The Evolution of Despair

Robert Wright

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"[I] attribute the social and psychological problems of modern society to the fact that society requires people to live under conditions radically different from those under which the human race evolved ..." –THE UNABOMBER

There's a little bit of the unabomber in most of us. We may not share his approach to airing a grievance, but the grievance itself feels familiar. In the recently released excerpts of his still unpublished 35,000-word essay, the serial bomber complains that the modern world, for all its technological marvels, can be an uncomfortable, "unfulfilling" place to live. It makes us behave in ways "remote from the natural pattern of human behavior." Amen.VCRs and microwave ovens have their virtues, but in the everyday course of our highly efficient lives, there are times when something seems deeply amiss. Whether burdened by an overwhelming flurry of daily commitments or stifled by a sense of social isolation (or, oddly, both); whether mired for hours in a sense of life's pointlessness or beset for days by unresolved anxiety; whether deprived by long workweeks from quality time with offspring or drowning in quantity time with them–whatever the source of stress, we at times get the feeling that modern life isn't what we were designed for.

And it isn't. The human mind–our emotions, our wants, our needs–evolved in an environment lacking, for example, cellular phones. And, for that matter, regular phones, telegraphs and even hieroglyphs–and cars, railroads and chariots. This much is fairly obvious and, indeed, is a theme going back at least to Freud's Civilization and Its Discontents. But the analysis rarely gets past the obvious; when it does, it sometimes veers toward the dubious. Freud's ideas about the evolutionary history of our species are now considered–to put it charitably–dated. He hypothesized, for example, that our ancestors lived in a "primal horde" run by an autocratic male until one day a bunch of his sons rose up, murdered him and ate his flesh–a rebellion that not only miraculously inaugurated religion but somehow left a residue of guilt in all subsequent descendants, including us. Any questions?

A small but growing group of scholars–evolutionary psychologists–are trying to do better. With a method less fanciful than Freud's, they're beginning to sketch the contours of the human mind as designed by natural selection. Some of them even anticipate the coming of a field called "mismatch theory," which would study maladies resulting from contrasts between the modern environment and the "ancestral environment," the one we were designed for. There's no shortage of such maladies to study. Rates of depression have been doubling in some industrial countries roughly every 10 years. Suicide is the second most common cause of death among young adults in North America, after car wrecks. Fifteen percent of Americans have had a clinical anxiety disorder. And, pathological, even murderous alienation is a hallmark of our time. In that sense, the Unabomber is Exhibit A in his own argument.

Evolutionary psychology is a long way from explaining all this with precision, but it is already shedding enough light to challenge some conventional wisdom. It suggests, for example, that the conservative nostalgia for the nuclear family of the 1950s is in

some ways misguided–that the household of Ozzie and Harriet is hardly a "natural" and healthful living arrangement, especially for wives. Moreover, the bygone American lifestyles that do look fairly natural in light of evolutionary psychology appear to have been eroded largely by capitalism–another challenge to conservative orthodoxy. Perhaps the biggest surprise from evolutionary psychology is its depiction of the "animal" in us. Freud, and various thinkers since, saw "civilization" as an oppressive force that thwarts basic animal urges such as lust and aggression, transmuting them into psychopathology. But evolutionary psychology suggests that a larger threat to mental health may be the way civilization thwarts civility. There is a kinder, gentler side of human nature, and it seems increasingly to be a victim of repression.

The exact series of social contexts that shaped the human mind over the past couple of million years is, of course, lost in the mists of prehistory. In trying to reconstruct the "ancestral environment," evolutionary psychologists analyze the nearest approximations available–the sort of technologically primitive societies that the Una bomber extols. The most prized examples are the various hunter-gatherer societies that anthropologists have studied this century, such as the Ainu of Japan, the !Kung San of southern Africa and the Ache of South America. Also valuable are societies with primitive agriculture in the few cases where–as with some Yanomamo villages in Venezuela–they lack the contaminating contact with moderners that reduces the anthropological value of some hunter-gatherer societies.

None of these societies is Nirvana. Indeed, the anthropological record provides little support for Jean-Jacques Rousseau's notion of the "noble savage" and rather more for Thomas Hobbes' assertion that life for our distant ancestors was "nasty, brutish, and short." The anthropologist Napoleon Chagnon has written of his first encounter with the Yanomamo: "The excitement of meeting my first Indians was almost unbearable as I duck-waddled through the low passage into the village clearing." Then "I looked up and gasped when I saw a dozen burly, naked, filthy, hideous men staring at us down the shafts of their drawn arrows!" It turned out that Chagnon "had arrived just after a serious fight. Seven women had been abducted the day before by a neighboring group, and the local men and their guests had just that morning recovered five of them in a brutal club fight." The men were vigilantly awaiting retaliation when Chagnon popped in for a chat.

In addition to the unsettling threat of mano-a-mano violence, the ancestral environment featured periodic starvation, incurable disease and the prospect of being eaten by a beast. Such inconveniences of primitive life have recently been used to dismiss the Unabomber's agenda. The historian of science Daniel Kevles, writing in the New Yorker, observes how coarse the "preindustrial past" looks, once "stripped of the gauzy romanticism of myth." Regarding the Unabomber's apparent aim of reversing technological history and somehow transporting our species back toward a more primitive age, Kevles declares, "Most of us don't want to live in a society like that."

