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SPECIAL ISSUE — An Homage to Jean Robert in Two Parts

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Introduction: A Cosmic Thinker

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There are no living without the dead, writes Jean Robert in one of his essays that Samar and I have selected for this issue of *IJIS*. We were prompted to this effort by his life-long partner Sylvia Marcos and aided by the gracious welcome of the editors of *IJIS*, notably Dana Stuchul. In 2018 we curated a sheaf of his essays for this journal. Jean was the senior if silent partner in that effort. For this collection, we celebrate the lifework of Jean Robert, without his guiding hand. We are sad but we are not alone because there are no living without the dead.

To fashion a frame on which to mount his writings is no easy task for a few reasons. First, these are remnants — previously unpublished essays — that don't neatly belong under one subject heading. All who have encountered his foraging mind will not be surprised by the range of topics and references here. Second, though most were complete, some were in various stages of completion. These latter demanded making difficult editorial and publishing decisions. We encountered numerous instances of unwieldy sentences, seemingly oral utterances jotted down, and a fair sprinkling of foreign words in these English texts. Translation is a treason and that is especially so when editing the texts of a man who was comfortable thinking in at least six languages. Third, and perhaps most importantly, the order we present these selected essays reflect our effort to understand Jean's thought. To those who say we pass off what is ours as his, we reply, with Jean, there are no dead without the living.

We present eight essays and one book outline for this collection. The first essay draws on a book he co-authored with Majid Ranehma in 2008 about the *Potency of the Poor* (*La Puissance des pauvres)*. In the wake of the world-wide financial crisis of 2008–9, they make an impassioned case for what they call "subsistence knowledges." Economic science, they say, is congenitally incapable of comprehending the distinction between poverty and misery. Poverty remains an ineradicable dimension of the human condition. The combination of low levels of buying goods and services and high levels of self-sufficiency has been the historical norm. In contrast, widespread misery is the historically unprecedented condition of almost total dependence on cash for even basic sustenance combined with the almost total absence of conditions that permit self-sufficiency. Misery is poverty without the means of autonomous subsistence. By that measure, the so-called rich are even more miserable than the poor. Their anxiety and rapaciousness reflect what they secretly know but cannot acknowledge: unlike the poor, the so-called rich could not last a day without their cash. Economic science cannot help conflating the distinction between poverty and misery. It is to prevent

the rich and the economist from further immiserating the poor that Jean argues for the return of subsistence knowledges. These are ways of knowing that foster ways of being relatively free from debilitating dependence on the market. There are two broad streams of subsistence knowledges: the one borne of common sense, appropriate to each place, grounded in common experience, and respectful of the human condition as being rooted in necessity. The other stream of subsistence knowledges entails the arduous effort to clear away the accumulated historical debris formed by scientific knowledges that confuses reason, clouds perception, and prevents autonomous action.

> Is there thought after economics? asks Jean in the second essay in this series. Following Illich, he argues for three kinds of political limits on the techno-scientific production of goods and services. Not only a limit on the industrial production of goods to preserve the environment; not only a limit on the professional production of services to make room for communal action; but also a limit on the economic sphere, as such. The destruction of the commons by the expanding economic sphere is enabled by economic science that is necessarily blind to the commons. If we are to escape from our servility to the economic, implies Jean, we must topple the dismal science from its high perch. One cannot escape from scientific ways of knowing unless one is grounded in and by the senses.

In the next two essays, Jean focuses his attention on an utterly familiar aspect of our technological condition — the contrast between auto-mobility and being carried in automobiles — to prove how "subsistence knowledges" can and indeed must be grounded in common experience. Walking and being moved are scientifically described as alternative modes of locomotion. But phenomenologically, these experiences are incomparable. Relying on the work of Bachelard and Merleau-Ponty, Jean underscores the pedestrian condition as one of "immersion and embodiment." In contrast, mechanized locomotion necessitates the severance of sight from bodily movement. The immobile body in a speeding car-seat "sees" the environment as a moving series of images that flash past. The landscape reduced to a series of moving images is a consequence of "the disembodiment of motion." That the world is put into motion or at least appears as such to the passenger or driver who is immobile is the paradoxical effect of vehicularization. In fact, the windshield view is a form of seeing just as mediated as the views obtained at the lens of a microscope or telescope. Long training in seeing through such instruments is needed to observe what is supposed to be seen through them. For example, the astronomer must be taught to ignore much of what appears on the telescopic lens to be able to see the star. Jean proposes the phrase "tachyscopic perception" to refer to what is seen when one is enclosed in objects moving through space at high speed (cars, trains, buses). In the essay on "the stuff of traffic landscapes," Jean emphasizes the singular optical illusion produced by such a kinetic perspective. The stuffiness of the world, its materiality, its thinginess, is dissolved into a fleeting slideshow of images because the viewer is carnally severed from it.

Transportation science cannot grasp the phenomenological distinction between walking and being carried just as economic science cannot grasp that between poverty and misery. The former is mired in the notion of transport as means of locomotion, itself understood as mere displacement in space. The latter is stuck in the idea of scarcity understood as the problem of allocating insufficient means to satisfy proliferating ends. Both sciences presuppose the means-ends relation which Jean critically dissects in the fifth essay titled, "The Rise and the Death of the Instrumental Paradigm." The assertion that cars or markets are means to an end presupposes that means are distinct from ends. However, if the car transforms the built landscape in a way that offices are located far away from homes thus necessitating the commute, then it makes little sense to say that "one needs a car to get to the office." The purported purpose of the car — reaching the office —has been shaped by the car —the supposed means. The empty roads and empty offices of the Covid-19 months have decisively revealed how urban landscapes are built for the car. In situations where means cause the ends, which is to say in situations of tight feedback loops or circular causality, the logic of X as a means for Y is invalid. In fact, when means produce ends, one is condemned to live without ends, as such. Jean names this an infernal condition, with all the theological resonances that word carries.

When cars increase in number and speed, they define the purposes for which they are driven. The result is the topsy-turvy world where ends and means cannot be distinguished. The short essay titled, "Auto-Stop," which Jean co-authored with Illich, is a quasi-serious proposal to limit the number of cars. It builds on *Energy and Equity* by Illich in which he argued for limiting the speed of cars. Illich and Robert wrote this radical manifesto well before Uber or Lyft. The core of their proposal is simple: All cars using public roads must be potential taxis and all drivers must be paid for their services. By this one act, they suggested, "a small change in the character of transportation [could] lead to a moral reevaluation of place." However, the age of Uber is also the age of Tesla and their proposal for "Auto-stop," like that of speed limits no greater than twenty-five miles an hour, now reads as a cautionary tale.

These six essays occupy the branch of "subsistence knowledges" rooted in common experience, common sense, and grounded in the perception of necessity as inextricable with the human condition. In the remaining essays, Jean explores the second branch of subsistence knowledge which is concerned with studies that clear away the accumulated detritus of engineered perception. Just as black print on a white page aids reading, so also to properly grasp the present requires a contrasting moment. The foreignness of our past serves as a more reliable touchstone than any imagined future in order to evaluate the present. Jean practiced the kind of history that Illich and Foucault did. Since all things that have a beginning can have an end, he sought the beginnings of familiar things to better understand their end. When did the idea of *space* take shape, how was it complicit in the ways cities and freeways were constructed, what ways of being and thinking did it cast into the shadows? By bringing the present into clear

relief against the contrast of the past, Jean forces the reader to become uncomfortable with what is taken-for-granted and to thereby begin the journey of becoming another.

The next essay is just such a prod to becoming estranged from the present. A red thread running to many of Jean's works is the built environment, or better, the modes in which peoples have dwelled. In his reflection on "the idea of a town," Jean explores the very distinction between the city and the country; between the urban and the rural, that is both considered obvious and under dissolution today. The expanding slums and shantytowns of the Global South are now increasingly mirrored by the inner cities and *banlieues* of the North. This growing intermingling of city and country undermines the idea that the urban consumes what the rural produces and that the city cultures the country. The ruins of the clear demarcation between urban and rural is hyped in some quarters as the birth pangs of the new networked city built on the communication technologies. According to these futurists, the difference between New York and Iowa is the degree to which they are networked— the relative density in the flow of water, waste, information, supplies, and people. In contrast, Jean reaches back into the distant past —the Neolithic period — to uncover the lived distinction between horticulture and agriculture. It is still a popular notion that agriculture both replaced hunter gatherer economies and produced the surpluses necessary to support the growth of cities. However, Jean insists, there is an intermediate stage of horticulture, of gardening, that began and persisted in urban locales. As recently as in the Paris of Victor Hugo, many cities produced enough food in urban gardens to nourish a third of their population. It is precisely the early networked city — macadamized on the surface and riddled by a sewer system underground—that decisively separates the city from the country and requires the urban to be fed by rural.

Even more upsetting of settled ideas are his essays into the historicity of technology. His considered thoughts on the subject, he told us, are in a book as yet only available in Italian, titled *L"eta dei sistemi nel pensiero dell"ultimo Illich*. Expanding on suggestions by Illich, he argues that the era of the instrument or technology is over, to be replaced by the system. The instrument which also underwrites the means-end paradigm, presupposes a distance or distality between the user and the tool. Anyone can pick up the hammer to deploy the mechanical intention — hammering —that is captured in it. And anyone can just as easily lay it down. In contrast, once one interacts with a system one cannot put it down. The cell phone, the computer, even the interstate road system are "pseudo-tools" because they demand that you fit into them as a node or sub-system. As such, humans are transformed into systemic interfaces. Proper attention to this phenomenon, asserts Jean, will disclose the gulf between the instrument or tool which one can use and a system in which one is enmeshed. No wonder the dominant ways of dealing with this emerging and fast hardening systemic milieu are "adaptation," "resilience," and in general, "going with the flow." The end of the age of technology also prompts questions about its beginning.

Jean — the architect and historian — tracks the age of technology or the instrument by following changes in the sense of "here" and "there." In a series of broad strokes, Jean

sketches the prehistory of the instrument in the idea of *proportion* and its emergence as *instrumentum separatum* in the idea of the Christian minister who acts as the instrument of God's will. A *topocosmic* understanding of oneself entailed awareness of the relation between place (*topos*) and order of places (*cosmos*). Here and there, like inside and outside, now and then, and up and down express a proportionate relationship within a mutually ordered couplet. All things find their meaning and measure in and by other things to which they are related. The indifferent unidimensional expanse of *space* which replaced the notion of *topocosmos* is itself, Jean suggests, coming to an end. *Space* implies a finite if arbitrarily defined region. One is located in space by some version of the Cartesian coordinates. Here and there are arbitrary points with reference to some equally arbitrary point of origin. The disappearance of the technological milieu is marked by the dissolution of this idea of a container-like space. It is no accident that "location" in the age of computer systems means a collection of bits across databases. Accordingly, the mutation from the *topocosmos* to *space* and the further break between space and *system*-withouta-locus is one way to mark the birth and death of the instrument. Illich once noted that the Greek etymology of "cosmic" does not refer to the large and unlimited. In contrast, it referred to the bounded and the relational, as for example, the two lines formed by armies facing each other or the two banks of a river. It is a cosmic thinker who insists there are no living without the dead.

We have included two further items in this collection that hint at these arguments. Both also speak to the collaborative nature of Jean's mode of life and the inextricable welding, in his person, of thinking and living. The first is a long "preparatory note" Jean wrote in preparation for a 2010 seminar in Paris. We include it here not only to reaffirm the broad and synthetic scope of his thought. Above all, it also reveals the generosity of the man. Always thinking in the company of others and always ready to share references and provide criticisms, Jean embodied the manner of a vernacular thinker—not for him the possessiveness over ideas, the ownership of thought, the imagined scarcity of thinking. Instead, as his notes prove, thought is, for Jean, one of the communal exercises in learning to live together well. The last "paper" we include in this collection is a sketch for a project of a bilingual book, in German and English. In it he wanted to explore the transition from "place perceptions to spatial misplaced concreteness" or the destruction of *topocosmic* relations. Yet, he was insistent that nothing is lost forever and that nothing reappears exactly as it once was. He was convinced or at least hoped that such rests or remains of the past that persist in the present could liberate new forms of thinking and being. The project was unfinished at the time of his death. Both these of are invitations to the reader to think and write with their author. As Jean Robert implied, *there are no dead without the living.*

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The Return of Subsistence Knowledges

Majid Rahnema, Jean Robert

In *Medical Nemesis*, first published in French in 1975, Ivan Illich wrote:

> The acute problems of manpower, money, access, and control that beset hospitals everywhere can be interpreted as symptoms of a new crisis in the concept of disease. This is a true crisis because it admits of two opposite solutions, both of which make present hospitals obsolete. The first solution is a further sickening medicalization of health care, expanding the clinical control of the medical profession over the ambulatory population. The second is a critical, scientifically sound de-medicalization of the concept of disease[1]

Much of this analysis of the crisis affecting clinical medicine at the middle of the 1970s could be applied to the examination of the "economic crisis" now facing the world. What societies need first is to reexamine the destructive effects of a globalized system of economic domination on the livelihood of human beings; it is only then that the search can begin for entirely new organic links with the reality that the Greeks designated by the verb *oikodomeo*, meaning "I manage my and my family's own livelihood." It is from that verb that the Western world has derived the contemporary words *economy* and *economics*, giving them a meaning diametrically contrary to the verb's meaning.

The author of *Medical Nemesis* also wrote:

> Medical epistemology is far more important for the healthy solution of this crisis than either medical biology or medical technology. Such an epistemology will have to clarify the logical status and the social nature of diagnosis and therapy [...][2]

Analogically, an epistemology based on the history of economic ideas seems to us far more important than all the micro- and macro-economics presently proposed as a rapid "solution" of the crisis. To quote a thought attributed to Albert Einstein, "one cannot solve our problems with the same thinking with which we created them."

