converged at sites including Chaco Canyon, New Mexico, the Cahokia Mounds outside St. Louis, England's Glastonbury and Stonehenge, Machu Picchu in Peru, the Great Pyramid in Egypt, and Mount Olympus in Greece. New Age celebrities, including Shirley MacLaine, John Denver, and Timothy Leary, were among the convergers, and the mainstream media took note, albeit with a gentle sense of humor. Though total numbers only reached a fraction of Argüelles'

projected 144,000, the event was generally proclaimed a success within New Age media. Actual numbers, of course, are impossible to know, since participation could have included simply meditating or linking thoughts in the privacy of one's home or backyard.

A second Harmonic Convergence was organized in August 1992, with minor follow-up attempts since then, but these have only managed to rally much smaller numbers of participants. In recent years Argüelles has been vigorously advocating that global institutions (such as the United Nations) replace the current Gregorian calendar with a 13-moon, 28-day calendar. "The religion of truth is the religion of the Earth," he has argued, and the latter requires, as a moral imperative, to be based on a "natural" and galactically calibrated method of measuring time. Though Argüelles' ideas have not galvanized the mass movement he has hoped for, any final judgment regarding the success of the 1987 convergence remains premature until the 25-year transition period comes to its prophesied end.

Adrian Ivakhiv

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See also: Celestine Prophecy; Earth Mysteries; Harmonic Convergence and the Spiritualization of the Biosphere; Maya Religion (Central America); Maya Spirituality (Guatemala Highlands).

Harmonic Convergence and the Spiritualization of the Biosphere

The Harmonic Convergence Global Peace Meditation occurred on the dates 16–17 August 1987. Widely publicized in the world media, especially in the United States, the event called for a massing of a minimum of 144,000 people at dawn of August 16. An emphasis was placed on gatherings to be held at sacred sites around the world. These sites included the Great Pyramid, Egypt; Lake Baikal, Siberia; Ayres Rock, Australia; Glastonbury, England; Macchu Picchu, Peru, Mt. Haleakala, Hawai'i; and Mt. Shasta, USA. By all reports the event attracted many times the 144,000 called for and made it the most unique global event of its kind. Subsequent events such as the stock market crash of 19 October 1987, and the end of the Cold War, early 1990, were ascribed in part as being due to the effects of the Harmonic Convergence. According to one of its principle organizers, Jim Berenholtz, never before did people from so many different cultures and religious persuasions gather to pray for peace . . . it was the largest pan-spiritual event in history.

While many people believed that the Harmonic Convergence heralded the New Age and it certainly helped create the New Age as a popular cultural phenomenon, the roots of the Harmonic Convergence lay in an ancient Mexican prophecy, that of the Thirteen Heavens and Nine Hells. This prophecy was first popularized in a book by Tony Shearer (1926–2002), *Lord of the Dawn* (1971). It was directly from Tony Shearer in 1969 that the originator of the Harmonic Convergence, José Argüelles, learned of the prophecy and of the prophetic dates, 16–17 August 1987. The Thirteen Heavens and Nine Hells refer specifically to 22, 52-year cycles based on the Mayan calendar. The first of the Thirteen 52-year Heaven cycles of decreasing choice began in 843, and ended in 1519, with the arrival of the conquistador, Hernan Cortes on Mexican soil. The Nine Hell cycles of increasing doom spanned the time between Good Friday, 1519 and 16 August 1987, with the final cycle beginning in 1935. The prophecy itself was associated with the Toltec sage and prophet Ce Acatl Topiltzin Quetzalcoatl, Our Lord One Reed, Quetzalcoatl (947–999).

Late in 1983, Argüelles had a vision of the end-date of this prophecy in which he saw circles of people gathered at sacred sites around the world, reestablishing a connection with the natural order of reality. Then in 1984, Argüelles coined the term for the event, the Harmonic Convergence. As he began to announce the event, he encountered several others who were also aware of the prophetic nature of the 1987 dates, including musician Jim Berenholtz and Native American medicine man, Harley

Swiftdeer. By late spring 1987, with the publication of Argüelles' book *The Mayan Factor*, the Harmonic Convergence attracted major media attention, including the breaking story on the front page of the *Wall Street Journal*, 23 June 1987. As such, the Harmonic Convergence exemplified a popular participatory eschatology where one's very actions make a difference to the planet's future.

Through all of the mass media attention, the actual meaning of the event was generally overlooked. While signaling the end of the Thirteen Heaven and Nine Hell prophecy cycle, the Harmonic Convergence actually initiated the final 25-year countdown to the conclusion of the Mayan calendar Great Cycle. This defines a cycle of 5125 years between 13 August 3113 B.C.E. and 21 December 2012. Consisting of thirteen sub-cycles called baktuns, of 144,000 days each, the entire cycle spans the history of civilization from Uruk and the First Dynasty of Egypt, ca. 3100 B.C.E., to the present moment. For this reason, what the ending of the Great Cycle portends is the ending of history itself and the beginning of a genuine posthistory. To successfully conclude the cycle in 2012, according to the Harmonic Convergence prophecy, the human race must return to living again in the natural cycles of the universe, and abandon the materialist civilization that dominates the present era. If the human race cannot transcend or go beyond the materialism of the present world order by 2012, then it can only expect the worst – the collapse of civilization or even worse, the collapse of the biosphere.

At the heart of this prophecy is a recognition of the human deviation from nature and its effects on the environment, or properly speaking, the biosphere. In this regard the Harmonic Convergence prophecy coincides with the theory of the biosphere-noosphere transition. The biosphere is defined as the region on the surface of the Earth for the transformation of cosmic energies. By definition, the biosphere includes all of life as a single unity inclusive of its support system, solar and cosmic energy, the soil, hydrospheric cycles, and the convection currents of the atmosphere. As a fragile membrane encompassing the Earth's surface, the biosphere is dependent upon the pressure that the different species exert upon each other to maintain the balance of its laws, principles and cycles that govern. As Vladimir Vernadsky (1864–1945) saw it, humanity, through its extension, the machine, was upsetting the balance of the biosphere. Vernadsky himself was uncertain as to whether humans were crippling or destroying the biosphere.

In the theory of the biosphere as presented by Vernadsky and Pierre Teilhard de Chardin (1881–1955), the biosphere is an evolutive whole which is tending toward a major culminating transmutation known as the noosphere, Earth's mental envelope, discontinuous with and above the biosphere, a planetary thinking network of consciousness and information. For Teilhard de Chardin the noosphere is like a new organ of consciousness, analogous on a planetary level to the evolution of the cerebral cortex in humans. Teilhard de Chardin spoke of the moment of noospheric mutation as the Omega point, and of the convergence of the person with the Omega point as defining a new hyper-spiritualized state not only of the human but of the Earth itself. Similarly, Vernadsky (with whom Teilhard de Chardin coined the term noosphere in 1925) saw

that following a peak crisis of the biosphere heralding the biosphere–noosphere transition, a new geological era would appear, the *psychozoic* era. This new era dominated by the noosphere would represent a spiritualization of life, the meaning of the word, psychozoic.

What neither Teilhard de Chardin nor Vernadsky foresaw was the intermediate stage between the biosphere and the noosphere, and that is the technosphere. The present stage of human civilization is defined as the technosphere: the sum of technology and the civilization which maintains it as an artificial envelope coextensive but discontinuous with the biosphere, affecting all of its aspects and functions. In this regard, the technosphere represents a singular but necessary deviation from the natural order. As the agent effecting the disruption of the biosphere while alienating the human species from nature, the technosphere is the mechanism allowing both for the global communication system to hook up the species as a single organism, and for the release of free energy into the biosphere accounting for global warming, ozone depletion, species extinction and the general crisis of the biosphere as a whole. Seen from the perspective of the biosphere–noosphere transition, the technosphere is like the cocoon of the new emergent evolutionary stage, the noosphere. Since the technosphere is dependent on the very biosphere which it is disrupting, it must inevitably either destroy itself and the biosphere or transform into its opposite condition, the noosphere, a purely non-technological spiritual state.

As the fulfillment of the prophecy of the Thirteen Heavens and the Nine Hells, Harmonic Convergence actually defines and describes the entire 25-year period between 1987 and 2012. From the Harmonic Convergence viewpoint, the great Cycle end-point, winter solstice 2012 corresponds to Teilhard de Chardin's Omega point, while the entire 25-year period defines the biosphere–noosphere transition. The crisis of the biosphere is seen as the direct result of the technospheric civilization, while the technosphere itself is defined as a function of operating on timing cycles that are artificial and mechanistic. The call of the Harmonic Convergence to return to living in the natural cycles of the universe represents an evolutionary signal to the species that its dependence on artificial civilization and mechanistic time must be abandoned if it is to survive. The real meaning of the Harmonic Convergence is the capacity of the human species to respond to this signal and to harmoniously synchronize itself with the natural order by 2012, thus attaining to Teilhard de Chardin's Omega point.

As the focal event of the *Mayan Factor*, the Harmonic Convergence must be understood within the context of the meaning of the Mayan calendar system. The *Mayan Factor* is the overlooked factor in any analysis or consideration of human history. What is overlooked is the Mayan contribution to human thought and culture, and that is the correct understanding of time. The complex and rich system of thought embodied in the Mayan calendar system is based on a radical perception of time that is not a linear construct as the Western paradigm has it, but is a frequency. As a frequency, time is the universal factor of synchronization which, in turn, defines a whole other domain of reality, the synchronic order. The nature and purpose of time is to synchronize,

and therefore, the purpose of human timekeeping should be evaluated on the degree to which it promotes synchronization with the universe. The Harmonic Convergence prophecy worked because the Mayan prophecies are synchronized to the universal timing frequency. Since the Harmonic Convergence prophecy proved to be so effective, then one must anticipate that there is something to the prophecy regarding the end of the cycle in 2012. If history is meant to be concluded by that point in time, how can the transition of the human race from mechanistic to natural synchronic time be attained? That is the question left open by the Harmonic Convergence.

Obviously, if the technosphere is a function of artificial and mechanistic time, then the release from the technosphere must be by a replacement of artificial and mechanistic timing standards with naturally synchronic timing standards. The fulfillment of the Harmonic Convergence prophecy can then be realized as the change in the time of civilization. The technosphere, the final stage of civilization, is governed by two timing standards, the Gregorian calendar and the mechanical clock. The irregular measure of the Gregorian calendar combined with the mechanization of time produced by the clock are the direct causes of the alienated and fast-paced mental condition of modern humans. To change the time by replacing the current calendar with one that is genuinely synchronic would be an apocalyptic act, for it would portend the removal of the macro-organizing basis of the present world order, thus altering the operating basis of society altogether.

In this way the Harmonic Convergence is a supreme eschatology representing a grand convergence of prophecy. For to replace the standard by which civilization has governed itself for over 2000 years with a perpetual and harmonic standard in which there is no irregularity whatsoever would be to remove the very foundation of history and the technosphere as a deviation from nature. The most harmonic standard conceivable is a solar-lunar calendar of 13 months of 28 days each, 52 perfect weeks a year, with one extra day for the forgiveness of debts. In history as it has devolved there is no harmony. In harmony there is no history. Accepting a perfectly harmonic standard, therefore, would be to enter into posthistory.

According to the Harmonic Convergence prophecy, the biosphere can only be spiritualized if man is synchronized with the cycles of nature. The only way to achieve this goal is through the rejection of the irregular timing standard and the adoption of a harmonic one. Only by operating in a harmonic timing standard will the human species be able to return to living in the natural cycles of the universe.

This would augur the fulfillment of the Harmonic Convergence. But to attain to this condition by 2012 means that a calendar change must be enacted. This is the purpose of the Great Calendar Change of 2004, the natural sequel to the Harmonic Convergence Global Peace Meditation of 1987. Should such an eventuality succeed, it would also signal the successful conclusion of the biosphere–noosphere transition and the imminent advent of the psychozoic era, the era of the spiritualization of the biosphere.

Jose Argüelles

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See also: Celestine Prophecy; Earth Mysteries; Maya Religion (Central America); Maya Spirituality (Guatemala Highlands); New Age; Teilhard de Chardin, Pierre.

Harmony in Native North American Spiritual Traditions

Few who witnessed the first Earth Day in 1971 have forgotten its most memorable symbolic moment: a television commercial in which an American Indian warrior paddled his canoe to the bank of a river and walked to a nearby highway, congested with traffic. As he watched this desecration, a single tear rolled down his cheek and the voice-over narration intoned: “People start pollution; people can stop it.” While this public service ad – recently named one of the top fifty commercials of all time – communicated an admirable message, it also disseminated a stereotype of American Indians as romantic ecologists or, according to some scholars, “ecologically noble savages” (Redford 1991: 46–8). This positive stereotype has generated endless discussion about whether indigenous peoples have actually lived in *harmony* with nature or whether they, too, have irresponsibly destroyed their own environments. Framing the debate in these terms perpetuates an insidiously false dichotomy, however: either American Indians must embrace “harmony,” which connotes a mystical bond with nature and the absence of conflict, or they fall prey to an extractive colonialism similar to that practiced by Euro-Americans. What this binary opposition erases is how American Indians themselves have perceived their relationship to the land, and how it has been articulated in native intellectual and spiritual traditions.

Many stories in these traditions suggest that the complex act of treaty-making more accurately portrays the connection of American Indians to the Earth. Legally, a treaty conjures such synonyms as “covenant,” “contract,” as well as “commitment.” It denotes an agreement that two or more parties enter into entailing mutual responsibilities and obligations. A construct for understanding the relationship between American Indians and the land, the treaty describes a process undertaken by native peoples to understand our ethical and ceremonial commitments to the world in which we live. Precisely what these commitments are and how they have been broken will become clearer in the light of oral traditions about them. If, as Tlingit scholar Nora Marks Dauenhauer has observed, origin stories are by nature theoretical, then stories about the origins of covenant provide a starting point for elucidating this concept.

An old Cherokee story, for example, tells of the time when animals, fishes, insects, plants and humans lived with each other in peace and friendship. The human population increased beyond sustainable numbers, however, and they began to crowd and crush their other-than-human partners out of carelessness and contempt. Even worse, humans invented weapons such as the blowgun and the spear that allowed them to kill

animals indiscriminately. In response, every species of animal called a council of their own kind and each decided that they would invent a disease inflicting pain and death upon their victimizers. The deer sent rheumatism to every hunter who killed one of them unless he respectfully asked forgiveness for this offense. The fish sent humans nightmares about eating decayed food. Eventually, the animals and insects devised so many new afflictions that if their inventiveness had not faltered, not one human would have survived. When the plants, who were friendly to humans, heard what had happened they determined to help by furnishing a cure for each human disease. Although this story concerns the origins of Cherokee medicine, it also thematizes the struggle to achieve a precarious balance (one might even say “harmony”) among many forms of life with diverse needs. It addresses the responsibilities that we all must assume toward each other, and presents the complicated negotiations of covenant as a model for the relationship between humans and the rest of creation. It is a story about harmony that is filled with conflict.

Or consider a tale from the other side of the continent: that of Moldy Head, a young Tlingit boy, who rejects the dried salmon his mother gives him because it is moldy. This behavior offends the salmon people, who capture him one day when he drowns in the Klukshu River. During the time that he spends in their watery world, the young boy learns about salmon culture and even participates in their annual spawning migration – presented in more than one version as “going to break that war house – that’s people’s fishtrap” (Kitty Smith in Cruikshank 1990: 209). His mother recognizes a necklace worn by one of the migrating salmon as the one belonging to her son, and she has “Moldy Head” restored to human form. Because of his learned empathy with the salmon, the boy becomes a medicine person specializing in maintaining a respectful relationship between his people and the salmon. As Tlingit elder Mrs. Angela Sidney notes: “That’s how they know about fish. That’s why kids are told not to insult fish” (Sidney in Cruikshank 1990: 78). Once again, the term harmony seems a reductive way of talking about the multifaceted and often agonistic forging of respectful relationships between humans and other forms of life. The story of Moldy Head teaches listeners that learning to see life from other angles – as well as making mistakes – constitutes a crucial component of living in harmony with nature.

Narratives whose theme is the intermarriage between humans and animals also bear directly upon what constitutes a proper “marriage” or covenant between American Indians and Mother Earth. In the Anishnabe story of “Clothed-in-Fur,” a human by the same name sits in the wigwam of his beaver wife and fantasizes about eating his sister-in-law. His father-in-law, Old Beaver, allows him to eat her. When the man disposes of her remains in a proper and respectful way, his sister-in-law returns alive to her family. Some other humans who desire to hunt and “eat” offer the beaver a pipe through the door of their wigwam. They smoke it and then return it to the humans. In the morning, the people came to hunt “and all [the beavers] gave themselves up to be killed . . . And in the evening they all returned alive” (Overholt and Callicott 1982: 71). Yet another would-be hunter boasts about his capacity to take beaver without any help – a human

arrogance that deeply angers Old Beaver. Not surprisingly, this hunter's quest fails. The Anishnabe story of Clothed-in-Fur depicts further elements of the covenant between humans, animals and the Earth. In exchange for humans fulfilling their obligations toward their furred companions, the beavers willingly sacrifice themselves for the good of humans. Respectful attitudes and reciprocal obligations not only exist as necessary conditions of this covenant, but also embody a sustainable ethics allowing both beavers and humans to "return alive," that is, to survive.

Generalizations about the diverse native cultures inhabiting North America should always be made with caution. However, these Cherokee, Tlingit and Anishnabe stories articulate an insight central to most native spiritual traditions: the connection between humans and Mother Earth resembles the protracted and often contentious negotiations of treaty-making rather than the static symbiosis of harmony. Perhaps in this sense, transforming harmony into harmonizing would more accurately represent the teachings of our stories. According to Santa Clara Pueblo scholar Gregory Cajete, harmonizing involves the integration of mind, body, and spirit through a dynamic and complex set of activities. For Native people, living in harmonious and sustainable relationship with the land was a sacred responsibility, tempered with the realization that the neglect of this responsibility would bring dire results and retribution from the Earth . . . These people considered ahead of time the possibility that resources might fail and worked out practical and spiritual ways to ensure life (Cajete in Overholt and Callicott 1982: 212–13).

If humans and all our relations are to meet the environmental challenges facing the twenty-first century, we must develop more nurturing models for maintaining the bond among all life forms and the Earth. Native storytelling traditions distill experience gained over hundreds, if not thousands, of years and offer crucial perspectives on this process. They tell us that "harmony" is fragile and can only be achieved by making a daily commitment on its behalf. They tell us that, unless we honor the treaties among humans, animals, and the land, no environmental or spiritual transformation of our world is possible. They tell us that unless we manifest the proper respect and an ethic of reciprocity in all aspects of our lives, it will be Mother Earth – and not the first warrior of Earth Day – who weeps.

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See also: Indians as "First Ecologists"; Mother Earth; Noble Savage and the "Ecologically Noble" Savage; Traditional Ecological Knowledge.

Harner, Michael – and the Foundation for Shamanic Studies

Michael (James) Harner is among the most prominent authorities in the neo-shamanic field. He became involved in the debate about the authenticity of the works of his friend, Carlos Castaneda. In 1963, Harner earned his Ph.D. in anthropology (University of California, Berkeley) and worked as professor at Columbia, Yale, Berkeley, and at the New School for Social Research in New York. In 1959, he led a research project on behalf of the American Museum of Natural History to study the Conibo Indians of the Peruvian Amazon basin. During this – and later – fieldwork, Harner was introduced to shamanic rituals involving the “entheogenic” vine *ayahuasca*. These experiences changed his attitude toward shamanism. According to his account, Harner was not only an academic authority, but also succeeded in being considered a prospective “master shaman” by native specialists.

After extensive research both “in the field” and through literature, Harner elaborated what he felt to be the crosscultural common denominators of shamanism. These he referred to as *core shamanism*, which he describes as a spiritual technique instead of a religious concept. Employing rhythmic instruments – mostly a large frame drum or rattle – a slightly altered state of consciousness is induced (not necessarily a “trance”), which allows the practitioner to focus his or her attention to non-ordinary realities. In this state the shaman journeys into the lower or upper worlds in order to meet spiritual entities like power animals and spirit helpers. Submitting as an apprentice to the spirits, the shaman can then ask for help or advice in order to heal herself/himself, other people, animals, plants, or places. The relationship between shaman and spirits is further strengthened by ritual activities like dancing and singing, or through power objects that bring immaterial power into visible form.

In 1979 a kind of social formation took place when Harner and others founded the “Center for Shamanic Studies.” Having resigned his professorship, Harner renamed this non-profit organization in 1987 as the “Foundation for Shamanic Studies.” Subsequently, a global network was established in order to secure the quality of the core shamanism techniques, to facilitate grassroots networking, and to distribute literature, music, and shamanic paraphernalia. The constitutional aims of the “Foundation” are threefold: preservation of shamanic cultures and wisdom around the world; study of the original shamanic peoples and their traditions; and teaching shamanic knowledge for the benefit of our planet. This last objective has been especially controversial because the Foundation offers scholarships to natives to regain their own shamanic heritage

(“Urgent Tribal Assistance”). Critics regard this as a sincere act of colonial suppression, whereas natives who work as certified “counselors” for the “Harner method” – like the Lakota Carol Proudfoot Edgar – embrace the Foundation’s techniques as a crosscultural shamanic tradition.

With branches on most continents, the “Foundation for Shamanic Studies” can be described as an institutionalization of the Harner method. Several other groups have adopted it as a model. The foundation organizes workshops, and it also encourages participants to gather into drumming groups, where the skills learned through the workshops are practiced and shared. With the growth of Harner’s workshops – seventy participants or more is not exceptional – fierce debates arose concerning the commercial aspect of his work. Critics from outside charge Harner with having appropriated native traditions for personal profit, while participants frequently express their disappointment about the workshops’ sterile or impersonal atmosphere. This might have to do with Harner’s description of shamanism as a mere “technique”; others (particularly Harner’s former colleague Jonathan Horwitz) stress the animistic aspect and talk of shamanism as “sacred work.”

There are two kinds of courses. In the basic courses (mostly three days), participants learn the fundamental techniques of shamanism, especially shamanic journeying and how to contact spiritual helpers and power animals for problem-solving advice. The entities found are then blown into the client’s chest or forehead. Although these basic techniques are essential for any kind of shamanic work, training in their application and the chance to increase one’s own spiritual abilities are only possible in the various advanced courses. Here, participants learn to retrieve soul-parts that are considered to have been lost through trauma, etc. (in fact, those techniques closely resemble certain psychotherapies [e.g., working with the “Inner Child”]). On other occasions bodily, mental, or spiritual illnesses are “sucked out” of the client.

The accompaniment of dying persons before and after death (i.e., helping the soul traveling into the realm of the dead and communicating with the departed) also is an important field of neo-shamanic practice. In addition, affinities with deep ecology have been increasingly drawn since the early 1990s. This work, which is often called

“spiritual ecology,” not only includes communication with plants, stones, or other entities that the animistic worldview considers to be alive, but also involves healing work for energetically disturbed places or even the whole planet. Furthermore, some groups practice Native American traditions like the vision quest; others – especially in Europe – integrate or (re)construct Celtic or Nordic elements, like the *seidr* tradition.

The neo-shamanic scene shares a lot with neo-pagan and environmental groups ritualizing their relationship to nature. Both the soul retrieval and the spiritual ecology workshops are grounded in an esoteric concept of wholeness and sacredness. In an interview, Sandra Ingerman said that mankind has reached a crucial point in the history of the planet, having the ability to destroy life as we know it. Consequently, we are in need of as many “whole” people to appear on the planet as quickly as possible, and

if a weekend workshop can foster people's abilities to heal themselves and experience the sacredness of nature, that will help us to save the planet.

Michael Harner's influence has led to a standardization of shamanic practice in the modern world. This has entailed processes of inclusion and exclusion, as well as questions of legitimization and valuing. At the same time, an inevitable counteraction has questioned Harner's authority in matters shamanic. One recent example of this is seen in Harner's devaluation of the "middle world" of visible, material nature. Whereas Harner strongly warns his participants not to perform "middle world" journeys (e.g., to walk through a wood in a state of shamanic consciousness) others argue that this is a precarious disregard of nature's material power and a flight into "otherworldly" realms. Annette Høst from the "Scandinavian Center for Shamanic Studies" even describes this doctrine as a prolongation of the Christian attitude that depicts nature and its spirits as bad, dangerous, and impure.

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See also: Anthropology as a Source of Nature Religion; Ayahuasca; Breathwork; Castaneda, Carlos; Entheogens;

Indigenous Religions and Cultural Borrowing; Shamanism

– Neo (Eastern Europe); Snyder, Gary.

Harris, Marvin (1927–2001)

In the 1960s, the conventional anthropological view of religion, established by figures such as Frazer, Malinowski and Radcliffe-Brown, began to be challenged by a small number of scholars in the United States. Many taught or were trained at the Columbia University Department of Anthropology, where a materialist and evolutionary anthropology was established in the years after the Second World War. By the early 1970s, this was being elaborated at several academic centers – chiefly Columbia and the University of Michigan (Ann Arbor) – by practitioners of the interrelated paradigms of cultural or human ecology and cultural materialism. The latter was principally identified with Marvin Harris, who received his Ph.D. from Columbia in 1953 and taught there until 1981, when he moved to the University of Florida (Gainesville). Harris' perspective was characterized by a critical departure from the synchronic functionalism to which cultural ecology, with a greater resistance to comparative generalizations, remained attached, as in Roy Rappaport's classic work on religious ritual cycles in the New Guinea highlands.

While sharing with Rappaport the explicit aim of illuminating the functional role of religious practices in concrete settings, with emphasis on their role in the management of environmental resources, Harris' approach to religious phenomena was more notable for its evolutionary and comparative perspective, which was as much interested in patterns of causality as of function. Where scholars such as Rappaport, who emphasized the "selfregulating" function of human ecological systems, in time drifted toward an increasing preoccupation with symbolic meaning (Rappaport 1979), Harris' interest continued to explore how, beyond their apparent ideological unity, such systems were composed of contradictory material interests. Hence, his analytical strategy had far greater political implications. For that reason, Harris' materialist approach to religious beliefs and practices was intended to demonstrate the merits of his more general analytical framework

– cultural materialism – which accorded priority to the influence of material relations, especially those between the environment and human economy, over symbolic structures.

Harris' perspective, in regard to religion, can be summed up in his own words:

Beliefs and rituals that appear to the nonanthropological observer as wholly irrational, whimsical, and even maladaptive have been shown to possess important positive functions and to be the dependent variable of recurrent adaptive processes (1971: 556).

Although he had not abandoned the tendency of anthropology to emphasize the *functional* interrelationships between religious practices and beliefs, it was also of prime

importance to Harris to comprehend such phenomena as *processes* that did not have an independent existence in people's minds or depend on a set of *a priori* cultural or symbolic norms, which was the prevailing anthropological view. On the contrary, for Harris they reflected and, even more, were part of, a community's overall mode of production, emerging out of the practical experience of people challenged to secure their livelihoods within a particular set of environmental conditions. As such, they could be shown to play an important role in organizing or reinforcing behavior patterns that were crucial, often counterintuitively, to the ongoing dynamic of a given social formation. But, to that extent, religious phenomena, in Harris' overall research strategy, were really treated no differently than any other cultural traits that initially seemed to have an incomprehensible relationship to the way people met basic needs.

Harris first elaborated this position in two papers on the "cultural ecology" of the sacred cattle of India (1966), in which he forcefully argued that the apparently counterproductive Hindu taboos on cow slaughter and beef consumption were intelligible if examined both in terms of other material advantages – such as the use of cow dung for fuel and fertilizer and of oxen for traction – for individual poor farmers and, in the aggregate, in terms of their cumulative positive effects for the carrying capacity of the Indian ecosystem.

Over time, Harris elaborated his arguments to meet the views of his many critics, while his general method of analysis was extended by some of his students and colleagues to other cases. Collectively, they have made a powerful argument that patterns of religious meaning and practice need to be seen within wider patterns of survival and livelihood strategies of individuals, communities and societies.

Harris' work is not beyond criticism. There is a tendency in his approach, especially where he has examined religious beliefs related to dietary practices (including not only the cow in India, but the pork taboo in ancient Israel and cannibalism among the Aztecs) to place inordinate emphasis on endogenous variables such as population pressure and to minimize the influence of political-economic structures and processes, especially those of a global nature. In his accounts of the emergence of the India cow taboo, for example, Harris' environmental history of the sub-continent makes virtually no reference to British colonialism. While this does not negate the merit of a materialist analysis of religion, it does raise theoretical questions about Harris' work that will engage future scholars for years to come.

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See also: Anthropologists; Anthropology as a Source of Nature Religion; Domestication; Ecological Anthropology; Ecology and Religion; Evolutionary Biology, Religion, and Stewardship; Goshalas (Home for Aged Cattle); Hunting and the Origins of Religion; Magic; Rappaport, Roy A. ("Skip"); Religio-Ecological Perspective on Religion and Nature.

Hasidism and Nature Mysticism

Hasidism is a mystical revival movement within Judaism that began in southeastern Poland in the last decades of the eighteenth century. It spread quickly through the areas of Jewish population in Eastern Europe and was a major force in Jewish religious life until the Holocaust. In the post-war era, Hasidism has reestablished itself in Israel, North America, and Western Europe.

Hasidism originates in a call for spiritual renewal, one that did not shy away from radical and daring forms of expression. These include a challenge to Judaism's typically bookish, intellectualized form of religiosity and a call to seek out the radiance of divine presence to be found throughout the created world. "The power of the Maker is in the made," proclaimed many a Hasidic author, and therefore (quoting the biblical prophet Isaiah [6:3]) "the whole Earth is filled with God's glory."

The discovery of God's presence within the created world was often couched in the language of a quest for "sparks" and their "uplifting." This religious discourse was derived from the sixteenth-century Lurianic Kabbalah, named for its originator, Rabbi Isaac Luria of Safed.

A ritual task of the Jew, taught the Hasidic masters, was to find these sparks even in the most unlikely places, recognize their divine origin, and thus restore them to God. This quest often took masters and disciples to the fields and forests surrounding the shtetls or towns in which they lived. It was there that the true devotee could best celebrate the pure joy of living in God's presence.

"Nature" is a concept not found in the ancient sources of Judaism. Indeed the **Hebrew** term for nature, *teva*, is a coinage created for the translation of Greco-Arabic scientific works into Hebrew during the Middle Ages. Hasidism follows a school of Jewish thought that insists on the absolutely supernatural character of all events; "nature" is but a cloak that hides the constant stream of divine energy that ever flows into the world, sustaining it anew in each moment as an assertion of willful divine grace. An acceptance of the "naturalness" of such events as the daily sunrise or even the continuation of one's life from one moment to the next is seen in the Hasidic perspective as implying a lack of true faith. Here the natural is identified with the ordinary, that which is not appreciated for the true miracle that it is.

This insight that God's presence underlies all of nature is expressed by frequent mention that the word *hateva* ("nature," preceded by the definite article) is numerically equal to Elohim or "God." Some Hasidic authors depict the creative word of God (identified with the divine "Let there be" in the first chapter of Genesis) as the true

object of creation the entire natural universe serving as a mere cover for that divine essence.

The celebration of nature within Hasidism is most often associated with the movement's first key figure, Rabbi Israel Ba'al Shem Tov (1700–1760) and his great-grandson, Rabbi Nahman of Bratslav (1772–1810). The legends of the Ba'al Shem Tov's life tell that as a schoolboy he often disappeared from the classroom, only to be found later, alone in the deep forest, calling out to God. This motif of the woods as a place to find God is carried through in many tales and melodies associated with Hasidic life. Rabbi Nahman of Bratslav, perhaps the greatest poetic spirit among the Hasidic masters, spoke of melodies that rise up from the "corners of the Earth," of each field's grasses bearing a unique note in the symphony of divine music, and of prayer as an act of gathering beautiful blossoms in a field, drawing them together to be offered as a gift to God.

Scholars have debated whether the Hasidic quest for the divine essence of being is one that truly affirms the natural world as a locus of divinity or merely seeks to cast the varied masks of nature aside in order to reach the single, undifferentiated goal of the mystical quest. While the key mystical authors within Hasidism (Rabbi Dov Baer of Mezritch and his circle) do indeed waver on this question, popular Hasidism in its early days surely glorified the natural world as a setting for the encounter with God's glory.

In later years, especially as Hasidism moved from rural to urban settings, much of this devotion to the outdoors as a place to seek God was set aside. As Hasidism became an ever more ultra-conservative force within Jewry, the image of the early Hasidic masters came to be colored more by their devotion to tradition than by their attraction to a mystical appreciation of the natural world. This element was recovered, however, in the twentieth-century phenomenon known as Neo-Hasidism, and is prominent in the writings of such key figures as the young Martin Buber (1878–1965) and Hillel Zeitlin (1871–1942).

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See also: Buber, Martin; Judaism; Kabbalah.

Haudenosaunee Confederacy

The term Iroquois refers to a confederation of five Native American nations (Seneca, Cayuga, Onondaga, Oneida, and Mohawk) who joined together under the Great Law of Peace. In the early eighteenth century the Tuscarora joined the Confederacy, becoming the sixth nation. Iroquois was a name assigned to this Confederacy by the French but the indigenous term for this confederation is the *Haudenosaunee*, which means “People of the Longhouse.” Previous to European invasion the Longhouse was a building in which resided several, perhaps hundreds, of people related through a clan connected through the women’s lineage. The leader of the clan, called the Clan-mother, undergoes a selection process by the entire clan. Among the Clan-mother’s many duties are naming children, selecting and nominating leaders of the clan, and observing and overseeing the conduct of the leaders. All of her nominations for leaders are subject to the consensus of clan. Clan-mothers have the responsibility and authority to remove leaders who have violated their roles as clan leaders. Today the Longhouse is not a residence but continues to be the center of traditional communities organized by clans.

Offices associated with each clan are the Clan-Mother, a male clan “chief” (which in Iroquoian languages usually translates to “good mind”), a sub-chief, and a male and female Faithkeeper. Where the Longhouse system has not been weakened by U.S. and Canadian intervention, it is also where political and economic decisions are made. The Haudenosaunee have no word for “religion” but understand Longhouse as the way one lives one’s life everyday. Ceremonial activities, as well as political and economic decisions, of the Haudenosaunee all take place in the Longhouse. The Haudenosaunee Longhouse system of governance is the last remaining traditional indigenous government that is still in charge of land in North America that is recognized by the United States Government. All other governments on Native American lands have been forced to adopt an elective style government mandated and funded through the Bureau of Indian Affairs (BIA). Among the Haudenosaunee territories only Onondaga, Tuscarora, and the Seneca at Tonawanda maintain traditional Longhouse governments that are the center of ceremonial, economic and political life. Onondaga is the Central Fire where the Grand Council meets to debate matters pertaining to the entire Confederacy.

The geographical arrangement of the Haudenosaunee, depicted in the Confederacy Belt, is understood to be an enormous Longhouse that extends over upstate New York. From right to left, or East to West there are the Mohawks called the “Keepers of the Eastern Door”; the Oneida called the “Younger Brothers”; represented by a central tree are the Onondaga called the “Central Fire”; the Cayuga called the “Younger Brothers”;

and at the far left are the Seneca, which are called the “Keepers of the Western Door.” Along with the Tuscarora, these groups form the Haudenosaunee. The Confederacy Belt, made of wampum shell beads, is the symbolic expression of this confederation of the original five nations. Lines extending to the East and West acknowledge that the Confederacy is unfinished and will include other people in the future.

Haudenosaunee ceremonies and life-ways originate from their relationship with the Creator. Three specific messages were received by the Haudenosaunee from the Creator at important points in their history. The first message was how the Haudenosaunee should live in a respectful manner. Their ceremonial cycle is based on the yearly cycle of seasons. Ceremonies are referred to as the Thanksgivings. At various moments throughout each year thanks are given to food, to the land, to water and to life in the Longhouse. This is not regarded as a sentimental activity but a practical one. But the intention is not to control some other-worldly power. As one elder put it, the Thanksgivings are not worship, not an attempt to manipulate the cosmos, nor are they attempts to seek salvation of some kind (and therefore not “religion” in the conventional sense). Rather they are events to fervently give thanks for gifts that have already been received. These insights highlight the difference between “religion” as it is understood in common and scholarly settings and a “way of living” for the Haudenosaunee, as well as for other indigenous people. The Thanksgiving Ceremonies are the spiritual center of the Haudenosaunee.

Another gift given by the Creator is the Thanksgiving Address. Before every significant gathering of the Haudenosaunee the Thanksgiving Address is recited. This is a formal acknowledgement of different beings and forces in the cosmos, which are intimately involved in all life and should be at the forefront of all human deliberations. There is a set form for the Thanksgiving Address. Salutations and respectful words are given to Visitors, Mother Earth, Water, Grasses, Animals, Birds, Foods, Medicinal Herbs, Trees, Sun, Moon, Ancestors, Spirit Protectors, and the Creator. Depending on the occasion the Thanksgiving Address can last between thirty minutes to a few days. The Thanksgiving Address unifies the minds of the human group so that they can make appropriate decisions on behalf of creation. The nature of the Thanksgiving Address is to engage all of creation in human decisions and to unify and align the human community in work that supports and promotes creation.

The second message to the Haudenosaunee is the Great Law of Peace. This is a system of governance that is based on what Oren Lyons has called “natural law,” which is the unchanging laws of the natural world. The Great Law of Peace is based on perpetuating a relationship to natural world powers, such as the Grandfathers of Thunder and Lightning, Elder Brother Sun, Grandmother Moon, and Mother Earth. These life-giving forces are well known to the *Haudenosaunee* and yet are well beyond their control. Fostering a thankful and respectful attitude toward these powerful forces results in their having a deep knowledge of the intricacies of the workings of the natural world. Haudenosaunee leaders are mandated to make decisions on behalf of seven generations into the future and take comfort in the fact that wise decisions of

their ancestors made seven generations ago are why they have survived until today. The effect of being mindful of the seventh generation in the past and future on the individual is that one thinks of the long-term consequences of one's actions. It is of practical importance to think outside of the human temporal framework and in larger cycles of time.

The third message is the *Gaiwiyo*, or "Code of Handsome Lake." In a series of symbolic images the *Gaiwiyo* warns how accepting certain things from European Americans will erode the Haudenosaunee relationship with the Creator. Specifically the acceptance of alcohol, things of a foreign culture, gambling, and the Bible are mentioned. Even though they have undergone tremendous hardships, the promise of the *Gaiwiyo* is that the Haudenosaunee will remain strong as long as they hold to their relationship with creation as revealed in their three messages. Without the *Gaiwiyo* the Haudenosaunee traditions would not have survived until the present day. Of urgent contemporary interest are the *Gaiwiyo* warnings against gambling and the Bible. At its core gambling fosters an un-thankful attitude of insatiable need, desire and want that is directly contrary to the Haudenosaunee focus on ceremonies as Thanksgivings. Part of the Haudenosaunee resistance to categorizing their ceremonies as "religion" also has to do with the open-ended nature of their practices. Unlike other world religions, Haudenosaunee laws, rituals, and decisions are based in a tradition but are not written or canonized, and are therefore unfinished. Revelations from the Creator are an ongoing reality and not, as with Christianity and Islam, something that happened in the past and is finished. Because creation persists there is always the possibility of new and urgent messages coming from the Creator.

The Great Law of Peace and the Thanksgiving Address have had substantial impact on American culture and the world. All Longhouse activities, whether they are ceremonies, economic meetings, or meetings of the clans, have a concern for creation at their core. Moreover their survival as the last traditional government (i.e., not having allowed the Federal Government through the Bureau of Indian Affairs [BIA] on their lands) is directly attributable to the strength of the Longhouse system. Many have been interested in the history of the Haudenosaunee. In 1992 the U.S. Senate passed resolution #76, which formally acknowledged the "contribution of the Iroquois Confederacy of Nations to the development of the United States Constitution." Founding Fathers Thomas Jefferson, George Washington and Benjamin Franklin couniled with Haudenosaunee leaders to discuss effective governmental structure. The resolution went on to reaffirm the continuing government-to-government relationship between Indian tribes and the U.S. Additionally, the prominent role of women in the Clan system influenced the development of women's rights in the United States and the Haudenosaunee were formally recognized at Seneca Falls, where the woman's movement began in 1848. Today Haudenosaunee leaders like Oren Lyons and Audrey Shenandoah are bringing the concerns of indigenous people from around the world into the United Nations. Jake Swamp, who directs the Tree of Peace Society, has spread the message of the Great Law of Peace by planting trees around the world.

As a result many indigenous people and others all over the world continue to be interested in the genius of the Haudenosaunee. At the 1992 World Summit on the Environment of over 181 world leaders in Rio de Janeiro, the Secretary General of UNCED, Maurice Strong, concluded his opening remarks with a quote from the Peacemaker on the importance of making decisions on behalf of the Seventh Generation. At a meeting of Native American leaders in 1994, President Clinton likewise quoted the Peacemaker on the importance of being ever-mindful of the Seventh Generation. Both of these examples are testimony to the wisdom and strength of the Haudenosaunee Confederacy.

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See also: Indigenous Environmental Network; Lyons, Oren.

Hawai'i

Na Hawai'i, the Native Hawaiian people, are descendants of the original inhabitants of the island archipelago, Hawai'i. Oral traditions passed on through chants, legends, myths and *mo'oku'auhau* or family genealogies, trace the origins of the Native Hawaiian people to early Polynesian ancestors and beyond them to the life-forces of nature itself.

According to these genealogies, Native Hawaiians are the living descendants of Papa, the Earth mother, and Wakea, the sky father. Ancestral deities include Kane of the living freshwater sources such as streams and springs; and Lono of the winter rains and the life-force for agricultural crops; as well as Kanaloa of the deep foundation of the Earth, the ocean and its currents and winds; Ku of the thunder, war, fishing and planting; and Pele of the volcano. Thousands of deities of the forest, the ocean, the winds, the rains and other elements of nature are acknowledged as ancestors by Native Hawaiian families.

Located midway between the American and Asian land masses, the islands of Hawai'i are the most isolated land mass in the world. They are home to diverse and unique endemic species of plant and animal life. Initial human settlement, their introduction of new animals such as the Polynesian rat and pig, and the clearing of land for the cultivation of new edible plants resulted in ecological disruption and the extinction of certain species of birds and plants. Native Hawaiian spiritual beliefs and stewardship practices ultimately evolved to honor and protect the fragile island resources.

Aloha 'aina or love the land; *aloha i na akua* or love the gods; *aloha kekahi i kekahi* or love one another; express three central values which form the core of the traditional Native Hawaiian philosophy, worldview and belief system. These values prescribe that Native Hawaiians sustain supportive, nurturing and harmonious relations with the land and natural resources, the gods, and each other, particularly within their *'ohana* or extended family. This philosophy of the unity and harmony of humans, nature and deities is called *lokahi*.

Native Hawaiian ancestors honored and worshipped the life-forces of nature as gods. They did not possess or own the land or its abundant resources. Instead, they maintained stewardship over it – planting and fishing according to the moon phases and the changes from rainy to dry seasons. The traditional land system evolved to provide Native Hawaiians access to the resources they would need for subsistence. It also reflected their stewardship responsibility over the land.

Following contact with the Western world in the late eighteenth century, the Hawaiian island landscapes were seriously degraded throughout the nineteenth and early twentieth centuries, progressively by sandalwood harvesting and deforestation for cash

crop cultivation, ranching, and large-scale sugar and pineapple plantations. Twentieth-century economic development centered around the military, and tourism combined with exponential population growth degraded Hawai'i's fragile ecosystems at an unprecedented rate. By the end of the twentieth century, Hawai'i had the largest number of extinct and endangered endemic species of flora and fauna of any place in the world.

The Native Hawaiian people, themselves, succumbed to introduced continental diseases which, due to the absence of genetic immunity, grew to epidemic proportions. Such diseases included cholera, measles, whooping cough, influenza, leprosy, and tuberculosis. From an estimated population of between 400,000 to 800,000 inhabitants in 1778, the pure Native Hawaiian population had declined to 29,800 by 1900, with another 7800 Hawaiians of mixed ancestry. Native Hawaiian cultural and spiritual beliefs, customs, and practices declined in the face of such dramatic changes, and under the pressure of Christian missionary activity, except in certain isolated rural areas and the smaller islands.

In 1959, Hawai'i became the fiftieth state of the United States of America. Surprisingly, rather than leading to fuller assimilation into the American culture, statehood sparked a reassertion of Native Hawaiian rights and a revitalization of Native Hawaiian language, culture, and spirituality. The island of Kaho'olawe served as the unexpected catalyst for this dynamic native rights movement.

Kaho'olawe was traditionally honored as a sacred manifestation of the Hawaiian deity of the ocean, Kanaloa. It had served as a center for the training of navigators in celestial navigation and was home to Hawaiian farmers and fishermen. With Western contact, its natural resources, like the other islands, were degraded by ranching. At the outbreak of World War II the island was taken over by the U.S. military for live-fire training exercises. In 1976, the island became the focal point of a Native Hawaiian movement to reclaim sacred land and revive the cultural and spiritual practices of *aloha 'aina*. This included a consciousness about the importance of protecting Hawai'i's unique and exquisite endemic and native flora and fauna. The movement spread throughout the islands and sparked a Native Hawaiian cultural and political renaissance to revive the Native Hawaiian language, navigational arts, cultural practices and political sovereignty. The military use of Kaho'olawe stopped in 1990 and the island was returned to the State of Hawai'i in 1994. The U.S. Congress appropriated \$400 million to clean the island of unexploded ordnance and restore the island as a cultural reserve. Under law, the island is to be managed as a trust by the State of Hawai'i for eventual transfer to a sovereign Native Hawaiian entity, when it is reestablished and recognized by the U.S. federal government and the State of Hawai'i. Similar to Native American nations, such a sovereign entity would be comprised of indigenous Hawaiians.

The movement to reclaim Kaho'olawe was initiated by Native Hawaiians from the island of Moloka'i. Called, the "Last Hawaiian Island," Moloka'i was one of the rural Hawaiian communities bypassed by the mainstream of economic, political, and social development. Native Hawaiians living in these communities continued, as their ances-

tors before them, to practice subsistence cultivation, gathering, fishing and hunting to supplement their wage income. To be successful gatherers, fishers, or hunters, they applied traditional knowledge about the resources passed down to them from one generation to the next. This included the acknowledgement and honoring of the forces of nature as *'aumakua* and *akua* and involved the practice of *aloha 'aina* and *lokahi*.

Rural communities, such as Moloka'i, where Hawaiians have maintained a close relationship to the land through their subsistence livelihoods, have played a crucial role in the survival of Hawaiian cultural and spiritual beliefs, customs and practices. These rural communities are at the center of contemporary efforts to protect Hawai'i's ecological resources.

Rural Hawaiian communities were traditional centers of spiritual power. In traditional Hawaiian chants and mythology, major *akua* (gods) and Hawaiian deities were associated with the areas. The districts were isolated and difficult to access over land and by sea. Due to the lack of good anchorage and harbors, early traders often bypassed these districts in favor of more accessible areas. The missionaries entered these areas and established permanent stations during a later period than in other parts of Hawai'i. Thus, traditional Hawaiian spiritual beliefs and practices persisted there, without competition, for a longer period of time. As Christian influences entered these areas, they coexisted with traditional Native Hawaiian beliefs and practices.

The geography of these districts discouraged the widespread or long-term development of sugar plantations. Where neither plantations nor ranches were established, traditional subsistence activities continued to be pursued, side by side with smaller agricultural enterprises. In the wetland areas, taro continued to be farmed, often in conjunction with rice. In the arid areas, sweet potatoes, dryland taro, and other traditional and introduced food crops suited to the dry soil and climate were cultivated.

Thus, the natural features and resources of these districts which rendered them unsuitable for plantation agriculture played a role in the survival and eventual revitalization of Native Hawaiian cultural, spiritual, and subsistence customs and practices. Concurrently, the quality and abundance of the natural resources of these rural communities can be attributed to the persistence of Native Hawaiian cultural and spiritual values and practices in the conduct of subsistence activities. An inherent aspect of these values is the practice of conservation to ensure availability of natural resources for present and future generations. Ancestral cultural and spiritual knowledge about the land and its resource has been reinforced through continued subsistence practices. While traveling to the various *'ili* (sections) of the traditional cultural practices region, through dirt roads and trails, along spring-fed streams, and the shoreline, practitioners continuously renew their cultural knowledge and understanding of the landscape, the place names, names of the winds and the rains, traditional legends, *wahi pana* (sacred places), historical cultural sites, and the location of various native plants and animals. The practitioners stay alert to the condition of the landscape and the resources and their changes due to seasonal and life-cycle transformations. These lands are treated with love and respect like a *kupuna* or elder member of the 'ohana.

Through the Moloka'i families who got involved with Kaho'olawe and the movement that they initiated, the values of *aloha 'aina* and *lokahi* were revived and reborn into the hearts and minds of a new generation of Native Hawaiians. This is reflected in the formation and flourishing of many schools of Hawaiian language immersion education and of Hawaiian cultural practices such as *Hula*, chant, navigational arts and skills, *lua* or fighting arts and Hawaiian herbal healing arts. It is also evident in the rebuilding of traditional fishponds and the numbers of young farmers reopening ancestral taro growing lands. In addition, annual religious *makahiki* or harvest ceremonies in honor of the Hawaiian god of agriculture, Lono, have been revived on most of the islands.

Among the important traditional concepts that have regained preeminence is that of *wahi pana* or sacred place. The thoughts of the late Edward Kanaha on "Wahi Pana" or Hawaiian Sacred Places describes the renewed significance and meaning of such places to Native Hawaiians and provides an appropriate summation for this overview of religion and nature in Hawai'i:

The sacred places of Hawai'i, or wahi pana of Hawai'i, were treated with great reverence and respect. These are places believed to have mana or spiritual power. For native Hawaiians, a place tells us who we are and who is our extended family. A place gives us our history . . . and the history of our ancestors . . . a place gives us a sense of well being.

A wahi pana is a place of spiritual power, which links Hawaiians to our past and our future.

Our ancestors honored the earth and life as divine gifts of the gods. In fishing and farming wahi pana were respected. Their activities never encouraged or allowed overuse of the resources of the land or the sea. To do so would dishonor the gods. "The earth must not be desecrated," is a native Hawaiian value.

The inventory of sacred places in Hawai'i includes the dwelling places of the gods, the dwelling places of their legendary kahuna, temples, and shrines, as well as selected observation points, cliffs, mounds, mountains, weather phenomena, forests, volcanoes, [lava tubes, pu'uhonua or places of refuge and burial sites]...

All wahi pana need our protection and our respect

– not only for their historical significance, but also for their human significance (Kanaha in James 1992: ix–xiii).

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See also: Kapu in Early Hawaiian Society; Melanesian Traditions; Pacific Islands; Polynesian Traditional Religions; Surfing; Volcanoes.

Heathenry, also known as Heathenism or Ásatrú, is a polytheistic spiritual practice and theology based in the mythologies of Northern Europe. People practicing Heathenry today draw on a number of sources for both mythology and custom. These primarily include Icelandic mediaeval literature (especially the *Poetic Edda*, and Snorri Sturluson’s *Prose Edda* and *Heimskringla*); and other sources such as Saxo Grammaticus’ *History of the Danes* (Tacitus’ accounts of Germanic custom and religion), Old English poetry such as *Beowulf*, and folklore and folk-magic, including medieval healing charms, from Scandinavia, Britain, and Iceland, and European countries including Germany and the Netherlands. Heathens may describe their religion as a “reconstructed” North European paganism: reconstruction does not mean an attempt to duplicate earlier practices, but usually refers to creating spiritual practice for today that draws on the earlier descriptions and on archeological evidence.

Pre-Christian practices of Northern Europe varied considerably across time and place: however many groups use the Icelandic material as the basis for reconstruction because there is so much of it relative to other sources. “Ásatrú” – the Icelandic form of

a word coined during the nineteenth-century romantic period – means literally “faith in the Æsir,” whereas “Heathenry” is a more general term.

Heathen beliefs and cosmology focus on the tree Yggdrasill (variously seen as an ash or a yew, on which Óðinn hanged himself in quest of wisdom and the runes), the Nine Worlds, and the deities and other spirits described in Norse and Germanic mythology. There are parallels with the World Trees of various northern Eurasian shamanisms. The Norns spin or craft Wyrð below the tree, and this wyrð applies to all beings (or “wights”) including the Æsir and Vanir (thought of as deities) together with *jotnar* or giants, *álfar* or elves, and landwights, ancestral spirits, and living people. Literary sources identify two groups of divinities, Æsir and Vanir. Today the Æsir are sometimes described as deities of culture or society, the Vanir as deities of fertility and vitality, but these distinctions are not clear. In the past, particular deities were important in different areas of Northern Europe – Freyr in Sweden, Thor in Iceland, possibly Woden in parts of Britain. The world of people, Midgard (Miðgarðr – from which Tolkien took the name “Middle-Earth”) is described as one of nine worlds, each with its own denizens which in Midgard include people, ancestral spirits, and wights associated with animals, plants, land and sea, etc.

Heathens relate to this cosmology in numerous ways including *seidr* (community shamanistic practice), rune-use, and formal (non-ecstatic) ritual. The main rituals of Heathenry are blót (an offering ritual, which may be simple or elaborate) and sumbl (a ritual involving toasting and honoring people, goddesses, gods or other beings, which may involve poetry or storytelling). Heathens speak about their religion and their relationships with gods, goddesses and wights in ways distinct from prevailing neo-pagan or Christian discourses. The following public narratives are indexed in the discourse of practitioners:

1) References to myths and stories of the Æsir and Vanir (e.g., to explain characteristics or personalities of the gods). Followers of Ásatrú index specific pieces of what is referred to as “the lore.” Knowledge of this material forms a backdrop to ritual and discussion. Many Heathens consider that people do experience the deities in their own ways, and personal revelations (point 4), which have become known within several communities as Unusual Personal Gnosés (UPGs), are to be checked against “the lore.”

2) A concept of polytheism (as distinct from monotheism or duotheism). Deities are spoken of as real entities, separate and distinct, with rounded personalities and *different* from, for instance, Celtic or Greek or Native American beings or deities. Wights are similar but usually restricted to smaller areas, for instance associated with particular houses, trees, or stones.

3) A sense of *specificity of cultural practice*. Blót and Sumbel, the ritual forms of Ásatrú, are spoken of as distinct in kind from, for example, a Wiccan circle. Again, they are drawn from “the lore.”

4) The possibility of direct communication with these deities or wights, to speak with them and gain various forms of knowledge. In speaking with Heathen practitioners and theologians, this narrative of communication appears as an explanation of how

they “know” about their deities and why these deities appear so “real” to them. Direct communication is a means of achieving personal gnosis (UPG).

5) The manipulation of consciousness or “reality” by deities and wights, or through magic inspired by them or in association with them: including *galdr* (chanted magic), runic magic, and spae-working or *seidr*. Not all Heathens practice *seidr* or attend sessions. More, probably the majority, engage in rune-divination (casting runes to gain a sense of their *wyrd*) or rune-magic (often making talismans including several carved runes, to effect some form of change in the natural or social worlds), often including *galdr*. However not all practitioners of Ásatrú engage in the performance of magic.

6) A sense that spirituality is not separate from everyday life, but informs it. Many Heathens place a high value on skills of daily living known from “lore,” archeology or later folk-practices – woodcraft, fiber-crafts, smith-crafts, brewing, etc.

7) A sense of individual merit and responsibility, combined with community worth. Some Heathens list “Nine Noble Virtues,” moral values or strictures; others talk about individual responsibility and “being true” in more general terms: people have a choice in what they do on a daily basis, and need to accept responsibility for their choice. This includes responsibility to local (Earth, plant, tree or animal) nature-spirits for their actions.

8) An elaborate concept of “soul” and “self,” which is currently being explored by some Heathen researchers, particularly workers of *seidr* – with reference, once again, to “the lore.” With this goes a concept of personal or family fate or *ørlög*, and overall *Wyrd*, which people, and the Norns, weave.

9) The Elder Kin (deities) and other wights also are subject to the workings of *Wyrd*.

Therefore, Heathens see themselves, along with other beings, as bound up with the *Wyrd* of the worlds. This has a bearing on Heathen concepts of “nature.”

Heathens are divided on whether their religion is a “nature religion.” They do not focus on the Earth as “The Goddess.” Rather, they honor Earth, by various names such as *Fjörgyn* and *Jörð*, as “a goddess,” and celebrate Earth’s bounty when appropriate to do so. Nor do they see all goddesses as one. Some Heathens therefore consider that Heathenry is “not a Nature Religion” or “not Naturebased,” but is “deity-based,” looking first to the *Æsir* and *Vanir*. Others point out that a central concept in Heathenry is that the Earth is alive – this religion has a strong relation to animism in that rocks, plants, and trees all have their spirits. These spirits have their own agendas and purposes. Icelandic folklore is replete with references to land spirits, and “Wight” is the modern English form of the Old Icelandic “*vættr*.” Various Heathens, including *Jörmundur Ingi Hansen*, *Allsherjargoði* in Iceland, have commented that practices and offerings in the past would have focused more on land spirits, rather than on the deities of *Æsir* and *Vanir*. Everyday rituals would have honored local wights, whereas on special occasions the deities would have been greeted. However, because the poets of the *Edda* told stories of the deities, today’s reconstructions have focused first on deities.

Yet, while a blót (ritual of offering) is based around honoring one or more deities, it is common to begin by asking the local land or house spirits for their permission, blessing, and assistance in conducting the rite. Two items from the old literature mentioning “Earth” are favorites for ritual use with Heathens today. One of these is based on the Old English “charm” for field-remedy or field and plough blessing (*Æcerbot* from an eleventh-century manuscript), a later ceremony that may hold traces of earlier heathen ritual. It makes reference to Earth as *Folde*, and possibly *Erce*, addressing her directly (*hal wes thu, folde, fira modor! – be in health, Folde, mother of the people*). The second is part of the Eddic poem “Sigdrifumál,” where the newly awakened Sigdrifa, after greeting Day and Night, praises the deities:

Hail Æsir, Hail Ásynjur, Hail Earth who gives to all

Goodly wit and speech grant unto us renowned pair, And healing hands in this life (author’s translation from Sigdrifumál 3–4; Icelandic in Sigurðsson 1998).

In various areas Heathens have been involved with ecological activities, including road protests and (particularly in Britain) protecting “sacred sites.” Most Heathens attempt to live their spirituality on a daily basis

– talking to wights and honoring them (for instance, by picking up litter, clearing up an area) is part of everyday life.

Today, there are many different ways in which people construct their Heathenry. Some focus in general on the deities of the Æsir and Vanir, others have particular associations with one or several deities. For all, the concept of *wyrd* is important. Those who work shamanistically, engaging in *seidr*, deal with the tree Yggdrasill and with various wights, including ancestors, plant and animal spirits, land spirits, and their own *fylgja* (follower), a helper-spirit often seen in animal form. Most Heathens recognize some parallels between their (reconstructed) practices and those of shamanic Eurasian peoples. In particular, Heathens are coming to recognize similarities with Sámi religion.

In general, Heathen practitioners see their religion as reconstructed, and increasingly as shamanic or shamanistic. While some practitioners make common cause with adherents of Western Pagan religions (Druidry or Wicca), others do not. For models to “fill out the gaps,” practitioners are likely to look to indigenous, particularly Sámi, religion, or to Shinto or Hinduism to indicate how Heathenry might have developed in the absence of “conversion.” The basis of practice however remains the mythological stories from the Eddas, and from these Heathens draw ways of relating to their living landscapes.

Jenny Blain

Breakout Box: Seidr

“Seidr” (pronounced “say-thur” or “say-th,” with “th” as in “then”), described in the Icelandic sagas, seems to relate to practices involving altered consciousness whereby a

seeress or seer works on behalf of their (human and nonhuman) communities – it is being reconstructed as such today.

The Saga of Eirik the Red describes the visit of a seeress to a famine-struck Greenland farm, one thousand years ago. She wears a blue-black cloak, shoes of calfskin, a hood of black lambskin lined with white cat-skin, and her gloves are of cat-skin, shaggy inside. Her staff, topped with a knob, is ornamented with metal and stones, and she wears a pouch containing magical or sacred items. She eats a meal of the hearts of the farm animals, and the next day a “high seat” or platform is made ready for her. Women circle around her, and one sings a special song to call the spirits. The seeress, Thorbjörg little-völva, then speaks from the high seat, prophesying a good future for the farm and individuals present, including the woman who sang her song.

Seeresses and seers, and others who are “much-knowing,” are common in the sagas. Some use *seidr* to call spirits to aid in predicting, protecting, bringing their community into balance, or seeking the downfall of their enemies. Today’s seid-folk work with the shamanistic cosmology of the north, the World Tree Yggdrasill and Nine Worlds, using chant, drumming, or entheogens to achieve altered states of consciousness. In trance, they may speak from a raised platform in group rituals of Oracular *Seidr*, looking along the strands of Wyrð – the weaving of individual or community events and futures – (such prophecy may also be called “spæ”), or work to bring healing or create balance between communities of people and other beings (landwights, animal and plant communities, ancestors and so on). This may include doing magic to protect areas of the Earth, or sacred sites, and is likely actively to involve the spirits of those places, working with them (and prompted by them) rather than “for” them.

Seidworkers draw on concepts of “a person” not merely as dualism of “body and soul,” but having many dimensions to spirit or soul and to the ways these link with physical body – thus enabling the seer to act for the human community. One such dimension, the *fylgja* or “follower,” present from birth and usually seen in animal form, may act as an animal ally during *seidr*. Other helpers include *kinfylgja* or family spirit guardian, *Dísir* or ancestral women, and various others in animal or plant forms. With such allies, the seidworker negotiates between communities of human-people and spiritpeople, especially ancestors (spiritual, cultural or physical), at times “faring forth” (*hamfarir*) in altered shape.

In the literature, Freyja first brought seid-magic to the Aesir, the “family” of gods of which Óðinn, Thor, Frigg, etc. are members. As Heidr, the Bright One, she goes to houses to bring help. The magician-god Óðinn learned *seidr* and travels through the nine worlds (including Midgard, the world of people) that have their being on the World Tree Yggdrasill, often in altered shape, in search of knowledge. Loki, Óðin’s bloodbrother, often seen as a “trickster” god, also flies as a falcon (borrowing Freyja’s cloak) to seek what is needed. All bring change to what they touch: ecstasy, inspiration, poetry, and – often – disruption.

In the past, *seidr* appears to have been shamanistic practice specific to time, place, and community. There may have been commonalities with Sámi shamanism. (The

Sámi are indigenous reindeer-herding people of the North of Scandinavia and Russia, previously called Lapps by others.) However, not everybody in Heathen society approved of *seidr*, and by “saga times,” seidworkers – particularly if male – were often distrusted for reasons that may be more to do with politics than with religion.

Today *seidr* is a process of change – for the community, the seidworker, and relations between communities of people and other wights (beings with whom we share Midgard). In transformation lies beauty, ecstasy and discovery, but the process is not easy.

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See also: Druids and Druidry; Elves and Land Spirits in Pagan Norse Religion; Odinism; Saami Culture; Trees (Northern and Middle Europe).

Hebrew Bible

Scattered through the normative, narrative and wisdom texts of the Hebrew Bible are many motifs now considered “environmental.” Numerous laws refer to key categories of modern environmental concern, including protection of nature. The biblical laws should not be confused with Jewish law as it is interpreted in the rabbinic tradition. From Moses onwards, tradition believes that oral laws were passed down through the generations which accompanied and explained the written Torah. In the Jewish tradition, the written and the oral law are regarded as one, even though the latter was written down in the Mishnah early in the third century by Rabbi Judah the Prince. Since then, Jewish law has continued to develop through rabbinical interpretation.

Among these biblical laws is the prohibition against destruction of fruit trees when laying siege to a city (Deut. 20:19–20). Jewish tradition derives from this verse a prohibition against the destruction or waste of any resource. Another commandment refers to maintaining the constancy of species by forbidding the mating of two different types of animals, or sowing one’s field with two different kinds of seeds (Lev. 19:19; Deut. 22:9).

Several laws are concerned with animal welfare. In the Decalogue, man is commanded not to work on the seventh day; one’s ox and ass must also rest (Ex. 23:12; Deut. 5:13–14). Farmers are forbidden to plough with an ox and an ass yoked together, as this would impose hardship upon the weaker animal (Deut. 22:10).

The Jewish tradition relates a prohibition against eating a limb from a living animal to Gen. 9:4 and Deut. 12:23, which say one should not consume an animal’s life, equated with blood, with its flesh. No animal should be slaughtered on the same day as its young (Lev. 22:28). When taking eggs from a nest, one must let the mother bird go free (Deut. 22:6–7). On the other hand, animals bear responsibility: an ox that kills a human must be stoned to death (Ex. 21:28).

Other biblical commandments refer to the preservation of natural resources. These include the laws of the sabbatical year: every seven years, the land must rest and lie fallow (Ex. 23:10–11). In the Jubilee year, which marked the end of seven sabbatical cycles, the same prohibitions apply (Lev. 25:23).

The Hebrew Bible also addresses land use: the Levite cities had to be surrounded by open space on which building and growing crops was forbidden (Num. 35:2–5). Several texts deal with the prevention of nuisance and pollution. After the exodus from Egypt there had to be an area outside the camp where one could relieve oneself; one’s gear was supposed to include a spike for digging a hole and covering excrement (Deut. 23:13–14).

After the priest had dealt with certain offerings in the Tabernacle, he had to change his vestments and carry the ashes beyond the camp (Lev. 6:4).

The precautionary principle is expressed by the commandment to make a parapet on the roof of a house, to prevent people falling from it (Deut. 22:8).

These rules should be seen within the hierarchical order of a theocentric worldview. The laws show coherent concern for the environment which translates into a normative program of action. When elements of nature become objects of idolatry, however (i.e., in pagan cults) the Israelites are told to demolish them:

You must destroy all the sites at which the nations you are to dispossess worshiped their gods, whether on lofty mountains and on hills or under any luxuriant tree. Tear down their altars, smash their pillars, put their Asherahs to the fire, and cut down the images of their gods, obliterating their name from that site (Deut. 12:2–3).

Some claim that the Asherah may have been a sacred grove, but it is more likely to have been a manmade wooden cultic object. This law is one of several which define aspects of the hierarchical position of nature protection in biblical law as compared to other biblical priorities.

This theocentric vision is also expressed in many ways in the Hebrew Bible's narrative and wisdom texts. The first chapters of Genesis relate how God creates nature and humankind (Gen. 1–2). As its Creator, He is above nature and can do with it whatever He deems fit. Nature is not sacrosanct: on the one hand, it expresses divine majesty; on the other, God may use or change it in order to teach humans a lesson, punish or reward them.

In Genesis one finds several narratives recounting the destruction of ecosystems, or humans' removal from them, as a punishment for disobedience of God's commandments. Adam and Eve are expelled from Paradise (Gen. 3); Cain is punished for murdering his brother Abel, and becomes a permanent wanderer over the Earth (Gen. 4); almost all of humankind, birds and land animals are destroyed by the Flood (Gen. 6–7); verbal communication between the builders of the Tower of Babel becomes confused, and they are scattered over the face of the Earth (Gen. 11); and Sodom and Gomorrah are destroyed by sulfur and fire because of their inhabitants behavior so that even ten righteous men cannot be found there (Gen. 18–19).

On the other hand, in order to be blessed and father a great nation, Abram – later Abraham – must leave his native land of Ur of the Chaldeans for the Land of Canaan (Gen. 11: 31–12:6).

After the Flood, God promises that the Earth will not be destroyed again due to human misbehavior and that there will be some elements of constancy in nature (Gen. 8:21–22). The rainbow symbolizes this covenant (Gen. 9:12–17). With regard to specific situations, however, the prophet Isaiah forecasts that what happened to Sodom will happen also to Babylon: it will never be settled again (Isa. 13:19–22).

The motif of divine punishment and reward through changes in nature frequently recurs in later narratives. The Israelites' crossing of the Red Sea and the subsequent drowning of the Egyptians pursuing them are examples (Ex. 14). Another is the story

of Korah and his fellow mutineers being swallowed by the Earth (Num. 16:30–33). The narrative of the Ten Plagues is a paradigm of the relationship between God, humans and nature. It describes a series of modifications of nature as tools of punishment (Ex. 7–12). A number of disasters kill part of the Egyptian population, their slaves, animals and crops, but these plagues do not affect the Israelites living nearby in

Goshen.

When the Nile waters turn into blood, there is so much pollution that the Egyptians cannot drink its water and all the fish die (Ex. 7:21). When Moses and Aaron throw handfuls of furnace soot into the air, the resultant air pollution from the fine dust causes inflammations of boils on human and beast alike (Ex. 9:10–11).

Such “environmental” punishments may take many forms. When the Israelites complain, a fire from God breaks out in the desert and ravages the outskirts of the camp (Num. 11:1). The Israelites are warned that idolatry will lead to starvation because no rain will fall and the ground will yield no produce (Deut. 11:16–17). The prophet Ahijah warns that the descendants of Israel’s King Jeroboam who die in the cities will not be buried but be devoured by dogs, and those perishing in the country will be eaten by birds (1 Kgs. 14:11). Similar prophecies are made about the Israelite Kings Baasha and Ahab (1 Kgs. 16:4; 21:24). Jeremiah forecasts that God will use nature to punish the idolatrous Israelites (Jer. 15:3). The Psalms state that He wrecks ships with the wind (Ps. 48:8).

A major example of nature’s modification for the Israelites’ benefit is the Manna narrative, with its many environmental aspects (Ex. 16:16ff.). This concerns the heavenly food which came down in the wilderness of Sinai close to the Israelite camp every morning except the Sabbath. The Hebrew Bible also ascribes spiritual characteristics to the Manna: a fixed quantity of this one food provides all the Israelites’ requirements. This embodies the antithesis of conspicuous consumption (Deut. 8:3). It is white, a color that according to Isaiah symbolizes cleanliness (Isa. 1:18). Moses tells the Israelites to collect only what they require; leftovers become infested with maggots and stink, which is likely to prevent repetition. The uncollected manna melts in the sun.

However, the Israelites become dissatisfied with their exclusive dependence on this divine food, craving the meat, fish and vegetables of Egypt. While God then supplies them with quail, they are subsequently punished for their gluttony by a severe pestilence (Num. 11:4–6, 33–34).

The miraculous provision of water is another example of beneficial modification of nature. Upon God’s command, Moses throws a piece of wood into the bitter water at Marah, which becomes sweet (Ex. 16:23–25). Another time, Moses strikes a rock to provide water (Ex. 17:5–6). Moses later repeats this action to cause the same miracle, although he is instructed by God only to speak to the rock (Num. 20:8–11). Isaiah prophesies that God will respond to the Israelites’ demands, and make large quantities of water available in unusual places (Isa. 41:18; 43:20).

Changes in nature’s ways also occur with respect to individuals. Moses sees a bush burning in the desert, which is not consumed; there God gives him his mission to free

the Israelites from Egypt (Ex. 3–4). His rod is turned into a snake, then becomes a rod again. When Moses puts his hand in his bosom and takes it out, it is encrusted with snowy scales; upon putting it back and taking it out once more, it becomes normal again. Later, Aaron’s staff is turned into a serpent before Pharaoh (Ex. 7:8–9).

The prophet Balaam rides off to curse the Israelites; when an angel blocks his ass’ path and the prophet strikes it, the animal starts speaking to him (Num. 22:23–30). Abraham sends his second wife Hagar away together with her son Ishmael. In the desert, when they are thirsty, she sees a well, because God opens her eyes (Gen. 21:19). After slaying the Philistines, Samson calls out to God for water. His prayer is granted by water’s gushing out of a hole (Judg. 15:18–19). The prophet Elisha tells Na’aman, the commander of the King of Aram’s army, to bathe seven times in the waters of the Jordan in order to be cured of his leprosy (2 Kgs. 5:10–14).

The prophet Jonah flees from God by ship, but a storm arises to prevent his flight. When the crew throws him into the water he is swallowed and saved by a huge fish (Jon. 2:1); later, near Nineveh, God saves him from discomfort by providing a rapidly growing plant to shade his head. The next day, the plant is attacked by a worm, and withers (Jon. 4:6–8).

The prescribed relation of humans to nature is one important element when analyzing the Hebrew Bible’s attitude toward the environment. Much – often misguided

– attention has been given to Gen. 1:28, wherein God says that humans should multiply, master the Earth and rule the animals. In the Bible’s normative context, this rather imprecise verse is secondary to the array of specific commandments defining humans’ relationship with the environment. In another text, God tells man to “till and tend” the Garden of Eden (Gen. 2:15). Defining the human role toward nature only as one of stewardship based on this verse – as is frequently done – also incompletely reflects the complex role that the Bible ascribes to humans in the framework of creation.

The Bible sees an expanding population as a blessing for humankind in general (Gen. 1:28; 9:1). The blessing of multiple descendants is later also bestowed on the Patriarch Abraham (Gen. 18:18). References to this motif appear, in various forms, elsewhere in the Hebrew Bible (Gen. 32:12–13; 1 Kgs. 4:20; Isa. 10:22, 48:19; Jer. 29:4–6;

Hos. 2:1).

Nature as a manifestation of God’s majesty is a frequently recurring theme. Humans should thank God who provides through nature (Ps. 147:7–9). The heavens are also told to praise their Creator (Ps. 148:4–5).

The Garden of Eden is described as an environmental Paradise, a lush ecosystem with abundant water and many trees. There is no need to use non-renewable resources, artifacts or tools. Apparently no fertilizers are required for food plants to grow. In the absence of production, there is no permanent pollution. Carrying out an environmental impact study would show the Garden of Eden to represent an ideal sustainable society (Gen. 2:8–17). Several prophecies foretell that elements of such a society will return in the Latter Days, when humans and animals will no longer harm each other (Isa. 11:6–8, 65:25; Hos. 2:20). The Hebrew Bible provides many perspectives on animals

and their position in society. The offering of animals as a substitute for humans is recounted in the story of Abraham's near-sacrifice of Isaac (Gen. 22). Hosea forecasts that animal sacrifices will be replaced by offerings "from lips," which the later Jewish tradition interpreted as prayer (Hos. 14:3).

Animals are also used as a tool of divine punishment. This is also the case with several of the Ten Plagues: the frogs (Ex. 8:1–10), the dust turning into lice (Ex. 8:12–13) and locusts eating the grass and the trees until no greenery remains (Ex. 10:15). It is prophesied that hornets will be instrumental in driving the Canaanites out of the Land of Israel (Ex. 23:28).

Animals can also save people; upon God's command, ravens bring food to the prophet Elijah who is fleeing from the Israelite king Ahab (1 Kgs. 17:4–6). Animals may also have an informative role: the pagan prophet Balaam is scolded by his ass (Num. 22:30). Another example of this motif can be found in the book of Job (Job 12:7–8).

Many narratives indicate that animals are held responsible for their deeds, however, and are punished either separately or jointly with humankind. In the Paradise story, the snake tempts Eve to eat from the Tree of Knowledge: thereupon it is doomed to crawl on its belly and eat dirt all of its days (Gen. 3). In the days of Noah, the animals are corrupt and are punished alongside humankind (Gen. 6:12–13). The narrative of the Ten Plagues relates how humans and beasts are punished alike with vermin, boils and hail (Ex. 8:13–14; 9:10, 25). Animals can also die in order to punish humans (Ex. 9:3).

Several narratives indicate that animals should be properly treated. Abraham's servant chooses Rebecca for

Isaac's wife because, unsolicited, she offers to water his camels (Gen. 24:12–20). On his deathbed, Jacob speaks negatively of his sons Simon and Levi, and mentions the murder of humans and the killing of animals in one breath (Gen. 49:6–7). Similarly, an angel reprimands Balaam for beating his ass (Num. 22:32–33).

The difference between humans and animals pales beside the difference between God and humans (Eccl. 3:19; Job: 25:5–6). The metaphors that relate to nature are another indication of the Hebrew Bible's attitude toward the environment. Animals are often described in terms of human personality or vice versa (Gen. 49). Jeremiah compares the believer to an evergreen tree (Jer. 17:7–8).

Issues concerning resource policies, a core element of the modern sustainability discourse, are addressed in several instances. Joseph advises the Pharaoh to hoard surplus grain in the years of plenty (Gen. 41). Scarcity of water leads to conflicts in the days of the Patriarchs (Gen. 21:25–26, 30; 26:19–21).