Quite so. Though evolutionary psychologists would love somehow to visit the ancestral environment, few would buy a one-way ticket. Still, to say we wouldn't want

to live in our primitive past isn't to say we can't learn from it. It is, after all, the world in which our currently malfunctioning minds were designed to work like a Swiss watch. And to say we'll decline the Unabomber's invitation somehow to turn the tide of technological history isn't to say technology doesn't have its dark side. We don't have to slavishly emulate, say, the Old Order Amish, who use no cars, electricity or alcohol; but we can profitably ask why it is that they suffer depression at less than one-fifth the rate of people in nearby Baltimore.

The barbaric violence Chagnon documented is in some ways misleading. Though strife does pervade primitive societies, much of the striving is subtler than a club fight. Our ancestors, it seems, competed for mates with guile and hard work. They competed for social status with combative wordplay and social politicking. And this competition, however subtle, had Darwinian consequences. Anthropologists have shown, for example, that hunter-gatherer males successful in status competition have better luck in mating and thus getting genes into the next generation.

And getting genes into the next generation was, for better or worse, the criterion by which the human mind was designed. Mental traits conducive to genetic proliferation are the traits that survived. They are what constitute our minds today; they are us, we are designed to steer genes through a technologically primitive social structure. The good news is that doing this job entailed some quite pleasant feelings. Because social cooperation improves the chances of survival, natural selection imbued our minds with an infrastructure for friendship, including affection, gratitude and trust. (In technical terms, this is the machinery for "reciprocal altruism.") And the fact that offspring carry our genes into posterity accounts for the immense joy of parental love.

Still, there is always a flip side. People have enemies–social rivals–as well as friends, feel resentful as well as grateful, feel nervously suspicious as well as trusting. Their children, being genetic conduits, can make them inordinately proud but also inordinately disappointed, angry or anxious. People feel the thrill of victory but also the agony of defeat, not to mention pregame jitters. According to evolutionary psychology, such unpleasant feelings are with us today because they helped our ancestors get genes into the next generation. Anxiety goaded them into keeping their children out of harm's way or adding to food stocks even amid plenty. Sadness or dejection–after a high-profile social failure, say–led to soul-searching that might discourage repeating the behavior that led to the failure. ("Maybe flirting with the wives of men larger than me isn't a good idea.") The past usefulness of unpleasant feelings is the reason periodic unhappiness is a natural condition, found in every culture, impossible to escape.

What isn't natural is going crazy–for sadness to linger on into debilitating depression, for anxiety to grow chronic and paralyzing. These are largely diseases of modernity. When researchers examined rural villagers in Samoa, they discovered what were by Western standards extraordinarily low levels of cortisol, a biochemical by-product of anxiety. And when a Western anthropologist tried to study depression among the Kaluli of New Guinea, he couldn't find any.

One thing that helps turn the perfectly natural feeling of sadness or dejection into the pathology known as depression is social isolation. Today one-fourth of American households consist of a single person. That's up from 8% in 1940–and, apparently, from roughly zero percent in the ancestral environment. Hunter-gatherer societies, for all their diversity, typically feature intimacy and stability: people live in close contact with roughly the same array of several dozen friends and relatives for decades. They may move to another village, but usually either to join a new family network (as upon marriage) or to return to an old one (as upon separation). The evolutionary psychologists John Tooby and Leda Cosmides see in the mammoth popularity of the TV show Cheers during the 1980s a visceral yearning for the world of our ancestors–a place where life brought regular, random encounters with friends, and not just occasional, carefully scheduled lunches with them; where there were spats and rivalries, yes, but where grievances were usually heard in short order and tensions thus resolved.

As anyone who has lived in a small town can attest, social intimacy comes at the price of privacy: everybody knows your business. And that's true in spades when next-door neighbors live not in Norman Rockwell clapboard homes but in thatched huts.

Still, social transparency has its virtues. The anthropologist Phillip Walker has studied the bones of more than 5,000 children from hundreds of preindustrial cultures, dating back to 4,000 B.C. He has yet to find the scattered bone bruises that are the skeletal hallmark of "battered-child syndrome." In some modern societies, Walker estimates, such bruises would be found on more than 1 in 20 children who die between the ages of one and four. Walker accounts for this contrast with several factors, including a grim reminder of Hobbesian barbarism: unwanted children in primitive societies were often killed at birth, rather than resented and brutalized for years. But another factor, he believes, is the public nature of primitive child rearing, notably the watchful eye of a child's aunts, uncles, grandparents or friends. In the ancestral environment, there was little mystery about what went on behind closed doors, because there weren't any.

In that sense, Tooby and Cosmides have noted, nostalgia for the suburban nuclear family of the 1950s–which often accompanies current enthusiasm for "family values"–is ironic. The insular coziness of Ozzie and Harriet's home is less like our natural habitat than, say, the more diffuse social integration of Andy Griffith's Mayberry. Andy's son Opie is motherless, but he has a dutiful great-aunt to watch over him–and, anyway, can barely sit on the front porch without seeing a family friend.

To be sure, keeping nuclear families intact has virtues that are underscored by evolutionary psychology, notably in keeping children away from stepfathers, who, as the evolutionary psychologists Martin Daly and Margo Wilson predicted and then documented, are much more prone to child abuse than biological fathers. But to worship the suburban household of the 1950s is to miss much of the trouble with contemporary life.

Though people talk about "urbanization" as the process that ushered in modern ills, many urban neighborhoods at mid-century were in fact fairly communal; it's hard to walk into a Brooklyn brownstone day after day without bumping into neighbors. It was

suburbanization that brought the combination of transience and residential isolation that leaves many people feeling a bit alone in their own neighborhoods. (These days, thanks to electric garage-door openers, you can drive straight into your house, never risking contact with a neighbor.)