[1] *Medical Nemesis. The Expropriation of Health*, New York: Pantheon Books, 1976, p. 166.
[2] Ibid.

Be Fearful of Fear

To search for the true causes of the present crisis requires therefore warding oneself from the panic fear foisted by economic experts wanting people to believe that the "solution" requires more measures from their domain of expertise. The path to the truth about the economy is rather an invitation to *touch the ground*, that is, to ask radical questions about all the "received ideas." It is also to painfully, and sometimes joyfully, recover the perception of concrete things: not only how hard it can be to make a living, but also of the soil and of the other elements and of the everopen possibility of conviviality. It means cleansing one's vision of fashionable mirages and, perhaps, of an excess of abstractions, to remember and to rediscover how, for millennia, the poor have actually been able to defy misery and destitution by obtaining directly from nature and their human surroundings most of what they needed for their livelihood. Not in solitude, but in solidarity. Not by competing with one another for increasing productivity and personal profit but by intensifying their human and convivial bonds with others to redefine their living riches according to Necessity.

As beautifully formulated by R.M. MacIver, in his preface to the now classic work of Karl Polanyi, what was almost sacred was to protect the "inner temple of human life" from being spoiled and violated.[3] What modern economists refer to, often with a tone of disdain, as their "subsistence economy" was far from being an "underdeveloped" way of living. To paraphrase Mahatma Gandhi, it was not an "*ego*nomy" created by *homo oeconomicus* and its descendants, but a most diversified and creative search by convivial men and women for new forms of "living riches," as opposed to the "dead riches"[4] of money and profits.

For the great majority of men and women throughout history, to lead a subsistence life has therefore never represented an "underdeveloped" or shameful mode of living. Even in more specific "economic" terms, it has mainly consisted in producing what one eats and to eat what one produces. Where there is free land, water, and sun, it can always be done, and does not require academic titles. It only needs a perception of one's human condition respectful of Necessity, and empirical knowledges appropriate to the place, borne out of common sense, and the fruit of everyone's experiences; in other words, knowledges and practices adequate to their possibilities and impossibilities, and appropriate to a place's specific climate and to the human culture nourished by its soil. Let's call them *subsistence knowledges*.

Stubborn proponents of total market dependency, and hence of the extinction of all subsistence knowledges, still abound in the circles of professional economists and their fundamentalist followers among Third World politicians. But do the "First World scientists" and their political flocks in poor countries understand what they despise and eventually repress? The economists' answer is that economy is a game in which

[3] Karl Polanyi, *The Great Transformation*, Beacon Press, p. 3.

[4] The distinction between these two forms of "riches" has been beautifully described by Mowlana Jalal-ad-Din Rumi in all his poems.

all should be able to win the money necessary to get from the market the goods and services that will satisfy their basic needs: a few to lead a life of luxury and comfort, and the very few to show off a material wealth that no past society could even have dreamt of.

They have generally no difficulty to recognize that this disparity is unjust. Yet, they argue that the question of justice must be carefully distinguished from economic efficiency. They would be ready to recognize that economy is a kind of lottery, but they say: "let's be realistic, there is an optimal level of injustice in which the situation of the least favored participant in the economy is better than it would be with less injustice."[5] There are two arguments involved in what we just wrote and it is important to differentiate them. The first deals with the fundamental question of injustice. A good number of economists are ready to recognize that economics, "the dismal science," is inherently unjust. Yet, as soon as this is acknowledged, it is argued that some degree of injustice fosters an increase in productivity, as a result of which, some of the wealth of the richest trickles down to the poorest. The second argument, seldom clearly stated by economists, is based on the recognition that, in modern economic society, one generally produces one thing in order to obtain something else. For instance, I want a full basket of good things for my family at the end of the month; but in order to obtain it, I have to be filling formularies in an office, or working in an armament plant or in a cigarette factory: I can only obtain my family's basket through a *detour*. To sum up, still more than injustice, the *detour of production* characterizes the modern economy. Jean-Pierre Dupuy has written:

> Some work, for instance, in the production of death engines in order to obtain a "worth" – their health – that in a large measure they could have produced in an autonomous way, for instance by living a healthier and more hygienic life.[6]

In another work, the same author had stated:

> When one is animated by the spirit of the detour, one may fall into its trap and end up losing sight of the fact that the detour is, precisely, only a detour. When one steps back while looking in the opposite direction, one runs the risk of forgetting one's objective and, seeing one's regression as progress, of taking the means for ends.[7]

[5] Superficially influenced by Rawls' theory of justice — see John Rawls, *A Theory of Justice*, Cambridge: Harvard University Press, 1999 [1971] – many economists would argue that, in order for a society to afford an optimal affluence for its poorest member, it has to maintain an optimal level of injustice such structured that it be beneficial to him.

[6] Jean-Pierre Dupuy, *Pour un catastrophisme éclairé. Quand l'impossible est certain*, Paris : le Seuil, 2002, p. 38, 39, our translation.

[7] Jean-Pierre Dupuy, "Detour and Sacrifice: Ivan Illich and René Girard," Lee Hoinacki and Carl Mitcham, ed., *The Chalenges of Ivan Illich. A Collective Reflection*, Albany: State University of New York Press, 2002, p. 194.

Jean-Pierre Dupuy is a top mathematical economist who became a philosopher. As such, he might be the only member of the economic guild to have clearly revealed that the foundation of modern economy rests on the *detour of production*, or, more exactly, "the sway that it holds over people's minds."[8] For him, all modern economies are based on the unlimited lengthening of detours of production, and on the concomitant destruction of subsistence practices. In other words, the detour of production is the battering ram of the war against subsistence.

However, the capacity to make detours – stepping back in order to spring farther or refraining from eating all the harvest in prevision of the winter – is inherent to human intelligence, yet; everything indicates that the primary finality of industrial economies is no longer the production and storage of goods, but *the production of production detours*, that means *work for the production of the need of more "necessary" work*. If it is so, Dupuy concludes, industrial society has become stupid for being too clever. Let us examine both arguments successively; that is, let's firstly reflect on the inherent injustice of the economic system, and then on its propensity to multiply production detours and to destroy the forms of traditional subsistence that would make these detours unnecessary.

I. Himalayas of Wealth Alongside Abysses of Misery

By now, even the most ideologically blinded economist begins to suspect that the economy is a machine that produces unfathomable levels of wealth on the one hand and abysms of misery on the other. This last sentence requires some explanations. Let us state clearly that, for us, misery is not poverty. As Proudhon has written long ago, "poverty has been the normal condition of man in civilization." For Michel Mollat and the exceptional team of historians who contributed to his classic work on the subject[9], it appears also that, while misery and destitution could be considered as accidents in human history, poverty has been a normal mode of living and a way of preventing such accidents. Since this historical evidence is seldom taught in modern universities and institutions dealing with the complex realities of the poor, one could easily reach the appalling conclusion that the dominant and prevailing trends in "modern economic sciences" suffer from an acquired syndrome of selective blindness to all traditional, empirical, hardly mathematizable forms of the livelihood of man. The very fact that today, the world's most recognized economists serving the World Bank and similar institutions have come to redefine THE POOR of all lands as every person who lives with less than two dollars a day, is a preposterous example of this syndrome.

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[8] Ibid.

[9] Michel Mollat, *The Poor in the Middle Ages: An Essay in Social History*. New Haven: Yale University Press, 1990.

One could imagine that, in years to come, the historians of economic ideas will wonder at the fact that, before the fall of 2008, such professional economists had lost sight of what most of their forerunners, in particular the founders of the new science of "economy" had seen with much clarity. One might attribute that to the fact that those pioneers of modern economics in the late XVIIIth and early XIXth century did not consider themselves professional economists in today's sense, but as philosophers like Burke did, or as a moral analyst of human sentiments like Smith did, or political men as thought Townsend, or as Bentham thought of himself, as businessmen eventually capable of getting profits from the administration of poor houses. With the possible exception of Smith, they did not think that the rich's wealth was ever to be shared with the poor. The sentence that disturbs their modern heirs, when we pronounce it, would not have shocked Burke, nor Townsend, nor Bentham. Here is our sentence: "Modern economics is the blueprint of social arrangements that simultaneously produce summits of wealth that no previous epochs could have imagined and abysms of misery of which there was no experience either." We can reformulate it in various guises, for instance: "Misery accompanies wealth as shadow accompanies light." "The economy offers men to lead them into affluence and foments at the same time forms of scarcity that engender new miseries." "The richer a society, the less able its members become of the relations of mutuality that were natural to the historical poor and were the basis of their subsistence." Or, in John M'Farlane's words, in his meditations on the growing poverty of the richest nation of the XVIIIth century, England: "The greatest number of poor is not to be found in barren countries or amidst barbarous nations, but in those which are the most fertile and the most civilized.[10]

Perhaps that we begin to glimpse the truth concealed by modern economic knowledge: A rich nation must suppress its traditional subsistence relations so the motor of its economy can start buzzing. Contrary to the water that seeps through the coffee in a percolator, the form of affluence that is peculiar to the rich does not trickle through society to reach the poor, as Adam Smith believed it would. Jeremy Bentham, the first entrepreneur who was able to realize a profit from the administration of a poor house organized like a model prison[11] never gave credit to Smith's archaic "percolatión" theory to which, before last fall's awakening, many modern economists had found convenient to give lip service. With a cynicism that would ruin any modern politician's electoral prospects, Jeremy Bentham could affirm that the government's task was not to alleviate misery but "to increase want in order to make the physical sanction of hunger effective."[12] He urged the rich who had been misled on the ruts of benevolence

[10] John M'Farlane, *Enquiries Concerning the Poor*, 1772.

[11] See Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time*, Boston: Beacon Press, 1957 [1944], p. 106, 121.

[12] See Karl Polanyi, op. cit., p. 117.

to acknowledge that "[i]n the highest stage of social prosperity, the great mass of the citizens will most probably possess few other resources than their daily labor, and consequently will always be near to indigence."[13] Joseph Townsend is still more precise when he states that only the threat of misery and hunger allow men deemed by their condition to servile work to inure themselves to the hardships of wars and the seas' inclemency: "For what is it but distress and poverty which can prevail upon the lower classes of the people to encounter all the horrors which await them on the tempestuous ocean or on the field of battle?"[14]

Burke, author of a theory of the sublime, stated with compunction that all inclinations to help the poor stem from absurd principles that pretend to accomplish what, by the very constitution of the world, is impracticable. "When we affect to pity as poor those who must labor or the World cannot exist, we are trifling with the condition of mankind."[15] The true difficulty, he explains, is not to succor the hungry, but to contain the impetuosity of the rich's benevolence. And, again, the authoritative voice of Reverend Joseph Townsend: "Hunger will tame the fiercest animals, it will teach decency and civility, obedience and subjection, to the most perverse. In general, it is only hunger which can spur and goad them [the poor] on to labor."[16]

The Church apologized to Giordano Bruno for having burnt him at the stake, to Galileo for having condemned him to house arrest, but the Economy has never apologized to the poor. Today, it has learnt to conceal its structural cynicism behind a mask of *evergetism*,[17] taking this last word in its literal sense of do-gooding, doing as if one were good, with ostentation and from the summits of power. Before last Fall, the economy's inherent injustice as well as the lengthening of production detours —and the concomitant destruction of subsistence practices opposing these detours —could be legitimized by the spurious argument that, as long as the global heap was growing, at the end, there would be money, goods, services and jobs for everybody. We can see now how stupid it was to believe it.

It is possible that, in the months or years, the pilots of the economic machine will succeed in leading it out of the turbulent zone in which it is presently enmeshed. However, it must be feared that, in the name of security, the levels of social control, the persecution of autonomies and the repression of dissidences will be increased, encroaching in new ways upon the freedom margins of simple citizens like you and us. But there is something still more disquieting in wait.

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[13] Ibid.

[14] Edmund Burke, *Thoughts and Details on Scarcity*, 1795.

[15] See Karl Polanyi, op. cit., p. 118.

[16] Joseph Townsend, *Dissertation on the Poor Laws*, 1784, quoted in Karl Polanyi, op. cit., p.113.

[17] The term 'euergetism' (Gk: to do good deeds) was popularized by the French historian Paul Veyne to describe the practice of the wealthy in ancient societies of Greece and Rome to donate some of their wealth to the community. (eds)

II. The Systematization of the Production Detour and the War Against Subsistence

There is indeed a deeper reality, for the denouncement of which there are still hardly words. This reality is the war waged by the West against the subsistence of the rest: of the natives of the non-European parts of the world and of the poor in all parts. As Michel Foucault said, this war resembles a fight between a vulgar iron pot and a beautiful piece of ceramics. It is the war between economic and subsistence practices, economics vs subsistence knowledges. To analyze this war, it is necessary to go beyond the adjective "capitalist" and to examine what it qualifies: economics itself, that is, according to schoolbook definitions, "the allocation of limited means to alternative (read: unlimited) ends" or "the formation of values under the constraint of scarcity." Scarcity is the tension between the limitedness of the means and the unlimited character of the ends. As soon as the economy is defined in terms of scarcity and values, it is irremediably capitalistic, and attempts to redeem it from its inherent violence by means of state interventions might momentarily and locally curb it, but they will never change its nature. It is not possible to proclaim peremptorily that the economy must be put again "at the service of man" or that, since it emerged from our actions, we can correct its defects like we do of a tool. Nor can we affirm, as it is done by some anti-establishment politicians, that the machine was manipulated in the shadow by a number of evil beings and therefore to assume that it would be enough to replace economy by something else in order to put it back entirely at our disposal.[18]

Re-humanizing the economy seems to be as utopian a goal as making the automobile and its highways friendly to pedestrians. But what cannot be radically changed can be contained.