The Bible indicates specifically that humans may use natural resources for their benefit. When the Israelites come into their land, they mine copper from its hills (Deut. 8:9). When Joseph's descendants complain to Joshua upon entering Canaan that they have not been given enough land for their numbers, he tells them to clear forest land in the hill country (Josh. 17:15–18).

A few narratives recount destruction of elements of the ecosystem by biblical figures. The judge Samson considers fighting the enemy a higher priority than protection of animals and natural resources; he binds the tails of two foxes together, fixes torches between them and lets the animals loose among the Philistines' standing grain (Judg. 15:4–5). Before the battle against the Amalekites, the prophet Samuel tells King Saul to kill not only all their people but also all their animals (1 Sam. 15:2). The prophet Elisha orders the kings of Israel, Judah and Edom in their battle with Moab to fell all good trees, stop up all wells and ruin all fertile fields with stones (2 Kgs. 3:19ff.).

When King Sennacherib of Assyria invades Judea and marches on Jerusalem, the religiously faithful King Hezekiah stops up all the springs outside the city in order to stop water supplies to the enemy (2 Chron. 32:2–4). The Bible's wisdom texts indicate that *some* destruction is part of the normal cycle of life: there is a time for planting and a time for uprooting what has been planted (Eccl. 3:2ff.).

The Hebrew Bible also contains detailed perceptions on various elements of nature (e.g., water and trees). It sees in water, *inter alia*, a vitalizing agent of the Earth (Gen. 2:5); a natural resource most essential for the survival of living beings (Neh. 9:20); a tool of destruction (Ex. 14:27–28); having religious functions (Lev. 16:4); a tool for testing people (Gen. 24:13–14); a natural barrier (Ex. 14:29); a means of identity, particularly through the possession of wells (Gen. 26:18); and a carrier for transport (Isa. 18:2). Furthermore, it is a symbol in a great variety of metaphors.

Pollution is mentioned a number of times in the Hebrew Bible. Sometimes the ideas expressed coincide with contemporary environmental concepts, for instance, the above-mentioned example that excrement must be removed from public places. On other occasions this is not the case. After Aaron constructs the Golden Calf in the desert, this spiritually polluting artifact is destroyed by being burned and ground to dust; the gold dust is subsequently thrown into a brook (Deut. 9:21). In modern terminology, this may be considered destruction of resources but not pollution, the dust being inert matter.

The relationship between human wickedness, pollution and destruction is a familiar biblical motif. It often has religious connotations. There is no mention of decay in the story of Paradise (Gen. 2). The Israelite King Jehu tears down the temple of Baal and turns it into latrines (2 Kgs. 10:27). Isaiah speaks of Jerusalem as a sinful city in which “silver has turned to dross” (Isa. 1:22). He also speaks about the reverse process of purification and renewal, with a metaphor from the world of waste management: “God will smelt out your dross as with lye, and remove all your slag” (Isa. 1:25). Similarly, Ezekiel speaks about purifying polluted water with clean water from the Temple (Ezek. 47:8–12).

Noise pollution can play an important role in warfare. After entering Canaan, the Israelites laid siege to Jericho. The city walls collapse as a result of the Israelites' shouting, when the horns are sounded (Josh. 6). The noise motif is also mentioned in connection with the judge Gideon (Judg. 7:15–22).

Many more motifs with environmental connotations appear in the Hebrew Bible. They must be seen in the framework of its central theme: that humans – and the Israelites, in particular – should recognize and serve God, Creator of the world, in the various ways commanded by him.

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See also: Animal Rights in the Jewish Tradition; Creation Myths of the Ancient World; Creation Story in the Hebrew Bible; Creation’s Fate in the New Testament; Hasidism and Nature Mysticism; Israel and Environmentalism; Jewish Environmentalism in North America; Judaism; Kabbalah and Eco-theology; Paganism and Judaism; Tikkun Olam – A Jewish Imperative; Vegetarianism and Judaism; Waskow, Rabbi Arthur.

Hegel, G.W. Friedrich (1770–1831)

Georg Wilhelm Friedrich Hegel was born in Stuttgart and spent most of his academic career at Jena (1800–1808), as a headmaster in Nuremberg (1808–1816), and after two years in Heidelberg, was made Professor of Philosophy at the University of Berlin in 1818. His major works include *Phenomenology of Spirit* (1807), *Science of Logic* (published in two volumes in 1812 and 1816), *Encyclopedia of the Philosophical Sciences* (first published in 1817 and revised in 1827 and 1830), and the *Philosophy of Right* (1821). After his death in 1831 friends and former students compiled his lectures and unpublished material, the best known of which are, perhaps, his *Lectures on the Philosophy of Religion* (in 1832), and *Philosophy of History* (in 1837).

To say anything briefly about Hegel's philosophy is as big a challenge as describing it clearly – this is particularly true when it comes to his writing about nature, his most complex and impenetrable work. Nature and religion serve dynamic, ontological processes in Hegel's systematic treatment of existence, revelation, and knowledge. Nature fills this role as the second part of his *Encyclopedia of the Philosophical Sciences*. Religion appears in a number of places in Hegel's philosophical thought but primarily in his lectures on *The Philosophy of Religion* and in the *Phenomenology of Spirit* where it fills an entire, and dense, chapter.

Nature, in Hegel's philosophy, is the world external to human thought: epistemologically, metaphysically, and empirically. It is the source of experience and radical contingency that our understanding attempts to grasp in theory but which we grasp in practice as the unmediated and unshakeable Given of the world-immediately-before-us. While its subject matter is the external world, nature also requires a kind of knowing in which the object known is presupposed to exist as external to a knowing subject.

The content of nature thus includes everything from the most abstract concepts like Space and Time to increasingly concrete experiences like chemical reactions, pollen, mollusks, and bird's building their nests – the subject-matter we routinely consider to exist as independent from and external to our knowledge.

In the course of dialectically unpacking these concepts, these implicit presuppositions are made explicit. So while, metaphysically and epistemologically speaking, nature is the world around us, it is more than this. It is the ground that makes our philosophical speculations possible in the first place. The knower is a product of and is implicated in the very thing she knows.

The profound philosophical implications of this statement – as a way to reconnect humans to the rest of nature, not just ethically, but ontologically (based not only on what we can *know* about the world, but on notions of the essential and fundamental na-

ture of reality) – is generally missed in the flood of seventeenth and eighteenth century scientific material included as Remarks and Additions from his lecture notes. While this additional material demonstrates the astonishing breadth of Hegel's scientific background, it equally seems to anchor his treatment to a set of scientific observations that are now 300 years out of date.

In the context of contemporary analyses of race, gender, and class – all of which employ the originally Hegelian category of otherness as an essential tool – nature could safely be called *The Big Other*. It is *ganz Andersein und Äußerlichkeit*; everything posited and comprehended as external to our thought. His *Brobding-nagian* mapping of nature, *The Philosophy of Nature*, dialectically unpacks 1) this primordial externality, 2) our relation to it and 3) simultaneously, our understanding of both of these. This is the typically recursive Hegelian approach to dialectic: it takes its own activity into account by providing a recursive treatment both of its subjectmatter and of itself treating its subject-matter. From a more practical point of view, it is fascinating to note that the marginalization of people on the basis of race, class, and gender is often based on the degree to which such people are associated with nature – the more they are characterized as “natural” the more likely they will be marginalized and repressed.

Nature, for Hegel, is not merely the world around us, but plays a developmental role in the larger context of Hegel's system. There, nature mediates Logic and Spirit, the other two parts of his *Encyclopedia*.

For Hegel, nature is understood as a moment in a syllogism of Logic-Nature-Spirit. Logic, Nature, and Spirit are three parts of a trilogy that constitutes the whole of reality and makes our knowledge and participation in reality possible. Unlinked from its companion moments, nature remains the fallen detritus of Christian paradigm, the illegitimate offspring of Spirit, yet it is equally that through which Spirit enters the world. If Christianity, and therefore Western philosophy in general, reinforces the view of nature as fallen and sinful, to be abandoned for a new heaven and a new Earth (as suggested in the

Revelation of St. John) or corrected and renovated by the divine light of human reason in order to restore an original Eden (as suggested in the work of Francis Bacon), nature remains for Hegel the ground by which and from which Spirit arises. Without nature, Spirit is impossible; without Spirit, nature is merely mechanical and physical process – but nature is alive and is thus the portal, and substrate, of Spirit. This begins to suggest the links between nature and Spirit as moments within the larger development of Hegel's system.

This three-part mediation of Logic, Nature, and Spirit, as the overlapping spheres of reality, resonates with the Christian Trinity. Nature (the incarnation of thought comprehended in and through the external forms of the created world) takes the role of God the Son mediating God the Father (here in the guise of the archetypal categories of thought, Logic) with God the Holy Spirit (manifested most evidently, at least in terms of Hegel's notion of the history of consciousness, as the consciousness of humankind reflecting on its own nature) – and in this way satisfying the Aristotelian

legacy of thought thinking itself: human consciousness as a finite and imperfect manifestation of divine consciousness thinking itself, as it does in Book *Lambda* of Aristotle's *Metaphysics*.

“Thus, the consciousness of God on the part of finite Spirit is mediated by nature. Man sees God by means of nature; nature is thus far only a veiling and an untrue configuration” (Hegel in Hodgson 1979: 120).

This strikes a rather different chord from contemporary work that attempts to reseat human beings into a natural world from which they have been alienated. In what may be the starkest expression of Hegel's view of humans as distinct from nature, he wrote, “If man exists as immediate, natural man, he ought to consider himself to be existing in an inappropriate way” (Hegel in Hodgson 1979: 133–4). “Natural” is not the appropriate way for humans to exist. Humans are, for Hegel, beings of reason and spirit and while nature is the place where spirit first breaks forth, it does not remain there. It leads us away from the mere externality of the sphere of nature toward the more adequate universe of spirit.

If nature is the external content of time and space through which God can be made known to humans, what is the role of religion?

Religion appears in Hegel's *Encyclopedia, Philosophy of Religion*, and *Phenomenology of Spirit* as an inadequate mode of knowledge; as the narthex to a more adequate, philosophical, understanding. It plays the developmental role in Hegel's system of a threshold to philosophy. What religion does with faith and belief, philosophy will undertake with thought.

The *Phenomenology* provides a schematic of religion cast into a hierarchy of conceptual adequacy, explicating how religion, with increasing adequacy, reveals the absolute; beginning with the least adequate forms (natural religions; Hinduism; religion in Egypt and Greece) and culminating in the revealed religion of Christianity. From here, consciousness moves dialectically beyond the inadequate kind of knowing (and subject-matter) provided in religion to culminate in knowledge of the absolute and absolute knowing. In other words, even human spiritual life can only be adequately comprehended, for Hegel, not by religion but by philosophy. Even the religious dimension of human experience is only adequately comprehended by thought.

If his interpretation of nature is suspect from the scientific point of view, his Christianity is equally suspect. Marx and Kierkegaard both found Hegel problematic: Marx because of the presence of Spirit in dialectic and Kierkegaard because of Hegel's assumptions that, finally, everything can be thought – including the infinite God which, Kierkegaard insisted, collapsed thought at the ethical stage of life and requires that famous leap of faith as the starting point of theistic relation. To Kierkegaard, Hegel's dialectic was a Tower of Babel; to Marx it was a mystic's sacristy. To us, Hegel's works should suggest the lucid, if Byzantine, insights of a philosopher with a remarkable background in both theology and empirical science at the dawn of the modern scientific era.

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See also: Book of Nature; Descartes, René; Holism; Philosophy of Nature.

Heidegger, Martin (1889–1976)

Because the noted German philosopher Martin Heidegger offered such an influential critique of the technological domination of nature, he has been read as a forerunner of contemporary environmentalism. Despite important areas of agreement with environmentalism, however, Heidegger disagreed with one of its major assumptions, namely, that human beings are animals. In asserting that humans are ontologically different from animals, Heidegger continues the traditional idea that humans stand outside of nature, even while being somehow part of it. Another factor impeding easy assimilation of Heidegger's thought to contemporary environmentalism is his notorious affiliation with National Socialism.

Heidegger's major work, *Being and Time* (1927), maintains that human existence opens up the temporal-historical "clearing" or "world" in which entities can manifest themselves, and in this sense "be." By asserting an integral relation between being and time, Heidegger emphasized the *historical* dimension of being and thus challenged the traditional assumption of the link between being and eternity. Moreover, he contended that "being" names not an eternal ground, foundation, or source – such as Platonic forms or the biblical God – but instead the capacity for entities to present themselves in their intelligibility.

Concern for nature is not much evidenced in Heidegger's earlier writings. In *Being and Time*, for instance, we are told that entities reveal themselves primarily as instruments, and secondarily as objects for scientific cognition. During the 1930s, however, Heidegger began to develop his critique of Western humanism. He maintained that Nietzsche's conception of humans as "clever animals" was consistent with the Darwinism that allegedly animates modern political ideologies. If humans are merely animals, human existence is reduced to the struggle for survival and power, while nature becomes a gigantic storehouse of raw materials. As an alternative to the technological will to power, Heidegger recommended the attitude of "releasement" (*Gelassenheit*) in which people may "let things be," that is, allow things to manifest themselves according to their own properties, rather than in accordance with the demands placed upon them by the technological subject.

In Friedrich Hölderlin's poetic notion of nature as "holy wildness," Heidegger discerned hints of an encounter with nature, *physis*, the ontological primal that eludes human mastery. The relation between such "holy wildness" and what some environmentalists have in mind by "sacred wilderness" is not clear. Heidegger defined nature in terms of his ambiguous interpretation of *physis*. At times, he viewed *physis* as almost identical with being, that is, the self-manifesting of entities that occurs within the

temporal-historical clearing. This sense of *physis* means nature insofar as it manifests itself and to that extent is said “to be.” Nature defined in this manner is what Heidegger meant by “wild” nature, that is, the overpowering manifesting with which humankind must struggle mightily in order to make entities intelligible, appreciable, or useful to humankind. By emphasizing the interpretative activity involved in disclosing the being of entities, Heidegger indicated that the historical world – the clearing needed to encounter *physis* or being – is constituted not only by temporality, but also by the articulating power of language. Instead of viewing language as a human possession or tool, however, Heidegger said that language is a dimension of cosmic intelligibility or *logos*. Language as *logos* possesses *us*.

Elsewhere, Heidegger interpreted *physis* not as the selfmanifesting of entities, but rather as their self-emergence, as when an animal gives birth to its young or unfolds into maturity. Nature in this sense does not refer to the intelligibility of beings revealed in the historical-linguistic clearing. Instead, we experience natural phenomena as occurring independently from us, and as having taken place long before human existence began. In places, Heidegger indicates that humankind itself is an aspect of *physis*, understood now as the complex natural processes that take place independently of human existence. In other places, he states that such processes can “be” only insofar as they show themselves within the clearing opened up through human existence. These incompatible conceptions of nature or *physis* reveal Heidegger’s own struggle to reconcile or at least to address two central aspects of humankind: that we are beings, and that we are disclosers of beings in their intelligibility. Heidegger never deviated from his conviction that humans transcend nature even while somehow being part of it.

Starting in 1933, Heidegger infamously used his own philosophy to support National Socialism, which condemned enlightenment modernity. During this same period, the German Reich – inspired by Nazi rhetoric of “pure land and pure blood” (*Blut und Boden*) – passed what was at the time the world’s most far-reaching environmental legislation. These disturbing facts should give pause to environmentalists who engage in totalizing condemnations of modernity, while failing to appreciate the positive contributions of modernity. Thomas J. Sheehan offers another reason for not conceiving of Heidegger as a proto-environmentalist. Sheehan argues that Heidegger’s conservative views – his anti-urbanism, his preference for the countryside, and his critique of modern science and technology – conceal that the *real* thrust of his thought is consistent with the modern view that humankind is destined to make all entities completely present for study and exploitation. If Sheehan is right, then, Heidegger’s thought is consistent with the titanic project of world domination that Nietzsche allegedly foretold and celebrated. Still, his criticism of the excesses of anthropocentric humanism, including mistreatment of animals and heedless destruction of the natural world, retains its force, even if one affirms modernity’s achievements of renouncing political repression, freeing science from religious dogmatism, and providing a far better material living standard for countless millions of people. Moreover, even if modernity cannot adequately be

understood in terms of the clever animal seeking power, by taking this approach, Heidegger points to the dangers involved in reading humankind in reductionistic terms that ignore its remarkable capacity for understanding itself and other phenomena.

During the 1950s, apparently decentering humankind's role in constituting the clearing in which things can be manifest, Heidegger suggested that beings are disclosed in connection with the dynamic interplay of the "fourfold" of Earth and world, gods and mortals. In 1966, he stated that "only a god can save us" from the dire consequences of modern technology's mobilization of humankind and nature. Nevertheless, he usually affirmed that only humankind is endowed with the linguistic capacity that holds open the clearing for beings. Far from being a biocentric egalitarian, then, he held that humans are dramatically different from other entities. He once wrote that the loss of the clearing opened up through humankind would be even worse than the destruction of the natural world by nuclear war. Many environmentalists would disagree with this opinion.

Heidegger's thought that things can "be" only in the world opened up through human language and history, enormously influenced postmodern theory, including deconstruction, which now challenges the very idea of a pristine "nature" that exists independently of human language, culture, and social practices. Many environmentalists, of course, prefer the good old days, when the reality and identity of "nature" were uncontested. Radical constructivism, according to which nature is reduced to a virtual product of human imagination and practices, may go too far. Nevertheless, in order to understand our obligations to nature, and even whether we have any such obligations, we must understand as well our role in conceiving and defining it.

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See also: Deep Ecology; Descartes, René; Fascism; Holism; Nietzsche, Friedrich; Philosophy of Nature; Radical Environmentalism.

Hildegard of Bingen (1098–1179)

Hildegard of Bingen was a twelfth-century Benedictine nun whose synthetic vision of nature, [female] fertility, and spirituality represented a radical departure from the dualistic thinking of her time. Some believe she offers a model for a contemporary environmental consciousness that is centered on wholeness, mutuality, sensuality and respect for the sacrality of nature. As a theological writer, healer and composer, Hildegard occupied a role that transcended the boundaries set for women in her society by writing books on theology and medicine, undertaking preaching journeys and composing music. Adopting the stance of a “poor little woman” whose voice was not her own but that of God’s prophet, she devised a unique spirituality in which the natural order was fused with the essence of God, and the divine was restored to the feminine through the body of Mary.

Hildegard’s worldview derived in part from the medieval aesthetic which conceptualized the universe as a harmonious whole, with all things ordered, yet interdependent, and most importantly, suffused with the presence of God. Her writing was characterized by exuberant natural imagery of fertility, light and life, and reflected her sense of oneness with the living, breathing material world. At the center of her cosmology is the notion of *viriditas*, the sunlight-filled greenness, the essence of the life-force which emanates from the divine and permeates the natural world. In the *Liber operum divinorum*, she recorded what she believed was the voice of the Living Light (or God), revealed to her in a vision:

I, the fiery life of divine essence, am aflame beyond the beauty of the meadows, I gleam in the waters, and I burn in the sun, moon and stars. With every breeze, as with invisible life, that contains everything, I awaken everything to life. The air lives by turning green and being in bloom. The waters flow as if they were alive. The sun lives in its light (1987: 8–9).

For Hildegard, *Viriditas* was the ultimate expression of sacred fertility, and it abrogates the dualism between the spiritual and the natural/fecund Earth/feminine. *Viriditas* is most clearly manifested through the divine motherhood of Mary, whom Hildegard positioned as the *salvatrix*, the “author of life,” whose “holy vitals” redeemed human nature from the effects of the Fall. In the song cycle, *Symphonia armonie celestium revelationem*, which Hildegard composed for performance by her nuns, she intentionally arranged the pieces in hierarchical order. The sixteen songs to Mary, though titled, “For Mother and Son,” are clearly addressed to Mary, and they are placed in the second position of the traditional Trinity – the place of the Son. Barbara Newman refers to this as a “pointed theological statement” that celebrates Mary’s divine childbearing and

indicates that Mary, like Christ, belongs in the very heart of God (Newman 1988: 59). Thus, the feminine, through the fertile/female body of Mary, metaphorically recovers its space in the divine order, which it now shares with the crucified male body of the Son.

In these songs, the natural imagery with which Mary's body is inscribed fuse the fertile greenness and flowering of her Earth/womb with those of celestial light and radiance, in this way recognizing the divinity of the female generative force. While it is not possible to know what Hildegard's awareness might have been of those ancient religious traditions that predated the belief in a celibate male god, and in which there was a virtually universal recognition of a cosmic Earth mother/nature whose fruitful energy/desire was the animating force of the universe, her treatment of Mary embodied this goddess ideal. As the leafy branch whose womb blossomed with wheat, and whose flesh held joy, Mary represented the divine sensuality that Hildegard saw in the natural world. Through the body of the Mother of God, that "luminous matter," ("shining white lily") and "resplendent jewel," the feminine was exalted as the incarnation of divine *viriditas* [translations of the Marian Songs are Barbara Newman's]. Always cognizant of the gender boundaries of her age, in her songs to Mary, Hildegard nevertheless comes as close to resurrecting the Earth/nature goddess as she dared.

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See also: Apocalypticism in Medieval Christianity; Christianity (5) – Medieval Period; Ecofeminism (various); Dualist Heresies.

Hinduism

Hinduism is the major religious tradition in India and the faith of more than eight hundred million people around the world. It has no single founder or beginning date. There are many philosophical, ritual, narrative, theistic, and non-theistic traditions within Hinduism. Although there are few concepts that all Hindus would believe in or accept, notions of immortality of the soul, a supreme being, and karma would be accepted by most Hindus. Given the diversity of the traditions, it is easy to see why there are pluralistic views toward nature. Hindus value nature, think of the universe as the body of God, pray for peace between all the elements of the universe, urge non-violence to all beings on Earth, and personify nature and the Earth as goddesses. However, some Hindu communities devalue nature by thinking of matter (homologized to women) as ensnaring the spirit which should free itself from its shackles to get liberation. Yet others think of the universe as ultimately without reality. Some Hindus think of the final goal as transcending all dualities of good and evil, spirit and matter, culture and nature.

The terms “Hinduism” and “Nature” have both been contested and problematized and yet both have considerable currency in scholarly discourses. The meanings of both terms have differed strikingly at various times and in various traditions, cultures, and communities. There are several Indian words in Sanskrit and in vernacular languages which have philosophical and colloquial meanings corresponding with the many meanings of “nature.” In general, the term will be used here to refer to those elements which are considered to be part of the lived or conceptualized environment in the many Hindu traditions. Many Indian religious traditions make a distinction between the sentient – those with consciousness (chit) – and the insentient (achit). The first category includes the deity and souls; the latter ordinarily, though not always, includes all material substances, their primordial essences, as well as time. The Indian terms for “nature,” especially prakriti, may refer to matter as well as the inherent tendencies in material substances.

The terms “Hindu” and “Hinduism” are very flexible. The term includes those who may just be acquainted with some texts and narratives (like the epics), some concepts (like karma and reincarnation), or who practice some of the customs and rituals (such as performing sacraments in front of a sacred fire) associated with the many traditions that consider themselves faithful to the Vedic tradition or which self-consciously depict themselves as “Hindu.” It would also include people in India who may have never heard of some of the Hindu texts by name but who participate in the larger world of the extended family of deities, beings, and/ or modes of ritual behavior shared in a loose

way by some of those people who do call themselves Hindu. Hindu notions of sacrality also cover what may be considered “secular,” “supernatural,” or even “superstitious” in the Western world. Thus, among other things, to understand the Hindu way of life, it is necessary to understand sacred times, places, omens, architecture, music and dance, trees, plants, and planets in the Hindu tradition.

It is hard to identify many common denominators in the many Hindu traditions. While some texts and some deities are accepted by many, there is no single text, single deity, or single teacher that all Hindus would deem authoritative or supreme. There is a corpus of holy works, and many people hold some of those texts to be revealed and of transhuman or divine origin; but other, non-literate Hindus may not even have heard of these compositions. Similarly, there are many local deities with local names who may or may not be identified with the more recognizable pan-Indian gods and thousands of folk tales and vernacular ballads known only in a few villages or communities. Hundreds of communities and sectarian movements make up the Hindu tradition, and each community has its own hallowed canon, its own sacred place to which its members make a pilgrimage, and its own deity whom it holds to be absolutely supreme.

Notions of dharma (duty, righteousness, “religion”) have been communicated through stories from the epics and Puranas (Sanskrit and vernacular texts glorifying deities and places composed primarily though not completely in the first millennium) and narrated by family or village elders. We should also note that the many Sanskrit texts within Hindu traditions have had a limited role to play in the history of the religion. The many Hindu traditions consider custom and practice to be as important as the texts themselves. Nevertheless, one may say that, with the intellectual colonization by the West and the advent of mass media, Hindus today have started to focus on the sacred texts and many search for answers to the environmental crises both in text and practice. In this entry, therefore, we will consider textual sources as well as eco-practices adopted by Hindus. We will initially consider the phenomena of nature in historical, philosophical, and narrative texts, and then move on to the relevance of some philosophical concepts, and finally discuss the various forms of environmental activism in India which use religio-cultural concepts as sources of inspiration or guidance.

History

The earliest civilization in India, which is said to be a progenitor of latter-day Hinduism, has variously been called the Indus Valley or the Sarasvati culture. One of the most disputed issues in Indian history is the origins of the people who inhabited the banks of the river Sindhu (Indus, from which we derive the words Hindu and India). While colonial scholars and many historians hold that the original inhabitants here were eventually displaced by the Indo-Europeans, recent challengers of the theory

argue that the Indus was really the ancient river Sarasvati, spoken of in the Vedas, and that this was the original home of the Indo-Europeans. It is the references to the flora and fauna (the existence of a horse in the early culture) as well as the references to local landscape (descriptions of the river and an ocean) in the Vedic literature that fuel the controversy. The civilization seems to have been urban and the many seals uncovered here have shown the importance of several animals in society. Because of the excavation of a large swimming-pool-like structure, carefully constructed, as well as fire pits, one may speculate a reverence for water and fire. It is possible that the flooding of the Indus River destroyed parts or all of this early civilization.

Early Sanskrit Texts

The earliest compositions we have in India are called Veda or “knowledge” and these were composed by the Indo-European people. There are four Vedic collections, each divided into four sections composed possibly between 1500 and 600 B.C.E. The four collections or Vedas are known as Rig, Sama, Yajur, and Atharva. The sections in each of these collections are samhitas or hymnic compositions; brahmanas or ritual treatises; Aranyakas or

“compositions for the forest”; and Upanishads, “sitting near [the teacher].” The earliest compositions are hymns of the Rig Veda. The hymns were used in sacrificial rituals, and some of the instructions on conducting rituals are contained in the Yajur Veda and the brahmanas. Philosophical speculation is found in the sections called Aranyakas and Upanishads. Although considered to be extremely important by all orthodox philosophers and theological treatises, the Vedas are not books kept in people’s houses. Rather, they are ritual texts understood by many Hindus as eternal sound, eternal words passed on through the generations without change. A few hymns from them are known and recited regularly at temple and home liturgies, and the philosophical sections have been translated and commented upon frequently, but the rest of the Vedas are known only to a handful of ritual specialists. The earliest hymns of the Vedas are addressed to many gods and many of them are connected with natural phenomena and the environment the people lived in. Agni, the god of fire, is seen as a messenger between human beings and the deities because offerings were placed in the fire to be carried to other worlds. Agni is the fire on Earth, lightning in the atmosphere, and the sun in the sky. Soma, also addressed in the hymns, is identified as the moon and, frequently, is depicted as the presiding deity of a creeper-plant, and also as an elixir that was derived from the plant and used in the ritual sacrifices. Usha, the goddess of dawn, Varuna, who presides over the waters, the oceans and even aquatic animals, and Indra, who is associated with the thunderbolt and rain, are all worshipped.

A goddess known as Sarasvati is also spoken of, sometimes as a river, sometimes as representing learning. In the Rig Veda, Sarasvati is described as the inspirer of noble thoughts, one who gives rise to truthful words, one who is beautiful and fortunate, the

best of rivers filled with dynamic vitality. In later literature – the ritualistic sections called the Brahmanas – Sarasvati is identified with the goddess Vac (speech), who has an individual identity in the early verses of the Rig Veda. Vac was perceived to be the consort of the creator Prajapati. The stories and attributes associated with her become superimposed on Sarasvati. As Vac, she was speech incarnate, the power of the word, the mother of the Vedas. When identified with speech in some texts, Sarasvati is also known as Gayatri (the triple song) and Savitri (hymn to the sun) and is associated with the formula that is given to young boys in a ceremony when they are invested with a sacred thread. The formulaic verse (mantra), called the Gayatri, dedicated to the sun, becomes the mantra that marks the initiation of a young boy into his life as a student. The votary, through the mantra, meditates on the brilliance of the sun and asks for that illumination to be in his mind. Although only young men were initiated into this mantra in the last two millennia, in the last two centuries women in some Hindu traditions also recite it. The important deities of later Hinduism are mentioned a few times in these earliest hymns. It is only in the later Vedic literature that goddesses like Sri (Lakshmi) or gods like Narayana (Vishnu) are addressed directly in hymns.

Some hymns speak of a connection between the rituals and the prevalence of cosmic and earthly order, *rta*. *Rta* is truth and justice, the rightness of things. It makes harmony and peace possible in the Earth and the heavens. Although it is an impersonal cosmic principle, Vedic gods like Varuna were considered its upholders.

In one key hymn, the Hymn to the Supreme Person (Purusha Sukta), the universe itself is said to have come out of a cosmic sacrifice in which the primeval man (Purusha) was offered. The hymn is important even today in domestic and temple ritual for the Hindus and has figured continuously in the tradition for about 3000 years. In it, the composer strains to capture infinity in words and uses the notion of a “thousand” to denote all that cannot be measured or perhaps even conceptualized. In this hymn, the “cosmic man” (*purusha*) is said to have a thousand heads, eyes, and feet. Covering the Earth, he still extends beyond; that is, he is all space. He is the past, present, and future. He was offered as a sacrifice, and various elements of the universe are said to arise from this ritual. From his mind came the moon; from his eye, the sun; the gods Indra and Agni from his mouth; and the wind came from his breath. From his navel came space; from his head, the sky; from his feet, Earth; from his ears, the four directions. Thus, says the hymn, the worlds were created. It is said that the four classes (*varnas*) of society also came from this initial cosmic sacrifice. While the origins of what eventually came to be called the caste system are generally seen to lie in these verses from the Rig Veda, it is important to recognize that the social order is connected with the natural order of the origins of the universe.

The sacrificial worldview of the early Vedic age gave way to philosophical inquiry and discussion in the Aranyakas and the Upanishads. The Aranyakas (compositions for the forests) and the Upanishads (“coming near” a teacher) were composed at a time of intellectual ferment and philosophical speculation, possibly between the seventh and sixth centuries. We note from the title of these texts that the forests were places of

quietude and hermitages where there were small educational institutions. In yet other verses of the Vedas, we find the forest as wilderness, opposed to the culture of the village.

In retrieving and re-visioning the Vedas, Hindus have emphasized those sections which speak of peace and harmony. Thus, the Song of Peace (shanti path) has become popular in India and in the diaspora. Repeating a hymn composed more than three millennia ago, the Hindu devotee recites: “May there be peace in the skies, peace in the atmosphere, peace on Earth, peace in the waters. May the healing plants and trees bring peace; may there be peace [on and from] the world, the deity. May there be peace in the world, peace on peace. May that peace come to me!” (Yajur Veda 36.17)

The quest for a unifying truth is a distinctive feature of the Upanishads, and recurs in Hindu philosophical traditions of later centuries. In the Mundaka Upanishad (1.1.3), the one who seeks the truth phrases his question: “What is it that being known, all else becomes known?” Knowledge, both of nature and the spirit, is all swept into a unified category. The dualism between matter and spirit seen in some philosophical schools – both in Indian and Western thought – is not explicit in the Upanishads.

The Vedas, considered absolutely transhuman by the many Hindu traditions, are termed sruti (that which was heard). However, the literature that was composed after their period, starting approximately around 500 B.C.E., was acknowledged as human and loosely called smriti (that which is remembered). Though of human authorship, the material called smriti was nonetheless considered inspired. And while this literature has been theoretically of lesser authority than the Vedas, it has played a far more important role in the lives of the Hindus for the last 2500 years. Sometimes this category is divided into the epics (itihasas), ancient stories (puranas), and codes of law and ethics (dharma shastras). The term smriti can also mean the codes of dharma alone.

The two epics, the Ramayana (Story of Rama) and the Mahabharata (Great Epic of India), have been the bestknown works within the Hindu tradition. The narratives, both in the Sanskrit and the many vernacular, and the many folk versions, have been memorized, recited, sung, danced, enjoyed, and experienced emotionally, intellectually, and spiritually for the last 2500 years. These texts have largely been transmitted through the performing arts and through oral tradition. Invariably the narration of the epics is the first and most lasting encounter that Hindus have with their texts. It is in these texts that we find an enormous wealth of materials on the glory of the natural universe, the conservation of resources, as well as the cycles of time.

The Bhagavadgita (sometimes rendered Bhagavadgita) was probably written around 200 B.C.E. or during the following centuries and added to the epic Mahabharata. It is frequently printed separately, and many people have a copy of this sacred text or know parts of it by heart. In the Gita, Krishna instructs his cousin Arjuna (who is generally understood to be any human soul who seeks spiritual guidance) on the nature of the human soul, God, and how one can reach liberation.

In verses that are still recited at a Hindu’s funeral, Krishna describes the human soul as being beyond the reach of human senses and thought; it is not affected by the

sense organs or physical nature and is removed from it. Just as a human being casts off old clothes and wears new ones, so too does a soul discard bodies and assume new ones. Thus the soul inhabits bodies that are born and that die. This continues through the ages until the soul is finally liberated from the cycle of births and death. The soul does not die when the body dies; it is never born and never killed. According to some Hindu theologians, the Gita clearly demarcates the line between the “physical” part of the human being and the “soul” – a distinction that becomes well discussed in Hindu schools of philosophy. When Arjuna is not quite clear about Krishna’s claim to be God incarnate, Krishna reveals his own cosmic form, which is only visible to Arjuna’s divine eye. In this vision, the entire universe makes up the body of Krishna and the concept is elucidated several centuries later by the philosopher Ramanuja (1017–1037).

Starting around 300 B.C.E. and continuing until a little after 1000, books known as the Puranas were composed. The word purana means “old” in Sanskrit; the Puranas dealt with old tales. These devotional books, whose use was not limited to the priestly caste, are well known. The Puranas praised deities that had become important in the Hindu pantheon. The chief deities of the Puranas are Vishnu, Shiva, and the goddess Parvati (also known as Devi) in their many manifestations.

Vishnu

One of the most important deities in the Hindu tradition, Vishnu (“all pervasive”) has been worshipped in various forms since the time of the Rig Veda. Considered by his devotees to be always united with the goddess Lakshmi who is portrayed as seated on a full-blown lotus flower, Vishnu is portrayed as the creator, protector and destroyer of the universe.

Iconographically, Vishnu is usually depicted as standing, as sitting majestically on a throne, or as reclining on a serpent called Ananta (Infinity). In the last form, Vishnu, who pervades all of creation, is couched in the coils of infinite time, showing his dominion over space and time. Vishnu, like most Hindu deities, has several arms, each holding a specific symbol. They are said to indicate the deity’s omnipotence as well as their characteristics, symbolized by the objects they hold in their hands. Vishnu usually holds a conch, a flying wheel, a mace and a lotus flower. As with all other objects connected with deities, some devotees hold that these items have symbolic meaning: the conch is said to depict space and the wheel portrays the cycle of time. Vishnu is portrayed as being dark blue in color, the color of a rain-filled cloud. Just as the cloud drenches the Earth with life-giving rain, Vishnu is said to shower his devotees with grace.

Hindus believe that Vishnu has several incarnations (*avatara*); he comes down to Earth aeon after aeon in animal and human form to rid it of evil and establish dharma or righteousness. One of Vishnu’s incarnations is as a fish, to save Manu, the primeval man, from the flood.

This story was originally seen in the Vedic literature, but is expanded now in the Puranas. It focuses on Manu, the progenitor of all human beings. While bathing in a lake, he finds a small fish in his hand. The fish speaks to him and asks him to take it home and put it in a jar. The next day, it has expanded to fill the jar, and Manu is asked to put it in a lake, and eventually when it outgrows it overnight, into a river and then the ocean. The fish, who is really Vishnu, then tells him that he is to build a boat, put his family in it, along with the seven sages and “the seeds of all the animals.” Manu does as he is told. When the floods sweep the Earth, the fish asks him to harness the boat to its horn and they ride the waves. Thus he and those on the ship survive the flood. This story is reminiscent of some of the flood myths in other religions and is set in a frame of periodic destruction and re-creation of life forms.

Some Hindu texts speak of Vishnu having ten incarnations in this cycle of time. Nine of these are said to have already happened. Of them, the fish is the first. The seventh incarnation is as Rama, the hero of the epic. In some versions of the narratives, his eighth incarnation is as the Buddha, who according to some interpreters diverted people from Hindu teachings but according to others gave an important place to nonviolence as an ethic. The tenth incarnation is to come at the end of this cycle of creation of the universe. Some twentieth-century interpreters see in the list of ten incarnations (fish, tortoise, boar, half-man/half-animal, a dwarf, a warrior, and then the full man Rama, followed by Krishna, his older brother and finally the destroyer of evil, Kalki) as illustrating Darwin’s theory of evolution. Vishnu’s incarnations from a water animal to an amphibian, land animal and so on are said to be depict evolution through narratives. It must be remembered, however, that the sequencing of the lists changes in several texts.

The Earth Goddess is prominent in both the Hindu and Buddhist traditions. Known as Bhū-Devī, and sometimes as Prithvī, Dharinī, Vasudhā, or Vasundhārā, she bears all life forms and nourishes them. In the Hindu tradition, she is seen as a beloved consort of Vishnu and is iconographically depicted as being on his left side in many south Indian temples. Lakshmi or Shri, the goddess of good fortune is on Vishnu’s right. In many of the Puranas, it is this goddess, who, unable to bear the grief rendered unto her, appeals to Vishnu for succor. It is these kinds of narratives that usually frame the longer stories of how Vishnu descended to Earth and incarnated himself.

Shiva

Like Vishnu, Shiva emerged as a great god in the postupanisadic era, but unlike Vishnu, he did not become the important focus of a doctrine of consecutive incarnations. The icon of the dancing Shiva – the king of dance or Nataraja – is one of the best-known pieces of Hindu art in India and in Southeast Asia. The drum that is sounded before he dances is like the recitation of Om, the most sacred syllable in the Hindu tradition. The icon of the dancing Shiva is said to embody five functions – creation,

preservation, and destruction; concealment of the truth and the granting of salvation. The first verse of the *Abhinaya Darpana*, a well-known book of dance says: “his limbs are the worlds, his songs are the languages of universe, his clothes are the moon and the stars.” As Nataraja, the lord of the dance, he is depicted with his right hand holding the drum of creation, and his left hand holds the fire of destruction. There are other dances – in sculpture and dance he dances his omnipotence, his immanence, his omniscience; he dances time and eternity. Above all, the devotees implore him to dance in their hearts. The dancing icon simultaneously embodies and articulates one dominant Hindu paradigm of the cosmos and, to the attentive devotee, a lesson in theology.

Although the many deities are well known all over India, in most southern Indian villages and towns, they are known by (and usually, only by) a local name. Thus, Vishnu in Tirumala-Tirupati is known as Venkateswara or the lord of the Venkata Hills. Many of these places also have what is called a *sthala purana*, namely, a narrative that tells one why that place is holy, what were the kinds of hierophanies that took place there, and why the deities linger there for the welfare of human beings. Each *sthala purana* is unique, even though many of them are strikingly similar and can be seen as fitting into a familiar genre. Since each story – and place – is unique, visiting one is not a substitute for another. It is this sense of the special nature of each place that gave rise to the major traditions (and now, business) of pilgrimage within Hinduism. The *sthala puranas* frequently glorify the place where the deities have revealed themselves. Some descriptions are generic, but there is also a great deal of specific detail, exulting in the local landscape and describing the flora and fauna with considerable care. The purpose of these descriptions is to praise the land in which Vishnu or Shiva or the goddess has come to live in; thus in praising the natural landscape, one is glorifying the deity. These texts serve as sources of inspiration for contemporary ecological initiatives.

Ages of Time

As noted earlier, many Hindu philosophies include the category of time under the rubric of “*achit*” or that which is insentient. The Puranas speak about cycles of creation and destruction of the cosmos. These cycles are known as the days and nights of the creator god (a minor deity) called Brahma. During a day (which is called a *kalpa*) there are secondary cycles of creation and destruction. Each *kalpa* is approximately 4320 million earthly years. (There are distinctions between earthly years and the much longer years of the gods.) The nights of Brahma are of equal length. The total of 360 such days and nights makes a year of Brahma and Brahma lives for 100 years. This cycle therefore is 311,040,000 million years. After this, the entire cosmos is drawn into the body of Vishnu or Shiva (depending on which Purana one is reading), and remains there until another Brahma is evolved.

During each of his days, the creator god brings out the universe periodically and withdraws it into himself. A day in the life of Brahma is divided into 14 manavantarās, and each lasts 306,720,000 years. During the long intervals between manavantarās, the world is re-created and a new Manu or primeval man appears and begins the human race.

Each manavantara contains 71 great aeons (maha yugas), each of which is divided into four aeons (yugas). A single one of these aeons is the basic cycle. The golden age (krta yuga) lasts 4800 divine years (1,728,000 human or earthly years). During this time, dharma is on firm footing. To use traditional animal imagery, the bull of dharma or righteousness stands on all four legs. The Treta age is shorter, lasting 3600 god years, that is, 1,296,000 earthly years; dharma is then on three legs. The Dvapara age lasts half as long as the golden or krta age; it is 2400 god years long (864,000 earthly years) and dharma is now hopping on two legs. During the kali yuga, the worst of all possible ages, dharma is on one leg and things get progressively worse. This age lasts for 1200 god years (432,000 earthly years). We live in this degenerate kali yuga, which, according to traditional Hindu reckoning, began around 3102 B.C.E.

There is a steady decline through the yugas in morality, righteousness, lifespan, and human satisfaction. At the end of the kali yuga – obviously still a long time off – there will be no righteousness, no virtue, no trace of justice. According to many of the texts, when the world ends, seven scorching suns will dry up the oceans, there will be wondrously shaped clouds, torrential rains will fall, and eventually the cosmos will be absorbed into Vishnu. The Puranas deal with astronomical units of time; the age of the Earth and of the human being is infinitesimally small in relation to the aeons of time the universe goes through.

The Epics and Puranas give detailed narratives of the periodic and cyclic destruction of the world. By the beginning of the third eon, things are perceptibly going awry. The Kurma Purana (1.27.16–57) says, “Then greed and passion arose again everywhere, inevitably, due to the predestined purpose of the Treta [Third] Age. And people seized the rivers, fields, mountains, clumps of trees and herbs, overcoming them by strength” (in Dimmitt and van Buitenen 1978: 39). That is just the beginning of the decline in virtue and behavior. The epic Mahabharata (c. 500–200 B.C.E.) is graphic in the portrayal of the events at the end of the fourth – and worst – aeon and what happens after a thousand such ages. At the end of the aeon the population increases; there is a stench everywhere. The

“natural” order of things becomes sluggish; the cows will yield little milk, and the trees, teeming with crows, will yield few flowers and fruits. The Brahmins – the priestly class – it is said, will plunder the land bare for alms. Householders, out of fear of the burden of taxes, will become thieves; students who should normally work on virtues like non-attachment will be false with greed for possessions. At the end of a thousand aeons, the text continues, there will be a drought of many years and all creatures will starve. The fire of destruction will rage and large clouds will rise up in the sky. The epics pessimistically say that all humans will become “omnivores” and barbarians and

naturally cruel. They will destroy parks and trees and the lives of the living will be ruined in the world (van Buitenen 1978: 586–9, 595–6).

These destructions are portrayed as cyclical and periodic; it almost seems that the events are inevitable and in some way predestined. However, many Hindus tend to take these notions of time in a metaphoric way. More literal interpretations place the beginning of kali yuga around 3102 B.C.E. It should also be noted that although these cataclysmic events are forecast, almost all theologians and philosophical texts insist on the importance of a free will for human beings and give them full agency.

There are also several texts which speak about correct human behavior. These offer advice and a large toolbox of strategies which have been deployed to avoid conflict and promote nonviolence. The Mahabharata, one of the most important texts in the Hindu tradition, focuses on a civil war, but the line that lingers in our consciousness is “ahimsa paramo dharmah” (nonviolence is the highest virtue). The Mahabharata also speaks about the eternal dharma (sanatana dharma), the virtues that should ideally exist in all human beings. Here too, it is nonviolence that is valorized: “Lack of enmity to all beings in thought, word, and deed; compassion and giving; it is these which form the eternal dharma” (Santi Parva – the section on peace, Mahabharata).

Dharma and Artha Texts and Practices as Environmental Resources

The many texts which focus explicitly on dharma or righteous behavior were composed in the first few centuries of the Common Era. Many sections of the epics Ramayana and Mahabharata and the Puranas also focused on dharma. Other scriptures have encouraged the planting of trees, condemned the destruction of plants and forests, and asserted that trees are like children. In this context, a passage from the Matsya Puranam is instructive. The goddess Parvati planted a sapling of the Asoka tree and took good care of it. She watered it and took care of it and it grew well. The divine beings and sages came and told her:

O [Goddess] . . . almost everyone wants children. When people see their children and grandchildren, they feel they have been successful. What do you achieve by creating and rearing trees like sons . . .? Parvati replied: “One who digs a well where there is little water lives in heaven for as many years as there are drops of water in it. One large reservoir of water is worth ten wells. One son is like ten reservoirs and *one tree is equal to ten sons (dasa putra samo drumam)*. This is my standard and I will protect the universe to safeguard it . . .” (*Matsya Puranam*, chapter 154: 506–12).

The words of Parvati seem relevant even today. Trees are said to offer more than aesthetic pleasure, shade, and fruits. They are vital to maintain our ecosystem, our planet, our well-being, and Parvati extols them by saying they are comparable to ten sons. The main Puranas, texts of myth and lore, composed approximately between the

fifth and tenth century C.E. have wonderful resources on trees. The Varaha Purana says that one who plants five mango trees does not go to hell, and the Vishnu Dharmottara (3.297.13) claims that one who plants a tree will never fall into hell. The Matsya Purana also describes a celebration for planting trees and calls it the “Festival of Trees” (Kane 1958: 415)

Just as the planting of trees was recommended and celebrated, cutting them was condemned by almost all the dharma shastras. Kautilya Arthashastra (ca. fourth century B.C.E.) prescribes varying levels of fines for those who destroy trees, groves, and forests. Kautilya said:

For cutting off the tender sprouts of fruit trees, flower trees or shady trees in the parks near a city, a fine of 6 panas shall be imposed; for cutting off the minor branches of the same trees, 12 panas, and for cutting off the big branches, 24 panas shall be levied. Cutting off the trunks of the same shall be punished [with a fine between 48–96 panas]; and felling of the same shall be punished with [a fine between 200–500 panas] . . . For similar offenses committed in connection with the trees which mark boundaries, or which are worshipped . . . double the above fines shall be levied (in Shamasastri 1967: 225).

Despite such exhortations, there has been massive destruction of trees in India. This has been particularly true in the twentieth century when, in the deforestation that has occurred in the Himalayas and in the Narmada basin, there has been a tragic transgression of dharma in the destruction of national health and wealth. Some temples are now in the forefront of the “afforestation” (reforestation) movements, urging devotees to plant saplings.

Aspects of Nature

Although the philosophy of Ramanuja may not be well known to the larger Hindu population, it is most definitely true that most Hindus perceive divinity in many aspects of nature. Many animals, snakes, mountains, rivers, trees, indeed the entire universe, pulsates with something divine. Some Hindus personify natural phenomena as divine; others think of them as having presiding deities. Although the divinity is considered invested in some natural phenomena and habitats, it does not follow that these are not used or abused. As with many religious traditions, there is dissonance between perception and behavior.

Sacred Animals

Many deities are connected with animals, birds, and/or plants. Elephants are considered to be omens of auspiciousness; they are connected both with the goddess Lakshmi and with the deity Ganesha. Lions and tigers are associated with the goddess Durga;

still, they are hunted and killed. The Garuda bird, which is like the eagle, is a mount of Vishnu and held to be sacred. Almost all south Indian Vishnu temples have a shrine for this bird. Hanuman, a divine person who was born as a monkey, is the paradigmatic servant of the god Rama. There are other animals and birds that are sacred, but it is only the cow that is not killed and consumed.

Cows have been revered for the last two to three millennia and most Hindus do not eat beef. Some scholars interpret early Vedic texts as saying that cows were consumed; others consider this to be a misinterpretation. Certainly, in the last two millennia, the cow has been seen as an animal worthy of veneration, an animal that symbolizes everything good in nature, and as an animal symbolic of the maternal giving of the deities Vishnu and Lakshmi. Some Hindus think that by venerating the cow they are symbolically venerating all living creatures. Others believe that the cow is the ultimate “giving” animal; its products and hide can be used in many ways.

It is for very different reasons that the naga or snake is venerated. In many villages and in many quiet places in the cities, there are sacred trees that have a simple platform built around them. Under the trees may be many small stone images of intertwined snakes. These serpent images are venerated with red spots of kum kum powder that is used to adorn the forehead of women, or used in worshipping the goddesses. Women come to these openair shrines to worship at particular times of the year, or when they need a wish to be fulfilled. The serpents, called nagas, may well be one of the earliest features of the Hindu tradition. Hindus think of nagas both as serpents and as having human characteristics. Epics mention groups called Nagas and it is possible that snakes were tutelary deities for them. Hindus in many parts of Kashmir, Nepal, and other areas consider themselves as having Naga ancestors. Similar stories are found in the Hindu kingdom of Kambuja-desa (Cambodia) where the people thought of themselves as having been descended from the Nagas. Snake imagery is still dominant in the Cambodian countryside. Nagas are said to have powers that human beings do not have and are considered worthy of veneration and protection.

Sacred Mountains and Rivers

Many of the mountains and rivers are personified and venerated in Indian culture. Mountains are generally considered male, though there are some exceptions such as Nanda Devi in the Himalayas. The goddess Parvati, whose name means “born of the mountain” is a much-beloved goddess who is also called “vanaja” or born of the forests. These mountains and rivers are glorified in the many sthala puranas or texts which speak about the sanctity and mythical history of a place. Hills such as the ones in Tiruvengadam (Tirumala Tirupati in South India) were thought of as so sacred that there are stories of how holy teachers climbed them on their knees just so that their feet would not sully the sacred soil. Many mountains such as Kailasa – thought of as the abode of the deity Shiva – in the Himalayan range are places of pilgrimage.

The towers of the temples are frequently compared to mountains. The inner shrines of Hindu temples, known as the “womb house” or garbha griha are the caves which served as houses of worship. But more importantly, it is not just any mountain to which temples are compared – many Hindu and Buddhist temples are modeled after Mount Meru, which is believed to be the center of the universe. The largest and most famous example of this correlation is the Angkor Wat in Cambodia.

Rivers such as Ganga, Kaveri, Godavari, and Narmada are much venerated by devotees, both as rivers and as goddesses. In many south Indian temples, the river goddess Kaveri is present in the inner shrine. Many rituals are also associated with the river. For instance, in the Tamil month of Adi (July–August), when the river Kaveri is turbulent because of the monsoons, she is considered to be pregnant, and many local residents who live by her banks in the state of Tamilnadu picnic on the banks of the river and offer food to her. Veneration and rituals to river and mountain deities can thus be very personal.

By bathing in the great rivers of India, one is said to be both physically cleansed and morally purified of one’s sins (papa), which are destroyed. Moreover, one acquires merit or auspiciousness in this way. A story popular in oral tradition makes the point:

A king goes to sleep on the banks of the River Ganga. When he wakes up in the middle of the night, he sees some women covered in filth taking a dip in the holy river. They emerge from the river cleansed and then disappear. The king returns on several nights and sees the same thing. Eventually he asks them who they are; they reply that they are the embodiments of the rivers of India. Everyday, they tell him, human beings bathe in the rivers and their sins are absolved by that act. The rivers – embodied as women – absorb the moral dirt and then come to the Ganga, the grand purifier, to purify themselves.

Variations on the story say where the Ganga goes to get herself purified, although it is generally assumed that she needs no purification. In stories that extol the river Narmada, Ganga goes to bathe in that river. In a metastory, ascribed to oral tradition, she goes to bathe in the holy city of Prayag (modern Allahabad) to absolve herself of the moral filth. The story obviously praises the sanctity of Prayag, but ends up being a circular narrative because the holy city itself gets its importance because the Rivers Ganga and Yamuna meet there.

The generic version of the story distinguishes between two kinds of dirt – moral dirt or sin, known as papa in Sanskrit, is perceptible as physical dirt in the bodies of the river. The story, therefore, makes a direct connection between morality and physical pollution, a connection that is dominant as we saw initially in the *fin de siècle* myth. In addition to moral and physical purity, one may also note that in other Hindu contexts there is a third kind of purity: ritual purity. When one bathes in them, rivers and other bodies of water may bestow the pilgrim and his/ her clothes with ritual purity. Ritual purity encompasses physical purity, but as Kelly Alley has explained, all that is physically clean is not ritually pure. Even if a person is physically and ritually

clean, the mere association with people and garb which are deemed ritually unclean or impure may be contagious and polluting.

Many families keep a small jar of Ganga water in the shrine to use when someone is dying. The holy water is then sprinkled on the dying person. After death, the body is cremated and the ashes are immersed in any body of water. Some families may preserve a small amount of the ashes of a dead person to be immersed in the Ganga at a later time. The waters of these rivers are also brought to various continents and mingled with the waters of local rivers, and used to consecrate newly built temples. So important are these rivers that Hindus who migrated to Southeast Asia in the first millennium considered local rivers such as the Kbal Spean in Cambodia to be like the Ganga. In late twentieth century, Hindus in the diaspora have used rivers like the Thames in London as local substitutes for the Ganga.

Although there is strong belief in the religious purity of the rivers, from an environmental perspective they have become severely polluted. In light of accelerating rates of environmental degradation, the story relating the need of rivers to cleanse themselves has become particularly poignant. The desire for consumer goods and quick profit has led to a rapid industrialization and release of toxic waste in the rivers. Due to overpopulation and the lack of basic sanitary facilities, the sacred rivers have become latrines, despite injunctions in the dharma texts against such behavior. The rivers, which are supposed physically, morally, and ritually to purify human beings, now reflect adharma: unrighteous behavior. Devotees' belief that the rivers are intrinsically pure, moreover, works against the cleansing of the rivers, for some people believe that they cannot really be polluted.

Sacred Forests, Trees, and Groves

While the texts praised the planting of trees, temples tried to exemplify the practice of venerating them. Almost every temple in south India dedicated to the gods Shiva or Vishnu, or to a manifestation of the goddess, has a *sthala vriksha* ("the tree of a [sacred] place"), a particular tree that was sacred to that area. This is the "official" tree of the temple and is usually a grand old specimen that is surrounded by a beaten path used for circumambulation by pilgrims and devotees. Early Tamil texts such as the *Ahananuru* and *Purananuru* (first–second century) affirm the sacrality of trees. Many temples in south India have sacred temple trees that have been venerated by the local devotees for centuries. Such sacred temple trees stand symbolically for other trees, all of which are worthy of respect.

The sacred temple tree is generally venerated by women; it is adorned with colored thread, scarves, red and yellow kumkum and turmeric powder. Lamps are waved in front of the tree and acts of ritual adoration are occasionally performed. Despite this worship, all trees are not necessarily considered to be major deities or divinities; they are like the cow and some other sacred animals, recognized to be essential providers

for and sustainers of human life. Planting of trees in temples has been a latent ideal in many communities. Now, in the light of extensive destruction of trees, many temples in Andhra Pradesh and Tamilnadu have revitalized the custom of planting trees within their precincts.

References to various trees in the epics and Puranas as well as the practice of worshipping the deities with plants and leaves sacred to them have inspired some activists to grow “sacred plants.” Research by some of these activists has led to the identification of dozens of varieties of plants and trees in the holy texts, and many have learnt a new respect for forests and trees.

The religious significance of plants is also related to their healing properties, which are emphasized in many texts and healing practices. The medicinal texts of Ayurveda (“the knowledge of [long] life”), for example, find that trees have medicinal qualities. The neem tree was one of the most useful in this regard. Its twigs are used as tooth brushes in rural areas, its leaves are used to treat skin ailments, and the tree as a whole is said to have antibacterial properties. Many of these claims are now being scientifically tested. Plants and herbs in India were also used for digestive and respiratory ailments, and were therefore regularly planted and nourished. As early as the time of King Ashoka in the third century B.C.E., there are rock edicts urging the planting of medicinal and herbal plants and trees all over the empire. The Second Major Rock Edict of King Asoka (who reigned 269–232 B.C.E.) says that medicinal herbs which are useful to human beings and animals are to be planted everywhere along with various kinds of plants and trees. This king also had wells dug and trees planted on the roadside to help travelers and pilgrims.

Trees and groves are also seen as the habitats of semidivine beings known as yakshas and yakshis, who, when disturbed from their natural habitats, may cause problems to local human residents. Many groves were left undisturbed in the past because they were considered homes of these beings and it was thought that felling the trees and plants would render these beings, animals, and birds, homeless.

The Eight Cardinal Directions and Building Structures

Many Puranic texts speak about the ashta dik or the eight directions. The eight directions are spoken of in many contexts. Each one of the directions has a guardian (dik pala) who is venerated. Sometimes the directions figure as part of the rhetoric used to praise a hero or heroine who is said to have conquered lands in all the eight directions. The potential and power said to be inherent in each of the directions is also discussed in texts and observed in practice. Thus, the east is frequently associated with everything good; many temples face this direction. The west is also good and many Vishnu temples face this direction. The south is considered to be associated

with death. The northeast is one of the best directions; the north has the potential to increase one's fortune. The directions also have presiding deities; Agni, the fire god, for instance, presides over the southeast. Frequently, he is portrayed in carvings in the southeast corner of temples. When applied to the function of the buildings, these concepts translated to placing of rooms in particular directions, so as to magnify and harness the potential of the Earth. Thus, the kitchen in a home, or the halls for fire sacrifices, were frequently built in the southeast part of the structure because Agni, or Fire, presided over this direction.

Many temples in India and in Southeast Asia were aligned very specifically in certain directions, to maximize the perceived power of the land and the directions. While a lot of this was based on various conceptual belief systems, some temples were precisely aligned with the planets and the stars to serve as giant calendars or perhaps even observatories. This is not immediately evident in Indian temples today because, as with many structures, they have been added upon and rebuilt over the centuries, but has been abundantly shown in recent research by Eleanor Mannikka on temples like Angkor Wat. The orientation of these buildings and the shape of the structures have historically been connected, as in many cultures, to notions of space and time. Angkor Wat may have served as a giant calendar and or astronomical calculator, tracking the movement of various planets.

Hindu temples were considered to be bodies – some say of the cosmic person, some say of a giant being, some say, of a human being. The temple could be the body of God or the cosmos. But the concept most pervasive in Hindu popular cultures is that of the vastu mandala, a specific geometric grid of 64 or 81 squares in which we find the body of a person of somewhat ambivalent disposition, neither human nor divine, called the Vastu Purusha, who lies on the ground on which we build our homes, our businesses, and temples. The legends are not very clear as to whether he is good or is an asura, a demon. The stories say that this being fell into Earth and, to vanquish him, the many celestial beings – devas – jumped on him and pinned him to the ground. The head is to the east; this is the most auspicious direction; and the figure of this person is fitted into the square of the extended universe. The mandala and the form of this Vastu becomes “a diagrammatic field of co-ordinates, intersections and diagonals [and] is sensitive to any interference with its order and in this respect it functions like the subtle body of the human being.” Such constructions have wide currency in Indian thought where they are said “to signify the universal law as a working entity” (Kramrisch 2002: 71). The body is said to be a place of coordinated activity where each part is the seat of a special function. Such coordinated function is made factually and repeatedly in Brahmanical cultures and in Buddhism; in sacred texts, rituals, and works of arts. The presence of the Buddha is spoken of in reliefs in Sanchi and Amaravati (Andhra Pradesh, India) by having his footprints in the place of the feet, a tree or pillar as the trunk and axis of the body, the wheel as head and the sun-shade above it.

The many principles of vastu and geomancy govern the positioning of a house, a bed, a desk or even one's computer. The orientation of buildings to specific directions,

whether east to the rising sun or to the west, informs us about the notions of the people's spatial relationship to the cosmos; their function as astronomical centers, aligned with and observing planetary and stellar movements, informs us of their calculation of time. Sacred cities and towns were built like mandalas, powerful diagrams of the universe. Hindu temples, towns, and cities tell us how human beings have experienced embodiment, conceptualized the divine, constructed social hierarchies, and aligned themselves with the natural forces of the Earth, the stars and the planets.

Planets and Stars

An integral part of Hindu religious life is one's relationship with the planets and stars. Many Hindus believe that human beings are integrally connected with various parts of the universe, including the stars and planets. The position and relationship of these bodies are believed to affect human nature and destinies. The belief and practice of "the study of stars" (jyotisha) or astrology was a significant branch of knowledge in ancient India and considered to be a vedanga or a field ancillary to the study of the Vedas. The Indian astronomers were in contact with the Greeks and framed their knowledge in religious discourses. By about the middle of the first millennium C.E., nine planets (nava graha) were recognized. These nine planets included the sun and the moon, along with Mars, Mercury, Venus, Jupiter, and Saturn. Two other entities, called Rahu and Ketu or the ascending and descending nodes of the moon, were added to this list. Since the study was primarily on bodies which affected people on Earth, our planet was not included in this scheme. As with various other aspects of nature – mountains and rivers, for instance – the nine planets have been personified and venerated. Architects depicted them on the lintels of temples in Orissa by the ninth century. In the last few centuries these planets have been consecrated in south Indian temples all over the world, including Atlanta, Pittsburgh, Tampa, Chicago and other cities. They are arranged in a specific square format, without any of them facing each other directly – a symbolic way of showing that their orbits do not intersect. Many Hindu communities have the birth horoscopes of infants drawn in great detail and this becomes a blueprint to guide a person through good and bad times. In certain periods of one's life, for instance, Mars or Saturn may not be in the right place. This, a Hindu may assert, can cause havoc in one's life. To minimize the negative placements of these planets, specific worship ceremonies are indicated and are carried out. Belief in astrology cuts across social class, caste, gender, and education. Highly educated Hindu communities have strong faith in the stars and planets and consider their influence on life as perfectly natural, taking this for granted as they would a force like gravity. Computer software programs now chart horoscopes and in many communities these are used as compatibility guides for marriages.

Although there have been texts and practices which extol the protection of Earth, several centuries of colonial rule, industrialization, and increasing human numbers have

led to extensive pollution and denigration of the environment. Many contemporary environmental activists, both inside and beyond India, view Hindu religious culture as a valuable resource for responding to this crisis.

Hindu Philosophical Systems

Some environmental philosophers, particularly in the West, have seen the Hindu philosophical systems as potential resources for India's environmental crises. While these systems of philosophy are significant in some areas, they have not inspired solutions to the environmental crises as much as the texts of dharma.

Six traditional or orthodox systems of philosophy are recognized within the Hindu tradition. The word translated as "philosophy" is literally *darsana* or "vision." One may call these schools viewpoints or visions of reality. Some of the schools go back to about 500 B.C.E. The development of Vedanta, on the other hand, continues even now and is of considerable speculative significance in the intellectual history of the Hindu tradition.

Samkhya ("numbers" or "count") was probably one of the earliest philosophical schools. It predates the Bhagavad Gita and is explicitly dualistic in its conceptual framework. Innumerable souls (*purusha*) are seen to be enmeshed in matter (*prakriti*). *Prakriti* is composed of three strands, which also color human attributes. These are *sattva* (purity), *rajas* (passion), and *tamas* (sloth). During creation, the five sense organs (the *functions* of sight, smell, taste, touch and sound) are derived from the notion of *ahankara*, ("i-ness" or ego) and connected with the essences of sight, smell, taste, touch and sound. These subtle essences produce the five gross elements – Earth, water, fire, air, and *akasha* (translated usually as "ether," "space," or "vacuum").

Liberation of the Soul Is through its Extrication from Primordial Matter

In its liberated state, according to such philosophy, the soul is blissful in its splendid isolation. In later compositions like the Bhagavad Gita, the worldview of Samkhya-yoga is integrated into a theistic worldview. Elements of the Samkhya worldview were also integrated into Buddhism and Jainism. Yoga, the second school, was tied up with Samkhya in its philosophical framework. Yoga in its theoretical aspects is theistic in outlook, differing from Samkhya philosophy, which does not focus on a deity.

Vaisesika, one of the six schools, dealt with nine categories of irreducible principles (Earth, water, time, space, fire, etc.) constituting the universe. Vedanta (end of the Vedas) is the sixth school of philosophy and has been significant over the last 1000 years. While yoga has been overshadowed by devotion in importance, the intellectual

and spiritual interpretation of Vedanta philosophy has preoccupied and continues to engage many Hindu thinkers.

Traditionally the term Vedanta was used to denote the Upanishads, the final part of the vedic corpus. But the term has more popularly been used to denote systems of thought based on a coherent interpretation of three works, the Upanishads, the Bhagavad Gita, and a text called the Brahma sutras. Vedantic philosophers wrote extensive Sanskrit commentaries on these texts; modern writers do it in English and also give oral discourses to the public, explaining particular viewpoints.

Shankara, who lived around 700, was a prominent interpreter of Vedanta. He portrayed this Earth and life cycle as having limited reality; once the soul realizes that it is and always has been Brahman, this life passes away like a dream. For Shankara, reality is nondual (advaita). There is only one reality, Brahman, and this Brahman is indescribable and without any attributes. Brahman and Atman (the human soul) are identical. It is because of maya, an illusory power that ultimately defies definition, that one believes oneself – or the universe – is different from Brahman. When this maya is cut through, the soul is liberated through the realization of its true nature. Liberation, therefore, is removal of ignorance and a dispelling of illusion through the power of transforming knowledge. Shankara's philosophy, therefore denies *ultimate* ontological reality to nature and to this universe, but postulates that for people caught in the cycle of life and death, it is real.

While the “oneness” doctrine and its ecological implications are sometimes underscored by some Western philosophers, recent work by Lance Nelson shows how the advaita (“nondualism”) conceptual system does *not* promote eco-friendly behavior. Nelson presents overwhelming evidence that Shankara's nondual (“oneness of all creation”) doctrine *does not* find any spiritual value inherent in nature and ultimately expresses a functional dualism. He demonstrates that this philosophy actually devalues nature and concludes that this “is not the kind of nondualism that those searching for ecologically supportive modes of thought might wish it to be” (Nelson 1998: 65). In addition to what Nelson says, it is also important to note that the oneness is only in the state of liberation and not when one is trapped in the sea of life and death. Thus, arguments that Hindus *ought* to value nature because ultimately there is a sense of non-difference do not really hold much weight, because the reality of nature and the physical universe is ultimately denied when one is liberated. We should remember, however, that Shankara's interpretation is only one of several schools of Vedanta.

Ramanuja (ca.1017–1137) was the most significant a interpreter of theistic Vedanta for the Sri Vaishnava community of south India. For Ramanuja, Vishnu is immanent in the entire universe, pervading all souls and material substances, but also transcending them. Thus, from a certain viewpoint there is only one reality, Brahman, but from another, one may say that Brahman is qualified by souls and matter. Since the human soul is the body (sharira) and the servant (sesha) of the Supreme Being, liberation is not portrayed as the realization of identity between the two. Rather, it is the intuitive, total, and joyful realization of the soul's relationship with the lord.

The elaboration of this philosophy, where the universe is understood as the body of Vishnu, is found in the many texts of Ramanuja and his followers, according to John Carman. According to Ramanuja, the universe, composed of sentient (*chit*) and non-sentient stuff (*achit*) forms the body (*sharira*) of the Vishnu. Just as a human soul (*chit*) pervades a non-sentient body (*achit*), so too does Vishnu pervade the souls, the material universe, and Time. Vishnu-Narayana is inseparable from Shri-Lakshmi, the Goddess. According to the Sri Vaishnava theologian Vedanta Desika (1268–1368), both Vishnu and Shri pervade the universe together; the universe is their body. It is important to note that in this philosophy, it is *not* the case that the material universe is female and the transcendent god is male; together, the male and female deities create and pervade and yet transcend the universe. What the body–soul metaphor translates to in devotional praxis for Ramanuja and Vedanta Desika is that human beings and the entire natural universe are the body of Vishnu and Shri; they are owned and supported by them. However, while the devotional songs emphasize the drama and engagement of interpersonal relationships between the deity and the devotee, the philosophical underpinnings of the universe as the body of the deities has been practically unknown, except among a few philosophically learned people in the Sri Vaishnava traditions.

Tantra

The component of the Hindu tradition that is termed Tantra is hard to define, partly because it is portrayed differently by its advocates and its detractors. Essentially it centers on a body of ritual practices; some of these have been integrated into the larger devotional universe of the Hindu traditions, while others are considered by many Hindu communities as socially unacceptable. Tantra, which etymologically means “loom,” began to gain importance in the Hindu and Buddhist traditions around the fifth century. The tantric tradition influenced many sectarian Hindu movements; Shaiva and Vaishnava temple liturgies, still practiced, are in large measure derived from tantric usage. For example, when the images of the deities are installed in temples, large geometric drawings (*mandalas*) representing the god or goddess and the entire cosmos are drawn on the floor and used as a tool for meditation and ritual.

The tantric tradition advocated its own form of yoga, known as kundalini yoga. Kundalini refers to the *shakti* or power of the Goddess, which is said to lie coiled like a serpent at the base of one’s spine. When awakened, this power rises through a channel passing through six *cakras* or “wheels” to reach the final center located under the skull. This center is known as a thousand-petalled lotus. The ultimate aim of this form of yoga is to awaken the power of the kundalini and make it unite with Purusha, the male Supreme Being, who is in the thousand-petalled lotus. With this union, the practitioner is granted several visions and given psychic powers. The union leads eventually to final emancipation. In some tantric texts, the Goddess is identified with *prakriti* or material nature.

Theological Resources for Social Problems

The many Hindu theological texts and philosophical systems (darsanas) do contain engaging accounts of reality, which, could serve as important resources for several social and moral problems. The Hindu traditions have competing and intersecting worldviews recommending specific behavior patterns. In some Hindu philosophical systems, these are arranged in a chronological fashion – thus, it was mandatory for a male from one of the so-called higher castes to be celibate and not earn a living while he was a student, but when he got married, it was the norm to procreate, earn money and so on. In his later years, he had the option of becoming a forest dweller (not too many did) or monk, to be engaged in the study of theological texts which would guide him to his liberation from the cycle of life and death. As a householder, goals such as dharma, money and power, and sensual pleasure were important; as he focused on his liberation, he would be encouraged to understand and experience the tattva, the categories of reality posited in the texts of liberation (moksha). In theory, these stages were not available for women and the so-called lower castes, but in practice, most men did not become students and stopped at being householders.

There are many meanings for *dharma*. In some of its manifestations it is concerned with *loka sangraha* or the welfare of human beings. Dharma refers to many topics including notions of righteousness and duty as well as virtues such as gratitude and compassion, which are thought of ideally as common to all human beings. The texts on dharma also form the basis for formulating parts of Hindu family law in India. Moksha, on the other hand, refers to liberation from the cycle of life and death. While in some philosophical traditions, doing one's dharma or duty led to moksha, in other cases, the dictates and norms of dharma to sustain society (beget children, earn money) could be seen as binding one to the cycle of life and death and as tugging in a direction away from liberation. The pathways to liberation included meditative and reflective paths focusing on control of the human body and mind as well as intellectual and emotional devotion to the deity of one's choice. Detachment from everyday life – even while living in the midst of the world – was an integral part of the enterprise.

The texts that deal with moksha or liberation are generally concerned with three issues: the nature of reality, including the Supreme Being and the human soul; the way to the supreme goal; and the nature of the supreme goal. Generally the nature of reality/supreme being is called tattva (truth) and corresponds to the term “theology” or “thealogy.” These texts do not focus much on ethics or righteous behavior in this world; that is the province of dharma texts. The theological texts or sections that deal with tattva focus on weaning a human being from the earthly pursuit of happiness in favor of what they consider to be the supreme goal of liberation (*moksha*) from this life. It is important to keep this taxonomy in mind, because *theological doctrines do not necessarily trickle down into dharmic or ethical injunctions; in many Hindu traditions there is a disjunction between dharma and moksha*. Some scholars, such as Johannes van Buitenen, see a fundamental opposition between them; while dharma involves the

ordering of society and the centering of the human being, liberation may be considered to be an abandonment of the established order, not in favor of anarchy, but in favor of a self-realization which is precluded in the realm of dharma. Other scholars, including Daniel Ingalls, disagree with the sharp nature of the cleavage described by van Buitenen but acknowledge that there have always been some religious leaders who have insisted on the contradiction between dharma and moksha. This disjunction between dharma and moksha is marked in Hindu literature and communities. Dharma texts promote righteous behavior on Earth and moksha texts encourage one to be detached from such concerns. A few texts like the Bhagavad Gita have tried to bridge dharma and moksha paradigms.

Thus, a theology that emphasizes the world as a body of God, a pervasive pan-Indian belief that Goddess Earth (Bhu Devi/Vasundhara/Prithvi) is also a consort of Vishnu, or the notion that the Mother Goddess (Amba, Durga) is synonymous with nature (prakriti), does not necessarily translate to eco-friendly behavior. Likewise, renunciation, celibacy, and detachment are laudable virtues for one who seeks liberation from the cycle of life and death, but the texts on dharma say that begetting children is necessary for salvation. These bimorphic worldviews have to be kept in mind if we are to see the relevancy of philosophical viewpoints such as deep ecology for the Hindu traditions. On another front, the dissonance between dharma and tattva/moksha texts also accounts for how some Hindu traditions hold the Goddess to be supreme while women do not always have a high position in society. It is true that some theological/tattva texts speak of certain kinds of “oneness” of the universe and in some cases, of the equality of all creation. Some tattva texts speak of the oneness of creation and the Creator, and the absolute identity between the Supreme Being (Brahman) and the human soul (atman) – a oneness which transcends the concept of “equality of many.” This philosophical system of nonduality is considered an important resource for environmental ethics by some Western philosophers, who have interpreted the idea presented in *some* schools of Hindu philosophy – that there is ultimate oneness of creation – as an affirmation of continuity between human beings and all other life forms. They surmise that because Vedanta philosophy maintains that all life is one, there must be a natural reverence for all things. This generalization, however, does not hold true on two fronts; first, the “oneness” of the universe is a concept seen only in one school of Vedanta (that of Shankara) and secondly, this oneness is only seen when the soul is liberated from the cycle of life and death.

Thus, in Hinduism, the philosophies of Shankara and Ramanuja *are relevant to those who seek liberation and are not seen as guides to everyday behavior*. Hindu communities, customs, and traditions are ordinarily not established on the sense of oneness or equality found in moksha, but on many hierarchies based on gender, caste, age, economic class and so on. Hindu institutions and eco-activists have therefore found more resources in the narratives found in the dharma texts.

Thus, although some tattva texts contain rich resources for the problems of ecology, population, and consumerism, in the Hindu contexts they have limited power over

ethical behavior. While logically the theological/tattva texts ought eventually to translate to human action, the timeframe for such connections would probably be rather long. Texts of dharma, on the other hand, function like law codes in some countries – sometimes not known by the subjects, sometimes followed, sometimes flouted, sometimes ignored, sometimes evaded, sometimes taken to heart as the right thing to do to maintain social stability.

Environmental Activism in the Contemporary Period

In India there has been a fairly long, though sporadic, history of environmental activism. One of the most famous has been the faith of the Bishnoi; and in recent years the Chipko movement and the Narmada Andolan have become well known. The Bishnoi tradition – or as some call it, the eco-religious revolution – was started around 1485 in Samrathal Dhora (north India) by Jambho-ji (b. 1451). Jambho-ji was said to have been influenced by the pastoral life led by the deity Krishna and is believed to have preached his faith for about 51 years. Of the 120 sayings credited to him, 29 (“bish-noi”) directives are said to be particularly significant. Many adherents today interpret these teachings as promoting biodiversity and the protection of trees.