The suburbs have been particularly hard on women with young children. In the typical hunter-gatherer village, mothers can reconcile a homelife with a work life fairly gracefully, and in a richly social context. When they gather food, their children stay either with them or with aunts, uncles, grandparents, cousins or lifelong friends. When they're back at the village, child care is a mostly public task–extensively social, even communal. The anthropologist Marjorie Shostak wrote of life in an African hunter-gatherer village, "The isolated mother burdened with bored small children is not a scene that has parallels in !Kung daily life."

Evolutionary psychology thus helps explain why modern feminism got its start after the suburbanization of the 1950s. The landmark 1963 book The Feminine Mystique by Betty Friedan grew out of her 1959 conversation with a suburban mother who spoke with "quiet desperation" about the anger and despair that Friedan came to call "the problem with no name" and a doctor dubbed "the housewife's syndrome." It is only natural that modern mothers rearing children at home are more prone to depression than working mothers, and that they should rebel.

But even working mothers suffer depression more often than working men. And that shouldn't shock us either. To judge by hunter-gatherer societies, it is unnatural for a mother to get up each day, hand her child over to someone she barely knows and then head off for 10 hours of work–not as unnatural as staying home alone with a child, maybe, but still a likely source of guilt and anxiety. Finding a middle ground, enabling women to be workers and mothers, is one of the great social challenges of our day.

Much of this trouble, as the Unabomber argues, stems from technology. Suburbs are largely products of the automobile. (In the forthcoming book The Lost City, Alan Ehrenhalt notes the irony of Henry Ford, in his 60s, building a replica of his hometown–gravel roads, gas lamps–to recapture the "saner and sweeter idea of life" he had helped destroy.) And in a thousand little ways–from the telephone to the refrigerator to ready-made microwavable meals-technology has eroded the bonds of neighborly interdependence. Among the Aranda Aborigines of Australia, the anthropologist George Peter Murdock noted early this century, it was common for a woman to breast-feed her neighbor's child while the neighbor gathered food. Today in America it's no longer common for a neighbor to borrow a cup of sugar.

Of course, intensive interdependence also has its downside. The good news for our ancestors was that collectively fending off starvation or saber-toothed tigers forged bonds of a depth moderners can barely imagine. The bad news was that the tigers and the starvation sometimes won. Technology is not without its rewards.

Perhaps the ultimate in isolating technologies is television, especially when linked to a VCR and a coaxial cable. Harvard professor Robert Putnam, in a recent and much

noted essay titled "Bowling Alone," takes the demise of bowling leagues as a metaphor for the larger trend of asocial entertainment. "Electronic technology enables individual tastes to be satisfied more fully," he concedes, but at the cost of the social gratification "associated with more primitive forms of entertainment." When you're watching TV 28 hours a week–as the average American does–that's a lot of bonding you're not out doing.

As the evolutionary psychiatrist Randolph Nesse has noted, television can also distort our self-perception. Being a socially competitive species, we naturally compare ourselves with people we see, which meant, in the ancestral environment, measuring ourselves against fellow villagers and usually finding at least one facet of life where we excel. But now we compare our lives with "the fantasy lives we see on television," Nesse writes in the recent book Why We Get Sick: The New Science of Darwinian Medicine, written with the eminent evolutionary biologist George Williams. "Our own wives and husbands, fathers and mothers, sons and daughters can seem profoundly inadequate by comparison. So we are dissatisfied with them and even more dissatisfied with ourselves." (And, apparently, with our standard of living. During the 1950s, various American cities saw theft rates jump in the particular years that broadcast television was introduced.)

Relief from TV's isolating and at times depressing effects may come from more communal technologies. The inchoate Internet is already famous for knitting congenial souls together. And as the capacity of phone lines expands, the Net may allow us to, say, play virtual racketball with a sibling or childhood friend in a distant city. But at least in its current form, the Net brings no visual (much less tactile) contact, and so doesn't fully gratify the social machinery in our minds. More generally the Net adds to the information overload, whose psychological effects are still unknown but certainly aren't wholly benign.

This idea that modern society is dangerously asocial would surprise Freud. In Civilization and Its Discontents, he lamented the tension between crude animal impulses and the dictates of society. Society, he said, tells us to cooperate with one another, indeed, even to "love thy neighbor as thyself"; yet by our nature, we are tempted to exploit our neighbor, "to humiliate him, to cause him pain, to torture and to kill him. Homo homini lupus [Man is a wolf to man]." The Unabomber, too, in his mode aas armchair psychologist, celebrates our "WILD nature" and complains that in modern society "we are not supposed to hate anyone, yet almost everyone hates somebody at some time or other." This sort of cramping of our natural selves, he opines, creates "oversocialized" people He seems to agree with Freud's claim that "primitive man was better off in knowing no restrictions of instinct."

Yet evolutionary psychology suggests that primitive man knew plenty of "restrictions of instinct." True, hatred is part of our innate social repertoire, and in other ways as well we are naturally crude. But the restraint of crude impulses is also part of our nature. Indeed, the "guilt" that Freud never satisfactorily explained is one built-in restrainer. By design, it discourages us from, say, neglecting kin through unbridled egoism, or

imperiling friendships in the heat of anger–or, at the very least, it goads us to make amends after such imperiling, once we've cooled down. Certainly modern society may burden us unduly with guilt. After erupting in anger toward an acquaintance, we may not see him or her for weeks, whereas in the ancestral environment we might have reconciled in short order. Still, feeling guilty about spasms of malice is no invention of modern civilization.