Another reflection by Ivan Illich inspires us here:

> Social scientists can build a computer model of traffic in Calcutta or Santiago, and engineers can design monorail webs according to abstract notions of traffic flow. Since these planners are true believers in problem solving by industry, the real solution for traffic congestion is beyond their grasp. Their belief in the effectiveness of power blinds them to the disproportionately greater effectiveness of abstaining from its use. Traffic engineers have yet to combine in one simulation model the mobility of people with that of vehicles.[19]

Traffic engineers are totally blind to autonomous mobility and hence to the synergy of autonomy and heteronomy which is the "really existing traffic." In the best of the cases, they acknowledge walking or biking as forms of "cheap and primitive transportation," and for which motorized vehicles have to be substituted as soon as possible,

[18] Florence Aubenas y Miguel Benasayag, *Résister c'est créer*, Paris: La Découverte, 2002, p. 109 (free translation by the authors.)

[19] Ivan Illich, *Energy and Equity*, New York: Harper & Row, 1974, p. 53, 54.

naturally, as always in their wooden language, "for people's good." Their blindness leads them to plan the mess of late industrial traffic, in which congestion becomes a general condition and where planned *detours* play the role of the multiplication of the epicycles with which late Ptolemaic astronomers attempted to put an obsolete theory in accordance with the facts.

Traffic, that is the synergy of *transit* (term used by Illich to define *autonomous mobility*, which is non-economic and non-bureaucratized) and *transport* is a very apt metaphor for a relation for which economists have no term because all their professional training aims at making them selectively blind to it.[20] It is the synergy between two forms of obtaining the necessaries of daily life, one of which is autonomous, non-economic in the modern sense and as little administrable as transit or autonomous mobility, and another which is *heteronomous* as transport, economic in the sense of "submitted to the iron law of scarcity," and in need of administration and social control. These two forms of obtaining the necessaries can be called, respectively, *subsistence* and *economy*. Their synergy is the concrete *livelihood of man* with all its tribulations and joys. *Economics* is a taught and prestigious blindness to subsistence, just as *transportation science* is a cultivated blindness to people's autonomous power to move around. In the industrial variety of traffic, transport or heteronomous mobility encroaches upon transit, or autonomous mobility to the point of making it dangerous and finally insignificant, according to the engineers' and economists' self-fulfilling prophecies. In the form of human livelihood imposed upon people by capitalism, the synergy between subsistence and economy has become negative to the point that the destruction of whatever remains of subsistence capacity has become the first condition of any revamping of economic growth, with its cancerous proliferation of production detours and its war against all remnants of autonomous subsistence.

III. For Whom Do the Bells of the "Crisis" Ring?

What we call "the crisis" is a moment in which the economic lottery has even fewer consolation prizes for the poor, reduced privileges for the average well-to-do, while the cards distributed to the top players are rearranged in a way to allow the game to produce, on the one side a new poor, and on the other, a new type of riches for which the words millions and billions are what a village accountant is to Microsoft's financiers. There are several numerical ways to express these new disparities. Unfortunately, their many indicators are generally incompatible.

They rarely state clearly if the word "riches" refers to wealth or income, and in general, they seem to intentionally discourage comparisons. Here are some examples of this dance of numbers: "The group of the 300,000 richest Americans possess as

[20] "The discussion of how energy is used to move people requires a formal distinction between transport and transit as the two components of traffic. By *traffic*, I mean any movement of people from one place to another. By *transit*, I mean those movements that put human metabolic energy to use, and by *transport* that mode of movement which relies on other sources of energy," Ivan Illich, op. cit., p. 15.

much wealth as the poorest 150 million." "The 500 world's richest have as much as the poorest 416 million." "In 2007, global military expenditures amounted to 1,339 billion dollars."[21] According to the World Bank, the poor represent 56% of the World population: 1.2 billion earn less than 1 dollar daily, and 2.8 billion, less than 2 dollars.[22] Today, in the United States, prototype of a country with subsidized agriculture,[23] the poorest dedicate up to 16% of their income to feeding themselves. By contrast, in many countries of the South, households dedicate half of their income to this purpose, and in not few cases, up to 75%. Everything seems to indicate that capitalism is preparing a huge paupericide.[24]

Granted that such disparities in wealth and incomes, the amounts dedicated to armaments, publicity, or subsidies allowing the farmers of the rich countries to smash the poor countries' agriculture are blatant injustices.[25] But the apparent objectivity of cold numbers conceals a still more disquieting reality, which is the destruction of people's autonomous abilities, the economists' blindness to that destruction, in short: the war against subsistence waged by market economies.

The *Potentia* of the Poor

In a book that was published a few months ago[26], we acknowledged these disparities and their alarming growth, and tried to show clearly how the injustices inherent to

[21] *Le Monde*, June 11 2008. Are one thousand billion a trillion of a zillion?

[22] Deepa Narayan, *Moving out of Poverty: Cross-Disciplinary Perspectives on Mobility*, New York: Palgrave, Macmillan, World Bank, 2007.

[23] According to documents presented at the *Heads of State Meeting* of Johannesburg in 2002, in 2001, the industrial countries of the North subsidized their farmers for a total amount of 350 billion dollars — that is about one billion dollars daily — to allow them to export their produces to poor countries, making these dependent on alimentary commodities whose price is defined by stock exchange gambles. Legalized by economic and political powers, and supported by professional do-gooders, this *dumping* contributes both to destroy the subsistence basis of the poor and to oblige them to expanding production detours, starting with ever longer commuting times. But what do we hear, now that the price of grains and other forms of basic food is rising in the world's markets? Incredulous, we hear political leaders of the South announce that they will reduce customs duties to allow their people to continue eating imported food.

[24] See the statistics presented by Frances Moore Lappé, *World Hunger:12 Myths*, New York: Grove Press, 2004 and *Getting a Grip: Clarity & Courage in a World Gone Mad*, Chelsea Green Publishing, 2007. The *dumping* practiced by rich nations subsidizing their agriculturists looks as if it were a world-wide operation aiming at suffocating the poor, particularly subsistence peasants. However, in the data presented to the public, it is constantly stated that "due to the present urgency," only a modernized agriculture can feed the world population. What the manipulators of statistics conceal, is that 1) not long ago, traditional agriculture was still able to feed most of the people, and that 2) even in its present status of only very partial modernization, the world's agriculture produces enough to feed twice the world population.

[25] World-wide, the costs of publicity are estimated at $450 billion annually, see Majid Rahnema, Jean Robert, *La Puissance des pauvres*, Arles: Actes Sud., p. 19.

[26] See Majid Rahnema, Jean Robert, *La Puissance des pauvres*, Arles: Actes Sud, 2008.

the widening gulf between rich and poor were the result of a dominant *episteme* and practices that were mainly geared to the defense of the privileged few and the gradual destruction of all the creative powers and potentialities of the poor. The worldwide assault of modern economy against the remaining subsistence economies has indeed considerably weakened the people's traditional means of defense. We have amply shown how all the various attempts to "integrate" the uprooted poor into the dominant markets by substituting formal economic relations for threatened subsistence practices are doomed to transform vernacular poverty into helpless misery. Poverty equipped with means of subsistence is what the human condition has been through history. Misery is poverty deprived of its traditional means of subsistence. Yet, we believe that such a dismal perspective could only become reality if we yield to panic. However, there is indeed a real danger that the strategies of all the governments serving the market could finally succeed in breaking the power of resistance of the poor.

We have written this essay sustained by the hope that the "crisis" could stimulate, instead of panic and fear, reflections on how to reinvent the present through new political options at the individual and social levels. For the Chinese, the idea of a "crisis" is rendered by the juxtaposition of the ideograms for "danger" and for "opportunity." In ancient Greek, the word *krisis* means discernment, decision. If the "crisis" is understood in this sense, every time the economic system proceeds to the structural readjustments through which it attempts to nominally save its face,[27] it may lead to the understanding that unfathomable new powers can grow on the corpse of people's freedom to subsist and govern themselves[28] and that not succumbing to them is a primordial ethical and political issue. If we yield to these powers, the mechanics of the world economic machine will foist a great *crisis* in order to compel people to accept the new disparities, inequities, expropriations, production detours and concomitant destruction of subsistence capacities deemed necessary to put it on its tracks again. Then the *crisis* will be another word for the stunning of the political imagination.[29]

The cold and often fallacious "objectivity" of numbers conceals what neither the United Nations nor the World Bank and their likes have words to express: before the Development adventure that, for more than six decades, colonized the peoples of the South to the North's economic mind-frame,[30] the majority of the poor still possessed *subsistence knowledges* that allowed them to avoid falling into the dependencies that pave the way to destitution and misery. Since then, the capitalist persecution of sub-

[27] According to Milton Friedman, if you want to promote a change in the capitalist system, provoke a *crisis*. According to Immanuel Wallerstein, *World-System Analysis: An Introduction*, Dirham, North Carolina: Duke University Press, 2004, the actions of anti-systemic groups contribute most of the time to reinforce the system.

[28] See Majid Rahnema, Jean Robert, op. cit., chapter IX, entitled "Changer de revolution," a title that could be better translated in English by "For a change in the concept of revolution."

[29] See Ivan Illich, *Energy and Equity*, op. cit., p. 23–26.

[30] See Majid Rahnema's insider critique of Development in Majid Rahnema, Jean Robert, *La Puissance des pauvres*, op. cit., chapter VI : "The Development Imposture" (interview with Jean Robert).

sistence has turned into an *epistemic war*, the war of economic know-how against subsistence knowledges.[31]

Political thought on modern economy must finally confront the question that it eludes for over two centuries: What should be the rightful place of economics in a truly democratic society? In other words, what is the place that historically and culturally constituted societies could provide to a domain that is bound to be ruled by the iron law of scarcity? To what extent should free human beings, aware of their freedom and their true "living riches," allow a market economy to contaminate and pollute still more the interpersonal and non-economic relations and ties that constitute the real and ultimate wealth of a truly free society? And finally, how to prevent that the utilitarian logic[32] of an economy mainly geared to growth and productivity gradually produces a *dissociated society*, that is transforms society into a "*dissociety*", as the French sociologist Jacques Généreux's has named it[33]? Reflecting on the place of the economy within society would lead to a re-evaluation, not only of subsistence practices among nonEuropean peoples or in the European past, but also could conceive of the *livelihood of man* as a synergy of subsistence and formal economy.[34]

Among all "third world" leaders that fought colonialism after World War Two, Gandhi is indeed one of the very few who understood that its destructive power was not primarily England's conquering thrust, but the Indian adoption of the English be-

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[31] For an analysis of this epistemic war, see Majid Rahnema, Jean Robert, op. cit., chapter III: "The Poor's Epistemè: Epistemology of the War Against Subsistence," and IV: "The Constitution of an Epistemic Domination that Subjugates Traditional Subsistence Knowledges."

[32] See the works of the M.A.U.S.S. (movement anti-utilitariste en sciences sociales), its journal, *La Revue du MAUSS*, published by La Découverte, and the popularization of the movement's ideas in the books of, for instance, Serge Latouche: *La Méga-machine. Raison technoscientifique, raison économique et progress.* Paris: La Découverte, 2004 [1994]; *Petit Traité de la décroissance sereine*, Paris : Mille et Une Nuits/Fayard, 2007.

[33] *La Dissociété*, Paris: Seuil, 2006.

[34] For us, the classical initiation to the strangeness of modern economic normality is Karl Polanyi's *The Great Transformation*, op. cit. By a self-affirmed disciple of Polanyi, see Louis Dumont, *From Mandeville to Marx: Genesis and Triumph of Economic Ideology*, Chicago: University of Chicago Press, 1977. Among the contemporary authors who have contributed to maintain alive the tradition that, since Aristotle, states that the administration of one's own house (meaning all the activities covered by the Greek verbs *oikonoméô* and *oikodoméô*) is radically different from all *chrematistics*, defined by Aristotle as the disproportional mind-frame of the one who practices exchanges in order to obtain more that what he is ready to give, and to accumulate goods or money beyond all sound principle of satisfaction and satiety, we especially recommend: Alexandr Chayanov, *The Theory of Peasant Economy*, Homewood, Richard D. Irwin, for the American Economic Association, 1966. Chayanov was executed in 1937 for his "revisionist" opposition to the very economicist *kolkhose* promoted by the Soviet economists favoring State capitalism in the guise of socialism. In 1987, Chayanov was rehabilitated in Moscow, in a ceremony presided by Prof. Teodor Shanin, who declared that by assassinating Chayanov, Soviet socialism had committed suicide. See also Teodor Shanin's site in the Internet. Julius Herman Boeke, *Economics and economic Policies of Dual Societies as Exemplified by Indonesia*, New York: Institute of Pacific Relations, 1953. François Partant, *La Fin du développement: naissance d'une alternative*, Paris: La Découverte, 1982.

liefs that machines could indefinitely substitute for people's work, that imported tweed was better than *khadi*, the Indian homespun fabric, and that the British School system was better than the Gandhian *Naï Taleem* project of indigenous schools.[35] If other Third World leaders had understood that what crushes the poor is what makes them useless, the decolonized South would have taken another course and the North could have learnt form its political experiences as it starts now to learn from the Zapatistas.[36]

In the possibility of this contention and inversion we place our hopes.

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Jean Robert is a historian of technology and a car resister involved in Amsterdam's Provo movement in 1963 and 1964. As a pedestrian whose liberty of movement is encroached upon by automobiles, he defines himself as a "toreador torreado."[37] Robert's publications include *Water is a Commons*, Mexico: Habitat International Coalition, 1994, *La Trahison de l'Opulence* (co-authored by Jean-Pierre Dupuy), Paris : Presses Universitaires de France, 1976, *Le Temps qu'on nous vole. Contre la société chronophage*, Paris : Seuil, 1980.