Some temples like the one at Tirumala Tirupati in south India – the largest and richest temple complex in the country – have also encouraged eco-activism. Billboards saying “Vriksho rakshati: rakshatah” (“Trees protect: Let us protect it” or “Trees, when protected, protect us”) greet visitors to the sacred pilgrimage town of TirumalaTirupati in the state of Andhra Pradesh.

The statement on the billboard is obviously adapted from the Laws of Manu which say that dharma when protected, protects us. In response to the ecological crisis in India, the Venkateswara (“Lord of Venkata Hills”; a manifestation of Lord Vishnu) temple at Tirumala-Tirupati began what is called the Vriksha (tree) Prasada scheme. Whenever a pilgrim visits a temple in India, s/he is given a piece of blessed fruit or food to take home. This is called a prasada or “favor” of the deity.

The Tirumala-Tirupati temple, which is located at an elevation of 3000 feet and was once surrounded by heavy forest, has now established a large nursery on the hills and encourages the pilgrims to take home tree saplings as prasada. But one must also remember that the TirumalaTirupati temple is not just any other temple; it is the richest shrine in India and carries with it a great deal of dharmic and financial clout. The nurseries of the Tirumala-Tirupati temple have many varieties of plants, both decorative and those considered to be medically useful. The saplings cultivated are suitable for the soil in various parts of India, and by planting them at home one can have a real piece of the sacred place of Tirumala wherever one lives.

Apart from this public-relations initiative, which one may call an ecology-consciousness-raising venture for the pilgrims, the T.T. Devasthanam (the official bureaucracy of the temple) has also started the Shri Venkateswara Vanabhivridhi Schemes. The Forestry department of the

T.T.D. began this scheme in 1981 and it was initially called the “bioaesthetic plan.” The donation made by the devotee is used for the purchase and planting of trees and plants. The donor is honored by being granted special darshan (viewing of the deity in the inner shrine) and by having his/her name displayed next to the tree that has been planted. Over 2,500,000 indigenous trees are said to have been planted on the hills and the plains as a result of this program. In support of it, the temple itself quotes relevant texts on the importance of trees and, most importantly, honors devotee-participants in this thriving program. Both in texts and in practice, the Hindu traditions and some institutions have encouraged a proactive plan in the planting and protection of trees and plants.

Environmental activists have deployed several religious strategies in the fight against the damming of rivers. Sunderlal Bahuguna, a famous environmental activist, says that damming a river is like killing it. In resisting the building of the Tehri Dam in the Himalayas, a seismic zone, he has argued that several holy pilgrimage sites will be destroyed if the dam were to break.

Most of the rivers of India are considered to be female and mountains male. There are exceptions: some rivers like Krishna have male names and some mountains like Nanda Devi bear women’s names. Rivers are perceived to be nurturing (and sometimes judgmental) mothers, feeding, nourishing, quenching, and when angered, flooding the Earth. Hindu girls in India are frequently named after rivers. Rivers are personified as deities. River Ganga is sometimes portrayed as a consort of Lord Shiva. In the south, Kaveri Amman (Mother Kaveri) is the name by which the river is fondly addressed. Hundreds of girls born in the area of Coorg, where the Kaveri has her source, are named after her. In the plains of Tamilnadu, Kaveri is seen as a devotee and sometimes the consort of Lord Vishnu, and several temples (like Terazhundur, near Kumbakonam) have a striking image of this personified river in the innermost shrine. In the eighth-century Vishnu temple at Tirucherai, a small village near Kumbakonam, River Kaveri is seen as in a maternal posture with a child on her lap.

In the hundreds of grassroots movements around India, leaders like Veer Bhadra Mishra and Sathya Sai Baba, institutions like the World Wide Fund for Nature, and pilgrimage sites such as Badrinath have all used religious narratives, ritual, and values of dharma as ways of successfully motivating Hindus to take action and clean up the environment, plant new trees, and value biodiversity as an integral part of their activities. In many of these movements, women have played a very active role.

Women and Contemporary Environmental Action

Beginning in the late twentieth century, activist intellectuals such as Vandana Shiva began to bring together an ecofeminist critique of gender and environment pertinent to India, comparing the denigration of the rivers to the denigration of women at various times in the history of Hindu civilization. Shiva has also eloquently and forcefully explored the ways in which women suffer as “development” destroys forests near their homes. Gruzalski summarizes such dynamics:

Deforestation, as well as replacement of mixed forests with eucalyptus or Chir pine groves, has degraded not only the environment, but also the condition of these women. They often need to spend the entire day gathering fuel and fodder, not only an exhausting task in itself, but one that makes cooking and the care of children more difficult. In addition, as the mixed forests are destroyed, springs and streams dry up and the women must go further for water. In short, the degradation of the forest environment means more work and suffering for the rural village women (Gruzalski 1993: 107).

Shiva’s argument was that these are “maldevelopment” projects in which “Nature and women are turned into passive objects, to be used and exploited for the uncontrolled and uncontrollable desires of alienated man” (1988: 6), and this argument has been influential globally, especially among ecofeminists. Shiva also works on issues of hazardous wastes, biodiversity conservation, globalization, patenting and intellectual property rights (calling the profiteering of corporations from traditional ecological knowledge “biopiracy”). Often inspired by such critiques, women from diverse social classes have become environmentally active in India. It is not surprising that women, in the Chipko (“hugging trees”) movement for example, have been involved in protecting trees, for they are generally the first to feel the impact of deforestation. In an important development, however, many women from more powerful classes have become influential environmental activists in their own right, adding their own strengths to the cause.

Women have been actively and creatively involved in communicating the tragedy of ecological disasters and facilitating environmental awareness and action, sometimes using traditional religious art forms, sometimes through mainstream media and technology. Many women, for example, publish regular reports about the ecological crises in India, including ones that draw out the religious dimensions of environmental concern, as does *Manushi*, a “magazine for women and about women.”

Indian Classical Dance and Environmental Action

Awareness of ecological concerns has also been heightened through the medium of traditional Indian dance, the Bharata Natyam. The theory and practice of classical dance in India (natya shastra) is seen as a religious activity. The birth myth of the dance describes it as the fifth “veda” or sacred knowledge, one that is accessible to all

human beings. In other words, dance – indeed, most performing arts – are optional ways to salvation within some Hindu traditions. In the twentieth century, classical dance has also served as a medium for a social commentary on women. Bharata Natyam is now the medium by which other social concerns are being expressed. Mallika Sarabhai, a noted dancer and feminist communicator, has choreographed many dances with environmental themes. She presents in “Shakti: The Power of Women”, the story of the Chipko movement in northern India. Through this medium, audiences around the country, urban and rural, both literate and illiterate, understand quickly the urgency of this message.

Sarabhai’s communication through this art form is not a novel example of innovative dance portraying the courage of the rural women who protect and are protected by the trees – there are other performers who focus on this socially relevant theme. Instead of performances where the central piece highlights the pining of the individual soul for God, some women performers have begun to portray ecologically sensitive messages. Dancers in the United States also have begun to dance to environmental themes. With the growing awareness of our ecological plight, Hindu communities are pressing into use many dharmic texts and injunctions. They are drawing on the epics and *Puranas* for inspiration as they plant gardens and revive customary lore regarding the medicinal importance of trees and plants. Women, through song and dance, increasingly communicate about the ways in which environmental deterioration injures both women and nature, and call for environmental protection and restoration, sometimes engaging in direct action resistance to environmentally destructive practices. The philosophic insights of Hinduism may not have been strong enough to prevent environmental disasters, but the dharmic resources have provided rich resources for the sub-continent’s early initiatives to reverse these trends and make the sub-continent green and toxic free.

Vasudha Narayanan

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Hinduism and Pollution

The river Ganga, known to Hindus of India as *Mother Ganga*, is sacred. She is a mother, goddess, purifier and sustainer of all life. Along with the Ganga, many other rivers and mountains are considered sacred and powerful in the Hindu worldview. In fact, Hindu sacred sites in India are often located beside rivers or on top of mountains. Yet when considering the Ganga, the less faithful and followers of other religious persuasions consider the river polluted and in some reaches almost dead. To nonbelievers, the coexistence of sacred purity and environmental pollution appears paradoxical.

Anthropological analysis in India shows that the coexistence of sacred purity and environmental pollution is not paradoxical for Hindus who believe in Ganga's sacred purity. Hindus talking about sacred purity do not render purity and uncleanness mutually exclusive conceptual categories and conditions. Hindus consider the Ganga a goddess who possesses the power to purify all sorts of human and worldly impurities. They invoke the purifying power of "Ma Ganga" (Mother Ganga) through ritual ablutions, meditation, and worship. They understand Ganga's deep symbolic history and cite eulogies to her developed in the sacred texts – the *Ramayana*, *Mahabharata*, the *Puranas*, and *Mahatmyas*. A popular narrative, drawn from a chapter of the *Ramayana*, describes how she descended from heaven on the locks of Lord Siva.

Numerous places of healing and sacred power for Hindus are located along her 2525 kilometer traverse across northern India. In these sacred complexes, pilgrims and residents perform ablutions and undertake the ritual of arati to revere her. Devotees perform arati by waving oil lamps in front of Ganga while standing on the riverbank. The sounds of bells, gongs, drums, and conch shells also play a prominent role in focusing the devotee's attention

River Ganga and the Clean Ganga Campaign

Scientific assessments of ecological conditions made by government officials often conflict with assessments of ecology made by members of religious organizations and members of non-governmental environmental groups in India. While scientific theories use terms such as biological oxygen demand (BOD) and fecal coliform count (FCC) to indicate river-water-quality conditions, devout Hindus use notions of sacred purity and female forgiveness to talk about a river's power. In the Ganga river basin, there are marked disagreements between those claiming that the river is polluted and those

claiming she is eternally pure. One particular nongovernmental organization plays a leading role in bridging these radically different interpretations.

The Sankat Mochan Foundation, a religious trust in Varanasi, spearheads the “Clean Ganga Campaign” (Swatchha Ganga Abhiyan). The campaign is run by three professors who teach engineering at Banaras Hindu University and their local and international support groups. In 1982, they formed an organization called the Clean Ganga Campaign and listed it under a religious institution run by one of its principal members. They have found that the distinction between physical cleanness and sacred purity is crucial to their environmental message and they evoke it as a way to form a syncretism of Hinduism and science. The importance of this distinction is evident in their organization’s name. They use the word *svaccha*, which they spell *swatchha*, to show that they are an organization concerned with physical cleanness rather than sacred purity. But campaign members are not removed from religious concerns. The leading member of the group is the head priest of a religious institution, the Sankat Mochan Foundation. This organization manages the Sankat Mochan Temple, an important Hindu temple where the saint-poet Tulsī Das received his vision of Hanuman, the monkey-god of the *Ramayana*. The leaders explain that their concern is with the impact of waste on the physical Ganga. They do not contest or seek to denigrate her eternal sacred purity. However, while they revere Ganga through worship rituals in their private lives, they do not claim to promote a revitalization of such rituals through their own organization work.

Although there is no large-scale environmental movement in Varanasi today, campaign members continue to work from their unique position bridging Hinduism and science. They engage in direct confrontation with government officials in the Ganga Project

Directorate using scientific arguments. Yet they also understand the deep religious connection to the river goddess and respect her purificatory power. However, this bridging of perspectives is not appreciated by either the Ganga Project Directorate or Hindu pilgrim priests in Varanasi. Instead, government officials and pilgrim priests appear skeptical about the sincerity of any party’s desire to respect Ganga’s purity or prevent her pollution. Pilgrim priests see sewage treatment plants and projects as vehicles for state moneymaking, and complain that pollution prevention work “on paper” has not made any real progress. The Clean Ganga Campaign provides scientific evidence for the argument that officials have not adequately capped the drains feeding wastewater into the Ganga. Pilgrim priests agree with this, though their evidence rests on what they consider to be temporary conditions of material uncleanness, not sacred impurity. Pilgrim priests are not active in the Clean Ganga Campaign, and appear alienated by scientific concepts that do not match up with their own worldview. All concerned citizens acknowledge that sewage treatment and public activity on the riverbank fall well short of keeping human uncleanness away from the river. But when pilgrim priests and other residents of Varanasi face the vacant meanings of scientific concepts and witness blunders in official projects, the divide between them

and environmental scientists and officials widens. Bridging science, religion and official policy and practice in this context is an extremely difficult task, but the Clean Ganga Campaign members are determined to continue their efforts.

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Stille, Alexander. "The Ganges' Next Life." *The New Yorker* 73:43 (19 January 1998). on the sacredness of the river. The festivals of Ganga Dussehra and Ganga Saptami celebrate her purifying power and please her immensely. When Ganga is pleased, she blesses the faithful and purifies their minds and souls. Hindus of the sacred city of Varanasi consider that the following elements entering the Ganga are unclean (*gandagi*): dirty water from drains (*nalas*), industrial waste, household trash, soap from bathing and washing clothes, human excrement from "doing latrine" on the riverbank, and betelnut (*pana*) spit. Many consider that material dirtiness and bodily wastes have only a temporary impact on Ganga, making her unclean at a particular stretch. Sacred texts and popular manuals on pilgrimage, spiritual life and good conduct communicate ideas about distancing unclean bodily functions from pure-water bodies. They direct people to distance some everyday human processes such as defecation, brushing teeth, spitting, and washing clothes from the riverbank. Yet at many sacred places that border sacred rivers, while pilgrims perform ablutions, others wash clothes with soap, a pilgrim priest spits, an old woman "does latrine" on the riverbank (for lack of public facilities), and urban sewage flows into the river. Material uncleanness surrounds the people who seek purification.

The Hindu practice of cremation on the banks of sacred rivers aims to reduce the corpse to the five basic elements of existence: fire, air, water, ether, and Earth. Hindus use the words *asuddha* or *apavitra* to describe the state of impurity brought on by corpses and cremation, and they tie these notions to ritual and cosmic order. According to Hindu concepts of death, dead bodies, *per se*, are not problematic for Ganga because she has always accepted the bodies of holy men (*sadhus*), children, lepers, and smallpox victims, who are by rule not cremated. But pilgrim priests point out that some corpses found floating down the Ganga fall outside this acceptable category. This indicates a lapse in the respect for ritual order.

Some Hindus include uncremated or partially cremated corpses in the category of dirtiness (*gandagi*) they enunciate. At first glance, dead bodies in the Ganga represent another example of how the unclean is in the immediate vicinity of sacred purity. The issue is more confusing, however, because corpses are carriers of ritual impurity as well. When mentioning uncremated bodies dumped in the Ganga, Hindus conflate notions of ritual impurity and physical uncleanness. Moreover, government officials use floating corpses as key symbols in their assessments of river pollution.

Hindu pilgrim priests firmly believe that dead bodies do not threaten Ganga's spiritual integrity. But they fear that industrial waste, or more generally dirty water from drains, may have a harmful impact over time, by making the Ganga *asvaccha* or physically unclean. Still residents insist that *gandagi* cannot alter Ganga's power to give liberation (*mukti* or *moksa*) and purify the ashes of the deceased. This power is eternal and not subject to fluctuations in material reality. As long as humans demonstrate their reverence through ritual ablution, *arati*, and other forms of worship, Ganga will remain happy. As long as she is happy, she will purify the cosmos, soul, body, and heart. But even if, in theory, Ganga's purificatory power remains eternal, Hindus who express concern about their personal health when bathing appear disturbed by *gandagi*.

Hindus also conceive of the river in feminine terms, linking femininity with motherliness, housekeeping, clean-up, and forgiveness. Hindus will remark that Ganga, a good mother, cleans up the messes her children make and forgives them lovingly. In this way, she cleans up other kinds of dirtiness people bring to her and excuses dirty behavior with maternal kindness. Ganga is forgiving rather than angry about human dirtiness. By attributing a forgiving nature to Ganga, environmental activists argue, Hindus undermine pollution-prevention activities. Environmental activists argue that this view of sacred purity and loving tolerance leads to a passive acceptance of polluting behavior. However, these very activists understand that revising the deep religious association between water and womanhood to include human responsibility for Ganga's well-being is difficult indeed. Hindus link morality to *gandagi* but do not find that the Ganga participates in the sin-game (*pap-lila*) of humans. This means that she is unaffected by the sins of humans and not motivated toward retaliation. She did, after all, descend to Earth to wash away those very misdeeds.

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See also: Ahimsa; Appiko Movement (India); Bhagavadgita; Dharma–Hindu; Hinduism; India; Prakriti; Tehri Dam; Yamuna.

Hippies

The counterculture that blossomed in the Western world in the late 1960s and early 1970s had as a major theme a romantic love of nature. The hippies were sharply critical of the degradation of the environment that had accompanied the development of industrial and technological society. The seeming human desire to master nature was, the hippies argued, a fatal mistake; instead, one should realize that human beings were simply part of nature's flow and should seek to become one with that flow rather than swimming upstream.

The hippie writings that took industrial society to task at length were often influenced by Asian religious thought and certain strains in American Indian religion. Many hippies read Asian religious classics avidly (the

Bhagavadgita, the *I Ching*, and various sutras, for example), and even more read the works of Asian and Asian-inspired religious teachers in the West (for example,

D.T. Suzuki, the Zen teacher; the Maharishi Mahesh Yogi, founder of Transcendental Meditation; and Alan Watts, the Episcopal priest turned Zen Buddhist). Hippies also typically were fascinated with American Indians, who were seen as people living close to the Earth and in harmony with the flow of nature.

The use of drugs by hippies was often tied to the countercultural desire for union with nature. Hippies often distinguished between "good" and "bad" drugs, the good list usually including marihuana, LSD, mushrooms, and peyote, which were all regarded as consciousness-expanding and therefore useful, and the bad including such substances as heroine and amphetamines that led to stupor and death. Good drugs could open one's awareness in a way that would lead to rejection of industrial society in favor of natural simplicity. The use of marihuana by hippies also spurred the larger movement to get back to the land, where the precious weed could be grown and used more discreetly than was possible in the city.

The desire to get back to nature took several forms. The simplest was an attempt to eliminate artificial materials and processes as fully as possible from daily life. Many tried, for example, to avoid the use of plastics, processed foods, and/or artificial fibers. In that spirit some drugfriendly hippies used only marihuana and psychoactive mushrooms and cacti in their quest for consciousness expansion, avoiding all refined and processed drugs, including heroin, cocaine, LSD, and alcohol. Going one step farther, some hippies avoided owning or riding in cars, and a few eschewed the use of electricity and modern machines. Others best exhibited their affinity for nature in affirming, even glorifying, the human body through massage and other kinds of physical bodywork and exercise regimes. Where isolated surroundings permitted, many hippies doffed their

clothes, communing with nature as completely as possible. In many rural communes, especially, nudity was considered a sublime pleasure.

Although many counterculturists disdained political activism, most rose up as advocates of cleaning up the despoiled environment. Those who could stomach at least a modicum of organized activity were early participants of the late twentieth-century phase of the larger environmental movement. The first Earth Day, held on 22 April 1970, had a strong countercultural presence and flavor. The milieu of environmental concern and activism that hippies helped propagate led to the emergence of several of the more radical national environmental organizations, including Greenpeace and Earth First!, even though many of the less countercultural environmental activists found the hippies high-minded but not terribly politically effective.

From its early days in the mid-1960s, the counterculture counted many in its midst whose desire for natural living embraced a desire to leave the city and live in a rural area, preferably one as remote as possible. Many hippies fled the cities as individuals and families, seeking peaceful and natural lives on homesteads that would be as self-sufficient as possible. Others sought companionship in the rural quest and founded thousands of communes in scattered locales from coast to coast. From their earliest days the hip communes displayed strong natural leanings; Tolstoy Farm (1963, Washington state), for example, worked toward self-sufficiency using old, non-motorized tools, and Drop City (1965, Colorado) consisted of about a dozen domes pieced together largely from discarded construction and junkyard scrap to create a place where one could live apart from modern industrial society.

The counterculture began to disappear as a distinct cultural phenomenon in the middle to late 1970s, but its legacy lives on in Western society. Its waning days coincided with the rise of neo-paganism and Wicca, and many hippies pursued their love of nature within that framework. The desire of hippies to avoid processed food and large supermarket and restaurant chains helped the previously tiny health-food industry mushroom into an extensive international network of natural food stores, many of them run cooperatively, and health-oriented restaurants, generally small local proprietorships. The passion of the hippies for the preservation of the environment helped cultivate the ground for the international environmental movement found in all Western countries today. The countercultural sense of love for and enhancement of the human body has been an important feeder of the modern bodywork movement that ranges from reflexology to yoga to rolfing. The desire to get out of the cities and back to the land is embodied in the thousands, probably millions, who live in rural locations and, in thousands of cases, in communes, hundreds of which founded by the hippies survive today. It is fair to conclude that the countercultural love of nature contributed substantially to later natural interests and commitments in the larger society.

Timothy Miller

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See also: Back to the Land Movements; Bioregionalism; Bioregionalism and the North American Bioregional Congress; Entheogens; The Farm; New Age; New Religious Movements; Rainbow Family; Snyder, Gary; Tolstoy Farm; Western Esotericism.

Hogan, Linda (1947–)

Native American writer Linda Hogan, born in 1947 in Denver, Colorado, grew up in Oklahoma among a Chickasaw family with a vigorous storytelling tradition. The award-winning author of numerous poetry and shortstory collections, novels, essays, and most recently a memoir, *The Woman Who Watches Over the World* (2001), Hogan has also coedited three important anthologies of women's writing on spirituality and the natural world. Hogan considers herself primarily an environmental writer; her work emerges from a pan-Indian tradition of reverence for nature, an interest in physics and biology, years of volunteer work in wildlife preservation, and an ecofeminist orientation that links the exploitation of women, natives, animals, and the Earth.

Much of Hogan's work focuses on the dispossession of indigenous peoples that began with the European conquest of North America and persists in contemporary land and resource appropriation. Her first novel, *Mean Spirit* (1990), is set during the "Osage Reign of Terror," a series of murders of Osage people for their land and oil rights during the Oklahoma oil boom of the 1920s. Her second and third novels are also based on historical events – *Solar Storms* (1995) on Cree resistance to the Canadian government's James Bay hydro-electric project in the 1970s, and *Power* (1998) on the killing of an endangered Florida panther in the Everglades. Each is a female quest narrative in which an abused and alienated mixed-blood teenager undertakes a wilderness journey, remaking her identity as she negotiates new relationships with history, place, and a community resisting the devastating effects of "progress." Environmental justice, Hogan suggests, is predicated on a recovery of human embeddedness in nature that recognizes the sentience, agency, and voices of the natural world.

Hogan traces the current environmental crisis to a "broken covenant" between humans and world that originated in Christianity's dominion theology and Enlightenment values of abstraction, objectivism, and materialism. Language, Hogan believes, has the power to heal the splits between humans and nature, mind and body that are written on the bodies of women, natives and Earth, a power she realizes most effectively in *The Book of Medicines* (poetry 1993) and the lyrical prose of *Solar Storms* and *Dwellings* (essays 1995). Drawing parallels between indigenous cosmologies and postmodern science, between tribal oral narratives and the stories of Christianity, Hogan enfolds Western dualistic discourses within a reimagined indigenous worldview of interconnectedness and participation. Her recent work continues the project of rewriting the Bible begun in *Mean Spirit* by Osage healer Michael Horse, whose "Gospel According to Horse" corrects the Christian "mistake" that gives man dominion over nature; *Solar Storms* adds the "lost days of creation," which give humans their place in relationship to sto-

ries, the animals, and Earth. Hogan regrounds, feminizes, and “heterarchalizes” (i.e., levels hierarchical relationships in; see Murphy 1995) the stories of Western culture, writing into being a new spirituality that is inclusive, process-oriented and evolving.

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See also: Environmental Justice and Environmental Racism; Memoir and Nature Writing; Silko, Leslie Marmon.

Holidays

The holiday is a time of celebration that interrupts the normal business and legal cycle. It is mandated either by law or custom and usually commemorates or honors a particular event or person – whether hero, saint or deity. The holiday would appear to have grown out of the feasts originally connected with the observance of rites of passage marking the important transitions in the life of the individual: birth, naming, circumcision, adulthood, marriage, pregnancy, death and post-mortem commemoration. As a parallel to celebrating the significant stages of the person, the holiday more collectively became a means to recognize the turning points of the year: solstices, equinoxes, full and new moons. Consequently, the festival is a social institution that affirms the cycles of both men and women as well as that of nature. As a communal expression, it extends in addition to remembering fortuitous occasions for the community, religion and state and also the significant events in the lives of the gods.

As collective celebrations, holidays undoubtedly originate with commemorating the food supply and its production upon which the community depended: first-fruit ceremonies and harvest festivals. First-fruits were offered to whomever was deemed responsible for the crops, fish and/or animals: nature spirits, the gods, the priests as their representatives, the king or the ancestors. These offerings were intended to ensure the protection of produce in its maturation process. The harvest ceremonies commemorated the other end of the cycle: its completion and the death of vegetation. Symbolically, the suspension of fertility was represented in the withdrawal of the Earth Mother of nature or her child to the underworld. The harvest festival was both a time of concern for the fertility of the future and of rejoicing for the current bounty. Although festivals have continued to be augmented through additional occasions on which to commemorate an illustrious civic contributor or those memorials of national thanksgiving, disaster and armistice, at their base are the seasonal observations that honor the round of nature and humanity's intimate connection with it.

Nevertheless, with the increased urbanization of Western culture, the natural festival continues to undergo radical transformation. This process began already with the shift away from spontaneous pagan sensitivities that occurred in Judea and Christian Europe. For instance, Jewish harvest festivals suppressed their primitive fertility features and became occasions simply for jubilation. Pagan vernal and Yule celebrations were converted into the Christian holidays of Easter and Christmas – to which were added the feasts of Pentecost, Epiphany, the Ascension, All Souls as well as those of the saints and the Virgin. But as the Christian ascendancy already indicates a restriction of the sacred when compared to the notions of immanence held by its pagan predecessor,

contemporary times in the twentieth century and beyond are increasingly characterized by secularization. This decline of religion can be witnessed in the suspension of prohibition against business trade on Sundays and in the transference of commemorative celebrations to the closest Monday. This drive toward greater efficiency and non-interruption to the business/working week is a far cry from the original holiday impulse that in pagan times allowed one to become accustomed to interruptions of normal life “which broke up the calendar and honoured the gods” (Fox 1986: 67). As Fox recognizes from this, “Pagan cults created the divisions of civic time” (Fox 1986: 67). The merrymaking and feasting associated with these civic breaks of the holiday relate to the original idea of carnival as a timeoutside-time. The festival and carnival represent suspensions of the ordinary and/or intrusions of the special and the holy.

Consequently, the holiday provides an occasion for both the individual and community to step outside normal routine and view things from a different perspective. In the gaining of new insights and understandings, a person or collective experiences the possibility of regenerative renewal. For many people today in Western societies, with the diminishment of religious if not also municipal and national significance within the accepted calendar of established holidays, along with the increased sense of urban alienation, the framework of legal days of interruption become opportunities to visit national parks and reserves in order to commune with nature and regain a sense of the natural and holistic. Increasingly, as people today lose a sense of the religious associated with traditional holidays, these times of commemoration become instead windows through which the sanctity of nature is often rediscovered.

Michael York

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See also: Pagan Calendar.

Holism

Holism, coined in 1926 by the South African philosopher and statesman Jan Christiaan Smuts in his work *Holism and Evolution* (1926), is a modern term for an ancient concept (known under differing names as the whole, *to holon*, or totality) that refers to a whole, composed of many parts, or in its modern usage, to a greater whole than the individual parts of which it is composed. Modern concepts of holism then describe a comprehensive worldview that produces order and coherence not only among the sciences, but also in the realms of ecology, politics, aesthetics, theology, and morals. Indeed it provides meaning for the parts and the whole as they mutually and reciprocally influence and modify each other. Holism, in reaction to much contemporary scientific reductionism, not only stresses relationship, but in addition introduces concepts of history and teleology into the scientific worldview.

Holism was reconceptualized temporally through the influence of Christianity, in particular through the notion of the three historical ages advanced by the twelfth-century mystic Joachim de Fiore. His views prefigured later socialist and Marxist understandings of society. Antonio Gramsci held that socialism was an “integral vision of life” because it included not only the economy, but also a philosophy, a mysticism, and a morality. This vision was developed particularly by Western Marxists such as Ernst Bloch, who included nature as an essential element. While certainly anthropocentric, this was rooted in a cosmic vision of wholeness that went far beyond the Marxism of his time. His work *Principle of Hope* was to deeply influence German political theologians such as Baptist Metz and Jürgen Moltmann, who both linked nature to the Christian conception of hope and promise of eschatology that points to God’s guidance of the whole. Both these theologians were to influence early liberation theologians.

Smuts coined the term holism to express his philosophical doctrine according to which the universe is understood as an evolutionary process that produces wholes of ever-increasing complexity and self-awareness. The constituent parts are such that their totality is greater than the sum of their individual parts. Not only is the concept of holism conceived of as a process of synthesis, (chemical analogies are used to indicate the creation of more inclusive wholes), but it is also combined with a deep belief in personalism. For Smuts, personality was the highest level of development in an ever-developing universe. This included belief in the value of the individual, and in love as the force that brought humans together in associations. Holism then for Smuts, as for others in the Western philosophical tradition, represented a reaction against the mechanist conceptions of science and the accompanying individualistic fragmentation that marked much of the modern worldview. Against such reductionism, holism under-

stands all the elements of the human whole as continuous with each other, the world, and the whole universe. The part rather is a manifestation of a prior whole. The human personality is the center of selfdetermination and evolution comprises the achievement of higher forms of self-determination, resulting in an inner cosmos where the part is more related to the whole than to the constituent parts. Such spirituality in turn gives purpose to the whole. This almost mystical perception enables the individual to strive to the whole through the struggles and negations of existence.

Whether as a normative or as a descriptive term, holism or wholism or totality remained a critical concept in ecology, psychology, the natural sciences and theological movements in the late twentieth century. These are ably synthesized and presented in the recent works of Leonardo Boff which draw directly on Smuts' concept. Boff utilizes holism to present an ecological theology which offers an integrated vision of all reality. Such a paradigm stresses the interrelatedness and complexity of all being and is expressed through the metaphor of the Spirit. This paradigm avoids the errors of past Western thought and their accompanying cosmologies, namely: the Theocentric (understood as hierarchical and whose metaphor is the organic chain of being) and the modern or Anthro- pocentric (understood as objective and rational and whose metaphor is the machine). Holism thus, ever since Aristotle, has implied hierarchy and subordination and modern reconceptualizations have sought to address these facets, with varying degrees of success.

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See also: Boff, Leonardo; Christianity (7b) – Political Theology; Descartes, René; Dualist Heresies; Ecofascism; Haeckel, Ernst; Smuts, Jan Christiaan.

The Holocaust and the Environmental Crisis

On Holocaust memorials we often proclaim that we will “never forget.”

Yet when we discover the myriad radiation experiments done on unknowing subjects and communities in support of the Cold War, do we remember the medicalized torture of children in Auschwitz?

When our communities face pesticide-spraying airplanes, dioxin-spewing industrial chimneys, chemical food contaminants, and leaking landfills, do we remember the Zyklon B flowing into the gas chambers?

When we listen to our children cough, and wonder why so many have asthma, and continue a way of life that creates the air pollution that weakens their lungs, do we remember how well-meaning, passive bystanders helped make the Holocaust possible?

When we hear about the countless indigenous peoples with monstrous cancer rates because of uranium mining on their land, or victims of cultural genocide because their forest homes were turned into so many board feet of lumber, their villages dispossessed in the name of some mindless “development” scheme – do we remember how the world (most of the Allied governments, the Catholic Church, the spokespeople for great and noble causes) managed to ignore what was happening to the Jews?

When we see how the assault on the rainforest eliminates dozens of species of trees that have been evaluated as having potential for cancer treatment (even for the cancers that may afflict those who direct the assault), do we remember how the German government made transporting the Jews to the death camps their first priority, even when that priority interfered with their own military goals?

When we hear of a corporation lying to the public to protect a toxic chemical it sells, or paying off a legislator to get some environmental regulations weakened, do we remember how the Nazi elite got rich off Jewish slave labor?

When we see the full force of our own denial of the ecological dangers surrounding us, do we remember that it was thought impossible – especially by the victims! – that a modern, industrialized state could systematically slaughter millions of unarmed civilians?

Some years ago, Holocaust survivor Eli Wiesel, commenting on the potentially final ecological catastrophe of nuclear war, said: “It seems that the whole world has become Jewish” (in a television interview about the television movie *The Day After*).

Wiesel was not saying that a nuclear war would have been just like the Holocaust. And neither is the environmental crisis “just like it.” Despite the obvious differences,

however, the Holocaust can serve as a warning. This is so because there are several important analogies between the two events. Both the Holocaust and ecocide depend on highly developed technology and large, impersonal bureaucracies; and both reveal how irrational modernity can be. They disclose a profound inability to empathize with other people and other forms of life and express a vision of human relationships keyed to domination and exploitation. That is why the Holocaust and ecocide both call into question many of the basic premises of our civilization. Religious traditions, family structure, forms of personal identity, and distribution of economic and political power are all rendered suspects when humanity's way of life undermines its own survival.

While the Holocaust involved the centralized, strategically planned annihilation of a particular group, ecocide stems from myriad sources and is not anyone's self-proclaimed goal. It happens because corporations pursue profit, governments develop military power, ordinary citizens seek a "better lifestyle," and peasants deforest hillsides so they can cook dinner. From these varying strategies for profit, power, pleasure, or simple survival comes the ruin of the world. Yet what the Holocaust does reveal, and part of what connects the two events, is just how devastating modern states, bureaucracies, and technologies can be; and thus how carefully we "ordinary men and women" must examine our participation in them. It is precisely the "normal" and "ordinary" that may be the most terrible.

We also can learn in this context that while environmentalists' direst predictions must always be evaluated in detail, they cannot be dismissed out of hand due to a mistaken confidence that governments and corporations would not commit mass murder; or that intelligent citizens might not just sit back and let it all happen. After Auschwitz, such confidence makes little sense. In a way, the Holocaust "prepares" us to take in the fact of ecocide, teaching that there is virtually no limit to human folly, lust for power, and bureaucratic complicity in mass murder. The slaughter of six million Jews and five million other victims, carried out coldly and "rationally" by civil servants and professionals as well as politicians and soldiers by a "legitimate" government and with the sanction or passive acceptance of much of the rest of the world, is an omen for the environmental ruin we are creating now. This time, however, the catastrophe may spread far beyond the borders of any particular community, nation or region.

Also, both events depend on a complex structure of aggressors, victims, and bystanders. Thus both raise particularly complicated moral questions about good and evil, guilt and innocence, responsibility and forgiveness.

Finally, in both settings people facing overwhelming odds have fought back. The presence of this resistance can help change the way we think about both the Holocaust and the environmental crisis – transforming them from examples of unrelieved horror to settings in which, despite everything, people managed to resist.

As an example of the connections between the Holocaust and the environmental crisis, consider the history of Zyklon B.

Zyklon B was the gas used on Jews in the death camps. It came to the attention of a young SS officer as Auschwitz was starting to operate. Remembering how a Hamburg

pesticide firm had fumigated the insect-laden Polish army barracks that the SS had taken over, Hauptsturmführer Fritsch decided to try the pesticide on people. It worked well enough. The next move – from killing insects and rodents with a powerful chemical to killing millions of Jews the same way – was not very difficult. The Nazi leadership believed, after all, that Jews were vermin, and that the “health” of Germany required that the Jews be exterminated.

Ironically, while the Nazi machine has long been defeated, the use of chemical pesticides still threatens human beings; and the notion that “vermin” can simply be exterminated without any ill effects on those of us left alive has led to widespread poisoning of many life forms – including our own. Pesticides kill people even when they are aimed at bugs. In agricultural communities throughout the world, for instance, water supplies are tainted by pesticide run-offs. In some areas so much has accumulated in women’s bodies that breast milk is legally considered too dangerous to feed infants. And breast-fed babies have more than three times the amount of the toxic PCBs in their bloodstream as bottle-fed infants.

What is common, then, is the logic of extermination. The challenge is to learn from the Holocaust the consequences of using modern forms of power in the pursuit of extermination – whether of people, bugs, weeds or anything else.

Roger S. Gottlieb

See also: Fascism; Judaism.

Holy Land in Native North America

What is sacred? That is a question asked in courtrooms, administrative hearings, and city council meetings across the country. In the end there is no absence of irony: indeed, the oppressed must go to the Court or administrative hearing process of the oppressor to quantify exactly how sacred something is in North America. Nowhere is the discussion more passionate than the debate over the preservation and protection of sacred sites.

Chris Peters, a Pohik-la from northern California, discusses the distinction between native spiritual practices and Abrahamic religious traditions as having different paradigms. Native spiritual practices are “affirmationbased religions,” while Abrahamic religious systems are “commemorative religions,” in terms of a broad definition (author’s discussion with Peters, 8 June 1992). Native American religious and spiritual practices are often based on the reaffirmation of the relationship of the human to the creation. Native oral traditions often tell of the place of the “little brother” (i.e., the humans) in the larger creation, and consequently, our need to be continuously thankful for our part in creation; the gifts given to us by the Creator are always underscored. These teachings are reinforced in Midewiwin lodges, Sun Dance ceremonies, world renewal ceremonies and many others. Abrahamic religious teachings and events frequently commemorate a set of historic events: Easter, Christmas, Passover, Hannukah, as examples within two of the dominant religious practices in the world.

The difference in the paradigms of these spiritual practices has, over time, become a source of great conflict in the Americas. The history of religious colonialism, including the genocide perpetrated by the Catholic Church (particularly in Latin America), is a wound from which native communities have not yet healed. And, the notion that other non-Christian spiritual practices could have validity was entirely ignored for centuries. Consequently, while there may be some “sacred sites” in Abrahamic religious traditions, for instance the “holy land” in modern-day Israel/Palestine, the existence of other “holy lands” has been denied.

There is a place on the shore of Lake Superior, or Gichi Gummi, where the Giant laid down to sleep. There is a place in Zuni’s alpine prairie, where the Salt Woman moved, and hoped to rest. There is a place in the heart of Lakota territory where the people go to vision quest and remember the children who ascended from there to the sky and became the Pleiades. There is a place known as the Falls of a Woman’s Hair, which is the epicenter of a salmon culture. And there is a mountain upon which the

Anishinabeg rested during their migration, and looked back to find the place they were instructed to go by their prophets.

A “holy land” cannot be exclusive in a multicultural and multispiritual society; yet indeed it has been treated as such. Papal Law became the foundation of colonialism, the Church a handmaiden to military, economic, and spiritual genocide and domination. In their time, each subsequent pope would pass new papal bulls, all underscoring the legitimacy of Christian manifest destiny. Those papal bulls underscored the supremacy of Christendom, and ostensibly authorized the practices of colonialism. All of that carried over to the Americas, with perhaps some of the most virulent and disgraceful manifestations of dominance beginning the process of colonization in the Americas.

Indeed, xenophobia and a deep fear of native spiritual practices became the centerpiece of early reservation policy as native religious expression was outlawed in North America. To practice your traditional form of worship was tantamount to a death sentence for many peoples. The Wounded Knee Massacre of 1890 occurred in large part because of the fear of the Ghost Dance Religion which had spread into the Lakota nation, and hundreds of Lakota, and other native spiritual leaders, were sent to the Hiawatha Asylum for Insane Indians in present-day Canton, South Dakota, just for their spiritual beliefs. So it was by necessity that native spiritual practitioners went deep into the woods, or into the heartland of their territory, to keep up their traditions, always knowing that their job was to keep alive their instructions, and hence, their way of life.

In 1978, some two hundred years after the American constitution guaranteed freedom of religion for most Americans, Congress passed the American Indian Religious Freedom Act and President Carter signed it into law. Although the act contains worthy language which seemed to reflect the founders’ concepts of religious liberty, it had few teeth. The act states:

It shall be the policy of the United States to protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the traditional religions of the American Indian, Eskimo, Aleut and native Hawaiians, including but not limited to access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites...

While the law insured that native people could hold many of their ceremonies (although Native American Church ceremonies remained challenged), it did not insure the protection of the places where many of these ceremonial practices would take place, or the protection of that which is needed for the ceremonies, such as salt from the sacred Salt Mother for Zuni ceremonies, salmon from the Columbia River for Columbia River Tribes, or the sanctity of these places from desecration whether by rock climbers or bulldozers. The Religious Freedom Act was underscored with President Clinton’s 1996 Executive Order 13007, for preservation of sacred sites:

In managing federal lands, each executive branch agency with statutory or administrative responsibility for the management of Federal lands shall . . . avoid adversely affecting the physical integrity of such sacred sites...

Those protections were applied to lands held by the federal government, not by private interests, although many sacred sites advocates have urged compliance by other landholders to the spirit and intent of the law. The administration of George H.W. Bush, however, has ignored that Executive Order.

Dr. Henrietta Mann is a Northern Cheyenne woman and chair of the Native American Studies Department at Montana State University. She reiterates the significance of the natural world to native spiritual teaching,

Over the time we have been here, we have built cultural ways on and about this land. We have our own respected versions of how we came to be. These origin stories – that we emerged or fell from the sky or were brought forth – connect us to this land and establish our realities, our belief systems. We have spiritual responsibilities to renew the Earth and we do this throughout Ceremonies so that our Mother, the Earth, can continue to support us. Mutuality and respect are part of our tradition – give and take. Somewhere along the way, I hope people will learn that you can't just take, that you have to give back to the land (Taliman 2002).

So, we have a problem of two separate spiritual paradigms, and one dominant culture. Make that a dominant culture with an immense appetite for natural resources. The exponential growth of the U.S. economy for two centuries was largely related to the expropriation of Native American lands and resources, as colonialism would be replaced with neo-colonialism, but each step of the way requiring more land to feed the growing industrial infrastructure. The U.S. consumes one-third of the world's resources. To create that level of consumption a significant level of production had to occur, much of it on and from native people's lands. By the 1930s, the native land base had been reduced to 52 million acres, or about 4 percent of our original land base. Indeed, we saw some 90 million acres taken by the federal government from native people just from 1889–1934, and within all of those takings, more than 75 percent of our sacred sites were removed from our care and jurisdiction.

Native people must now request permission, quite often to use their own sacred sites, and, more often than not, find that those sacred sites are in danger of being obliterated, or just simply desecrated.

To complicate the challenge of attempting to maintain your spiritual practice in a new millennium is the problem of the destruction of that which you need for your ceremonial practice. The destruction of 50 million buffalo in the Great Plains by the beginning of the twentieth century caused immense hardship for traditional spiritual practices of the region, especially since the Pte Oyate, the buffalo nation, are the older brothers of the Lakota, and many other indigenous cultures of the region. Similarly, the decimation of the salmon on the Columbia, Klamath and other rivers in the north-west by huge dam projects, overfishing, water diversion, and logging has caused great emotional, social and spiritual devastation to the Yakama, Wasco, Umatilla, Nez Perce and many other peoples of the region. New efforts to domesticate, patent and genetically modify wild rice similarly concern the Anishinaabeg people of the Great Lakes region.

In terms of struggles over sacred sites in the United States, there are many which are ongoing, although some have been resolved, favorably, at least for now.

The Valley of the Chiefs in Montana was almost destroyed by an oil drilling project, but was protected, at the last minute, by the concerted efforts and organizing of many. Containing one of the largest collections of sacred pictographs on the continent, it contains a refuge for those involved in many ceremonies. Threatened by oil drilling, a campaign of opposition by the Crow, Comanche, Lakota, Blackfeet, Northern Cheyenne and a host of environmental groups led to the donation of oil leases to the National Trust for Historic Preservation, after which the Bureau of Land Management followed suit, withdrawing an additional 4200 acres in the area from the mineral leasing process. During the battle, the coalition against the mining was able to leverage support of U.S. congressional representative Nick Rahall of West Virginia, who introduced legislation to protect the Valley of the Chiefs, terming the proposal to drill something like “erecting an oil derrick in the Sistine Chapel.”

Medicine Lake rests high in the northern California mountains and is held sacred by the Pit River, Modoc, Shasta, Karuk and Wintu people. The Pit River people recall that after creating the Earth, the Creator and his son bathed in the waters of the lake. And then, the Creator imparted his spirit to Medicine Lake. That water is used for ceremonies, and the entire area is recognized as a place to train medicine people from the region. In 1999 a coalition of tribes successfully petitioned the National Register of Historic Places to recognize the Medicine Lake Caldera as a Traditional Cultural District. The Calpine Corporation proposed a geothermal project in the area, with the hopes of harnessing enough steam power to run as many as six power plants. Court and administrative battles went on until California’s energy “crisis” created a political climate making it possible for the Bush Administration to site a

\$120 million, 48 megawatt geothermal power plant at Telephone Flat, one mile from Medicine Lake.

Zuni Salt Lake rests peacefully within the domain of the Great Salt Mother. It is here, among purple mesas, lush grasses, and tenacious trees, that Zuni Salt Lake rises majestically in the center of a gentle sanctuary. She is called *Ma;Oyattsik’i* by the people of Zuni Pueblo, and stories are remembered of her movement to her present resting place, across the land. Today, great pilgrimages are taken by the men, not only of Zuni, but of neighboring Acoma Pueblo, *Dine Bii Kaya*, or Navajo land, Apache, and other neighboring peoples to collect salt for their ceremonial life, indeed, their lifeblood. That is perhaps why *A:shiwí A:wan Ma’k’yay’a dap an’ullapna Dek’ohannan Dehyakya Dehwanne* exists, a 185,000-acre sanctuary, from time immemorial.

The Salt River Project, however, the nation’s third largest public utility, is running out of coal at the McKinley mine near Gallup, New Mexico. The company has its sights on 80 million tons of coal just 11 miles from the lake, with the proposed 8000 acre Fence Lake Mine, and the state is supporting the proposed mining. Despite protests by native nations and the environmental community, it appears the mining will be permitted.

Black Mesa is located in the heartland of the Colorado Plateau, and is the region's largest and most productive watershed. It is also a coal body, representing at its prime over 22 billion tons of coal. But the largest community in the area, Tuba City, receives only a scant seven inches of rainfall annually. The Navajo Aquifer is the sole source of dependable drinking water for the region. Hence, the combination of massive mining development, combined with the use of water from the aquifer, has been a huge blow to the ecology of the region. For the past 35 years, 1.3 billion gallons of pristine water annually has been sucked from the Navajo Aquifer, just to move coal. Peabody, with its affiliate, the Black Mesa Pipeline Company, ship approximately 5 million tons of coal in a pulverized powder-like consistency pushed by up to 4500 gallons of water a minute some 273 miles west to the Mohave Generating Station in Nevada.

The irony of waste is not lost on the Hopi. Vernon Masayesva is a former Chairman of the Hopi tribe and is now executive director of Black Mesa Trust, a non-profit organization focused on trying to prevent the destruction of the Black Mesa aquifer.

Masyeseva explains that one billion gallons of the ancient, sacred water has been fouled beyond reclamation or evaporates each year in Nevada's desert skies. Hopi could live on this water for 100 years. Thirty years after the mining began, water levels in some Black Mesa wells have dropped more than 100 feet, and many of the springs are dry. Hopis contend that by the year 2011, the dewatering will leave the Hopi village of Moenkopi without water.

Bear Butte: Mato Paha. There is nothing quite like Bear Butte, as it looms high on the horizon in the heart of Paha Sapa, the Black Hills, the heartland of the Great Plains, and indeed the Lakota universe. A new proposal forwarded by the city of Sturgis, South Dakota (home of the Black Hills Classic, Sturgis Motorcycle race) has plans to build a sports complex and shooting range four miles from Bear Butte, which will lead to 10,000 rounds per day of gunshots from rifles and handguns. The range will negatively impact the serenity sought by the native people who go to Bear Butte to pray and conduct vision quests. The region's tribes were never consulted about the project and are now fighting its development in an effort to protect Mato Paha. *Spirit Mountain.* When the Ojibwe migrated from eastern North America to the west, each of the resting places provided a time for deliberation. It is said that we came to Spirit Mountain, and from there were able to see our final resting place: *Moningwanakwaning*, now called Madeline Island. The Anishinaabeg journeyed to this Mountain. Then, we were able to understand our instructions and view our destiny. The Anishinaabeg are not the Jews. We did not have a Moses and the tablets of stone. Yet, in Christian analogies, it is perhaps possible that Spirit Mountain would be for us akin to Mt. Sinai. For years, the city of Duluth has grown in the shadow of Spirit Mountain, but in the past few years, the City Council has taken an interest in supporting development of a worldclass golf course on Spirit Mountain. Almost every Ojibwe tribal government in the region, and hundreds of individuals, have opposed the project, and during the summer of 2002, Ojibwe traditional spiritual practitioners came to the Duluth City Council meetings to present their concerns about the issue. They were told by one councilman that the

Ojibwe migration story was a fabrication, he having read that the Ojibwe first saw this land, and the Spirit Mountain, when brought to the region on boats by explorers. Others asked the Ojibwe to identify which parts of the Mountain were sacred so that mitigation might occur. Such is the problem of quantifying the sacred and presenting a native worldview.

Dzil Nchaa sian or Mt. Graham rises 10,700 feet up from its base in Arizona's Sonoran Desert, a home to clouds at the top, and streams and flowing hot springs at its base. It is an oasis in the midst of a desert. It is also one of the largest mountains in the state, a part of the Pinaleño Range. Consequentially, in part because of both location and height, Mt. Graham possesses more life zones and vegetative communities than any other solitary mountain in North America. Within those vegetative zones, live three species of mammals, three species of flowering plants, three species of snails, a mollusk and many arthropods that have never been found anywhere else in the world.

Mt. Graham is also central to Apache spiritual practices, the source of many of their medicines, and the home of deities. It is also a sacred mountain for other native groups in the region. In a battle spanning more than a decade and despite opposition by the Apaches and dozens of national and international environmental groups, in 2004 three telescopes stood on Mt. Graham. Interestingly, one was built by the Vatican Observatory to listen in on the heavens and search for extraterrestrial intelligence, in part motivated by the quest to evangelize any who might be found. As the Jesuit director of the observatory told a reporter, they intended to ask extraterrestrial life forms if they knew "a Jesus who has redeemed" them (in Taylor 1995: 126). The major push behind the projects, however, still comes from the University of Arizona's Department of Astronomy. The U.S. Congress consistently supported the telescopes, overriding existing laws and circumventing injunctions and lawsuits, approving even five more telescopes, all of which are considered desecrating acts by most Indians and environmentalists from the region and others familiar with the case.

Petroglyph National Monument. Between 2000 and 500 years ago, the ancestors carved their messages into the lava formation just west of Albuquerque. Now known as Petroglyph National Monument, its historic value was recognized when it was named a national monument in 1990. But today both greed and the growth of the city of Albuquerque spurn the ancestors. A six-lane highway connects Albuquerque to its own sprawl and threatens to push through the center of the ancient lava chalkboard. All of New Mexico's native nations, including the 19 Pueblos, have opposed it, and a tenacious group known as the Sage Alliance continues its work to stop the proposal.

Coldwater Springs is a spring of water which for centuries has been known for its healing properties, and is used by many for ceremonies in the region. The 10,000-year-old limestone bedrock spring flows down the bluff to the Mississippi River and is estimated to have between 100,000 to 144,000 gallons of water per day going by it. It is said that it is fed from *Taku Wakan Tipi* (Something Sacred Dwells Here), a nearby hill, which was bulldozed to build the Minneapolis/St. Paul International Airport. The spring has remained and prevailed through the development of the south

Minneapolis region, but beginning in the early 1990s, proposals for highway expansion, in particular Highway 55, threatened to intersect the spring. A bitter struggle ensued between native people, environmentalists and the state Department of Transportation. Eventually, much of the highway was built, but some provisions were made to protect the spring. But afterwards flows at the spring vacillated between 55 and 115 gallons per minute (79,000–166,000 gallons per day) and new, further “compromise” proposals are being viewed with skepticism by the Mendota Dakota, Anishinaabeg and other people of the region.

The White Man’s Law and the Sacred

There remain many more sacred site issues in the United States, but the underlying question in all such controversies is “How sacred is it?” In the fall of 2002, the National Congress of American Indians came together with traditional spiritual people and sacred sites advocates to discuss some of the challenges within the context of the battle to protect sacred sites. The National Congress of American Indians (NCAI) adopted by consensus a resolution declaring “Zero Tolerance for desecration, damage, or destruction of sacred places,” adding, among other things, that there is a recognition that sacred places are to be defined only as places that are sacred to practitioners of Native traditional religions and that sacred places include land (surface and sub-surface), water and air, burial grounds, massacre sites, and battlefields, and spiritual commemoration, ceremonial, gathering and worship areas.

NCAI also joined with other native people in pointing out some of the most challenging aspects of the sacred site struggle, calling them objectionable elements, which include: definition of the sacred, prioritizing sacred places, centrality or degree of significance requirements, discrimination against non-federally recognized tribes with traditional sacred places to protect. So-called “mitigation” of impacts to sacred places was also criticized, as well as “reliance on previously published or recorded coerced or incomplete information regarding sacred places.”

In the summer of 2002, the California legislature passed a bill which would have protected sacred sites within the state, and increased dramatically the consultation with native nations with regards to many development projects at such sites. Governor Gray Davis did not sign the bill into law. Proposals for national sacred site legislation will continue to be advanced by Native Americans, environmentalists, and human rights activists until these places are protected and free religious practice fully ensured.

More than two hundred years after the founding of the United States it is still hard to be a native person here. As spiritual challenges continue, native people will continue, as we have for centuries, and in our prayers and songs, given our understanding of the sacredness of the land, we will always be thankful.

Winona LaDuke

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See also: Anishnabeg Culture; Black Mesa; Deloria, Vine; Devils Tower, *Mato Tipi*, or Bears Lodge; G-O Road; Indigenous Environmental Network; LaDuke, Winona; Law, Religion, and Native American Lands; Manifest Destiny; Sacred and the Modern World, The; Sacred Geography in Native North America; Wise Use Movement.

Several North American Native American religious traditions, including the Oto, Zuni, Navajo, Mojave, and Papago nations, for example, have embraced the "twospirited" person (often referred to in earlier writings as the "berdache"), a sacred man or woman who mixes gender categories and may participate in same-sex relations. Typically two-spirit persons have an honored role in Native American societies as shamans, healers, or wise persons. Similar attitudes and homosexual and transgender roles are found in many indigenous cultures across the globe, such as the Sambia and Bimin-Kuskusmin peoples in New Guinea, the Araucanians or Mapuche people of Chile, and the Inuit and Yup'ik peoples of the Arctic.

In each of these cultural complexes, nature in general, and animals in particular, are central to the group's spiritual and religious beliefs and myths; and beliefs about sexual and gender variability in animals often parallel and symbolize the recognition and valuation of homosexuality and transgender among humans. In North America, for example, associations between left-handed bears and twospiritedness are found among the Nootka, Kutenai, and Winnebago peoples. As Bagemihl observes, "Bears are thought to combine elements of both masculinity and femininity, and they are also seen as mediators between the sexes and between humans and animals" (1999: 217). Animal associations with transgender and homosexuality may also be linked to personal vision quests and twospiritedness, such as dreaming of a bison among the

various Sioux nations. In other cultures, the trickstertransformer figure, such as a coyote or fox, may symbolize human transgender and homosexuality.

The two-spirited traditions in North and South American indigenous cultures were heavily repressed by European and American colonizers and Christian missionaries, who categorized these complex cultural phenomena as sodomy and barbarism. In Indian communities that largely assimilated into Euro-American culture, two-spirited persons either went underground or disappeared, or risked increasing amounts of scorn from within their community. With the reaffirmation and reclaiming of traditional Native American ways since the 1960s, in the United States has come renewed interest in two-spiritedness, and two-spirited persons increasingly are active within and across indigenous nations today, including among the Navajo, Lakota, and Zuni peoples.

While less is known about African sexuality in general, similar patterns of transgender and transgenerational homosexual relations are found among some of the indigenous religions of Africa. Male adolescent homosexual behavior is common among groups such as the

!Kung of southern Africa and the Naman of the Namib desert, though such same-sex behavior is expected to cease with adulthood and heterosexual marriage. In cultures with polygynous households, reciprocal relationships among women that may or may not have a sexual component are common, as among the Azande of southern Sudan, the Twsana of southern Africa, and the Nupe of Nigeria. In some African societies, such as the Zulu, and the Ambo of Angola, males who receive a spiritual calling may assume an intermediate gender role similar to the two-spirit person in Native American societies. As in the Americas, European colonialism and Christian missionary activity have in many cases repressed or obscured indigenous African attitudes and practices toward homosexuality and transgender.

In contrast to indigenous religions, the scriptures and dominant teachings of the three Western monotheistic religions of Judaism, Christianity, and Islam have been largely perceived as hostile toward homosexuality. Jewish teaching regarding homosexuality is rooted in the *halakhah*, traditional Jewish law developed from the Torah and Talmud, which proscribes all same-sex sexual behavior. Jewish moral teaching on sexuality focuses on sexual acts, rather than sexuality, and limits licit sexual acts to those within heterosexual marriage. The sexual relationship plays an important and positive role within marriage, both for procreation and for building intimacy between husband and wife. Male homosexual behavior is specifically proscribed in Leviticus 18:22 (“Do not lie with a male as one lies with a woman; it is an abomination”) and 20:13 (“If a man lies with a male as one lies with a woman, the two of them have done an abhorrent thing; they shall be put to death”), part of Israel’s Holiness Code that required Israel to emulate God’s holiness in refraining from the practices of their Egyptian and Canaanite neighbors. Among these practices were a series of sexual sins that the Israelites must not practice, including incest, adultery, bestiality, and male homosexuality (the Torah is silent on female same-sex acts).

Contemporary Jewish attitudes toward homosexuality largely divide along how the authority of Torah and *halakhah* are interpreted. Within the North American Jewish community, Orthodox Judaism continues to proscribe all acceptance of homosexuality. Conservative Judaism expresses concern for gay and lesbian Jews and individuals, and supports civil rights for homosexuals while continuing to maintain heterosexuality as the norm and prohibiting openly homosexual rabbis and cantors. Reform and Reconstructionist Judaism largely accept gay and lesbian Jews, including as rabbis and cantors, and several gay and lesbian synagogues and Jewish associations have formed in recent years.

Integrating its Hebrew roots with Greek, Latin and pagan influences, Christianity has shaped much of the moral and theological debates about homosexuality in Western society and religion. These arguments typically draw on either the Christian biblical-theological tradition or the Western philosophical tradition, or both, to argue that only heterosexual relationships (usually within monogamous marriage) can be accepted as moral, natural, and within God's plan for humankind. Contrary to popular belief that Christianity has always been hostile to homosexuality, however, historian John Boswell has documented a wide spectrum of attitudes and practices within the Christian churches and cultures prior to modern times. These include a long tradition of Christian liturgies celebrating same-sex unions in pre-modern Europe – in many cases long before similar heterosexual marriage ceremonies were practiced within the Christian Church (marriage within the Christian Roman Empire was largely a civil practice outside the Church through at least the first ten centuries).

Roman Catholicism, the oldest of the Western branches of Christianity, combines biblical interpretation with natural law to declare homosexuality unnatural and all homosexual behavior sinful. The primary New Testament text supporting this position is Paul's letter to the Romans where he writes about the Gentiles and their idolatrous behavior:

For this reason God gave them up to dishonorable passions. Their women exchanged natural relations for unnatural, and the men likewise gave up natural relations with women and were consumed with passion for one another, men committing shameless acts with men and receiving in their own persons the due penalty for their error (Rom. 1:26–27).

Catholic moral theology has followed Aquinas' emphasis on natural law and declared all non-procreative sexual acts unnatural, including bestiality, homosexuality, and masturbation. With changing views of science that now largely see homosexuality as a natural expression of sexual diversity in human cultures, some Catholic theologians develop theological arguments based on natural law and contemporary science to argue for the full inclusion of gay and lesbian persons within Church and society.

While today the Roman Catholic, Orthodox, and Conservative Protestant churches largely continue to reject all forms of homosexuality, mainline Protestantism has been engulfed with debates on such issues as ordination of homosexuals and the blessing of same-sex unions. Some denominations, including the United Church of Christ and

Unitarian-Universalism, have moved to a theological/ethical stance of full inclusion of their lesbian, gay, bisexual, and transgendered members and advocate for their full inclusion in society. These Christian communities ordain openly gay and lesbian persons and often recognize and celebrate same-sex unions. Other mainline Protestant denominations such as Presbyterian, Lutheran, and Methodist, advocate for civil rights for homosexuals while remaining deeply divided over issues of ordination and same-sex marriage within their denominations.

Islam is perhaps the most consistent of the three Abrahamic traditions in its rejection and condemnation of homosexuality. Its primary source, the Qur'an, is understood to have been revealed directly to Muhammad and thus to be uncontested, and it is explicit in its condemnation of homosexuality as outside Allah's will for humanity. Drawing on the biblical tradition of Lot and the destruction of the cities of Sodom and Gomorrah, homosexuals are termed *qaum Lut*, Lot's people. About them the Qur'an records "How can you lust for males, of all creatures in the world, and leave those whom God has created you as your mates. You are really going beyond all limits" (26:165–166). The Prophet Muhammad is reported to have said in his "Farewell Sermon,"

Whoever has intercourse with a woman and penetrates her rectum, or with a man, or with a boy, will appear on the Last Day stinking worse than a corpse; people will find him unbearable until he enters hell fire, and God will cancel all his good deeds.

Islam considers itself to be the true religion of nature that all humans should adhere to, and homosexuality therefore is a violation of the laws of nature. Islam puts a strong emphasis on heterosexual marriage, and abhors celibacy. The *shari'a* or Islamic law considers homosexuality not only a sin, but also a crime. But the standard of evidence required to be convicted of the crime of homosexuality is extremely high – as long as one is not public in one's homosexual behavior or identity, there may be a great deal of tolerance for what goes on in private in many Islamic societies. Hence, as long as homosexual persons are heterosexually married and discrete about their homosexual identity and behavior, most find a degree of tolerance within Islam.

Comparatively less scholarly work has been done on the question of homosexuality in Eastern religions, and particularly of lesbianism, but the broad pattern seems to be tolerance of varieties of human sexual expression. Hinduism scholar Arvind Sharma has surveyed Hindu texts and the scholarly literature and concluded that classical Hinduism saw homosexuality as a matter of marginal concern. Because of subsequent and often negative contact with outside groups, medieval and modern Hinduism has tended to associate homosexuality with outsiders and in a largely negative light. With the rise of modern Hindu nationalism, homosexuality typically has been associated with the British and Muslim dominant minorities to be overcome, and hence a negative facet of Hindu life.

Buddhism scholar Jose Ignacio Cabezon argues that despite the historical and geographic diversity of Buddhism, on the whole Buddhism has been mostly neutral on the question of homosexuality. The principal question in Buddhism has been one of sexuality versus celibacy, rather than heterosexuality versus homosexuality; where ho-

homosexuality has been condemned it has usually been for involving sexual desire rather than for involving partners of the same sex. In contrast to Buddhist doctrine, however, the cultures within which Buddhism has flourished have varied widely in their attitudes toward homosexuality, and Buddhist tradition has tended to reflect the particular socio-cultural norms where it is found. Generally tolerant attitudes toward homosexual activity interspersed with occasional periods of sexual repression seem to characterize the histories of both China and Japan. Both cultures record long histories of homosexual behavior and same-sex love. In China, primary reservations about homosexuality stemmed largely from Confucianism's concern for family and social stability and continuity, and with Daoism's concern for balancing yin and yang energies in sexual intercourse. Japanese culture has been far more embracing of the diversity of human sexual expression, including same-sex behavior. Long associated with the warrior samurai class, male homosexuality was termed "Love in the Satsuma way," a reference to the locale where military training went together with homosexual practices. Shintoism's lifeaffirming worldview and lack of a detailed moral code, together with a cultural focus more on pollution (coming from contact with a woman) rather than sin, seem to lie behind Japan's generally liberal outlook on sexuality.

Finally, nature plays an important role in the spirituality and religious practices of many contemporary lesbian, gay, bisexual and transgendered persons in modern society. Reclaiming the body and the erotic within nature is seen as central to these emerging traditions, as it is to many radical environmentalists who argue that human cultures will never reharmonize life on Earth until we overturn repressive and misguided restrictions on eros. Within both communities, embracing homosexuality, bisexuality, androgyny and transgender are seen as key to a future that is both ecologically sustainable and socially just. Within gay and lesbian Earth-based spiritualities, sex itself is experienced as sacramental, connecting oneself to nature, others, and a sense of the divine. Among gay men, the Radical Faeries movement began in the 1970s as an effort to reclaim gay identity from both the cultural mainstream and the mainstream gay movement. Closely identified with nature, Radical Faeries reclaim sexuality and ecstasy as central to spirituality and gay identity, while critiquing the often hypermasculine gender identity of the mainstream gay male "clone" culture. Similarly many lesbian communities rooted in nature have embraced Wicca or other Earth-based and ecofeminist spiritualities as a way to ground their lesbian identities in the Earth. These radical communities in turn have influenced many lesbian, gay, bisexual and transgendered persons who continue within more traditional and mainstream religious communities, leading to the possibility of the transformation of these traditions to be more embracing of nature and the diversity of the Earth's inhabitants as central to their religious identities.

Daniel T. Spencer

Breakout Box: Homosexuality

Attitudes toward and responses to homosexuality and same-sex behavior have varied widely among the world's religions, from fully accepted and embraced, to completely prohibited and violently repressed. At stake in these differences are widely varying attitudes toward nature, what counts as "natural" and what difference this makes for religious claims and practices, and how diverse sexual behaviors and identities across human cultures and animal species are valued or disvalued.

Indigenous religions often have embraced more diversity in sexual identities and gender roles as an integral and honored part of the natural diversity within nature than the world's great religious traditions, particularly the monotheistic religions of the West. Robert Baum observes,

In contrast to the patriarchal or asexual image of the godhead in Western religions and the nontheistic focus of most schools of Buddhism, traditional religions of the Americas . . . often see spiritual power in a sexual dimension, with different types of spiritual power associated with each biological sex. In many instances spiritual beings and their religious specialists in the human community are seen as androgynous, or of an intermediate gender, and thereby provide an importance for a diversity of sexual orientations that remain peripheral to many other religious systems (Swidler 1993: 2-3).

Breakout Box: SP Homosexuality and Science

Attitudes toward human homosexuality in religions and cultures often rest on assumptions about nature, particularly homosexuality in nonhuman nature. Increasingly, scientific studies of sexuality are influencing religious and cultural debates about homosexuality, even as lesbian, gay, bisexual and transgendered persons reclaim and reshape religious practices and spiritualities. Recent studies of animal behavior document the widespread presence of same-sex behaviors throughout the nonhuman world. Biologist Bruce Bagemihl notes that homosexual behavior has been observed in more than 450 kinds of animals in every major geographic region and every major animal group across the globe. According to Bagemihl: "Animal homosexuality itself is a rich and multifaceted phenomenon that is at least as complex and varied as heterosexuality" (1999: 42).

Studies of sexual behaviors in nonhuman primates, our closest animal relatives, suggest homosexual primate behaviors go back at least 25 million years to the Oligocene epoch. This suggests that homosexuality is part of both the human evolutionary *and* cultural heritage as primates. One distinctive difference between human and nonhuman responses is an almost complete lack of hostility on the part of animals toward same-sex and transgender behaviors in other animals; animals exhibiting these behaviors almost without exception are fully integrated into their respective animal groups. In

contrast, human cultures and societies vary enormously across time and geography in their attitudes toward homosexual behaviors and identities, from fully accepting to completely rejecting to severely repressing, even with violence.

Arguments about the morality of homosexuality have long looked to animal behavior to support claims on both sides of the debate. Ethicists and others have noted the flaws in the logic of these arguments. Many activities that most human groups reject as immoral exist as “natural” behaviors throughout the animal world. At the same time we use our biological facilities in many ways “unintended” by nature without ascribing a moral value to such actions, such as using the tongue for kissing or blowing bubbles. Moral arguments about homosexuality will have to be made on other grounds.

More recently some have looked to scientific studies of human sexuality to answer questions about the etiology of homosexuality in hopes of deciding debates about the morality of homosexuality. Since at least the mid-nineteenth century, most study of human sexuality in general, and homosexuality in particular, took place within the field of psychology, where sexuality was understood primarily as a mental phenomenon, largely influenced by social, cultural, and environmental factors. Debates raged about whether homosexuality (and heterosexuality) was primarily a result of nature (a biological predisposition) or nurture (caused by environmental influences). With the recent rise of neurobiology and especially molecular genetics and brain studies, this is increasingly seen by researchers as a false and ultimately unhelpful dichotomy: genetic, hormonal, and environmental factors all ultimately are expressed in the body where they influence a person’s sexuality through interactions of genes and brain chemistry.

After several decades of neurobiological and genetic studies, the factors that determine a person’s sexual orientation remain largely unknown, yet it does seem clear that sexuality is a result of a complex interplay of genetic, prenatal, and environmental factors in each individual. The diversity of sexual behaviors seen in the animal world are reflected in the human sphere where they are complemented by a rich diversity of sexual and gender identities. Religious and cultural traditions that proscribe homosexuality based on antiquated understandings of nature and what is “natural” increasingly must confront the results of many different branches of science that show homosexuality to be a cross-species, crosscultural expression of sexual diversity across the animal and human worlds.

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See also: Dirt; Sexuality and Ecospirituality; Sexuality and Green Consciousness.

Hopi

– See Black Mesa; Greenpeace; Hopi–Navajo Land Dispute; Hopiland to the Rainforest Action Network.

Hopi–Navajo Land Dispute

“Welcome to Jerusalem,” opened the Hopi Tribal attorney. “. . . We have a very serious problem where both religions are coming up against one another . . .” The religions: those of the Hopi and Navajo peoples. The occasion: a hearing before the Ninth Circuit Court of Appeals in San Francisco. The context: *Jenny Manybeads et al v. United States of America et al*, one of many lawsuits filed in the near forty-year litigious history of the Hopi–Navajo land dispute.

The “dispute” concerns arid desert land, sparsely forested with pinyon and juniper, supporting grasses, forbs and shrubs such as greasewood, winterfat, and rabbit brush. It provides poor but sustainable grazing land for cattle, sheep and goats. Occasional pockets of trapped ground water and flood plains provide farming opportunities in desert-adapted corn, beans, squash, melons and fruit trees. Willow, tamarisk and Russian olive line streambeds, dry except in the summer monsoon season when they carry flash floods. Huge deposits of coal, gas, oil, and uranium underlie the entire region. The Hopi and Navajo Tribal governments share ownership of the minerals. But legal jurisdiction over the surface area and rights to use its sparse resources constitute the subject of contested histories and competing definitions of community, personhood, and cosmology.

History

Created in 1868, the Navajo Reservation has its western boundary in Hopi country. The Hopi Reservation was not created until 1882. After 1884, the government expanded the boundaries of the Navajo reservation so that by 1934 the 25,000 square-mile Navajos surrounded Hopi land on four sides. Navajos’ land base had increased, but not enough. Navajos, who numbered close to 200,000 by 1970, moved onto the Hopi Reservation, competing with the 10,000 Hopis for grazing land.

In implementing stock reduction to reverse erosion, the Government divided the Hopi and Navajo reservations into twenty grazing districts and assigned all but three of them completely to Navajos. Although in theory the “Hopi Reservation” comprised 2.45 million acres, Hopi jurisdiction was limited to one district, covering only 624,064 acres; Navajos were granted permits to live and graze their livestock everywhere else.

In 1961, a federal court ruled that each Tribe had “joint, equal, and undivided” possession to the surface as well as the subsurface (the minerals) property of the 1882 Reservation outside District Six, 1,822,000 acres. This area subsequently became

known as the Joint Use Area, or JUA. But in fact, Navajos continued to exercise exclusive use and control of the JUA for all practical purposes. Hopis lodged protests.

In 1977, a mediator appointed by the U.S. Government divided the “JUA” into two areas: the Hopi area – 905,000 acres – Hopi Partitioned Lands, or HPL; and the 922,000 Navajo acres – NPL, Navajo Partitioned Lands. Hopis and Navajos on the “wrong” side of the partition line had to move.

Life and Land

Hopis live in nuclear family households and in thirteen compact settlements. At birth, each child’s umbilical cord should be placed in the mud-and-brush ceiling. Few houses have been built with these traditional ceilings since the 1930s. Within a village, a larger group of people, a matrilineal clan, collectively own houses and use rights to farm land. A clan or family’s farming and grazing land are located outside the village, often as far as ten miles distant.

In contrast, each of the several dozen Navajo communities on the HPL portion of the JUA consisted of three or four households, usually representing three generations, related through parental or brother–sister ties. At birth, every child’s umbilical cord is buried near the home. Farm land and grazing land are located nearby, although a spouse’s grazing land might be located in a distant community.

The Religious Factor: Hopi

Living side by side for three centuries, the Hopi and Navajo honor parallel, but distinctly different, worldviews and ritual commitments. Hopis may cooperate in planting and harvesting, but their main sense of community comes from collectively owning one or more rituals, along with ritual items. Rituals are performed by a group of persons specially recruited and initiated who are, for the most part, not members of the clan that owns the ritual. The groups perform the rituals in specially constructed chambers, kivas, owned by one of the clans that owns one of the ceremonies conducted in it. Nearly every ritual includes some public performances that are attended by most, if not all, members of the village. Thus, Hopis within a village are tied together in solidarity by a complex warp and weft of clan and ritual ties.

Hopi religion revolves around “duty” and land, although Hopis do not have a word for “religion” *per se*. Rather, Hopis speak of wiimi “religious rites to which one is initiated,” navoti (“teachings, traditions”), and tumala, “responsibility,” that mandate performing rituals and maintaining clan identity. Part of that responsibility entails stewardship of the area within boundaries marked by stone ruins of villages no longer inhabited and by shrines. Hopis claim an aboriginal territory bounded by Tusak Choma (San Francisco Peaks); Po ta ve taka, Polungaihoiya, Nei yavu (Lolomai Point, Grand

Canyon); Tokonavi and Ky westima (Betatakin Ruin); and Tsi mun tu qui (Woodruff Butte). Various shrines, at the boundaries and inside them, constitute pilgrimage areas. Some of these shrines are associated with springs, while others are known by location and marked only by the depositing of prayer feathers. The area marked by all of these shrines is much larger than the Hopi Reservation. It includes shrines in national forests, on private land, and on the Navajo Reservation. A number of shrine areas are nesting areas, where Hopis go at a certain time of year to secure young eagles and hawks necessary for ceremonies. Ancestral ties to material surroundings stretch back centuries. Not to periodically venerate these shrines would be to shirk important duties.

Destruction and desecration threaten shrines. A century of tourists hiking the "Hopi Salt Trail" in the Grand Canyon, disregarding shrines and offerings deposited at them, led the Park Service to close the area to all but authorized Hopi priests in the 1980s. Peabody Coal Company has operated a gargantuan strip mine on Black Mesa, within Hopis' shrine area, since 1968, under leases from the Hopi and Navajo Tribal Councils. Opposing the mining at the time, many Hopis still feel that despite the income to the Tribal government, the lease was a big mistake. Tsi mun tu qui, Woodruff Butte, has been in private, non-Hopi ownership for decades. Recently turned into a gravel mine, the top of the butte was dynamited and five of six shrines were destroyed in the process.

The Religious Factor: Navajo

Navajos also do not have a specific word meaning "religion." Rather, traditional Navajo "religion" centers around maintaining hozho, "harmony." Illness stems from hocho, "ugly conditions," the opposite of harmony. To remove hocho and restore balance, a ceremony, a "chant," must be conducted by a ritual specialist, a "singer." The singer must use appropriate materials. Because nearly everyone needs several chants during his or her lifetime, many individuals maintain an "Earth bundle" of appropriate materials, gathered from near home, for this purpose.