This points to the most ironic of evolutionary psychology's implications: many of the impulses created by natural selection's ruthless imperative of genetic self-interest aren't selfish in any straightforward way. Love, pity, generosity, remorse, friendly affection and enduring trust, for example, are part of our genetic heritage. And, oddly, some of these affiliative impulses are frustrated by the structure of modern society at least as much as the more obviously "animal" impulses. The problem with modern life, increasingly, is less that we're "oversocialized" than that we're undersocialized–or, that too little of our "social" contact is social in the natural, intimate sense of the word.

Various intellectual currents reflect this shortage of civility in modern civilization. The "communitarian" movement, lately championed by Democratic and Republican leaders alike, aims to restore a sense of social kinship, and thus of moral responsibility. And various scholars and politicians (including Putnam) are now bemoaning the shrinkage of civil society, that realm of community groups, from the Boy Scouts to the Rotary Club, that once not only kept America shipshape but met deep social needs.

The latest tribute to civil society comes in Francis Fukuyama's book Trust, whose title captures a primary missing ingredient in modern life. As of 1993, 37% of Americans felt they could trust most people, down from 58% in 1960. This hurts; according to evolutionary psychology, we are designed to seek trusting relationships and to feel uncomfortable in their absence. Yet the trend is hardly surprising in a modern, technology-intensive economy, where so much leisure time is spent electronically and so much "social" time is spent nurturing not friendships but professional contacts.

As scholars and public figures try to resurrect community, they might profitably draw on evolutionary psychology. Prominent communitarian Amitai Etzioni, in highlighting the shortcomings of most institutionalized child care, has duly stressed the virtues of parents' "co-oping," working part time at day-care centers. Still, the stark declaration in his book The Spirit of Community that "infants are better off at home" gives short shrift to the innately social nature of infants and mothers. That women naturally have a vocational calling as well as a maternal one suggests that workplace-based, co-operative day-care centers may deserve more attention.

Residential planners have begun to account implicitly for human nature. They're designing neighborhoods that foster affiliation–large common recreational spaces, extensive pedestrian thoroughfares and even, in some cases, parking spaces that make it hard to hop from car to living room without traversing some turf in between. In effect: drive-in, hunter-gatherer villages.

Still, many nice features of the ancestral environment can't be revived with bricks and mortar. Building physically intimate towns won't bring back the extended kin

networks that enmeshed our ancestors and, among other benefits, made child rearing a much simpler task than it is for many parents today. Besides, most adults, given a cozy community, will still spend much of the day miles away, at work. And even if telecommuting increasingly allows them to work at home, they won't be out bonding with neighbors in the course of their vocations, as our ancestors were.

One reason the sinews of community are so hard to restore is that they are at odds with free markets. Capitalism not only spews out cars, TVs and other antisocial technologies; it also sorts people into little vocational boxes and scatters the boxes far and wide. Economic opportunity is what drew farm boys into cities, and it has been fragmenting families ever since. There is thus a tension within conservative ideology between laissez-faire economics and family values, as various people have noted. (The Unabomber complains that conservatives "whine about the decay of traditional values," yet "enthusiastically support technological progress and economic growth.")

That much modern psychopathology grows out of the dynamics of economic freedom suggests a dearth of miracle cures; Utopian alternatives to captialism have a history of not working out. Even the more modest reforms that are imaginable–reforms that somewhat blunt modernization's antisocial effects–will hardly be easy or cheap. Workplace-based day care costs money. Ample and inviting public parks cost money. And it costs money to create good public schools–which by diverting enrollment from private schools offer the large communal virtue of making a child's neighborhood peers and schoolyard friends one and the same. Yikes: taxes! Taxes, as Newt Gingrich and others have patiently explained, slow economic growth. True enough. But if economic growth places such a strain on community to begin with–a fact that Gingrich seems to grasp–what's so bad about a marginally subdued rate of growth?

Besides, how large is the psychological toll? Evolutionary psychology suggests that we're designed to compare our material well-being not so much with some absolute standard but with that of our neighbors. So if our neighbors don't get richer-and if the people on Lifestyles of the Rich and Famous don't get richer–then we shouldn't, in theory, get less happy than we already are. Between 1957 and 1990, per capita income in America more than doubled in real terms. Yet, as the psychologist David Myers notes in The Pursuit of Happiness, the number of Americans who reported being "very happy" remained constant, at one- third. Plainly, more gross domestic product isn't the answer to our deepest needs. (And that's especially true when growth only widens the gap between richest and poorest, as has done lately.)

There is a lesson here not just for policymakers but also for the rest of us. "It is human nature always to want a little more," writes the psychologist Timothy Miller in the recent book How to Want What You Have, perhaps the first self-help book based explicitly on evolutionary psychology. "People spend their lives honestly believing that they have almost enough of whatever they want. Just a little more will put them over the top; then they will be contented forever." This is a built-in illusion, Miller notes, engrained in our minds by natural selection.

The illusion was designed to keep us constantly striving, adding tiny increments to the chances that our genes would get into the next generation. Yet in a modern environment–which, unlike the ancestral environment, features contraception–our obsession with material gain rarely has that effect. Besides, why should any of us choose to pursue maximum genetic proliferation–or relentless material gain, or anything else–just because that is high on the agenda of the process that designed the human mind? Natural selection, for better or worse, is our creator, but it isn't God; the impulses it implanted into our minds aren't necessarily good, and they aren't wholly beyond resisting.