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[35] See our reflection on the actuality of Gandhi in Majid Rahnema, Jean Robert, op. cit., chapter V.

[36] See Majid Rahnema, Jean Robert, op. cit., Annex 1 to chapter IX, p. 237 ff.

[37] See Emil Zapotek, "Confesiones de un torreador torreado" on Google. See also Ivan Illich and Jean Robert, "Autostop", in Corinne Kumar, ed., *Asking We Walk: The South as New Political Imaginary*, Bangalore: Streelekha Publications, vol. I, 2007, p. 352–356.

Is There Thought After Economics?

Jean Robert

The Founding Statement

In 1971, Ivan Illich pronounced the following phrase: "Beyond certain thresholds, the production of services will do more harm to culture than the production of material goods has done to nature." Three of the books he published in the following years were illustrations of this thesis, respectively for educational services (*Deschooling Society*), transportation services (*Energy and Equity*), and medical services (*Medical Nemesis*).

From then on, Illich proposed to politically define new limits to industrial productions. He accepted the limits to material growth proposed by the ecologists but added the need for limits to the production and consumption of services. Later, he introduced a third type of limits that I will comment at the end of my talk.

The State of the Art of the Early Critique on Services and Professions

The following summary will suffice to recall the state of the debate on services and professions at CIDOC in the 1970s:

- *services* are what *professionals* provide their *clients* with;
- the *professional-client* relationship comprises three types of professional interventions;
- the professional *diagnoses* the client's *needs*;
- he *prescribes* remedies;
- in his name, his *professional association* sues service-providers—and sometimes clients—who do not abide by the rules.

Besides, the professions establish a special relationship to technology, or, as Illich always preferred to say, to *tools*. Only professionals have access to society's high-performance tools and they enjoy a monopoly over them. Industrial tools foment

especially entrenched monopolies that Illich termed *radical monopolies* which, in a kind of circular causality, reinforce professional powers.

Let's recall the main elements of the client-professional relationship: the *professional*, the *client*, the *professional-client relationship*, the *diagnosis* of the client's *needs*, the *prescription* of remedies, the prosecution of deviancies by the corresponding *professional association*. Besides, professionals carry on a *radical monopoly* on the satisfaction of *needs*.

The Historicity of Professions

Yet, the professions are a historical phenomenon: the definition of the professional act in 2013 does no longer correspond to Illich's descriptions of it in the early 1970s. In the late 1990s, Sajay Samuel, in collaboration with Illich, studied the radical changes that, since the 1970s, have affected the relations between the constituting parts of all professional interventions.[1] I hope that, in the discussion that will follow, we will come back on this great transformation and the new constellation that it generated.

The Krisis[2]

After 1976, Illich became very critical of the concepts underlying his critique of institutions, professions, services, and industrial tools. He had realized that his previous works were not free from the axioms of industrial society. In his last conversations with David Cayley, he summarized his about-face as an auto-critique concerning the "mistake" he had committed by treating institutions as if they were tools or instruments, or better said as if they could be amended by restoring their instrumentality: schools should be learning instruments; roads and vehicles, tools for encounters; hospitals, healing devices. In these conversations, published as *The Rivers North of the Future,*[3] Illich says that he became aware of this "mistake" thanks to a student, Thomas Peschek, who was conducting a seminar in Bremen "about the fundamental mistake of Ivan Illich."

> What Illich did not understand, according to Peschek, and he is certainly right, is that [institutions are no tools, but systems, and] when you become the user of a system, you become part of the system. [...] Thinking about the world, not in terms of causality, but in terms of system analysis has

[1] For a short summary of the argument, see Sajay Samuel, Le role des professions, *Esprit* n.367 (8/9), pp.185192, 2010.

[2] In Greek, *krisis* means crossroad, or decision. The adjective, critical, derives from it.

[3] Or: *The Testament of Ivan Illich as told to David Cayley*, Toronto. House of Anansi Press, 2005, p. 78.

> brought us into a new era, into which we couldn't have come if we hadn't moved out of the world of tools[4]

Between 1976 and 1982, Illich combed his works of the previous years in search of such concepts. For example, the concept of *counter-productivity* is not free from a certain productivist bias, or the comparison between the energy that goes into a vehicle and the "energy" of the human body implicitly makes of the body a thermodynamic machine. He also publicly renounced the use of cybernetic-friendly concepts, like input, output, feed-back or even "to cope." He gave a historical sense to the word *system*: the expression the *age of systems* was increasingly used to define an epoch, our epoch, in which the concepts that he now avoided have become founding axioms of the social construction of reality.

In respect to his *krisis*, the first question that we must confront is: did the Illich of the 1970s really commit gross mistakes, or has a radical epistemic break occurred around 1980, a break that invalidated the critique of industrial society that Illich had elaborated in the previous decade? In other words, has Illich successively achieved the critique of two very different eras, the late period of tools, and the era of systems?

Thus, from 1980 on, Illich wrote books and essays on subjects that apparently bear little relation with his previous themes. His new themes are for instance body history, the history of perceptions, the "interface" between orality and literacy (to use Walter Ong's terms[5]), proportionality, systemic requirements instead of personal needs, risks, and the history of scarcity. What does it have to do with the strong concepts of the previous decade, like counter-productivity, the synergy of autonomous and heteronomous modes of production or radical monopoly? Apparently nothing.

The Substitution of an Iatrogenic Body for the Perceived Body

At this point, I have to share an experience: I have revisited Illich's early works after having read his last books and essays and the familiarity I gained with the "second Illich" radically changed my perception of the "first." This talk is inspired by this experience, which I warmly recommend to everyone interested in Illich. For the sake of my argument, I'll take *Medical Nemesis*. In the seventies, medicine is counter-productive. After 1980—personal *krisis* or epochal break?—medicine pushes a certain body under the patient's skin. More precisely, the medical act now substitutes an iatrogenic body for the patient's perceived body. Doing so, medicine destroys culture, since every culture is based on a shared perception of the body as the changing basis of

[4] Ibid.

[5] See Walter Ong, *Orality and Literacy: The Technologization of the Word*, London: Routledge, 1982.

the "I" in every historical epoch. This destruction goes far beyond the historic enclosure of the commons.

The Search for at Least One Precedent

I'll now ask a question that might seem rhetorical but that, the more I think it, can be structuring: is there another author whose work can be divided into two parts, related in such a way that: each one can be read independently and treats apparently unrelated topics; one is better-known than the other; the reading of the less-known work changes the perception of the well-known work?

In 1759, Adam Smith published *The Theory of Moral Sentiments*, which is a relatively little-known work. In 1776, he published *The Wealth of Nations* that made of him the putative father of modern economics. For a long time, economists, who read the first book after having studied the second said "nothing to do with what interests us." Nonetheless, a small number of them, who reread the second book after the first, erected Adam Smith's problem into a respectable academic theme dubbed "das Adam Smith Problem." Is there or is there not a line of continuity between the two books? That's the "problem."

My friend Jean-Pierre Dupuy states that "today, the prevailing opinion is that Smith's thought is a coherent whole."[6] The effect of (re) visiting the first book after having acquired a familiarity with the second is that it projects a new light on "...the conditions of the constitution of economics into a science."[7] According to Dupuy, the light that *The Theory of Moral Sentiments* projects on *The Wealth of Nations* is that economic behavior in the modern sense is essentially mimetic or even envious. One does rarely pursue riches to consume it or even to use it, but for the envious gaze it will elicit in others: riches attract the others' *sympathy*. The others' sympathetic—or envious—gaze is the reward for the ostentation of useless riches. Smith confirmed the status of economics as a science by systematically confusing subsistence and economics (e.g. the rules of the game for purchasing diamonds and for yielding water). The abolition of the distinction between economics and subsistence submits man's livelihood to the iron law of scarcity and to the bad weathers of the markets.

On the contrary, Illich's contributions to economic thinking has been to insist on the logical necessity of restoring the commons as a domain not submitted to economics, that is to the iron law of scarcity. His defense of the commons tends to reestablish a distinction that, before the XVIIIth century, was simply part of the art of government. More precisely, by analyzing critically the economics of services and professions, Illich allowed to reestablish a clear distinction between economics as a domain submitted

[6] Jean-Pierre Dupuy, "De l'émancipation de l'économie. Retour sur la problème d'Adam Smith," *Introduction aux sciences sociales. Lpogique des phénomènes collectifs*, Paris : Ellipses, X École Polytechnique, 1992, p. 148.

[7] Op. cit., p. 149.

to the law of scarcity and subsistence as an autonomous production of use values not submitted to it; the reason is that "beyond certain thresholds," economics—or the "formal economy"—inevitably destroys a culture of subsistence (example: the industrial production of food threatens the existence of subsistence agriculture)[8]. Once again, this verifies Illich's capacity to build distinctions where a gray indifference reigns.

Before Smith's century, the economy had still something to do with the Greek verb from which it derives, *oikonomeô*, I administer my house, semantically close to *oikodomeô*, I prepare the ground for cultivation or for the edification of a house. Subsistence was a domain protected from cupidity, greed, envy. A domain in which a general rule prevailed, one fostering the protection of the weakest's subsistence, a domain where there were many *commons*. A 17th century witness, Samuel Pufendorf, describes the situation in the following terms:

> ...the necessity of the thing, or its exalted usefulness, are so far from always holding the first place, that we rather see men hold in lowest esteem the things with which human life cannot dispense. And this because nature, not without the singular providence of God, pours forth a bountiful supply of them. Hence an increase of value tends to be produced especially by scarcity; and this is made much of when things are brought from distant parts. Hence love of display and luxury have placed enormous prices on many things with which human life could very comfortably dispense, for instance pearls and jewels. But for articles in everyday use prices are raised especially when their scarcity is combined with necessity or want.[9]

The Conflation of Economy and Subsistence

God's providence pours forth a bountiful supply of the things with which human life cannot dispense and which are free, like water, or cheap, like bread. Expensive goods are generally useless, as are jewels or diamonds. When the economy was not a science, but part of the art of government, a strict distinction between subsistence goods—which are the goods with which man cannot dispense—and the trade of sumptuary goods deprived of subsistence value was strictly maintained. Smith, and all economists after him, abolished that distinction. Once the economy had been conflated with subsistence, it ceased definitively to be the good administration of a house. It ceased to deal with subsistence, this easy and, for Smith, "uninteresting question." Modern economics is no longer submitted to the rule of satiety and to just proportion and becomes a chrematistics, a shameful activity, according to Aristotle. An activity ruled by the law of scarcity.

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[8] Nonetheless, subsistence and non-industrial farmers are still the world's major producers of food.

[9] Samuel Pufendorf, *The Two Books on the Duty of Man and Citizen according to the Natural Law*, Chapter XIV, "On Value," Cambridge, 1682.

The traditional commons protected subsistence from cupidity, envy and all that can be qualified as destructive mimetic relation. To abolish the distinction between a domain obeying the rule of satiety and just proportion and another domain submitted to destructive mimetic behaviors is to leave the subsistence of common people at the mercy of the markets where mimetic relations reign without restrain. The laws that rule modern markets, the "laws" of economics are not the social equivalent of the laws of physics, but manifestations of mimetism, of which the first is the fundamental "law" of economics, scarcity, one of the main figures of mimetic behavior, according to Dupuy.

Reestablishing the Suppressed Distinction

Besides of being the author of a late work capable of modifying the perception of his early work—whilst the reverse is true for Smith—Illich has little in common with the moral philosopher and then economist from Glasgow. In order to see how he restored the distinction that Smith negated, one has to read the introduction of *Shadow Work.*[10] Three sets of political limits had successively been proposed: 1. the production and consumption of material goods and energy must be limited; 2. one has to limit the production and consumption also of services. After 1980, Illich introduced the necessity of a third type of limits: 3. the limits that must be imposed to all what paralyzes the commons and causes subsistence to be conflated with economics.

The third type of limits is the decisive departure from Smith who, by submitting subsistence goods to the same law as sumptuary goods, gave a new virulence to the old war against subsistence. What Ivan Illich attempted is to put again in the foreground what Smith – and all economists after him – had repressed:

- water before diamonds;
- subsistence before economics;
- what is common ("mean") before aristocratic modalities;
- oral epics before poetry;
- the felt *soma* before the iatrogenic body (oranatomic descriptions);
- the history of stuff before the history of ideas;
- "*quod est in sensu*" before "*quod est in intellectu*"
- the percept before the concept;
- material culture before "high culture"; • incarnation before anagogic elevation;

[10] London: Marion Boyars, Open forum series, 1981.

- the baby in the crib before the heavenly Emperor.

Little by little, I am revisiting the first part of Illich's work and reinterpreting it along the insights of the second part.

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The Disembodiment of Motion

Jean Robert

The Pedestrian Condition

We have delved into the perceptual sediments of fifty years of car-related routines. Under that accumulated alluvium, we find the strata of pedestrian locomotion, with which, in the next chapter, we will contrast railroad journeys. Up to the epoch of the first iron ways, around 1830, everybody was a hiker or traveled in coaches at walking speed. Pedestrian was almost synonymous for "common man" and in many languages, "horse rider"—cavalier, Ritter, caballero, chevalier— was the first distinction from the common condition. Except for brief moments of gallop, the rider's pace is twice or thrice faster than the walkers'. Let's imagine that the speed of human locomotion today to be within the range of the velocities of walking and of riding a bicycle. Such a narrow spectrum of possible speeds would not allow for essential differences of perceptual modalities to occur. The bicycle and the horse enhance or exacerbate perceptions, but they do not break the circle of the pedestrian condition. The rider, or the cyclist are immersed in nature's materiality, even if they pierce the wind faster than do pedestrians.