The chant is held in a Hogan. Although Hogans were formerly used as dwellings and for ritual purposes, now nearly all Hogans are constructed specifically as ceremonial chambers and are blessed by a singer. The Hogan represents the world and its elements. Navajos sometimes compare the sky to the ceiling of an immense Hogan; the Earth is its floor. Thus the round ceiling of an actual Hogan is the sky and the Hogan floor is the Earth. When a singer performs a ritual, the singer does so within a microcosm representing the universe. Chants last at least two and often five or nine nights. Although only the singer, the patient, and a few close relatives participate in the rituals, dozens of relatives come to supply moral support and food. Thus, a sing entails much preparation, including construction of temporary structures to shelter the visitors, and many people.

The Dispute and Relocation

After division of the “JUA” in 1977, Government crews began demarcating the line by constructing a fence. Elderly Navajos in the isolated Navajo community of Big Mountain resisted the fencing, and their cause became publicized and celebrated nationally and internationally. Supporters came to Big Mountain from urban areas, undertaking what amounted to pilgrimages to assist what they perceived as a handful of Navajo elders resisting destruction of their lives. The late 1970s and early 1980s saw the peaking of the “deep ecology” movement, which searched not only for solutions to environmental problems, but also for models for how to live a renewable, sustainable, “low-tech” lifestyle. What Navajos in the remote communities lived with from necessity – one or two-room houses shaded by willows and surrounded with sage; unpaved roads; juniper and pinyon as cooking and heating fuels; meat from range-fed livestock; careful husbanding of water – urban-dwellers saw as a desirable and appropriate lifestyle. The politics of resistance to relocation became increasingly linked with religion and life in a particular ecosystem.

Conclusion

Relocation proceeds inexorably, but some Navajos still refuse to move. A further complication entails the Sun

Dance. Brought to the Navajos on the JUA by Lakota ritual specialists in the 1970s, the annual “Big Mountain Sun Dance” emphasizes community solidarity as well as personal commitment and sacrifice and attracts hundreds of participants. In a dubious demonstration of its sovereignty over HPL, the Hopi Tribal Government ordered the area bulldozed shortly after conclusion of the 2001 ceremony, outraging many people, including some Hopis.

Hopis and Navajos have not always been at odds over religious land. In the 1970s, they united to oppose the construction of a second ski resort on Tusak Choma, the San Francisco Peaks. The opposition was unsuccessful. But tribal jurisdiction on Tusak Choma did not exist and was never a possibility. Regarding the fraction of their “shrine” over which Hopis now have jurisdiction, attorneys referenced “Jerusalem” to raise questions of definition and access: whose religion ultimately defines sacred places? Does mandatory relocation impair a Navajo’s ability to practice religion in specific ways because it requires irrevocably abandoning the Hogan where ceremonies are conducted, where a person’s umbilical cord is buried, and where materials for Earth bundles are obtained? Do continued use and occupancy of ancestral Hopi land and shrine areas by Navajos impair Hopis’ ability to practice their religion? Despite mediation in the 1990s and congressional legislation enacted in 1996 purporting to settle it, the dispute, whether phrased in historical, economic, or religious terms, persists.

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See also: Black Mesa; Hopiland to Rainforest Action Network; Law, Religion, and Native American Land.

Hopiland to the Rainforest Action Network

From West Virginia to Hopiland

In the contemporary world of my youth, religion and nature were separate, though both were a part of my life. From birth to age eight I grew up enjoying the four seasons and the forests of West Virginia. At year eight, we moved to Central Florida where the swamps became the playgrounds of my explorations and adventures. My great-grandmother deeply influenced these outdoor reveries. She was half Blackfoot Indian and wonderful to me. With childlike wonder I often pranced through these forests and swamps, pondering what it would have been like to be Indian. As a “half-breed” in a white-dominated society, she didn’t talk much about her Indian heritage. Still, my West Virginia family was somewhat clanlike, even tribal. Mystery and intuition seemed to permeate my youth. The mothers, grandmothers, and great-grandmother of our family would often state who was calling on the phone before anyone had a chance to answer it. They were usually right. They often declared the gender of the upcoming baby. This was before modern methods of testing. My religious upbringing was Protestant, the First Christian Church. I went most Sundays as a kid and enjoyed it. However, I don’t recall any significant references to nature or to God’s earthly creations. In church, sacred was a term that had little meaning for me. What I do remember is looking out the church window a lot and seeing the beautiful and mysterious Spanish moss hanging from the scrub-oak trees. The natural world moved me, and although I thought church interesting, it held no spirit for me. Much later, after college, I moved west, spending time over the next ten years with the Elders of Hopi Nation. At that time, sacred came to mean something that was both pragmatic and profound. This redefinition of sacred has influenced all my work since then, whether in the world’s tropical rainforests, or in the corporate boardrooms where I negotiate on behalf of Mother Earth as the President of the Rainforest Action Network.

In college (1968–1973) there were many classes, of course, but college life in these years was also about sex, drugs, and rock and roll. Yet, there was an additional element to those times – cosmic consciousness. Janis Joplin and others sang about it. And we read a great deal about it in the popular works about native people like Black Elk, Lone Deer, and Don Juan. I did well in school learning the usual things, but by my senior year I was questing for a more spiritual connection. A college friend suggested I go to a poetry reading by Gary Snyder. I did and became enamored with the California/beat movement. Snyder knew a lot about things I cared about.

Soon after this encounter, after a yoga class my instructor told me, “I see you going west and working with the Indians.” I don’t know if he was prophetic or if I just liked

the idea but I soon went west and landed in the former beat enclave, and now artist/tourist town, of Sausalito.

In California I took a yoga class from the teacher of my teacher. There I met a likable yoga student named Tom Styles, who in a way stereotypically Californian later became Swami Mukunda. Styles had been researching a college thesis on crosscultural prophecies, and when he invited me to go with him to some Indian land near the Grand Canyon, I was happy to go. I did not at the time know the name of the tribe, but he led me to my unique and rewarding decade with the Hopi elders.

The Hopi

The Hopi have lived for at least ten thousand years (*they* say a lot more) on Black Mesa, the Colorado Plateau of the Southwestern United States, in an area the size of the state of West Virginia. The Hopi villages are just north of the Painted Desert and east of the Grand Canyon at the south end of Black Mesa. I was not an understudy to any spiritual leader or medicine person but worked more as secretary and driver for the elders. From them and the high desert of Hopiland I learned much. The elders would often say that white people have tribal wisdom if they would just go back in their own histories. They put the onus of discovery right back on me. It was probably a way to not have to answer too many stupid questions, but nevertheless, I learned many lessons, including that the laws of nature are final and have absolute authority governing this Earth. Natural laws will prevail regardless of man-made laws or governments. When we disturb the cycles of nature by interfering with the natural elements, destroying species of life, or changing species of life, the consequences may be immediate, or may fall upon our children, or our children's children, but we will suffer and pay for our mistakes.

Hopis say that we human beings are charged with the responsibility of working for the continuation of all life. Our fate is intertwined with one another; what affects one affects all. Euro-American domination and destruction of nature as well as of indigenous ways continues. To alter this course, Westerners would do well to seek advice from and cooperate with indigenous people.

The Hopi tribe did not just survive for thousands of years as desert farmers. They developed a high culture and one that can help us with issues of ecological sustainability and peace. I am honored to stand in solidarity with nature based on the Hopi tribal perspective. It is work to maintain their land and the natural ways of life. Hopi, as well as other tribal cultures, would often say that their work is to help hold the world in balance. That phrase means something I do not fully understand, but I know it relates to an annual set of ceremonies.

Hopiland as my Seed Time

It was in 1973 that Tom Styles and I left Sausalito around midnight one evening and made it to the south rim of the Grand Canyon around sunset. The descending sun cast shadows over red rock walls. We drove into the Hopi Nation to the village of Old Oraibi. A dirt road heads south to Oraibi off of the only paved road in Hopiland. Oraibi is the oldest continually inhabited village in North America. Just outside of Oraibi we came to a sign that said essentially, "Warning white man. Because you cannot obey your own laws, let alone ours, you are hereby prohibited from entering this village." The night was upon us and we camped next to the sign along the road. We did yoga atop nearby rocks and hoped that some Indian blasting by in a pick-up truck would invite us in. The Milky Way was stellar and we could hear the drumbeat from a ceremony going on in this forbidden village. We were left in the dust that night, but the next day was a different story.

Somehow Yoga Tom knew the names of several of the elders. We were soon at the next village of Kyakotsmovi, knocking on the door of Thomas Banyacya's adobe and cinderblock house. Thomas, I was to learn, was not a medicine man, but he was from the Coyote Clan. Coyotes are barkers. His role was one of spreading the word about Hopi relationship with nature and their message of peace. Fermina Banyacya, a Bear Clan woman, answered the door. She was gracious regarding our many undoubtedly naive questions. I was 23 years old, and spellbound by her singsong voice, beauty, and what she had to say about nature and future and purpose. Her demeanor harkened back to my great-grandmother. Eventually, she invited us in. To this day she remains a friend. From Fermina and many other Hopi I came to my deeper understanding of sacred.

When the Hopi talked about the Great Spirit or the many spirits in nature it had a ring of authenticity that I did not experience in the First Christian Church. I would stay for weeks at Hopi, often shuttling elders around to community meetings. The meetings were often about the government trying to put electricity lines in some of the villages or about coal and uranium mining on their ancestral lands. These were the lands they had been charged with protecting. They had the responsibility of maintaining the cycles and fecundity of nature. It was a difficult time for them, and they still struggle with these imposed conflicts. I was going back and forth to California from Hopiland, many times a year at this point, a pattern I repeated for an entire decade. The Hopi Elders with whom I worked eventually realized I was earnest about wanting to help the Earth and support native peoples.

After many years there, one rather common-looking old man revealed to me that he was a Snake Priest. He spoke of how the snake was a communicator between the minerals in the Earth's crust and the climate-making aspects of the atmosphere. Snakes are often painted as lightning strikes in Hopi art, traveling between the sky and the land. The Snake Priest explained to me, though I doubted him at the time, that lightning strikes not just from the sky to the Earth, but from the Earth to the sky.

At such times I could sense the importance of their oral traditions. Their method of learning included one of trial-and-error experimentation, just as we do in Western science. Learning occurs while living in the same desert home over generations, and is transmitted over thousands of years. This is why they know so much about the ways of the plants and animals, and the land and sky.

The medicine person, it seemed to me, was more of a scientist than a magician. The Hopi Snake Priest stood amidst a library and lineage of teachers. That is not to say that one doesn't learn through intuition. At Hopi, I believe, everyone is intuitive and something of a medicine person. Some are better at it than others or have a sub-set of special gifts, but in Hopi Culture, the line between science and intuition are relatively indistinguishable.

Some lessons seep into your soul slowly and expressing them in words is difficult, but I'll try. When a plant, insect, or animal is killed or perhaps the entire species goes extinct, this is tragic. But, that loss is more than the loss of a sentient being or species. Its function in the web of life is lost as well. Certain species or certain aspects of nature have a special function in the web, and the loss of that function weakens the Whole, subsequently reducing Earth's resilience to the human onslaught on destruction. The following example is mundane, but in our EuroAmerican culture we know about the special function of the canary in the coal mine. When the canary dies, the air is so foul that you had better vacate or make some change fast. The functionality of many things in nature can be very specific and can relate to life-and-death issues. These special functional places or aspects might be a certain mountaintop, a water spring, or a rattlesnake in an electrical storm. It can even be something invisible to us like a line of energy running through a village like Hotevilla just east of Old Oraibi. These are sacred sites or sacred animals to the Hopi and to many indigenous peoples including those in the Amazon rainforests. Knowledge about the sacred/functional is passed on by the priests, or in the case of the Hopis, by certain people initiated into one of the many clans like the One Horn or Two Horn Kachina (nature spirit) Clans. Some of the knowledge can come directly from a person's sensitivity to nature and nature's ways. Even a sacred feather placed near a Kiva (underground ceremonial chamber) can be of great significance perhaps in helping keep the world in balance. As I was not an understudy I can say little more about these matters.

One doesn't necessarily need to know a lot about these things to know one should desire to protect the natural world. And it isn't just sacred sites that must be protected. When asked once to draw a circle around a sacred site, the

Hopi just shook their heads and walked away. They told me later that such a line would convey that anything outside the circle was not sacred. An isolated spot in the web of life cannot be saved without maintaining the entirety of it.

From Hopiland to the Rainforest Action Network

Such are the lessons of Hopi that I bring into my current work. The Rainforest Action Network, co-founded with the Earth First! hero Mike Roselle, is a forest protection group, but it is also a human rights group with a focus on the rights of native peoples. As we all know, the people in some governments and giant corporations are profiting at the expense of nature, indigenous peoples, and future generations. The web of life we call the biosphere is being dangerously shredded. Climate change and what scientists now call extreme weather events mark a particularly precarious moment in human history. At Rainforest Action Network we call these extreme weather events “ecospasms.” The biosphere, Mother Earth, is becoming spastic. Ecological spasms show up as gigantic hurricanes of greater force than we have ever seen before. They include tornadoes occurring in places that have never seen them before. The forces degrading ancient forests and native peoples are many. They include industrial invasion of agribusiness, toxic waste, uranium mining, timber cutting, cattle ranching, and unfortunately, racism. But, individuals and movements have arisen to address and reverse such problems.

A clear set of principles and policies around which we can build a better world is emerging that starts with giving honor to the laws of nature. The new global movement gathers annually at the World Social Forum (WSF), among other places. That event started in year 2000. The WSF has had three annual gatherings in Puerto Alegre, Brazil. India will host the 2004 gathering. These efforts will continue to invite the widest possible participation.

The Hopi speak about a window of opportunity where the age of appropriate technology (the marriage of the circle and the cross, but that is another story) can come about. At Hopi there is a petroglyph on a sandstone rock that shows healthy corn plants in the future and the possibility of hope for all life. Hopi say this won't necessarily be our future, but it could be. It depends on what we all do to help shape that course. It is fair to ask the key question, can we rally to the task in time? Can we rally on a scale commensurate with the problem and the urgency?

Another lesson I learned at Hopi has to do with prophecy. Prophecy, I surmise, is what people of European heritage call what the Hopi elders see as supposition or projection based on a combination of human nature and probability or trend. As the elders often told me with a chuckle, prophecy is far easier to declare after events have occurred. The marriage of religion (spirituality) and nature has not been completely lost. It can and must be restored.

When you dedicate yourself to nature's needs, there is mystery and providence in the journey.

Though we may come from different cultural, economic, and racial backgrounds and though we will not agree on everything, we can cooperate, share honestly, and work with one another in respect. Again, a broadbased movement to protect nature, develop just societies, and halt the demise of native peoples exists. It is growing. At

the Rainforest Action Network we know that we must be a part of these efforts and we hope you will be as well.

Randy Hayes

Further Reading

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Randy Hayes also directed the award-winning film *The Four Corners, A National Sacrifice Area*. The film won the Academy of Motion Picture Arts and Sciences award for “Best Student Documentary” in 1983. This epic film documents the tragic effects of uranium and coal mining on Hopi and Navajo tribal lands in the American Southwest.

See also: Beat Generation Writers; Black Mesa; Earth First! and the Earth Liberation Front; Greenpeace; Radical Environmentalism; Snyder, Gary.

Hopkins, Gerard Manley (1844–1889)

A Jesuit priest born in mid-Victorian England, Gerard Manley Hopkins composed some of world's most vivid nature poetry. Unknown during his lifetime, his highly distinctive work was first published in 1918 and is now considered a major literary achievement. Hopkins' influential contribution to the religious nature lyric tradition features striking stylistic and technical virtuosity, acute descriptive observation, and an urgent eco-poetical consecration of wild nature.

A star student and promising young poet at Oxford in the 1860s, Hopkins was converted there to Roman Catholicism, and afterwards became a priest of the Society of Jesus. For several years he renounced verse-making as an aesthetic pastime inconsistent with his religious vocation. But in 1875 he abruptly resumed composition and began privately producing, for the eyes of a few literary friends, a remarkable new kind of poetry chiefly representing human obligations and response to a natural world deeply infused with specific religious and theological meaning: "news of God." Evidently this newly "prophetic" approach was the justification for an otherwise unaccountable change of mind regarding the religious value of writing.

Hopkins' letters and journals record the attentive habits of a lifelong amateur field naturalist and artist, as well as his horror at wanton environmental despoliation by an industrial society "founded on wrecking." But it is in much of the best poetry itself that he affirms, to an unusual degree among Christian writers of his or any era, the mutual interdependence of humanity and created nature and the inter-implication of our own salvation with its survival.

Of particular interest, then, are Hopkins' poems that do associate God and humankind and the Earth in ecological terms. Of these, the best known is perhaps the sonnet "God's Grandeur," a lament for a world obscured from us by industrial commerce: "All is smeared with trade, bleared, seared with toil / And wears man's smudge and shares man's smell" (Hopkins in MacKenzie 1990: 139). We can no longer discern or detect what lies beneath the burnt, begrimed, oily, stinking surface of modern things. Still, the poem also testifies to the divine "charge" of meaning in the physical world. Something resilient, a "dearest freshness," still "lives" somewhere "deep down" under the now "spent" and blighted surface of creation, and it abides in "things." The basis for this hope, the firm "Because" of it, is faith in a divine spirit, the "Holy Ghost," its life principle. Implicit here is something more active, or even activist, than passively

trusting in God. The breath of the Holy Ghost is also traditionally charged with the function of inspiring language and utterance, the words of poets, prophets, priests, and possibly all of us, and by this agency possibly to animate the human world to action, to sound the alarm, as it were.

Another eco-lyric, "Ribblesdale," confirms that writing poetry was justified, for Hopkins, by its exertions in response to and on behalf of suffering Earth's voiceless appeal. This poem also resumes the "God's Grandeur" motifs of wrecking, of spending, of "bentness," and of the bareness of the Earth's once lush surface. In this instance, the visibly wronged being of Earth is said to plead silently (or by implication through the voice of poets?) to "selfbent" and "thrifless" humankind.

Confirming Hopkins' perceptual or even epistemological emphasis on the consequences of destroying nature is another lyric, "Binsey Poplars." Here the fragility, the delicacy of nature is more than "sweet." In some mysterious way we depend upon it. We know not what we do when we dig, cut, hack, and rack, or imagine we are somehow improving a world whose very "being" is actually as sensitive to permanent injury as our own translucent eyeball tissue ("But a prick will make no eye at all") (in MacKenzie 1990: 157). Here again is the ominous cycle of violence and self-blinding, with the enigmatic implication that the consequences for ourselves are, if anything, greater than for the physical world itself. The poem's most important warning is about losing access to channels of knowledge and understanding. Hopkins clearly connects an ethic of conservation with the means and prospects for our own salvation.

Among the many other religious nature poems by Hopkins that include similar elements are "The Starlight Night," "Spring," "The Sea and the Skylark," "As Kingfishers Catch Fire," "Pied Beauty," "Hurrahing in Harvest," "Spelt from Sibyl's Leaves," and "That Nature is a Heraclitean Fire."

The famous nature poems of Hopkins demonstrate the urgency with which he seized upon ecological contexts as an essentially religious impetus or imperative for his suddenly renewed poetic mission. The world would otherwise probably not have had his poetry at all.

Michael D. Moore

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See also: Roman Catholic Religious Orders.

Huaorani

World Creation and Predatory Forces

One of the greatest problems with Tylor's view of animism, according to Nurid Bird-David, is its monolithic character. She argues instead for a plurality of animisms: different belief systems conceptualize "life," "non-living" and "human" in fundamentally different ways. Exploring the animism of a forest people from the Ecuadorian Amazon, the Huaorani, who have lived between the Napo and the Curaray Rivers and from the Andean foothills to the Peruvian border for hundreds of years, indicates the value of such an approach.

There are no words in *huao terero*, "the language of the true people," corresponding to nature, ecology, religion, animals or plants. Like most Amazonian societies, and most indigenous societies, the Huaorani do not conceptualize the world in abstract, reified categories that separate the body from the mind, belief from perception, or human society from the nonhuman environment. "Our homeland," "our territory," the rainforest or nature is *monito ömè*. Within *monito ömè*, people distinguish pristine forests with high and old trees (*ömere*) and secondary forests, defined as "places where trees have grown again" (*ahuene*). Successional fallows are further divided into

huiyencore (fourto ten-year-old clearings characterized by the frequency of balsa trees), *huyenco* (tento twentyyear-old clearings), *huiñeme* (twentyto forty-year-old clearings characterized by the high incidence of adult palms), and *durani ahue* (fortyto a hundred-year-old clearings remarkable for their bigger trees). Huaorani ecology is primarily based on specific plant/animal relationships and on people's experience of how different plant species grow, mature and reproduce. Animals are identified and named at species level, although, when pushed by an inquisitive researcher, a Huaorani may use the name of an iconic species to define broad categories such as fish, primates, or birds.

Huaorani territory is not definable from without as a well-demarcated space bounded by clear limits on all sides. It is, rather, a fluid and ever-evolving network of paths used by people when "walking in the forest" (*ömere gomonipa*). Men, women and children spend a great part of their lives slowly exploring *monito ömè*. They hunt and gather but they also simply *walk*, observing with pleasure and interest animal movements, the progress of fruit maturation, or vegetation growth. When walking in this fashion, people feel in and *with* the forest, their bodies absorbing its smells. Walkers keep these paths open through many small and careful gestures, such as the

picking up of a thorny leaf fallen during the night, the breaking of bending branches, or the cutting of invasive weeds. As soon as they have fallen into disuse, paths revert to forest, indistinguishable from the vegetation cover. Well-trodden paths located at strategic intersections become the repositories of traumatic memories in the same way as physical landmarks (i.e., creeks, particularly tall and old trees, lagoons, or hill formations) recall bloody attacks or spearing raids. Other paths form a network criss-crossing unknown or forgotten land; they lead to exciting discoveries, especially food plants said to have been planted by past people. Trekking in the forest is therefore like walking through a living history book in which natural history and human history merge seamlessly. Walkers, while maintaining the paths, move from direct observations of animals or people to detecting their presence; they also note material signs evoking times long gone.

Life as a continuous process involving the right combination of elements and species is central to Huaorani spirituality. Their social life, knowledge of the world, and cultural understanding are all inspired by the life-force and energy characteristic of all organisms – especially plants – which caused them to be born, grow and mature. This energy, in a sense, has authored their lives. The myth of origin, which develops around the giant ceibo tree (*Ceiba pentrandia*), container of all life forms, expresses the fundamental characteristics of the Amazon ecosystem, which largely depend on a delicate balance between heat and humidity, and shade and light.

In the beginnings of time the Earth was flat; there were no forests or hills, moon or night. The Earth was like a dried, barren, and endless beach, stranded at the foot of a giant ceibo tree. This tree, attached to heaven by a strong vine, was the only source of shade against the merciless heat of the sun. All that was alive dwelled in the giant tree. In those times of beginning, living beings, neither animals or humans, formed one single group, with the exception of birds (doves), the only game available to hunters. There were also two dangerous individuals, Eagle (raw meat eater) and Condor (eater of rotten flesh), who preyed on people and doves alike. Life in the giant ceibo would have been good, if it had not been for the two predators. Every time someone left home, Eagle or Condor would descend on their victim, kill her and take her back to the nest on the highest branch. The victim's relatives would hear in grief the noises of the cannibal repast, and see the bones of their dear kin fall to the ground, one after the other. At last, Squirrel and Spider decided to take action and put an end to this dreadful business. They climbed one day to the very top of the tree, where Eagle had fallen into a deep sleep after one of his copious meals. Spider wove a tight and intricate web all around Eagle's body. Eagle remained unaware of the snare until the following day when he attempted to swoop down on his next prey. He was soon seen hanging upside down, his head swinging in the air. Squirrel's plan was to detach him and let him crash to the ground, like a dead log, but the maneuver went wrong. Instead of cutting the web off the branch, Squirrel's teeth incised the vine linking the tree to the sky. The vine sprang up, with Squirrel still biting on its end, causing the giant tree to fall westward all the way to the ground. Squirrel's tail can still be seen in

the sky, especially on the bright nights that precede heavy rains, where it glows like a fluffy trail of golden dust. The Amazon watershed was born from the fallen tree, and numerous fish species from its leaves. Before the fall, there was only scarce rain avidly collected in small clay pots. During the fall, the plug which blocked the underground waters loosened up from the giant tree's roots, causing the country to be submerged under an enormous flooding which killed almost everything in its wake. A few people survived by taking refuge in a hollow branch in which they made their way up river. They died of exhaustion, except for a brother and a sister, who became husband and wife. By flying over the immense flood plain, Woodpecker succeeded in lifting hills out of the sea of mud. Forests soon covered the hills, in which the first Huaorani found refuge, dwelled, multiplied and grew numerous (in Rival 1997: 69–70).

Although the correlation between mythology and society is far from direct or straightforward, there are grounds for arguing that the Huaorani myth of origin expresses the fundamental characteristics of the Amazon ecosystem. There would be no life on Earth without trees, as they provide shade, food and shelter, and prompt rain formation. The primordial tree is a small ecosystem in itself, and the world expands when this perfectly self-contained microcosm collapses, giving birth to a new ecosystem, which is as integrated and self-generative as the primordial tree. The story of the fall of the great ceibo tree unambiguously belongs to the Cosmic Tree religious complex. Like in a number of ancient religions founded on the sacred tree of life, the Huaorani cosmic tree represents the central axis around which the universe is ordered. The myth of origin articulates another powerful message, which associates social categories with two distinct natural processes: the aggressive relation between predators and their prey, as found in the animal kingdom, and the life-sustaining relation between people and forest plants.

Hunting and Shamanism

Before the recent introduction of new garden crops, shotguns, dogs and Western medicine, as well as the intensive use of air transport and radio contacts which undermined traditional foraging, the Huaorani hunted almost exclusively monkeys, especially the woolly monkey (*Lagothrix lagotricha*), the howler monkey (*Alouatta seniculus*) and the spider monkey (*Ateles paniscus*), birds, such as the curassow (*Mitu salvini*) and the Spix guan (*Penelope jacquacu*), and white-lipped peccaries (*Tajassu peccari*) with essentially two kinds of weapons, the blowpipe and the spear. The Huaorani say that monkeys and birds reproduce without difficulty as long as humans leave them enough food to eat, and as long as inter-species population dynamics are balanced, that is, as long as human settlements remain relatively small, interspersed, and transient. Huaorani hunting is a form of gathering, whereby using and consuming natural resources does not impair – and possibly even encourages – their continued reproduction. Furthermore, game animals are kept close and in plentiful supply through shamanic practices.

Supernatural jaguars who visit shamans in rites of spirit possession and control game stocks make birds and monkeys stay closer to humans, and tell humans where to find game in the forest.

Men become shamans (*meñera*, literally “parents of jaguars”) at a mature age. A man does not choose to be a shaman, but is chosen as an adopted father by a jaguar spirit who first appears in his dreams. If the dream recurs, the jaguar spirit feels welcome and confident that the man has accepted him as his son. From then on, the jaguar spirit visits his human father, his “mother” (i.e., his human father’s wife) and his “siblings” (i.e., his human father’s children) regularly at night. Such visits make the man “die” temporarily, as the jaguar spirit/son takes the place of the man’s soul, and uses his body as a “tape recorder” to broadcast his visions and conversations with his human audience. Adoptive fathers of jaguar spirits are not only mature men with a family of their own, but also survivors of a grave childhood illness, who were given the hallucinogenic drug *mihì* (*Banisteriopsis muricata*) as the ultimate remedy. Finally, the “heart souls” (*mimo*) of dead shamans and warriors killed while fighting are said to “give birth” to several female jaguar cubs which are adopted and raised by “real” forest jaguars as their own cubs. In short, the spirits that live in jaguar bodies, adopt certain men as their fathers, and visit humans, once lived in human bodies.

Palm Groves and Natural Abundance

The Huaorani vision of life is not limited fertility, but natural abundance. Huaorani people, like other Amazonian trekkers and foragers, largely depend on managed, but not yet domesticated plant species. They also use a whole range of more or less intentional management practices to encourage the continuous growth of certain fruit trees and palms in old sites and to facilitate the propagation of certain plant species (Rival 2002). It is in the nature of trees and other food plants of the forest to give continuously to humans without asking anything in return. The Huaorani say that past people “did” (*què*) and “lived” (*huè*) in such and such a part of the forest, and that their activities “have made the forest grow,” by which they mean that subsistence and ceremonial activities have encouraged the *natural* growth of useful forest plants. The forest is turned into a giving environment – that is, an environment that gives in profusion without asking anything in return – by the life activities of past people. In short, the forest, which stands as the historical record of past human activities, is inseparable from the people who have lived in it, and with it.

People are also conscious that their present activities are making similar activities possible in the future. However, such awareness is devoid of moral implication, and has nothing to do with the modern notion of planning for the benefit of future generations. Future and past are envisaged from the point of view of a continuous, timeless present. The dead do not ask for anything, so no exchange takes place between the living and the dead. What they “give” to the living is not really a gift, anyway; it is more like a

by-product, a consequence of spending their lives giving to, and receiving from, each other; today's useful resources are the legacy of their sharing economy. The forest, far from being a pristine environment external to society, exists as the product of the productive and consumptive activities of past peoples. Both the forest and society are regenerated through the business of ordinary life, without need for accumulation, surplus, stealing, or the transfer of life energy from one sphere to another.

Socio-cosmologies and Value Systems

This exposition makes it obvious that the Amazon rainforest has had a profound impact on Huaorani cosmology and social philosophy. Huaorani relational epistemology, rooted in the recognition of the shared physicality and biological unity of beings that grow, mature and decay, connects persons across species boundaries, including supernatural entities. Social life is embedded within organic processes.

Huaorani religious ideas have arisen from an obsession with predation, which, as the myth of origin indicates, constitutes one dimension of the world as it was created, and, as such, pre-dates speciation. Perceiving themselves as the victims of powerful predators (human enemies or evil spirits imagined as jaguars or harpy eagles) who reproduce themselves by continuously snatching the creativity, vitality and life-force of "true human beings," Huaorani people can do no more than elude contact with cannibal attackers and rely on their own forces. Shamanism privileges a more symbolic and positive relation with nature, particularly with the animal world. Shamans, who have the power to see what is normally inaccessible to human consciousness, receive help from visiting jaguar "sons," who, among other deeds, keep game animals close to humans. Shamanic power symbolically replicates the forest management practices through which people transform the forest into a giving environment.

The forest's natural bounty is understood to result from the interlocking of animal, plant and human life cycles. It is the relationship between living people, the forest and past generations that makes forest resources bountiful. The forest naturally and abundantly provides people with food and useful materials, as well as with the means of establishing physical links with the past. The past is encountered while cruising in the forest, and history is made out of the intricate relationship between ecological cycles, such as massive seeding or fructification, and past activities that naturally increase forest resources. For the Huaorani, who associate the power to generate vitality with spontaneous vegetational growth, reproduction and continuity do not depend on the acquisition of, nor can they be appropriated by, external political or religious powers.

As Gerardo Reichel-Dolmatoff wrote just before his untimely death, there are two Amazons: the Amazon of modern development based on fossil fuels, ruthless exploitation, gold mining, logging, cattle ranching, hydro-electric dams, violence, corruption and human misery; and the Amazon of the small number of indigenous peoples who still retain their tribal ecological knowledge and ancestral value systems, and for whom to

know the rainforest ecosystem is to communicate and socialize with the natural kinds or natural forces which make it alive. The Huaorani, who still belong to the latter, cultivate interspecies communication and relate to the energies inherent in animals and plants by living in – with – the forest. Their eco-economy is in this sense solar, given that all living organisms originate from the same cosmic source, the sun, its rays, and powers of fecundity.

For the last fifty years, Huaorani people have been confronted with the other Amazon, that of oil development, although it is only recently (in 1994) that oil has been commercially extracted from their land to feed the global fossil economy which is exhausting raw resources, destroying lives and livelihoods, and undermining the future. Confronted with pernicious and contradictory economic and political interests, the Huaorani are not embracing the market place ruled by the imperatives of carbon energy and corporate law in the way expected by the oil companies operating on their territory. Witnesses of the transformation of their forest into a busy oil field, with thousand of kilometers of seismic lines cut, tens of wells drilled, and numerous temporary camps established, the Huaorani have subverted the cultural logic of corporate outsiders by treating them as sources of endlessly renewable wealth. Large quantities of foreign commodities imported by oil workers have reached Huaorani homes and have been distributed, shared and used according to the same egalitarian principles as other forest resources. The forest is bountiful. Past activities of long dead people are understood to be at the origin of forest abundance. The wealth of game and plant resources, accessed through the skilled activities of every hunter and gatherer sustains the longhouse sharing economy. By treating the oil companies as impersonal giving agencies not unlike that of long dead people, the Huaorani have turned the religion of the market on its head. What they continue to value are the unfolding, personal relationships between interdependent subjects of the sacred Earth/forest. At the beginning of creation, there was the giant *ceibo* tree, rooted in Earth and tied to the sky. Through the dynamic interplay of social agency, the tree of life was transformed into a great water system and landscape. The world with all its differentiation and biocultural diversity is, and will continue to be, the historical transformation of what was given, the tree of life.

Laura Rival

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See also: Animism (various); Amazonia; Shamanism – Ecuador.

Hudson River School Painters

– See Art; Romanticism – American.

Hundredth Monkey

The claim that a spiritual transformation of consciousness is prerequisite to the reharmonization of life on Earth is a recurrent theme in environmental enclaves. One expression of this theme is that of the “Hundredth Monkey,” first published by Lyall Watson in *Lifetide: A Biology of Consciousness* (1979).

In *Lifetide* Watson described how on the Island of Koshima in 1952 a Japanese monkey of the species *Macaca fusacata* was provided with a new food, sweet potatoes. They were covered with sand and dirt and this particularly intelligent monkey, dubbed Imo by the primatologists studying the troop, quickly apprehended the potatoes would taste better if first washed in the river. Imo subsequently taught the behavior to his neighbors, which between 1952 and 1958 spread throughout the island, adopted by most of the monkeys. “Then something extraordinary took place” (1979: 147), Watson wrote, indicating that what happened next is not certain and that he had to gather the rest of the story from the personal anecdotes and bits of folklore among primate researchers, because most of them are still not quite sure what happened. And those who do suspect the truth (1979: 147) are reluctant to publish it for fear of ridicule. So I am forced to improvise the details, but as near as I can tell, this is what seems to have happened (Watson 1979: 147–8).

In the fall of 1958, a large group of monkeys was washing potatoes, “Let us say, for argument’s sake, that the number was ninety-nine” (148), when “one further

Monkeys in the Field

During the 1980s there were regular “Hundredth Monkey” protests against nuclear weapons at the U.S. government’s Nevada Test Site. While engaged in fieldwork exploring radical environmental sub-cultures I learned that many Earth First! activists had participated in protests at the test site and had been inspired by the story. One of them told me during a 1992 interview (4 January, Siskiyou National Forest, Oregon) that the idea has to do with paradigm shifts:

I’m trying to remember if it was a myth that became a scientific experiment, or a scientific experiment that became a myth, but during the ’50s, there were studies on these monkeys on an island off the coast of Japan. The scientists gave the monkeys potatoes to see what they would do with them, and they would eat them whether they were sandy or not. Then one day a girl (sic) monkey took her potato . . . and washed it off and ate it, preferred it, showed her friends, then the parents, and they caught on,

and pretty soon all the parents, and the whole island washed the potatoes, and then [as if by magic] monkeys on all the other islands begin doing it, even though there was no physical contact.

When I responded, “So this shows interconnectedness of all beings?” he replied, “Oh yes. The magic of these paradigm shift stories shows that a lot is going on we can’t easily feel, touch and taste.”

Shortly after this conversation I noticed an article in *Earth First!* endorsing a similar metaphysics. Commenting on the “one percent effect” claimed by practitioners of Transcendental Meditation, the author wrote that it “demonstrates that when 1% of the population in a given area practices meditation . . . crime rates decrease along with instances of mental illness and disease. We literally can [therefore] dream back the bison, sing back the swan” (Lewis 1989: 27–8).

John Seed, the Australian deep ecology activist and itinerant Council of All Beings missionary also mentioned the “one percent effect” during an interview (5 November 1992 in Osceola, Wisconsin). He indicated that there was a journal article documenting it and that, although he was not sure about the validity of this research, the environmental crisis is so grave that only a miracle precipitated by massive spiritual-consciousness transformation could prevent massive extinctions.

Not all radical environmental activists, however, are enthusiastic about such beliefs. During a 1993 conversation between Dave Foreman, probably the most charismatic of the founders of Earth First!, and board members and staff of the Wildlands Project in the United States (24 February 1993, Tuscon, Arizona), the conversation turned to the collision of sub-cultures that had led to a schism in the radical environmental movement a few years earlier. In this context the idea of the Hundredth

Monkey came under discussion. Then executive director of the project, David Johns, noted how activists from Oregon had shown up at Earth First! campaigns wearing “no them” buttons. These buttons expressed an antidualistic perspective toward political adversaries, in other words, the point of view that one’s opponents are not enemies or evil but misguided, implying that a transformation of human consciousness (like those envisioned in New Age circles and in stories like the Hundredth Monkey) will eventually overturn such distinctions. Foreman indicated that he did not fit in with such people and that he tended to ridicule the Hundredth Monkey stuff.

Johns, however, stated that there may be some truth to the theory, adding that such an effect would be too subtle to yield the radical changes needed to protect the Earth’s forests. As the conversation continued it became clear that most of those gathered thought the idea might be plausible. One mentioned favorably Peter Thomkins’ *The Secret Life of Plants* (a book that reached #1 on the *NY Times* best-seller list), which purported to show scientifically that plants have feelings and could communicate. Another board member talked about the sense of communication that American explorers reported having with the land. And for all his relative skepticism, Foreman himself stated, “I talk to trees. I think they’re telling me that it’s all connected.” He

added that trees have even warned him on a number of occasions not to camp in a particular place.

Such interviews and conversations suggest that the plausibility of the Hundredth Monkey story resides not in its accuracy or scientific credibility. Such stories are resilient within the environmental countercultures because they cohere with the personal spiritual experiences of connection and extra-ordinary communication that many of these activists have had with nature's various energies and life forms.

Bron Taylor

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See also: Breathwork; Council of All Beings; Deep Ecology; Earth First! and the Earth Liberation Front; New Age; Radical Environmentalism; Re-Earthing; Seed, John. convert was added to the fold in the usual way," sitting down and imitating the others.

But the addition of the hundredth monkey apparently carried the number across some sort of threshold, pushing it through a kind of critical mass, because by that evening almost everyone in the colony was doing it. Not only that, but the habit seems to have jumped natural barriers and to have appeared spontaneously . . . in colonies on other islands and on the mainland...

The relevance of this anecdote is that it suggests there may be mechanisms in evolution other than those governed by ordinary natural selection. I feel that there is such a thing as the Hundredth Monkey Phenomenon and that it might account for the way in which many memes, ideas, and fashions spread through our culture. It may be that when enough of us hold something to be true, it becomes true for everyone. Lawrence Blair says, "When a myth is shared by large numbers of people, it becomes a reality." I'll happily add my one to the number sharing that notion, because it may be the only way we can ever hope to reach some sort of meaningful human consensus about the future, in the short time that now seems to be at our disposal (1979: 148).

Watson concluded *Lifetide* arguing that this and the other examined scientific and occult phenomena demonstrate,

What we regard as ordinary physical matter is simply an idea that occupies a world frame common to all minds. The universe is literally a collective thought, and we have a very powerful say in the reality manifest on our particular sector (1979: 310).

This story spread at least as rapidly as the potatowashing monkeys. Ken Keyes, a self-help pioneer (d. 1996) explained that he learned of the story from talks given by the New Age writer Marilyn Ferguson (best known as the author of the New Age classic the *Aquarian Conspiracy*, if it is not an oxymoron to call it that) and Carl Rogers (the founder of Humanistic Psychology and arguably of the so-called Human Potential Movement). Keyes borrowed Watson's story to promote a transformation in consciousness that would reverse our tendency to "experience people as 'them' – not 'us'," which he believed necessary to eradicate nuclear weapons and to restore our "bond with Mother Earth" (quotes from internet version www.testament.org/testament/100thmonkey.html, which includes additional material from Keyes 1982: 106–7).

Published with no copyright in 1982, *The Hundredth Monkey* story spread rapidly, first within the cultic milieu of Western religious and political countercultures – antinuclear, New Age, and environmental. Its popularity was boosted by a video by the same name in which Keyes and Rupert Sheldrake (who in his own books articulates a novel metaphysical explanation for animism) repeated and promoted the story in this medium. The story lives on at numerous internet sites and will likely do so for many years to come.

But its popularity cannot be accounted for without understanding its appeal. The *Hundredth Monkey* transmits a nature spirituality expressing metaphysics of interconnection, namely, belief that, at least at a sub-atomic level, everything is connected to everything else. At the deepest levels of Being, therefore, there is no "us versus them," a point which Keyes made explicitly in *Hundredth Monkey*. The metaphysical interconnection of all universal energies makes possible diverse modes of communication not observable scientifically, including telepathic pathways. They even make possible dramatic and rapid human cultural evolution that could bring social justice, peace and environmental well-being.

It is especially noteworthy to understand the appeal of the vision when considering that those most commonly embracing it are barraged continually with the depressing environmental apocalypticism that is pervasive within the environmentalist sectors of the cultic milieu. The *Hundredth Monkey* suggests a metaphysical basis whereby humankind and other earthlings might evolve in such a way as to live harmoniously. This is an idea expressed in various ways within New Age enclaves and the subcultures they influence. We can see such ideas, for example, in José Argüelles's understanding of the "Harmonic Convergence, James Redfield's "Celestine Prophecy," and in the idea of the "one percent effect" in Transcendental Meditation. They are also reflected in countless artifacts of material culture; for example, in bumper stickers and posters proclaiming we can "Dream back the Bison / Sing Back the Swan" and "Visualize World Peace."

An appealing story is not necessarily accurate, of course. It is apparent to most of those who read the original scientific reports that Watson did not truly base his story on them. That he also implied that he had interviewed sources and patched together accounts from those present, an implication for which there is no evidence,

also raises serious questions of his integrity and veracity. Keyes presented the story without mentioning Watson's qualification about the uncertainty surrounding the incredible parts of the story, and did not mention that Watson himself acknowledged that he had "improvised" parts of the story. Skeptics concluded that Watson fabricated in an unscrupulous way his entire account. Some such criticisms were published in *The Skeptical Inquirer* and republished later in a book debunking this and other paranormal "phenomenon" (Admunson 1985, 1987; Frazier 1991). A later article reported that the senior scientist involved in the original studies denied observing any spontaneous, trans-oceanic transformation in monkeyconsciousness, having heard any folklore in this regard, or even having talked to Watson (Pössel and Amundson 1996). Watson's only published response appeared in the *Whole Earth Review*, in which he essentially admitted that he made up the most salient points of the story.

A story need not be accurate, of course, to convey important truths. Watson and others moved by the story have offered the rejoinder that the story was never intended to be taken literally as a scientific theorem. It was, rather, an encouraging and empowering metaphor for the struggle to transform human consciousness in such a way that the Mother Earth and all denizens would be understood as sacred and coevolving toward a peaceful and harmonious future. Others within environmentalist sub-cultures who share the perception that the Earth is sacred dismiss the story as wishful New Age fantasy that distracts people from taking action in her defense. The reception of the story depends in part on what strategies for the hoped-for transformations activists find most plausible.

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Hunting and the Origins of Religion

Introduction

Recently the relationship between religion and biology has drawn increasing scholarly attention. Ranging from theories of religion being “hardwired” in the human brain as a result of the species’ genetic structure to the application of cognitive science in attempting to understand so-called religious proclivities and their history, more and more scholars such as Atran, Wilson, Ramachandran and Boyer are pursuing the links between humans, their religions, and the “natural” environment within which they function. Nature as the totality of the context within which a subject or an object exists, including all living and non-living materials, is a broad, even endless opportunity for relationships to be identified and traced. The origins and sources of particular compartments and relationships, in turn, throw light upon how those actions can be best understood. In this setting, religion can be approached as a web of relationships with an environmental framework; any attempt to grasp the origins of these relationships must, therefore, highlight that environment or the “natural” world in which those linkages take place. Among the most prominent of the pieces in this puzzle are human consciousness, human ethical behavior, and the predatory character of human interaction with the world, especially as represented in the hunt. All three concepts and activities rank at the top of any list proposing the most controversial notions of our time.

In contemporary thought, for example, ethics threatens to disappear into a general relativism. How is it possible any longer to establish values that function normatively? How, in other words, are values capable of “binding” and thus controlling the actions of members of a society? If one attempts to do that from within a given culture, one runs the danger of being charged with discrimination on the grounds of class or sexual orientation. If, on the other hand, one attempts to establish such value scales for another culture than one’s own, then, especially in the United States, one might well be tagged as chauvinistic, even a racist. What can ethical norms mean in a world where Japanese mountain climbers could struggle past dying Indian climbers near the peak of Mt. Everest in 1996 without saying a word or doing a thing to help them? Their only commentary: “Above 8,000 meters (25,000 feet) is not a place where people can afford morality” (in Krakauer 1998: 313).

Hunting, meanwhile, is being attacked from all sides. In Germany and France, for example, hunting stands have their supports sawed off and their ladders weakened; in the United States, hunting dogs are poisoned and vehicles are vandalized. In a partic-

ularly notable case in 1997, the First Amendment of the United States Constitution was applied to such an incident. Normally called upon in court actions to protect the exercise of free speech, in this case the second part of the amendment was cited as support for the exercise of a woman's right to religious freedom. She had attempted to interrupt a legally permitted hunt in the state of New Jersey and argued that the sacred and divine character of all living things was the core of her religious beliefs; as a result, she claimed the right to transform her belief into action, in this case the protection of the hunted animals from the hunters. Her claim was rejected by the court (1999).

Great debate has emerged over the past decade concerning the structure, the function, the meaning, and above all the origins, of human consciousness. Is, for example, as Crick has argued, human consciousness simply a huge collection of nerve cells or perhaps merely a reaction to magnetic fields, as Persinger has hinted? Or perhaps a story that we recite to ourselves, but which always remains the wrong story? Only the most rigorous defender of a divine creation as found in Christianity would still use the word "soul" to comprehend consciousness, much less speak in terms of Meister Eckhart's "divine spark in the human being."

The confusion surrounding these notions is probably reason enough to reflect on whether there is any relationship between them. What can it mean to be "ethically bound" while hunting or when conscious? A common distinction is often made between morality and ethics. While the latter category is typically applied to the responsibilities and duties that result from the relationship of a human being to itself, the former label refers to the duties that emerge from the relationship enjoyed by a human being to other living (and often non-living) beings. Unfortunately it is not always easy to differentiate cleanly between these sources of human responsibility or values. If, for example, one commits suicide due to unbearable pain and suffering, has one acted morally or in relationship to oneself according to Seneca's famous dictum: "when the smoke in the room becomes too thick, then the best thing to do is to open the door and leave." But is the relationship to the self the only such connection that one entertains? Presumably there is an extensive and complicated series of relationships maintained by every individual to other humans and to the surrounding environment to which one should pay attention or act ethically. To take our example of suicide, it turns out not to be simply a moral action but a complex event involving both moral and ethical decisions and consequences. Clearly it is difficult, and not always possible, to slip one's responsibilities and actions neatly into the one or the other category only.

The Hunter and the Prey

If we turn our attention to hunting, we might ask how this action is best characterized. Obviously the hunt represents both a relationship of the actor to itself, that is, of the hunter to the hunter, as well as of the hunter to the hunted, or the prey. The main

focus, however, remains concentrated on the relationship of the hunter to the hunted, and this for the simple reason that the death of the prey is the goal of the hunt. Despite Ortega y Gasset's well-known claim that one kills in order to have hunted, it is vital to confirm that the death of the prey is a fundamental and core part of every hunt. Without the prey's death, or at least without striving for the death of the prey pursued, there is simply no hunt. I do not wish to denigrate either the so-called camera safari or any other outwitting of another living being, whether human or animal. Yet such activities are simply not a hunt, though they often are powerful and skilled undertakings that frequently serve to confirm the power and the accomplishment of the main actor. An actual hunt, on the other hand, always must reckon with death: a hunter kills. That is why, of course, hunting is such a controversial event. Not because hunting can be viewed as a "management" or conservation tool, or even as necessary to human survival (food), but rather because hunting can be comprehended as the fulfillment of a human desire and need. Put baldly, the hunter experiences a certain pleasure in the act of killing. This fact cannot be obscured by laws and regulations, or even erased by pious wishes; at the most, we can hope to understand it. The question, therefore, to be raised in this connection is what an "ethically normative" hunt can mean under these conditions? What responsibilities and duties can be derived from the intended death of another being, above all when this act will lead inevitably to the direct and violent severing of the very relationship that provides the basis for an ethical relationship? This question can be approached from three different directions.

First, one can sustain an ethical relationship to the prey by paying strict attention to *how* the death is achieved. To kill through the hunt does not mean that one simply eliminates the prey; instead, the game is killed "cleanly," which means that the animal is not destroyed but harvested. Such a death must also be inflicted as quickly and with as little suffering as possible; achieving such a death lies at the core of a hunter's act. At the same time one employs a method of killing that allows the prey a chance to avoid death; in turn this means that the game has the opportunity to participate in its own death. Without this participation of the prey in its own death, the ethical relationship is broken.

Second, the dead animal is put to use. This means that the hunter reflects on *why* the prey died. In this way the killing of a being that is bound up with the hunter in an ethical relationship is justified. Without this justification, a death through hunting is no longer ethically constituted. Third, the dead prey is celebrated precisely in its death.

By becoming a "trophy," a means to reflect on the game, its meaning in life, and its death, the killing of the prey is given *meaning*. Without this honoring of the slain animal and the consequent granting of meaning to it, which is to be performed by the hunter, the ethical relationship loses all content.

In other words, an ethically determined hunt always bears the character of a "liturgy" or a "ritual." The marks of such a performance are to be found in the fact that the prey is always killed in a particular way and not according to whim; in the special

constitution of a “sacrificial act,” whereby the death has not occurred without purpose (in this way, for example, hunting is distinguished from the attempted extinction of a plague or nuisance animal); and in the perpetuation of honoring and remembering the prey and its death, which both imbue the being that has been killed with a further meaning that continues after its death. These fundamental guidelines form the basis for hunting around the world; and according to our current knowledge their beginnings reach into the Paleolithic and beyond.

Religion as a Consequence of the Hunt

If one understands hunting and its conceptual framework as here presented, then there would appear to be a direct connection between the hunt as the intentionally sought killing of another being and religion as a widely spread location for symbolic thought in general and human consciousness in particular. How can we more precisely determine this connection?

In a remarkable study of the North American pronghorn antelope, John Byers, prominent wildlife biologist, has concluded that this unique species is a survivor from a long-lost age still existing in our contemporary world. This species stands as a remaining witness to the great extinction of large mammals in North America some ten to fifteen thousand years ago. If we are fortunate, this particular antelope-like animal will always be here to “remind us of just how fast a North American cheetah could run” (1997: 244). In other words, even though the appropriate predator, the cheetah, has long since disappeared, its corresponding prey species, the pronghorn antelope, still lives and remains in possession of those characteristics that allowed it to survive its enemy. As Byers so memorably puts it, the pronghorn antelope will continue to be chased by the “ghosts of predators past” (1997: 242).

Weston La Barre, the late world-renowned anthropologist, once characterized the belief in god, indeed the construction of any religion, as a “biopsychological relationship peculiar to human biology” (1970: 20). The well-known case of Kaspar Hauser, however, shows us just how empty and unprepared for matters of religion we are upon entering this world. This so-called “child of nature” had been kept imprisoned almost all of its childhood until close to maturity without any contact whatsoever with other humans or with the natural world. After his liberation, Hauser displayed to the first observers absolutely no signs of the thoughts or insights, and certainly no acts, that might possibly have been associated with “religion.” Is it therefore possible that adaptive developments and acquisitions, evolutionary hangovers if you will, and not specific genes, build the core of those human constructions we call “religion”?

If we take Byers’ example of the North American pronghorn antelope, then we might best understand religion as a collection or assembly of particular strategies, tools and constructions by which the human species achieved the transition from being purely a prey species to being a predator species. Or to put it another way: as a point of

departure, let us assume that religion is a complex and complicated set of strategies, which has as its goal the production of a value system, supported by a ritual apparatus, with which the human species can determine its origins and its final fate to be located outside of itself and its environment. The goal of such a strategy would be to cope with the experience that we as a species have changed from being prey to becoming predators, ending up in the unique position of being both prey and predator at the same time. Is it, in other words, possible that the human species is still pursued by the “ghosts of predators past” just as the American pronghorn antelope is, and that therefore the human species still displays some of the adaptations by which we once survived our most potent enemies?

The Battle for Life and Death

The heart of these reflections lies in the observation that the pursuit of prey species by predator species leads to wide-reaching changes in the pursued, for example, in herbivores such as antelopes. According to Byers and others, it is often the case that these changes and developments, such as the running speed of antelopes, reflect an adaptation that took place long ago and that does not fit the present situation in which the animal lives. Why should this not also be the case for the human species? Humans were originally herbivores; consequently, traces of these adaptations should still be available. As Byers points out, such a model of explanation would rank an historical interpretation of an ecological development peculiar to a particular species as equal to an explanation that is derived from the present-day usefulness of a particular behavior. Certainly the early experiences of the human species as prey led to survival strategies, even if our memories of these moments have long ago become faint. For example, how were decisions made about who would sleep on the edge of the fire and who next to the fire, and thus about who might well be the first one taken by a prowling predator? Even more important, how were such decisions made acceptable by those chiefly affected? The issue was, after all, a matter of life and death, just as it is for contemporary primates in portions of their African range. The main point is that some of these basic strategies that would have allowed leaders to make such decisions about who would likely be the next prey taken from the group on the one hand, and that permitted the selected individuals to accept that decision on the other, are also found in many, many so-called religions around the globe. For example, how death can be overcome by the promise of a life after death; or the persuasion that the good of the collective is more valuable than the survival of the individual; or the value of sacrifice, especially of the self; and so on. Such belief structures can be understood without much difficulty as the result of strategies that were developed for coping with the relationship between prey and predator. As a result, such strategies have become firm components of the tool kit that the human species carries around for constant

tinkering with the problems of survival. Not in the sense, of course, that Freud meant, but in an evolutionary and functional meaning.

If this theory is accurate, then the origins and the beginnings of religion would meet in a unique combination of human behavior and ideas that could be thought of as an evolutionary reaction to a prey/predator relationship existing for hundreds of thousands of years. This evolutionary hangover from an earlier development is still encountered in the human species of today. Some of our primate neighbors, above all those who go upright (for example the orang-utans, the baboons, the chimpanzees), are still frequently hunted and killed by the larger predator cats. For the human species, however, this problem has been greatly reduced by the extermination or severe reduction of such predators where humans thrive, except in a few isolated situations. The human species is among the best predators on Earth. We left the trees, went to the savannahs, and became among the world's most efficient and successful predators. Just a very few years ago the remains of an early predecessor to the human species, *Australopithecus gahri*, came to light, together with tools for butchering and bones that had been worked on. These bones and accompanying remains were dated some two and a half millions year ago! For a long, long time we were not only predators but also competitors with other predators for the same prey. And that means that at the same time we remained through many millennia also a prey species.

The result, as we have seen, was the development of the human species into a better and much more successful predator. What has remained, however, are the evolutionary traces of prey behavior that came about as a result of the prominent and very long exposure to predators. Physical traces of this development are, naturally, only few, and even they are not always obvious; the human psyche, however, betrays these remains much more clearly. When we hear noises in the middle of the night, it is not some spirit or ghost that we are afraid of, but rather it is a great predatory cat or perhaps the great cave bear, who could run faster than a horse. It is no wonder that the hair along our back stands up – or at least what is left of that hair. The chills that run up and down our spine are the result of our many back muscles that used to guide the hair formerly growing there. It was very risky, and very dangerous being a human being, and just how risky can still be seen in various parts of the world. India, for example, provides a classic example. In certain forests there that are inhabited by tigers, humans remain on the regular menu as prey for these powerful predators, and not simply the target of so-called “man-eaters” who have been driven to hunt humans because of injury or old age. Earlier, and present-day, experiences with the grizzly bears of North America together with the annual and sometimes deadly meetings with the polar bears of the far north offer further examples. And who can forget the story of John Patterson and his lions of Tsavo? He was supposed to build a bridge over the river Tsavo in British East Africa during the year 1896. Two young male lions interrupted work on the rail line and the bridge for over seven months, however, by keeping the indigenous and Indian workers on their daily menu. It took over half a year before Patterson and his colleagues were able to kill the lions. Finally, one need only turn to the constant wars

that plague the human species all across the globe to experience the human being as a predator *par excellence*.

There is one more thing that links the hunt and religion with each other, and with human consciousness. Widely experienced is the attempt on the part of many religions to remove the handcuffs with which the pursuit of “history” has bound us. This attempt is made through religious belief, ritual, and stories to recover the past and have it live again in the fullness of its reality and effect. Though some historians have proclaimed precisely this achievement as their goal (one need only think of Leopold von Ranke), most, if not all, realize that this task can never be accomplished. Through the hunt, however, the event that has already occurred can actually be resurrected and experienced in all its plentitude. In the killing that is such an essential part of hunting, the hunter is able to break through the barriers of memory: time is no longer a prison but a source. Only in the rarest of human moments is anything remotely possible. The great goal of myths and of religions, always striven for but never gained, is the heart and soul of the hunter’s life: through the hunt one returns to the beginning. This happens, as each hunter knows, because every kill is the first kill.

Thus we return to our beginning. Hunting is anchored in the earliest origins of the human species and in the ongoing environmental context we call nature. At the same time, however, hunting is governed by norms and devices that reoccur again and again in later developments of religion and human consciousness. Every kill is the first kill .

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Gary Lease

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- See also: Ecological Anthropology; Ecology and Religion; Evolutionary Biology, Religion, and Stewardship; Hunting Spirituality; Hunting Spirituality and Animism; Paleolithic Religions; Shepard, Paul; Wonder toward Nature.

Hunting Spirituality

“Hunting spirituality” is perhaps most readily observable among peoples to whom the phrase itself would make little practical sense – those contemporary hunter/forager societies whose lifeways are closest to those of our prehistoric forebears, and which continue to practice subsistence forms of hunting, in combination with gathering and/or small-scale horticulture. While there are many variations from one context to the next, the attitude toward nature expressed by these Aboriginal cultures is that summed up by anthropologist Richard Nelson, with reference to the Koyukon people: “Move slowly, stay quiet, watch carefully, be ever humble, show no hint of arrogance or disrespect . . . [A]pproach all life, of which humans are a part, with humility and restraint. All things are among the chosen” (Nelson 1991: 277). This attitude of reverence arises from, and in turn reinforces, a sense of mutuality between human and nonhuman beings. The twin ideas that everything that lives is holy, and that life itself comprehends a cycle of which death is a necessary part, are perhaps more comfortably at home in an animistic setting in which the dividing line between nature and human culture (as well as that between matter and spirit) is far less firmly drawn, than in the developed world.

Indeed, hunting in developed, particularly Western, societies has generally been characterized as a form of mastery over, rather than intercommunion with, nonhuman nature. From ancient Greece forward, European hunting was a pastime reserved for aristocrats, the vast majority of them men. Much of the symbolism associated with it reflected patriarchal and hierarchical values. While the situation in the United States is rather more complex in terms of class (rural subsistence hunting developed alongside the European model of hunting as the pursuit of the privileged classes), in the main here too the predominating models for hunting have been those described by sociologist Stephen Kellert as either “utilitarian” (meat or subsistence hunting) or “dominionistic” (competitive or trophy hunting). However, in his important research on hunters’ motivations, Kellert also isolated a third “type” of hunter, the “naturalistic” hunter, who seeks “an intense involvement with wild animals in their natural habitats,” and generally exhibits more knowledge of and affection for wild animals than hunters of the other two types (Kellert 1976). While these hunters are in the minority, and there is a certain amount of overlap among the three categories in any event, the number of naturalistic hunters appears to be growing. And the “nature hunter,” who according to Kellert confronts the paradox involved in killing an animal for which one also claims deep affection, represents an alternative view to the hierarchical conception of hunting.

Among European and American hunters, two sorts of hunting spirituality may be distinguished. The European tendency has been to ritualize some aspect of the kill –

the “blooding” ceremony in British fox hunting (in which a small amount of the prey’s blood is spread on the face of the first-time hunter), and the “last bite” (a sprig of greenery placed in the newly killed stag’s mouth) in Germany are good examples – as well as to bring hunting itself within the ritual umbrella of the Christian Church. Catholic hunters throughout Europe venerate St. Hubert as their patron saint, bringing their hunting horns, hounds and falcons into church to celebrate his 3 November feast day. However, with occasional exceptions, traditions such as these, rooted as they are in culture-specific forms of Christianity and closely identified with aristocratic privilege, did not translate to North American hunting culture.

Hunting spirituality among non-Native Americans tends to arise from what Kellert called the naturalistic perspective on hunting, and its exponents appeal to native, non-Christian and pre-Christian models. Nelson, for example, was initiated into hunting by native Alaskans; while he is loath to disown his identity as a white, middleclass Protestant, he makes explicit use of the teachings of Koyukon elders to articulate his experience of reciprocity between himself as hunter and the deer that keep him alive both literally and figuratively. In a similar vein, Ted Kerasote (1993) writes of the “deep emotional, even spiritual investment” he and his Wyoming neighbors have in elk-hunting, and (drawing the metaphor from his Greek Orthodox background) remarks that “elk meat is the Eucharist of this place.” David Petersen presents a more secularized view of elk hunting, which reflects a ruggedly individualistic personal spirituality. James Swan relates hunting to Jungian archetypal theory, and stresses its therapeutic as well as spiritual value. In my work, I focus on the power of the symbolism of Artemis, as simultaneously the goddess of women and the ecosystem, relating hunting to childbirth. While my own Artemis, drawn from classical mythic and ritual sources, is explicitly not the goddess of New Age spirituality, at least one practicing Wiccan, Chas Clifton, has argued the compatibility of hunting with Pagan nature-based spirituality.

These writers, and others who identify with the naturalistic model, all stress the initiatory importance of hunting, as a way of participating in the natural world, and reconnecting with the rhythms of the life-process from which Judeo-Christian civilization has become increasingly alienated. They tend, as a group, to be critical of urbanization and of advanced technology for its own sake, and to argue for what the late environmental philosopher Paul Shepard referred to as a movement back to the Pleistocene. This does not mean nostalgia for the past, or an attempt to appropriate other or earlier forms of hunting spirituality in any simple-minded fashion. Rather, as Max Oelschlaeger has argued – picking up where Shepard left off – the goal is a “new-old way of being,” rooted in a radical reconfiguring of the relationship between human culture and nature, which draws its insights from the best and deepest intuitions of those cultures which have lived more intimately in connection with the Earth.

Poet and environmental activist Gary Snyder eloquently sums up what might be called the credo of American hunting spirituality as follows:

The archaic religion is to kill god and eat him. Or her. The shimmering food-chain, the food-web, is the scary, beautiful condition of the biosphere. Subsistence people live without excuses . . . A subsistence economy is a sacramental economy because it has faced up to one of the critical problems of life and death: the taking of life for food . . . Our distance from the source of our food enables us to be superficially more comfortable, and distinctly more ignorant (Snyder 1990: 184).

Mary Zeiss Stange

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See also: Adams, Carol; Hunting and the Origins of Religion; Hunting Spirituality and Animism; Paleolithic Religions and the Future; Shepard, Paul; Snyder, Gary; Wilderness Religion; Women and Animals.

Hunting Spirituality and Animism

I've never really thought of myself as a "spiritual person." Certainly not in any ecclesiastic sense of the term. Like television commentator Bill Moyers, I'm firmly of a mind that "a lot of religion gives God a bad name."

But recently, here in the midst of my middle years, a profound spirituality has bitten into my being. And it's all tied up with hunting. To put a name to it, borrowing from two of my literary betters, I've become an "Earthiest" (Edward Abbey), in that "I stand *for* what I stand *on*" (Wendell Berry). An Earthiest is simply a pragmatic neoanimist. And animism, I propose, is the ultimate spiritual reality. While nature – and therefore "nature worshipping" animism – is palpable, logical, and utterly understandable on any number of levels, "God," by definition, is incomprehensible. Thus, any belief in God requires unquestioning faith. And faith is nothing more than blind acceptance of something whose existence lies beyond proof.

Physicist Paul Davies restates this contentious issue well when he says:

To invoke God as a blanket explanation of the unexplained, is to make God the friend of ignorance. If God is to be found, it must surely be through what we discover about the world, not what we fail to discover (Davies in Raymo 1998).

Indeed, I'll go with my senses.

"In indigenous cultures around the world," writes psychotherapist Ralph Metzner, offering an apt summation of what draws me spiritually to animism, the natural is regarded as the realm of spirit and the sacred; the natural *is* the spiritual. From this follows an attitude of respect, a desire to maintain a balanced relationship, and an instinctive understanding of the need for considering future generations and the future health of the ecosystem – in short, sustainability. Recognizing and respecting worldviews and spiritual practices different from our own is perhaps the best antidote to the West's fixation on the life-destroying dissociation between spirit and nature (Metzner in Oelschlaeger 1995).

In other words, those of social anthropologist Richard Nelson, "Nature *is* God." (1990).

According to ethnographic research, animism has always been and remains the universal cosmology of unadulterated hunting/gathering peoples worldwide (though such peoples today, following centuries of genocide, geographic displacement, ecological erosion, and cultural cooption, are scarce as fur on a fish). Likewise, neo-animism – Earthism, if you will – plays actively in the cosmologies of all *true* hunters yet today, whether they know it or not. As Aldo Leopold points out in his lyrical essay "Goose Music":

Hunting is not merely an acquired taste: the instinct that finds delight in the sight and pursuit of game is bred into the very fiber of the race . . . The love of hunting is almost a psychological characteristic. A man may not care for golf and still be human. But the man who does not like to see, hunt, photograph, or otherwise outwit birds or animals is hardly normal. He is supercivilized, and I for one do not know how to deal with him (1990).

Nor do I, though they often are friends and family.

Various sciences concur today that our apish deep-time ancestors started down the long winding path to sapience some six million years ago. Across all that gaping void of time, we were gatherers and, increasingly, hunters; predatory omnivores; bipedal bears. By comparison, we've been farmers and herders for only the past ten thousand years – less than one percent of our species' tenure by even the most modest of informed estimates.

As both genetics and biology testify, ten thousand years is by no means long enough for the human DNA pattern (genome) to have even seriously begun adapting to match the radically altered social, physical, technological and cultural environment we have wrought for ourselves in that same brief interval. Were our ancient, instinctive needs for predatory omnivory (and the lifeway and cosmology such a diet implies) not so deeply etched in our genetic being – were it merely “something we once did” along the road to becoming human, rather than what we *are* – hunting would have long ago been abandoned and forgotten.

But such is not the case. And this in spite of centuries of genocidal oppression of animistic tribalism by agricultural civilization and its various messianic religions, conspiring in a concerted effort to bring about what novelist Daniel Quinn (*Ishmael* and *The Story of B*) calls the “Great Forgetting.” Certainly, humanity's essential animistic tendencies cannot be genetically obliterated in so short a time as ten thousand years. Yet, in all urban civilizations they are effectively sublimated. Thus is the willful destruction of wild nature – which animism could never conceive much less condone – culturally codified and morally sanctioned throughout the “civilized” Christian/Jewish/Moslem world.

Meanwhile, those few among us who would fight to protect wildness, or, more daring yet, remain active players *in* wildness – those of us who clearly have *not* forgotten how we once were, how we are *meant to be* – are defiled by industrial culture as “tree-huggers, environmental elitists, and troublemakers” in the first instance, “anachronisms, barbarians, and heretics” in the latter. For my part, so be it. “To embrace the mass religions or ideologies of the present,” advises Wyoming meat hunter and poet C.L. Rawlins, “we must first deny what we know in our very bones: how the world works” (Rawlins in Petersen 1996).

And how the world works is through an endless sacred cycle of digestion. All things born must die, and, one way or another, be consumed. To be or not to be is *not* the question, but *when*.

The reality that all flesh feeds on fellow flesh is ineluctable, logically undeniable, even for the strictest of vegans. To trot out one of preeminent human ecologist Paul Shepard's more colorfully cranky aphorisms:

The human digestive system and physiology cannot be fooled by squeezing a diet from a moral. We are omnivores: our intestines and teeth attest to this fact . . . Vegetarianism, like creationism, simply reinvents human biology to suit an ideology. There is no phylogenetic felicity in it (1998).

Phylogeny is the evolutionary history of a species, compressed into a common genome. Veganism is felicitous to the phylogeny of *no* omnivorous species, jutting like a bent spoke from the great grinding wheel of biological life. Contrarily, nothing could be more in tune with nature, thus more ultimately moral, than to follow our omnivorous instincts, needs, and "God-given" talents as what I think of as *spiritual* hunters, openly and gratefully acknowledging at least a few of the countless deaths that go to nourish our lives. In attempting and accomplishing such personal humility and metabolic identity with the rest of nature, I propose, a far higher percentage of hunters succeed than do vegans.

One of the most significant and subtle scenes in Richard

Nelson's award-winning Alaskan memoir *The Island Within* comes when a native Koyukon hunter voices the animistic conundrum: "Remember, each animal knows way more than you do" (in Nelson 1990). In addition to its instincts – the "superhuman" ability to interpret and utilize the finest intricacies of landscape, weather, its fellow creatures, and more – what every animal not only knows but also actively acknowledges is its place in the great web of life. For millions of years, humans knew this too. And a few of us still do.

Spiritual hunting has helped me not only to accept the biological necessity of life-giving death, but also to applaud its practicality and embrace it as immutably sacred. And what is sacred must be guarded for all time.

In the end, we find sacredness only where we seek it. And only *if* we seek it. True hunters, spiritual hunters, seek and find sacredness in aspen grove and piney wood; in mountain meadow and brushy bottom; in cold clear water and stinking elk wallow; and ultimately – necessarily, *naturally* – in bloodstained hands.

David Petersen

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See also: Hunting and the Origins of Religion; Hunting Spirituality.

Huxley, Aldous (1894–1963)

Aldous Huxley, novelist, poet, literary critic, philosopher, essayist, was among the intellectual giants of the twentieth century. Born in Surrey, England into the famous biologist family (Julian Huxley, his brother; Thomas Huxley, his grandfather) and educated at Eton and Oxford, he developed a close friendship with D.H. Lawrence when both lived in Italy in the late 1920s and early 1930s. In his subsequent novels, Lawrence served as Huxley's primary model of the "natural man." Huxley moved to the United States in 1937. Huxley's many novels included *Crome Yellow* (1921), *Antic Hay* (1923), *Point Counter Point* (1928), *Brave New World* (1932), *Eyeless in Gaza* (1936), *After Many a Summer Dies the Swan* (1939), *Time Must Have a Stop* (1945), *Ape and Essence* (1949), *The Devils of Loudun* (1952) and *Island* (1962). In 1959, the American Academy of Arts and Letters granted Huxley the Award of Merit for the Novel. The author's non-fiction works included his anthology of mystical writing, *The Perennial Philosophy* (1946), as well as numerous collections of essays: *Jesting Pilate* (1926), *Do What You Will* (1929), *The Olive Tree* (1937), *Ends and Means* (1937), *The Doors of Perception* (1954), *Heaven and Hell* (1956), *Tomorrow and Tomorrow and Tomorrow* (1956) and *Brave New World Revisited* (1957) among others.

In his earlier years, Huxley was critically ambivalent and agnostic toward religion. Through remaining a cynic who saw life as essentially meaningless, he exalted the Greek ideals of sexual and intellectual happiness. If these two forms of fulfillment represent polar conflicts, in his novel *Eyeless in Gaza* they were resolved through mysticism. In his "Seven Meditations" of 1943, Huxley declared, "Unholiness arises when we give consent to any rebellion or self-assertion by any part of our being against the totality which it is possible for us to become through union with God" (in Bridgeman 1992: 23). This more mystical outlook culminates in *The Perennial Philosophy*.

Already, however, in his early essay "One and Many," Huxley concluded,

If men are ever to rise again from the depths into which they are now descending, it will only be with the aid of a new religion of life. And since life is diverse, the new religion will have to have many Gods . . . It will have to be all, in a word, that human life actually is, not merely the symbolical expression of one of its aspects (1937: 40).

Despite this affirmation of pluralism, Huxley's mystical quest took him steadily closer to a monistic position. During the 1940s and early 1950s, he became an initiate of Prabhavananda of the Ramakrishna Order, but after his experiments with entheogens as sacramental substances, he grew away from Vedanta and closer to Zen under the influence of Jiddhu Krishnamurti "who espoused freedom from any prophet

or path”(Bridgeman 1992: x). Huxley is known for arranging his consumption of LSD shortly before his death.

Huxley’s clearest understanding of nature is found in his 1956 essay “The Desert.” Here he expresses his understanding of space, silence and emptiness as “natural symbols of the divine” (1959: 19). The desert conveys the overwhelming quality of the cosmos *vis-à-vis* humanity. For Huxley,

By the majority the desert should be taken either dilute or, if at full strength, in small doses. Used in this way, it acts as a spiritual restorative, as an anti-hallucinant, as a de-tensioner and alternative (1959: 21).

In exalting mystics as diverse as Wordsworth, St. Bernard, Thomas Traherne and Meister Eckhart, Huxley found no antithesis between nature and spirituality. But when we do not accept nature as teacher and express charity toward her, “we try to dominate and exploit, we waste the Earth’s mineral resources, ruin its soil, ravage its forests, pour filth into its rivers and poisonous fumes into its air” (Huxley 1947: 109).

Huxley condemned the folly of humanity’s presumptuous attempt to be the master of nature “rather than her intelligently docile collaborator,” and claimed that the corollary of an immanentist doctrine is the sacredness of nature. But, he warned, “one cannot know created Nature in all its sacred beauty, unless one first unlearns the dirty devices of adult humanity” (1947: 124).

Michael York

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Hyenas – Spotted

Like lions, spotted hyenas are one of Africa's top predators. Although their territories also face encroachment by growing human populations, spotted hyenas are still found in greater numbers than lions and many other "charismatic megafauna." Spotted hyenas are bigger, bolder, more ubiquitous, more social, and more of a hunter than either East Africa's other hyena, the striped hyena, or southern Africa's brown hyena. They have been subjected to the greatest symbolic elaboration. Like leopards, spotted hyenas are crepuscular and nocturnal. A number of ethnic groups in Africa place leopards and spotted hyenas among the animal familiars of the notorious night-witches. With spotted hyenas, few positive associations are linked to the speed and strength they share with leopards. In Africa, some ethnic groups give individuals "hyena" names (e.g., Mbiti, Ondiek, Nyang'au, Kundu) but this naming tends to have origins in negative circumstances such as a mother dying in childbirth, or a child being born alive after one or more siblings died during the birth process. In some cases, the term for hyena is a synonym for "monster." Hyenas have a place at the top of many, but not all, Africans' lists of "animal hates."

Negative views of hyenas are found around the globe. Buddhism has marked hyenas as inedible to humans for the stench associated with their carrion eating and for their predatory nature. The 1642 "Decree on the Protection of Animals and the Environment" excluded predacious hyenas from the list of animals Tibetan Buddhists were prohibited from harming. Islam has proscribed the eating of hyenas, marking hyenas as "beasts of prey" whose consumption can negatively affect a person's character. Islam's concern to slaughter animals by humane methods has been seen as antithetical to the bloody manner by which hyenas kill and consume their food. The Old Testament and Pseudepigraphical texts show ancient Israelites reviled hyenas for carrion-eating and despoiling graves to feed upon human corpses.

Reporting on Pythagoras' teachings in his *Metamorphoses*, Ovid marked hyenas as anomalous for their purported practice of changing their "function" and "sex." New Testament, apocryphal, Gnostic, and other early Christian texts echo Greek attitudes. In the second century, Clement of Alexandria contended that hyenas were improperly "quite obsessed with sexual intercourse." Clement focused, as later Christian writers were to do, on what he regarded as regular hyena 'homosexuality.' In the same period, in his *Oneirocritica*, Artemidorus, a Greek mystic, declared that in a dream the hyena represented "a virago," "poison-mixer," or person "addicted" to homosexuality. The *Physiologus*, compiled between the second and fifth centuries C.E., and the *Aberdeen Bestiary* (ca. 1200 C.E.), provide further examples of Christian portrayals of hyenas

as anomalous, licentious animals that were “unclean” by multiple abominations and therefore inedible. While Aristotle attempted to refute views that hyenas were anomalously “hermaphroditic” (or changed their sex annually), his was a minority position for millennia. In 1614, Sir Walter Raleigh declared that hyenas had been excluded from the Ark because God only wanted “thoroughbreds.” Raleigh imagined hyenas had risen again after the

Flood from the “unnatural” copulation between a cat and dog.