Part of Miller's point is that the instinctive but ultimately fruitless pursuit of More–the 60-hour workweeks, the hour a month spent perusing the Sharper Image catalog–keeps us from indulging what Darwin called "the social instincts." The pursuit of More can keep us from better knowing our neighbors, better loving our kin-in general, from cultivating the warm, affiliative side of human nature whose roots science is just now starting to fathom.

COVER STORY

The Evolution of Despair

A new field of science examines the mismatch between our genetic makeup and the modern world, looking for the source of our pervasive sense of discontent

By ROBERT WRIGHT

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THERE'S A LITTLE BIT OF THE UNABOMBER IN MOST OF us. We may not share his approach to airing a grievance, but the grievance itself feels familiar. In the recently released excerpts of his still unpublished 35,000-word essay, the serial bomber complains that the modern world, for all its technological marvels, can be an uncomfortable, "unfulfilling" place to live. It makes us behave in ways "remote from the natural pattern of human behavior." Amen. VCRs and microwave ovens have their virtues, but in the everyday course of our highly efficient lives, there are times when something seems deeply amiss. Whether burdened by an overwhelming flurry of daily commitments or stifled by a sense of social isolation (or, oddly, both); whether mired for hours in a sense of life's pointlessness or beset for days by unresolved anxiety; whether deprived by long workweeks from quality time with offspring or drowning in quantity time with them—whatever the source of stress, we at times get the feeling that modern life isn't what we were designed for.

And it isn't. The human mind—our emotions, our wants, our needs—evolved in an environment lacking, for example, cellular phones. And, for that matter, regular phones, telegraphs and even hieroglyphs—and cars, railroads and chariots. This much is fairly obvious and, indeed, is a theme going back at least to Freud's *Civilization and Its Discontents*. But the analysis rarely gets past the obvious; when it does, it sometimes veers toward the dubious. Freud's ideas about the evolutionary history of our species are now considered—to put it charitably—dated. He hypothesized, for example, that our ancestors lived in a "primal horde" run by an autocratic male until one day a bunch of his sons rose up, murdered him and ate his flesh—a rebellion that not only miraculously inaugurated religion but somehow left a residue of guilt in all subsequent descendants, including us. Any questions?

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RICHARD SANDLER

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THE EXACT SERIES OF SOCIAL CONTEXTS that shaped the human mind over the past couple of million years is, of course, lost in the mists of prehistory. In trying to reconstruct the "ancestral environment," evolutionary psychologists analyze the nearest approximations available—the sort of technologically primitive societies that the Unabomber extols. The most prized examples are the various hunter-gatherer societies that anthropologists have studied this century, such as the Ainu of Japan, the !Kung San of southern Africa and the Ache of South America. Also valuable are societies with primitive agriculture in the few cases where—as with some Yanomamo villages in Venezuela—they lack the contaminating contact with moderners that reduces the anthropological value of some hunter-gatherer societies.

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JEFF MERMELSTEIN

Quite so. Though evolutionary psychologists would love somehow to visit the ancestral environment, few would buy a one-way ticket. Still, to say we wouldn't want to live in our primitive past isn't to say we can't learn from it. It is, after all, the world in which our currently malfunctioning minds were designed to work like a Swiss watch. And to say we'll decline the Unabomber's invitation somehow to turn the tide of technological history isn't to say technology doesn't have its dark side. We don't have to slavishly emulate, say, the Old Order Amish, who use no cars, electricity or alcohol; but we can profitably ask why it is that they suffer depression at less than one-fifth the rate of people in nearby Baltimore.

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Still, there is always a flip side. People have enemies—social rivals—as well as friends, feel resentful as well as grateful, feel nervously suspicious as well as trusting. Their children, being genetic conduits, can make them inordinately proud but also inordinately disappointed, angry or anxious. People feel the thrill of victory but also the agony of defeat, not to mention pregame jitters. According to evolutionary psychology, such unpleasant feelings are with us today because they helped our ancestors get genes into the next generation. Anxiety goaded them into keeping their children out of harm's way or adding to food stocks even amid plenty. Sadness or dejection—after a high-profile social failure, say—led to soul-searching that might discourage repeating the behavior that led to the failure. ("Maybe flirting with the wives of men larger than me isn't a good idea.") The past usefulness of unpleasant feelings is the reason periodic unhappiness is a natural condition, found in every culture, impossible to escape.

What isn't natural is going crazy—for sadness to linger on into debilitating depression, for anxiety to grow chronic and paralyzing. These are largely diseases of modernity. When researchers examined rural villagers in Samoa, they discovered what were by Western standards extraordinarily low levels of cortisol, a biochemical by-product of anxiety. And when a Western anthropologist tried to study depression among the Kaluli of New Guinea, he couldn't find any.

One thing that helps turn the perfectly natural feeling of sadness or dejection into the pathology known as depression is social isolation. Today one-fourth of American households consist of a single person. That's up from 8% in 1940—and, apparently, from roughly zero percent in the ancestral environment. Hunter-gatherer societies, for all their diversity, typically feature intimacy and stability: people live in close contact with roughly the same array of several dozen friends and relatives for decades. They may move to another village, but usually either to join a new family network (as upon marriage) or to return to an old one (as upon separation). The evolutionary psychologists John Tooby and Leda Cosmides see in the mammoth popularity of the TV show *Cheers* during the 1980s a visceral yearning for the world of our ancestors—a place where life brought regular, random encounters with friends, and not just occasional, carefully scheduled lunches with them; where there were spats and rivalries, yes, but where grievances were usually heard in short order and tensions thus resolved.