The pedestrian's is a condition of immersion and embodiment. The walker meets the sites of nature with his legs, his nose, his ears and all the pores of his skin. For him, there are smelly places, others are remembered for their unique odor. Besides, places vary with the seasons and the hour of the day, constituting local "spimes" remembered by the walker's body. The feeling of sweat in my armpits will always remind me of that fountain under a Jura pine where, on a summer afternoon, we washed our skirts and let the sun dry our sweating chests. I can still name the friends who remember that place, that day.

Through all history, up to the modern epoch, the feet had defined the scale of inhabited places. The pedestrian condition, common to all, shaped common perceptions of natural sites and landscapes. The king, then, hardly traveled faster than his subjects and he perceived nature the way they did: by walking or riding in her. For the best and the worst, neighbors truly dwelled in the same place, and every place engendered its peculiar perceptions and representations of the close and the far, this and the other world. Every inhabited site was, as E.V. Walter writes, "a unity of experiences organiz-

ing the mutual (...) influence of all beings within it."[1] It was a stage on which reigned a particular unity of place, time, and action. An intimate distance, which was felt in the legs, but was also evaluated in kinship or in intensity of friendship or enmity made every site distinct from the next and gave it, in Walter Benjamin's words, its unique aura. Things, like places had, Benjamin writes, an aura of uniqueness: they were not reproducible. Except printed books, no object was an exact copy of another one, and even a book, in a given region, was generally unique, because the next copy was out of reach. In his essay on the village of Montaillou in the 13th century, Le Roy Ladurie speaks of the man who possessed an exemplar of Ovid's "Art of Loving" and was well known because of it.

Pedestrian locomotion is not the abolishing of distances. It is the bodily experience of the intimate distance between unique places and moments. The hiker's tales enhance and sometimes exaggerate the estranging particularities of the far regions into which he ventured. Pilgrims had their most noticeable adventures in the most remote places they had visited, as if the intensity of their experiences increased with the traveled distance. Walking is not a disembodied motion relating an abstract distance to an abstract time. It is not an arrow between an origin and a destination, but an action that can shape the goals realizing them. It is not a scheduled forecast about my body's location within one hour or one day, but an unpredictable event. The world's center is always under the walker's feet. To him who walks about, nature does not reveal herself as a mere sequence of images, but as an *oikos* of heavy and smelly substances limited by a horizon.

Far under the perceptual rubles of mechanized locomotion, we find a form of motion which does not fit our schedules, our maps, nor the internal arrow of those who believe that time is the cost of an operation whose benefit is the attainment of valuable locations. Any activity that puts ends at the service of predetermined goals, Aristotle calls a motion. He opposed motion to action, an activity which, like playing, sets its own goals and reveals the world in always new and unexpected ways. We have to contrast the perceptual habits shaped by mechanical motion from those formed of actions and their always surprising revelation of worldly matters. For that, I have been inspired by the intuitions of two great phenomenologists.

Substantial Motion Versus the Vain Destiny of Fleeting Images

In his essay on the imagination of matter, Bachelard establishes a distinction between movements that entail "an essential destiny that endlessly changes the substance of the being," and "the vain destiny of fleeting images and a never-ending dream." (*Wa-*

[1] Eugen Victor Walter, *Placeways: A Theory of the Human Environment*, Raleigh: University of North Carolina Press, 1988.

ter and Dreams, p. 6) Motion either brings forth the substantial essence of moving stuffs, or it is a vain succession of immaterial images. True movement always reveals something of the substantial depths of the visible world. The experience of motion is essentially the revealing of things in their materiality in the presence of one's body. Substance less motion is nothing: it is but a succession of weightless images. Bodiless motion is a dream. It is not enough to say that motion is always motion **of** something: its true nature lies in the acts which, from the depths of substance, bring the materiality of the world into our incarnated presence.

The old philosophers who thought that motion is an actualization of substantial forms understood its nature differently—and perhaps more genuinely—than the modern scientists who draw its trajectories in coordinate space-time. For them, motion was an **actualization**, by which they meant the bringing into being of a potential existence. To see how right they were, we don't need to share their belief in predetermined and eternal potentialities or "forms." It is sufficient to understand that motion — my body's and nature's —has the power to actualize existence into sensible beings by bringing them into my carnal presence. The walker's movements bring existence which were at best only potentially there —in thought or in memory — into the realm of his vision and in this the ancient philosophers were right: motion actualizes hitherto hidden possibilities of being.

It is by my movements that immobile objects facing me reveal their hidden face and become seizable. It is my motion which will reveal to me things presently behind the horizon. Conversely, nature seizes us in her motions. The world is an experience of seizure. In the sense of that double grasping, a doctrine of motion that would start from these powers of reciprocal revelation would be a "haptology": a science of the mutually palpable presence of the world and the body. Yet, the actuality of this seizure is, in itself, inexpressible through words, for we can only speak of motions that have happened and make guesses about their continuation.

In spite of all their merits, the physico-mathematical theories of motion that fix its trajectory in space-time miss this "haptologic" dimension. To regain a pristine conception of motion as the mutual seizure of the body and things, we must attempt to conceive it without our usual *a priori's* of space and time, as an experience that precedes, and not follows any reference to rods and clocks. Before it could possibly be scheduled and mapped, perhaps before the conceptual invention of space and time, motion was the modality of our vision. Schedules, trajectories, and space-time coordinates are means to catch, not the unseizable "haptologic" moment of motion, but its dead trace once it has passed away and to make that trace available to the eye as "trajectory." Trajectories are the pastness of motion, not its unspeakable present.

Unlike modern scientists, who freeze motion in graphs, the medieval philosophers attempted to catch its actuality with words. They defined it as a *perfectio*, by which they meant the bringing forth of a substantial form and its completion. They recognized that the *via ad perfectionem* (the path to that perfection) could be studied as something different from the *perfectio* itself, but they resisted the temptation to take the path for

the motion. They insisted that the essence of motion was actualization. Further, if I see "actualization" as the bringing into my presence of things hitherto only potentially existent for me, I come to understand that the medieval philosophers — the great Scholastics or "Schoolmen" —were also great walkers, for their philosophy fits the experience of him who knows nature by walking her.

Galileo studied abstract trajectories in space-time, not motion as that which brings potential existence into sensible being. A theory of motion centered on trajectories and framed in an aprioristic space-time necessarily concentrates on repeatability and predictability. On the contrary, motion, experienced in the act of its completion, is never quite predictable because one does not know which hidden aspect of being, which "substantial form" it is going to emerge into one's presence.

The "space" and "time" of actual motion, experienced in the flesh, is not the metric spacetime of mathematics and physics. Embodied movement engenders its own "spime," which is why it is so radically different from the motion of a mechanical contraption in the lab. Walking is a moving experience which, only by an abuse of language, can be dealt with in the terms applied to mechanical locomotion. The act of walking is the complement to the act of seeing. As Gibson has shown, seeing is an ecological act: it opens up an *oikos* to be seized, smelled, tasted, heard, and seen while walking. A philosophy of walking is a philosophy of vision and, conversely, the philosophers who start their inquiry by asking "what is there, there?" used to be walkers: were not Aristotle and his students called "the ones who walk about," the "Peripatetics"? Through the Middle Ages up to the beginning of modern times, philosophers who followed Aristotle's example and commented on his works claimed that same name for themselves, signifying that walking is the complement of the philosopher's vision. Did not Socrates himself initiate the dialogue with Phaedrus with the injunction: "Move forward"? They went out of the city, took a stroll, and while walking reflected on the spell letters cast on sensible being.

The walker sees nature with his feet as well as by walking her with the feet of his eye: even in the darkest night, a special fatigue in the ankle allows him to 'see' the steepness of a path. At dawn, he who wants to climb a mountain prepares himself by evaluating and feeling "in the calf of the eye" the distance to be covered.

The alphabet first engendered a realm which is open to the eye only. The man of letters sits behind a desk. While his eyes pore over the pages, he sometimes dreams that he's left his body behind. What the mastery of the alphabet's technique once allowed a well-trained minority —letting the eyes abandon the body — the technology of speed internalized into everybody's perception.

Kinaesthesia

The walker's space is a manifold of actual and potential body sensations: not only the hill actually climbed is impressed as fatigue in the walker's calves or the rider's loins,

but distances to be covered are also evaluated as potential sensations of effort. This sensation of movement or "kinaesthesis" (from Greek *kinein*, to move and *aesthesia*, sensation) is the impression, in the walker's flesh, of nature's motive injunctions. As long as man was a pedestrian or horse rider, the perceived movement of things could be echoed in his entire body —not just the eye — which was then the sensorium of motion. Nature's movements were challenges to man's actions and invitations for new gestures to be performed. This is how I understand the phenomenologists' intuition of the intentionality of nature. When man could experience nature's motions by being immersed in them and responding with his own movements, every particular motion bore the coloration of a particular element: violent water through which the swimmer escapes using all his muscles was radically different from the wind's action on the dauntless walker or from the crumbling weight of earth underfoot. In a pedestrian world, nature's challenges are always embodied in material elements.

The perception of things in motion is, following Bachelard, strengthened by the knowledge of the depth of a specific element. This element, for him, was water. Water gave his imagination of matter its "fundamental color." For he was born "in a section of Champagne noted for its streams, its rivers, and its valleys — in Vallage, so called because it has so many valleys." Thus, his preferred image for substantial motion was flowing water. He never saw water as the ocean's surface, which evokes an infinite extension, but as the stream of rivers or the flow spurting from a deep underground spring, "for, in my own reverie, it is not infinity that I find in waters, but depth." Movements of water surging from the depths are, for Bachelard, the carriers of remembrance. They first remind him of Vallage, where "matter" is never abstract — tasteless, colorless, devoid of tactile qualities —but always embodied in sensible stuffs.

But the region we call home is less expanse than matter; it is granite or soil, wind or dryness, water or light. It is in it that we materialize our reveries, through it that our dream seizes upon its true substance. From it we solicit our fundamental color. Dreaming by the river, I dedicated my imagination to water, to clear, green water, the water that makes the meadows green. I cannot sit aside a stream without falling into a profound reverie, without picturing my youthful happiness... It does not have to be the stream at home, water from home. The nameless waters know all of my secrets. The same memory flows from all fountains (ibid. p. 8)

"Dreaming by the river," letting water give him its "fundamental color," Bachelard made of flowing water a metaphor for motion. Readers of his other works might find my statement too exclusive and object that he recognized that each one of the elements — earth, water, air, and fire — called for its specific imagination of substantial movement. He dedicated another book to the imagination of air and even gave it the subtitle "Essay on the Imagination of Motion." Bachelard, however, remained exterior to the spirals of invisible air that shape and sustain the spectacle of the vault of the heavens. He was not a wind hero, a dauntless walker who, like Nietzsche "bends forward in the face of the wind, against the wind," whose walking stick "pierces the hurricane, makes holes

in the earth, thrusts through the wind." Nor could he, like da Vinci, become one with the whirls that shape the sky.

The movement which brings water from the depths to the visible surface allowed Bachelard to understand motion as an epiphany of the materiality of the world. What, for the sake of references to come I call "substantial motion" (motion that brings forth the substantiality of things), Bachelard understood in accordance with the movements of the flesh it induces or demands. (ibid. 159). Again and again he insisted that reality cannot be founded as a succession of images in human's eye. I bring nature into my sensible presence by the movements of my flesh, and, in her motions, she responds by her active presence. "I see" means that my movements actualize as visible the potential existence which nature brings forth from her depths. Between nature —which Aristotle defined as a "principle of motion and change" (Physics 2OOb) — and my body there takes place an interplay of mutual challenges and responses through which both establish their carnal presence. It would be as silly to claim that nature is "an image in my eye" or "a representation in my mind" as to say that I am a dream of nature.

To address that carnal presence in a mutual activity, Bachelard — who wrote fifty years ago —used words which I now find too ambiguous, misleading. He spoke of "man's labor," the objects' "coefficient of adversity," our "offenses" and the elements' "anger." He wrote:

> as soon as we begin to distinguish — as I have tried to do by considering the composition of water and earth — every matter in accordance with the human labor it induces or demands, we shall not be long in understanding that reality can never be well founded in men's eyes until human activity is sufficiently and intelligently aggressive. Then all the objects of the world receive their true coefficient of aggressivity.

And:

> We will bring Schopenhauer's insight to its conclusion; we shall compute the sum of intellectual representation and clear will from *The World as Will and Representation* in a formula: The world is my provocation. I understand the world because I surprise it with my incisive forces, with my directed forces, in the rightful hierarchy of my offenses, which are like embodiments of my joyous anger, my ever-victorious, ever-conquering anger. Insofar as he is a source of energy, a being is an *a priori* anger." (op. cit. p. 159,160)

We should not misread these lines as allusions to the offenses of *homo industrialis* or to the threats of climatic catastrophe. Bachelard searched for strong words to express the mutual claims of carnal presence of body and nature. His "labor" is my effort in walking, his "provocations" are my dauntless steps into the wind. An object's "coefficient of adversity" is the resistance felt in my flesh when an object opposes my "incisive force":

for example, the experience of lifting rocks to build a stone wall. My joyous anger corresponds to the anger of the elements, embodied in motions of earth, violent water, wind, and fire. Bachelard searched for the conditions of a pristine vision, which for him were none other than the conditions of the world's material reality and of my carnal presence in and to it. If, hearing his words, we cannot help thinking of our industrial offenses and our frozen anguish, it is because we have understood that we live in an epoch capable of limitless provocations but numb to nature's elementary angers. Our aggressions are disembodied, our angers mindless. Nature's flesh has been peeled away. Like heavily loaded clouds before the storm, the elements keep a threatening silence. Bachelard died before pollution and ecological disasters manifested nature's obvious response to our industrial offenses; and therefore he is at risk of being misunderstood.