The *Aberdeen Bestiary* also displayed an attitude that has persisted longer than mistaken views of hyena intersexuality and homosexuality. Using a discourse of debasement, it applied the term hyena to human beings and declared that “the sons of Israel resemble the hyena.” From the fourth century C.E. into contemporary times, some Ethiopian Christians have echoed the anti-Semitic “blood libel” canard and widespread African beliefs that hyenas are one of the animals into which humans can shape-shift. They have labeled Beta Israel Falasha Jews “The Hyena People.” Right and left-wing writing in Austria, Hungary, Peru, the United States, and elsewhere continues to use the term hyena for “international Jewry” and other enemies.

The American-based Disney Corporation has added to the large body of cross-cultural references that present hyenas in a negative light in its movie *The Lion King*. One of the hyenas has a Swahili name, *Shenzi*, whose range of meanings includes “worthless bastard,” “uncivilized,” and “uncouth.” Hyenas are emphatically excluded from the ecological paean to the “Circle of Life” overtly celebrated in the film.

Spotted hyenas’ scientific name, *Crocuta crocuta*, derives from a comparison of their reddish brown-tan coats to the color of saffron, the expensive and sought-after spice that comes from the *Crocus sativa* plant. This nomenclature is where complimentary attitudes toward spotted hyenas seem, in many instances, to end. Spotted hyenas prey on a variety of animals, including pythons, puff adders, pangolins, hare, zebra, wildebeest, the calves of elephants and rhinos, domesticated dogs, sheep, and cattle. They readily devour placentas. Their preferred method of killing involves completely disemboweling animals. Hyenas’ bloody means of killing seems messier than that of other predators who commonly go for the jugular and choke prey to death, but whether it makes them “the most vicious predator” has been questioned by only a few observers. Hyenas’ jaws and physiology give them the ability to devour bone, hide, hair, teeth, and hooves. Instead of the thoroughness and efficiency with which hyenas can consume almost all of an animal being regarded as ecologically sound, efficient, thrifty practice, which, even though bloody, is ultimately tidy, their manner of eating has made them a trope for the sin of gluttony. Hyenas also do not display the reverence for their dead that has been connected to elephants. They have gained a reputation for killing other hyenas and being animal cannibals.

Hyena killings of *Homo sapiens* and their ancestors have been documented deep into the past. Spotted hyenas figure in early human cave art. At a cave site in Monte Circeo, Italy, a Neanderthal skull that appears to have been opened up violently was first interpreted as indicating

“brain eating and cultic practices” on the part of other Neanderthals. The more recent interpretation is that the condition of the skull was caused by a hyena that had eaten the brain and spinal cord of the unfortunate Neanderthal. Hyena killings of humans, although not common, continue in the present. Elephants have long killed humans, and still do so, without acquiring the same animus against their kind in the international arena where the term “rogue hyena” seems redundant.

Spotted hyenas will consume the remains of kills that other animals, human hunters, and poachers have left behind as unfit for further use, whether these kills are fresh or moldering. Hyenas engage in coprophagy (eating excrement). Africans and others who believe in “contagious magic” seem to have regarded coprophagy less lightly when hyenas do this, as opposed to when the domesticated dog eats feces. Hyenas roll in “grossly physiological” substances like regurgitated masses of hair and bone and the blood of dead animals as well as swamp mud, and other matter humans find malodorous, to “perfume” their bodies or keep away flies. The odor their bodies emit has added to their reputation as “unclean animals” for humans around the world who do not share hyenas’ olfactory preferences. While a few peoples in Africa in the past left some corpses out for hyenas to dispose of, like the ancient Israelites and many other peoples, many African ethnic groups have regarded hyena necrophagy with revulsion. Some have used hyenas’ services as garbage collectors while continuing to view hyenas as “animal un-touchables” because of their close contact with refuse. Missionaries have developed “An African Creed” which emphasizes Jesus rose from a grave made secure so that “hyenas did not touch him” (Anon 1998: 4).

Hyena sociality and sexuality has begun to receive another reading from women in the West and elsewhere. Research is showing that hyenas have the mental and social skills attributed to the more “charismatic” elephants and chimpanzees. Female hyenas are physically larger than males. Hyena social life, like that of elephants, is one where female “matriarchs” head groups that have been called “matrilineal clans.” As with elephants, females stay with their natal clans; while males leave them at puberty. This means that the death of several females, by deliberate poisoning, killing, or “culling” at the hands of humans can have a devastating effect on a hyena clan’s ability to repopulate. Such deaths do not yet get the same publicity and level of protest from eco-theology and ecofeminism that the killing of elephants and apes has evoked, but this is a matter female ethologists and others are seeking to change.

While female hyenas do not seem to cooperate or form deep emotional bonds to the extent that female elephants do, their lives and psyches have not been studied as extensively. While hyenas do not yet have as many human voices speaking for them, studies have shown that hyenas’ own communicative abilities are not limited to their so-called “maniacal laughter.” Bonds among the highly social spotted hyenas are maintained by a complex repertoire of sounds, body language, olfactory communications, social defecating, play, and other communicative and social activities.

Scholars of hyenas are coming to appreciate that, as with Africa’s rock pythons, hyenas are another animal species in which forced insemination of mature females

appears to be absent. Female child molestation does not occur. While female dominance among hyenas has been attributed to their high level of testosterone, other factors are being recognized. Taking the male as the norm, the female spotted hyena has been said to possess a “pseudo-penis.” However, their organ actually only superficially resembles the male hyena’s penis. Female hyenas give birth, accept semen, and urinate through this organ. They use it in greeting rituals. Recent suggestions that the female hyena’s organ should be called a “macro-clitoris” or “external vagina” are an advance on calling it a “pseudo-penis,” but they only capture some of the organ’s complex character, much as the intricacies of hyena matri-clan life have yet to be fully appreciated.

Views about hyenas must be looked at more closely to see whether they apply to hyenas in general, to male hyenas, or to females. In contemporary Kenya, as in several other parts of the world, hyenas have featured in the discourses relating to both national and sexual politics. Shortly before his death on 23 August 2000 – a death that some Kenyans believe to have been another “arranged suicide” at the hands of the regime of Daniel arap Moi, which he had criticized – Fr. John Kaiser, wrote, “I want all to know that if I disappear from the scene, because the bush is vast and hyenas many, that I am not planning any accident, nor God forbid, any self destruction” (www.johnkaiser.net). In 2001, Wangari Maathai, a Gikuyu ecofeminist, and mother of the Greenbelt Movement, used a hyena metaphor to protest the plans of Moi’s regime to “excise” (or clear) forests and put them to use for its own purpose. Maathai’s censure was harsh. She asserted that asking Moi’s government “to stop the logging . . . is like asking the hyena to give you back the goat” (*Carte Blanche Interactive* 28 October 2001). Maathai also used a gendered hyena metaphor to castigate the Moi regime. She observed, “In my community they say that as greedy as a hyena is, it has never eaten its own puppies. Our so-called leaders have the level of greed that surpasses that of the hyena, for they destroy their own children, take food from their mouths, and eat it” (*Sunday Nation* 27 January 2002). Maathai’s background as a scientist is biology, and her comment can be seen to reference female hyenas as mothers. Field biologists describe female hyenas as “wonderful mothers.” It is male hyenas that may seek to “cannibalize” their young, an effort stymied by the larger, fiercer, mother hyenas.

As with many peoples around the world, the Luo of Kenya have associated hyenas in general with gluttony. Luo “Hare and Hyena” folktales tend to display the Hare as a clever trickster who triumphs over the Hyena, an inconsiderate glutton who thinks with its belly rather than brain. Women are the cooks in Luo society. They show agreement with the general assessment that “leopards and hyenas are ever hungry.” However, when asked what animals they used as terms of abuse against men, several women affirmed the term hyena was apt because “men eat a lot.” They added that a woman was likely to call a husband a hyena out of his hearing, recognizing that in most but not all Luo marriages dimorphism is not in women’s favor and that most women are not as large or as physically strong as their husbands.

Luo folklore contains tales in which a woman is married to a hyena at the outset of the tale, or finds out too late that a husband or paramour, who appeared to be human

enough, was actually a male hyena. The tales tend to show women using their wits to escape from men who are seeking to harm the woman, her natal kin, or their children. Ayodo sees their message being about women's "enormous inner strength" (1994: 123). Luo recognize that female hyenas also display great strength, so the tales need not be interpreted as a repudiation of all hyena qualities.

In "Marriage in the Sky," a tale-type found in many places in Africa, Hare takes a group of animals to the Sky, where Hare is seeking the hand of the chief's daughter. There is a test – either Hare or the other animals must refrain from eating. When Hare cannot control his appetites, and eats a ram he is not supposed to eat, Hare makes Hyena his scapegoat. Hare cleanses himself of the blood from the feast by wiping the blood on Hyena, who is punished for Hare's transgression. Having been turned into a scapegoat, Hyena feels wronged. Kenya Luo present the spotted hyena's vocalizations as the way hyenas are seeking "to tell the world" that Hyena "did not kill the first ram" (in Odaga 1980: 86). Hare is blamed for having given Hyena the idea to steal and eat people's goats, sheep, and other animals. The ecological message of this etiological tale seems to be that hyenas are not to be blamed for any enmity humans have toward them.

The Luo narrative "*Anyango Nyar Gwasi*" (Anyango, the Daughter of Gwasi) is about a woman who turned into a hyena and ate men. Luo women were adamant that Anyango Nyar Gwasi never ate her "sister-women." They told me the men devoured by this hyena-woman were men who had done Anyango Nyar Gwasi or another woman wrong, men who had "troubled women excessively," men who had gone off wandering from their homes, men who were "sex crazy." Some contended Anyango Nyar Gwasi transformed herself into a hyena through the use of indigenous medicine. Others claimed she was an emissary sent by Nyasaye (God), who had given Anyango Nyar Gwasi the power to transform herself into a female hyena to punish men. Some Luo women insisted a dream about a hyena could have nothing to do with night-witches, but rather was about getting "more power" from one of the "power animals" Luo culture presented to them.

Marilyn Zuk has contended that "human views on charisma are nothing more than biases" (2003: B13). Too many accounts of spotted hyenas have been biased against them. Some hyena figures, like Anyango Nyar Gwasi, have indeed been "charismatic megafauna" for some people.

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See also: Animals; Bestiary; Cognitive Ethology, Social Morality, and Ethics; Disney Worlds at War; Dogs in the Abrahamic Traditions; Dogs in the Islamic Tradition; Elephants; Kenya Greenbelt Movement; Nile Perch; Ovid’s *Metamorphoses*; Power Animals; Snakes and the Luo of Kenya.

I

Ibn Al-cArabi, Shaykh Muhyiddin (1165– 1240)

Abu Abdullah Muhammad Ibn Al-cArabi is called Muhyiddin (rejuvenator of religion) and Al-Shaykh AlAkbar (the Greatest Master) in recognition of the strong influence of his teachings throughout the Muslim world. Born in Murcia (Al-Andalus), now a part of Spain, he traveled extensively in North Africa and what is now Saudi Arabia, Syria, Egypt, Iraq, and Turkey, before settling in Damascus. Ibn Al-cArabi lived an extraordinary spiritual life, studied under numerous scholars and mystics, acted as a spiritual mentor to innumerable disciples, and produced some of the most sophisticated treatises on Islamic mysticism, cosmology, psychology, and metaphysics. Ibn Al-cArabi was essentially a sage, who expressed the contents of his spiritual “unveilings” or “openings” by using all the rhetorical and theoretical tools at his disposal, including poetry, while grounding his insights in the Qur’an and Sunnah. The most famous of his several hundred works include *Al-Futuhat Al-Makkiyyah* (The Meccan Openings), *Fusus Al-Hikam* (Bezels of Wisdom), and *Turjuman Al-Ashwaq* (The Interpreter of Ardent Desire).

Ibn Al-cArabi has been a controversial figure in Islam, revered and criticized with almost equal zeal. Much of this controversy can be traced to the inherent complexity of Ibn Al-cArabi’s writings; unable to study him directly, opponents have often formed hasty views based on misleading secondary sources. While this tendency crept into early Orientalist approaches, more recent Western scholarship on Ibn Al-cArabi is yielding increasingly refined understandings of his visions, insights, and intuitions.

One facet of Ibn Al-cArabi’s thought is what came to be known as Wahdat Al-Wujud or Unity of Being. Despite superficial resemblances, Unity of Being is very different from Pantheism, Panentheism, or Monism. It is a highly sophisticated and subtle exposition of the meaning of Tawhid, or divine unity. According to Ibn Al-cArabi, God is sheer Being, Absolute Reality, the only being that truly exists. Everything other than God is in an ambiguous state, halfway between Being and nonexistence. The perceptible universe consists of the manifestations, reflections, or modalities of Being.

According to a divine saying often quoted in the Islamic tradition: “I was a hidden treasure and I loved to be known, so I created the creation in order that I might be known.” For Ibn Al-cArabi, the universe may be seen as countless mirrors in which the one true Being is reflected, and through which it becomes known. Since all the

reflections in the mirrors cannot exist without what they reflect, each reflection can be taken as divine in its essence; at the same time, each reflection is nothing more than a mere image that has no independent reality. The mystery of existence is a paradox between affirmation and negation – everything is God/not God – a paradox that cannot be resolved in either direction without falling into error.

Ibn Al-cArabi's ontology is rooted in his epistemology. Human beings have been endowed with two "eyes" or ways of knowing. Each provides a valid but limited view; both have to be taken at the same time in order to arrive at truth. Where the eye of intellect and reason (*aql*) sees multiplicity and difference (*takthir*), the eye of imagination and unveiling (*khayal* and *kashf*) finds unity and sameness (*tawhid*). The former can affirm God's distance and transcendence from creation, but the latter experiences God's nearness to and immanence in creation. Full realization of truth requires balance and harmony between these two epistemic modes; yet the latter enjoys a degree of precedence.

Ibn Al-cArabi's ethics revolve around his view of human nature. For him, the foremost ethical imperative is the actualization of the entire range of potentialities inherent in the human being's primordial nature (*fitrah*). These human potentialities correspond to divine attributes, and the imperative to actualize them is based on the saying of Prophet Muhammad: "Assume the character-traits of God." The Islamic tradition provides ninety-nine divine names, each of which describes an attribute or character-trait of God. These names are often divided into "names of majesty" (e.g., Mighty, Inaccessible, King, High, Wrathful, Slayer, Harmer) and "names of beauty" (e.g., Beautiful, Near, Merciful, Compassionate, Forgiving, Life-Giver, Bestower). These two categories of divine names are sometimes seen as "masculine" and "feminine," terms that should not be understood as having any direct or necessary link with biological gender.

Since human beings have been created in the "form of God," they must develop their inherent divine character-traits in the most appropriate and harmonious manner, thereby becoming increasingly better "mirrors" in which God may be reflected and thereby known. While every creature or phenomenon of nature reflects a limited configuration of a few attributes of God, the human being has the unique capacity to reflect all of God's attributes in their fullness – to reflect God as God. This also means that human beings are not apart from nature; there is a certain kinship between the two, for the same God who is manifested in the created universe is the one who is revealed in the human being, the latter representing the universe in miniature (microcosm). This perspective can have a sobering effect on the human sense of separateness from and superiority over nature.

The writings of Ibn Al-cArabi have hardly lost their value during the last seven centuries. They have probably acquired new and unforeseen relevance in view of the increasingly apparent contradictions of the modern age. In this regard, the environmental crisis can be analyzed in thought-provoking ways when approached from a perspective that is informed and inspired by Ibn Al-cArabi's works. There are many ways to undertake this project; one would be to see the environmental crisis as rooted

in modernity's tendency to view reality with only one eye, that of intellect and reason. The environmental predicament can therefore be viewed as coming out of a partially valid but incomplete epistemology that sees multiplicity in nature but is blind to its underlying unity. For Ibn Al-cArabi, the realization that God is not identical with nature and that everything has its own reality is only one side of the truth. The equally important other side is that everything is a mode of God's self-disclosure through which God becomes known, and that the reality of everything is in essence God's Reality. To grasp this side of the truth, human beings must bring about a basic change in their way of knowing – they must open the other eye. Only then will human beings know that they cannot treat nature as their eternal “other” without becoming alienated from God and without betraying the most sublime aspects of their own primordial nature. Only then will they realize that the humanly caused extinction of a single plant or animal species is tantamount to shattering a divine mirror. Ibn Al-cArabi's ethics provides another possible way of approaching the environmental crisis. The roots of the crisis may be traced to the fact that human beings have become dangerously unbalanced in their selfactualization. Anthropocentric hubris results when human beings give an abnormal amount of emphasis to the traits of majesty, while ignoring the traits of beauty. Modern culture emphasizes the “masculine” side of the human self at the cost of its “feminine” side. Consequently, the human attitudes toward nature have been characterized more by domination and control and less by love and compassion. Ibn Al-cArabi's prescription would be to reverse this trend. Ibn Al-cArabi believes that God's “feminine” aspects have a greater reality than the “masculine” aspects. In the final analysis, divine names of beauty enjoy precedence over divine names of majesty, in accordance with the divine saying: “My Mercy precedes My Wrath.” In other words, God is more merciful than wrathful. This precedence of beauty over majesty, or “femininity” over “masculinity,” in the case of God must also reflect in the character-traits of human beings striving for perfection. In other words, the element of love and compassion in the human attitude toward nature must precede the element of domination and control, as a necessary requirement for self-realization.

In order to actualize Ibn Al-cArabi's relevance to the environmental movement, his extensive writings will have to be approached and appropriated from an ecologically informed perspective; the resulting insights will have to be made the basis of ecological education among those mystical and intellectual traditions in which Ibn Al-cArabi is revered as the greatest master.

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See also: Islam; Islam and Eco-Justice; Islam and Environmental Ethics; Islam on Man and Nature; Islamic Basis for Environmental Protection; Muhammad, The Prophet of Islam; The Qur'an; Tawhid (Oneness of God).

Ifá Divination

Ifá is a sophisticated and complex system of divination developed by the Yoruba people of today's southwest Nigeria, Benin, and Togo. Ifá is based on 16 major *odù*, or chapters, and 240 minor *odù*, making a total corpus of 256, which is known as *odù Ifá*. The *odù Ifá* is comprised of literally thousands of stories, myths, verses, songs, prayers, proverbs, ritual sacrifices and offerings (*ebo*), cultural history, social and cultural taboos, medicinal preparations, and dietary recommendations, among other themes. The repository of this literature, which nowadays is frequently in written form but in the past was entirely oral, is in the hands of priests of Ifá called *Babalawo*. They and other adepts of Ifá believe the entire literary corpus to be the message of the creator God, *Olodùmare*, as witnessed by the all-wise, all-knowing deity (*Òrìshà*) named *Òrúnmilà* or *Òrúnla*, who presides spiritually over the system. Ifá encompasses the entire spectrum of human experience, and as such it exhibits extraordinary diversity and complexity. However, the interconnecting thread that weaves the entire Ifá corpus is nature. Indeed, in virtually every *odù Ifá* there is at least mention of some bird, mammal, fish, reptile, insect, plant, tree, mineral, or geographic location.

The origins of Ifá in Yorubaland are shrouded in myth and cultural history. However, it is fairly certain how Ifá came to be known in the “New World” or in Diaspora, which nowadays unofficially boasts of having hundreds of thousands of practitioners. Along with millions of other Africans who were brought to the Americas via slave ships, hundreds of thousands of Yoruba were brought to the Caribbean islands of Cuba, Trinidad, and Hispaniola, as well as Brazil. A large contingency of these Yoruba were brought in the late nineteenth century to Cuban shores. Undoubtedly among those captured Yoruba were *Babalawo* versed in the literature and knowledge of Ifá. The names of these *Babalawo* are maintained orally and recalled frequently in ceremonial settings by many present-day diviners in the diasporic hubs like Cuba, Miami, Puerto Rico, and New York where Ifá and other *Òrìshà* traditions and practices are vibrant. Many of the same stories, myths, verses, songs, proverbs, etc. relating to nature that have been recorded in recent studies on Ifá in West Africa have been preserved by present-day *Babalawo* in the Diaspora. Since there is little difference in the flora of the Caribbean there has been little alteration to core religious practices. However, in several U.S. cities, which do not have a tropical climate, practitioners generally import needed herbs from Miami, Southern California, or other tropical areas.

Ifá priests are not only versed in the literature of Ifá but also in ceremonial procedure and practice. Their training is lifelong but typically most concentrated in the first seven years after initiation into the priesthood. Aside from knowledge of the *odù*

Ifá itself, priests attain a thorough understanding of herbs (including fruits and vegetables), animals (domestic and wild), and geographic locations such as rivers, lagoons, oceans, hills, and forests. From the aforementioned the most attention is usually focused on herbs and animals. Proficient *Babalawo* are well versed in the medicinal as well as spiritual use of leaves, barks, roots, and fruits. They know their cultivation, locations, indications, and contra-indications. There are *Babalawo* who specialize in herbal medicine both physical and spiritual. These are often called *Olu-Òsayin*, after *Òsayin*, the deity of herbs and healing.

Ifá priests who are herbalists usually also have shrines dedicated to *Òsayin*. The priesthood of *Òsayin* is a separate but integral aspect of *Ifá*. *Òsayin* is an *Òrìshà* who inhabits forests and wooded areas. He is lord over all flora. He is said to kidnap adepts in the woods and return them to society with a vast knowledge of herbs. This deity is also said to have part of one leg, one arm, and one ear missing, as well as a grossly disfigured eye. However, his ability to heal and make spiritual magic is said to be unsurpassed. One of his praises says, “*Òsayin*, the one who skips along with a single leg but who is more powerful than those with two.” He is a constant ally to *Òrúnmilá* and in fact taught him the importance and efficacy of herbal medicine.

Most important ceremonies in *Ifá* in the Diaspora and Yorubaland begin with the collection and ritual preparation of many herbs called “*ewe’Fá*” or the “herbs of *Ifá*.” In Yorubaland most coronation and initiation ceremonies employ an array of selected herbs. Prior to annual festivals, shrines and emblems of the different *Òrìshà* are often ritually washed with specific herbs. Sometimes shrines are decorated with these herbs and branches from selected trees. Palm fronds woven and dried in the form of a curtain are frequently seen demarcating shrines.

There is also a group of trees that are believed to be the abode of a variety of *Òrìshà*, spirits known as *Ebora*, and ancestors, or *Ègun*. These trees are generally seen in the forests as they are often quite large and usually quite old. Sometimes shrines are established at the base of these trees and designated with a wrapped piece of white cloth, especially when these sprout around populated areas. Some of the trees include *Àràbà* (Silkcotton, or *Ceiba*), *Ìrókò* (African Teak), *Akòko* (*Newboldia Leavis*), *Òshè* (Baobab), and *Òpè’Fá* (Oil Palm).

Another common and important feature in the *Ifá* divination corpus is the role that animals play. Most *odù Ifá* have some story featuring animal symbolism. Usually these animals include birds such as the hawk, eagle, falcon, woodpecker, toucan, and African Grey parrot; and domestic animals like the rooster, hen, goat, sheep, cow, dog, and cat. Many verses also speak of wild animals like the elephant, lion, leopard, hyena, water buffalo, fox, monkey, turtle, and aquatic species like the Electric mudfish and the Snapper. It is common to see in the divination verses any of these animals anthropomorphized. Oftentimes a specific characteristic of an animal; such as its ferocity, or its cunningness, or its sheer strength, its ability to survive adversity, and even its physical characteristics like fur, teeth, eyes, feathers, or even sound, is fused and paralleled with human characteristics, feelings, habits, and desires. These projections

serve as metaphors for ethical and moral lessons, for survival strategies, for acceptable behavior within society, for methods of worship, and/or taboos.

Some animals are considered sacred to certain *Òrìshà* and are forbidden to be killed or eaten, usually due to a circumstance in which a particular deity was in dire straits and the animal saved its life. The deity, it is said, citing eternal gratefulness, pledges never to eat the animal or its kin. Some animals are emblematic of the worship of particular deities. These animals, usually domestic farm animals, are sacrificed to the deities, then butchered, cooked, and finally eaten by the worshippers and community at large. In traditional Yoruba society, when a hunter captured and killed a wild animal such as a leopard, bush rat, antelope or deer, the animal was customarily butchered and divided among the hunters' kin. If the animal was very large (an elephant, for example) the meat was divided among elders and chiefs, as well as the hunters' family. However, in modern society and in the Diaspora these practices have become less common because of deforestation in Yorubaland and the scarcity of such wild animals in the African Diaspora.

Several *Òrìshà* have natural environments and phenomena associated with them. There are deities who inhabit particular rivers for which they are named (e.g., The *Òshun*, *Obà*, *Ògún*, and *Yewa* rivers located in southwestern Nigeria). Although The *Ògún* river is not inhabited by *Ògún*, *Yemojá*, one of his consorts and the spirit of the seas, there begins her fluvial tour that eventually leads to the ocean – her actual dwelling. There are also important deities who are associated with natural phenomena (e.g., *Shangó* with fire, thunder, lightning; and *Ọya* with wind and tornadoes). Notably, these two deities are characterized as volatile and hot-tempered. The stories of how these sites and phenomena came to be associated with these deities are also in *odù Ifá*. There are a host of other less popular deities associated with hills, farms, lagoons, and certain trees, as well as particular spirits who inhabit caves, river banks, desolate beaches, and even ant hills.

Practitioners of *Ifá* believe everything in nature is a manifestation of *Olodùmare*. And since every creation is imbued with a portion of the Creator, then every creation has a portion of his spirit. *Babalawo*, and indeed practitioners of the *Òrìshà* religion in general, believe that some small portion of *Olodùmare* exists everywhere in nature – in herbs, trees, rivers, oceans, lagoons, hills, birds, mammals, fish, in all their variety and color, and this divine power is accessible through ritual and prayer. *Ifá* priests believe that through certain words contained within *odù Ifá* the essence of nature can be summoned. And even though *odù Ifá* uses words to color its metaphorical landscape, clearly nature provides the canvass to convey sacred messages for the betterment of humanity.

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See also: Candomblé of Brazil; Santería; Umbanda; Yoruba Culture (West Africa).

Incas

To understand the religious ideas of the Andean peoples under the Inca in the sixteenth century, one must first look beyond the physical manifestations of empire, so dominant and lauded in the literature. To be sure, the elaborate road system that united the area of southern Colombia, Ecuador, Peru, northwestern Argentina, and half of Chile; the hundreds of storage silos that dotted the landscape; the pyramid structures and sacred centers of Tumibamba, Huanuco Pampa, Incawasi, and the like; the terraced Andean slopes; and the extensive irrigation networks that turned dry valleys into fertile oases all deserve mention. But to comprehend why these were built and maintained so assiduously requires delving into Andean notions of origins and life. In short, it requires readers to contemplate the role of the dead in the lives of contemporary Andeans on a continuing and daily basis.

The peoples of the Andes, whether we are dealing with individual lineage, with the ethnic groups that they made up, or with the dozens of ethnicities that fell under Inca rule in the sixteenth century, believed that they owed their existence to an identifiable ancestor, who was, in turn, either synonymous with or the direct offspring of a celestial being, body, or force, like the sun, the moon, the stars, or thunder/lightning. Lineage (*ayllu*) members, to start with the smallest social, political, and religious unit, told and retold the stories of their creation in songs and verse. Many preserved the mummified body of an apical ancestor to whom their creation was attributed. The mummy was kept in an open tomb or cave. On sacred occasions the mummy was visited, re-dressed in fresh attire, “fed” through sacrifices of animals, corn, coca, and maize beer, and sometimes removed for a period of celebration and worship that involved dancing, singing, and feasting. In the seventeenth century, the Spanish sometimes found such a mummy sitting on a stool or throne in his tomb, surrounded by the preserved bodies of hundreds of his deceased descendants, who could be named and identified by the living. Individual lineage members could and did recite their genealogies back to this founding hero. This apical ancestor was worshipped as a god, who, often with a sister, begot the lineage and either was the first to cultivate the Earth, was the first to introduce an important subsistence crop, or was the first to dig the irrigation system. Their myths and legends told how the first ancestor had traveled across an untamed landscape. When their ancestor sat down, usually on an elevated place, like a mountaintop, he brought order to chaos and civilized the uncivilized. The living believed that their first ancestor and his deceased descendants could and did continue to influence their lives. The ancestors could affect their health and fertility and that of their animals and

fields. For this reason, they received the peoples' thanks and acknowledgment through sacrifice and celebration. Living descendants also worshipped the spot where their first ancestor originally appeared and locations where he was known to have stopped or frequented during life. This is the origin of colonial references to the native reverence for a sacred spring, a tree, or a mountaintop. If the living did not adequately remember and propitiate their forebears for their blessings, the ancestors sent signs of their wrath and disfavor. An illness or plague; a frost, drought, or flood; even the infertility of a couple could be attributed to and explained as the result of the ire of one ancestor or another.

Andean peoples saw evidence of divine largess and power throughout nature. At harvest time, peasants separated and saved the highest yielding and fertile corn plants (*mates de maiz*) to dress as women and revere as the wives of their idols (*saramamas*). Miners preserved unusually pure pieces of ore to venerate also as gifts of their gods. Peculiarly colored or shaped stones and boulders also served as objects of local devotion.

The same ideas were prevalent among the dominant ethnic group, called the Incas by the Spanish, although the scale and elaborateness of worship were proportionately greater. The Inca or king claimed descent from the sun, his father, and the moon, his mother, the sun's sister and wife. The Incas who were alive at the time of the Spanish invasion in 1532 preserved the mummies of their forebears and brought them out on ritual occasions as proof of their direct descent and right to rule. Each mummified king had a palace and attendants, their own descendants, who clothed and fed them, answered questions for them as if they were still alive, and kept the flies off their preserved remains. The Incas built centers of sun worship throughout their realm, each patterned on the first, complete with hospitality centers and residences for the "chosen" women. Rich ceremonies were celebrated at these centers as the Inca moved from one to another, dispensing favors and justice, celebrating the sun, moon, and stars, and reinforcing the personal relationships that proved the basis of his terrestrial power. On such occasions, Inca feats and achievements were recalled. Such events marked the calendar and provided occasions for peoples of the various ethnicities to participate in the adorations, learn the traditions, and identify with the greatness of their past. These ancestor-gods, known as *huacas* (a generic expression for anything sacred) provided a paradigm for Andean rulership, of a lineage (*principal*), a larger ethnic group (*curaca*), and nation (king or emperor). The apical ancestor, either as a mummy or its representation (an idol or a mask), was carried from place to place on ceremonial occasions. An extended family might designate one of its members to carry great (great, great, great . . .) grandfather on his back for the dancing and singing during a celebration. A larger ethnic group might carry their forebear on a more or less elaborate litter. They, as mentioned above, were dressed afresh for such occasions and "fed."

Andean leaders, from lineage leaders to emperor, were treated in much the same way. Each ruler was carried "on the shoulders of Indians," seated normally on a low

stool, atop a litter. He moved from one ceremonial center to another surrounded by his personal retainers, who served as pages, musicians, entertainers, and guards. Women followed his procession, carrying toasted corn and maize beer to dispense to the onlookers. As he passed, subjects pulled out their eyelashes and eyebrows to blow in his direction and put their hands to their lips, which they smacked as in a kiss, as the palms of the hands were thrust outward and upward, as an outward sign of reverence (known as the act of the *mocha*). Like the gods who moved from place to place, the leader remained mum and mostly motionless as he was carried about. The Inca's person was sometimes shielded from view by a curtain or cloth and a spokesman answered direct questions in his stead.

Ancestral gods were believed to take an active role in choosing the successors to rulership. At all levels, candidates for leadership were screened by divination. In a ceremony, called the *calpa*, the ancestors indicated their choice from among the candidates. Once chosen, the lord-to-be fasted and went through purification rituals. The inauguration ceremony involved investing the lord with the insignia of rule and sitting the incoming authority on a stool. Once thus enthroned, his followers worshipped him. The *mocha* has been interpreted as symbolizing the investiture of the wisdom and power of the past on the living authority at the moment he took his seat. Once seated above everyone else, he could mandate and control the labor and fate of his followers and bestow justice, including the recognized right to condemn to death for serious infractions of group customs or affronts to the gods or his person.

The authority's legitimacy was based on his direct descent from a hallowed creator. The balladeers and record-keepers (*quipucamayocs*) recited the history of the group as a royal genealogy. The Incas recalled the rule of about a dozen previous god-kings, going back to a mythical man named Manco Capac. Lineage leaders in the central Andes in the seventeenth century recited a genealogy of authorities going back up to eleven generations to an apical ancestor. Even the bestowal of a plot of land in sixteenth and seventeenth-century Lamabayeque (Peru) required the recitation of a list of ten previous holders, back to the person who presumably was the first to clear and cultivate the plot.

One task of each ruler was to accomplish, if possible, something extraordinary to be sufficiently noteworthy to be remembered. For some individuals, conquest established his reputation while at the same time gaining the vanquished as persons on whom to impose labor service. Other rulers mobilized their followers to terrace the hillsides or extend an irrigation system to create additional resources for exploitation. Presumably, production could then increase. More surpluses might be warehoused for distribution at the sacred rituals, where dancing, singing, and feasting were the order of the day. Individuals from other lineages might be recruited to his service because the ancestral god showed favor on his descendants. Prosperity and good government reinforced and were the manifestations of their ancestral belief system. The reputation of the local leader and his cult increased. Marriage alliances extended the cult. In sum, either through successful waging of war or the execution of a major engineering feat, a lord

could gain a place in the collective memory stored in songs and verse. This increased the chances that he would be remembered and adored generations after he died, and began the process of turning him into a generous and good folk hero.

It was another of the tasks of such leaders to serve as mediator between the god(s) and his followers. The principal at the lineage level, the *curaca* at the ethnicity level, and the Inca at the imperial level were responsible for propitiating the spirits of the dead with food and drink. He also directed the cultivation of certain plots of lands that were worked to produce the items used in sacrifice. He assigned people to herd and care for the animals that were raised for ceremonial purposes. He sometimes appointed persons to care for the tombs. Maidens were chosen to make the maize beer and weave the cloth for ritual acts. He also was believed to have the power to communicate directly with the gods. In this way, he served as a mouthpiece for the ancestors, who answered important questions of concern to individuals and the group as a whole. Thus, reciprocity reigned between the gods and authorities, as between the authorities and their peoples.

Should the living lord prove remiss in his duties, as evidenced by difficulties and disaster (including natural ones), his subjects would judge him a failure and flee. It then became incumbent upon the lesser lords to take action. If hardships persisted, lesser lords were known to murder their lord, believing that he had lost the favor of the departed and, therefore, his legitimate right to rule.

The power of the gods was not considered to be static. Their power, like that of men, could change over time. In times of war, descendants carried the ancestor's mummy or its representation into battle to help defeat the enemy. The victor's god was believed to be more powerful than the vanquished side's hero. It was accepted custom for the vanquished to accept defeat as proof of relative power and accept service to the victors and their ancestors. One scholar believes that the purported aid of the sun god explained the victory of the Incas against the Chancas under the Inca Pachacuti. This victory moved the sun into the primordial and most powerful position of the pantheon, displacing the thunder god as the most revered. Because lineage leaders were related to *curacas* and

curacas were related to the Inca through multiple marriages and the practice of polygamy, polytheism was the order of the day. One individual might worship the sun and the moon, the ancestors of the *curaca*, his own grandfathers' grandfather, and his father and mother. Likewise, one family, all its relatives, and all the relatives' relatives might travel in pilgrimage to a regional ceremonial site to participate in a ritual honoring the sun on the occasion of the presence of the living Inca himself.

There was, in short, a hierarchy of gods. The Spanish chroniclers write that the Inca evaluated ethnic and lineage gods, who were required to be presented before him once a year, on the basis of their predictions. Those who foretold correctly were lauded and rewarded; those who failed to predict accurately were demoted to the point of oblivion. In a culture that depended primarily on oral traditions for its historical sense of self, to lose adherents and followers was to be forgotten.

The multiplicity of gods and the absence of detailed historical texts led to the historization of the landscape as a memory aid. Unique and notable features of the countryside – the highest peak, a lake, a spring, a boulder, or a very old tree – might be rendered sacred by this association with a heroic ancestor. A person would hear in childhood the stories associated with each landmark, thus learning to “read” or “recall” the history of the group. These would be manifestations of the interdependence of the living and the dead; the future depended on the past through the advocacy of the living. Roads were extended to unite a people, made one by marriage and blood with the most powerful of the sacred ancestors, the sun. In times of crisis, one looked to the strongest and most powerful for aid. The hundreds of storehouses of the Inca guaranteed subsistence to people who lived on lands that periodically trembled and shook and who suffered from periodic frost, floods, and drought. The pyramids and other monumental architecture, the ceremonial complexes, the irrigation networks, and the terraced mountainsides were evidence of a powerful past, legacy to the living and the future. In worshipping their ancestors and the places they rested and inhabited, and the origins of their origins, Andeans were worshipping the sun, the moon, the thunder and lightning, the Earth (the *pach- amama*), life and themselves, for they were children of the gods.

Vestiges of this native belief system are still seen in the Andes of today. Inhabitants of small towns (e.g., Racchi) still name the surrounding peaks as objects of devotion. There and elsewhere, entire families spend All Saints’ night in the cemeteries, leaving gifts of food and drink at the tombs of their dead. An old aglarrobo tree is still the object of veneration and sacrifice in the Poma forest of inland Lambayeque (Peru), although no one will say why it is considered a holy spot. It is in some ways ironic that all over the Andes, people, like those of Ucupe (north coast of

Peru), are increasing their protection of ruins and setting aside tracks of forests and jungles (e.g., Manu) as nature preserves for the potential they symbolize of bringing in tourist revenues. In this sense, the ancestors are still providing for their descendants.

Susan Elizabeth Ramírez

Further Reading

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Ramírez, Susan Elizabeth. *To Feed and Be Fed: The Cosmological Bases of Authority and Identity in the Andes*. Stanford: Stanford University Press, 2004.

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See also: Andean Traditions.

India

The natural landscape in India is extremely varied, from the deserts of Rajasthan and the flat eroded landscapes of the Gangetic valley to the green tropical forests of Kerala, the tree-covered hills of Madhya Pradesh and the snowy mountains of the Himalaya region. Similarly varied is the religious terrain. The religious history of India is best understood as an interplay of several major religious traditions and many minor ones. Hinduism, Buddhism, Jainism and Sikhism arose in India; Islam and Christianity have had a significant presence here for more than a thousand years. India has been politically unified only a few times but has had rulers supporting Buddhism (Mauryans, 324–187 B.C.E.), Hinduism (Guptas, ca. 320–500), Islam (Moghuls, founded 1526), Christianity (British, 1757–1947), and secularism (1947–present). Jainism and Sikhism have been supported by regional rulers. In addition, India contains a large number of tribes with their own religious traditions. These religions have influenced each other in innumerable ways and none of them should be identified with India. Nevertheless, the Hindu religious tradition has had a particularly great impact on the religious culture of India. More than 80 percent of the population is usually reckoned as Hindus and more than 90 percent of the Hindus of the world live in India. However, because of the immense plurality of cultural and religious traditions of India, it is impossible to speak of a single Indian vision of or attitude toward nature.

Since the nineteenth century, India has experienced unprecedented environmental degradation. This degradation has been caused by the rapid expansion of the industrial capitalist mode of production and consumption and has led to deforestation, erosion, water and air pollution, exponential population growth, urbanization, and increasing poverty. Use of old technology in industrial production and transportation is a major cause of pollution. Polluting industrial production has been moved from Europe and North America to countries with low labor costs such as India. The combination of exponential population growth, urbanization and small technological changes such as water closets and plastic bags have had devastating environmental effects. Environmental legislation has followed. However, the Indian government's lack of funds and the poverty of the majority of the population have been, and continue to be, an obstacle to improvements. Religion is to a large degree irrelevant to these new problems, as large-scale environmental problems seldom or never are caused by religious practices as such. Likewise, the goals of environmentalism are usually peripheral to the purpose of religions. Nevertheless, traditional religious practices and inherited interpretations of the meaning of nature and the human–nature relationship can provide a critique of contemporary environmental attitudes and behaviors. In India, starting in the 1970s,

certain aspects of the religious heritage have been used to promote a mobilization against further environmental degradation and to initiate healing of the environment.

The oldest religion in India known through texts is the Vedic religious tradition. Vedic religion developed from a religious tradition that was brought to India by a seminomadic people who spoke an Indo-European language. Its most sacred texts, the Vedas, composed between ca. 1200 B.C.E. and 300 B.C.E., bear witness to the worship of divinities, many of whom are personifications of nature. Central in the Vedic religion was the notion of obligation and the duty to give to the gods as a response to what has been received. The sense of obligation linked humans and the divine beings in a circle of ritual giving and receiving. Since many of the gods and goddesses manifested themselves in natural phenomena, humans were linked to nature in a religious sense and in a holistic relationship. This sense of duty was codified in a number of Law-books (*Dharmasutras* and *Dharmashastras*) and summarized in the concept of *dharma* (right, duty, order).

In the centuries after 600 B.C.E., the center of the Vedic culture had moved from the northwest of India to the Gangetic valley. In this region other religions (among them Jainism and Buddhism) arose and the Vedic religious tradition was transformed into Hinduism. Many of the dominating concepts in Indian religious thought, some of which had consequences for the understanding of the human–nature relationship, became popular in this period. The concepts of rebirth (*punarbhava*), *karma*, and *moksha* were central in the new religions of Buddhism and Jainism, and these concepts were also developed in the Vedic tradition.

Hinduism has continued the Vedic tradition of seeing the world as a manifestation of the divine. But especially in the philosophical and theological texts, the world has often been given a secondary value compared to the divine principle itself. In the *Upanishads*, and in the philosophical and theological interpretations of them by the *Brahmasutra* and the Vedanta schools, a principle called *brahman* was accepted as the ultimate reality and the source of the phenomenal world. Many of the gods inspired by the natural phenomena now received less attention while the gods Shiva and Vishnu were elevated to ultimate principles identified with *brahman*. Around 500–600, the Goddess was given the same status. The divine power to create was assigned to the Goddess who became the creative power of the male god. The male gods Shiva and Vishnu were identified with the formless, unmanifest and transcendent ultimate source of the world. The Goddess was thought of as the power of manifestation (*shakti*) and also identified with the manifest world as such. In the theologies of the Goddess, therefore, the material world was not of secondary value. The Goddess was also called *prakriti*, a word that came to mean both nature and woman, and which later was chosen by the speakers of the languages of North India to translate the English word “nature.”

According to Jainism, all living beings have souls (*jivas*). Some Hindu traditions believe that all living beings are part of the same divine principle (*brahman*) and others, that all living beings have separate souls (*purushas*). In Buddhism it is emphasized that animals and humans are part of the same rebirth realm. Since the cycle of rebirth

(*samsara*) includes not only all human beings, but also all animals (and, in the case of Hinduism and Jainism, also plants), animals (and plants) are included in the moral order. Treating animals well gives religious merit and leads to a good rebirth and treating them badly gives demerit and a bad rebirth. A good rebirth means a rebirth as a human or rebirth in one of the divine worlds; a bad rebirth means rebirth as an animal, ghost or in various hells. Most religions have an ethics of *ahimsa* (non-injury), but in many religions this is often formulated as a prohibition to kill humans. A consequence of the inclusion of animals and plants in the doctrine of *karma*, *samsara* and *moksha*, or in the divine unity, is that the doctrine of *ahimsa* in India includes also the non-killing of animals and plants. *Ahimsa* entered the religious tradition of India as a criticism of the institutional killing of animals in sacrifice. The emperor Ashoka (268–239 B.C.E.), a famous proponent of *ahimsa*, prohibited animal sacrifice in his capital. *Ahimsa*, therefore, came to be accepted not as a reaction to war, but as a statement about treatment of animals and of the human–nature relationship. However, slaughter of animals has usually not been prohibited in India and animal sacrifice has been common in some styles of Hindu worship, especially in the worship of the Goddess. Several religious traditions in India such as Jainism, yoga traditions, and traditions of Krishna worship, however, condemn the killing of animals.

Moral behavior is not expected from animals since they usually are not thought to produce merit and demerit, but just to experience the result of past acts. However, the Buddhist *Jatakas*, stories of the previous lives of the Buddha, tell that the Buddha was building up religious merit through altruistic behavior in rebirths as various animals. The *Jatakas* use animal stories to teach ethics. The device of using animal stories to convey wisdom is part of Indian culture. Several other such collections are known, the most famous being *Hitopadesha* and *Panchatantra*. Animals manifest various human characteristics: the parrot is wise, the deer and the antelope are affectionate and delicate, the monkey is intelligent, the elephant powerful, the jackal is cunning, the tiger fierce but easily tricked by the jackal, and the serpent is secret, vicious and powerful.

The natural parks in India, however, did not grow out of such anthropomorphic ideas, but out of the early twentiethcentury Western idea of “wilderness” as a protection of hunting reserves. However, an Indian tradition of hunting reserves for the feudal elite had existed already from the time of the Muslim Moghuls.

Animals have also been incorporated into the divine world. Several of the Hindu gods such as Ganesha and Hanuman, have animal forms and most of the major gods and goddesses have animal vehicles (*vahanas*). These animal vehicles often symbolize attributes of the gods and goddesses. Some gods have particularly friendly relationships to animals. Krishna grew up in a cow-herding community while Rama spent 14 years in the wilderness. Rama’s sense of justice was admired also by the animals in the forest who became his helpers. Krishna is often depicted in contemporary god-posters next to cows, while Rama is depicted hugging animals, either his monkey friend Hanuman or the bird Jatayus, showing the solidarity between the gods and the animal world.

Some animals in India such as cows, snakes and elephants have been given an almost divine position. They may be worshipped as divine beings.

Many Indians, especially Hindus and Sikhs, have warm feelings for the cow. The cow is decorated during religious festivals and is celebrated for its ability to give. India is the biggest milk-producer of the world and all the five products of the cow (*pancagavya*: milk, ghee, yoghurt, urine and cow dung) are considered pure and are used in a variety of rituals. The cow is a symbol of the Mother, both as the Earth and the Goddess. The sacredness of the cow is closely related to the doctrine of *ahimsa* (non-injury) but the relationship to the cow of many Indians can also be compared to the relationship Europeans or Americans have to the dog. To them the dog is like a member of the family and would of course never be eaten. Even Hindus who eat meat would therefore not eat meat from the cow.

Protection of the cow is an ancient custom in India. Muslims and Christians slaughter and eat the cow but this is sacrilegious to many Hindus and has been a source of conflict. After the Muslim invasion of India in the eleventh century, the sacredness of the cow became a focus for the resistance of the spread of Islam in India. Several of the Muslim rulers such as Akbar's son Jahangir (d. 1627) had a great love of nature, but they were eaters of beef. Some Muslim rulers such as Babar and Akbar, however, are supposed to have banned cow slaughter, and the Sikh kingdom in Punjab made cow slaughter a capital offense. Slaughtering of cows nevertheless continued to cause tensions between Muslims and Hindus. Slaughtering of cows and eating of beef were used by the Brahmins to generate opposition to Islam. The rulers of the Hindu Maratha kingdom of the seventeenth and eighteenth century who fought the Mughal empire saw themselves as the protectors of the cow. Muslims on the other hand used the propagation of beef eating as a way to spread Islam. With the coming of the Western colonial powers in India, the sacredness of the cow was again used to mobilize people against the British beef eaters.

The Hindu reform movement, Arya Samaj, founded in 1875 by Dayananda Sarasvati, established cow-protection societies in different parts of India. One wing of the movement favored laws for the protection of the cow and prohibition of commercial slaughterhouses dealing in beef. This anti-cow-slaughter agitation led to large-scale rioting between Muslims and Hindus in 1892–1893. Anti-cow-slaughter has been a recurrent phenomenon in India and has often been anti-Muslim, with mostly Muslims as the victims.

One cause of the great Indian Mutiny of 1857 was the accusations that the British were using cow's fat as grease for the maintenance of military equipment. Accusation about the use of cow's fat continues to arouse strong feelings. In 2001, when it was revealed that the American food chain McDonalds used fat from the cow to add taste to their french fries, it caused an uproar among diaspora Hindus. The hamburger chains in India serve meat only from sheep and goat.

In societies in which humans suffer, animals usually suffer even more, and, like humans, animals in India often have had and continue to have difficult lives. Even

if religions encourage treating animals well, animals are no doubt often treated badly. However, the principle of *ahimsa* has generated a great tolerance of animal life. Animals such as rats and sparrows, who compete with humans for food, are not exterminated but their right to eat and live is generally accepted. Being good to animals gives religious merit, but is not a religious goal in itself, although it might be a sign of deep religiosity. Places to feed animals such as birds and fish are often found in sacred compounds since feeding them gives religious merit. Some Jains run places for discarded animals, called animal hospitals, while some Hindus run *goshalas*, places to take care of unwanted cows. Animal hospitals and *goshalas* are important as symbols of the ideal human– animal relationship.

The world is characterized by a fundamental disharmony since species depend on killing each other in order to stay alive. Perfection in the practice of *ahimsa* is impossible while living; only in the released state (*moksha*) is absolute non-injury conceivable. This is one motivation for attempting to attain *moksha*. According to Jainism and Buddhism and some of the Hindu traditions, some practice of *ahimsa* is a necessity for attaining release from rebirth. Monastic orders have been established for persons interested in performing the religious restraints necessary for attaining release. Since killing or having others kill for you is a necessity, but prohibited for the monks, lay people provide the food and other necessities to the ascetics. The custom of vegetarianism is more widespread in India than in any other country of the world. Vegetarianism is a way to deal with the fundamental disharmony of the world and a consequence of the awareness that humans harm themselves (because of karma) by causing pain to other living beings. It is an adaptation of the principle of *ahimsa* and the inclusion of animals and plants into the moral order.

Restraint is one of the significant ideals in the religious cultures of India and is often formulated as a relationship to nature. Monks and renunciants are the foremost representatives of this ideal, but most religious persons admire it. Restraint might have been part of the preparation of the priest for the Vedic sacrifice, but it is a primary value in Jainism and Buddhism and is of great significance also in the Hindu tradition, especially in the institution of renunciation. When the Hindu orthodox renunciant took the vow of renunciation, he gave the gift of “safety to all creatures.” He said: “From me no danger (or fear) will come to any creature.” He promised that all living beings may go to sleep and wake up without fear from him and swore never to injure any living being. He abjured even his own self-protection against wild animals.

Ascetics are supposed to be able to almost develop perfection in *ahimsa* and, interestingly, animals are believed to be able to recognize such ascetics. Animals therefore seek their company and even wild animals become peaceful in their vicinity. In their presence, natural enemies such as cat and mouse give up their animosity. To attract animals is a sign of spiritually advanced persons. Animals recognize their peaceful nature. Ascetics often live or wander in wilderness areas. The Himalayas are known as a place of yogis, but many mountains, hills and forests in India have been and are homes for ascetics. The *Shvetashvatara Upanishad* 2.10 says that the practice of Yoga should

be performed at a charming place and a place the mind does not consider ugly. Since yoga should be performed at a place of natural beauty,

ashramas or meditation centers of ascetics are often places of striking natural beauty with the enchanting sound of water flowing, the melodious song of birds and the pleasant scent of flowers. Many descriptions of their beauty are found in the classical Indian literature.

Jainism and some Hindu traditions believe that plants also have souls (*jiva*, *atman*). Some plants are even considered divine. In the *Garuda-Purana* it is stated that “By growing, nurturing, sprinkling, saluting, and extolling the *tulasi* plant, the moral impurities of a human being accumulated in various births are wiped off” (2.38.11). In other words, the *tulasi* plant is a manifestation of God, and by worshipping such a plant salvation is attained. *Tulasi* is sacred especially to the worshippers of the god Vishnu, but several other plants and trees are sacred to the worshippers of Shiva. Tree worship is common in the whole of India. An ancient institution in India called “sacred groves,” perhaps of pre-Vedic origin, kept patches of original forest uncut. The Buddha was probably born in such a sacred grove. Many villages in India have sacred groves in which plants and animals receive absolute protection. But already in the 1880s, the inspector general of the forests in British India lamented the loss of sacred groves and this destruction has continued unabated since. However, there is also a tradition in India of defending trees and forests from being cut down. In about 1750 the famous Bishnois in Rajasthan protected the tree *Prosopis cineraria* from being cut down by letting themselves be killed by soldiers. Even today Bishnoi villages are green islands in a desertlike environment.

In India there is an ancient tradition of wandering in the forest, traveling to rivers or beaches or climbing to the top of hills. The purpose is to visit sacred places. In several of the religious traditions of India, place as such is a source of religious power. Millions of Indians regularly visit sacred places. Traditionally the pilgrims walked alone or in small groups, but these days crowds travel together in buses, trains and cars. The landscape of India is plotted with sacred sites: Hindu temples, Sufi shrines, Sikh *gurudwaras*, mosques and churches. Many are places of local or regional pilgrimage but quite a few centers attract pilgrims from all over India. At the Kumbha Mela festival 2001 during the most sacred days, between 20 and 30 million people gathered at the confluence of the rivers Ganges and Yamuna to bathe at this sacred place of natural beauty. A unique feature of the Hindu concept of the power of place is the idea that the places as such can be reduplicated. Reduplication means that the power of one sacred place can be represented and thus be made available also at other places. In other words, the power of place can be abstracted and transferred to other places. Sacred places have the power in themselves to give *moksha*, and dying at a sacred place such as the riverbed in Varanasi brings release.

Many places of pilgrimage are next to rivers and rivers play a significant role in the religion of the Hindus. They are believed to be sacred, are personified as goddesses and have the power to cleanse the individual from moral impurities. The ashes of the dead

are usually placed in the river. The idea of the sacredness of places and rivers may be drawn on to generate a respect for the land, but it may also obscure environmental degradation such as pollution. The environmentally polluted state of the rivers Yamuna and Ganges is easily observable, but the rivers are nevertheless still considered pure from the ritual point of view by devotees.

In general, greed for the products of nature is probably a much greater cause of environmental degradation than a lack of appreciation of her. Ascetic values and traditions that consider human restraint as an ultimate virtue in the relationship to nature have had a great impact on contemporary environmentalism in India. This is to a large degree due to the innovative reinterpretation of the ascetic values of Mohandas Karamchand or Mahatma Gandhi. Gandhi, although he lived before environmentalism and the environment was not his main concern, is nevertheless recognized as the father of the environmental movement in India. There are several reasons for this. Gandhi's life had a deeply ecological foundation. He practiced vegetarianism and thought of animals as having the same dignity as humans. His various methods of nonviolent resistance, *satyagraha* ("holding on to the truth"), have become models for environmental action. Gandhi is also a model for the plain material standard of living celebrated by some environmental movements. Gandhi's famous statement that "the Earth has enough for everyone's need, but not for anyone's greed" is a slogan for contemporary environmentalism. Disciples of Gandhi, such as Mirabeau and Saralabehn and leading Gandhians such as Sundarlal Bahuguna (a disciple of Vinoba Bhave) and Baba Amte, have played central roles in the Indian environmental movements. Gandhi's thoughts and methods have had a great impact on several international environmental movements such as deep ecology.

Since the 1970s the destruction of the environment has been met by the establishment of a large number of environmental organizations and environmental legislation. Sometimes religion has played a role in this development. The most significant environmental movements in India have been concerned with forests and water. The movements have protested against destruction of forests and the construction of big dams. Their main issue has been environmental injustice. A consequence of providing industry with raw materials and electricity has been the impoverishment and displacement of local people. Several modern environmental movements in India have concentrated on protecting trees. The origin of environmentalism in contemporary India goes back to 1973 when the Chipko movement of the central Himalayas successfully stopped commercial timber felling. The Chipko managed to prevent loggers for a sports company from the city of Prayag from felling trees by hugging or sticking to the trees. The Indian Forest Act had restricted the access to forests of tribals and peasants who had customary rights, and this created a deep feeling of injustice. Scientific forestry also proved to be ecologically harmful and a cause of erosion and flooding. Increased deforestation, shortages of fuel, fodder and timber for local communities led to conflicts with the interests of industry. Deforestation continues to be a grave problem in India and several other organizations such as the Appiko in Karnataka confront this same

problem. Another celebrated environmental movement in India is the Narmada Bachao Andolan (“Save Narmada Movement”). This movement has protested against the building of the dams of the Narmada river that will displace 100,000 persons, mainly tribals. Protests against the Tehri Dam has been led by Virendra Saklani. Chandi Bhatt, a former Chipko leader, fronts the opposition to a smaller dam at the Alakananda River. Chipko, the Narmada Bachao Andolan and several other movements have been catalysts for the opposing interests of, on the one hand, subsistence-oriented peasants and forest dwellers and, on the other, big industry and the better-off urban population.

Religion has played a role in several of the modern environmental movements. Chipko originated in the watershed of the sacred river Ganges, and the river Narmada is as sacred as the Ganges for the people who live in central India. Environmentally concerned individuals have attempted to mobilize against the recent environmental degradation by bringing attention to traditional religious concepts and views, and highlighting texts of the religious traditions of India in which humans are perceived as an integral part of nature, protectors of nature or worshippers of her. As a response to the challenge of environmentalism, Indians have brought attention to the celebration of the sacredness of nature in the Vedic tradition and to responsibility for the welfare of the whole world (*lokasamgraha*) implied in the concept of *dharma*. The concept of *seva*, social service, important to Gandhi and many twentieth-century Hindu religious thinkers and organizations, has put a greater demand on religious organizations to contribute to social welfare. Methods of protest such as nonviolent opposition, a creative reinterpretation of the principle of *ahimsa*, and fasting, inherited from the religious traditions of India, have found new applications.

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See also: Ahimsa; Amte, Baba; Appiko Movement (India); Art of Living Foundation; Athavale, Pandurang Shastri; Aurobindo, Sri; Auroville; Bahuguna, Sunderlal; Bhagavadgita; Bishnoi (Rajasthan, India); Buddhism; Chipko Movement; Dharma – Hindu; Domestication; Gandhi, Mohandas; Goshalas (Home for Aged Cattle); Harris, Marvin; Hinduism and Pollution; Hinduism; India; India's Sacred Groves; Jainism; Jataka Tales; Krishnamurti, Jiddhu; Prakriti; Ralegan Siddhi; Re-Earthing; Santal Region (India); Sarvodaya Shramadana Movement (Sri Lanka); Seeds in South Asia; Shakti; Shiva, Vandana; Sikhism; Swadhyaya; Tantra; Tantrism in the West; Tehri Dam; Theosophy; Yamuna; Yoga and Ecology.

Indian Classical Dance

In any culture, dance both reflects and embodies the central values associated with civilization. In the case of India, a series of “classical” dance styles share a basic worldview that expresses, in symbolic terms, humans’ relationship to nature in the broadest sense of the term “nature.” In Vedic philosophy and practice (the oldest systematized foundational basis of what we now refer to as Hinduism), nature or *prakriti* encompasses not only the external manifest universe but also the processes of the body, mind, and evolution of all creatures, including humans. Therefore the dominant Hindu worldview is theoretically monistic and denies any ultimate duality, or radical division between humans and nature. Nonetheless, a basic dualism appears (whether such appearance is given the status of reality depends upon the particular school of Hindu

philosophy) in all creation as gender differentiation: the world is envisioned as the interplay or “dance” of male and female energies. In this dance, the feminine comes to play the role of “nature” while the masculine is associated with the transcendent function, or “spirit.” It is this interplay that has provided both the structure and content of Indian classical dance in its myriad variations and for this reason, throughout its history, erotic themes and elements have been dominant.

The oldest continuous forms of Indian dance are those practiced in the South where thanks to entire communities and unbroken lineages of artists, the basic language and vocabulary of various classical styles are still governed by Bharata’s *Natya Sastra*, a dramaturgical text which dates to the first century. Other, more localized texts called *agamas* fine-tuned the principles and application of the art form to regional specifications, for the temple complexes of South India, both small and large, were, until the early part of the twentieth century, the religious, political, and economic headquarters of regional kingdoms – centers which through ritual of various kinds once defined and upheld both the social and cosmic universe. Today’s Indian classical dance styles are largely the modern-day survivals of the dance forms which played a central role in these temple centers.

Prominent among these were the *devadasis* or “servants of the God,” young women dedicated to the temple from an early age to fan, sing and dance in front of the deity at midday mealtime, at night before closing the temple, and in procession during festivals. They also served as sexual partners to the priests and elite clientele of the temple who patronized both them and the temple. While debate continues regarding the exact nature and function of such “divine prostitution,” it is clear that the sexuality of the devadasis was a central part of their religious role and sacred status. In their ritual function the devadasis’ dance embodied the erotic element of life associated with fertility

– life-giving rains, increase of crops and vegetation as well as its inhabitants – in short, the auspicious properties of nature both *invoked and brought under the transcendent order and control of human civilization*.

Embodying auspicious nature, devadasis were symbolically regarded as *chalanti devi*, or “moving goddesses,” manifestations of the Great Goddess married to the GodKing or ruler. The importance of this role played by the devadasis cannot be underestimated in a worldview where the divine is gendered and no major male deity stands alone without his *shakti* – his female consort or “power.” The question which may be raised is whether nature, or the feminine in this equation, is more invoked or more controlled. Does Hinduism display an unambiguously positive attitude toward nature?

To begin to answer it, we must explore goddess myth and symbolism which is rich with elements of *tantra* – systematized esoteric beliefs and practices which provide a relatively more positive and embracing attitude toward nature and the manifest world than mainstream Vedic Hinduism. A feature of the goddess traditions is that feminine deity (symbolic of nature) is not sentimentalized. She is rather portrayed in both her benign and formidable aspects, in destructive as well as erotic forms. In its embrace

of all aspects of nature, the dark as well as the light, the low as well as the high, the Tantric, goddesscentered traditions contrast with the more strictly hierarchical and polarized Vedic worldview which, however Earth-centered, holds asceticism (renunciation) as its highest value.

What complicates the picture is that the Tantric and Vedic streams within Hinduism are so highly interwoven and overlapped that it may be misleading to radically distinguish them. Nonetheless, dance, a primarily feminine activity, has traditionally come to embody eroticism and the invocation of nature, while yoga, primarily male, embodies asceticism and control *over* the same for the ultimate purpose of transcendence. Tantrism embraces both elements and became the means by which the Hindu tradition was able to maintain a creative tension at the center of its ritual, myths, and various philosophies. As the myths, symbols, and sacred techniques of dance and yoga demonstrate, both disciplines contain elements of the other: while dance is performed primarily inside temples, inscribing the heart of culture with the power of nature brought under social control, yogis transcend the social to enter into a mystical union with nature and transcendent cosmos. Ultimately, the goal for both the yogi and the devadasi is to realize both immanence and transcendence, to balance and unite male and female energies within to attain a kind of divine androgyny or mystical state of non-dual unity. Although the dancer projects this state outwardly in her performance, in the Hindu worldview, the key to nature, whether it is being invoked (celebrated and embraced), or controlled, lies “within.”

Today, more than fifty years after the abolishment of the devadasi institution under British colonial influence, dance in India is primarily (although not exclusively) performed by and centered on women who continue to inscribe and embody a basically Hindu worldview. Dance scholarship points out that the reformation of Indian classical dance traditions in the post-colonial and postindependence period reinterpreted the meaning and harnessed the energy of the dance within the context of Indian nationalism. “Bharata Natyam,” South Indian temple and court dance reinterpreted by Indian-born Theosophist Rukmini Devi, in particular, became synonymous with Indian culture and, not long after, other regional styles were reformed in similar fashion. Today, Indian dance is in the process of being reshaped again, this time within the context of global internationalism and its associated spiritual multiculturalism. This is happening both in India and within the Indian diaspora, and includes the increase in the number of non-Indian performers of the art both in India and abroad.

Although they no longer perform in the sanctums of temples, today’s Indian classical dancers continue to embody eroticism – the auspiciousness, fertility, and lifeenhancing qualities of nature within a new secular context. Following the dramaturgical rules of the *Natya Sastra*, all classical dance styles involve a language of the body, facial expressions, and hand gestures called *hasta-s* or *mudra-s*. This language reflects both *natya dharmi* (idealized and abstracted representational form) as well as *loka dharmi* (a representation of observable life). *Loka dharmi* reflects the “natural” world that presents itself to the senses; for example, the use of a hand gesture to suggest the

shape of a cow or deer, or a young woman walking with a water pot on her head. In contrast, *natya dharmi* transforms nature into culture – hence the “sacred” geometry (circle and square) of the body in the basic dance stance. In either case, classical dance and drama treats life as food for reflection on the nature of existence – hence the “spiritual” nature of this art.

Both a profound respect for, as well as a desire to control nature for “higher purposes” pervades the art and is reflected straightforwardly in the myths and symbols of the dance. Siva Natraj, the patron deity of the dance is portrayed as a cosmic deity whose five activities govern the origin, preservation and destruction of the created universe and whose dancing feet stamp out cadences which divide eternity into time. His iconographic image incorporates the *panchatattvas* or four elements – Earth, water, fire, air – and his intoxicated dance represents his complete and blissful control over these processes. Most significant is that under his feet he tramples a dwarf, a representation of our collectively shared notions of “lower” nature.

In contrast, the most popular stories enacted through the dance are much more “down to Earth,” centered on Krishna, the cowherd Lord who playfully romps with the

Gopis (cowherdresses) on the idyllic banks of the Yamuna in Brindaban. In countless dances and dramas throughout India, the myths and rites of Krishna celebrate the rich eroticism of nature and raise it up as a vision of transcendent beauty. Yet Krishna, as an incarnation of Vishnu the protector who takes birth in various ages to rescue the world from demons, must also subdue the aspects of nature which are anathema to *dharma*, the socially constructed, transcendent order of civilization. Therefore, as portrayed in various classical styles, Krishna dances on the hood of the snake Kalika who emerges from the primal waters just as Siva dances on the dwarf. In the more commonly portrayed dances, where the focus is on the erotic relationship between Krishna and Radha (or one of his other consorts) the female consort represents the human (nature) while the Lord represents the divine (culture reflecting the transcendent). It is especially noteworthy that classical dance dramas, now as throughout history, center on two archetypal themes – the subduing of demons (the lower forces of nature) and the *hieros gamos* or sacred marriage representing the union of opposites. Of the two, the latter is by far the most popular, especially today, a trend which may reflect an archetypal nostalgia at the heart of Indian culture – a universal human longing for wholeness reflected in the harmony between nature and spirit.

In India the now “secular” art form of classical dance is still primarily performed at the time of religious festivals, weddings, and the openings of various institutions which are usually calculated astrologically (in tune with nature as defined by Vedic “sciences”). Likewise, it is arguably the “spiritual” aspect of Indian classical dance, the combination of eroticism and transcendence, which speaks most profoundly to contemporary international audiences. While embodying the transcendently erotic aspects of Indian culture, today’s Indian dancers still preface their dance with *bhumi namaskar*, a simple gesture wherein the dancer bends to prayerfully touch the Earth and to ask the Earth’s forgiveness for stamping on her. Similarly, *Puspanjali*, the offering of flowers to the

stage, the breaking of a coconut and the lighting of the sacred lamp before the start of a program, all continue to be observed, demonstrating what Ananda Coomaraswamy called “the transformation of nature in art,” the sanctification of time and space by offering up the bounty of the Earth to a “higher” spiritual purpose.

Indian classical dance, in an entirely new global context, still speaks to the human desire to contemplate the relationship of spirit and nature, a relationship that continues to be engendered as masculine and feminine. Typical of all art and philosophy in the postmodern period, this changed context calls for a constant reevaluation of the meaning of all terms involved. As Indian classical dance moves further away from its land of origin, it will undoubtedly reflect a transformed understanding of

“nature” in keeping with humanity’s own relationship to inner and outer realities.

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See also: Dance; Ghost Dance; Hinduism; India; Lakota Sun Dance; Planetary Dance; Prakriti; Tantra; Tantrism in the West; Yoga and Ecology.

Indian Guides

The Indian Guides is a youth program sponsored by the Young Men's Christian Association (YMCA). Through activities themed around "Indian Lore," the program aims to use young people's interest in the "romance," "beauty," and "color" of Native American cultures to provide occasions for fathers and sons and fathers and daughters to work together on costumes, rituals, and related projects. The YMCA works from a traditionally nondenominational Protestant religious orientation, and the Indian Guides add to that base a generic nature-based "spirituality" thought to be common in American Indian cultures.

The first "tribe" of Indian Guides was created by Harold S. Keltner, a leader in the YMCA of St. Louis, Missouri. Based on his experiences in Canada, Keltner brought a Canadian "Ojibway," Joe Friday, to address a father and son banquet in 1925, and Keltner saw immediately that the interest of the boys and men present could be the basis for a movement involving fathers more directly in the social, physical, and moral development of their sons. The movement began as a very loosely organized, decentralized program emphasizing the autonomy of the local "tribe" and, eventually, the groups of tribes called "nations." By 1925, however, the movement had spread to enough YMCA offices that the National Council became an official sponsor of the program. A few years later, the official name of the program became "The Father and Son 'Y' Indian Guides." Eventually girls were admitted to the movement ("Indian Princesses") and, even later, the "Y" created "Indian Braves and Indian Maidens" as programs for mother-and-son and mother-and daughter-pairs. In 1988 a manual entitled *Friends Always* (the motto of the program) consolidated the program materials of the four separate programs.

From the outset, the movement acknowledged the important work of Ernest Thompson Seton (1860–1946), the artist, naturalist, and writer who created his own youth movement based on Indian Lore (the "Woodcraft Indians," 1903) and who was one of the small group of founders of the Boy Scouts of America in 1910. Seton drew upon the Darwinist ideas of the age and his knowledge of the Native Americans of North America to provide both concrete instruction in "Indian Ways" (e.g., from his 1903 book *Two Little Savages* to his 1937 *The Gospel of the Redman*) and a general philosophy of nature-based spirituality.

"Y" leaders have always emphasized to the fathers and mothers that the use of Indian Lore in the program is a means to the end of parents' greater involvement in their children's lives. Changing public sensibilities about Native American cultures in the late twentieth century – spurred in no small part by Native American civil rights and

political social movement organizations, such as the American Indian Movement (AIM) – brought negative publicity to the uses of “Indian Lore” by mainly white youth organizations and sports teams. By 1990 the National Advisory Committee was attempting to promote more “responsible” use of the “native American theme” in the movement, and a 1991 initiative with the Smithsonian Institution’s planned National Museum of the American Indian signaled a new sensibility about the theme. Responding to public criticism, the national office of the YMCA of the USA decided in late 2001 to revise and rename (as “Friends Forever”) the program, eliminating all references to Indian Lore. The new program material will eliminate references to the “Great Spirit” and substitute the “Creator.” The heavily decentralized nature of the Y-USA, with local YMCAs enjoying considerable autonomy, means that some “tribes” and “nations” might resist this plan.

The religious or spiritual content of the Y-Indian Guides program has always been slight and rather inconsequential. The program, though, brought thousands of children and parents together as part of the larger historical effort by which mainly white, middle-class youth-workers and children attempted to use their own, somewhat limited understanding of Native American nature-based religion to revitalize and energize their own, more conventionally Protestant understanding of how to lead a religious life.

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See also: Indigenous Religions and Cultural Borrowing; Religious Environmentalist Paradigm; Scouting.

Indian Shaker Religion

The Indian Shaker religion began around 1882 in Washington Territory, at Mud Bay on Puget Sound, near what is now the state capital, Olympia. Taking its name because of the physical movements of the worshippers (similar in some aspects to the Shaker Religion brought to America by Ann Lee in the late eighteenth century), the faith was inspired by a native who reportedly died, then came back to life, relating apocalyptic visions of the afterlife. John Slocum, a Squaxin tribal member living on Puget Sound, fell sick and apparently passed away. But while the mourners were waiting for his coffin to arrive from Olympia, the “corpse” sat up, astonishing his family and friends.

Unlike traditional native religions, however, Slocum’s new faith considered itself a branch of Christianity reserved for Indians, and it focused on personal renewal and piety, rather than on the rejection of agriculture or other European-American practices. Slocum revealed that he had gone to heaven, been admonished that his sinful ways had made him “unworthy” to enter, and had then been sent back to warn his people to live their lives in accordance with holiness and purity.

The religion quickly spread from southern Puget Sound, gaining converts and influence on reservations such as Neah Bay on the Strait of Juan de Fuca, the Siletz on the Oregon coast, the Klamath in northern California, and the Warm Springs, Umatilla, and Yakama Reservations east of the Cascade Mountains. The Yakamas consistently provided leadership and healthy numbers of believers to other growing native churches, and they maintain an active Shaker presence today.

The faith gives Native Americans in the Pacific Northwest a viable alternative both to traditional native spirituality, and more orthodox expressions of Christianity as brought by missionaries in the nineteenth century. Since its inception, Shakerism has been known for its eclectic nature, borrowing certain rituals from Protestantism, Catholicism, and the Drummer Dreamer faith, but forging its own tradition, based on healing and moral selfexamination.

The Shaker faith also allows a more Western idea of virtue and piety to combine with more traditional indigenous attitudes toward the environment. The tradition’s insistence that worshippers practice personal holiness, combined with the expansion of virtue to include environmental respect has resulted in a syncretistic idea of piety that frowns on environmental degradation – not as a personal insult against the order of things, but as a vice to be rejected. Thus, speaking in terms of pragmatic agreement on environmental public policies – especially on local land issues on reservations – Shakers and believers in more traditional native spirituality often present a united front. Given that both traditions do not thrive by adhering to extensive and exclusive doctrines,

such agreement is not surprising. However, since natives comprise a minority on many reservations, this unity on environmental issues is an essential component in letting a native voice be heard.

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See also: Yakama Nation.

India's Sacred Groves

Interest in sacred natural elements, such as groves and plants, has grown remarkably in the past decade, particularly in relation to biodiversity conservation (UNESCO 1996). Scholars from numerous fields, including ecology, botany, and anthropology, have attempted to establish the importance of these sacred natural areas, suggesting that sanctifying forests and groves may have been traditional ways to conserve biodiversity. These writings rightly draw attention to sacred areas and traditional systems of conservation; however, village-level studies suggest first that not all sacred groves are biologically diverse, and second, that the biologically rich groves, in many cases, were protected for reasons other than conservation of biodiversity. Sacred groves and other sanctified natural elements may need to be better understood from the local perspectives.

Study in the Kumaun region in the northern state of Uttaranchal (India) illuminates local perspectives on the sacred and sanctity of natural elements, and demonstrates that merely keeping areas sacred is not sufficient for conservation given the nature of change in religious behavior taking place in many rural areas. Instead, it is critical that we understand the beliefs that have led to the sanctification and conservation of these elements in nature.

No single word in the Hindi language captures the various meanings of the word "sacred;" however, the Hindi language has multiple words capturing the different meanings of this English word. The numerous meanings of the word are, in turn, reflected in multiple kinds of local relations with sacred elements in the biophysical world.

Table: Multiple reasons for sanctity of natural elements.

<i>Reason for sanctity of objects</i>	<i>Forms of natural elements</i>	<i>Example</i>
Dedicated to the divine	Sacred landscapes, sacred groves, other sanctified forests	
Most hills, rivers		
Belonging to the divine	Sacred groves	Badrivan (surrounding temple of Badrinath in northern India)
Associated with a sacred place	Particular trees not otherwise considered sacred	A <i>Pinus roxburghii</i> (<i>Chir</i> pine) tree in temple vicinity
Auspicious (associated with mythology and/or ascetics)		

Sacred groves, species of flora/fauna *Ficus religiosa* (Fig), most species of snakes

Ecological benefits	Sacred groves (species)	<i>Ficus religiosa</i> (Fig) (ground water retention)	Medicinal properties	Floral species	<i>Betula utilis</i> (Birch) (used in treatment of)		snake	Asel	Hydr	Cedar (the conical shape of tree)	Symbiotic	Edible species	<i>Ficus bengalensis</i> (Banyan) (longevity)	Social significance	Floral species	<i>Ficus bengalensis</i> (Banyan) (shade and shelter)
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For instance, rural Kumaunis refer to the hill regions of Kumaun as *dev bhumi* (god's land), marked by the presence of the gods. Yet, features of the biophysical world considered more sacred are described by other concepts of the sacred. For instance, mountains and local hilltops are considered especially sacred in Kumaun, for as in many other parts of the world, they are thought to be the abode of the gods and as belonging to the gods. According to local mythology and villagers' conceptions of these areas, these represent places where the divine showed its presence to the human world. These places are, therefore, dedicated to the divine, and temples are built to honor the deity that showed its divine presence.