As anyone who has lived in a small town can attest, social intimacy comes at the price of privacy: everybody knows your business. And that's true in spades when next-door neighbors live not in Norman Rockwell clapboard homes but in thatched huts.

Still, social transparency has its virtues. The anthropologist Phillip Walker has studied the bones of more than 5,000 children from hundreds of preindustrial cultures, dating back to 4,000 B.C. He has yet to find the scattered bone bruises that are the skeletal hallmark of "battered-child syndrome." In some modern societies, Walker estimates, such bruises would be found on more than 1 in 20 children who die between the ages of one and four. Walker accounts for this contrast with several factors, including a grim reminder of Hobbesian barbarism: unwanted children in primitive societies were often killed at birth, rather than resented and bru-

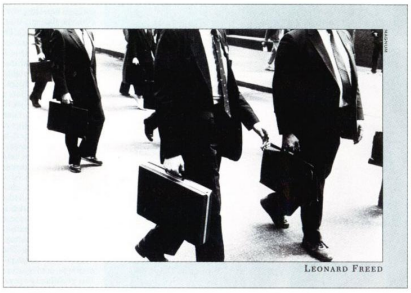
The suburbs have been particularly hard on women

talized for years. But another factor, he believes, is the public nature of primitive child rearing, notably the watchful eye of a child's aunts, uncles, grandparents or friends. In the ancestral environment, there was little mystery about what went on behind closed doors, because there weren't any.

In that sense, Tooby and Cosmides have noted, nostalgia for the suburban nuclear family of the 1950s—which often accompanies current enthusiasm for "family values"—is ironic. The insular coziness of Ozzie and Harriet's home is less like our natural habitat than, say, the more diffuse social integration of Andy Griffith's Mayberry. Andy's son Opie is motherless, but he has a dutiful great-aunt to watch over him—and, anyway, can barely sit on the front porch without seeing a family friend.

To be sure, keeping nuclear families intact has virtues that are underscored by evolutionary psychology, notably in keeping children away from stepfathers, who, as the evolutionary psychologists Martin Daly and Margo Wilson predicted and then documented, are much more prone to child abuse than biological fathers. But to worship the suburban household of the 1950s is to miss much of the trouble with contemporary life.

Though people talk about "urbanization" as the process that ushered in modern ills, many urban neighborhoods at mid-century were in fact fairly communal; it's hard to walk into a Brooklyn brownstone day after day without bumping into neighbors. It was suburbanization that brought the combination of transience and residential isolation that leaves many people feeling a bit alone in their own neighborhoods. (These days, thanks to electric garage-door openers, you can drive straight into your house, never risking contact with a neighbor.)



LEONARD FREED

The suburbs have been particularly hard on women with young children. In the typical hunter-gatherer village, mothers can reconcile a homelife with a work life fairly gracefully, and in a richly social context. When they gather food, their children stay either with them or with aunts, uncles, grandparents, cousins or lifelong friends. When they're back at the village, child care is a mostly public task—extensively social, even communal. The anthropologist Marjorie Shostak wrote of life in an African hunter-gatherer village, "The isolated mother burdened with bored small children is not a scene that has parallels in !Kung daily life."

Evolutionary psychology thus helps explain why modern feminism got its start after the suburbanization of the 1950s. The landmark 1963 book *The Feminine Mystique* by Betty Friedan grew out of her 1959 conversation with a suburban mother who spoke with "quiet desperation" about the anger and despair that Friedan came to call "the problem with no name" and a doctor dubbed "the housewife's syndrome." It is only natural that modern mothers rearing children at home are more prone to depression than working mothers, and that they should rebel.

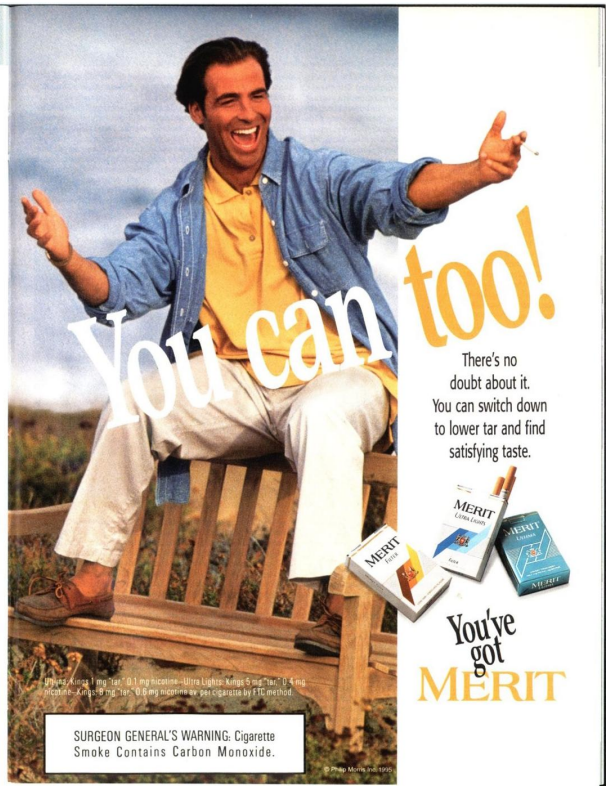
But even working mothers suffer depression more often than working men. And that shouldn't shock us either. To judge by hunter-gatherer societies, it is unnatural for a mother to get up each day, hand her child over to someone she barely knows and then head off for 10 hours of work—not as unnatural as staying home alone with a child, maybe, but still a likely source of guilt and anxiety. Finding a middle ground, enabling women to be workers and mothers, is one of the great social challenges of our day.