Synaesthesia

Merleau-Ponty's understanding that the body "is an intertwining of vision and movement" echoes and completes Bachelard's intuitions. Substantial motion, which Bachelard called nature's elementary "anger," responds to my "provocations" — my claims of carnal presence— and elicits my "labors." Nature's angers, which reveal her deep, elementary materiality and my labors are the two complementary sides of the same being. In *The Primacy of Perception*, Merleau-Ponty articulates the complementarity of these two sides:

> In principle, all my changes of place figure in a corner of my landscape; they are recorded on the map of the visible. Everything I see is in principle within my reach, at least within reach of my sight, and is marked upon the map of the "I can." Each of the two maps is complete. The visible world and the world of my motor projects are each total parts of the same Being. (op. cit. p.162)

The "map of the visible" intimately coincides with the realm of my motor projects. What I see cannot be disembedded from what I can: reach, seize, taste, smell, hear; no ideal "image" can be abstracted from these powers and their challenge by nature's moves. It is only by a kind of ellipsis that one can say that the senses "overlap" in a joint action, for they were never severed in the first place. In this joint perception, or *synaesthesia*, things are present before any analytical reduction of their perception to "sensorial data": eyes eavesdrop, words enlighten, feet see, and the nose touches the body's aura.

The synaesthetic perception of someone who evaluates what he sees through the touchstone of a walkable world is the ground of his intuitive judgments about "what there is" and the most solid guarantee for the truth of his assertions. Since modes of talking and action are historical, the grounds for intuitive judgement are also historical. Therefore, an epoch may reject judgments based on another epoch's grounds.

Yet, intuitive judgment founded in synaesthesia—the mutual carnal presence of my body and nature —is not substitutable by any speculative reason. Deprived of that ground, man is unable to make judgments about the truth of what he sees and hears. Does he see "what is there" or does he just stare at fleeting images? Vision, for him, becomes "an operation of thought" or a daydream. We do not "think sufficiently" to the complementarity of "the map of the visible" with the realm of the "I can":

> This extraordinary overlapping, which we never think about sufficiently, forbids us to conceive of vision as an operation of thought that would set up before the mind a picture or a representation of the world, a world of immanence and of ideality. (M-P, op. cit. p. 162)

So intuitive judgment—and its possibility—also rests on a proscription. The breach of that overlapping opens the door to a picture of nature, sets up before the mind "a representation of the world, a world of immanence and ideality." Nature's destiny becomes the vain fate of "fleeting images and a never-ending dream" (Bachelard) and Merleau-Ponty reminds us that the word "image" generally refers to "a copy, a second thing." (op. cit. p. 164) The world becomes a selfreferent copy.

We can now understand what radically separates the vision of nature through a windshield — the "kinetic experience" — from the experience of walking. Our projects of vehicular displacements — let's call them our "automotive dreams" —do not match nature's substantial movements nor do they elicit her elementary angers. The old map of the "I can" is replaced by the map of "what I have in the tank." The act of seeing ceases to be the complement of the act of walking. Frozen by the windshield glance, nature becomes a neutral environment. It thus becomes clear that the essence of the kinetic experience is not the quantitative intensity of speed but the qualitative dislocation of the two sides of being which the walker knows as one. Speed produces a bipartite division of the flesh of perceived nature into, on one side, a quasi-immaterial environment manifest as sequences of fleeting images and, on the other, a body enclosed behind shields and screens.

Instead of an immersion in invitations to gesticulatory responses, nature is now experienced as a landscape framed by a window. A strange type of mirroring between the body and its environment is so established: mediated by the windshield, it is experienced as an "inside-outside" relation. "Inside," the traveler is trained to a new kind of limited kinaesthesia with an enclosed environment that reflects bodily needs and to which exuberant newcomers are eventually housetrained by disapproving stares. "Outside," the landscape, framed by the window, with only the eye still in contact, since the body's training to immobility, the barrier of speed and perceptual buffers prevent the transportee from sensing nature's motive injunctions in his-her legs or loins. While he sits quietly on a bench, in an apparently immobile interior, "outside" all is motion, but it is a motion that has lost its elementary powers. It is the flux of visual specters dancing on the window, as if the landscape were now constituted by a weightless ether.

Seeing Becomes "An Operation of Thought"

The ambiguity of speed —which can be experienced as a thrill or as unspeakable boredom, as the excitement of a departure from routines or as the most enslaving grind —lies in that dislocation of vision and bodily motion. In its "first-timeness," the kinetic experience could be a kind of premonition of that "systematic disarrangement of all the senses" which, after Rimbaud, was seen as a possible door to poetry for it shook the ground of commonsense judgment. Yet it is a derangement or "dérèglement" only as long as it is experienced in a frame of pedestrian references. In that frame — as long as it holds and the body is not tamed — speed creates an illusory extension of the map of the "I can" and extends my motive projects. Then — as soon as I feel comfortable sitting still on my car seat —a chasm is introduced between motion and vision, but speed still maintains me in an interesting state of giddiness. As long as the traveler is a transported pedestrian, motion is still substantial. Then, while nature's elementary angers seem more intense and colorful, the body surreptitiously recedes from their reach. When the chasm becomes the rule, the interesting "dérèglement" ceases and the windshield becomes the frontier of a new covenant: inside, the internal swarming of bodily stuffs under the skin; outside, the unbearable lightness of things in motion. Speed breaks the overlapping of the visible world with my motor projects.

When speed imbues the space situated beyond vehicular enclosures — the environment — with never-ending motion, motion becomes a disembodied flux of forms. Bodily exposure to mechanical speed —the "kinetic experience" —dramatizes formal aspects of nature, like tectonic lines, horological textures, and materializes geometries: straight lines, horizontal planes, intimations of sphericity beyond pedestrian horizons. The routinized experience of speed severs the imagination of matter from powers of judgment grounded in the overlapping of "what I see" with "what I can." Like a dust cloud, stuff whose substantiality is not attested by intuitive judgments can stealthily cover the ground of synaesthetic perceptions and muddle judgments to come. It is then time to step out, extend your legs, and cleanse the eye of your feet from the cloud of dust.

If speed can extend its realm beyond all the limits of a pedestrian common sense, it becomes a reality-shaping experience. The ground of judgment is crushed, reality is molded in the new stuff. Taking Greek etymology seriously, I call it a *neo-plasm*, a newly-cast matter. Unless we watch out, it will proliferate and pollute all the interstices of whatever synaesthetic shelters we have managed to keep hold of. The neo-plasm is but a bad dream: it is matter in its absence, as only a numb, legless and handless no-body could possibly imagine it.

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The Stuff of Traffic Landscapes

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Steel and concrete structures covered by glass, highways, low-rise suburbs, parking lots, air-conditioned interiors, canyons—that we still call streets —between high-rise buildings, open fields, industrial areas and again, suburbs constitute the daily environment of most urbanites. These are the elements of their obvious world. Locations often take the appearance of coordinates on a grid—Sixth Avenue, Second Street—and everybody schedules his day as a to and fro movement between a particular set of locations. In-between space-times are to be abolished, and speed is the means for that suppression. Yet, the "stuff" we perceive our obvious world made of is mainly generated in the devalued in-betweens. The daily ritual of commuting contributes to shape the commuter's perception of day and night, of places, of the material constitution of nature and of the forces that inhabit her. For him, day succeeds to night and night becomes day at the rhythm of the switch between low-rise suburbs and high-rise centers. A meadow, a patch of wood, a river here, a pond there are but points of reference on a trajectory, and no sites. Or better, once framed in the windshield of a vehicle, natural locations lose the aura of unique places they long retained. Vehicular vision is selective in a way pedestrian people could not imagine: what does not serve the purpose of orientation is generally evacuated into a perceptual limbo. E.V. Walter, who has a sure sense for forceful neologisms speaks of the 'rubbish of experience.'

For the hurried commuter, obsessed by the threat of traffic jams or by scheduled connections to take, speed dissolves all sites into evasive images which, unless they contain a significant detail, are evacuated to the rubbish of experience as soon as they were seen. As it crosses a site, the vehicle leaves behind a material and symbolic halo of fume and "seen sights." There is a paradox of the commuter which has thus far not attracted the attention of sophists: he *is* geographically there where he will never *go*. Or better, the hasty images seen through the shield are the visual ghosts of places that he will never meet: speed separates his body from the sites his vehicle crosses.

The walker meets the sites of nature with his legs, his nose, his ears and all the pores of his skin. For him, there are smelly places, other are recalled for their unique odors. Besides, places vary with the seasons and the hour of the day, constituting local "spimes" whose memory is impressed in the walker's body: that bench under a Jurassian pine is for me inseparable from the record of wet armpits on a sunny afternoon. Two miles away, that fountain is for me the place where we washed our shirts, and I can still name the friends who will remember the site. The internal state of the walker's flesh

echoes that of the "flesh" of the landscape, and vice versa, which is why old toponymies speak of bodily marks imprinted in nature.

Speed draws a virtual dash between an origin and a destination. It extracts the body from an original "here" and aims at a well localized "there" where it lets it go again. The in-between spime is not abolished but fused into a daydream. Remember my argument: I argue that this day dream — dreamt during "in-between times," in locations which are no places — is the melting pot of most of the modern imagination of stuff. If I am right, the stuff of the obvious world as we perceive it grows in the shadow of our attention and its threatening strangeness could any time —as an art critique wrote about painter Sydney Goodman's perception of the modern obvious world — "take us unaware in the moment of our indifference." The imagination of stuff drifts away, with the daydream of the imagining mind. Perceptual buffers —cushions, lids, two-or three-folded windows, black noise and the unavoidable music—confine it to a space where it can be tamed by taught ideas and captured by truisms. Imagine an extreme situation, an "ideal type" with which the real experience can be matched. Imagine a car driver who had never been a walker. His body would be virgin of the memories walked landscapes imprint in the walker's flesh. For him, what others still call the landscape would consist of sheer images deprived of all flesh. The windshield would sever the warm interior in which his body rests at ease from an abstract outside that he would not call nature, nor even the landscape, but perhaps "the environment": that undefined and half threatening extension surrounding his vehicular uterus. All his representations of the world would differ from the walker's, who knows that the places he meets with the power of his feet have an independent existence. This theoretical driver would construct his reality on an epistemological ground fitting his confinement in a wheeled box. The images through the shield —or better: *on* the shield —would come and go depending upon his ability to make them surge by an apt manipulation of the board instruments and the map. The visible environment, he would state, is contingent to my technical skills. No wonder that such a man would not stop to assist a wounded traveler abandoned on the side of the road: a push on the gas pedal would abolish the disturbing image. So far with the ideal type.

The Vehicularization of Perception

The Greek word *opsis* designates a reduction of sensual reality to sheer optical stimulations. All driving involves by force some degree of functional *opsis*. When he steps into a vehicle, the walker ceases to be a walker in order to become a driver or a passenger. Modern man differs from the ideal driver in that he daily jumps from one state to the other. In first approximation, it is as if he had two interchangeable conditions: the pedestrian condition in which he retains many traits of traditional man, and the vehicular condition, which is an unprecedented historical novelty. Closer observation however reveals that the experience of being a driver, a passenger or a commuter is

more than a parenthesis between two pedestrian experiences. Once he has framed nature into a windshield, man the commuter never quite becomes a walker again. He now tends to see all landscapes through an imaginary shield, just as addictive photographers cannot help seeing you through an imaginary lens. A general "vehicularization of perception" begins so to substantiate the vision of the natural and the social world.

One of the symptoms of this vehicularization of pedestrian realities is the specialization of walkers into sub-species: some are called tourists and are recognizable at the cameras hanging from their neck; others, duly equipped with earphones, are called joggers; men and women too poor to afford transportation fares or rich enough to live close from where they work are officially described as practicing "transportation by foot"; the police keep an eye on loiterers, whom they check for their driving license —or, in its absence, their I.D. — and eventually provide with a destination: "go home" or "follow us." Who still loiters and chats downtown generally speaks Spanish or has dark skin. Who takes the risk to walk along the highways joining the city with its residential suburbs has often an apologizing sentence ready for the police: "I go for stamps; what happens is that I live two blocks from the post office" or "my car is in the body shop, so I took this walk to the supermarket." Who is seen going in the street needs to be rehabilitated as a pedestrian commuter: he must prove that he uses his feet as others use wheels.

Through all history, up to the modern epoch, the feet have defined the scale of inhabited places. The pedestrian condition common to all shaped common perceptions of natural and built landscapes. The king, then, hardly travelled faster than his subjects. For the best and the worst, neighbors truly dwelled in the same place, and every place engendered its peculiar perceptions and representations of the close and the far, this and the other world.[1] It is this distance, which speed reduces to an amorphous inbetween measurable in miles, minutes, hours, or gallons of gas. It is that intimate distance between autonomous sites which speed aims at suppressing and, in reality, only represses. I consider repressed distance in lost time —repressed and alienated "inbetween" spimes —to be the perceptual ground of most of modern representations of Matter and Motion. It is during these lost "in-betweens" that modern Man is trained to look at pedestrian realities though the Professionalized Eye. Vehicular locomotion leaves the body in command of the sole driving instruments: decisions about directions —right, left, or straight —are left to the hands, while the feet control speed. Only the eye still knows the landscape, but it knows it through the commands of feet and hands on the instruments. Driving first deconstructs the unity of action of the senses and the limbs; then, along with the acquisition of the necessary reflexes, it reconstructs it in a new guise. Vehicular perceptions are a form of *opsis* in which vision is mediated by

[1] Every inhabited site was, as E.V. Walter writes, "a unity of experiences organizing the mutual (...) influence of all beings within it." Every inhabited site was a stage on which reigned a particular unity of place, time and action. An intimate distance, which was felt in the legs, but was also evaluated in kinship or in intensity of friendship or enmity made every site distinct from the next and gave it, in Walter Benjamin's words, its unique aura.

technological devices. The theoretical driver who had never walked was an ideal type. We refuse his extremist epistemological position, but we also know that we cannot work in traffic if we do not let our perceptions be re-shaped by the driving instruments, the design of the highways and the code of circulation.