Special significance is also accorded to rivers, and confluences of rivers for similar reasons. Likewise, certain species of wild fauna are considered sacred, and are therefore traditionally protected due to the direct association with mythical characters.

When the term sacred is used in relation to particular species of flora, the meaning and conception of the sacred is slightly different from the above. Not all species of flora considered sacred are associated with the divine, neither are they considered sacred *per se*, but these floral species are viewed as auspicious (*shubh*). The conception of sacred in this context, however, is related, as in the case of sacred sites, to a feeling of reverence. Most people, including priests, typically tend to be unaware of the precise reasons for the sanctity of certain flora. It is generally assumed that since these species were referred to in religious texts, and were favored by ascetics and sages of the past, who were especially knowledgeable about flora (especially the medicinal properties), and hence meditated under carefully selected trees, they must have beneficial properties. The numerous sacred and secular reasons for the sanctity of particular flora are provided in the table above.

Also embedded in these notions of the sacred is the concept of relative sanctity, and the recognition that not all sacred places or entities are equally sacred. In such a continuum of relative sanctity, the highly sacred species are believed to be sacred

in themselves, and are protected regardless of the sanctity of areas adjacent to them. Species that are relatively less sacred are not necessarily protected unless associated with a sacred area. These lesser sacred plants are, nevertheless, commonly planted in sacred areas such as groves. Through this, these particular plants or trees (and not the species) move up the continuum among the highly sacred floral species, and hence are locally protected.

Sacred groves in the Kumauni context ascribe to yet another conception of the sacred. In Kumaun, these groves are typically associated with a temple, and are generally referred to as *dev van* (god's forest). These groves are not merely associated with the divine, as in the case of many sacred sites and sacred flora, nor are they always designated or dedicated to the divine; rather, they are often taken simply to *belong* to the divine.

Although the meanings associated with sacred flora (*shubh* or auspicious) and sacred groves (*dev van*) differ, local reasoning on the existence of sacred groves in Kumaun overlaps with reasons for the sanctity of the specific floral species. The most common explanation of sacred groves, provided by local priests, is simply aesthetics, broadly seen as enhancing the spiritual integrity of these places. Other explanations include shade and shelter for the deities, especially on the hilltops, and ecological benefits such as retention of ground water.

While the biophysical is, and has been, protected due to association with the spiritual world, or at times *consciously* used as a means of addressing secular concerns of conservation, protection of the biophysical environment may not always follow from such association with the sacred. Numerous examples exist where religious practices and beliefs in the sacred have resulted in environmental degradation.

In Kumaun, as in other parts of India, environmental degradation due to association with religion is primarily related to the changing views of contemporary religion itself. There is an increasing emphasis in contemporary religion on the Vedic rather than the animistic traditions. Not only are local deities increasingly being associated with the Vedic deities and recognized as alternate forms of these deities, but natural elements of worship are being replaced by deities of the Vedic tradition. Thus, the traditional use of sacred stones, typically collected from river-beds and placed in temples for worship in the more animistic traditions, are today being replaced by elaborate humanized Vedic idols. There is also increasingly a separation between nature and religion, with greater importance being placed on the material aspects of religious culture in place of the natural and the supernatural. As a result, even the Vedic gods and goddesses that were traditionally associated with certain natural elements, such as rivers, are being dissociated with the natural elements and increasingly being worshipped as idols. Finally, contemporary notions of aesthetics in many of these rural areas are placing greater significance on the material rather than on natural elements. Thus, in rural Kumaun, many sacred groves are being replaced by large temples and temple complexes. Emphasis on the temples and temple structures rather than the groves is leading to intensive grazing pressures on sacred groves. In some instances, the rising popularity of

specific temples, religious mass tourism, and resources used in large ritual ceremonies is leading to the depletion of the once-remote sacred groves.

Thus, given the changing conceptions of religion and religious behavior in contemporary times, merely keeping areas sacred is insufficient. By understanding local perspectives on the sacred and the changing local relations with sacred natural elements, we can see that building on local views of the sacred and reestablishing the link between nature and religion may be crucial for the protection of these natural areas.

Safia Aggarwal

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See also: Cathedral Forests and the Felling of Sacred Groves; Hinduism; India; Re-Earthing; Sacred Groves of Africa; Sacred Mountains; Wenger, Susan – Yoruba Art, and the Oshogbo Sacred Grove.

Indigenous Activism and Environmentalism in Latin America

Many indigenous spiritual and philosophical traditions express ethics of respect for nonhuman life, for particular places and landscape features, and for the Earth itself. These approaches illuminate the extent to which Western modes of understanding the world authorize or excuse environmentally destructive practices. They provide insight into other ways of representing and interpreting nature and humans' relation to it and point the way to solutions to human-caused environmental crises.

As the historian Richard White notes, “[p]erhaps the most important decision Europeans made about American nature in the centuries following Columbus was that they were not part of it but Indians were” (White 1999: 132). The Spaniards brought with them a stock of ideas about “wild men” and savages, which were early although not universally applied to the inhabitants of the Americas. Foundational categories of European thinking, expressed in oppositions between savage and civilized, or nature and culture, were central to Spanish thinking, yet images of nature as Eden, the landscape of a prelapsarian state of grace, also shaped their understandings of the land they colonized.

The same categories underwrote different phases of nationalism in Latin America. Early post-Independence nationalisms were characterized by conflict between conservatives and liberals, the latter of whom favored dispossessing the Church and indigenous communities of lands. The liberal view typically saw Indians as obstacles to progress; their disappearance would be an important achievement for the consolidation of the liberal nation. In contrast, some early twentieth-century nationalists lionized their indigenous heritage in their efforts to forge a mestizo nation. The distinctiveness and superiority of Latin American culture was explained as the sum of the best parts of both the Spanish and Indian heritage presumed in the ideology of *mestizaje*, or race-mixing. Most famously expressed in the Mexican José Vasconcelos's ideas about the Latin American “cosmic race,” accounts of *mestizaje* that celebrated its indigenous component looked to a glorious indigenous past rather than contemporary Indians, who were typically poor and marginalized and regarded as hindrances to progress.

Thus, two contradictory but constantly intertwined modes of imagining indigenous peoples recur in the last five hundred years of history in the Americas. One portrays Indians as inferior people and prescribes assimilation; the other celebrates the traditions, knowledge, and history of indigenous peoples. These complex and shifting valences of respect and disregard characterize representations of Indians that convergence in

regarding indigenous people as radically and fundamentally different from nonIndians. Such images shape the ways both non-Indians and Indians understand what it means to be indigenous, and influence contemporary issues involving indigenous peoples, including indigenous rights in international law, Indian land claims, and debates over bilingual education. They have also been fundamental in the relationship between indigenous peoples and environmentalists over the last thirty years.

Maya scholar and activist Victor Montejo affirms that indigenous peoples' worldviews encourage environmentally sustainable practices, pointing out that concern for the natural world, and the mutual respect this relationship implies, is constantly reinforced by traditional Mayan ways of knowing and teaching. [A] holistic perspective of human collective destiny with other living creatures on earth has a religious expression among indigenous people (Montejo 2001: 176).

Montejo draws on the teachings of the pre-Columbian Mayan text *Popol Vuh*, as well as his lessons he learned as a child, to show how Mayan beliefs foster humans' respect for the rest of creation. An origin myth in which an earlier race of humans were destroyed for the disregard they showed animals and inanimate objects cautions people to respect the natural world, while humans' relationship of dependence on a Creator who is embodied in the unity of sky and Earth reinforces the sacredness of the world.

Montejo's work points to one of the central aspects of contemporary indigenous identity: the identification of Indian religions and worldviews as emphasizing respect for nonhuman life and providing a holistic approach to understanding humans and nature. This is often expressed in the figure of Mother Earth. Mother Earth spirituality (whose historical roots among indigenous Americans is disputed) poses environmental protection as an issue of central concern to indigenous peoples for religious reasons. This lends legitimacy to activists' claims about the ecological superiority of indigenous worldviews; it also provides weight for some territorial claims. But Mother Earth spirituality has also become a central concept for the pan-indigenous identity asserted by political and social activists, expressing a certain sensibility and helping to foster solidarity among diverse indigenous traditions. Prayers to Mother Earth commonly lead off indigenous organization meetings and public events; references to Mother Earth were prominent among indigenous-oriented events at the 1992 Rio Earth Conference.

For the Maya and other Mesoamerican peoples, spiritual links to nature are clearly expressed in beliefs and traditions relating to maize. The first humans were made of corn, according to the *Popol Vuh*, and corn cultivation remains central to the lives of rural people throughout Mexico and Central America. In western El Salvador, peasant farmers choose to sow corn on at least some of their land even when it will be less profitable than other crops and even if they have insufficient land and will have to buy most of the years' corn in any case. Javier Galicia Silva notes the same preference for corn in Mexico, reporting that for contemporary Nahuatl small-scale farmers there are still "mythic criteria that motivate agricultural practices" (Galicia Silva 2001: 321).

Culturally specific appraisals of the importance of particular crops and forms of agricultural production clearly inform indigenous peoples' understandings of and interactions with the natural world. In Mesoamerica, indigenous farmers developed myriad varieties of corn, while Andean farmers have produced an astonishing number of potato varieties. Andean farmers' preference for a high diversity of crops is expressed in an ethic of cultivation that outlines what constitutes a satisfactory livelihood. This preference for diversity has been particular to peasant or non-elite farmers since before the arrival of the Spaniards: Inca state-run agriculture, like the *hacienda* production of Spanish colonial rule, was dedicated to the cultivation of large quantities of relatively few species and varieties. Commoner or peasant farmers, in contrast, identify a wide diversity of both species and varieties as fundamental to a satisfactory life, and their work has produced and preserved an astonishing array of potato and corn types.

Notable in these examples is the importance of culturally specific, often religious, guidelines that address both connections to "nature" as a general realm of nonhuman being and to agriculture. Although many indigenous traditions distinguish between cultivated spaces and a more distant place of spirits and beasts, both terrains are addressed by belief systems that provide guidelines for human interactions with the nonhuman. While it is by no means uncontested, there is evidence for the claim that many American indigenous traditions do not make the fundamental distinction between "wild" and

"civilized" or "humanized" landscapes that predominate in Western approaches to nature.

Indeed, much of what has been regarded by Westerners as "wild" landscapes in the Americas has indeed been produced by human activity, in some cases over thousands of years. This is true not only for regions like those in the Andes or the Mesoamerican highlands, but also for the lowland forests like the Amazon, many of whose inhabitants – long regarded as "hunters and gatherers" – have long traditions of gardening and cultivating medicinal plants. Selective slash-and burn (swidden) cultivation in lowland forests appears to have increased biodiversity in many areas; ancient Maya and Aztec societies maintained gardens and protected areas.

In Latin America (as in the U.S.) dominant elites have often labeled land inhabited and tended by indigenous peoples as not only "wild" but also "empty," particularly in cases of land not occupied by peasant farmers. In many countries (including Mexico, Peru, Ecuador, Guatemala, and Brazil) governments have encouraged highland Indians to colonize "empty" or "unused" lowland forests to relieve pressures on highland land concentrated in large estates and expand the agricultural frontier, and in some cases to strengthen national claims to disputed border areas. Highland peasants moving into lowland areas can cause tremendous ecological damage, often burning large tracts of land for cultivation and ranching or opening mining claims, and are a major threat to lowland groups in several countries.

There is evidence that anthropogenic environmental change in pre-Columbian Latin America contributed to degradation in some areas, and may have caused significant

damage. The most widely cited case is of damage wrought by widespread deforestation and agricultural intensification, which is thought to have contributed significantly to the collapse of Classic Maya civilization.

For the most part, anthropology, ecology, and other disciplines remain ambivalent about the links between spirituality or religion and ecological sustainability in indigenous communities. While many indigenous traditions express respect for nonhuman life or “the environment,” the extent to which these expressions predict ecologically wise and sustainable practices is uncertain. Understanding the natural world as sacred does not necessarily call for an ethic of environmental protection or stewardship. Indeed, a powerfully sacred landscape may well be outside the boundaries of human influence by definition. Specifically religious responses may not address ecological problems in some cases, and the “ecological balance” that many see expressed in indigenous religious traditions may be the result rather than the cause of particular practices that are ecologically sustainable and sensible.

Skeptics assert that the sustainability of many indigenous societies can more plausibly be explained as an outcome of particular technologies, ecological conditions, or levels of population density than as the result of religious attitudes about nature. Some assert that Indians with access to environmentally damaging technologies are no less likely than non-Indians to destroy their environments. In a less extreme but still cautious appraisal of the relations between indigenous religious traditions and ecological sustainability, other observers note that spirituality as well as everyday practices are created in particular historical and ecological conditions. They contend that attributing primary causal weight to religious beliefs oversimplifies complicated historical, cultural, and environmental factors, and that stark contrasts between Indian and Western worldviews neglect the impacts of five hundred years of Western presence in the Americas.

One recent study based on ten years of field research among indigenous and non-indigenous farmers in the lowland Petén forest of Guatemala provides suggestive evidence in favor of cultural explanations of environmental practices while also addressing the contingent quality of culturally specific variables. The Itza’ Maya, who have lived in the Petén for centuries, plant more crops and tree species than do neighboring Q’eqchi’ Maya (who moved to the forest from the highlands) or nonindigenous Ladinos. Itza’ also farm in ways that are less harmful to the soil and more productive, and show a more sophisticated understanding of forest ecology than do the other groups. One factor in Itza’ agricultural and forestry practices is a belief that spirits act as intermediaries for particular forest species, and these must be cared for and respected, while the intimate local knowledge of the Itza’ – inextricably linked to their worldview and spiritual traditions – guides sustainable management and farming practices.

Notably, nearby Ladinos engage in less damaging practices than do immigrant Q’eqchi’ Maya. Ladinos’ social organization favors learning from Itza’ practices, while Q’eqchi’ social organization does not. In addition, cognitive models of ecological relationships brought by Q’eqchi’ Maya from their highland places of origin seem not

to favor the environmentally sustainable (or less-damaging) practices engaged in by Ladino and Itza' farmers.

These findings point both to the importance of culturally specific and religious understandings of nature and to the transferability of those understandings. Yet they also show that culturally specific values of an indigenous people may predict environmental degradation and hinder learning ecologically sustainable techniques.

While social scientists may be unable to agree on the relative ecological wisdom of indigenous peoples, many environmentalists and indigenous activists assert with conviction that indigenous peoples are better able to live harmoniously with their environments than non-Indians, a belief that is fundamental both to political platforms and to social identities. Romantic images of ecologically superior Indians are employed to combat virulent racist representations. Such images are essential to the relatively recent importance of environmental issues to the political platforms of indigenous peoples as well as the alliance between international environmental organizations and indigenous groups. Some observers see the link between indigenous and environmental activists as a decisive shift in the practices of both groups, noting that earlier encounters were marked by tension and competition. Key features of this shift include the increasingly transnational sphere of indigenous activism as well as the new prominence of discourses and symbols associated with Indians' spiritual and traditional ties to nature.

The roots of indigenous rights activism in Latin America go back to debates over the treatment of Indians in the early Colonial period, as well as a long history of Indian revolts. Contemporary indigenous mobilization draws on this heritage, yet is more directly linked to doctrines of universal human rights and national sovereignty developed in the wake of World War II.

Abuses associated with colonization of lowland forests by miners and rubber tappers prompted the creation of some of the first international indigenous rights instruments, including the International Labor Organization Convention on the Protection of Indigenous Populations (ILO no. 107). Issued in 1957, ILO 107 was assimilationist in its basic logic, yet it marked the emergence of indigenous rights in the realm of international law and provided a baseline against which subsequent advances would be defined.

The 1960s and 1970s saw the establishment of seminal indigenous rights organizations including the International Working Group on Indigenous Affairs, Survival International, and Cultural Survival. The 1971 Declaration of Barbados (issued at an international meeting of mostly Latin American anthropologists) called for the recognition that indigenous peoples have rights that precede those of other national groups, including collective and territorial rights, thus articulating the fundamental distinctiveness of indigenous rights in universal human rights doctrine.

Also viewing indigenous rights as properly the domain of international law, the United Nations has been an essential ally in the development of indigenous rights doctrine. The U.N. sponsored NGO conferences in 1977 and 1981, and in 1982 established

its Working Group on Indigenous Populations, which issued the Draft Declaration of the Rights of Indigenous Peoples (DDRIP) in 1989. In 1989, the ILO issued Convention 169, an updated version of the earlier 107 that calls for constitutional recognition of cultural difference within nations as well as support for indigenous territorial claims. It has been ratified by ten Latin American nations.

The human rights focus of the movement expanded to include environmental concerns in the 1980s when environmentalists and indigenous rights organizations found common cause in the Amazon. Environmental activism underwent a period of rapid growth and internationalization in roughly the same period as did indigenous movements, and by the 1980s environmentalists were looking beyond national borders and taking an active interest in international issues such as tropical deforestation.

Opposition to World Bank-funded development projects in the Amazon galvanized the alliance. Beginning in 1982, the Brazilian government paved a road through the Amazon, using Bank funds. Millions of colonists followed the road, damaging the forest and threatening indigenous communities. Northern environmental groups pressured

U.S. politicians and the Bank, which suspended funding for the project in 1985 and subsequently modified the terms of the loan to include mitigation of environmental damages, protection of indigenous lands, and local participation in decision making. (The World Bank and other international lenders continue to fund road building in the Amazon and other lowland forests, where the presence of a road is the single most significant variable predicting deforestation. The Bank itself is a complex institution, and the impact of reforms like OD 4.20, described below, are uncertain.)

In another campaign, environmentalists joined the Brazilian Kayapó to fight a Bank-supported hydro-electric power project that would flood indigenous territory, including inhabited villages. A meeting convened at one of the proposed dam sites in 1989 included a performance by the rock star Sting. The publicity drew international attention and linked forest conservation with cultural survival. Once again the Bank suspended its loan pending revision of the project.

Responding to the protests, the Bank issued Operational Directive 4.20 (OD 4.20) in 1991. OD 4.20 calls for the mitigation of negative impacts on indigenous peoples caused by Bank projects (although it does not prevent projects anticipated to have such impacts). OD 4.20 formalizes the close association of indigenous rights and environmental concerns. Evaluation of threats to indigenous peoples is subsumed in the environmental impact assessment previously required of Bank projects.

The successful protests against the projects in Brazil helped to consolidate indigenous/environmentalist alliances in the Amazon. They also helped publicize indigenous issues as preparations were underway for two pivotal events of 1992: the UN Conference on Environment and Development in Rio and the continent-wide protests of the planned celebration of Columbus' arrival in the Americas five hundred years earlier.

Latin American and Spanish officials planned to celebrate the five-hundred-year anniversary in 1992 of what they called the "encounter of two worlds." Indigenous activists did not consider the event anything to celebrate. Under the banner of "500

years of resistance,” indigenous groups throughout the Americas organized protests. In Ecuador, thousands of Indians marched from the Amazon to Quito (with support from NGOs including the Rainforest Action Network) to demand territory and indigenous management of a national park – demands that were soon met. The anti-quincentenary campaign galvanized indigenous groups throughout the Americas, and international networks grew substantially. Largely responding to the protests and pressures from indigenous activists, the UN declared 1993 the International Year of Indigenous People and later extended the year to a decade, 1995–2005.

Brazilian indigenous groups, working with environmentalists, had received significant publicity in the five years before the UNCED. Indigenous leaders had toured the U.S. and Europe to mobilize international support and had generated a great deal of media attention. The Kayapó had successfully challenged the World Bank dam project and gained territorial rights, while the Yanomani were fighting for territory in the form of a national park that would protect their traditional lands. Environmentalists, human rights and indigenous rights organizations, and the UN Secretary-General pressured the Brazilian government to grant the Yanomani demands, using the upcoming UNCED as a point of leverage. The Yanomani were granted territory in November of 1992.

These successes, combined with years of diligent organizing, placed indigenous activists in a good position to take advantage of the political space opened by the Rio Conference. They attended a parallel NGO meeting and organized an “Intertribal Village,” a gathering of Indians that generated publicity and helped them achieve a meeting with the head of the UNCED. Their influence, along with the legacy of their alliance with environmentalist groups, is evident in the various provisions addressing indigenous peoples in the policies and recommendations made at the UNCED.

The main UNCED program (Agenda 21), the Convention to Combat Desertification (CCD), and the Convention on Biological Diversity (CBD) make special note of indigenous peoples’ relations with their environments. These policy statements recognize that many indigenous peoples have sophisticated understandings of local environments and natural resources – commonly called indigenous knowledge (IK) – that contribute to the sustainability of indigenous peoples’ economies, ecologies, and communities.

Indigenous knowledge has contributed to Western scientific knowledge, and many industries see a potential for IK to point to new products and technologies. Industry calls the search for new resources “bioprospecting” while many indigenous activists regard the process as “biopiracy.” They protest the patenting of traditional technologies and resources by Western scientists and firms.

They note that patenting rewards Western corporations and scientists for exploiting indigenous knowledge without recognizing the creation of that knowledge by indigenous peoples or the centrality of that knowledge – its production and its use – to indigenous belief systems.

(A related issue of growing concern to indigenous as well as peasant activists is the spread of genetically modified crops and seeds. The use of GMO seeds dramatically in-

creases local farmers' dependence on agroindustry. Another potential negative impact of GMOs is the reduction of the extraordinary diversity of corn, potato, and other cultigens developed by indigenous Americans. Many indigenous activists argue that GMO and seed patenting threaten their ways of life and their very identities by controlling crops and dramatically impacting agricultural practices central to indigenous spiritual traditions.)

Agenda 21, the CBD, and the CCD all encourage the dissemination of IK. Yet critics argue that indigenous knowledge is meaningful and workable in specific social contexts. The approaches to nature that are understood as IK may, for the people who developed them, be tied to complicated cosmologies and spiritual understandings of the natural world, as in the case of the Itza' Maya. For indigenous peoples, stripping indigenous knowledge of the worldview and religious traditions within which that knowledge operates is yet another example of outsiders' failure to respect their beliefs and values. Furthermore, the environmental sustainability of indigenous societies is not reducible to a single factor like IK. Access to Western technologies and market economies, population density, and settlement patterns, all affect sustainability. This complexity suggests that institutionalizing and disseminating IK within a Western development framework may be disappointing.

The interest in IK (and, more generally, the association of indigenous peoples with environmental protection) has contributed to increased support for programs that encourage community management of natural resources. In several cases, notably in the Amazon, Panama, and Costa Rica, participatory management and conservation plans have dovetailed with indigenous peoples' territorial claims. Agenda 21 includes provisions for territorial rights, as do ILO 169 and the DDRIP. At smaller scales, community forestry and agroecology initiatives that draw on IK have given indigenous peoples greater control over natural resources and local autonomy, including religious freedom. In highland Guatemala for example, including sacred sites identified by local religious leaders in forest management plans, these initiatives have contributed to more successful conservation.

In some cases, indigenous peoples have sought to exploit non-traditional resources within their territories in ways that are unsustainable and environmentally destructive. The Amazonian Kayapó have sold logging rights to tracts of forest under their control, and Amazonian

Guajajara Indians took hostages in 1989 in order to force the government Indian affairs agency to let them sell timber. The image of Indians clear-cutting their forest is jarring for some observers, including some environmentalists and indigenous activists. Yet as indigenous communities seek to achieve higher levels of economic development and social well-being, they may often be faced with the same kinds of decisions regarding environmental quality that non-Indians must confront.

The tremendous diversity of Latin American indigenous peoples is reflected in the heterogeneity of their religious beliefs and relations to nature. Yet Indians throughout the Americas share a basic experience of colonization and social, political, and economic

marginalization in which assimilationist efforts to eradicate indigenous belief systems have persisted from missionary colonists through post-Independence education policies, as have the dispossession and destruction of Indian lands by outsiders. For many indigenous peoples religion as an expression of a unique identity and a philosophy of connections to particular territories and places is central to their struggles to secure and protect their rights as distinct peoples.

Brandt Gustav Peterson

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See also: Aboriginal Environmental Groups in Canada; American Indians as "First Ecologists"; Indigenous Environmental Network; Maya Religion (Central America); Maya Spirituality (Guatemala Highlands); Mother Earth; Native American Languages; Noble Savage; Religious Environmentalist Paradigm; Traditional Ecological Knowledge; United Nations' "Earth Summits"; World Conference of Indigenous Peoples (Kari Oca, Brazil).

Indigenous Environmental Network

This relationship to the sacredness of our Mother Earth and all her children, defines our spiritual, cultural, social, economic, and even, political relationship we have with each other and with all life (Tom “Mato Awanyankapi” Goldtooth, Indigenous Environmental Network 2002).

The Indigenous Environmental Network was born in 1990 from a national gathering of tribal grassroots leadership and youth to discuss common experiences regarding environmental assaults on our lands, waters, and communities and villages. At that time, a significant number of our tribal communities were targeted for municipal and hazardous waste dumps and nuclear-waste storage facilities.

Indigenous activism seeking justice on environmental issues was new to many tribal members and tribal governments in the early 1990s. Such activism was quickly connected with an indigenous treaty rights agenda, namely, a commitment to strengthen the cultural and spiritual traditions that have sustained us since time immemorial. Within the U.S., by the early 1990s, a new “environmental justice movement” recognized that minority and lowincome communities in the U.S. bear a disproportionate burden of pollution in our society. This movement was especially relevant to our subsistence-based communities. Many indigenous communities in North America are affected through a traditional cultural and spiritual relationship to the ecosystems in which we live, including subsistence on fish, game, traditional agricultural practices, livestock, and gathering of plants for baskets and medicinal purposes. This relationship is deeply integrated into spiritual and cultural beliefs and practices, the disruption of which constitutes religious intolerance and violates basic principles of human rights.

Following the 1990 gathering, indigenous activists, youth and concerned tribal community members continued regularly in North America to put our minds, heart and spirit together for a common course of action as a means to restore our homelands to environmental health and harmony. From these initial gatherings, the idea of the formation of a network of indigenous peoples, with a commitment to respecting our spiritual traditions, was born – an idea born of hope, courage and common vision. This network was named the Indigenous Environmental Network.

Guiding Principles

We endorse the following principles as a statement of our beliefs and a guide to our actions:

Mother Earth, Father Sky, and all of Creation, from microorganisms to human, plant, trees, fish, bird, and animal relatives are part of the natural order and regulated by natural laws. Each has a unique role and is a critical part of the whole that is creation. Each is sacred, respected, and a unique living being with its own right to survive, and each plays an essential role in the survival and health of the natural world.

As sovereign peoples and nations, we have an inherent right to self-determination, protected through inherent rights and upheld through treaties and other binding agreements. As indigenous peoples, our consent and approval are necessary in all negotiations and activities that have direct and indirect impact on our lands, ecosystems, waters, other natural resources and our human bodies.

Human beings are part of the natural order. Our role and responsibility, as human beings, is to live peacefully and in a harmonious balance with all life. Our cultures are based on this harmony, peace and ecological balance, which ensure long-term sustainability for future generations. This concept of sustainability must be the basis of the decisions and negotiations underway on national and international levels.

The Creator has given us a sacred responsibility to protect and care for the land and all life, as well as to safeguard its well being for future generations to come.

Indigenous peoples have the right and responsibility to control access to our traditional knowledge, innovations and practices, which constitute the basis for the maintenance of our lifestyles and future.

The Need for Indigenous Organizing

The need for IEN arose due to increasing political and social pressures. The U.S. has been increasing efforts through its federal agencies and with energy legislation and through its corporate energy partners to push more mineral and resource-extraction development within tribal lands. Ten percent of U.S. untapped energy-related resources are under Indian lands. The U.S. energy plan calls for more oil and gas development, the construction of more coal-fired power plants, the potential for construction of more nuclear power reactors and the buying of electricity from large hydro-dam projects in Canada. All of these development initiatives are being planned within our tribal reservations and traditional territories, and they threaten tribal sovereignty. Such challenges need to be weighed when addressing environmental injustices related to American Indian and Alaska Natives.

Due to Western forms of development, the world is in a compounding crisis from greenhouse gases of the fossil fuel industry that is causing climatic changes and global warming. Many indigenous peoples with close relationships to the culture, language and environment have the most to lose when the land/water is contaminated, and when severe weather changes occur, which can disrupt their traditional, subsistence food systems and cultural practices.

Indigenous peoples in the U.S. and Canada continue to be confronted by many threats to their environment, whether they live on larger reservations or in smaller isolated communities and villages, or in Indian neighborhoods within urban areas. In addition to minerals, our lands hold natural resources that the industrialized world and corporations want to develop, own, and trade, such as water and timber, and forest products. Environmental problems are compounded by the increasingly toxic nature of industrial, agricultural and extractive industries.

Our tribal lands are viewed as places where municipal, industrial, federal and military toxic and radioactive waste can be dumped, burned, stored or reprocessed. In certain regions, toxic chemicals disproportionately contaminate tribal communities. These chemicals bio-accumulate and bio-magnify in the food chain, affecting both processed and indigenous traditional food systems. Our children are especially vulnerable. In some areas, health problems have resulted from decades of radioactive and toxic exposure. These are some of the reasons underlying the formation of IEN and they have taken environmental justice issues into the global issue-area concerning trade and globalization.

History of U.S. Indigenous Peoples and Colonization

Congress must apprise the Indian that he can no longer stand as a breakwater against the constant tide of civilization . . . A . . . thriftless race of savages cannot be permitted to stand guard at the treasure vaults of the nation which hold out gold and silver

. . . the prospector and miner may enter and by enriching himself enrich the nation and bless the world by the result of his toil (United States Senate, Congressional Globe, 27th Congress, 1846.)

As many as 15 million indigenous peoples lived in North America when Europeans first arrived in the late fifteenth century. By 1890 there were less than 500,000; the population decimated by European diseases and warfare. By the early twenty-first century, indigenous numbers had grown to over two million. The indigenous peoples of the U.S. are tribally diverse with over 500 different tribes and over 400 federally recognized tribal nations, each with its own tradition and cultural heritage. In spite of the historical policies of the U.S. government of military campaigns, removal of indigenous peoples from traditional homelands, outlawing traditional indigenous cultural and spiritual/religious practices and forbidding speaking of language at governmentally imposed schools, indigenous peoples of the U.S. have been able to retain a commitment to maintain and restore language and culture, as well as interweaving modern technology into everyday life.

Since the colonization of North America, control of land has always been the central political and economic issue. Those who control the land are those who control the resources. Social control and all the other aggregate components of power are fundamentally interrelated to the control of the land. To gain control the U.S. government signed more than 400 treaties with indigenous tribes. In exchange for land and agreements to cease resistance, tribes were promised protection, material goods, services, and sometimes cash payments. By entering into treaties with the tribal nations, the U.S. government acknowledged their sovereignty, although with restrictions. The colonial leaders recognized that land is essential to the survival of indigenous peoples and that a denial of indigenous peoples' right to land is racial discrimination. Land is central to the spiritual and physical well-being of indigenous peoples.

Within the U.S., tribal reservations – or “reserves,” as they are called in Canada – constitute a small but crucial “piece of the rock.” Approximately one-third of all western U.S. low-sulfur coal, 20 percent of known U.S. reserves of oil and natural gas, and over one-half of all

U.S. uranium deposits lie under the reservations. Energy companies, logging and mining interests, and publicly owned utilities, driven by industrialization and accelerating demands for energy and natural resources and materials are disproportionately affecting indigenous peoples. These developments build dams that flood indigenous lands; for example, like those of the James Bay Cree in Canada and the Standing Rock Lakota (Sioux) in the United States.

Such developments have forced tribal peoples to relinquish their culture and economies and claims to their traditional homelands. These developments have disrupted habitat and have thereby limited the ability of tribal people to carry on traditional subsistence practices such as hunting, gathering and fishing rights. Unsustainable development has made indigenous peoples dependent on government-subsidized housing and “non-traditional” diets.

Biological Diversity and Indigenous Languages

The world's biological, cultural and linguistic diversity are imperiled. Over 80 percent of the world's remaining biodiversity is found within indigenous peoples' lands and territories. Although globally there are an estimated 350 million indigenous individuals, our cultures constitute about 90 percent of the world's cultural diversity. Our distinct ways of life vary considerably from one location to another. Of the estimated 6000 cultures in the world, between 4000 and 5000 are indigenous. Approximately three-quarters of the world's 6000 languages are spoken by indigenous peoples. Of the nine countries in which 60 percent of human languages are spoken, six also host exceptional numbers of plant and animal species unique to those locations. When looking at the global distribution of indigenous peoples, there is also a marked correlation between areas of high biological diversity and areas of high cultural diversity. This link

is particularly significant in rainforests, such as those found along the Amazon, and in Central America, Africa, Southeast Asia, the Philippines, New Guinea and Indonesia. Wherever we live, we use our highly specialized, traditional knowledge to care for and conserve the interconnected web or Circle of Life known as “biodiversity.”

In November 2000, the World Wide Fund for Nature (WWF International), in collaboration with the international NGO Terralingua, published a report entitled

Indigenous and Traditional Peoples of the World and Ecoregion Conservation: An Integrated Approach to Conserving the World’s Biological and Cultural Diversity. The report reveals that 4635 ethnolinguistic groups, or 67 percent of the total number of such groups, live in

225 regions of the highest biological importance. The study reported that languages spoken by indigenous and traditional peoples are rapidly disappearing. Since the ecological knowledge accumulated by indigenous peoples is contained in languages, and since in most traditional cultures this knowledge is passed on to other groups or new generations orally, language extinction is leading to loss of ecological knowledge, and with that loss cultural and spiritual knowledge also disappears. It is widely accepted that biological diversity cannot be conserved without cultural diversity.

It has been said that languages are the foundation of peoples’ intellectual heritage and the framework for each society’s unique understanding of life. Given the rate of language extinction, cultural diversity is threatened on an unprecedented scale. In the twentieth century the world lost about 600 languages. Nearly 2500 languages are in danger of immediate extinction; an even higher number are losing the “ecological contexts” that keep them “living” languages. At current rates, 90 percent of the world’s remaining languages will be lost in the twentyfirst century, most of them belonging to indigenous peoples (World Wide Fund for Nature: 2000: Executive Summary). We are concerned that these languages, and our traditional ecological knowledge, are increasingly being lost. The expansion of market-based economic systems, communications, and other aspects of globalization, which promote dominant languages, do so at the expense of our indigenous languages.

The link between culture, spirituality and environment is clear to indigenous peoples. All indigenous peoples share a spiritual, cultural and economic relationship with our traditional lands. Indigenous traditional laws, customs and practices reflect both an attachment to land and a felt responsibility for preserving it for future generations. In Central America, the Amazon Basin, Asia, North America, Australia, Asia, Pacific Islands and South and North Africa, the physical and cultural survival of indigenous peoples is dependent upon the protection of our land and its resources – among a technological society that does not value these links.

Clash in Sustaining Values

The source of this world's collective social, economic and environmental crisis can be traced to the long historical processes by which people have become increasingly alienated from the Earth. This includes alienation from self, community and nature. This concept of alienation has roots in colonialism. Intellectually it is rooted in Western dualism, which sets humanity apart from nature and legitimizes the view that humanity has not only the right, but also the obligation to subdue nature to its own benefit. Institutionally it is rooted in the institution of money, which created a powerful illusion that people can live apart from nature, and are no longer dependent on her.

Ever since Pope Alexander VI's 1493 papal bull "Inter Caetera" called for the subjugation of the America's "barbarous nations," first colonial and then successor states have forcibly and violently destroyed indigenous peoples. To this day, the racist discrimination and cultural denigration established by Pope Alexander VI are engraved in the mentality of the Americas and continue to underlie the rationale for racial discrimination against indigenous peoples globally. The religious imperative of conversion and annihilation has been replaced by assimilation, "development schemes," international trade systems, privatization of land, and economic globalization as the most desirable end for indigenous peoples. The nationstate economic elites and transnational corporations have replaced the earlier conquistadors and colonists as the beneficiaries of indigenous lands, knowledge and resources.

The fifteenth-century papal bulls established a criterion for indigenous peoples which remains a part of established law in many parts of the world today, especially in the Western Hemisphere. The racist doctrine of discovery established in the later part of the fourteenth century continues to exercise influence. The 1955 Supreme Court ruling in *Tee-Hit-Ton Indians v. U.S.*, for example, based its decision against the land petition of the Tee-Hit-Ton on the Doctrine of Discovery (348 US 272 1955). These processes, policies, political and religious theories provided the basis for land takings in the U.S., South and Meso-America, and other frontiers.

Gross and massive, pervasive and persistent violations of human rights and fundamental freedoms, including genocide, ethnocide, forced removal and forced assimilation are somehow justified by the devaluation of indigenous peoples, our cultural and worldviews. Described as "stone age" by anthropologists, accused by dominant religions of being pagan or practitioners of black magic and witchcraft, our destruction as peoples has been taken by most dominant societies in the Americas as necessary for "progress."

Yet indigenous peoples seek only to be left alone, to be who we are, to remain on our lands, to practice and live our traditional cultures, languages and spiritual/religious practices. These are human rights and fundamental freedoms guaranteed by the United Nations' International Bill of Human Rights.

Many nation-states have policies that in effect if not intent forcibly assimilate indigenous peoples. Indigenous peoples continue to suffer forcible and violent mass re-

locations, as well as denials of their land rights and ruination of our environments. Forced relocation is also found in the economic need to migrate to urban areas caused by the loss of lands and territories and means of subsistence.

In the U.S., institutional racism prevails throughout federal policies that fail to protect the environment, our natural resources, and the lands we hold sacred. Socially ingrained attitudes of racial superiority and inferiority, which were given birth during historical colonialist attitudes, are now buried into the very fabric of the Americas and the collective unconscious of all Americans. The continuing denigration of our cultures and traditions, sanctioned by the state, damage and destroy our identity, our children, our lands and our future. The persistent refusal of many nation-states to recognize the rights of indigenous peoples as “peoples” underpins and justifies the deplorable state of human rights of indigenous peoples.

Building Sustainable Communities

Youth and tribal leadership are just now beginning to develop dialogue and strategy for resisting these damaging realities, beginning with the effort to rebuild sustainable indigenous communities and villages. With strong, committed and knowledgeable leadership, IEN has come to understand the importance of coming to grips with internalized oppression, the role of the older generation and younger generation in leadership development, and the recognition and application of traditional ecological knowledge, and to provide positive and strong models for community change. The IEN understands our responsibility to provide a voice of reason and wisdom as a means to mend and repair the delicate fabric of life while restoring balance and harmony to our communities and villages.

Reevaluating Our Relationship to Our Sacred Mother Earth

The path of Western development has produced many technological advances, which many indigenous peoples have embraced. But technology has further separated all humans from our sacred relationship to Mother Earth. We have become alienated from the most fundamental basis of our human nature, our spiritual connection to the Earth and the living universe. Within our foundation of utilizing indigenous traditional knowledge in our work, IEN has consistently challenged nation-states, environmental organizations, faith-based groups and other nongovernmental organizations that are doing environmental work to examine the spiritual aspects of this work. From the tribal perspective, water, air, ground-soil, and fire are sacred elements deserving of respect and protection.

In 1998, the IEN facilitated the participation of traditional elders and tribal grassroots members in the “Circles of Wisdom” Native Peoples/Native Homelands Climate Change Workshop. It was held in Albuquerque, New Mexico, in the traditional territory of the Pueblo peoples of southwest United States. IEN brought to this meeting our profound concern for the well-being of our sacred Mother Earth and Father Sky and the potential consequences of climate imbalance for our indigenous peoples, our environment, our economies, and our relationships to the natural order and laws.

At this meeting, there was a strong statement that indigenous prophecy now meets modern scientific prediction. Indigenous peoples have known that the Earth is out of balance, which was a message that Western scientists were beginning to deliver. At this meeting, the collective mind and heart of indigenous participants from many tribal nations developed the following preamble that well reflects the cosmos vision of indigenous peoples of North America:

Preamble

As Indigenous Peoples, we begin each day with a prayer, bringing our minds together in thanks for every part of the natural world. We are grateful that each part of our natural world continues to fulfill the responsibilities that have been set for it by our Creator, in an unbreakable relationship to each other. As the roles and responsibilities are fulfilled, we are allowed to live our lives in peace. We are grateful for the natural order put in place and regulated by natural laws.

Most of our ceremonies are about giving thanks, at the right time and in the right way. They are what were given to us, what makes us who we are. They enable us to speak about life itself. Maintaining our ceremonies is an important part of our life. There is nothing more important than preserving life, celebrating life, and that is what the ceremonies do. Our instruction tells us that we are to maintain our ceremonies, however few of us there are, so that we can fulfill the spiritual responsibilities given to us by the Creator.

The balance of men and women is the leading principle of our wisdom. This balance is the creative principle of Father Sky and Mother Earth that fosters life. In our traditions, it is women who carry the seeds, both of our own future generations and of the plant life. It is women who plant and tend the gardens, and women who bear and raise the children. The women remind us of our connection to the Earth, for it is from the Earth that life comes.

We draw no line between what is political and what is spiritual. Our leaders are also our spiritual leaders. In making any law, our leaders must consider three things: the effect of their decisions on peace, the effect on the natural order and law, and the effect on future generations. The natural order and laws are self-evident and do not need scientific proof. We believe that all lawmakers should be required to think this way, that all constitutions should contain these principles.

Our prophecies and teachings tell us that life on Earth is in danger of coming to an end. We have accepted the responsibility designated by our prophecies to tell the world that we must live in peace and harmony and ensure balance with the rest of

Creation. The destruction of the rest of Creation must not be allowed to continue, for if it does, Mother Earth will react in such a way that almost all people will suffer the end of life as we know it.

A growing body of western scientific evidence now suggests what Indigenous Peoples have expressed for a long time: life as we know it is in danger. We can no longer afford to ignore the consequences of this evidence. We must learn to live with this shadow, and always strive towards the light that will restore the natural order. How western science and technology is being used needs to be examined in order for Mother Earth to sustain life.

Our Peoples and lands are a scattering of islands within a sea of our neighbors, the richest material nations in the world. The world is beginning to recognize that today's market driven economies are not sustainable and place in jeopardy the existence of future generations. It is upsetting the natural order and laws created for all our benefit. The continued extraction and destruction of natural resources is unsustainable.

There is a direct relationship between the denial of Indigenous Peoples land and water rights, along with the appropriation without consent of Indigenous Peoples' natural resources, and the causes of global climate change today. Examples include deforestation, contamination of land and water by pesticides and industrial waste, toxic and radioactive poisoning, military and mining impacts.

The four elements of fire, water, Earth and air sustain all life. These elements of life are being destroyed and misused by the modern world. Fire gives life and understanding, but is being disrespected by technology of the industrialized world that allows it to take life such as the fire in the coal-fired powered plants, the toxic waste incinerators, the fossil-fuel combustion engine and other polluting technologies that add to greenhouse gases. Coal extraction from sacred Earth is being used to fuel the greenhouse gases that are causing global climate warming.

Because of our relationship with our lands, waters and natural surroundings, which has sustained us since time immemorial, we carry the knowledge and ideas that the world needs today. We know how to live with this land: we have done so for thousands of years. We are a powerful spiritual people. It is this spiritual connection to Mother Earth, Father Sky, and all Creation that is lacking in the rest of the world.

Our extended family includes our Mother Earth, Father Sky, and our brothers and sisters, the animal and plant life. We must speak for the plants, for the animals, for the rest of Creation. It is our responsibility, given to us by our Creator, to speak on their behalf to the rest of the world.

For the future of all the children, for the future of Mother Earth and Father Sky, we call upon the leaders of the world, at all levels of governments, to accept responsibility for the welfare of future generations. Their decisions must reflect their consciousness of this responsibility and they must act on it. We demand a place at the table in discussions that involve and affect our future and the natural order and natural laws that govern us (The Albuquerque Declaration, "Circles of Wisdom" Native Peoples/

Native Homelands Climate Change Workshop/Summit, Albuquerque, New Mexico 1998).

Indigenous Peoples Working Internationally

The United Nations Conference on Environment and Development, held in Rio de Janeiro, Brazil, in June 1992, was an important development for indigenous peoples and our rights related to the environment. The Conference, or Earth Summit as it is called, recognized that indigenous peoples and our communities have a critical role to play in managing and developing the environment. The importance of indigenous peoples' traditional knowledge and practices was acknowledged, and the international community committed itself to promoting, strengthening and protecting the rights, knowledge and practices of indigenous peoples and our communities.

During the Earth Summit, indigenous peoples and nongovernmental organizations gathered in Kari Oca, Brazil, to share concerns about the environment. The Kari Oca Declaration and the Indigenous Peoples' Earth Charter adopted at this meeting expressed the values of the world's indigenous peoples and recognized our distinct relationship with the Earth. The united voice of indigenous peoples helped influence the outcome of the Earth Summit.

Another important result of the Earth Summit was the adoption of the Convention on Biological Diversity. The Convention recognized the close dependence of many indigenous communities on biological resources and the desirability of sharing the benefits that come from using traditional knowledge, innovations and practices to conserve biological diversity, including species diversity.

Interest in the rights of indigenous peoples and the environment grew after the 1992 Earth Summit. Indigenous and non-indigenous peoples are increasingly aware that traditional lands and natural resources are essential to the economic, cultural and spiritual survival of indigenous peoples. Some countries, such as Canada, Australia, Finland, Brazil and the Philippines, have adopted legal measures that acknowledge indigenous land rights or have established legal procedures for indigenous participation in land-related issues. A growing number of governments have amended their national constitutions to recognize the ancestral rights of indigenous peoples to occupy, own and manage their traditional lands and territories. Although some governments now consult with indigenous peoples on land rights and the environment, however, many nation-states have not introduced laws or policies that provide for indigenous land claims or promote full political participation by indigenous peoples.

Indigenous Peoples and the United Nations’ “World Summit on Sustainable Development”

At the 2002 United Nations’ “World Summit on Sustainable Development,” held in Johannesburg, South Africa, the IEN coordinated with other indigenous nongovernmental organizational representatives in the drafting of our own Indigenous Plan of Implementation for the next decade. This was based on the “Kimberley Declaration,” which had been developed at the International Indigenous Peoples Summit on Sustainable Development that was held in Khoi-San Territory in Kimberley, South Africa, the month before the United Nations conference in Johannesburg. This was our contribution for achieving human and environmental sustainability in the world. One sentence of the Kimberley Declaration that stood out toward confirming our relationship to the Earth was, “Today we reaffirm our relationship to Mother Earth and our responsibility to coming generations to uphold peace, equity and justice.”

Indigenous peoples from every region of the world recognized the Kimberley Declaration and we reaffirmed our spiritual relationship in the text of the Indigenous Plan of Implementation, which reflected the heart and mind of indigenous peoples as traditional caretakers of Mother Earth. This was a message that we reaffirmed to each other as well as a message to the world.

One section of the Indigenous Plan of Implementation well illustrates this message, and is found in the section on Cosmo vision and spirituality. It states:

We will direct our energies and organizational strength to consolidate our collective values and principles, which spring from the interrelation of the different forms of life in Nature. Therein lies our origin, which we reaffirm by practicing our culture and spirituality.

We will strengthen the role of our elders and wise traditional authorities as the keepers of our traditional wisdom, which embodies our spirituality, and Cosmo vision as an alternative to the existing unsustainable cultural models.

Indigenous Peoples Will Continue to Seek Global Transformation

Since the United Nations’ “Earth Summits” at Rio and Johannesburg, the world has heard voices from indigenous peoples and civil society demanding a need for a radical change of humankind’s destructive mentality and actions toward nature in the modern world system. The global sustainability crisis is a direct consequence of how Western forms of development have continued a colonial

– conquest of the sacred and have resulted in humans increasing separation from their spiritual connection to nature, Mother Earth, to their human communities, and; most important, to themselves. A global transformation on the dimensions of societal

values, lifestyles, worldviews and life-interpretations is a necessary key for the solution of the problems that arise in complex patterns of technical, social and economic development.

Our elders have been telling us that humans have arrived at a moment of critical choice. Repeating previous choices will certainly lead to accelerating social, political and ecological disintegration. The alternative, a choice for spiritual transformational change, represents more than an act of survival.

As indigenous peoples, we will continue to learn to develop and support community-building initiatives and organizations with a focus of maintaining and sharing those principles and spiritual values that have sustained our communities for millennia. Global spiritual transformation of civil society is a necessity. Spirituality and community, not money, must define the threads that bind all people and all life together. The IEN seeks to open a constructive dialogue for mobilizing societal forces, within all cultures, to reevaluate what their relationship is to the sacredness of our Mother Earth.

All My Relations

Tom Goldtooth

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See also: Aboriginal Environmental Groups in Canada; American Indians as "First Ecologists"; Bison Restoration and Native American Traditions; Black Mesa; Casas, Bartolomé de Las; Cosmology; Devils Tower, Mato Tipi, or Bears Lodge; Earth Charter; Environmental Justice and Environmental Racism; G–O Road (North Carolina); Haudenosaunee Confederacy; Holy Land in Native North America; Indigenous Activism and Environmentalism in Latin America; Inuit; James Bay Cree and Hydro-Quebec; Lakota; Law, Religion, and Native American Lands; Manifest Destiny; Mother Earth; Native American Languages; Noble Savage; Rainforests (Central and South

America); Romanticism and Indigenous People; Sacred and the Modern World, The; Sacred Geography in Native North America; Seattle (Sealth), Chief; Sky; Traditional Ecological Knowledge; Traditional Ecological Knowledge Among Aboriginal Peoples in Canada; United Nations' "Earth Summits"; World Conference of Indigenous Peoples (Kari Oca, Brazil); World Wide Fund for Nature (WWF); Yuchi Culture and the Euchee (Yuchi) Language Project (Southeastern United States).

Indigenous Religions and Cultural Borrowing

Traditional indigenous religions tend to be intimately involved with the natural environments out of which they emerge. Indigenous peoples around the world have developed shamanic and animist belief systems that reflect their dependence on the environmental conditions directly affecting their communities. As social and economic circumstances have changed for indigenous peoples, religious practices have also been adapted and reshaped to accommodate new influences, desires and pressures. Likewise, traditional indigenous religions have had an influence on the wider world. They are often invoked, for example, as evidence of the connections that indigenous peoples are perceived to have with “Nature.” As a result, elements of these traditions are frequently borrowed or appropriated by non-indigenous groups or individuals who want to strengthen or authenticate their own spiritual feelings toward natural landscapes.

Most cultural researchers acknowledge that the tendency to borrow ideas from others is a universal human practice, an inevitable outcome of interactions between individuals and cultural groups. This diffusion of beliefs and practices is evident in the development of cultural traditions throughout the world. Religious traditions in particular provide some of the most dramatic and widely recognized examples of cultural borrowing. Perhaps it is for this reason that the study of religion has often included discussions about the significance and the implications of blending together elements selected from different cultures. The concept of syncretism, the attempt to reconcile or bring together diverse beliefs, conventions or systems, has frequently been applied in colonial settings to describe the ways in which indigenous peoples combined their traditional religious beliefs with those of the missionaries and colonizers.

“Syncretism” has acquired negative connotations in some places because it has been used to imply that religious traditions are somehow weakened or corrupted when they begin to incorporate practices drawn from other religious systems. This argument depends upon a set of culturally shaped ideas that assume “tradition” to be unchanging by nature and that therefore promote the importance of “purity” and “authenticity” within such traditions. It also reflects an understanding of cultures as essentially fixed and bounded entities, rather than overlapping and interacting systems of social engagement. These approaches fail to acknowledge that cultural traditions, religious and non-religious, indigenous and non-indigenous, are essentially dynamic; like all social practices they are repeatedly amended, altered and readjusted to meet the require-

ments of changing circumstances – even while they may maintain an appearance of unflinching stability.

Traditional indigenous belief systems tend to be directly and inalienably tied to specific places or sites; when indigenous peoples incorporate elements of other religious systems, both preexisting and incoming beliefs must be adjusted to accommodate new geographical and cultural contexts. Many indigenous groups who have been introduced to Christianity, for example, are faced with the challenge of reconciling their beliefs about the sacredness and centrality of land in their traditional religious practices with the “non-land-based” nature of the new religious system. Often indigenous peoples who take on one of the “world religions,” by choice or by force, will find ways to incorporate their traditional beliefs about land and nature spirits, the spirits of place, into the new set of practices. Alternatively, the two systems of belief might simply coexist side by side.

One indigenous response to the “placelessness” of the Judeo-Christian tradition is evident in anthropologist Eric Wolf’s 1958 account of the story of the Virgin of Guadalupe, a religious symbol of national significance in Mexico. Guadalupe appeared in a vision, in 1531, to Juan Diego, an ordinary indigenous man who had converted to Christianity. The shrine, built upon the hill where she appeared, became a major site of pilgrimage for indigenous Mexicans, who had, ostensibly, converted to Christianity. That same hill, however, was also an important pilgrimage destination before the Spanish arrived in Mexico, as the site of a temple dedicated to Tonantzin, the indigenous goddess of Earth and fertility. This former association was maintained amongst indigenous pilgrims. In this case indigenous believers in a religious system that was intimately linked to a particular place managed, very successfully, to appropriate and integrate Christian imagery, with its distant geographic origins, to reflect local needs and purposes.

Likewise, when non-indigenous people adopt indigenous beliefs their meaning may also be changed to reflect the needs and priorities of the appropriating group. In places such as America, Australia and Britain, for example, “New Age” use of imagery drawn from indigenous religious traditions, imagery that originally emerged from and related very closely to particular landscapes, tends to become universalized, its local significance minimized in favor of its perceived wider relevance. In this new context indigenous beliefs and practices are employed to signify a symbolic link to land in general – to the whole of the Earth and to “Nature” in its broadest sense. This approach is clearly reflected in New Age interpretations of shamanism as a universal human tradition that can be employed without reference to specific places or spirits of place. Inversely, members of settler communities also occasionally invoke indigenous religious knowledge in order to assert the strength of their own connections to particular locations and their own feelings of “indigeneity.”

Traditional indigenous religions have also provided inspiration for the international environmental movement. Because indigenous peoples are often perceived to have a strong spiritual connection to the natural environment they tend to be championed as the original ecologists. The famous speech attributed to “Chief Seattle,” for example has

become an important rallying cry for environmentalists around the world. In reality, this text was adapted by American professor of film, Ted Perry, in the early 1970s, from earlier texts produced by nonindigenous Americans (but inspired by a speech delivered in the Lushotseed language in 1854 by a Native American leader named Sealth). Elements of Native American and Australian Aboriginal religious traditions have also been incorporated into the ritual practices of the Deep Ecology movement as a means of emphasizing the importance of developing a strong spiritual commitment to the environment as a way of encouraging its protection. Within the context of Western tendencies to align men with “culture” and women with “nature,” indigenous religious traditions are often linked with “feminine wisdom” and embraced by proponents of the ecofeminist movement as alternative of models for “being in nature” (Jacobs 1994).

Many scholars who have worked closely with indigenous cultures, however, debate the perception that indigenous traditions are intrinsically ecologically sound. Evidence, in some places, of overhunting and overuse of fire, for example, supports the argument that indigenous peoples are not necessarily the “paragons of ecological virtue” (Ellen 1986) that they are often thought to be by Westerners keen to present an alternative model to the industrialism and consumerism associated with their own cultural tradition.

While some indigenous individuals encourage and benefit from the kind of interest in spiritual beliefs and practices described above, many now rigorously contest the borrowing or “appropriation” of their religious traditions. Some feel that their religions are trivialized and undermined when particular elements are removed from their original context and freely reinterpreted by others who are not part of their community and who may even seek to profit from the knowledge they have acquired from indigenous people. This situation is often exacerbated by social and economic inequalities that can only be understood by looking at the particular histories of indigenous communities, especially in relation to the long-term impacts of colonialism. Indigenous scholars and others also explain how romantic stereotypes about closeness to nature and heightened spiritual focus can undermine indigenous efforts, as minority groups encapsulated in nation-states, to gain political influence and support for the enforcement of basic human rights and social justice for their communities.

Indigenous peoples in all parts of the world have been persecuted for their religious beliefs, have been dispossessed of their traditional lands, and have had their personal and group identities further challenged and undervalued in numerous ways. As a result, many contemporary indigenous communities are trying to rebuild and revitalize their cultural traditions. Part of this complex process often includes reclaiming the rights to represent and control the use of their unique religious symbols and practices. In this context the large-scale borrowing, re-interpretation, and commodification of religious and cultural imagery by members of more dominant cultural groups may impact negatively on indigenous efforts to assert their own interpretations and uses of those same symbols. Their ability to benefit economically from the production of traditional arts and crafts and other business ventures that depend upon their unique cultural/

religious heritage may also be impeded if the power to control commercial use of that heritage is overridden by members of other communities.

Some of the most well-known and extensively researched examples of religious belief systems that overtly combine indigenous traditions and “world” religions are Melanesian cargo cults and the Africanderived traditions of Vodou (Africa, Haiti and USA), Candomblé (Brazil) and Santería (Cuba and USA). In each of these cases Christianity has been the major outside influence. The three latter cases are constituted primarily of indigenous African religions combined with elements of Catholicism, initially encountered through contact with missionaries and colonists. These traditions emerged from the beliefs and practices of African men and women, many of Yoruban heritage, who were forcibly transported to Haiti, Cuba, and the Americas as slaves. Catholic prayers and hymns still have an important place in the contemporary Vodou ceremonies and many Vodou spirits of African origin have counterparts in the form of Catholic saints. Similarly, Catholic saints play significant roles in the Brazilian and Cuban traditions of Candomblé and Santería.

Melanesian cargo cults developed, in part, as a response to the enormous differential in access to material wealth between indigenous people and European colonizers in the Pacific Islands following World War II. In this sense, they are political as well as religious. Although many and varied, these innovative millenarian movements are generally based on beliefs that adherence to newly developed rituals and social practices will result in the ancestors of the indigenous islanders returning with unlimited material goods to distribute amongst the indigenous community (hence the term “cargo”). While some cargo cults are relatively short-lived, others have survived for several decades. Whitehouse explains, in relation to the Papua New Guinean movement that he studied, that its success was closely linked to the fact “. . . that it was firmly rooted in Indigenous cosmology, [thereby] restoring confidence and pride in local *kastom* [roughly, “custom”] and exploiting some of the most compelling and plausible assumptions of traditional religion” (1995: 178). While this religious movement also incorporates many Christian terms, concepts and personages, such as “sin,” “absolution,” “Satan,” “Adam and Eve,” “Paradise,” “Jesus,” and “God,” it is essentially an antimissionary discourse that seeks to even up the imbalance between indigenous peoples and the Europeans, who have greater access to power and wealth.

Each of these forms of cultural borrowing highlight the creative and pragmatic processes involved in the development or invention of religious and other cultural traditions. They provide valuable insights into the dynamism of culture in general and offer interesting pathways to understanding the vibrant and changing nature of religious traditions, indigenous and non-indigenous. At the same time it is also important to understand and respond respectfully to indigenous accusations of religious appropriation, the “theft” of ideas and symbols drawn from indigenous religious traditions by nonindigenous peoples. Acknowledging the potentially destructive outcomes of this form of cultural borrowing is a necessary step toward supporting indigenous efforts to

maintain and revive traditional religious beliefs and practices in the face of misrepresentation and other significant social pressures.

Jane Mulcock

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Indra's Net

The motif of Indra's net is used by the Huayan school of Chinese Buddhism as a metaphor for the notion of mutual interpenetration of all phenomena in the universe. The image of Indra's net of jewels originally comes from the *Huayan Scripture* (also known as the *Avatamsaka* or the *Flower Garland*), one of the key canonical texts of Mahayana Buddhism. According to the scripture, in the heaven of the god Indra there is a sublime net which extends out infinitely in all directions. In each knot at the intersection of strands in the vast net there is a glimmering jewel; since the size of the net is infinite, there is a limitless number of jewels that together present a dazzling display of stunning beauty. The multi-sided and smooth surface of each jewel reflects all other jewels in the net, while each of the reflected jewels also contains the reflections of all other jewels, thus constituting a continuing process of infinite reflections.

During the Tang period (617–907) the Huayan school adopted the image of Indra's net as a symbol for a holistic vision of the world that stresses the causal relationship and mutual dependency among all phenomena in the universe. The Huayan view conceives of the totality of existence in terms of dynamic relationships among interrelated phenomena, which together constitute the whole cosmos, rather than in terms of distinct and separate entities. The interdependent web of causal linkages, which encompasses the relationship between the one and the whole as well as the relationship among individual entities, is predicated on the notions of mutual identity and interdependence. Both of these concepts are peculiar Huayan reinterpretations of the Mahayana doctrines of emptiness and dependent origination. According to this point of view, each and every individual/thing/phenomenon can be seen both as a conditioning cause of the whole and as being caused by the whole. By extension, every single phenomenon conditions the existence of each other phenomenon and vice versa. Therefore, nothing exists by itself, but requires everything else to be what it really is in a given moment. It is important to note that the Huayan interpretation of causality is not concerned with temporal sequencing and does not postulate causal processes that involve a progressive unfolding of events. Rather, the theory represents an attempt to elucidate the causal relationships that obtain among all phenomena in the universe at any given moment.

The Huayan doctrine can be interpreted as depicting a totalistic universe that is a self-generating organic body constituted by a limitless number of parts that are constantly interacting with each other. Recently there has been an increased awareness of possible parallels between the Huayan understanding of reality and an emerging ecological awareness of the interdependence of all living things, which is imbedded in

larger theoretical models that stress the holistic unity of the world and view nature as an intricate ecosystem comprised of constantly changing elements that interact with each other in a web of causal relationships. The Huayan view of existence as an intricate web of interdependencies is seen as representing a viable alternative to predominant notions of an anthropocentric world, even if the manifold intricacies and nuances of Huayan's complex theoretical model are not always fully taken into account.

Huayan's religious philosophy can readily be interpreted as implying that nature is not a mere background for the existence of humanity, to be manipulated and exploited for the satisfaction of human needs and desires. Rather, humans and all other beings are united together into an organic whole, with each and every thing and being related to everything else, each one of them occupying an important place in the total scheme of things. An example of contemporary application of Huayan ideas about Indra's net in ecological discussions can be found in Gary Snyder's conception of nature as community. By using the Huayan notion of interpenetration, Snyder sees the human relationship with nature as part of an ecological communion of beings that comprises Indra's net as a food web, which entails gift exchanges and can be embodied in a feeling of love that extends to all.

Mario Poceski

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See also: Buddhism; Buddhism – Engaged; Hinduism; India; Macy, Joanna; Seed, John; Snyder, Gary.

Institute of Noetic Sciences

– See Space Exploration (and adjacent, Institute of Noetic Sciences).

Interfaith Center on Corporate Responsibility

The Interfaith Center on Corporate Responsibility (ICCR), an independent coalition of religious institutional investors in the United States, coordinates and facilitates corporate responsibility among its members. In the late 1960s the Corporate Information Center (CIC), a project of the National Council of Churches of Christ, produced research reports on corporate issues. In 1971 six Protestant churches formed the Interfaith Committee for Social

Responsibility in Investments (ICSRI) with the intention of coordination, research and action. In 1974 the CIC and the ICSRI joined to form ICCR.

ICCR remains a coalition of seventy religious groups representing over \$100 billion in investments. Members include 22 Protestant denominations and agencies, two Jewish groups and over 275 Roman Catholic orders, dioceses, and health systems. Each is an active investor. ICCR has been one of the sparks of the social investment movement, a forerunner to the more widespread current interest in social investing.

Environmental issues have been a major theme of ICCR from its earliest days. In 1971 an ecumenical panel on copper mining in Puerto Rico convened to look at issues of a proposed mine. The mine was postponed partly because of information uncovered in the hearings.

In the early 1970s, strip-mining of coal was the subject of reports, public hearings and shareholder resolutions. Concerns about energy production and use led to resolutions calling for abandoning nuclear plant construction or examining the social, economic and health-and-safety issues of nuclear plants. These concerns became international when 22 ICCR groups in 1980 asked Westinghouse Electric to prevent export of nuclear plant components to the Philippines.

The discovery of toxic wastes at Love Canal near Niagara Falls in the late 1970s led to resolutions with the Occidental Petroleum Company. This situation, one of the first to receive widespread public attention, raised a continuing concern about toxic disposal practices of corporations. During the Vietnam War, Dow Chemical and other companies produced Agent Orange, a defoliant that caused health and environmental problems from a contaminant, dioxin. Several religious groups sponsored proposals with Dow and had forums with local churches in Midland, Michigan, Dow's headquarters.

In 1984 an explosion at a Union Carbide plant in Bhopal, India, killed thousands and left thousands more with injuries from breathing toxic fumes. ICCR shareholders sponsored proposals with Union Carbide, challenging the adequacy of its response to

the disaster. In 1989 an Exxon oil tanker ran aground in the Valdez strait in Alaska, spilling much of its cargo into the water. Religious shareholders addressed Exxon for several years following the spill.

In 1989 social investors, public pension funds and environmental groups formed the Coalition for Environmentally Responsible Economies (CERES) and announced the Valdez Principles, changed in 1992 to the CERES Principles. Since 1989 ICCR groups as part of CERES have introduced many proposals, calling for environmental reports or endorsement of the Principles.

In recent years ICCR issues have included the irradiation of food, genetically modified organisms, and global climate change.

A periodic publication, *The Corporate Examiner*, is available by subscription.

J. Andy Smith, III

See also: Ethics & Sustainability Dialogue Group; Interfaith Council for Environmental Stewardship; National Council of Churches, Eco-Justice Working Group; Stewardship; North American Conference on Christianity and Ecology [and the] North American Coalition on Religion and Ecology; Wise Use Movement.

Interfaith Council for Environmental Stewardship

Intended as a challenge to the National Religious Partnership for the Environment's claim to represent JudeoChristian thought on environmental issues, the Interfaith Council for Environmental Stewardship (ICES) was founded in April 2000 by Jewish, Catholic, and Protestant leaders promoting a theologically and politically conservative public religious agenda. These leaders argued that religiously informed moral action, rather than governmental controls, should guide behavior, and that the environment can best be sustained in a context of free market economics, strong property rights, and technological innovation. The ICES was conceived and established by the Acton Institute for the Study of Religion and Liberty, an advocacy and educational organization created in 1990 by Fr. Robert A. Sirico "to promote a society that embraces civil liberties and free-market economics."

The defining document of the ICES is the Cornwall Declaration on Environmental Stewardship, created in October 1999 at a conference center in West Cornwall, Connecticut. Largely a distillation of arguments made by

E. Calvin Beisner in his 1997 book *Where the Garden Meets Wilderness*, the Cornwall Declaration minimized the threat of global environmental problems, such as "destructive manmade global warming, overpopulation, and rampant species loss," arguing instead that the greatest environmental threats were local in nature and typically confined to the developing world. Rather than depicting humans as "consumers and polluters," the Cornwall Declaration envisioned them as "producers and stewards" with the ability to "add to the Earth's abundance" and to "enrich creation" by "developing other resources" and by unlocking "the potential in creation." Humans were "given a privileged place among creatures" in the divine order and thus "the human person is the most valuable resource on Earth." Nature is not best when "untouched by human hands" but instead must be developed and brought to fruitfulness by humans. Humans are to exercise wise stewardship, "which must attend both to the demands of human well being and to a divine call for human beings to exercise caring dominion over the Earth." A series of aspirations at the end of the Declaration envisioned a world in which "objective moral principles" and "right reason" unite with limited government, a free market economy, assured property rights, and technological advancement to produce a better environment for all creatures.

Though it was at odds with mainstream secular and religious environmental thought (even questioning some of its fundamental assumptions), the Cornwall Declaration rep-

resented the first acknowledgment of the need for environmental care by religious leaders combining theological with political conservatism. Among the prominent evangelical conservatives supporting it were Bill Bright (Campus Crusade for Christ), Charles Colson (Prison Fellowship Ministries), James Dobson (Focus on the Family), D. James Kennedy (Coral Ridge Ministries), Beverly LaHaye (Concerned Women for America), and Donald Wildmon (American Family Association). The Catholic and Jewish supporters included Fr. Richard John Neuhaus (editor of *First Things*) and Rabbi Daniel Lapin (Toward Tradition).

The ICES created a stir among Christian environmentalists in April 2000 when it sent the Cornwall Declaration to 37,000 religious leaders along with an introductory letter accusing the National Religious Partnership for the Environment of seeking to “redefine traditional JudeoChristian teachings on stewardship” and claiming that “its agenda will have devastating, unintended consequences for humanity and our world.” The Evangelical Environmental Network was forced to defend its evangelical credentials and policies in an open letter to its constituents and in a series of semi-public letters with ICES leaders.

The ICES provided an extended explication of its views in its book *Environmental Stewardship in the JudeoChristian Tradition*, published in 2000.

David K. Larsen

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See also: Au Sable Institute; Cathedral Forests and the Felling of Sacred Groves; Christianity (2) – Jesus (and adjacent, What Would Jesus Drive)?; Christianity (7i) – An Evangelical Perspective on Faith and Nature; Evangelical Environmental Network; Religious Campaign for Forest Conservation; Stewardship; Wise Use Movement.

Inuit

Scattered around the Arctic regions from Siberia to Greenland, Inuit (including Yup'ik, Inupiat, Inuvialuit and Kalaallit) have often been described as religious people but without a real religion. The variety of the expressions used by Western observers to describe their spirituality or worldview reflects how difficult it is to grasp traditions that have lived for thousands of years in close contact with their environment. Nowadays, if Inuit are still very often considered as “naturalists” (the missionary Hans Egede was already using that notion in Greenland in the eighteenth century), it is again because of this very special relationship they maintain to their environment. However, like many other Western concepts, the notions of religion and nature are very problematic to understand Inuit traditions adequately. We may wonder why, for example, if Inuit are so respectful toward nature, they are often opposed to anti-harvesting campaigns led by EuroAmerican animal-rights groups and why collaborations with ecologists and environmentalists are not always easy. According to the Inuit, nature does not exist as such.

Human and nonhuman beings including non-living objects belong to one continuum of the same domain. Humans are in dialogue with their environment at all times, and all the entities Western observers call “natural” are often endowed with spiritual agencies, with an *inua* (an owner), and consciousness. The Inuit discourses about the Earth, their very rich mythology and cosmology, hunting and ritual practices, as well as their spirituality, always strongly emphasize interdependence between human and nonhuman beings.

In the past, when Inuit traditions were developed by small nomadic groups depending on local resources like caribou, fish, plants, etc., the old designation of *-miut*-like *Iglulingmiut* (“people from Iglulik”) never meant that Inuit owned the land but only indicated the locality the group frequented. As a few anthropologists rightly put it, Inuit had to respect the land as they were in some manner possessed by *nuna* (the Earth) and *sila* (the air). Thus, people sharing a piece of the Earth with one another are said to be *nunaqqatigiit* and those sharing a piece of the air, *silaqqatigiit*. As the Earth itself was conceived as a living entity, camp leaders often warned their people that they should not stay in the same place indefinitely but move to another area to allow the place to cool and hence avoid sickness and starvation. In North Baffin, elders also explained to the youths that they should not pick up the eggs that grow in the Earth. Earth eggs (*nunaup*

manningit) are said to become *silaat* (big polar bears) or *pukit* (albino caribou) and “They are not allowed to be taken for the Earth will yearn for the lost eggs and cause

foul weather.” According to Kappianaq, “hunting silaat can shorten the life expectancy of the human who caught one” (in Oosten and Laugrand 1999: 192–3). Nowadays, a healthy environment (*avativut*) is depicted as a balanced one, not only regarding the proper numbers and types of living and non-living entities, but also one that has the ability to repair and heal itself.

From the viewpoint of contemporary symbolic anthropology, Inuit traditions fit into the universal – but very diverse – animist model. According to Inuit cosmology, as Fienup-Riordan indicated regarding the Alaskan Yup’ik, human and nonhuman animals possess a mutual awareness of each other’s activities; the latter are considered nonhuman persons and cognizant beings with whom humans can communicate. In some areas human beings are also believed to be able to reincarnate into animals.

To varying degrees, depending on region and generation, Inuit still attribute anthropocentric qualities to many entities that most people in Western cultures regard as “natural.” Though animals differ from humans in that they do not have a name (*atiq*) and that they are used for food, they are nevertheless thought to have a soul (*tarniq*) just like humans. This soul takes the form of a tiny bubble of air and blood but with the same shape of the outer body, the only difference being that its size is much smaller. According to various sources, it could be located in the gut, in the groin, in the bladder or in the joints. This conception of interdependence between humans and animals is deeply rooted in Inuit traditions from Siberia to Greenland. Quoting Ava and Ivaluarjjuk, Knud Rasmussen suggested this was one of the major religious problems with which the Inuit had to deal:

The greatest peril of life lies in the fact that human food consists entirely of souls. All the creatures that we have to kill and eat, all those that we have to strike down and destroy to make clothes for ourselves, have souls, like we have, souls that do not perish with the body, and which must therefore be propitiated lest they should revenge themselves on us taking away their bodies (in Rasmussen 1929: 56).

Far from being seen as something to be dominated, the Inuit believe animals yield to hunters capable of winning them over. Animals have human feelings, the power of speech and the capacity to think (*isuma*). They have songs and, according to some stories, a spirit (*inua*) owning them. Animals can also see the conditions in which they will be captured and decide – if the hunter has failed in respecting them by certain ritual practices – not to give in or even to take revenge.

In the Arctic, shamanism thus appears to be a form of religion where shamans act as a mediator between human and nonhuman entities. In Alaska, the Yupiit performed many ritual acts, songs and masked dances to influence animals and affect “nature.” In the Canadian Arctic and in Greenland, shamans (*angakkuit*) were often sent by their fellows to meet the biggest *inuut* – and especially the *inua* of the sea – to negotiate with them and obtain game, healthy conditions or good weather. Also, shamans would use their clairvoyance (*qaumaniq*) to see the unseen – the spirit world and the faults committed by humans when they break the rules – to restore order by addressing the ancestors and the *inuut*. Able to speak the language of their helping spirits (*tuurngait*)

and shamanic incantations (*irinaliutit*), they would sometimes turn themselves into an animal.

With their conversion to Christianity these ideas evolved. Parts have survived while other parts have been reappearing in a new form. Nowadays, Christian Inuit no longer believe that animals are owned by the great spirits of the universe (*inuut*). However, if most of them acknowledge that God created the animals, they still maintain that animals can communicate with humans and need to be hunted and taken and shared as prey to reproduce themselves. Not to hunt an animal is the best way to make it disappear. Inuit also still experience a close connection between diseases or physical problems and spiritual issues. Transgressing shamanic rules (*tirigususit*) or Christian rules (to hunt or get plants on a Sunday for instance) or not respecting animals are very dangerous behaviors for the living community. In that respect, the only solution is often the collective confession (*anniarniq*). In 1999, Nutaraaluk, an elder from Iqaluit, considered the Quebec ice storm to have happened because God and nature wanted to discipline a society that has been misbehaving for a long time.

Similarly, while the concept of *inua* seems to be losing its meaning in many areas, it remains consistent to understand modern attitudes. Nowadays, the strong reaction of the Inuit after their dogs were killed by the Canadian Government, for instance (Inuit elders complained that it was a form of genocide), can only be explained in terms of the central position of dogs in Inuit society. Being the only animals to have a name and sharing their master's *inua*, dogs are clearly seen as close members of human society. Subject to various rules and prohibitions in the past, they are still considered as human companions, able to decipher the presence of any spirit.