Much of this trouble, as the Unabomber argues, stems from technology. Suburbs are largely products of the automobile. (In the forthcoming book *The Lost City*, Alan Ehrenhalt notes the irony of Henry Ford, in his 60s, building a replica of his hometown—gravel roads, gas lamps—to recapture the "saner and sweeter idea of life" he had helped destroy.) And in a thousand little ways—from the telephone to the refrigerator to ready-made microwavable meals—technology has eroded the bonds of neighborly interdependence. Among the Aranda Aborigines of Australia, the anthropologist George Peter Murdock noted early this century, it was common for a woman to breast-feed her neighbor's child while the neighbor gathered food. Today in America it's no longer common for a neighbor to borrow a cup of sugar.

Of course, intensive interdependence also has its downside. The good news for our ancestors was that collectively fending off starvation or saber-toothed tigers forged bonds of a depth modern-ers can barely imagine. The bad news was that the tigers and the starvation sometimes won. Technology is not without its rewards.

Perhaps the ultimate in isolating technologies is television, especially when linked to a VCR and a coaxial cable. Harvard professor Robert Putnam, in a recent and much noted essay titled "Bowling Alone," takes the demise of bowling leagues as a metaphor for the larger trend of asocial entertainment. "Electronic technology enables individual tastes to be satisfied more fully," he concedes, but at the cost of the social gratification "associated with more primitive forms of entertainment." When you're watching TV 28 hours a week—as the average American does—that's a lot of bonding you're not out doing.

As the evolutionary psychiatrist Randolph Nesse has noted,



The ultimate in isolating technologies is television

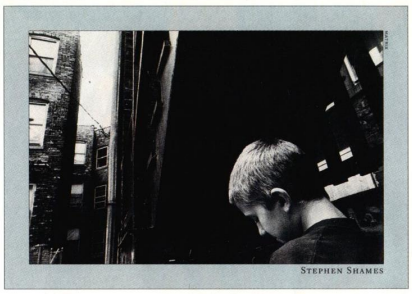
television can also distort our self-perception. Being a socially competitive species, we naturally compare ourselves with people we see, which meant, in the ancestral environment, measuring ourselves against fellow villagers and usually finding at least one facet of life where we excel. But now we compare our lives with "the fantasy lives we see on television," Nesse writes in the recent book *Why We Get Sick: The New Science of Darwinian Medicine*, written with the eminent evolutionary biologist George Williams. "Our own wives and husbands, fathers and mothers, sons and daughters can seem profoundly inadequate by comparison. So we are dissatisfied with them and even more dissatisfied with ourselves." (And, apparently, with our standard of living. During the 1950s, various American cities saw theft rates jump in the particular years that broadcast television was introduced.)

Relief from TV's isolating and at times depressing effects may come from more communal technologies. The inchoate Internet is already famous for knitting congenial souls together. And as the capacity of phone lines expands, the Net may allow us to, say, play virtual racketball with a sibling or childhood friend in a distant city. But at least in its current form, the Net brings no visual (much less tactile) contact, and so doesn't fully gratify the social machinery in our minds. More generally the Net adds to the information overload, whose psychological effects are still unknown but certainly aren't wholly benign.

This idea that modern society is dangerously asocial would surprise Freud. In *Civilization and Its Discontents*, he lamented the tension between crude animal impulses and the dictates of society. Society, he said, tells us to cooperate with one another, indeed, even to "love thy neighbor as thyself"; yet by our nature, we are tempted to exploit our neighbor, "to humiliate him, to cause him pain, to torture and to kill him. *Homo homini lupus* [Man is a wolf to man]." The Unabomber, too, in his mode aas armchair psychologist, celebrates our "WILD nature" and complains that in modern society "we are not supposed to hate anyone, yet almost everyone hates somebody at some time or other." This sort of cramping of our natural selves, he opines, creates "oversocialized" people He seems to agree with Freud's claim that "primitive man was better off in knowing no restrictions of instinct."

Yet evolutionary psychology suggests that primitive man knew plenty of "restrictions of instinct." True, hatred is part of our innate social repertoire, and in other ways as well we are naturally crude. But the restraint of crude impulses is also part of our nature. Indeed, the "guilt" that Freud never satisfactorily explained is one built-in restrainer. By design, it discourages us from, say, neglecting kin through unbridled egoism, or imperiling friendships in the heat of anger—or, at the very least, it goads us to make amends after such imperiling, once we've cooled down. Certainly modern society may burden us unduly with guilt. After erupting in anger toward an acquaintance, we may not see him or her for weeks, whereas in the ancestral environment we might have reconciled in short order. Still, feeling guilty about spasms of malice is no invention of modern civilization.

This points to the most ironic of evolutionary psychology's implications: many of the impulses created by natural selection's ruthless imperative of genetic self-interest aren't selfish in any straightforward way. Love, pity, generosity, remorse, friendly affection and enduring trust, for example, are part of our genetic heritage. And, oddly, some of these affiliative impulses are frustrated by the structure of modern society at least as much as the more obviously "animal" impulses. The problem with modern life, increasingly, is less that we're "oversocialized" than that we're undersocialized—or, that too little of our "social" contact is social in the natural, intimate sense of the word.



STEPHEN SHAMES

Various intellectual currents reflect this shortage of civility in modern civilization. The "communitarian" movement, lately championed by Democratic and Republican leaders alike, aims to restore a sense of social kinship, and thus of moral responsibility. And various scholars and politicians (including Putnam) are now bemoaning the shrinkage of civil society, that realm of community groups, from the Boy Scouts to the Rotary Club, that once not only kept America shipshape but met deep social needs.