There are other forms of *opsis* where seeing is dependant on technical skills and where the ability to separate what is worth seeing from perceptual rubbish is the outcome of a long training. Microscopy, for example: when they first look through a microscope, students are overwhelmed by a variety of unknown visual stimuli, not unlike you and me during our first driving lesson, when the wall at the end of the street threatened with crumbling upon us, while the instructor kept yelling, "Don't look at the obstacle, look at the road." Once he masters the technique of focalizing, the freshman must still learn what to see and what *not* to see. At the time he is trained into a technique, he is introduced to a new style of seeing. Microscopists say that by subtle changes of focus, they can "see" fine textures in depth with their fingers as well as with the eye. In microscopy, the object is constructed by filtering away some of the artifacts. It is however always constructed in conformity with the instrument's endoscopic characteristics. For the instrumental connection of the eye with what hands and feet do on the instruments, the windshield perception of the landscape belongs in a category with microscopy, telescopy, radioscopy, but also cinematography and photography. I would like to name the vision which is shaped by speed and its instrumentality, "tachyscopy." The image framed by the windshield is no more the landscape than a map is the territory or the object seen through the microscope's lens is a living being. What the microscopist "sees" with eye and fingers is the texture of tissues. What the driver "sees" with eye, hands and feet are references structuring an itinerary. Like telescopy, microscopy, or radioscopy, the "tachyscopic perception" of nature has its artifacts and endoscopic characteristics.

The Kinetic Perspective

The landscape is first deconstructed by speed and then reconstructed according to the endoscopic characteristics of the mediating technology. In less technical terms, the images on the shield are reorganized following a new optical logic. I call this the kinetic perspective.

In the history of perception, the apparition of the kinetic perspective is as much an innovation as the invention of linear perspective in the l5th century. Linear perspective immobilizes both the eye and the landscape —or the subject —which is seen as through an imaginary window. However, the smallest motion, the slightest displacement of the eye destroys the illusion and restitutes the instruments of vision to their material "thingness," which is how I interpret the famous drawing by Durer, in which a drawer who attempts to project the image of a mandolin on a canvas is represented "laterally" by another drawer. The landscape of linear perspective is static; the observer's body is

maintained on the other side of the window at the price of a convention: the painter's eye must remain absolutely fixed.

Linear perspective may have laid the epistemological ground for the subject-object relationship characteristic of classical Western philosophy and science, as Robert Romanyshyn and others have convincingly argued.[2] But even Lavoisier, a classical master of scientific observation, could only apprehend Paris much the way his contemporary, the painter Philippe Mercier did: "describing it with his legs."[3]

The kinetic perspective does not fix the eye at a point. It rather confines the whole body in a box. Furnished with holstered seats, severed from the outside by shields, that mobile box acts simultaneously as the body's prime mover and as a perceptual buffer against a direct apprehension of motion, so that motion is, as it were, expelled to the outside. It is landscape itself, not the body's limbs —or like in horse riding, the buttocks —which is now literally imbued with Motion. Though the sentence contradicts sound rules of language and logics, where motion is only an attribute of Matter, it is as if motion were allowed to become the "stuff" of the landscape. Or better, it is as if vehicular speed reduced the landscape's glebe to a malleable ether —simultaneously Matter and Motion —which constitutes the real "stuff" of the images framed by the shield.

An invisible energy capsule, which hardens when speed increases, surrounds the vehicle and severs its interior from the outside world. It is that energy barrier which keeps vehicles apart on highways. Its "thickness" depends, as every candidate to the driving examination knows, on the half mass of the vehicle multiplied by the square of its speed. Seen from the inside of the mobile box however, it is nature which now appears as loaden with a dangerous kinetic energy. Remember again your first driving lesson when you had the impression that a rock barring the horizon would collide with the car. Poets and writers like Maeterlinck, who around l920 left testimonies of their first experience as passengers in a car, had similar "energetic" perceptions of the outside world. Between the inside of the mobile box — the "cabin" — and the world outside, there is a difference of energy level, no matter where you put the "plus" and the "minus." This difference maintains inhabited bolides on their paths, preventing their occupants from immediate interactions with the outside. For them, signs of others' distress on the road's side are rarely invitations to solidary action. All too often, they are just disturbing images easily erased by a push on the gas pedal.

The kinetic perspective finally also affects the perceptions of the walkers, even those who have never driven a car. They know all too well that highways irradiate a kinetic energy that hurts and kills. "Step on the side!," "Watch out!": most pedestrians have heard these warnings since they learned walking. Walking education today is

[2] However, the precarity of that relationship must also be stressed: it is always subject to the convention of the fixed eye, and I think that this optical convention can be transposed to the scientific styles of "seeing," where the observer's body is "expelled" by strictly codified observation procedures — the equivalent of the imaginary window.

[3] The style of vision proper to Lavoisier's trade could hardly influence his pedestrian perceptions.

education to survive vehicular dangers. The ubiquitous noise of the engine silences nature's hubbub and seems sometimes to emanate from landscape itself. Rather than in smelly glebe, traffic landscapes are molded in the "stuff" of threatening energies, noise, and fumes. I don't content that there are no "privileged sites" left. I say that —with the gaining of the "privilege" —their aura is gone. Once distinguished by an intimate distance "in the legs," they have become the pedestrian appendages of the network of roads. The last places where walking is safe are now advertised as "pedestrian friendly paths," "picnic areas" or "natural parks." These are the reservations of the last walkers.

Once thought of as means to destinations that were still "places," networks of communication have become the all-encompassing milieu of our experiences: just as communication tends to become "the massage," networks become the milieu. Once thought of as a means to make sites accessible, the technology of speed generated a networking environment of asphalt and concrete imbued with diffuse energies. In that milieu, the driver —but also the non-driving commuter — stands to the unspecialized pedestrian as the developed to the underdeveloped.

The all-encompassing vehicular milieu which progressively absorbs or subdues all places, molds the perceptions of drivers, passengers, and walkers alike. It is the common "stuff" of their distinct realities. In order to stay alive, the last walkers have to do what drivers do in order to race: they frame nature on an interior windshield. They do so by internalizing the rudiments of the traffic code — watch out, first left then right when crossing a road — and obeying signals, like drivers. In that milieu, walking has truly become a cheap, inefficient, and often degrading form of transportation. Once the whole of landscape has been vehicularized, it is no longer the vehicular experience alone, but the whole vehicular milieu which acquires special perception-shaping powers. In the shadow of transportation technology, walking itself becomes a technology-related *hylopoetic* experience. The walker's feet cease to stamp the old glebe or the pavement stones and starts to knead the same stuff that motor wheels churn.

The Stuff of the Modern Obvious World

Energy-laden matter —or is it materialized energy?— is evidently the stuff out of which our obvious world is made. Energy carriers —tanks, fuel-laden trailers, high-tension cables, pipe-lines —in the environment are facts, not products of our imagination. Besides, they are scientific facts which lie beyond the reach of common-sense certainties. Very specialized disciplines and elaborate experiments are needed to produce the laws of energy conservation, the equivalence of matter and energy, and fashion the mystery-filled "high-energies."

Scientific disciplines are highly conventional perspectives, each —if Romanyshyn is right in generalizing the "fixed eye" to the epistemology of science —with its peculiar vantage point. The concepts of two different scientific disciplines are generally incompatible, just as the lines of two different perspectives cannot be superposed. Physics

does not recognize "value," an economic concept; "enthalpy," a physical concept, has no place in linguistics; "potency," a concept of number theory means nothing —or something else — in, say, physiology. Economists do not —or should not — deal with "entropy" which is a physical concept. Some do however, which is why a normative "should not" modifies the descriptive "do not." On one occasion at least, Marx did not and told his disciples why they should not: it was when someone urged him to incorporate the energy concept into his theory of value. "Political economics, he answered, should not talk physical gibberish."

In contrast to scientific concepts, truisms derived from all sciences fit each other like the pieces of a jigsaw puzzle. This puzzle is the upper floor of our civic worldview. The fact that scientific concepts migrate between disciplines and, besides, fit the puzzle seems to indicate that Science partially also consists of truisms. The truisms derived from physics and the ones inspired by economics —in spite of Marx and his warnings —have acquired a special affinity. Matter and Energy thereby gained an intrinsic Value, independent of the local conditions of their existence or of their use. It is how the popularization of scientific concepts contributed to railroads fracturing the unity of location, time and action that made a place unique. Nerds, who in addition to considering energy a "value" also, remembering their physics classes, remind us that "matterenergy" exists under two guises: as a value and as a waste. When matter's energy content is free for further uses, energy is a "value." When this energy is bound —not disposable, dissipated —it is a waste. Experience confirms this received wisdom: modern Man transforms everyday valuable wares into waste. Just as broken Humpty Dumpty could not put himself together again, wasted wares never spontaneously jump back on the shelves of the supermarket. Qualitatively, the transformation of matter and energy is not a cycle, where what has run down the hill gets up it in the next moment, but an irreversible degradation. We pay to get rid of waste, and since it also "costs energy," the industrial treatment of waste means more waste, somewhere else. It is a palpable fact, and those who live near an incinerator can even smell it.

The power engine provides us with metaphors that enlighten our perceptions: the economic process "burns" values just as the engine burns fuel, and at the end, both produce waste and ashes. Ashes never become coal again, dissipated heat never spontaneously returns to the "hot source." Sadi Carnot, who stated this in 1831 is now praised by some as an economic seer, as if he had stated by implication, that disvalues never become values again without generating more Disvalue.[4] The upper work of the modern civic worldview —taught ideas feeding truisms —is congruent with the bot-

[4] Since a German physicist named Rudolf Clausius coined it in 1861, the term "entropy" designates the "wastedness" of energy, its acquired incapacity to perform work or to undergo useful transformations. It adds a time arrow to the quality, or lack of particular qualities, of modern matter: like all rivers end in the sea, all energy and — Georgescu-Roegen insists — all matter end in an ocean of "high entropy." Matter-as-energy is the paradigm of the modern imagination of stuff. It first de-localizes matter and the forces of nature and deprives them of their smells, tastes, intimate humors and other particularities. It then places what is left under the fatality of irreversible degradation.

tom line of the facts of modern life. The energetic world view and the obvious world are tangled in one and the same inextricable web of meanings. Concepts corroborate percepts, daily perceptions verify half forgotten theorems. Like in the chicken and egg riddle, it is impossible to determine if perceived stuffs called for the concepts enlightening them, or if the first substantiate the latter. Daily rituals —commuting to work, weekly visits to the supermarket, the burden of homework among electric appliances —mold perceived stuffs and truisms into one single construct: we call it reality. The obvious world of modernity is a self-confirming, hermetically sealed circle. The same epistemological forces shape it and corroborate it. However, if we think that matter-as-we-imagine-it coincides with matter-for-science— that universal and eternal substrate of the universe physicists call "matterenergy" —the stuff of the obvious world can only confront us in an inscrutable opacity.

The historicity of matter, of the imagination of stuff can first be stated as an internal necessity of any critique of the obvious. It can then find a ground in the drift of the imagination of matter: the "stuff" of our intimate perceptions never coincides with matter-for-science, though it is shaped by truisms derived from science. Finally —and it is where the "historian of stuff" demonstrates his skills — matter-for-science —the "matter-energy" of modern physics itself — has to be subsumed into the History of Stuff or of the imagination and perception of matter. Scientific ideas —or what is left of them when the teaching has been forgotten —pretend to confirm every bit of stuff of the modern obvious world. Facts and ideas— the stuff of the obvious and the truisms in-forming it — coalesce into impenetrable concrete. The way to break that impenetrability and to scrutinize the obvious is to restore the imagination of matter to its historicity.

Rendering the Obvious Scrutable

Truisms only make the obvious world intelligible within the confines determined by a ritual: when we repress all "why?" questions in favor of "how?" questions to which acquired reflexes are the responses, or when we accept as true the truisms justifying the ritual, or when we relinquish all curiosity for the stuffs situated outside the shield or on the other side of the enclosure. The spell can be broken by appropriate "why's," by agnosticism in front of "scientific" certainties or by trespassing the enclosures. It is the overt purpose of this essay to foster these three rebellious attitudes. The question is "where do we start?" To make the obvious scrutable and defend ourselves against its visible and its obscure threats, I think that the best start is to pose nasty questions about the stuff of lived experiences in the daydream of technological rituals and to check the answers against conventional wisdom.

We have learned to think and to say that highways satisfy transportation needs, that hospitals provide us with health services, that schools provide education to our children. These statements are truisms. They answer questions like: "how do I conform

to the civic world view," or "how do I think as my neighbor says he thinks?" They give no answer to questions like: "Why do you spend two hours a day on highways?," "How does it feel to sit on school benches for fifteen years?" or "What does dying in a hospital mean?." The rituals of commuting, of medical treatment or of school attendance throw any personally felt answer to these questions into the rubbish heap of experience. Commuters, patients, and the clients of schools are maintained in a state of perceptual deprivation: it is as if their experiences had no personal depth and no other sense than the one which confirms taught ideas. Just as car drivers learn to abolish useless visual perceptions, and pupils become numb to the stench of school rooms; and patients even lose their capacity to suffer after weeks of hospital confinement, so the satisfaction of its energy requirements puts the body of modern Man in a state of constant homeostasis with its environment. Think only of your overheated apartment or your car's conditioned atmosphere.