In Inuit cosmology, many myths relate the origins of the great spirits (*inuut*) of the Inuit universe such as Sila, the spirit of the air and consciousness, or Aningat, the moon spirit who is said to have sexually abused his sister Siqiniq, the *inua* of the sun. From Siberia to Greenland, other myths relate the story of Sedna also known as Nuliajuk, Nerrivik, Uinigumasuituq, depending on the area. This myth of the *inua* of the sea explains how the entire human race (Inuit but also Whites, Indians and Ijirait spirits) was born after she coupled with a dog. Another episode of the myth tells how her finger-joints were transformed into sea mammals (whales, seals and walrus) after being cut off by her father, Anautalik. Interestingly, Sedna was considered the mother of the sea mammals and feared as such, being able to punish humans by provoking bad weather, starvation or infertility.

Nowadays, even if Christianity has been deeply incorporated by the Inuit, humans still respect many ritual injunctions and rules to avoid any bad relationship with spirits and animals. Under no circumstances, for instance, should a woman come into contact with game during her menstrual cycle, otherwise, warned an elder from Rankin Inlet, she might anger the spirits. Many people also tell stories about animals retaliating against humans who did not respect them, mistreated them or mocked them. In 1999, for example, Imaruittuq from Igloodik stated:

We were told to treat all wildlife with respect . . . If we did not do this they could take revenge on us . . . If I was toying with or mistreating an animal, the very person I love the most could suffer from what I did (in Oosten, Laugrand and Rasing 1999: 38–9).

The hunt and the relation to game imply discipline and specific procedures to avoid problems. Any mistake can be dangerous for the living person but also for their descendants. Thus hunters must be gracious about wildlife and share their prey. Obviously, the old Durkheimian opposition between the sacred and the profane becomes problematic in such a context, with Inuit connecting everything. Dreams, for instance still provide the best context for nonhuman persons to communicate with human beings.

The arrival of new Christian spirits such as God (*Guuti*), Satan (*Satanasi*) or angels (*ingilit*) has not dispelled most of the spiritual beings of the Inuit territory. Nor has it changed the integration of each person through its name in an extended community, consisting of ancestors, animals and spirits. Myths are full of stories of humans and animals turning into each other. In the Canadian Arctic, many hunters are still telling their experiences of encounters with nonhumans. Some of them talk of marriages between humans and *ijirait*, spirits that can be identified by the set of their eyes. Their whistling can make humans lose their memory. Others talk of bloody battles with *tupilait*, dead roaming spirits who are said to be responsible for spreading sickness among the living people. Others describe *tuurngait*, the helping shamanic spirits, as very dangerous entities. Some younger people have come up against *qallupiluit*, these sea spirits that kidnap children and wield a whip of seaweed. Then there are the *inurajait*, who can be recognized by their tiny footprints, the *tarriasuit*, and many other spirits depending on the region. All these meetings are often ambiguous and indicate to living people that the utmost care must be taken to follow social rules and rituals given to them by their ancestors.

As the elders often explain it to the younger generation, when human and nonhumans share so many features and the same universe, bodily distinctions and attitudes become important markers. Thus, humans must be very careful and always share their spiritual experiences with others to avoid the risk of having bad thoughts as this is one of the most dangerous phenomena in such a widely connected universe.

With this background in mind we can now understand why there is no contradiction for the Inuit to respect “nature” and their opposition to ecologists, environmentalists and anti-harvesting campaigns. For Inuit, nature is not a specific and autonomous domain that should be managed. Inuit spirituality is closely related to the hunting life, to providing and sharing food. Each person is inextricably linked to his or her environment and there is no alternative. Inuit cosmology encompasses shamanism and Christianity. Humans are aware that a good life means to maintain good relations with animals, with the weather, the spirits and the ancestors, who can all always retaliate. Thus, humans have to follow specific rules and act accordingly to avoid entropy. Today, over and above the many changes wrought by Christianity and modernity, Inuit spiri-

tual life thus displays considerable continuity by still attaching the greatest importance to harmony and mutual understanding rather than conflict.

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See also: Animism (various); Traditional Ecological Knowledge among Aboriginal Peoples in Canada; Indigenous Environmental Network; Watson, Paul – and the Sea Shepherd Conservation Society; Whales and Whaling.

Ireland

Much of what we know of the religion of the first people of Ireland comes to us from myth and legend. There are no original texts and the first printed works – early Christian interpretations – are hotly contested.

It is thought that Megalithic people in Ireland practiced a cult of the sun. They had rites and rituals as evidenced by stone rings, forts and passage tombs with solar alignments and inscriptions dating from this period. For the diverse people we now know as Celts, the sun also embodied a supreme divinity. The estimates for their arrival vary from 1000 B.C.E. to 500 B.C.E. There is little archeological evidence of major conflict in the transition. Indeed, the cross-cultural meeting of Celts and Megalithic people seems to have been a two-way process which allowed a symbiosis of old and new.

For both the Megalithic and later the Celtic people of Ireland, the landscape itself was sacred, often reflecting aspects of divinity in the form of gods and goddess. Certain rivers, wells and hills gained significance because of their capacity to mediate or facilitate the breakthrough of the spiritual world or other world. These places called “Anima Loci” or places of soul are often associated with specific events like sunrise and sunset on significant days of the year, for example, Newgrange in the Boyne valley is associated with the winter solstice, and Lough Crew, Co. Meath, with the spring and autumnal equinox sunrises.

The *Dinsheanachas* (place-name stories) preserve the geomythic tales and express a quality of ensoulment of certain places in the landscape. This information was very important as it detailed the connections that were a source of inspiration and power in the minds of the listeners linking them to other realms. It was, in Jungian terms, the ground of being for the people out of which they constructed their universe.

The idea of the sacred landscape is reflected most potently in the early names for Ireland – Eire, Fodla and Banba. They describe the goddesses of the land as encountered by the Milesians, the mythical ancestors of contemporary Irish people. Eire became the primary name for Ireland and through her the Mother Goddess, connected intimately with the land, lived on in the Irish psyche.

The carriers of the nature religion tradition were the Druids, some of whom were poets – “bards” or “*filidh*.” They were also judges, political advisors, teachers, musicians and entertainers. It is through their oral tradition that the early Irish nature poetry, perhaps the first of its kind to be written in Europe, has passed into the vernacular today. An example of this is to be found in the Hymn of Amerigen. For Amairgen, the primal God he worshipped could be felt within himself and it was embodied in the

landscape outside. He could feel the movement of God in the universe and within his own soul:

I am the salmon in the water, I am a lake in the plain,
I am a world of knowledge,
I am the point of the lance of battle,
I am the God who created the fire in the head
(“The Hymn of Amerigen” in O’Donohue 1997: 128).

Water in particular was the providence of the goddess for the early Irish. In one early story the warrior hero Fionn Mac Cumhaill is traveling with Saint Patrick. He sees the flowing watercress as a manifestation of the goddess of the well and he intercedes to her on Patrick’s (Christianity’s) behalf.

The belief that the Spirit has been imbued in the water persists and is manifest in the presence of numerous healing wells. The cult of Aine, an aspect of the Goddess Anu, continues even into recent times when people gathered at Knockainey (Aines Hill) in Co. Limerick on Midsummer Eve to invoke the spirit of Aine na gClair (Aine of the Whisps) to guard them against sickness and ensure fertility. Traditions of taking an informal blessing from “holy water” on entry and exit from houses continues, and many Irish people still carry bottles of this water in their luggage and cars for protection.

Celtic Christianity and Celtic Culture

Christianity arrived in Ireland, probably in the first or second century. As it settled in Ireland and in the Irish psyche it was immensely influenced by and reflected the pre-Christian relationship to nature. Evidence suggests that there was a belief among these early Christian peoples that God was fully present in the created, material world. The elements of the natural world, for example, were seen as a medium through which the glory of God shone. For these Christians as well as their pre-Christian ancestors, for whom the sovereignty myth was the central social tenet, loving God required living in harmony with the natural world.

Several stories from early Christian times tell of the intimate and mutual relationships between saints and animals, such as the one recounting how the sea otters dried St. Cuthbert after he had spent the night praying in the sea, and how his horse found food for him under the thatch of the roof. When St. Columba was dying, it was his horse that first knew about it and began the mourning. Other stories tell of how saints were led to their settlements by animals, Ciaran of Clonmacnoise by his horse and St. Gobnait by nine white deer.

In the early Christian period it is likely that Mass, following the pattern of earlier rituals, was celebrated out in the open and only later was it contained within churches. During the seventeenth and eighteenth centuries, under what is termed “penal law,” Catholicism was effectively prohibited by British efforts to bring the Irish under control. The Mass was then celebrated on a network of secret “Mass Rocks” in the open.

Commemorative outdoor Masses occur occasionally today to honor particular saints at their special sites or perhaps to remember the dead during the month of November in local graveyards. It may be argued from this that there is still a belief carried down from ancient times that one can be close to God and other “souls” when praying in the open air at these sites.

For the Celts the world was always latently and actively spiritual. In the Celtic world, and especially in the Celtic world of the senses, there was no barrier between soul and body. Each was natural to the other. The sun was the sister of the body, the body the sister of the soul (O’Donohue 1997: 81).

Religious rituals such as the pilgrimages to Croagh Patrick (the mountain of Saint Patrick) and Lough Derg also seek to narrow the distance between self and God, through exposure to the elements, walking barefoot, fasting and ritual walks with prayers.

This belief in the “sacramentality” of particular places where nature is regarded as a source or vehicle of spiritual power is one of the chief characteristics of primal religions throughout the world. Irish Christianity retained this primal sense of connection between nature and the divine remnants, which survives to the present day. The dates of the pilgrimage on Croagh Patrick coincides with the pre-Christian harvest festival of Lughnasad, and the route, with its large number of megaliths, suggest a pre-Christian origin for the still-famous walk. In addition to the primal and pantheistic origins of the pilgrimage to the mountain, Low also points to the biblical and theological parallels in the incarnational theology of the New Testament and in Teilhard de Chardin’s vision of the Cosmic Christ.

Ireland was the only Celtic country that was not invaded by the Romans. Christianity therefore came in contact with an intact druidic and Irish Celtic culture. In the transition to Christianity, it is clear that scholars and missionaries drew heavily on the earlier goddess and nature religions. As Mary Low, points out,

The old myths enshrined values and world-views which could not simply be discarded without threatening all that held the community together. Instead they were collected, modified and reinvented in an on-going myth making process (Low 1996: 25).

When in 431 the Christian movement, at the Council of Ephesus, made Mary officially the “mother of God,” the Celtic people turned to her enthusiastically as their replacement “Mother Goddess,” seeing in her the goodness of fertility, love and healing. For many scholars, therefore, it is difficult to distinguish between the pre-Christian goddess Bridget, the Christian saint she became, and the mother of God. In early Christian Ireland, Brigit was also known as Mhuire Na Gael (Mary of the Gaels). The historical figure of Brigit (455–525) is thought to have been a female Druid before converting to Christianity and she is intimately linked with the symbolism of the oak, which was sacred to the Druids. This is reflected in the name of her monastery at Kildare (Cill Dara – the Church of the oak).

Celtic Christianity and Brehon Law

The early church developed against a social and legal backdrop based on the clan system and codified under what is termed the Brehon Law. The integration of the new religion into this developed legal system set Celtic Christianity on a collision course with its Roman counterpart. Two factors were especially important in this conflict: the position of women and the ownership of land.

Women in the early Celtic Church continued to hold their pre-Christian positions of social and spiritual authority. Large numbers of women were involved in the early movement as missionaries and interpreters of the faith. A seventh-century poem tells of how Ethne, daughter of the Irish High King, questioned St. Patrick at length about the new Christian God asking “Who is God and where is his dwelling?” She was eventually converted and influenced her teachers, the Druids Mael and Caplaith, to follow.

The equality of women in Irish society meant that they continued to develop sexual relations within the context of the new religion. Mixed monastic settlements were common and children were brought up in religious service. This, combined with the communal system of land ownership by the clan, severely limited the power that could be exacted by the Church and state.

The diocese of a bishop was essentially a clan boundary, with its own priests. The clan allocated land to bishops (some of whom were female) and other members of the Church who were elected from within their own family grouping. These clan families, grouping together, could counter power of both papacy and monarchy. Mael Maedoc (ca. 1094–1148), Archbishop of Armagh, was one of the key reformers in the efforts to enforce clerical celibacy. He was instrumental in getting a papal blessing and permission for Henry II to invade and conquer Ireland. This was given in the bull *Laudibiliter*, issued in 1155 by Nicholas Breakspeare, the only English man to have become pope. At the Synod of Cashel in 1101 the High King, in an attempt to stave off the Anglo-Norman invasion, exceeded his power under law, and agreed to hand over lands to the absolute ownership of the Church. Before then there was no concept of absolute private property. “Thus the first alienation of land from the people took place” (Ellis 1995: 167).

The destruction of the social status and religious standing of women was therefore essential for the enforcement of clerical celibacy and ultimately for the transfer of political power and land from the clans to a clerical hierarchy with an allegiance to the centralizing Roman Church. Women were therefore forbidden to take part in the celebration of the Mass and in the twelfth century had the dignities and honors of bishop removed from their title. Land was no longer held in community ownership but in the private estates of the British Ruling Class and the Church. The religious status of women in Ireland therefore was degraded not for theological reasons but to further the economic and political marriage between the Roman Church and the British state.

The result was an enormous change in the relationship between religion and nature during the tenth to the twelfth centuries. The traditional system of land ownership

was overthrown through the mutually reinforcing actions of Church and state. Gender relations were utterly transformed and women began to take increasingly subservient roles. This period marked the beginning of the end for the Celtic Church.

Protestant Ascendancy and the Land

As Ireland became a colony of the Protestant British Empire, both colonists and native Irish used religion as a tool of resistance and oppression in the struggle to gain control of the land. An intensely political aspect of the connection of religion with nature in Ireland can be found in the complex history of the North of the country. One aspect of this history, which still carries a high political charge, relates to the movement of the mostly Scottish Protestant people onto the land in the North of Ireland in the sixteenth century. In this effort by Henry VIII to colonize or “plant” Ireland, many indigenous Irish were displaced to marginal lands or overseas by the settlers who are popularly referred to as “The Planters.” Their relationship with the land and nature in their new home was intricately linked with religious and political wrangling.

The conditions upon which they got their land bound them to admit no Irish customs, never to intermarry with the Irish, and not to permit any Irish on their lands. Fintan O’Toole has described the way that the abhorrence of the Planters in the North to the Native Irish was echoed by the colonial project in North America.

The relationship was driven by the distinction between city and forest, on the fear of degeneracy which the intermingling of races would bring, on the contrast between civilisation and barbarism which the divide between town and forest or city and wilderness implies, in which the Irish became associated with the forest savage (O’Toole 1994: 63).

Thus a sense of superiority of the Protestant religion was used as a justification for the bringing “under control” of nature and people.

In the late seventeenth and early eighteenth century a series of “Penal Laws” were enacted by the British. These forbade Catholics to practice their religion, receive an education, and purchase land or own a horse worth more than £5. Ireland was conceived of as an important food source for the newly industrialized urban centers in England. Taxes were placed on arable land so that sheep became more profitable than small farmers tilling the land. Thousands of Catholic farmers were forcibly cleared and either emigrated or died of starvation in the famines of the eighteenth and nineteenth centuries. These policies also resulted in a period of immense forest clearance for export to the shipyards of Britain. The last wolf was shot in Clare in 1770. For some writers the demise of the woods and the fall of the Catholic people were linked. “*Cad a dhéanfaimid feasta gan adhmad? Tá deireadh na gcoillte ar lár*” (“What will we do in the future without wood? The end of the forests has come”) (O’Corkery 1924: 35).

The potato famine in Ireland between 1845 and 1849 represented an important chapter in the story of religion and nature in Ireland. Before the famine, only 30

percent of the Irish attended Mass. By 1850, after hunger had run its five-year course, attendance had risen to over 90 percent. To the people, it appeared that nature had failed them, and they turned instead to the Church for forgiveness. Thus we can see that nature combined with certain colonial agricultural practices decisively influenced the development of Irish Catholicism after the famine. It gave the Catholic Church increasing political power in the period spanning the famine to the foundation of an independent Irish Republic with a particularly Catholic ethos woven into the Irish constitution of 1937.

Religion, Gender and Nationalism

The connection of female imagery and the land of Ireland had resonance for both nationalists and for the British colonizers. The political rhetoric on both sides used female imagery and religious affiliation to assert rights over land and nature. The oppression of Ireland was often described in the nationalist poetry as the oppression of a woman. The land was given female code names such as *Roisin*. Numerous laments were written about her plight. In this manner, the political content of a song or piece of prose avoided detection by the British army.

Drawing perhaps on the sovereignty myths of old where the health of the soil depended on the relationship between the king and the Goddess, nationalist writers and activists distinguished between the idea of land and soil, claiming that the connection with the soil could never be appropriated by the British who could only claim ownership of the land. Their campaign (simplifying the reality greatly) pitted the British Protestant elite, largely absent from the estates that they owned, against a Catholic peasantry who depended directly on the soil for their lives.

Although women were largely excluded from the power bases of either the rebel ranks or the Church, both freely used the image of the beleaguered woman as a symbol for the oppression of all Catholic Ireland. The image played an important part in the rallying of several mass movements of people, often with the support of the Catholic Church, to both peaceful boycotts and violent action from the seventeenth century onwards. It can be seen therefore that the Irish masses still had a powerful connection to the archetype of the feminine as a representation of the land and of nature. This connection did not however translate into a sharing of political and religious power, as the writings of the women in movements such as the Land League make quite clear (Ward 1983: 5). Political writings and journalism in nineteenth-century England also used female imagery but conceived of Ireland as “a recalcitrant harlot who needed England’s John Bull to tame and civilize her” (Ellis 1995: 37).

The power and the influence of the post-famine Catholic Church grew among the peasant majority where it was seen as more of a church of the “soil” and of the people than of the landed classes. The growing identification of the Catholic Church with the nationalist cause established the priest as “a curious amalgam of spiritual leader, legal

advisor and political organizer” (O’Tuthaigh in Duddy 2002: 251). On independence, the country was partitioned into a 26-county, primarily Catholic republic. The residents of the six, predominantly Protestant, counties which continued as part of the United Kingdom continued to experience political and violent struggle, divided on sectarian lines, over the control of land and nature.

Republic to Present

The government of the new Republic of Ireland initially rejected industrialization and sought instead to maintain a rural nation of small farmers who were in the words of its first president “satisfied with frugal comfort and devoted their leisure to things of the spirit” (DeValera in Breen et al. 1990: 31). Moral leadership was firmly rooted in the ethics of the Catholic Church and woven into the detail of the constitution.

The political and spiritual influence of the post-famine Catholic Church has been slowly undermined during the last quarter of the twentieth century by a rapid change in the values and lifestyles of Irish people. This was stimulated by the rapid expansion of the “Celtic Tiger” economy and accelerated by the exposure of serious breaches of trust in the senior ranks of the Church.

Alongside this rapid secularization of life in contemporary Ireland there has developed a quest for spiritual experiences outside of the Catholic Church. Some of the new movements link spirituality and nature in explicit terms, others in more implicit terms.

From within the orthodox Christian churches, new movements draw heavily on the Celtic roots outlined earlier. They look to the Iona Community in Scotland to revive interest, prayer and study in the Celtic tradition, and to the creation of a more ecologically informed vision for the Church. There is also a rediscovery and celebration of Celtic festivals, especially the Festival of St. Bridget, which has gained a strong following across Ireland. Symbols such as the rushes and the cow, and other stories that have been carried down from Brigid the Goddess, are freely used in the celebrations. An order of nuns dedicated to St. Bridgit has relit her fire in Kildare.

Also from within the Roman Catholic Church, Sean McDonagh, a priest and former missionary, persistently criticized the Catholic Church’s failure to address the ecological crisis. He asserted, for example, that “the Church has not responded in any effective way to environmental destruction” (McDonagh 2001: 40), calling for the development of prophetic witness from the Churches to support scientific information on climate change and other environmental problems. He has argued that “an authentic creation spirituality would help regenerate Irish Christianity” (McDonagh 2001: 50).

Best-selling author and priest John O’Donohue has also called for reclamation of this sensitivity to land and spirit. Significantly, in the 1990s through campaigning activity and direct action, he played a key role in the successful opposition to the development of a visitor center at the heart of the Burren national park.

Outside the mainstream Church, but with a following from within it, Dara Molloy, a “post-Catholic” priest, has been living since 1985 as a Celtic monk on the west coast Isle of Aran. He and his wife, Tess Harper run an important spiritual and ecological community and publish an international magazine called *The Aisling*. The community is dedicated to the recovery of the Celtic Christian Church, and their spiritual vision includes the creation of sustainable communities.

The Creation-Centered Spirituality movement, spearheaded by American theologian Matthew Fox, has excited the spiritual imagination of many people throughout the country. Creation spirituality contains strong references to the story of the creation and evolution of the Earth as a unifying myth for our times and has found special resonance among the female religious.

There is also a strong and growing deep ecology movement in Ireland drawing on the work of Joanna Macy and John Seed. Organizations such as Sustainable Ireland and Feasta are not overtly spiritual but offer a vehicle which critiques the Western economic model as undermining our relationship with nature and with each other.

The long-running protest in the late 1990s against the destruction of a remnant of ancient oak forest in the Glen of the Downs in Co. Wicklow drew on creation spirituality and Celtic Christian philosophy such as that of John Scotus Erigena (ninth-century philosopher) to develop a moral platform and spiritual reference for their actions.

A motorway that had in principle the full support of local people was diverted in 2001 to avoid the destruction of a fairy tree known as the “sceach” near Newmarket-on-Fergus, County Clare. It was claimed that the sceach was a marker in a fairy path and the stopping place for fairies to bury their dead on their way from the great battles between the Munster and Connacht fairies. Local folklorist Eddie Lenihan warned that its destruction could bring misfortune to those using the new road. The power of the myth with which the hawthorn tree was associated was still sufficiently strong to ignite a furious national debate that resulted in its protection.

Only a few miles from the “sceach” is the Ceifin Institute for Values-Led Change, founded in 2001 and named after the Celtic Goddess of Inspiration. The institute was founded by Catholic priest Fr. Harry Bohan and seeks to “revitalize Irish society, give us a renewed sense of identity, sense of purpose and a shared vision that people can take forward” (from the Founding Statement 2001). Although it is not overly Catholic in its mission, it draws on the long tradition of integrating spiritual and religious concerns into the social and political debates. Its conferences represent a uniquely Irish contribution to the sustainability debate. Inclusion of the key figures in Gaelic sport (with its traditionally strong links to church and spiritual matters) has garnered wide support in a country with very shallow roots in the secular and a long memory for the formative influence that religious and spiritual concerns have played in changes in the land.

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See also: Brigit; Celtic Christianity; Celtic Spirituality; Christianity (7e) – Creation Spirituality; Council of All Beings; Deep Ecology; Druids and Druidry; Faerie Faith in Scotland; Fox, Matthew; Macy, Joanna; Roman Britain; Scotland; Seed, John.

Ishimure, Michiko (1927–)

Michiko Ishimure became famous in Japan for exposing through various literary works the horrors of methyl mercury poisoning resulting from human ingestion of fish polluted by industrial discharges into the sea. Minimata disease, the neurological disease caused by such poisoning, became infamous the world over in part as a result of Ishimure's heart-rending portrayals of the 1956 epidemic that devastated the men and women of the coastal town of Minimata in Kyushu. *Kugai Jo-do*, published in 1969, was translated into English as *Paradise in the Sea of Sorrow: Our Minimata Disease* (1990) by Livia Monnet. As Monnet notes in her introduction, *Kugai Jo-do* became a bestseller not only for its achievement as a poignant exposé but also because of its innovative style. Ishimure creates a "new literary genre, a mixture of authentic autobiography, fiction and journalism."

From the title itself through the depictions of the spiritual lives of those afflicted, Ishimure emphasizes the moral and ethical dimensions of the religious beliefs and practices of traditional village people in opposition to the ruthlessness of corporate capitalism. In particular, she gives extensive attention to the Pure Land and True Pure Land sects of Buddhism, popular in that part of Japan. As Monnet explains, one popular interpretation holds that "the Minimata disease patients, purified by their suffering, attain enlightenment." Throughout *Paradise*, Ishimure interweaves a cry for environmental justice, a statement of belief in Buddhism and local Shinto practices, and feminist praise for the women victims and activists in the struggle to expose the cause of the disease and seek an end to the pollution.

While Ishimure has devoted many years of her life to assisting the Minimata victims and making their plight and the price of pollution known to the world, she has also written numerous other works. Of these, only one other has so far been translated. *Tsubaki no Umi no Ki* was originally published in serial form from 1973 to 1976, then in book form in 1976, and translated as *Story of the Sea of Camellias* (1983) by Livia Monnet. While also addressing the disruption of traditional village life by capitalist development in the twenties and thirties, Ishimure focuses on the inner life of a young girl named Michiko growing up in the Minimata area. Only partly idyllic, this apparently autobiographical novel portrays the world as filled with suffering in the Buddhist sense of desire and illusion and the need for reincarnation. In deep empathy for the people around her who suffer and for the natural world she frequents, Michiko displays not a passive acceptance of this suffering but a profoundly active animistic spirituality in her own dealings with social reality and a supernatural world. At the book's end Michiko takes her long-suffering, insane grandmother to see the opening of

the lotus buds and announces that in that instance, “something akin to enlightenment took place within me.” Out of this moment of both physical and metaphysical union of nature and spirit, a poem wells up inside of her. In *Story*, as in *Paradise*, the reader finds a unique vision of the interrelationship of the physical and the metaphysical, the immanent and transcendent, nature and culture, hope and sorrow.

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See also: Autobiography; Buddhism (various); Japanese Love of Nature; Japanese Religions; Matsuo Basho; Memoir and Nature Writing; Zen Buddhism.

Islam

Islam is a universal religious tradition claimed by over

1.3 billion people throughout the world at the end of the twentieth century. Muslim communities exist in virtually every country. The largest concentration of Muslims is in the region of South Asia, where they are fairly evenly distributed between India, Pakistan, and Bangladesh (with about 150 million Muslims in each), along with minority communities in Nepal and Sri Lanka. The nation with the largest Muslim population is Indonesia, with over 200 million inhabitants who adhere to Islam to at least some degree.

Islam originated in western Arabia in the early seventh century. Its founder, Muhammad ibn Abdullah al-Hashimi of Mecca (ca. 570–632) is believed to have begun receiving divine revelations in 610 at the age of forty. These revelations, which are collectively known as the Qur'an, continued up to the time of the prophet's death. Sometime during the following decade they were collected from various companions of the prophet who had memorized them, and written down. The Qur'an, which Muslims believe to be the word of God (Allah), is the basis of Islam and the foundation of all Islamic knowledge.

A supplementary source of guidance for Muslims exists in the form of reports about the words and deeds of the prophet Muhammad. Codified during the eighth century, these reports are known as *hadiths*. The Qur'an and the *hadiths*, together with the analogical reasoning (*qiyas*) of the classical jurists and the consensus (*ijma'*) of the scholarly community, constitute the four sources of Islamic law (*shari'a*), which were codified by the recognized schools of law by the tenth century.

The question of what constitutes the basis for religious authority in Islam has been a contested issue since the death of Muhammad. At that time the majority of his followers considered that the Qur'an represented the sole and adequate source of religious guidance for Muslims, while a significant minority felt that Muhammad had designated a successor in his nephew and son-in-law, Ali. Eventually the former group came to be known as "Sunnis" ("traditionalists"), while the latter were referred to as "Shi'ites," or "partisans" (i.e., of Ali [*shi'at 'Ali*]). Shi'ites differ from Sunnis mainly in that they accept a different set of *hadiths*, and consider the teachings of Ali and certain of his descendents, known as *imams*, to be authoritative.

From the eighth century a third type of authority emerged in the form of charismatic leadership by Muslim mystics, called Sufis (probably because some of them wore garments made of wool, Arabic *suf*). Since in the Sunni world religious authority resided with the legal scholars who studied the Qur'an and the *hadiths*, the charismatic au-

thority of Sufi teachers was often a source of contention. Many Sufi teachers, however, were also recognized legal scholars.

The intellectual tradition of Classical Islam (eighth to tenth centuries) was heavily influenced by that of pagan Hellenism. The Arabic term *tabi'a*, typically rendered in English as “nature,” was used by medieval Muslim philosophers in the sense of the Greek *physis*. Following Aristotle, the Iranian polymath Abu Ali Ibn Sina, known to the West as Avicenna (d. 1037) identified *tabi'a* as “an essential first principle.” The definition given in the tenth-century *Treatise of the Pure Brethren of Basra*, on the other hand, reflects Neoplatonic notions of emanation, referring to *tabi'a* as only one of the potentialities of the Universal Soul. Within the Neoplatonic hierarchy of creation as appropriated by many Muslim philosophers, only humans possessed all three attributes of *tabi'a*, intellect, and desire.

Yet for Muslims an important qualification is found in the Qur'an, where one reads, “In whose hand is the dominion of all things” (Qur'an 23:88). Ibn 'Arabi (1165–1240) found support for his concept of *wahdat al-wujud*, or “unity of being,” in the Qur'anic verse (Qur'an 2:115) which states that “Whithersoever you turn, there is the Face of God.” Although Ibn 'Arabi's monist metaphysics have been enormously influential on the thought of Sufi mystics in particular, especially in South Asia even to the present day, orthodox Islam has tended to reject the doctrine of *wahdat al-wujud* as verging dangerously close to pantheism. In the seventeenth century Ibn 'Arabi's popularity in India gave rise to a response by the conservative Sufi teacher Shah Waliullah (d. 1763) in which the latter attempted to substitute a concept he called *wahdat al-shuhud*, or “unity of witness,” through which the boundary lines between the Creator and creation could be firmly maintained.

In recent years a number of Muslim writers, mainly living in the West, have published essays to the effect that based on the scriptural sources of the tradition, Islam is an ecologically oriented religion. Whereas the medieval philosophers, when they addressed issues of the natural world, were concerned primarily with constructing theoretical arguments about justice, Islamic environmental ethics as articulated by contemporary writers tend to be rooted in more practical terms, often by way of response to Lynn White's 1967 critique of Western Christianity. Iqtidar Zaidi, for example, is clearly paraphrasing White when he states that the ecological crisis is “a crisis rooted in moral deprivation” (Zaidi 1981: 35). Seyyed

Hossein Nasr actually anticipated White's critique in his own lectures given at the University of Chicago earlier in the same year as White's address.

It may be useful to restrict the term “Islamic” to that which can be derived from the canonical sources of Islam, as opposed to the activities or attitudes of Muslims, which may or may not be directly motivated by those sources. In other words, one may distinguish between *Islamic* environmentalism – that is, an environmentalism that can be demonstrably enjoined by the textual sources of Islam – and *Muslim* environmentalism, which may draw its inspiration from a variety of sources, possibly including but not limited to religion. Around the world today one can find increasing examples of both.

For example, such organizations as the UK-based Islamic Foundation for Ecology and Environmental Sciences conduct environmental education programs around the world which are based on Islamic principles. On the other hand, the activities of international environmental organizations such as the IUCN and WWF in Muslim countries such as Egypt, Pakistan, and Indonesia, while carried out by Muslim staff members, tend to reflect Western notions of what constitutes environmental education and protection. Muslims have always been culturally diverse, and never more so than today when they number a billion or more and inhabit every corner of the globe. Historically the one indisputable source of authority which all Muslims have agreed upon is the will of Allah as expressed in the revealed scripture of the Qur'an. Within the Sunni majority (perhaps 80 percent of all Muslims) there exist four accepted schools of law, which differ from each other in approach and in some details of their legal rulings. Shi'ites follow their own school of law. Though the classical legal traditions contain material dealing with the environment, such as forbidding cruelty to animals, regulating water distribution and establishing undeveloped zones (*himas*) for the protection of watersheds, to attribute to them an environmental ethic in the contemporary sense would be anachronistic.

Islamic environmentalists today have attempted to derive an environmental ethic based on the Qur'an and *hadith*, generally giving little attention to possible cultural contributions from the various societies in which Muslims live. This is because local or regional attitudes cannot form a basis for any kind of universal Islamic ethic, since they are almost invariably perceived by Islamists as "accretions," (*bida'* – literally, "innovation") and therefore un-Islamic.

The politics of environmental activism among Muslims, where present, have tended to be region-specific. For example, when Palestinians seek to assert territorial claims by planting olive groves, one cannot say that this is an "Islamic" issue, since many Palestinians are not Muslim. From an Islamist perspective, the mere involvement of Muslims does not make an activity or ideology "Islamic"; only a basis in the Qur'an and the *hadith* does. This is not to suggest that broader cultural contributions by Muslims living in diverse societies around the world will not be significant in addressing the environmental crisis.

For an idea to achieve anything approaching universal acceptance by Muslims as "Islamic," it must be convincingly demonstrated that it derives from the Qur'an, or failing that, from the example of the prophet Muhammad. Recognizing this, contemporary Islamic environmentalists have defined environmentalism as a facet of the Qur'anic concept of stewardship, expressed by the Arabic term *khalifa*. The following verses are cited: "I am setting on the Earth a viceregent (*khalifa*)" (Qur'an 2:30), and "It is He who has made you his viceregent on Earth" (Qur'an 6:165). Also, a *hadith* is cited which states that "Verily, this world is sweet and appealing, and Allah placed you as viceregents therein; He will see what you do."

The Qur'anic concept of *tawhid* (unity) has historically been interpreted by Muslim writers mainly in terms of the oneness of God (in contradistinction to polytheism), but

some contemporary Islamic environmentalists have preferred to see *tawhid* as meaning “all-inclusive.” It has been suggested that Ibn ‘Arabi’s idea of *wahdat al-wujud*, or “unity of being” can be understood in environmentalist terms. Ibn ‘Arabi, however, has always been a highly controversial figure for Muslims, since many have accused him of holding pantheist or monist views incompatible with Islam’s radical monotheism.

In support of the more inclusive interpretation of *tawhid*, a verse (Qur’an 17:44) is often cited which states that all creation praises God, even if this praise is not expressed in human language. Another verse (Qur’an 6:38) states that “There is not an animal in the Earth, nor a flying creature on two wings, but they are peoples like unto you.” There would seem to be here a basis for tempering the hierarchical notion of stewardship implied in the concept of *khalifa*. The Qur’an also describes Islam as the religion of *fitra*, “the very nature of things.” By extension, some contemporary thinkers have reasoned that a genuinely Islamic lifestyle will “naturally” be environmentally sensitive.

Traditional accounts of the deeds and sayings of Muhammad, which together with the Qur’an have formed the basis for Islamic law, emphasize compassion toward animals. Muhammad is believed to have said, “If you kill, kill well, and if you slaughter, slaughter well. Let each of you sharpen his blade and let him spare suffering to the animal he slaughters;” also, “For [charity shown to] each creature which has a wet heart (i.e., is alive), there is a reward.” Muslims are urged to respect plant life as well, as in the prophetic saying, “Some trees are as blessed as the Muslim himself, especially the palm.”

The Qur’an contains judgment against those who despoil the Earth (Qur’an 2:205): “And when he turns away [from thee] his effort in the land is to make mischief therein and to destroy the crops and the cattle; and Allah loveth not mischief”; and (Qur’an 7:85) “Do no mischief on the Earth after it has been set in order.” Wastefulness and excess consumption are likewise condemned (Qur’an 7:31): “O Children of Adam! Look to your adornment at every place of worship, and eat and drink, but be not wasteful. Lo! He [Allah] loveth not the wasteful.” The Qur’an repeatedly calls for maintaining balance in all things (Qur’an 13:8, 15:21, 25:2, and elsewhere). Certain *hadiths* seem particularly relevant to contemporary issues of sustainability, such as, “Live in this world as if you will live in it forever, and live for the next world as if you will die tomorrow,” and, “When doomsday comes if someone has a palm shoot in his hand, then he should plant it.” Direct application of these injunctions to contemporary environmental problems is a matter for interpretation by analogy (*qiyas*). Contemporary Muslim jurist Mustafa Abu-Sway has argued that *hadith* reports which enjoin Muslims from relieving themselves on public pathways or into water sources can be understood “to prevent pollution in the language of today.” Since we now know that discharging toxic chemicals and waste into the water supply is harmful to human health, Abu-Sway reasons that, “by analogy, from the perspective of the *shari’a*, this is prohibited” (lecture at Belfast mosque, February 1998, published online at <<http://homepages.iol.ie/~afifi/Articles/environment.htm>>).

To date, Islam has not figured prominently in contemporary discussions on religion and the environment. For the most part contemporary Muslim writers on the environment have characterized environmental degradation as merely a symptom of social injustice. The problem is not, it is argued, that humans as a species are destroying the balance of nature, but rather that *some* humans are taking more than their share. If, in accordance with the Qur'anic prohibition of interest-taking (*riba*), the interest-based global banking system is eliminated, then there will be no more environmentally destructive development projects, and there will be plenty of resources for all. Overpopulation is usually dismissed as a non-issue. The problem is stated to be the restriction of movement; if visa restrictions are eliminated, then people will simply migrate from overpopulated areas to "underpopulated" ones.

In recent times global initiatives on birth control and women's reproductive rights have been most strongly opposed in Muslim countries. Such efforts are frequently met with accusations that "the West is trying to limit the number of Muslims." Warnings of starvation and deprivation from overpopulation generally elicit the response that "God will provide," which draws its support from the Qur'anic verse (Qur'an 11:6) which reads, "There is no beast upon the Earth for which Allah does not provide."

Yet unlike Roman Catholicism, in Islam there are no inherent barriers to practicing contraception. The medieval theologian Abu Hamid Muhammad Ghazali (1058–1111), who has been called "the second greatest Muslim after Muhammad" and whose writings remain highly influential throughout the Muslim world today, argues in his book *The Proper Conduct of Marriage (Kitab adab al-nikah)* that birth control in the form of coitus interruptus (*'azl*) is permitted in Islam. He suggests, furthermore, that "The fear of great hardship as a result of having too many children . . . is also not forbidden, since freedom from hardship is an aid to religious devotion." In response to the "God will provide" argument, Ghazali comments that "to examine consequences . . . while perhaps at odds with the attitude of trust in Providence, cannot be called forbidden" (Ghazali 1998: 79).

Despite these arguments, many Muslims still see arguments against having more children than one can afford as being symptomatic of unbelief (*kufr*), which to Muslims is quite a serious charge. Today, Iran appears to be the only Muslim country where an official policy of birth control and birth-rate reduction is backed up with Islamic rhetoric.

The traditional Muslim response to doomsday scenarios is that of *tawakkul*, or trust in God (Qur'an 5:23, 14:11–12, 65:3, 25:58, 26:217–218). This tendency, which is often perceived by Westerners as fatalism, recalls a *hadith* in which a companion of Muhammad neglected to tie up his camel, and the camel wandered off and was lost. The owner complained of his loss to the Prophet, saying, "I trusted in God, but my camel is gone." Muhammad replied, "First tie up your camel, then trust in God." In counterbalance to the familiar refrain of *tawakkul*, some Islamic environmentalists have, in the spirit of Ghazali, posited the concept of *'aql*, or rational intelligence, which according to Islam is a gift from God, given for a purpose (Qur'an 39:9). There would

appear to be nothing un-Islamic about suggesting that the gift of *'aql* has applications in recognizing a crisis and finding ways to avert impending disaster.

Nevertheless, among Muslim ethicists today there is far greater interest in human-centered issues of justice than in the biosphere as an integral whole. This would seem to bear some similarity to attitudes in the West, which is not surprising given Islam's common heritage with Judaism and Christianity. Islam holds that the world is a passing phenomenon, created to serve God's purpose, which will cease to be once that purpose has been fulfilled. Islam likewise emphasizes the relationship between humans and God above all else, and has by comparison little to say about the importance of our myriad fellow creatures. Whether the "true essence" of Islam is pro-environment or not, in practice throughout most of its history Muslim theologians, philosophers, and lay-persons have been focused almost exclusively on the relationship between Allah and humanity.

Given the importance of the petroleum industry and the widespread pursuit of materialistic, consumption-oriented lifestyles in numerous Muslim-majority countries, would appear that Muslims must now share with Christians and others some of the blame for the present and rapidly deteriorating state of environmental crisis. Some of the most severe environmental problems in the world today are found in countries where the majority of inhabitants are Muslim. Even accepting a degree of outside responsibility, these problems would clearly be less pronounced if large numbers of Muslims were shaping their lifestyles according to an interpretation of Islam which strongly emphasized *khalifa* as applied to the natural environment. The reality is that most are not, and this includes governments for whom development and economic growth are the top priority.

If Islamic sources do offer models for increased environmental responsibility among Muslims, the urgency of the environmental crisis implies a need to assess whether and to what degree the latent potential for Islamic models of stewardship (*khalifa*) is currently being realized anywhere in the Muslim world today. A possible starting point for this inquiry would be to analyze current environmental policy in countries where Islam is claimed as a basis for legislation by the government in power. The Kingdom of Saudi Arabia, The Islamic Republic of Pakistan, and the Islamic Republic of Iran are three countries that currently make this claim.

In 1983 the government of Saudi Arabia commissioned a group of Islamic scholars at the University of Jeddah to formulate an Islamic policy on the environment. A short paper was prepared and published in English, French and Arabic by the IUCN in Switzerland, but this paper has not been widely circulated or served as a basis for any government policy. Muslim environmentalists who have worked for Saudi government agencies have complained that environmental initiatives are not being adequately implemented due to lack of official interest.

The government of Pakistan, which began to adopt an Islamist platform in 1978, created a National Conservation Strategy Unit (NCS) in 1992 within the Ministry of Environment, Local Government and Rural Development. There are also several

environmentalist NGOs active in Pakistan which have been striving to influence government policy toward the environment, including the Sustainable Development Policy Institute (SDPI) and a national branch of the IUCN, which together formulated the Pakistan Environment Programme (PEP) in 1994. These organizations have achieved some successes in bringing about environmental legislation in Pakistan, such as the Environmental Protection Act of 1997. However, specifically Islamic rhetoric has not thus far been part of their approach. Only as recently as 1998 did the government of Northwest Frontier Province begin to envision an “*ulema* [religious scholars] project” as part of the Sarhad Provincial Conservation Strategy (SPCS). This initiative, in which religious scholars were urged to seek out and implement environmental teaching in Islamic sources, did not meet with success, as most of the scholars involved did not see the environment as a primary concern. In Pakistan, as indeed in many other Muslim countries, environmentalism is often seen as a “Western” ideology and thus dismissed if not actively opposed.

Developments in the Islamic Republic of Iran may offer the strongest evidence of an applied Islamic environmental ethic in the world today. Since the country’s revolution of 1978–1979 which ousted the repressive, U.S.-backed Pahlavi monarchy, Iran has been led by an avowedly Islamist government whose legitimacy depends on its claims to be working toward an Islamic state. As such, Iran’s government has had to face the hard realities of reconciling Islamic principles with the exigencies of contemporary statecraft. Among the most pressing problems that have vexed Iran’s revolutionary government – subsequent to its eight-year war with Iraq in the 1980s – are pollution, environmental degradation, and overpopulation. In attempting to address these issues through Islamic discourse, Iranian Islamists have perhaps gone further than any of the world’s Muslims today in deriving and articulating an Islamic environmental ethic that does not merely revert to pre-modern models, but rather expresses itself in terms of modern realities. Nevertheless, in Iran as elsewhere in the developing world environmental protection has taken a back seat to the exigencies of rapid industrialization and development, and environmental degradation there remains severe.

For many Muslims – as indeed for members of most religious traditions – the practical and active relationship between religion and the environmental crisis is not immediately obvious. Even so, some Muslims, recognizing that the environmental crisis is in some sense a spiritual issue, have begun to illuminate that connection through writing, activism, and policy making.

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See also: Gardens in Islam; Ibn Al-Arabi, Shaykh Muhyiddin; Islam, Animals, and Vegetarianism; Islam and Eco-Justice; Islam and Environmental Ethics; Islam and Environmentalism in Iran; Islam and PostAnthropocentrism; Islamic Basis for Environmental Protection; Islamic Law; Islam on Man and Nature (and adjacent, *Hadith* and *Shari'a* on Man and Nature); Izzi Dien, Mawil Y.; Muhammad, The Prophet of Islam; Nasr, Seyyed Hossein; Nursi, Said; Pure Brethren; The Qur'an; Rumî, Jalaluddin; Sufism; Tawhid (Oneness of God).

Islam and Eco-Justice

Protecting the environment and all God's creation for Muslims is a duty and not a choice. This duty comes from its *Tawhid* (Unity) paradigm. Before addressing Islam's view of the environment, it is useful to clarify the sources of the Islamic tradition. Most Muslims would agree that the sources of Islam are the following: the Qur'an or the Holy Book which Muslims believe to be God's Word transmitted through the Angel Gabriel to the Prophet Muhammad; *Sunnah* or the Prophet's traditions; *hadith* or the oral sayings attributed to the Prophet Muhammad; *Fiqh* (Jurisprudence) or *Madahib* (Schools of Law); and the *Shari'ah* (paths of law). These sources are not considered to be of equal weight. Most Muslims regard the Qur'an as the actual speech of God revealed through the angel Gabriel and it is the most authoritative source of normative Islam.

Tawhid Principle and the Environment

To understand the place of protecting nature one has to understand the various levels of the *Tawhid* principle in Islam. The first level of *Tawhid* is one that focuses on the oneness of the divine, *Allah*. The Qur'an says: Say: "He is Allah, the One and Only. *Allah*, the Eternal, Absolute; He begetteth not, nor is He begotten; and there is none unto Him" (112:1-4). The Qur'an clearly states: "There is no God but He, the Creator of all things" (6:102). This Oneness of *Allah* frames the understanding of nature. *Tawhid* links nature to the divine, but does not make it divine. Nature stands as a sign of God Almighty's creation and must be protected for that reason. Many verses in the Qur'an speak of respecting and reflecting on God's glory in His creations (50:6, 21:30, 13:2, 6:73). One verse clearly states this relationship between God the Creator and the creation: "The seven heavens and the Earth, and all beings therein, Declare His glory: There is not a thing but celebrates His praise" (33: 72). To attribute sacredness to nature is to associate other beings with God and that is against *Tawhid* and the Oneness of God (*shirk*).

The duality of the Creator and created renders the latter in Islam (e.g., nature, animals, humans and other creatures) a unified class of God's creation. This is the second level of *Tawhid*/Unity. The Prophet in regard to God's creation said, "all creatures are God's dependents and the most beloved to God among them is the one that does good to God's dependents." These dependents, though diverse, have five characteristics in common. First, all creation is a reflection of God's sacredness, glory and power. The

Qur'anic verse notes about such creation, "Whithersoever you turn there is the Face of God" (11:115). Second, God's creation is orderly, has purpose and function. The Qur'anic verses say, "And the Earth we have spread out; set therein mountains firm and immovable; and produced therein all kinds of things in due balance" (15:19); "And look for his Creation for any discrepancy! And look again! Do you find any gap in its system? Look again! Your sight, having found none, will return to you humbled" (67:3-4).

Third, the created world is actualized to worship and obey God. Hence, the Qur'anic verse states, "See thou not that to Allah bow down in worship all things that are in the heavens and Earth, the sun, the moon, the stars; the hills, the trees, the animals; and a great number among humankind" (22:18).

Fourth, the created have all been created from the same element: water. The Qur'anic verse states, "We made from water every living thing" (12:30) and continues in another verse by stating: "And God has created every animal from water; of them there are some that creep on their bellies; some that walk on two legs; and some that walk on four

. . . It is he who has created humans from water" (24:45).

Fifth, the unity of God's creation as a category is also exemplified in Islam in terms of the social structure. The Qur'an states that all God created he created in communities by stating, "There is not an animal (that lives) on Earth. Nor a being that flies on its wings, but (forms a part) of a community like you" (6:38).

Tawhid views only God, the Creator, as having the special quality of independence, while the created are interdependent on each other and dependent on God. In this relationship of interdependence among the created, Islam places the keeping of the Earth and heavens under the hands of humans, as the *Khalifah* (viceregents) on Earth. The Qur'anic verse states, "I am setting on the Earth a viceregent" (2:30). The *Khalifah* is a manager not a proprietor, a keeper for all generations. The Qur'anic verse (2:22) states, "Who has made the Earth your couch and the heavens your canopy and sent rains from the heavens, and brought forthwith fruits for your sustenance, then set not up rivals unto Allah when you know," clearly ends with a plural "you", carrying the message that the universe is not for one generation but for every generation past, present and future.

Humans were given the responsibility for managing the Earth according to the Qur'an (33:72) because the Heavens, the Earth and the Hills refused to shoulder the responsibility out of fear, but humans "assumed it, Lo they are tyrants and fools. For these reasons the universe is given to humans as a 'trust', [*ammanah*] which they accepted when they bore witness to God in their covenant of *Tawhid*, *there is no God but Allah*." According to the Qur'an this covenant was renewed throughout the years (7: 65, 69, 87, 10:73, 11:56, 61) until it reached Muslims in verses such as "Generations before you we destroyed when they did wrong" (10:13); "Then we made you heirs in the land after them to see how ye would behave" (10:14).

The Moral Burdens/Dilemma of Human Viceregency

The role of humans as *Khalifah*, viceregent, on Earth is to better it and improve it and not to spread evil and destruction. The Qur'an is full of injunctions concerning such behaviors and states clearly that this responsibility of improving the Earth will be checked by God to see how it has been accomplished, "And follow not the bidding of those who are extravagant" (26:152); "O my people! Serve Allah, and fear the Last Day: nor commit evil on the Earth, with intent to do mischief" (29:36); "But they strive to make mischief on Earth and Allah loveth not those who do mischief" (5:64).

The creation of humans on Earth in Islam is neither a "greater creation" (40:57), nor is it a punitive fall from the Heavens (2:35). The creation of humans was a fulfillment of the covenant to be custodians of nature. Faruqi emphasizes this protection of Earth as human destiny (purpose) to show their moral devotional abilities. Haq notes, there is a due measure (*qadr*) to things, and a balance (*mizan*) in the cosmos, and humanity is transcendently committed not to disturb or violate this *qadr* and *mizan*; indeed, the fulfillment of this commitment is the fundamental moral imperative of humanity. (2001: 3)

It is this role of *Khalifah* that produces several moral dilemmas for humans. The first dilemma lies in the dread of "corrupting the Earth." The Qur'anic verse says: "Behold God said to the angels I will create a viceregent on Earth. They said will You place one who will make mischief and shed blood? While we celebrate your praises and glorify your holiness, He said, I know what you know not" (2:30).

Numerous Qur'anic verses repeat this question about whether humans are capable of protecting this Earth from corruption. Hence we read: "If any do good, good will accrue to them therefrom; and they will be secure from the terror of the Doom. And if they do evil, their faces will be thrown headlong into the Fire" (27:88–89).

This dilemma of not corrupting the Earth is harder to resolve because Islam is not an ecstatic religion commanding detachment from worldly goods. Muslims are left with the duty to enjoy and use the bounties of the Earth. Humans in Islam have a dual relationship with nature/ Earth/universe. On the one hand they are nature's manager, but they are also its user. The Qur'anic verse notes, "Do you not see that Allah has subjected to your (use) all things on the heavens and on Earth, and has made his bounties flow to you in exceeding measure, both seen and unseen" (31:20); "It is He who made the Earth manageable for you, so traverse ye through its tracts and enjoy of the sustenance which he furnishes" (67:15).

Islam has a clear view that encourages the use of the bounties of Earth, and the engagement in other human pleasures. Islam does not tolerate abstinence, hence the absence of priests and nuns in the mainstream religious hierarchy.

There lies the dilemma. The subjugation of Earth to humans is always attached to a moral dimension of obedience and the fulfillment of the covenant to God. The Qur'an

states: “He has made subject to you the night and the day, the sun and the moon and the stars – They are in subjection by His command: Surely, in this are signs for those who reflect” (16:12–13). This dual role of the *Khalifah*, viceregent, creature of God and user of Earth creates the moral burden/the test for Muslims. For Muslims the issue of maintaining the equilibrium between having been charged with managing the Earth and bettering it, and at the same time using its bounties for their fulfillment, is one of the important tests in reaching the Gardens of Heaven.

Paths to Resolving the Moral Dilemma

Islam did not leave its human adherents, the *Khalifas*, with an impossible task to perform as custodians of the Earth. At least three clear paths are recommended to fulfill the role well and eventually go to Heaven. These include justice, action and balanced use. Haq (2001:9) argues that Islam “promulgates what one can call a cosmology of justice” to deal with the dilemma of protecting and using the Earth. The Qur’an clearly addresses issues relating to the dignity of the disabled (80:1–9); the rights of the orphans (93 entire; 89:17–18); honesty in exchange and barter (83:1–13); condemnation of greed and hoarding of wealth (100:6–11); feeding the poor (89:17–23); just interaction (11: 85); abstention from usury (2:161); distributive justice through taxation, *zakat*, (2:267); just leadership (88:22–21, 18:29, 4:58, 5:8, 16:90, 42:15, 38, 49:9, 13); and respecting differences as God’s will (10:99, 99:18). The necessity for justice, of justice that attends to the vulnerable and that speaks to the powerful, is central in the Islamic vision. This message is clear in the Qur’anic injunction: “God intends no injustice to any of His creatures” (3:108–109). It is through this cosmology of justice that humans can fulfill their destiny as custodians of the Earth.

The second path for humans to follow in their journey as *Khalifas* of God on Earth is that of action. Some Muslims argue that the failure of humans to fulfill their eternal destiny is the will of God, it is predestined, and human action is of no consequence. Other believers disagree with this view of predestination in Islam and there has been a long historic debate within Islamic thought on human will and action. It is clear, however, from many Qur’anic verses and Prophetic traditions that action has a role in human destiny. Hence, in a *hadith* we hear the Prophet saying “Any one who witnesses evil should remonstrate upon it by his hand, his mouth or his heart; the last is the weakest of faith” (Sahih Al-Bukahri 1966: 1998). This action that humans are enjoined to take is not only one that negates evil, but is also one that involves good deeds. As such the Qur’an states, “let there be among you a group of people who order good, *al-maruf*, and prohibit evil, *al-munkar*” (3:104). To many readers the usage of this verse in relation to the environment is strange. However, in the golden ages of Islam the term *al-maruf* applied to all God’s creation. Interpretations of the meaning of Qur’anic suras, and especially the application of God’s word to contemporary conditions (*tafsir*), have varied considerably in the Islamic world. These good deeds are not differentiated

between actions toward humans or other creatures of God. Within the perspective of *Tawhid* it is the good deeds of people that please the creator. As such a saying of the Prophet notes, “A good deed done to a beast is as good as doing good to a human being; while an act of cruelty to a beast is as bad as an act of cruelty to a human being” (Sahih Al-Bukahri 1966: 1027).

A third path that humans can follow in their role as viceregents on Earth is that of balance in behavior and use. The concept of balanced use is based on three principles. The middle path or balance is clearly stated in the Qur’an, “We have made you a community justly balanced” (2:143). The following story about the Prophet also indicates the importance of balance. Three believers came to the home of the Prophet to declare their piety and belief in and love of God. One of the believers said, “I want to show the extent of my belief in God by abstaining from food.” The second one said, “I will show my belief in God by not sleeping nights.” The third one said, “I will show my belief in God by not being intimate with my wife.” The Prophet stopped them and recommended, “God does not tolerate the extremes of abstention and says that moderation is the best path to piety” (Sahih Al-Bukahri 1966: 484).

Population in Islamic Ecological Thought

Scientists have argued that overpopulation is a major contributing factor to environmental depletion. In the case of Islam the argument remains anchored in simplistic debates about population and reproduction (i.e., of family planning and abortion) as though these are matters connected only to teaching women about ways to avoid pregnancy. Although Islam is a pronatal religion, various Qur’anic verses favoring family planning outcomes were stressed in many Muslim countries in the 1960s. For example:

4:9 – Let those [disposing of an estate] have the same fear in their minds as they would have for their own if they had left a helpless family behind: Let them fear Allah, and speak words of appropriate [comfort].

8:28 – And know ye that your possessions and your progeny are but a trial; and that it is Allah with Whom lies your highest reward.

24:21 – O ye who believe! Follow not Satan’s footsteps; if any will follow the footsteps of Satan, he will [but] command what is shameful and wrong; and were it not for the grace and mercy of Allah on you, not one of you would ever have been pure; but Allah doth purify whom He pleases; and Allah is One Who hears and knows [all things].

Still population growth rates in Muslim countries remain among the highest in the world. The root of the problem of population growth for many Muslim countries lies in the marginalized conditions of women. In most Muslim countries the patriarchal and misogynist conditions of local cultures prevail and debase women. Post-colonial policies, introduction of non-productive technologies (e.g., cellular telephones), focus on credentialing rather than education, and unequivocal focus on consumption rather than production are all cultural factors that have contributed to the taking on of

various forms of debasing women that in many ways are in direct opposition to early Islamic history and the holy texts. It is important to remember that Islam, at its core path, offers women equity with men by stating,

Oh humankind! We created you from a single soul, male and female, and *made you into nations and tribes*, so that you may come to know one another. Truly, the most honored of you in God's sight is the greatest of you in piety (49:13). [my emphasis]

Islam sees Muslim women as part and parcel of the religious message. They are included in the revelations. They have privileges and responsibilities. The Qur'an dictates that the penalties imposed on women are no less than those imposed on men (5:41, 24:2):

5:41 – O Messenger! let not those grieve thee, who race each other into unbelief: [whether it be] among those who say “We believe” with their lips but whose hearts have no faith; or it be among the Jews,— men who will listen to any lie – will listen even to others who have never so much as come to thee. They change the words from their (right) times and places: they say, “If ye are given this, take it, but if not, beware!” If any one's trial is intended by Allah, thou hast no authority in the least for him against Allah. For such – It is not Allah's will to purify their hearts. For them there is disgrace in this world, and in the Hereafter a heavy punishment.

24:2 – The woman and the man guilty of adultery or fornication – flog each of them with a hundred stripes: Let not compassion move you in their case, in a matter prescribed by Allah, if ye believe in Allah and the Last Day: and let a party of the Believers witness their punishment.

Islam does not prescribe the oppression of women as some interpretations suggest. Actually an accurate look at the Qur'anic directives and legal rights shows that polygamy is regulated in such a way that it could be very difficult to justify marrying more than one woman most of the time. Moreover, the veiling of Muslim women is not so clearly enforced as one is commonly led to believe from the images in Iran, Afghanistan and other Muslim countries.

The slowing of the population growth rates in Muslim countries and communities, and hence in the attendant ecological crisis, lies in the issues of social justice for women. Such forms of social justice as discussed above are very much at the core of the Qur'anic message and only require retrieval by those Muslims who want to do good deeds and avert corruption on Earth.

Summary and Conclusion

The Qur'an offers a blueprint for saving the environment, Muslims being called upon to strive to protect the latter as part of their devotional duties. With more than thirty wars devastating the Muslim world, the inexcusably violent responses of suicide bombing and terrorist attacks on noncombatants, the glaring difference between the rich and the poor in Islamic communities, and the extraction of oil with minimum

controls on toxic emissions and hazards make the prevailing conditions today far from desirable.

Islam, however, is very clear and has an unequivocal response to the depletion (corruption) of the environment. God created nature in an orderly manner. This nature is given to humans as a trust (*ammanah*). Humans are the

Khalifas, managers of this *ammanah* and not its owners. To manage this trust, humans need to follow the social justice ethic of the Qur'an, actively negate evil and do good deeds; and utilize the resources of Earth in a balanced manner. The protection of the Earth is the responsibility of all Muslims, and on account of this responsibility every Muslim and every community claiming the faith ought to be more engaged in protecting nature and the environment.

Nawal Ammar

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See also: Abortion; Breeding and Contraception; Environmental Ethics; Islam and Environmental Ethics; Islam and Post-Anthropocentrism; Islam on Man and Nature; Islamic Basis for Environmental Protection; Islamic Law; Population and Consumption – Contemporary Religious Responses; Tawhid (Oneness of God).

Islam and Environmental Ethics

The growing literature on Islam and nature, ecology, and the environment includes many writings that deal with ethics. Some work discusses how Islamic ethics bear upon environmental issues. Other studies proceed in the opposite direction, asking how modern environmental ethics intersect with Muslim faith and practice. Still other works strive for a dialogue among different religious and philosophical perspectives on environmental ethics. Although the late twentieth century witnessed a welcome increase in crosscultural communication on religion and environmental ethics, it was still the case that few works on environmental ethics gave close attention to Muslim contributions.

As Islam provides a comprehensive guide for human conduct, it might be thought that all writing about Islam and nature is, in some way, about environmental ethics. Although correct in a broad sense, that view does not shed light on specific environmental norms or on different ways of thinking about ethical obligations within the natural environments of different Muslim societies and traditions. Works on Islamic environmental ethics range widely across fields of human–environment relations from philosophy to ecology, landscape architecture, and geography. They link and sometimes conflate the closely related fields of ethics (*ahklaq*), law (*fiqh*), and justice (*'adl*) – a tendency that seems increasingly challenging as each of these fields develops its own specialized body of work on environmental problems.

One useful approach begins with the common doctrinal foundations for Muslim discourse on environmental ethics, which shed light on environmental norms in the Qur'an, *sunnah*, and *fiqh*, after which the historical contributions of groups like the *Ikhwan al-Safa* (Sincere Brethren of Purity; tenth–eleventh centuries), Sufi mystics such as Farid ud-Din Attar (d. 1220), and theologians from al-Ghazzali (d. 1111) to the present may be considered.

The term “environmental ethics” does not appear in revealed or prophetic sources of the Abrahamic religions. Scores of words and phrases in the Qur'an and traditions (i.e., the *hadiths*, which are authenticated sayings of the Prophet Muhammad or about him by his companions), denote aspects of the natural world and connote ethical obligations to them. The primary ethical relationship, however, is between the believer and Allah. The duties toward this world (*dunya*) – its airs, waters, creatures, and places – are part and parcel of fulfilling one's primary obligations to Allah, as are social ethics. Thus, much depends upon how one understands the relation between Allah and his creation, as a unified whole and in all of its myriad parts. To put it in overly simplified terms, an understanding of Allah as immanent in the creation can lead toward

the mystical environmental ethics of Sufi theologians and orders from ninth-century Arabia to the modern U.S., which are ethics of love (Ernst 1997). An understanding of Allah's transcendent relationship with the creation can lead either toward a view of environmental ethics as one of several branches of applied moral philosophy or toward ascetic philosophies that do little harm to but have little intrinsic interest in the natural environment, which are ethics of care (Izzi Deen 2000). But no simple dualism of this sort can sustain itself in the unifying context of Islam, as evidenced, for example, by the passionate asceticism of Majnun in the desert (as compiled by the poet Nizami in the twelfth century:

Two gazelles had been caught in snares, and a hunter was just about to kill the poor creatures with his dagger. "Let these animals go free!" shouted Majnun, "I am your guest and you can't refuse my request. Remove the nooses from their feet! Is there not room enough in this world for all creatures? What have these two done that you are bent on killing them? Or are you a wolf, not a human being, that you want to take the burden of such a sin upon yourself? Look how beautiful they are! Are their eyes not like those of the beloved? Does their sight not remind you of spring?" Never before had the hunter heard anything like this . . . he replied, "I have heard what you said. But look, I am poor, otherwise I would gladly obey you . . ." Without a word Majnun jumped out of his saddle, and handed the reins of his horse to the hunter who, well content with the exchange, mounted and rode away, leaving Majnun alone with the two gazelles (Nizami 1978: 85–6).

Thus, rather than begin with a partial perspective on the creation or the manifold relations that ensue from it (e.g., the sense in which human beings are viceregents [*khalifah*] in the creation, have responsibility for other creatures, or have the free will to obey or not), it is useful to survey a range of ethical perspectives, following the broad categories of Islamic ethics delineated by Majid Fakhry (1991).

Scriptural Morality – ethics revealed in the Qur'an and traditions (*hadith*) of the Prophet Muhammad; and as discerned in the fields of Qur'an interpretation and exegesis (*tafseer*), and in the science of the transmission of the *hadith* (*mustalah al-Hadith* and *rijal al-Hadith*).

Theological Ethics – ranging from rationalist theories of moral duties, including duties to fellow creatures, to voluntarist theories of human will in, and on, the world.

Philosophical Ethics – built upon antecedent Greek ethics, ranging from Socratic to Aristotelian, neo-Platonic, and neo-Pythagorean arguments.

Religious Ethics – situate ethics within the psychological and social contexts of religious life. Fakhry (1991) discusses ethical traditions, rules of conduct (*adab*), and religious traits.

Rather than recapitulate Fakhry's analysis, which offers a well-organized account of early and medieval Islamic ethics in categories meaningful to philosophers, but lacks close parallels with contemporary writing on Islamic environmental ethics, it is useful to survey how major bodies of contemporary environmental writing draw upon, extend, or depart from these four categories of Islamic ethics. We begin with

a combination of scriptural and religious approaches, which illuminates the major structures of Islamic moral philosophy, proceed to thematic investigations that invite more theological and philosophical approaches, and conclude with the challenges of synthesis and an overarching view of the field as explored by Seyyed Hossein Nasr.

The source of all ethical approaches to environmental issues – from conservation to treatment of animals, reclamation [ihya], purification, protected areas, and pious endowments – combines scriptural and religious approaches in a well-structured way that parallels Islamic law (e.g., Hamed 1993):

1. *The Qur'an* – is the first and most authoritative source on any ethical question. Whatever the Qur'an does not directly or fully address may be illuminated by the:

2. *Sunnah* – which is the example of the life of the Prophet Muhammad, including the *hadith*. Whatever is not fully addressed by the *Sunnah* may be illuminated by:

3. *Ijma'* – the consensus of the community of believers (*ummah*). The authority of *ijma'* rests upon the Prophet's saying that, "My community will not agree on an error." Some Muslim environmental laws (*fiqh*) are the product of *ijma'*, as are some aspects of major schools of law (e.g., Hanbalite, Malikite, Asharite, and Safi'ite schools of Sunni law; and *Imamite*, *Ismailite*, *Zaidite* schools of Shi'a law). Thus, we would expect some strands of environmental ethics to vary across geographic, socio-economic, and cultural communities. In a related vein, some Muslim environmentalists have emphasized the role of institutions (*hisbah*) in formulating and advancing environmental policy. If *ijma'* is inconclusive one looks to:

4. *Qiyas* – the logic of analogy with comparable ethical cases and situations. The rules and limits of analogy have been rigorously developed, for example, to address the rights of humans and animals to water (Wescoast 1995).

For some groups, the scriptural-religious approach stops with *qiyas*, while for others it continues on to less codified sources of custom (*urf*), conduct (*adab*), and individual discernment (*ijtihad*).

The scriptural-religious approach lends itself to analysis of specific environmental ethics issues because it follows a clear logical progression, and has long-established albeit contested principles and tools of inquiry (e.g., concordances and compilations for Qur'an interpretation, *hadith* science, *fiqh*, and local social knowledge of environmental norms and practices).

While many topics in environmental ethics are addressed with a scriptural-religious approach, some, if not most, topics require additional theological and philosophical inquiry when pursued in depth. These include the ethics of environmental topics such as the creation, signs in nature, and paradise eschatology. They also encompass human topics that have environmental dimensions such as viceregency on Earth, free will to conserve or consume, and obligations to mend damage (*islah*), avoid waste (*israf*), and prefer what is better (*istishan*) – to name just a few. To date, few detailed theological or philosophical treatises on these topics have drawn implications for, or made connections with, environmental ethics.

Instead, much Muslim environmental writing of the late twentieth century focuses on local substantive problems or international and crosscultural dialogues. A good example is the *Islamic Principles for the Conservation of the Natural Environment*, co-published by the Meteorology and Environmental Protection Administration (MEPA) of the Kingdom of Saudi Arabia and the International Union for the Conservation of Nature (IUCN) (BaKader, et al., rev. edn, 1994; first published, 1983). After an introduction on “Islam’s Attitude toward the Universe, Natural Resources, and the Relation between Man and Nature,” the authors survey principles for protection of basic natural resources (air, water, land); protection of humans and the environment from toxics, polluting substances, noise, intoxicants, and natural hazards; and individual mandates, legislation, and institutions that support and enforce ethical teachings. Its ethical teachings are drawn almost exclusively from the Qur’an and *hadith*, and not from theological or philosophical studies or from commentaries on sacred texts.

Sponsorship of the *Islamic Principles* by the IUCN, and the document’s reference to World Health Organization publications, indicates an active engagement with international environmental discourse – as do the increasing number of chapters on Islam in edited books on environmental issues. An extended case of engagement is Izzi Deen’s (2000: 149–66) review of the United Nations *World Charter for the Protection of Nature*. Deen compares it with the *Islamic Principles for the Conservation of the Natural Environment*, which provides a Muslim perspective on each passage. Several recent doctoral dissertations explore ethical issues in urban design and landscape architecture in Muslim societies, pointing the way toward further development of the pragmatic thread in Islamic environmental ethics (e.g., Ba-Ubaid 1999).

In the field of Islamic ethics, Fakhry (1991) regards al-Ghazzali as providing a synthesis across scriptural, theological, and religious ethics (though his *Tahufat al-Falasifa*, “Incoherence of Philosophy,” indicates the extent of his synthesis). In environmental ethics three further lines of synthesis seem promising. First, extended studies are needed of the sort pioneered in Seyyad Hossein Nasr’s

An Introduction to Islamic Cosmological Doctrines, which undertook a close philosophical and theological comparison of ideas about nature by the Ikhwan al-Safa, al-Biruni, and Ibn Sina. A second line of synthesis should focus on linkages between historic philosophical contributions and the modern pragmatic work by environmental agencies and organizations (e.g., Izzi Deen 2000). Finally, to cite Nasr (1996) again, advancing beyond simple oppositions between Islamic principles and the consequences of Western humanism, and toward a theory and practice of sacred science, East and West may chart a path beyond the current situation.

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See also: Islam, Animals, and Vegetarianism; Islam and Eco-Justice; Islam and Environmental Ethics; Islamic Basis for Environmental Protection; Islamic Law; Nasr, Seyyed Hossein; Sufism.

Islam and Environmentalism in Iran

Iran possesses more biodiversity than any other country in Southwestern Asia. The country contains many of the world's major ecosystem types, from high mountains and deserts to semi-tropical forests and marine environments. Yet with rapid overpopulation, desertification, and the endangerment of many species, Iran's environmental crisis is as dramatic as anywhere in the world. Whether despite or because of the severity of Iran's environmental crisis, official statements on a range of issues connected with the environment sound strikingly progressive, especially when compared with other parts of the Muslim world.

Iran is probably the only country at present where Islam is claimed as a basis for environmental ethics at the official level. In 1996 the DOE (Department of the Environment) stated in a published paper, the religious leaders in Iran have found the principles of environmental conservation compatible with the general guidelines of the holy religion of Islam. It is now the duty of environmentalists to encourage the Friday Prayer speakers to convey environmental messages to the public (*Islamic Republic of Iran Country Paper* 1996: 27).

The revolutionary government went so far as to assert its ideological commitment to environmental protection by including it in the 1979 constitution. Article 50 reads:

In the Islamic Republic protection of the natural environment, in which the present and future generations must lead an ever-improving community life, is a public obligation. Therefore all activities, economic or otherwise, which may cause irreversible damage to the environment, are forbidden.

Iran's Department of the Environment, originally established in 1972, was reorganized under the new, Islamic government, in 1986. The DOE has a Provincial Directorate for each of Iran's 28 provinces. Its mission includes research on appropriate technology, a national biological survey, public education, and national regulation of air, water, urban development, biodiversity, waste disposal, noise pollution, and agricultural toxics. The principle of sustainable development as outlined at the Rio Earth Summit (Agenda 21) is stated to be the framework for Iranian legislation, and environmental impact statements are supposed to be a major consideration in all projects. Recently increased priority has been given to family planning, bringing women into conservation, and encouraging grassroots movements. The DOE is also responsible for administering Iran's seven national parks, four national nature monuments, twenty-four wildlife refuges, and forty-two protected areas. In a national strategy paper pub-

lished in conjunction with the United Nations Development Program and the World Bank in 1994, the DOE called for 1) a land-use planning strategy based on integrated ecological and socio-economic issues rather than solely socio-economic ones, 2) promotion of NGOs and community participation, 3) provisions for the preparation of management plans for protected areas,

4) provisions for the formation of a “Green Corps” to reinforce the manpower needed for fulfillment of national strategies, and 5) a nine-point plan of action, incorporating details about the degree of sensitivity, sizes and relative cover of the country’s protected areas as well as the types of destructive activities threatening those areas, and including a program to finance the proposed strategies. The Department has produced educational programs on the environment for television and radio, and publishes a scholarly journal, called *Mohit-e Zist (The Environment)* four times a year. In 1996 plans were announced for an Environmental University, at which “all aspects of the environmental sciences” will be taught and “the expertise needed in the field of the environment will be trained according to the needs of the country” (*Iran Country Paper* 1996: 27).

The Iranian delegation to the Kyoto conference on Climate Change in December 1997 was led by Vice President and Director of the DOE and the Environmental Protection Organization (EPO), former revolutionary spokeswoman Massumeh Ebtekar. Though the Vice President cited in her address Iran’s successes in reforestation, control of desertification, and emissions regulations, she sided with other developing countries in arguing that

Before the actual materialization of promises made by industrialized countries, including technology transfer and financial assistance, it seems unfair that developing countries should undertake considerations that could seriously hinder their pace of development and damage their fragile economies (Ebtekar, address to Kyoto International Conference on Climate Change, 1–10 December 1997).

Nevertheless, following the Montreal Protocol of 1987 Iran currently has the world’s second-largest program (after China) for the phasing out of ozone-depleting chlorofluorocarbons (CFCs). Though Iran does not produce CFCs, it imports them, and the figure of five and a quarter billion tons imported in 1993 is to be reduced to zero by 2005.

Also in 1997, the DOE introduced a National Environment Plan of Action (NEPA), which was submitted to the Cabinet. A workshop at Tehran University in May 1999 brought members of the DOE together with academics and representatives from environmental NGOs, for the purpose of incorporating environmental policies into Iran’s Third Development Plan.

Non-Government Organizations

Public awareness of Iran's environmental crisis seems to be on the rise, due in part no doubt to the increasing visibility of new environmental non-government organizations (ENGOS). As of late 2000 there were 149 registered and unregistered ENGOS in Iran.

For the most part NGOs are a recent phenomenon in Iran, and are desperately attempting to establish contacts with similar organizations worldwide. Like many such organizations, they are underfunded. While some have received contributions from foreign donors, most of their funding comes from private donations within Iran. Since they are dependent upon ongoing government authorization to function as independent entities, they tend to abstain from direct political involvement such as lobbying for environmental legislation. There are no Sierra Clubs or Natural Resource Defense Councils. Instead, most of Iran's environmentalist NGOs concentrate on raising public awareness of environmental issues, often through direct contact such as volunteers going door-to-door or taking inner-city children on field trips to the countryside.

The first registered environmental NGO in Iran was BoomIran, founded in 1980. In 1983 BoomIran's director, Farrokh Mostafi, traveled to Switzerland to muster support for opposition to drain the Anzali lagoon near Rasht on the Caspian coast. The World Wide Fund for Nature (WWF) pressured the Iranian government, and the project was abandoned. Mostafi himself was featured in a recent issue of *National Geographic*.

BoomIran, which currently counts some 250 members, publishes a monthly magazine, *Shekar o Tabi'at* (*Wildlife and Nature*), as well as a children's magazine and an encyclopedia of Iran's fauna. The organization maintains a library, provides lecturers, and produces an educational television program. It has initiated a Pathfinders Program, which seeks to identify road and trail networks for use by hikers and travelers with regard to preserving the environment, and a program called Save Our Rivers, which seeks to identify and protect polluted rivers and determine sources of pollution. The organization recently established links with E-Law in the US, which aims to provide information and support on issues of international conservation law, liability for environmental damage, biodiversity legislation, and the effects on the environment of trade.

BoomIran is currently working to organize opposition to the proposed freeway project that would link Tehran with the Caspian coast, and to put together an environmental impact statement since the government has failed to do so. With six chapters now located around the country, BoomIran also has a birdwatching club that is currently monitoring eight endangered bird species in Iran, including the Siberian crane.