The latest tribute to civil society comes in Francis Fukuyama's book *Trust*, whose title captures a primary missing ingredient in modern life. As of 1993, 37% of Americans felt they could trust most people, down from 58% in 1960. This hurts; according to evolutionary psychology, we are designed to seek trusting relationships and to feel uncomfortable in their absence. Yet the trend is hardly surprising in a modern, technology-intensive economy, where so much leisure time is spent electronically and so much "social" time is spent nurturing not friendships but professional contacts.

As scholars and public figures try to resurrect community, they might profitably draw on evolutionary psychology. Prominent communitarian Amitai Etzioni, in highlighting the shortcomings of most institutionalized child care, has duly stressed the virtues of parents' "co-oping," working part time at day-care centers. Still, the

We are designed to seek trusting relationships

stark declaration in his book *The Spirit of Community* that "infants are better off at home" gives short shrift to the innately social nature of infants and mothers. That women naturally have a vocational calling as well as a maternal one suggests that workplace-based, cooperative day-care centers may deserve more attention.

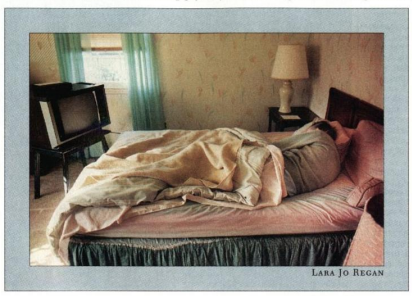
Residential planners have begun to account implicitly for human nature. They're designing neighborhoods that foster affiliation—large common recreational spaces, extensive pedestrian thoroughfares and even, in some cases, parking spaces that make it hard to hop from car to living room without traversing some turf in between. In effect: drive-in, hunter-gatherer villages.

Still, many nice features of the ancestral environment can't be revived with bricks and mortar. Building physically intimate towns won't bring back the extended kin networks that enmeshed our ancestors and, among other benefits, made child rearing a much simpler task than it is for many parents today. Besides, most adults, given a cozy community, will still spend much of the day miles away, at work. And even if telecommuting increasingly allows them to work at home, they won't be out bonding with neighbors in the course of their vocations, as our ancestors were.

One reason the sinews of community are so hard to restore is that they are at odds with free markets. Capitalism not only spews out cars, TVs and other antisocial technologies; it also sorts people into little vocational boxes and scatters the boxes far and wide. Economic opportunity is what drew farm boys into cities, and it has been fragmenting families ever since. There is thus a tension within conservative ideology between laissez-faire economics and family values, as various people have noted. (The Unabomber complains that conservatives "whine about the decay of traditional values," yet "enthusiastically support technological progress and economic growth.")

That much modern psychopathology grows out of the dynamics of economic freedom suggests a dearth of miracle cures; Utopian alternatives to capitalism have a history of not working out. Even the more modest reforms that are imaginable—reforms that somewhat blunt modernization's antisocial effects—will hardly be easy or cheap. Workplace-based day care costs money. Ample and inviting public parks cost money. And it costs money to create good public schools—which by diverting enrollment from private schools offer the large communal virtue of making a child's neighborhood peers and schoolyard friends one and the same. Yikes: taxes! Taxes, as Newt Gingrich and others have patiently explained, slow economic growth. True enough. But if economic growth places such a strain on community to begin with—a fact that Gingrich seems to grasp—what's so bad about a marginally subdued rate of growth?

Besides, how large is the psychological toll? Evolutionary psychology suggests that we're designed to compare our material well-being not so much with some absolute standard but with that of our neighbors. So if our neighbors don't get richer—and if the people on *Lifestyles of the Rich and Famous* don't get richer—then we shouldn't, in theory, get less happy than we already are. Between 1957 and 1990, per capita income in America more than doubled in real terms. Yet, as the psychologist David Myers notes in *The Pursuit of Happiness*, the number of Americans who reported being "very happy" remained constant, at one- third. Plainly, more gross domestic product isn't the answer to our deepest needs. (And that's especially true when growth only widens the gap between richest and poorest, as has done lately.)



LARA JO REGAN

There is a lesson here not just for policymakers but also for the rest of us. "It is human nature always to want a little more," writes the psychologist Timothy Miller in the recent book *How to Want What You Have*, perhaps the first self-help book based explicitly on evolutionary psychology. "People spend their lives honestly believing that they have almost enough of whatever they want. Just a little more will put them over the top; then they will be contented forever." This is a built-in illusion, Miller notes, engrained in our minds by natural selection.

The illusion was designed to keep us constantly striving, adding tiny increments to the chances that our genes would get into the next generation. Yet in a modern environment—which, unlike the ancestral environment, features contraception—our obsession with material gain rarely has that effect. Besides, why should any of us choose to pursue maximum genetic proliferation—or relentless material gain, or anything else—just because that is high on the agenda of the process that designed the human mind? Natural selection, for better or worse, is our creator, but it isn't God; the impulses it implanted into our minds aren't necessarily good, and they aren't wholly beyond resisting.

Part of Miller's point is that the instinctive but ultimately fruitless pursuit of More—the 60-hour workweeks, the hour a month spent perusing the Sharper Image catalog—keeps us from indulging what Darwin called "the social instincts." The pursuit of More can keep us from better knowing our neighbors, better loving our kin—in general, from cultivating the warm, affiliative side of human nature whose roots science is just now starting to fathom. ■

A critique of his ideas & actions.

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