The Green Front of Iran (*Jabheh-ye Sabz-e Iran*), founded in 1989, is another environmental NGO that has become increasingly visible in recent years, with over two thousand members nationwide. Avowedly apolitical, the Green Front aims to increase public awareness of environmental concerns and to foster public participation in clean-up projects. The most extensive such project involved thirty-three sites over eight hun-

dred kilometers along the Caspian seacoast on 27 and 28 August 1999, when over ten tons of garbage was picked up on beaches from Astara near the border of Azerbaijan in the west to the southeast Caspian port of Bandar-e Torkaman. An earlier afforestation trip organized by the Green Front in March 1998 was attended by President Khatami.

Siamak Moattari, founder of the Green Front, offers his own perspective on the oft-proposed tension between the environment and development. "We do not feel that tending to ecological issues is a luxury," he says; "it is a necessity." He points out that environmental degradation and poverty constitute a cycle.

Economic, social justice, and environmental issues must be viewed together. While it may be unrealistic to expect a forest-dweller with an empty stomach not to cut down a tree, we must realize that in the following years there will be no tree for his children to cut down.

Yet, "In Gilan we met individuals willing to lie in front of trucks carrying away lumber and even risk their lives in defense of those trees . . . These are people living in poverty." In Moattari's view, "individuals bring about environmental degradation not as a result of poverty, but as a result of ignorance or misinformation" (in Mokhtari 1998: 2). Despite its social justice agenda, the Green Front is not explicitly Islamic; it has, however, established a committee that seeks out references to environmental stewardship in the Qur'an and *hadiths* (non-inspired traditions of the Prophet Mohammad), and sends them to religious leaders and organizations.

The Iranian Society of Environmentalists (IRSEN) is an organization founded by academics and scientists. It is part of the multinational Caspian Environment Programme (CEP), and studies among other things pollution point sources, wildlife, and aquatic systems in the Caspian region, with the aim of advising the government on environmental policy issues. More recently a related organization, The Iranian Association of Environmental Health, was established with a specific focus on health concerns. Both organizations have carried out various projects to monitor water, soil, and air pollution throughout Iran.

The major Iranian NGO concerned with wildlife is the Wildlife and Nature Conservancy Foundation. WNCF has undertaken an array of studies, ranging from wetlands assessments to drops in riverine fish populations, to problems of park management and the impacts of human population growth. It is also seeking to determine whether in fact the Caspian tiger and the Iranian cheetah are indeed extinct.

A group of mountaineers formed the Mountain Environment Protection Committee (Hefazat-e Mohit-e Kuhistan) in 1993. In Tehran especially, weekend family outings to the mountains, whether Darband above Tehran or the 18,400-foot Mt. Damavand a short drive to the east, are extremely popular. Unfortunately, 100,000 or more visitors per week are damaging the Alborz, leaving garbage behind them and disrupting the mountain ecology. The MEPC has been attempting to educate Iranians about the fragility of mountain environments, the need to pack out garbage and stay on trails to minimize erosion. According to Director Abdullah Astari, the government has failed to enforce existing laws that could protect the mountains from overuse.

All of the aforementioned NGOs are based in Tehran. One organization active outside the capital is Esfahan Green Message (Payam-e Sabz Esfahan). Originally founded by students at the University of Esfahan in 1994, EGM now counts five hundred members. Like the Tehranbased NGOs, EGM seeks to increase public awareness and participation in environmental issues through educational initiatives, formulate policies through consultation with specialists, and influence decision-makers through meetings and letter-writing campaigns. Other organizations spread throughout Iran's 28 provinces include the Kerman Earth Lovers, Zagros Friends of Nature, Fars Friends of the Environment, Khorasan Green Thought Group, the Green Defence Society of Mazandaran, the West Azerbaijan Association for Reconciliation with Nature, the Green Artists Association, and many others.

Women's Involvement

Public interest in environmental issues received a boost in the wake of the 1994 United Nations Conference on Women in Beijing, which was attended by some Iranian delegations. Mansoureh Shojai, a self-described ecofeminist formerly of Iran's National Library, credits the Beijing conference with dramatically raising Iran's level of public awareness on both women's and environmental issues.

Environmental action in Iran considerably predates 1994, however, as does women's involvement. As long ago as 1970, a group of rural women in the arid southern province of Yazd embarked on an anti-desertification planting project for which they received support from the Office of Natural Resources. That project continues today as part of a microcredit scheme underwritten by the Ministry of Construction Jihad and the ONR. It inspired the United Nations Development Program to film a documentary called *The Green Desert* which took first prize at the first Iranian International Environmental Film Festival held in Tehran in 1999. The Iran office of the UNDP, which has been functioning since 1965, devotes about half of its \$25 million annual budget to environmental projects.

At least three Tehran-based NGOs currently combine women's issues with environmental work. One is the Society of Women Against Environmental Pollution (*Jami'at-e Zanan Mobarezeh ba Aludegi-ye Mohit-e Zist*), whose aim is to raise awareness of environmental problems among Iranian women. Among their activities are the gathering of statistics on urban pollution, the publishing of informational articles and brochures for the general public, organizing seminars, and preparing educational materials for public schools. They have scored a number of notable successes, including getting the Ministry of Education to include the environment as a part of the public school curriculum.

A second organization, the Struggle for Survival Society (*Jami'at-e Talashgaran-e Baqa*) focuses on the poor, especially refugees, who suffer disproportionately from the effects of environmental degradation. A third group, the Children's Book Council of Iran, produces educational materials on the environment for children.

Mansoureh Shodjai, who has been active in children's environmental education programs, describes one technique she has found effective for engaging children with the natural environment, a technique she calls "nature concerts." This involves having children sit down in a natural area and simply listen for a half-hour or so to whatever they hear going on around them. Afterwards they are asked their impressions. "For example, if a child mentions having heard a running stream," says Shodjai, "we understand that this particular child has an attraction to water, and we work with that, teaching the child about water pollution and what causes it and how it can be remedied. And so on for birds, wind, or whatever" (Shodjai, classroom visit, Columbia University, 1 May 2000).

ENGOS and the Government

The Iranian government under President Khatami has maintained a policy of encouraging the development of civil society, recognizing the important role of NGOs. The involvement of women and youth has been especially encouraged.

In 1998 representatives from several ENGOS met with the DOE and established the Environmental NGO Network. This has provided obvious advantages, including government recognition. On the other hand, the government's relation with ENGOS are still "guided by suspicion and a control mentality and agenda enacted through stifling administrative, regulatory procedures" (Namazi 2000: 11). The concept of NGOs is still unfamiliar to the Iranian public, and environmental NGOs, despite the flourishing of popular interest in environmental issues, face ongoing obstacles, both financial and political. According to Shadi Mokhtari,

There are few NGOs in Iran that can really be considered NGOs because they are mostly dependent on the government both substantively and financially

. . . Therefore, NGOs that served to hold state agencies accountable or protest the status quo were virtually non-existent (Shadi Mokhtari, personal communication, 15 November 1998).

And some critics argue that most of the Iranian government's expressed concern for the environment is mere rhetoric.

At a meeting in May 1999 Yusef Hojat, however, Deputy Director of Iran's Environmental Protection Organization acknowledged the Iranian government's shortcomings in addressing the environmental crisis. He went on to suggest that Iran's ENGOS were better situated to act than the government in many respects, and advocated increasing cooperative efforts with them.

This illustrates that Iran's ENGOS appear to have succeeded for the time being in remaining in the government's good graces, to the point where the government not only tolerates but encourages their activities in many areas. And at the very least, it may be remarked that strong rhetoric can be a significant first step in changing public attitudes as well as laying the groundwork for official policy.

In Iran today the government's stand on the environment, formally enshrined in the nation's constitution, as well as the energy and motivation of environmental NGOs and the rate at which public awareness of environmental issues is increasing, are all impressive. It may be that Iranians will have much to teach the rest of the developing world about environmental protection, perhaps especially Islamic countries, and that Iran will even provide a model for the industrial nations who still bear most of the blame for the rapidly deteriorating state of the Earth's lifesupport systems.

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See also: Islam (various); Mountaineering; Rock Climbing; Sierra Club; United Nations' "Earth Summits".

Islam and Post-Anthropocentrism

Islamic theology tends to exalt the human species as the noblest of God's creatures (*ashraf al-makhlughat*), who are bestowed with divine "viceregency" (*khalifa*) over the Earth. What has emerged so far in the growing literature on Islamic eco-theology is at best a soft anthropocentrism that emphasizes humankind's moral obligations to nature and animals, without, however, relinquishing the hierarchical credo that forms the basis of Islam's anthropocentric cosmology.

The quest for a post-anthropocentric interpretation of Islam need not proceed by focusing on those aspects of the Qur'an and, to a lesser extent, the Prophetic Tradition (*hadith*), which directly or indirectly support anthropocentrism (e.g., "Seest thou not that by His command God has made subject to you all that is on the Earth?"). Rather, the challenge is to find a creative process of reinterpretation that can illuminate the Qur'anic system of interspecies relations in a less anthropocentric way.

A de-centering of humans in Islamic theology might proceed from applying analogical reasoning to the Qur'an's view of humans and other animals: "And there is no animal on the Earth nor bird that flies with its two wings but that they are communities like ourselves." This verse clearly grants nonhuman animals the right of co-habitation, since the Earth is "spread out" for "His creatures." Similarly, a proscription against animal abuse is seen in *hadiths* such as: "Do you wish to slaughter the animal twice: once by sharpening the blade in front of it and another time by cutting its throat?"

What the *hadiths* reveal, however, perhaps even more than the Qur'an, is not simply an Islamic reverence for animal life. The Prophetic commentary on the cruelty of animal slaughter, which takes the form of a "minimum damage" doctrine, is not easily reconciled with antidualist conceptions of a sacral unity of humans and nature. The organicist views of mainstream Islamic thought, particularly in recent attempts at "Islamic ecotheology," overextend the divine unity (*tawhid*) to a cosmological totalism, and in so doing ignore the inherently disruptive aspect of Islam's nature theology which would seem to preclude perfect harmony. The partial disharmony between humans and nature is actually the epiphany of the eternal present which illuminates the transcendent self-revelation of God, the sole owner of all things, the creator of "all worlds."

The earthly worlds of nature, animals, and humans, notwithstanding their ontological contingency, are fully anchored in the creative attributes of God's omnipotence and embody his eternal glorification. Islam's recognition of a living tension among these worlds is linked to an eschatological fulfillment of time in which prayer, as act of reconciliation between man and nature, plays a crucial role. Both prayer and fasting

are humbling theological experiences that remind practicing Muslims of their divine origins in nature, their uncoupling and distance from both nature and celestial life, and the profound requirements to fulfill the promise of salvation. In Shi'ism, this is joined by an apocalyptic messianism that is open to the impulses of eco-justice and eco-eschatology. For example, in a post-anthropocentric Shi'ism, the motif of divine suffering, reflected in the principle of martyrdom (*shahadat*) as the linchpin of its liberation praxis, could assume a new meaning in the form of compassionate suffering for the sake (and preservation) of nature.

Islamic eschatology-as-apocalypticism provides yet another rich source for a post-anthropocentric epistemology, insofar as humans can foresee their destruction of the environment and, consequently, of their own species, and yet utilize this knowledge for self-restraint in accordance with the divine command (*amr*) for “measured” or “balanced” existence. The potential failure of humans in this duty is internally inscribed in the eschatological wisdom of Islam, yet this very failure could serve as another log in the furnace of post-anthropocentrism. In contrast to the classical Islamic ideal of the “perfect man” (*insan al-kamil*) who finds his perfection in his spiritual liberation from the confines of nature, a postanthropocentric approach would focus on the limitations of humans in fulfilling the divine promise.

The approach to developing a post-anthropocentric Islam proposed here is based on a marginalist, or “bottomup” re-prioritization of texts, centered on the twin agenda of deriving both a theology of the nonhuman and a new eco-eschatology. So far this remains a hypothetical undertaking, but one which could potentially be accomplished within an Islamic framework.

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See also: Animals in the Bible and Qur'an; Biocentric Religion – A Call for; Islam, Animals, and Vegetarianism; Qur'an, The.

Islam, Animals, and Vegetarianism

Although Sufi saints such as the Suhrawardi Hamid al-din Nagori in medieval India, as well as other pious Sufis in North Africa, are known to have practiced vegetarianism, to date any serious discourse on the viability of an “Islamic” vegetarianism is absent. The Qur’an explicitly allows the eating of meat, as in verse 5:1 which reads,

O ye who believe! Fulfill your undertakings. The beast of cattle is made lawful unto you [for food] except that which is announced to you [herein], game being unlawful when ye are on pilgrimage. Lo! Allah ordaineth that which pleaseth him.

Medieval Islam’s tensions with Buddhism (and, in India, Hinduism), seen as an idol-worshipping religion, historically provided a “guilt by association” argument against vegetarianism. The medieval legal scholar ’Iz al-Din b. ’Abd al-Salam (1181–1262), in his work *Qawa’id al-ahkam fi masalih al-anam*, (“The Foundations of Laws Benefiting the Human Race”) states that

The unbeliever who prohibits the slaughtering of an animal [for no reason but] to achieve the interest of the animal is incorrect because in so doing he gives preference to a lower, *khasis*, animal over a higher, *nafis*, animal.

Another medieval scholar, Ibn Hazm, provides an argument against moral consideration being extended to animals which anticipates those heard in nineteenth-century England, when he writes that “the laws of Allah are only applicable upon those who can talk and understand them” (Hazm 1964: 69).

Within the admitted hierarchy of creation in which human beings occupy the highest rank, the Qur’an and the Sunna (lit., “tradition,” understood as the example of the Prophet Muhammad as attested in *hadith* reports) nevertheless strongly enjoin Muslims to treat animals with compassion and not to abuse them. The Qur’an states that all creation praises God, even if this praise is not expressed in human language (17:44). The Qur’an further states that “There is not an animal in the Earth, nor a flying creature on two wings, but they are peoples like unto you” (6:38). Thus, when in the nature of things (*fitrah*), the Muslim must kill in order to survive, the Prophet Muhammad called for compassion: “If you kill, kill well, and if you slaughter, slaughter well. Let each of you sharpen his blade and let him spare suffering to the animal he slaughters.” On another occasion he is reported to have said, “For [charity shown to] each creature which has a wet heart (i.e., is alive), there is a reward.” He opposed recreational hunting, saying that “whoever shoots at a living creature for sport is cursed.” In another *hadith*, Muhammad is said to have reprimanded some men who were sitting idly on their camels in the marketplace, saying “either ride them or leave them alone.” He is also reported to have said, “There is no man who kills [even] a sparrow or

anything smaller, without its deserving it, but Allah will question him about it [on the Day of Judgment],” and “Whoever is kind to the creatures of God, is kind to himself.”

Medieval Islamic law prescribes that domestic animals should not be overburdened or otherwise mistreated, that they should not be put at risk of survival, that their young should not be killed in their sight, that they should be given adequate shelter and rest, and that males and females should be allowed to be together during mating season. The legal category of water rights extends to animals through the law of “the right of thirst” (*haqq al- shurb*).

Probably the richest material that Muslim civilization has produced with regard to animal rights is a tenth-century treatise entitled *The Case of the Animals versus Man* by a group of philosophers who called themselves the *Ikhwan al-safa*, or “Pure Brethren.” A briefer example of sympathy for animals can be found in a story about the eighth-century female Muslim mystic Rabi’a of Basra. According to the medieval hagiography of Farid al-din ’Attar,

It is related that one day Rabi’a had gone up on a mountain. Wild goats and gazelles gathered around, gazing upon her. Suddenly, Hasan Basri [another well-known early Muslim mystic] appeared. All the animals shied away. When Hasan saw that, he was perplexed and said, “Rabi’a, why do they shy away from me when they were so intimate with you?” Rabi’a said, “What did you eat today?”

“Soup.”

“You ate their lard. How would they not shy away from you?” (’Attar 1996: 160).

At least one contemporary Islamic legal scholar has taken issue with the dominant anthropocentric view of animal rights. B.A. Masri writes in the preface to his book, *Islamic Concern for Animals*, that in his opinion “life on this Earth is so intertwined as an homogeneous unit that it cannot be disentangled for the melioration of one species at the expense of the other” (1987: vii). Masri understands the superiority of the human species to consist only in its spiritual volition (*taqwa*), that is, its capacity to make moral choices. Without this distinction, Masri believes, the differences between humans and other animal species are superficial. Masri stops short of discussing the option of vegetarianism, however. His concern is with eliminating the kinds of unnecessary cruelty and exploitation of animals that he sees as prevalent in modern society, such as laboratory testing. Masri’s discussion implicitly acknowledges the reality that Muslims often fail to respect the Prophetic directives regarding animal welfare.

One issue which is prominently connected with meateating in Islam is the customary sacrifice performed once a year on the occasion of ‘Eid al-Adha, the Feast of Sacrifice commemorating Abraham’s willingness to sacrifice his son. On this day, Muslims traditionally slaughter the largest animal they can afford, from a sheep to a camel, and distribute the meat to the poor as an act of charity. However, during the 1990s, King Hassan of Morocco on two occasions banned this slaughter for economic reasons, citing the well-being of his Muslim subjects. It may be noted in passing that a number of religious traditions, including Judaism, Vedism, and others, historically evolved metaphorical substitutions for blood sacrifice (and in the case of Judaism after

the destruction of the Second Temple, this change was quite rapid). It is therefore not inconceivable that such a development could occur in the future within Islam. In any event, ritual slaughter in Islam is merely customary, and not prescribed by law.

The Qur'an and Sunna have been shown to enjoin Muslims to treat animals with compassion. This is clearly reflected in the established procedure for *halal* (lawful) slaughter. Few Muslims have made the observation that not slaughtering the animal at all would be even more compassionate; animal rights activism and vegetarianism are exceedingly rare among Muslims, and where present are most often motivated by extra-Islamic ethical principles.

Factory farms did not exist in seventh-century Arabia, nor were large percentages of arable land being used for fodder crops in preference to food for humans while 20 percent of the world's population went chronically malnourished. Times have changed. Though in Sunni Islam the tradition of interpreting divine revelation (*ijtihad*) has been largely in abeyance since the eleventh century, Islamic modernists have long been arguing that "the gates of *ijtihad*" must be reopened if Islam is to continue to meet the needs and conditions of the present age. But for a contemporary Islamic legal scholar to make a case for vegetarianism, the Qur'anic verses cited above in particular would have to be addressed.

The possibility for such a re-reading can be seen in the example of the verse: "The beast of cattle is made lawful unto you [for food]" (5:1), which might be compared with other verses (16:5, 66; 40:79) where the wording is equally vague. The theme common to these verses is that of deriving sustenance; in 16:66 milk is explicitly mentioned whereas 40:79 begins, "It is Allah who provided for you all manner of livestock, that you may ride on some of them and from some of them you may derive your food." Nowhere does the Qur'an refer to the eating of flesh as such. Even the gloss "for food" in verse 5:1 is merely inserted into the English translation, being absent in the original Arabic.

It is possible that future Islamic legal scholars will find a basis in the Qur'an and Sunna for vegetarianism, and perhaps issue *fatwas* (legal opinions) classifying meat-eating as *makruh*, the category of discouraged acts whose commission brings no punishment but the abstention from which brings reward. At the very least, one can hope to hear more in the way of Islamic critiques of factory-farming as incompatible with the clearly established Islamic principles of compassion toward animals.

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See also: Animals; Animals in the Bible and Qur'an; Islam; Vegetarianism (various).

Islam on Man and Nature

Our planet is characterized by richness and diversity of its components. Such a system can survive only if its components are in harmony with the overall design and are in due proportion and balance. To maintain this balance, there are natural agencies and systems, which if not disturbed, do their job with marvelous efficiency according to natural laws. These and similar laws are operating not only on this planet, but throughout this universe as we come to understand them due to the expanding horizons of science and technology. This balanced coexistence of all the components of this planet ensures “Peace,” in contrast to chaos and disorder, which results if the natural balance is disturbed. Islam, which literally means “peace,” is a system which ensures and strengthens this peaceful coexistence. It guides humanity to a methodology and way of life which guarantees peace among all the inhabitants of this beautiful Earth.

Humankind – A Special Creation

All cohabitants of our planet work under and according to the natural laws or divine guidance, which one often refers to as their natural instinct. Thus, under favorable conditions and if allowed to function naturally, a root would always absorb water and a green leaf would always photosynthesize, a clay particle would always hold water strongly and wind currents would always move toward

The Hadith and Shari’a on Man and Nature

The Prophet Mohammad was sent by Allah as “a mercy to all being” (21:107). He put the commandments of Allah into practice and thus established a working model for all human spheres. It has been interpreted further by different scholars who have laid down legal codes (*Shari’a*). All these details run into thousands of pages and even to summarize them is beyond the scope or capacity of this write-up. Some very illustrative Sayings and *Shari’a* Laws are mentioned here to give a glimpse of the vastness of Islamic literature dealing with environmental issues.

Hadiths:

“Show mercy to those on Earth, and He who is in the Heaven will show mercy to you.”

“Provide for the needs of any animal under your care. If a person causes an animal to die of starvation or thirst, he will be punished by Allah.”

“There is a reward in doing good to every living being.”

“God is pure and loves purity and cleanliness.” “There is no Muslim who plants a tree, or sows a field and man, birds or beasts eat from them, but it is charity for him.”

“Whoever brings the dead land to life, that is, cultivates waste land, for him is reward therein.”

Shari’a:

Based on the Prophet’s practice, Muslim legal scholars have ruled that Allah’s creatures possess inviolability (*Hurmah*) which pertains even in war.

In Islamic Law all animals have certain legal rights, which are enforced by the Islamic courts or by the office of the “*Hisbah*.”

One of the fundamental principles of Islamic Law is the Prophetic declaration: “There shall be no damage and no infliction of damage.” This “No Damage Law,” is of immense significance in the human–nature relationship. Another relevant *Shari’a* rule is: “The averting of harm takes precedence over the acquisition of benefits.”

It aims at achieving good and securing benefits without causing significant damage, injury or corruption.

“A private (smaller scale) injury or damage is accepted to avert a general (larger) injury to the public.” While enforcing certain laws or restrictions, interests of a small section of the community are usually affected. In such a situation the interest of the larger community takes precedence over smaller damage.

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Mohsin, Ammad. *The Translation of the Meanings of Sahih-Al-Bukhari* (Arabic-English). New Delhi: Kitab Bhawan, 1987. a low pressure area. They have no choice but to act according to the laws of nature (i.e., they have no freedom to act otherwise). In contrast to the rest of the creatures, human beings have been given the choice either to act according to divine guidance (read laws) or to follow their own whims or desires. Since Islam is a system which has been revealed to ensure peace and harmony, it guides humanity to a set of laws and directives which preserve and maintain the divine balance and order on our planet. It defines the position as well as responsibilities of human beings on this temporary abode.

Position – As an Inheritor or Viceregent

Allah defines humankind as “*Khalifa*” on this Earth (Qu’ran 35:39; 6:165), which literally means the guardian or vicegerent who inherits the planet from its forerunners. According to Islam, man is not the conqueror or master of nature, he is its guardian and hence protector who ensures continuity and availability of all its bounties.

Responsibilities

To seek knowledge

There are 756 verses in the Qur’an which deal with knowledge or *Ilm*. Without knowledge one can understand neither the complexities and interdependence of all the creatures, nor one’s own role and responsibilities, particularly as the guardian of the planet. Knowledge is the basic ingredient and foundation for “Belief” or “*Iman*.” *Iman* is complete faith in Allah, His Laws and Commands, based on reason and knowledge – almost a state of conviction. The Qur’an lays much emphasis on reason, and hence humankind has been gifted with mind, which enables one to think, and the intellect, which helps one to build up knowledge. Once acquired, knowledge helps one to understand the working and significance of divine laws. It is this knowledge which motivates the person to submit to Allah’s command. It becomes clear to him that if nothing can survive by defying natural laws, how can he act against the Laws set for him? However, if people do not utilize the faculties of thinking, observing and hearing (to grasp the truth), they will be destined to hell as they remain un-heedful of the Laws of Allah (7:179).

To ward off evil by good deeds

In any system of governance, we find those who are obedient and those who are disobedient. Those who are disobedient and do not submit to Allah’s Laws would definitely disturb the harmony on this planet. They would spread evil ideas of exploitation and injustice. Believers in Allah’s System are advised to counter such evil moves by good deeds (13:22). In an atmosphere where evil and the things harmful and destructive for humanity are prevalent, believers should not get carried away and should not adopt the same attitude; rather they should continue to do good as it is only such perseverance in doing good which wards off evil attitudes and designs. All such people who practice righteousness and remain steadfast in doing good, have been acknowledged as Friends of Allah who would be in peace with Him (6:127).

To do justice

Islam lays great emphasis on justice. It expects the Believers to do justice in every walk of life and in every situation, which includes the equitable distribution of natural resources.

Surely Allah commands you to make over trusts to their owners and that when you judge between people you judge with justice; surely Allah admonishes you with what is excellent; surely Allah is Seeing, Hearing (4:58).

O you who believe! Be upright for Allah, bearers of witness with justice, and let not hatred of a people incite you not to act equitably (justly); act equitably, that is nearer to piety, and be careful of (your duty to) Allah; surely Allah is Aware of what you do (5:8).

These suras have affinity with what many in the West today call “environmental justice,” showing that the equitable distribution of natural resources is a religious duty, even when dealing with people one does not particularly like, and that the burdens of environmental decline and pollution ought not to fall disproportionately on the poor.

To establish balance

Thanks to the advancement in environmental sciences, we all know about the delicate interand intra-community/ commodity balance that exists among all the living as well as non-living components of our environment. In several verses of the Qur’an (54:49; 15:19; 55:7–9), Allah reveals about this balance which He has established among His creations and commands His Believers not to transgress it

(55:8–9). The concept of balance is applicable to every sphere of human activity whether it is harmony with nature or human justice, commerce or even in personal relations and emotions. Hence, Believers are thus expected not to indulge in any such activity that disturbs any sort of natural balance, be it between oxygen and ozone or land and vegetation or prey and predator. However, Islam does not forbid the use of nature’s bounties; it just reminds us to remain within limits and to ensure their continuity in due proportion. *Ulemas* like Maulana Abdul Kareem Pareekh, Maulana Waheeduddin Khan and Maulana Akhlaq Hussain Qasmi (of the Islamic Foundation for Science & Environment), for example, often speak along these lines.

To improve the society

Whenever any unbalance occurs in nature, it results in chaos or disorder. Our current problems of pollution and ozone depletion are very relevant examples. The Qur’an terms the mischief which results in chaos or disorder as “*Fasad*” and forbids it (7:56). Elaborating upon different types of mischief or disorder, the Qur’an declares the destruction of cultivated land and stock as mischief (2:205), as well as incomplete measure-

ments, insufficient payment for someone's labor, economic disparities and encroaching upon other's rights as mischief (26:183; 7:85). Disrupting a just system (27:34) and committing crimes is also termed as mischief (12:73). All this mischief by people of evil intent results in all round chaos and corruption:

Corruption has appeared in the land and in the seas on account of what the hands of men have wrought, that He may make them taste a part of that which they have done, so that they may return (30:41).

In contrast to these "*Mufsideen*" (corruptors, spoilers, mischief-makers) who have spoiled the natural balance to serve their own ends, Allah characterizes Believers as "*Musleheen*" (rectifiers, correctors or reformers) of society (2:11). They have been commanded to do "*Aml-e-Salehat*" (acts of correction and reformation which would undo the damage done by the spoilers or corruptors; 2:82; 95:6; 103:3). Thus it is the duty of all Believers to take up corrective measures for improving society and to ameliorate the condition of people suffering because of inequalities, unbalances and disorders in society. As the social problems and maladies vary with time and space, these "good deeds" to be performed by Believers would also be different according to the challenges faced by the society at any particular time and place.

Nature – An Islamic Perspective

The Qur'an emphatically declares that nature has been created by Allah (3:191; 38:27; 46:3). By correlating different verses where Allah has mentioned nature, it emerges that Allah has created nature for two specific purposes:

Blessing provides sustenance, shelter and other necessities to all creatures through the perfectly balanced and self-sustaining systems operating in nature according to Allah's Laws. Through the intricate network of food webs and food chains, through cycling and recycling systems, through displacements and succession, decay and decomposition, autotrophism and heterotrophism, He provides sustenance to all (2:22, 164; 6:96–99; 10:31;

11:6; 16:5–8; 16:10–16, 65–70, 79–81).

Ayat (or Sign) signifies that all the creations of Allah are "*Ayat*" (Signs) of Allah's Wisdom, Knowledge and Grandeur. The Qur'an describes all these creations as His "*Ayat*," which means sign, mark or indication. Allah is supreme, unlimited and beyond human comprehension. Humankind with its limited vision and knowledge, cannot comprehend the unlimited. But His signs help people to understand His mastery, perfection and omnipotence. Thus by understanding his creations, humankind can appreciate Allah's supremacy. For this very reason Allah asks humankind to observe and study nature and ponder upon its mysteries – and hence the emphasis on acquiring knowledge (2:73, 164, 191; 6:46, 65, 97; 7:185; 10:5–7;

12:105; 13:2; 21:30–32; 23:17–22; 24:41–46; 25:53–54; 26:8).

Natural Resources

Nature provides necessities of life to all creatures through its bounties. Some of these resources are available naturally in large quantities, while others need to be tapped, reared or cultivated. At the dawn of civilization, human population was thin and scattered. It traveled throughout the land and used all natural resources freely and without any restriction. However, the situation changed with the establishment of kingdoms and empires and the emergence of class systems based on riches. Money started breeding and multiplying through the spread of trade, interest and banking systems, until it established its own clan. Since then, the world remains divided between those with much and those with little.

Equitable Distribution

Since justice, equity and balance are the main planks of the Islamic system, it asks Believers to treat all natural resources with the same spirit. The Qu'ran declares it without any ambiguity: whatever is on Earth He has created it for all (2:29). There is no discrimination on the basis of caste, creed, color or religion. According to the Islamic system, the wealth, produce, or any other resource which anyone gets, earns or inherits does not belong to him alone. It must be shared with all the needy, starting from one's own close relatives to neighbors, travelers, displaced and dispossessed to anyone in need (3:92; 14:31; 17:26;

32:16). Allah thus judges the resourceful and elevated ones (6:165). Allah warns those who accumulate wealth of a crushing disaster (104:2-4). Those who withhold the necessities of life are declared deniers of the day of Judgment (107:7).

To facilitate distribution and ensure the availability of resources, Islam has made it mandatory on all rich people to establish the institution of "*Zakat*," which in essence means a Development Fund for the needy (2:43, 83, 110, 177, 277; 4:162; 5:12; 7:156; 9:5, 11, 18, 71; 21:73; 22:41,

78; 24:37, 56; 27:3; 30:39; 31:4; 33:33; 41:7). "*Zakat*" prevents hoarding of money and causes the wealth to grow so that people can earn their living instead of depending on charity. The Islamic system does not encourage the provision of sustenance to the poor and needy merely through charity; it can be a short-term remedy but on a long-term basis the surplus of the rich should be invested to generate gainful employment for the needy, distressed and displaced.

Islam encourages individual Muslims to participate in the conservation and proper development of resources by creating endowments or "*Awqaf*," which constitute the major avenue for private contribution to the public welfare. In India, and elsewhere as well, there are thousands of such "*Awqaf*" taking care of, and maintaining mosques, schools, hospitals and other welfare activities.

Judicious Use

Islam does not approve of a lavish or unjust consumption of resources, wasteful attitude and extravagance (6:141; 7:31; 17:26). The permissible provisions of modern development in Islam can include all those articles which enhance efficiency in terms of time, space and material utilization, provided they do not disturb the socioeconomic equilibrium at any particular place or situation. Islam links “*Israf*” or wastefulness to “*Fasad*” (i.e., chaos, disorder and mischief in society) and declares wasters to be corruptors of society and spoilers of social order and harmony. It considers the extravagance of one person as economic deprivation of the other because extravagance by the former is certainly an encroachment upon the accessibility rights of the latter. Instead of wasting resources in a demonstrative and extravagant lifestyle, it asks the Believers to spend whatever surplus they have on needy people (2:219).

Conservation

Allah forbids unjust killing of any soul (6:151; 25:68). The two earliest inviolable sanctuaries (“*Haramayn*”) established in Mecca and Medina in Saudi Arabia reflect the Islamic spirit of conservation. The Qur’an declares Mecca a “city of security” (95:3). The sacred territory surrounding Mecca is a sanctuary for human beings, wildlife and native vegetation. Perpetuating the same spirit, Islamic Laws designate various inviolable zones within which developments are prohibited for the sake of conserving resources. Similarly, wildlife and forests are safeguarded in “*Hima*” or reserves which are established exclusively for conservation purposes.

Conclusion

The doctrines of Islam are equally explicit and emphatic about man’s role as guardian or viceregent on this planet. His relation to nature should be one of stewardship and not mastery. All the creations of Allah are a divine work of art. They all have been called “*Ayat*” or signs to man, indicative of the greatness, the goodness, the subtlety, the richness and so on of the Creator. To deface, defile or destroy nature would be an impious or even blasphemous act.

Though man is accorded the right to use natural resources, he is not permitted to abuse it with impunity. Besides, this Earth is a temporary abode for man and according to his deeds done on Earth, Allah rewards or punishes him here in this world as well as hereafter. Therefore, those who act against Allah by damaging, defacing or destroying His creations will certainly be punished. Secondly, though the Earth is only a temporary abode for man and is at his service, man is an integral part of it. He is made of the earthen stuff and is a creature among creatures. Hence, according to Islam there should be a kind of organic relationship between man and all other creatures. According to

Islam, all human beings are descendants of Adam and Eve, and regardless of color, creed, race or nation they all are equal members of one extended family. Lastly, Islam values the knowledge of nature and encourages its followers to acquire it.

It is supported by the doctrine of signs (“*Ayat*”). As we learn about nature, it becomes abundantly clear that the entirety of nature is an integrated whole. Therefore the destruction of one part of the environment will have its repercussions on its each and every component, including man. This is almost a self-destruction, which is strictly forbidden in Islam.

Even a cursory look at the present state of our planet and human society, provided it is unbiased and unprejudiced, would pinpoint imbalance and inequity as the sole reason of all ills facing humankind. The Islamic System which ensures balance, and hence peace, is the available remedy. If put into practice, as was done by the Prophet, it brings peace and tranquility here in this world as well as in the life hereafter. That it has always been opposed and resisted by vested interests, including Muslims, is a historical fact.

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See also: Islamic Foundation for Ecology and Environmental Sciences; Islamic Foundation for Science and Environment (and adjacent, *Hadith* and Shari’a on Man and Nature).

Islamic Basis for Environmental Protection

The idea of “conserving the environment” as it is understood today is relatively new, having emerged as a matter of concern to the human race only recently. This is seen to be a reaction to human excess, which is increasingly threatening the *mizan* (balance) of Allah Ta’ala’s (Allah the Exalted) creation. The main reason for this is that the Earth once considered by humankind to be sacred has now been reduced to an exploitable resource.

At its most basic the Islamic approach to understanding the environment is based on an awareness of the *fitra* (primal condition of humankind in harmony with nature). Conservation in Islam is about *mu’amalat* (acting in the public interest; civic responsibility). It is an integral part of life, an expression of existence in submission to the will of the Creator in harmony with the natural pattern of creation. As there was an Islamic code of conduct that governed social behavior and an individual’s rights and responsibilities within a community, so there was a code of conduct governing an individual’s behavior toward other sentient beings and the rest of the natural world. This however was not expressed as an “ism,” but rather as an integrated expression of life in all its manifestations. It would seem that this was how the human species, in spite of all its faults, lived within their respective traditions until very recent times.

The natural order works because it functions within certain limits. Similarly, there are limits to human behavior and the Qur’an defines these limits for us, which were subsequently clarified and codified by the *Shari’a* (legal modality or code) that evolved in the Islamic milieu. Living within these limits may be defined as living holistically – that is, in Islam and as if there was no separation from one aspect of Allah Ta’ala’s creation and the rest of the natural order. The problem now is that Muslims live mostly outside the precepts of the *Shari’a* and in doing so have lost the understanding of their relationship with nature. We now have to look for and recognize those aspects in the *Shari’a*, which specifically regulate our behavior in relation to the environment and contrive an “ism” that in previous times would have been superfluous.

The Ethical Foundations of the Qur’an

If the *Shari’a* can be described as a vast carpet with intricate patterns woven into it, what we are doing here is to borrow some of these patterns from the complex weave

of the carpet and make sense out of them. The primary element of the *Shari'a* is the Qur'an. It is the font of all knowledge in Islam and its precepts could be likened to the core of each pattern in this carpet. We may begin by examining some of these patterns, which amount to basic principles and which may collectively be seen as providing the basis for Islamic conservation practice. They are:

Tawhid which embodies the principle of unity of the Creator and His creation and is the basis of the holistic approach which is intrinsically Islamic.

Fitra which imparts an understanding of the creation principle and locates the human species firmly in it.

Mizan which recognizes the principle that every aspect of creation holds together because it is in a state of balance.

Khalifa which identifies the responsibility principle and the role of the human in the grand pattern of creation.

Tawhid – The Unity Principle

Tawhid is the foundation of *Din al Islam* (The Way of Islam). It has three aspects, and for our purposes we are looking at just one of these, which is *Tawhid ar Rububiyyah* (the unity of Lordship). This requires us to believe that there is only one Creator and that is Allah the Lord of all creation. (The other two aspects are *Tawhid al Uluhiyya*

– to believe that none is worthy of worship except Allah – and *Tawhid al Asma was Sifat* – to believe that the names and attributes of Allah are uniquely His alone.) Understanding *Tawhid ar Rububiyyah* leads us to the recognition that *Al Khaliq* (the Creator) is one and *khalq* (creation) is a unified whole. Its essence is contained in the *shahada* (declaration), the first pillar of Islam, which every Muslim accepts and is a constant reminder of Faith. It is *la ilaha illa lah* (there is no God but God), and it affirms the unity of the Creator from which everything else flows. The second part of the *shahada* is *Muhammadur Rasulallah* (Muhammad is the Prophet of Allah) whose example we follow. The *Shari'a* evolved from the Qur'an and the *sunnah* (practice) of the Prophet as he interpreted the revelations.

Knowing the Creator is the first step to understanding His creation and the very familiar *Sura Al-Ikhlās* (the chapter on Sincerity) lays down the basis of this understanding –

Say: “He is Allah, Absolute Oneness, Allah, the Everlasting Sustainer of us all. He has not given birth and was not born

And no one is comparable to Him” (112:1–4)

This is an affirmation of *ahad*, that is, the oneness of the Creator and the unity of all creation of which the human race is very much a part. The Qur'an further illuminates *Tawhid* in the context of *khalq* under the following themes:

Rab Al Alamin (The Lord of All Creation) – there is only one real power

“Praise be to Allah, the Lord of all the worlds” (1:1).

Al Khaliq (The Creator) – everything that exists was brought into being by Allah

“He is Allah – the Creator, the Maker, the Giver of Form.

To Him belong the most beautiful names. Everything in the heavens and the Earth glorifies

Him.

He is the Almighty the All-Wise” (59:24).

And –

“He who originates creation and regenerates it and provides for you from out of heaven and Earth” (27:66).

Al Muhit (The Encompasser) – this is the bedrock of the holistic approach in Islam as it affirms the interconnectedness of the natural world.

“What is in the heavens and the Earth belongs to Allah.

Allah encompasses all things” (4:125).

Fitrah – The Creation Principle

The *fitrah* principle describes the origination of the human species within the bosom of the natural world. It is a profound reminder of our place in the natural order. *Fitrah* has been described as the natural state. Some translators of the Qur'an call it the natural pattern, others the original state or pattern, and yet others describe it simply as nature. Some scholars describe *fitrah* as the pure state or the state of infinite goodness and point to the possibility that everything in creation has a potential for goodness, the conscious expression of which rests uniquely with humankind. It is commonly held that the real meaning of The Qur'an in Arabic is untranslatable into any other language, but we may conclude that *fitrah* denotes the original and natural state of purity, which applies to all of creation including the human in its newborn state. The term *fitrah* is a noun derived from the root F T R and occurs once in the Qur'an. It appears in its verb form, *fatarah*, fourteen times. The key verse in The Qur'an in which both the noun and the verb form occur is in *Surah Rum* (the verse on the Romans):

Set yourself firmly towards the Deen [the way, the life transaction],

As a pure natural believer,

Allah's natural pattern on which He made mankind. There is no changing Allah's creation.

That is the true Deen –

But most people do not know it – (30:29).

The part of this verse that concerns us here is the one that reads “Allah's natural pattern on which He made mankind.” Abdalhaqq and Aisha Bewley, the translators of the version the Qur'an used in this entry, render *fitrah* as natural pattern and *fatarah* as made. Here is how two other translators see it: Yusuf Ali: “The nature in which Allah has made mankind.” *Fitrah* is translated here as nature and *fatarah* as made. Arberrey: “Allah's original in which He originated mankind.” *Fitrah* is translated here as original and *fatarah* as originated.

As the translators grapple to convey the meaning of this verse, there is simplicity inherent in this message that conveys two things to us. The first is a sense of where we belong in the pattern of Allah Ta'ala's creation. The human race was originated, indeed like all other sentient beings, in the bosom of creation that Allah Ta'ala originated. Humankind was made part of a vast natural pattern, which cannot be changed. Secondly, it could be said that taken together with the rest of the verses in the Qur'an on creation this lays down the foundation for the deep ecological principles inherent in Din al Islam. An appreciation of this should lead us to addressing the environmental

concerns of today at their roots. The Qur'an comprehensively defines our place and our relationships within this pattern as the following verse further demonstrates –

The creation of the heavens and the Earth is far greater than the creation of mankind. But most of mankind do not know it (40:56).

Muslims start every one of their five daily prayers with this verse acknowledging the Creator –

...I have turned my face to Him

Who brought the heavens and Earth into being [*fatarah*]

A pure natural believer.

I am not one of the mushrikun [*Mushrikun* plural of *Mushrik* – one who ascribes divinity to any thing other than Allah] (6:80).

Mizan – The Balance Principle

Mizan is the principle of the middle path. The natural world, which we are a part of, is held together because it is in *mizan*, a state of dynamic balance. This is another way of saying that the natural order works because it is in submission to the Creator. It is Muslim in the original, primordial sense. In one of its most eloquent and popular passages, the Qur'an describes creation thus –

The All Merciful taught The Qur'an.

He created man and taught him clear expression. The sun and the moon both run with precision.

The stars [the word *najm* in the Qur'an is translated sometimes as herbs or shrubs] and the trees all bow down in prostration.

He created heaven and established the balance, So that you would not transgress the balance. Give just weight – do not skimp in the balance. He laid out the Earth for all living creatures.

In it are fruit and date palm with covered spathes, and grains on leafy stems and fragrant herbs.

So which of your Lord's blessings do you both deny? (55:1–11)

The introductory verses of this *surah* (chapter) remind us of the unique nature of the human species in creation. Our intelligence, the ability to make sense of our surroundings and to express our intentions clearly, is what differentiates us from every other sentient being in the universe. Allah Ta'ala has given us the gift of intellect with reasoning powers that can distinguish right from wrong, good from bad, honesty from dishonesty, conservation from destruction, moderation from greed, purity from pollution and so on.

The sun and the moon, the two objects in the cosmos most closely associated with us, have exacting functions. The stars and the trees bow down in prostration. For the Muslim these verses go beyond the metaphor to the realms of the real. Everything in the universe is in *sujud* (prostration), that is in *Islam* (submission), and that is how

the universe remains in *mizan* (balance). Everything we see around us works because it is in submission to the will of the Creator as these verses further explain –

Do they not see the things Allah has created, Casting their shadows to the right and to the left,

Prostrating themselves before Allah in complete humility?

Everything in the heavens and every creature on the Earth

Prostrates to Allah, as do the angels.

They are not puffed up with pride (16:48–49).

The humbling fact is that we can only look at existence and recognize it in this way because everything is held together for us. However, and paradoxically, we are the only sentient beings in creation who can through the very gift of reasoning choose not to prostrate and destroy everything around us by our presumed cleverness.

He created man from a drop of sperm and yet he is an open challenger (16:4).

As Allah Ta'ala has laid down the Earth for all living creatures, our responsibility lies not in denying His blessings through acts of folly that destroy the environment, but through actively recognizing the order that is around us both for the sake of ourselves and the rest of the natural world.

Khalifa – The Responsibility Principle

This principle establishes our role as the guardians of the natural world. The human race has a special place in Allah Ta'ala's scheme. Having given us the gift of intelligence He has appointed us as His *Khalifa* (viceregent) or His representative on Earth. We are thus required to act as protectors of the environment Allah Ta'ala has placed us in.

It is He who appointed you khalifs on the Earth And raised some of you above others in rank

So He could test you regarding what He has given you.

Your Lord is swift in retribution;

And He is Ever-Forgiving, Most Merciful (6:165).

Although we are equal partners with the rest of the natural world, we have added responsibilities by virtue of the powers of reasoning the Creator has given us. These responsibilities, as the Qur'an points out, are to uphold what is right –

Let there be a community among you who call to the good,

And enjoin the right and forbid the wrong. They are the ones who have success (3:104).

And, in doing so, to show no favors –

You who have *iman* [faith] Be upholders of justice, Bearing witness for Allah alone, Even against yourselves or your parents and relatives.

Whether they are rich or poor, Allah is well able to look after them.

Do not follow your own desires and deviate from the truth.

If you twist and turn away, Allah is aware of what you do (4:134).
And, finally, to compete in doing good –
. . . Had Allah willed, He would have made you a single community, but He wanted to test you regarding what has come to you.

So compete with each other in doing good . . . (5:48).

Everything we see around us is Allah Ta'ala's *n'ihma* (gift) to us. It is, however, a gift with conditions and the Earth is a testing ground for us. The tests are a measure of our *ehsan* (acts of worship) in its broadest sense. In other words, we are to live in a way that is pleasing to Allah, striving in everything we do to maintain the harmony of our inner and outer environments.

Will the reward for doing good be anything other than good?

So which of your Lord's blessings do you both deny? (55:59–60)

As *Khalifa*, we are trustees of Allah Ta'ala's creation –

We offered the trust to the heavens, the Earth and the mountains

But they refused to take it on and shrank from it. But man took it on.

He is indeed wrongdoing and ignorant (33:72).

The Qur'an expresses this responsibility in this form because of its enormity, and our wrongdoing takes many forms –

. . . Eat of their fruits when they bear fruit And pay their due on the day of their harvest, And do not be profligate.

He does not love the profligate (6:142).

And –

You who have *iman* [faith] Do not make *haram* [unlawful]

The good things Allah has made *halal* [lawful] for you,

And do not overstep the limits.

Allah does not love people who overstep the limits (5:87).

There is however a way out of our conundrum –

Corruption has appeared in both land and sea Because of what peoples' own hands have brought about so that they may taste something of what they have done so that hopefully they will turn back (30:40).

Institutions and Accountability

The Qur'an provides the moral foundation for human interaction with the natural world. As the *Shari'a* evolved, it manifested itself into a range of rules and institutions, as an expression of life in all its manifestations embodying what is truly holistic. Taken as a whole as it was intended to be, caring for Planet Earth, our only home, was integrated within the framework of the Islamic value system. This was an everyday concern for the Muslim, as the Qur'an draws attention to in the verses, "We have not omitted anything from the Book" (6:39) and "He said 'Our Lord is He Who gives each thing its created form and then guides it' "(20:49).

What emerged was a threefold process, which we may classify as legislative principles, institutions, and enforcement. The Qur'an laid down the basis from which the *Shari'a* evolved, which in turn determined the nature of *fiqh* (the science of the application of the *Shari'a*) and the subsequent establishment of relevant institutions. The body of the *Shari'a* allows us to deduce three general principles as follows –

The elements that compose the natural world are common property

The right to benefit from natural resources is a right held in common

There shall be no damage or infliction of damage bearing in mind future users.

Muslim legalists have over the centuries worked out both principles and structures to give expression to this. These principles concern –

Individual rights

Obligations and responsibilities individuals owe to the community

Accountability

Benefits accruing to users from renewable resources held in common

Penalties for improper use of natural resources.

Two of the most important institutions to emerge for this framework are the *hima* and the *harim*. The former lends itself to the setting up of a whole range of conservation zones, which may be established by a community or the state for the purposes of protecting land or species of flora and fauna. The latter permits the establishment of inviolable zones, not always but usually, for the protection of watercourses. People have a right in the *Shari'a* to create such zones managed by themselves and where use is severely restricted.

Having identified the ethical base and institutions, the third element that was needed to complete the picture was a system of accountability. From its earliest years the Islamic state established an agency known as the *hisba*, whose specific task it was to protect the people through promoting the establishment of good and forbidding wrongdoing (discussed earlier). A learned jurist (*muhtasib*) headed this agency, and he functioned like the chief inspector of weights and measures and chief public health officer rolled into one. He was also responsible among other similar duties for the proper functioning of the *hima* and *harim* zones and acted – to use today's parlance – as an environmental inspector.

Muslims thus have a fully developed system of environmental protection in their hands but its implementation in the form described above would prove to be problematic in a context in which the secular paradigm is dominant and economic development receives the highest priority. The Islamic Foundation for Ecology and Environmental Sciences (IFEES) is conducting experiments in various parts of the world where compromises are being sought between state machinery and *Shari'a* institutions to achieve the best possible conservation outcomes. The most advanced project in this sense, at the time of writing, is the Misali Island Marine Conservation Project located in Zanzibar, Tanzania. There is much to be drawn from the *Shari'a* in extending and improving this knowledge base, and it is an endeavor that Muslims should now undertake with increasing urgency.

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See also: Islam; Islamic Foundation for Ecology and Environmental Sciences; Tahwid (Oneness of God).

Islamic Foundation for Ecology and Environmental Sciences

The Islamic Foundation for Ecology and Environmental Sciences (IFEES) based in Birmingham, England emerged as a result of the work begun by Fazlun Khalid who is its founder and director. His interest in reviving Islamic environmental practice led him in the mid-1980s to persuade a group of his close associates to join him in setting up an Islamic eco-community. It was officially recognized as a charity in 1994 and by the early twentieth century the IFEES had become an internationally recognized body articulating the Islamic environmental position and practice.

The IFEES is a multidimensional organization and its objectives include:

- Setting up a center for researching Islamic conservation practice.
- Compiling a database and acting as an information exchange on environmental affairs.
- Producing teaching materials, books and journals.
- Training on practical and theoretical subjects. Training will take place by means of weekend courses and medium and long-term programs.

Training modules under development are based on the principles of the *Shari'a*. A range of subjects covering the environmental sciences are also taught. Projects include:

- The setting up of an experimental project focusing on land use and organic farming. Practical training will include sustainable land resource management and non-industrial, traditional farming techniques as a practical demonstration of self-sufficiency. IFEES will be drawing on the expertise already developed in the field.
- Developing alternative low-energy, low-cost technology. IFEES will function as a demonstration center for such technology and will participate in its promotion.
- Acting as a consultancy to various international NGOs, funding agencies and academic bodies.

Among its distinctive features are:

- An emphasis on resolving current concerns through the application of the *Shari'a*.
- Developing projects worldwide that give expression to specifically Islamic conservation practice.

Our program is designed to activate those properties inherent in Islam capable of remedying the socioecological imbalances of our time. A dedicated core of people with a range of expertise and skills (administrative, research, technical, agricultural, crafts and training) will work together as a community with a commitment to the goals outlined.

IFEES networks worldwide with NGOs, international organizations, academic bodies and grassroots organizations and invites collaboration from organizations and individuals from all persuasions who are also dedicated to the maintenance of the Earth as a healthy habitat for future generations of humankind as well as other living beings.

Fazlun Khalid

See also: Islamic Basis for Environmental Protection

Islamic Foundation for Science and Environment

Islamic Foundation for Science and Environment (IFSE) is a voluntary nonprofit organization that was established in 1994 mainly to integrate Muslims with the scientific movement and to explain and clarify the Islamic point of view *vis-à-vis* science and environment. It has been working with a two-pronged strategy.

First, it spreads scientific and environment-related awareness among Muslim masses of this sub-continent, especially with regard to pollution, environmental degradation and resource management. (Whenever reference is needed, students are exposed to theories of evolution including Darwinism and Intelligent Design.) Since 1994 it has published a popular science and environment monthly called *Urdu Science*. Its main target readership are students and graduates of *Deenee Madaaris* (Theology Schools).

Islamic Law

Secondly, it is trying to emphasize the need to interpret the Qur'an in today's context and in its right perspective, to understand what it says about scientific and learning pursuits, conservation of resources and the environment, and how a Model Muslim Society situated within the broader, pluralistic Indian society could be established to serve and guide humanity.

The Foundation has established a good rapport with the people of the *Madarsa* system. A meaningful dialogue has been initiated with them and a short-term orientation course for “*Ulemas*” (Religious Scholars) to make them aware of the present-day need to conserve resources and protect the environment has been proposed. An effort has been made to convince them to include these issues in their Friday sermons delivered every week to large gatherings, practically in every mosque.

The Foundation has organized lectures on relevant topics at various *Madarsas* and schools. Occasionally book exhibitions and other outreach programs are also arranged in different schools and *Madarsas*. School/*Madarsa* students are encouraged to write on relevant topics of science/environment and annual awards/cash prizes are given to the best three entries from either stream (i.e., *Madarsa* stream and School stream). There is a regular monthly Question and Answer column in the magazine where readers are free to ask any question on science/ environment or their interaction or interpretation in Islam. The best question is given a cash prize every month. Many *Madarsa* students get this prize, which shows their indulgence.

The Foundation is official Consultant to the “Islamic *Fiqh* Academy” (Islamic Jurisprudence Academy) on matters of Science and Environment.

Another plan is to devise and introduce a short course for modern-education-system schools whereby students would be taught Qur'anic principles about: 1) nature, its resources and their conservation, 2) the role of humankind on this planet, 3) the purpose of seeking knowledge, understanding the working of nature and growing in tandem with it, and 4) serving humanity with acquired knowledge – putting others' interest before self-interest – a Qur'anic model of selflessness and serving society.

The Foundation is developing linkages with other societies and religious groups to explain and clarify the Qur'anic teachings about development, coexistence with nature, and equity and distribution of resources for the ultimate good of humanity irrespective of caste or color, north or south.

Mohammad Aslam Parvaiz

See also: Islam on Man and Nature.

Islamic law (*Shari'a*) occupies a central position in both the ritual and public lives of Muslims such that they consider a good life to be one that is lived in accordance with the provisions of *Shari'a*. Therefore, Muslims of every time and clime strive, as far as circumstances permit, to ensure that their activities comport with *Shari'a* provisions. The sources of Islamic law regarding protection of the environment seek to fulfill *Shari'a's* role of providing guidance to the right path, and in this context, to the path of sustainability and harmony between all life forms through ascribing intrinsic value to every form of matter on Earth. Islam's role in engendering consciousness about nature in particular, and cosmic beauty and order in general, cannot be overemphasized. Pondering about nature is an important aspect of Islam, and such contemplation breeds love for and circumspection toward the natural environment.

A fundamental concept from which the law flows is that every organism on Earth partakes in God's creation, and as such deserves love and respect. A survey of Islam's tradition and history reveals outward manifestations of love and respect for all of God's creatures, such that Prophet Muhammad said of a mountain: "It is a mountain that loves us and we love it" [*See* Muslim Ibn al-Hajjah, *Sahih Muslim*, in AL-KUTUB AL-SITTAH § 3371 (Saleh A. Al-Sheik ed., 2000)]. God's creatures are interconnected and united under one source of order according to which harm to one creature ultimately affects others. Yet, Islam is neither associated with historical profanation, nor the contemporary sacralization, of nature.

Generally, environmental rules are dictated by the manner in which Islam constructs the human–nature relationship. Accordingly, the ultimate ownership of all organisms inheres in God, which supercedes apparent human proprietorship, which is protected and enforced under the law *vis-à-vis* competing human claims. This ownership confers the right of beneficial use to fulfill the material and spiritual needs of humans, but it does not extend to an unquestionable power to maintain, spare, or destroy these elements at will.

Flowing from this posture is the belief that most organisms are subject to common human ownership under the law and their appropriation is deemed to be for communal benefit. Water, air, the wilderness, and other natural resources such as oil and gas, are all in the public domain. Regulation of human behavior with respect to these resources is dictated by considerations focused on preventing harm to humans and nonhumans alike. The principle of harm prevention limits the exercise of otherwise justifiable rights where such exercise inflicts unacceptable damage.

Although Islamic law acknowledges the primacy of humankind with its attendant right use Earth resources, such right is limited by the status of humankind as vicegerent or trustee – a status based on humankind's material/spiritual make-up as well as imbued intellect; and as such, we are accountable and owe a duty to maintain *mizan*, the balance of all life on Earth. The Qur'an states: "And the Earth We have spread out (like carpet); set thereon mountains firm and immovable; and produced therein all kinds of things in due balance" (Qur'an 15:19). It states further: "And the Firmament has He raised high, and He has set up the Balance (of Justice), In order that ye may

not transgress (due) balance” (Qur’an 55:7–8). The Prophet also said in this regard: “The world is green and beautiful, and God has appointed you his stewards over it; He will see what you will do” [See Muslim Ibn al-Hajjah, *Sahih Muslim*, in AL-KUTUB AL-SITTAH § 6948 (Saleh A. Al-Sheik ed., 2000)].

Norms of Islamic law regulating the human/ environment relationship therefore draw from the trusteeship of humankind and its responsibility to maintain the Earth’s ecological balance. Preserving animal life, limiting the justification for killing wildlife to only nourishment as well as placing restrictions on the genre and mode of the killing, preventing harm to all life forms except when human life is exposed to immediate threat, even then limiting the elimination of the threat to the extent of force necessary to remove the danger, and providing site-specific mechanisms are all examples of traditional Islamic norms implementing its conception of the human/ environment relationship toward maintaining the Earth’s balance.

The site-specific rules applicable to inviolable (or *haram*) regions further illustrate the prescribed human– environment behavior. In these regions, all persons are subject to civil and criminal penalties for disturbing, much less killing, any wildlife from its chosen habitat in the regions, or for cutting leaves or branches of naturally grown trees, even if they happen to be thorns.

The law denounces intemperate use of resources, such as water, even if one is by a flowing river and performing ritual washing. Consumption of resources that do not satisfy a legally identified function or need is considered wastage; as such the Prophet prohibited riding on the fur of tigers. We may note the implicit postulation of Islamic law regarding maintenance of a pristine environment (*fitrah*) and harmony among species. There is, therefore, a considerable challenge when the law tries to redress and rehabilitate a global environment that is being severely degraded. One noticeable challenge and opportunity for further development of the law is the lack of extended protection of marine life on an explicit basis comparable to that which is guaranteed terrestrial wilderness.

However, the implications of these basic provisions for the development of modern environmental management is that they offer a new foundation for opening human awareness of the need for a wider dialogue on the environmental problem. Islamic law seeks to prevent harm not only to humans, but also to all other organisms because those organisms participate in declaring the glory of their Creator and aspire, like humans, to fulfill a certain spiritual function even as humans “understand not how they declare His glory” (Qur’an 17:44).

This non-anthropocentric posture justifying the independent existence of other organisms apart from their apparent utility to humans presents a functional mechanism beyond moral suasion in that they are designed to prevent harm not only to the present generation of human beings, but also to future ones and to other life forms on Earth. Islamic law is amenable to such a comprehensive framework since most mediums and mineral resources involved in polluting the environment are largely managed for communal or state benefit, and are therefore subject to public-oriented regulation with

little challenge posed by private interests. The law does not make waste, excessive consumption or pollution an extension of property rights. Rather, it treats them as part of a notional responsibility toward nature.

Extending the prohibition of harm to all creatures rather than to humans alone does away with humanism and other limitations that have influenced the determination of environmental problems such as unsustainable consumption patterns, population growth, and warfare as based merely on costs and short-term benefits. Muslim communities can utilize Islamic law in formulating, implementing, and redirecting environmental policies in their domestic programs on the one hand; and on the other, for guiding their positions toward a nonanthropocentric agenda in negotiating international environmental agreements. Environmental programs of some Muslim states are beginning to reflect Islamic law principles, as those states have hinged their biodiversity programs and various Biodiversity Country Reports submitted to the relevant U.N. body on the divine order of the Prophet Noah to protect pairs of every species from peril. Scores of environmental statutes of these countries also proceed from the Islamic concept of harm prevention as explained above. For example, article 50 of the constitution of the Islamic Republic of Iran limits and forbids all activities, especially those in the economic sphere, which may necessitate “damage to the environment.” The challenge for Muslims is to cooperate with others in devising means of operating their economic activities in harmony with other environmental postulates of Islamic law.

Ali Ahmad

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See also: Islam; Islam and Eco-Justice; Islam on Man and Nature; Islamic Basis for Environmental Protection; Muhammad, The Prophet of Islam; The Qur'an.

Israel and Environmentalism

Environmental History Prior to the Foundation of Modern Israel

Efforts to protect the land of Israel or the Holy Land from environmental damage are recent. Since the advent of the Roman conquest and the destruction of the second Jewish commonwealth, evidence exists of steady land degradation, overgrazing and deforestation. Yet, none of the many occupying powers who governed the land seems to have considered environmental issues meaningfully during their rule prior to the twentieth century. Rather, the ecological deterioration was frequently exacerbated by policies that sought to maximize tax revenues from the largely agrarian population. Environmental conditions in Palestine worsened noticeably during World War I when the Ottoman armies devastated forests in their war efforts. For instance, one third of the olive trees in Palestine were destroyed in order to produce the wood necessary to run and extend the railways.

The British Mandate, which began its rule during the 1920s, implemented a limited policy of conservation. Laws were passed creating forest reserves and, for the first time, hunting ordinances were introduced, although poorly enforced. While several species of large animals disappeared from Palestine during the first half of the twentieth century (e.g., the Syrian bear, the crocodile, the cheetah), beyond biodiversity damage, environmental impacts were minimal. Indeed, in many ways the Palestinian environment may have improved, with malaria essentially eradicated, soil conservation measures encouraged and rudimentary urban sewage systems installed.

Nevertheless, during the three decades of British control, the antecedents to modern pollution problems emerged. The population swelled from some 400,000 residents (at the turn of the century) to 1.8 million, an extensive road infrastructure introduced automobiles to the northern half of the land, and heavy industry was introduced, as was the mining of the Dead Sea. During this period, with the exception of the admonitions of a few bold botanists and zoologists, practically no organized protest over the environmental problems existed. The chief Rabbi of Palestine, Rabbi Abraham Isaac Kook consistently expressed concern for the natural world, but his efforts were limited to the theological realm and did not address the actual environmental policies of the Mandate government.

The Establishment of Israel, Rapid Development and Nature Protection

Subsequent to declaring its independence as a Jewish state, Israel began aggressive efforts to encourage “the ingathering of the exiles,” absorbing hundreds of thousands of immigrants. To meet the needs of a growing population, the young country expanded its agricultural production as well as afforestation efforts dramatically. An increasing percentage of the population, however, settled in cities and towns, with industry and services as the major source of employment.

It was during this period that the Jewish National Fund (*Keren Kayemet L'Yisrael*), a corporation owned by the World Zionist Organization, changed its institutional focus from land acquisition to forestry. During most of the 1950s, the JNF planted some six million trees a year, six times more than foresters had planted during the British mandate. The trees planted were primarily conifers, in particular the Aleppo (Jerusalem) pine tree, that had proven to be a very fast-growing and tenacious species, given the poor soil and steep slopes where they were planted. While there were initial efforts to create a local timber industry, the conifers were not sufficiently productive. Debates regarding the indigenoussness of this species still continue. What is no longer in doubt is the vulnerability of this species to an aphid that devastated vast swaths of the Jewish National Fund forests. This, along with a growing ecological sensitivity within the JNF, has led to a more recent emphasis on diversity of species with a corresponding growth in traditional Mediterranean forests. In retrospect, the results are dramatic. After their almost complete disappearance, today, roughly 10 percent of Israel's lands are designated as forests under the National Master Plan, largely due to JNF efforts, and areas that had previously been considered to be semi-arid deserts are now forests that provide recreational benefits.

Ironically, agricultural expansion and the JNF's plan to drain the Huleh swamp to that end were also the catalyst for the creation of the Society for Protection of Nature in Israel (SPNI), the first and still the largest environmental organization in Israel. This unique wetlands ecosystem, located at the northern tip of Israel, was considered to be a source of malaria and potentially arable. When the protests of scientists and amateur nature-lovers failed to prevent the draining of the swamp, in 1953 with the leadership of Professor Heinrich Mendelssohn and Amotz Zahavi, this group formally launched the SPNI. Its original mission involved nature protection and soon thereafter education. While its involvement in enforcing hunting laws by fielding a force of amateur rangers came to a halt with the establishment of Israel's Nature Reserve Authority, the SPNI continued to be a leading force in environmental education through its extensive field school network, as well as a high-profile advocate for conservation, primarily through monitoring the planning process.

Like most of the population in Israel at the time, the new activists were decidedly secular in their outlook, espousing at once a Romantic and Zionist ideology toward

nature. Yet, their affiliation with the historic biblical aspects of the Holy Land was pronounced and Jewish heritage became an integral part of the SPNI educational message. Hundreds of thousands of school children pass through this informal program of hiking, taxonomy and reference to the long history of the land, in particular the natural history that appears in the Bible and the Talmud.

After considerable lobbying, the SPNI helped pass legislation creating a Nature Reserve Authority in 1963 that was independent from the parallel National Parks Authority whose mandate included development of parks, primarily of historic importance. Israel's biological diversity is remarkable, largely as a result of migrations and mixing from the three adjoining continents. The country is home to 2600 plant species (130 endemic to Israel) and 700 vertebrates. Under the leadership of former General Avram Yaffe, the Authority set out on an ambitious program to protect the country's dwindling natural treasures through the declaration of nature reserves and the preservation of "Protected Natural Assets." Today, some 25 percent of the lands in Israel have been earmarked for preservation and protection of ecological systems in the Reserve system. The tide of extinctions within Israel has largely been halted by the enforcement of hunting laws and the preservation of habitat. Recently, there has been concern expressed that present patterns of urban sprawl and development may threaten some of the impressive conservation gains.

Pollution in the Holy Land

Israel's pollution profile has not enjoyed such progress. With a population growth of roughly one million per decade, the northern half of the country, in which over 80 percent of the residents live, has become one of the most crowded regions in the world. Almost all environmental trends, with the exception of oil/tar pollution on the beaches and concentrations of lead in ambient air, have become worse or stayed the same. Air pollution in the major cities, which was primarily caused by factories during the 1960s, 1970s and 1980s, is now produced largely by vehicle exhaust and has become increasingly acute. Water quality in the country's two major aquifers has suffered and attempts to restore the country's streams, which primarily serve as conduits for sewage effluents, have not been effective.

A Ministry of Environment was established in 1988, replacing a smaller and poorly funded Environmental Protection Service at the Interior Ministry. The Ministry remains small (less than five hundred workers) and has limited authority in critical areas such as pesticide registration, drinking water, and auto-emission standard setting and oversight. Politically, the position of Environmental Minister has had low prestige, with some eight Ministers filling the position during its first fourteen years. Yet, the Ministry's competent professional staff boast impressive achievements in several important areas.

In response to the severity of the environmental insults, a virtual explosion of new environmental organizations has emerged at both the local and national level. Life and Environment, the umbrella group for Israel's environmental organizations, has around eighty member organizations. *Malraz*, the Council for Prevention of Noise and Pollution, established during the 1960s, was the first legal advocacy group in Israel, providing free legal assistance on a range of nuisance cases. While dormant during much of the 1990s, the organization was revitalized in 2001 and operates a mobile inspection van that has been authorized to stop cars to check their emissions levels. Among the more influential of the new organizations is *Adam Teva V'Din*, the Israel Union for Environmental Defense, established as a public interest law group in 1990. The Tel Aviv-based organization boasts a large staff of lawyers and scientists that have successfully litigated numerous cases involving air quality, water quality and physical planning. Environmental organizations specialize in Israel today and focus on transportation, radiation, water quality and of course education. Almost every town and hamlet has either a formal or informal environmental activist group, with major cities sporting numerous initiatives, like the forty organizations that make up the "Sustainable Jerusalem" coalition.

Since 1998, Green Parties have begun to field candidates in Municipal and National elections. While public support has been insufficient for representation in Israel's Parliamentary elections, elections in Haifa and Tel Aviv have produced surprising success. Indeed, local Green party leader Shmuel Gilbert was part of a winning coalition in 2003 that lifted him into the position of Deputy mayor and chairman of the Haifa Planning and Building Committee. Voters for Green parties, were not, however, religiously motivated and came generally from among the liberal, highly secular public. (Typically, religious Israelis vote for parties affiliated with their ethnic or chosen theological inclination.)

Education in Israel is divided up according to religious affiliation so it is difficult to generalize about the interplay between religion and the environment in this context. The predominant secular educational program has expanded its environmental offerings, with many high schools offering advanced programs and national matriculation exams also offered on the subject. Religious themes, however, are not part of this curriculum. While Bible studies are mandatory from second grade, evolution is taught in biology classes as a matter of fact, with biblical descriptions of creation left to the realm of national mythology. Religious Jewish (as well as Moslem) education takes a more traditional track. Recently, some ecological materials have been integrated into religious educational programs and some institutions, such as the high school Yeshiva (rabbinic training program) in Mitzpeh Ramon, have made environmental studies a sub-specialty.

Religion and the Environmental Movement in Israel

Leaders of Israel's environmental organizations are primarily secular and non-denominational in their personal affiliation. Indeed, until recently, the religious communities in Israel were completely marginal in activist activities. While some prominent environmentalists, such as ornithologist and former SPNI Director Yossi Leshem are Orthodox Jews, they have not tried to make their faith an important part of the organizations they run. Environmental groups most often reflect the prevailing ideologies of the Israeli environmental community, which continues to be a largely Romantic and occasionally Rationalist philosophical perspective that often contains some mystical elements, based on traditional Zionist adulation of the natural world in Israel. Indeed, sociologist Oz Almog has gone as far as to characterize the traditional perspective among Israel's first generation of Sabras (native-born Israeli Jews) as "pantheistic," where nature, rather than the traditional Jewish God, became the subject of worship. Nature was among the most "prestigious" of the compulsory subjects of study, hiking became a national pastime (with the Bible providing the most common travel book), and eulogies for fallen soldiers focused on their competence in field biology rather than their military prowess.

Israel's environmental movement has been strongly influenced by Jewish immigrants, who assumed leading roles in environmental organizations as well as in academia. Immigrants from English-speaking countries have been extremely influential, with several new groups established and run by this cohort. In addition, Jewish foundations, based in the U.S. and Europe, have since the 1990s offered prodigious funding to Israel's environmental movement, with most environmental organizations enjoying better support from Jewish communities outside Israel than from local philanthropists. Yet, Jewish environmentalists living in the Diaspora have not yet extended a meaningful influence on Israeli environmental thinking and remain unknown to their Israeli coreligionists for the most part.

Recently, there has been a move to integrate Israel's religious Jewish community into the environmental movement as well as consciously to integrate Jewish traditional values of stewardship into the local green ideology. The Heschel Center for Environmental Learning and Leadership, an environmental educational and sustainability think-tank based in Tel Aviv, founded *L'avdo ul'shamro* (To Work and To Protect) based on the directive in Genesis regarding the Garden of Eden, an initiative that brings together religious Jews with pro-environmental leanings. In 2002, Life and Environment sponsored a teach-in day in Israel's Parliament Knesset where rabbis (including Chief Sephardic Rabbi, Bakshi Doron) presented pro-environmental Jewish texts and teachings. When ultra-orthodox rabbi and politician Moshe Gafni became chairman of the Knesset Interior and Environment Committee, he became one of the most environmentally active Parliamentarians, winning an award from greens for his work and even making Jewish

traditional commitment to environmental protection an election theme for his party. Several Orthodox and Ultra-orthodox communities have begun to field environmental interest groups, like the Committee for Quality of Life in Har Nof that has sponsored a range of initiatives to protect Jerusalem and even to recycle the water from *mikvehs*, the traditional Jewish ritual baths. As the word “water” appears in the Old Testament 580 times, as well as half a dozen different Hebrew words for precipitation-forms, rain-fed ritual baths seem to provide a natural bridge between environmental concerns and the spiritual routine of traditionally Jewish Israelis.

Involvement of the Moslem and Christian communities in Israel’s mainstream environmental movement remains fairly minimal. The few Arab organizations that are active environmentally, like the Galilee Society, and the Arab National Society for Health Services and Research, are decidedly secular in their approach and their leadership contains both Moslems and Arabs. The Interreligious Coordinating Council of Israel (ICCI), a Jerusalem-based, interfaith coalition of seventy organizations, attempts to bring a range of religious persuasions and leaders together to work on environmental issues. In 2001 it began sponsoring an annual conference on Religion and the

Environment, along with the Jerusalem Institute. To date the event has failed to attract mainstream Israeli religious figures and institutions as participants. Perhaps the most influential religious influence on Israel’s environment can be found among Haifa’s Bahá’í community. Their recently expanded gardens have transformed the center of this scenic city, with sculpted terraces providing tranquil and aesthetic open spaces in the otherwise conventional urban setting.

Most of the cities that are deemed “holy” to the world’s monotheistic religions suffer from the environmental pathologies that characterize the rest of Israel. Hebron, Bethlehem, and East Jerusalem have inadequate sewage systems. Nazareth suffers from air pollution from chronic traffic congestion, with its municipal environmental protection unit closed for lack of funds. An improved quality of water in the Sea of Galilee is the source of some encouragement, which is the result of the concerted efforts of the Kinneret Administration, a local agency that has had success at reducing non-point and point source discharges into the world’s lowest freshwater lake.

Zionism’s insistence on the reemergence of a Jewish state in the Land of Israel (and rejection of a multi-cultural model) and the Arab unwillingness to tolerate such an entity has produced a cascade of violent events. The environment itself has only been moderately affected. While trees have been uprooted by soldiers in attempts to reduce sniping, and segmentation of habitats has been caused by border fences or bypass roads, these impacts may be largely reversible. Paradoxically, there are also unquestionable ecological benefits associated with the enmity, such as de facto no-man’s-land preserve areas typified by the Jordan River valley or the Lebanon border. Environmentalists certainly hope that among the confidence-building measures necessary to end the conflict there will be common environmental initiatives such as binational and multinational nature reserves, transboundary coordinated air and water management, pesticide-reduction policies, and joint anti-desertification measures. Religion has

always had a central role in the now century-long Arab–Israeli conflict, and the environment may provide some common ground for diffusing these divisions, producing a more peaceful and sustainable future.

Alon Tal

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See also: Bahá'í Faith; Gordon, Aharon David; Gush Emunim; Hasidism and Nature Mysticism; Hebrew Bible; Jewish Law and Genetic Engineering; Jewish Law and Vegetarianism; Jewish Environmentalism in North America; Jewish Law and Environmental Protection; Judaism; Kabbalah and Eco-theology.

Izzi Dien, Mawil Y. (1948–)

Among the very few contemporary Islamic thinkers to make the environment a central concern, Mawil Y. Izzi Dien ('Izz al-Din, aka Izzi Deen; b. Baghdad, Iraq) has been one of the most prominent. Izzi Dien was trained in Islamic Law at Baghdad and Manchester Universities. In 1983, while on the Faculty of Law at King Abdul Aziz University in Jeddah, Saudi Arabia, Izzi Dien helped formulate the first contemporary statement on conservation from an Islamic perspective, a paper which was published by the International Union for the Conservation of Nature in English, French, and Arabic. As an advisor to the Saudi government, he helped establish the legal and philosophical framework for that country's Meteorology and Environmental Protection Administration during the 1980s.

Izzi Dien's 1990 essay, "Islamic Environmental Ethics, Law and Society," as a result of being reprinted in numerous anthologies throughout the 1990s, came to be seen by many Western environmentalists as representing the normative Islamic view. In this essay, as in his later book-length treatment published in 2000, Izzi Dien emphasizes the moral obligations which Islam places upon humans, focusing on those aspects of the classical legal tradition of Islam and its sources in the Qur'an and *hadith* which apply to the management and distribution of natural resources, especially land and water. In particular he cites the legal principles of *hima* (protected areas) and *ihya al-mawat* (bringing to life of dead lands) in terms of their applicability in Muslim societies today.

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See also: Islam; Islam and Eco-Justice; Islam and Environmental Ethics.

A critique of his ideas & actions.



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