Modern stuff is imagined in a state of general numbness or better yet, the forces shaping the modern imagination of matter have their sources in the rubbish heap of experience. We imagine matter as what is left of stuff when hot and cold, odors, tastes and tactile qualities have been suppressed or thought away. Modern stuff is the ghost of the materiality of things framed by several perceptual shields. Shaped—in-formed—by truisms laced with a scientific flavor, it is the malleable plastic which then fits the obvious facts of our existence. To scrutinize the obvious, we have to put our noses deep into the stuffs out of which it is made.

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The Rise and the Death of the Instrumental Paradigm

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'Incongruent' Transportation Behaviors

Let's start with a seemingly silly question: for what is the transportation industry good for? What is the purpose of traffic flows? If you ask Joe Smith or Hans Müller, he will rightly say that the answer is obvious: he *must* commute daily to work, his wife *must* drive every week to the supermarket, once in a while, they *want* to go to the theater. Besides, every morning Joe *must* leave the youngest kid at the public school and his wife, who has a part time job to which she commutes in the family's second car *must* bring the kid back in the early afternoon. The grownup daughter commutes daily by bus to a computation school that has just opened in the neighborhood. If you ask the Smith or the Müller family what their two cars are good for, they will tell you that without them, they would simply 'not make do.' So simple as that. People have a variety of purposes, most of them not particularly 'free,' and transportation, be it private or public, is a major *means* to those *ends*. So there is seemingly nothing more to add: the answer is as trivial as the question... and I have apparently taken a false start.

So give me a second chance. Allow me now to look as it were 'obliquely' at the 'Smith family problem' and to ask a completely different kind of question. Are the ends of the Smiths *originally* independent of the means by which they pretend to reach them? The question may seem misleading since the ends are *instrumentally* dependent on the means. By 'originally independent' ends, I refer to ends that are not caused by the means, as for instance in the story about the drunkard who drinks in order to forget that he is drinking. If you use a hammer to put a nail in the wall on which you want to hang a photograph of your wedding, you assume rightly that such a means is not going to 'hammer' your marriage. Intuitively, the Smiths expect the same of their automobile, a means to reach ends that, they think, have not been defined by it. What if they were wrong, in other words, what if the map of their daily and weekly destinations was shaped by the means to reach them? The evaluation of my initial question would of course have to be reconsidered too. What would now seem to be

worth analyzing would precisely be this *circular causality*, or if you prefer, the *mutual determination of means and ends.*

Does the End Justify the Means?

After Machiavelli, moral philosophers have repeatedly raised an old problem in new guises: "does the end justify the means"? If the means shape ends, then the paradoxical question "do the means justify the ends" becomes thinkable. It is obvious however, that the sheer possibility for such a question to be raised, completely modifies the meaning of 'to justify,'[1] in a way that makes it questionable in both ways (do ends justify means? and do means justify ends?). One could say that the 'ethical space' in which the question "does the end justify the means" is *congruent*, not paradoxical, is one in which the ends are not shaped by the means. It is that original independence of ends from means that insures them a certain stability during the action and hence allows satisfaction to be effective. If means modify ends and their meaning, then a situation that we have called *counterproductivity* becomes the rule.[2] On the contrary, when the question ceases to be congruent, it can be said that the means modify or "curve" the medium in which ends can be fulfilled in a satisfactory manner. Counterproductivity is a situation in which the *accumulated effects* of the means on the medium is such that even if the ends can be achieved, this achievement will be less meaningful because, in the new situation brought about by the modification of the medium, it will give less satisfaction. An example: If the end of the automobile was to allow people to reach their destinations more easily, the multiplication of that very means has favored a type of urbanism in which on average, everything is located farther. The end result is that Joe Smith spends more time and more money, and experiences more toil in order to reach his usual daily destinations than his father of grandfather did before the era of the automobile.

The ineptness of most official discourses on transportation is due to the fact that they do not recognize counterproductivity as a characteristic so inherent to transportation space, that it coincides with what physicists would call '*its metrics.*' It could also be said, that in transportation space, a variation of the theme of Tantalus's experience becomes endemic. Tantalus was sentenced to spend his days in a luxuriant garden where the fresh water of the spring, the honey flowing from the trees, the succulent fruits toward which he stretched his hand would recede, so that he could never reach them. Not only *do* common destinations recede as transportation facilities expand: sometimes the loaf of bread that you expect to find at the destination has become a stone.

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[1] Camps, Victoria, *Etica, retórica, política*, Madrid: Alianza Unversidad, 1988.

[2] Dupuy, Jean-Pierre and Robert, Jean, *La trahison de l'opulence*, Paris: Presses Unversitaires de France, 1976.

The period of history during which the question "does the end justify the means" was an answerable question corresponds to a period of moral philosophy which I would like to call '*the period of congruent instrumentality.*' During that period of history, certain actions were considered instrumental—e.g.: means — for the realization of certain values defined independently of them — e.g: the ends. I would compare the 'moral space' of the period of congruent instrumentality with Euclidean space. I will call *instrumentally congruent* the moral space in which the question "does the end justify the means" can be asked in the hope of receiving an answer, recalling that 19th century physicists called Euclidean space *congruent.* By this, they meant that its *metrics* was not modified by the intensity of bodily motion. On the contrary, non-Euclidean spaces are spaces whose metrics is locally modified by the intensity of motion. Pre-Einsteinian physicists called them *non congruent* spaces. Before Einstein, the possibility that physical space could be incongruent —the modern term is 'curved' —was held to be a mathematicians' utopia, as Helmholtz argued in a wellknown polemics against the mathematician Riemann.[3]

I will use *congruent* and *congruence* and their antonyms as technical terms for situations where the ends are originally independent from the means, versus the opposite situations, in which the means shape the ends. If one compares the local metrics — or the particularities —of nonEuclidean space with ends, and motion with a means to these ends, one is allowed to speak of a new type of 'moral space' in which the question "does the end justify the means" has no simple answer because means modify ends. This space is *instrumentally incongruent* (or instrumentally 'curved'). The kind of space which is generated by mechanical transportation space is an instrumentally incongruent space: in it the 'metrics of desires' is curved by the means to satisfy them.

Moral thinking about transportation is today in a situation comparable to that of physics before Einstein: it does not consider seriously the possibility for the means to modify the medium's metrics in such a way, that the meaning of satisfaction be radically modified by its means. Transportation policies today resemble Philip Lennart's physics in that they are construed as if the medium were *instrumentally congruent.* Hence, the perceived *counterproductivity* of the transportation industry —the growing frustration of the users and the injustices committed toward those who are not users but nonetheless must suffer the destruction of their living space by aliens — does not find a political expression. This unrecognized incongruence is one main reason for the demise of ethics when confronting transportation-related inequities. Where ethics has no questions to ask, economics, "the anti-ethics" formulates the answers.

[3] Riemann, Bernhard, "Über die Hypothesen, welche die Geometrie zu Grunde liegen, in: Abhandlungen der Königlichen Gesellschaft der Wissenschaften zu Göttingen*, Bd 13, Juni 1954, vs. Helmholtz, Hermann von, "Über die Tatsachen, welche die Geometrie zugrunde liegen."

Autopsy of a Popular Illusion

The Smiths believe that they live in an instrumentally congruent space because the modification of the metrics of means and ends of every one of their displacements is imperceptible. What they perceive is the global effect of all displacements, yet they do not ascribe it to the *law of composition* of thousands of behaviors similar to theirs, but to a blind fatality, to the 'worsening of times' or to bad policies and bad planning. The fact is that *no good transportation planning* is possible as long as the instrumental incongruence of the kind of space generated by the transportation industry is not recognized. Let me illustrate it with examples taken from everyday language.

Are Transportation and the Economy in a 'Means-to-end' Relationship?

Let's now ask if the economy results are not the aggregation of thousands, millions of behaviors like the Smiths' and Müllers.'

"As a 'consequence' of the opening of the European Economic Space, the volume of all types of traffic will double in the next ten years."

I started hearing that prediction for the first time this year, and it came to me under several different guises. Some only forecasted a 70% increase. Others assumed that the doubling would occur in less, others in more than ten years. Still others spoke of the practical aspects of this growth: more noise and fumes, more time and more space dedicated to transportation. If we avoid hairsplitting about the details, we can say that such an affirmation has two main characteristics:

1. It is speculation of an unknown future.

2. It admits multiple descriptions and forecasts from several different viewpoints: for instance, I can say that the noise level in my already busy street is likely to increase, that traffic jams are going to become worse or that most people will spend more time commuting.

For both reasons — its speculative or hypothetic character and the multiplicity of the ways in which it can be formulated — this affirmation easily sounds ideological. One of the purposes of this essay is to find a *method* to express a *shared concern* for the worsening ways in which traffic encroaches *today* upon our existences. Methodologically, the problem consists of giving a convincing expression to predicaments which have an anthropological foundation but no possible economic formulation.

Let us now consider another type of affirmation:

"The falling away of old barriers will increase the accessibility of most people to desirable locations."

A quasi-equivalent would be:

"People's economic opportunities will grow."

Such a statement also allows for a multiplicity of formulations or 'descriptions' from several viewpoints:

"Joe Smith will be able to select his job among a larger number of opportunities.

He and his wife will buy from a larger pool of choices."

Though they are often stated in a factual manner, such sentences have no direct factual content.

They are not descriptions of actual situations, today or tomorrow but rather expressions of some

kind of collective program, generally held to embody the 'good.' In official reports, they are often overtly formulated as goals of political measures:

"The equalization of opportunities and the optimization of accessibility must be priority goals for any global policy of space management within the European community." At the level of the application, these political goals are sometimes conflicting: For instance, the proposition

"Provided the right measures be taken, the costs of the most efficient means of transportation can still decrease, giving more opportunities to more people." (Gaudry) is opposed by the affirmation

"If the external costs of the transportation industry are to be internalized, transportation prices must go up." (see Ernst von Weizsäcker).

Or:

"The capture of comparative advantages, as major benefits of peace must not be the privilege of international corporations, but must be democratized," versus:

"If comparative advantages are to be maintained, they must be protected by some new kind of barriers."

A 'Thought Experiment'

To clarify my point, I invite you to consider a very simple example of an action which is instrumentally congruent and admits several descriptions[4]:

"I am sitting, reading in my room. The night falls. I stand up to put on the light."

This simple act can be described in different ways. On the one hand, I can say:

"I stand up, walk through the room and operate the switch,"

or:

"I turn on the light",

or still:

"I am seen as a Chinese shadow by someone in the street, who draws the conclusion that I have turned on the light."

On the other hand, I can also describe my action in one of the following ways:

"I want to go on reading,"

or even:

"I want to read 'The Prince' in order to understand Machiavelli's ideas over means and ends."

[4] I was inspired by: Villoro, Luis, *Fines y medios*, manuscript, Mexico, 1993.

The statements of the first type are attempts to give a factual or 'behavioristic' description of an act, as it can be experienced and perceived by its agent and by observers. Statements of the second type define the action by its finality. In this simple example or 'thought experiment,' behavioristic and finalistic statements can be related by means of the words '*in order to*': "I turn on the light *in order to* go on reading." A characteristic of that relationship is that it is conserved when I substitute any parallel description for the one first given. For instance:

"I stand up, go to the switch and turn it on in order to go on reading 'The Prince.'" I will call this characteristic 'approximate invariance of the relationship under synonymous descriptions.' Another characteristic of this example is that it is instrumentally congruent: though one could argue that the means (electric light) induces 'night-time reading,' which is arguably different from 'day-time reading,' he would have difficulties proving that it affects the understanding of 'The Prince' as radically as transportation transforms the space of all, be they users of transportation networks or not.

Paradoxical Applications

I would like to ask you if the coexistence of statements like: "Traffic flows will double in ten years" and "The accessibility of all to all will be increased" confronts us with a situation comparable to that of our thought experiment. In the example of 'turning on the light' and 'reading,' descriptions of the first kind ('behavioristic descriptions') and of the second kind ('finalistic descriptions') relate as *means* to *ends*. The action described in behavioristic terms appears to be *a condition* for the situation described consequentially to occur: *in order* to be able to try to understand Machiavelli's ideas about means and ends after the night has fallen, I have to turn on the light. It could also be said that the situations that arise from the actions that are described in behavioristic terms are *consequences* of them. In the case of the situation described as 'going on reading,' we can speak of an immediate consequence. The situation described as 'understanding Machiavelli' is only a mediate consequence of the act of turning on the light: it could be that it does not realize itself even if the conditions for reading are met. 'Understanding Machiavelli' is a longrange goal that inspires not only this, but many other actions. Besides, it can be met by a great variety of other means. When a goal can be attained by several distinct routes, we can speak of *equifinality*.

What I would like to ask now is whether the questions that we have been called to discuss in this symposium can be approached under the assumption that there is a simple 'means to end' relationship between transportation and the economy. It is my contention that to admit it unavoidably leads to antinomies. Can I for instance say that the doubling of traffic flows is the *means* to achieve a greater accessibility of all to all? If it were so, my interlocutors—following the logical sequences of our thought experiment—should not have stated:

"As a consequence of the opening....etc a doubling of traffic of all kinds will take place", but rather:

"As a consequence of the doubling of traffic, a 'European space' for all kinds of economic activities and to which all Europeans will have an equal access will (perhaps) come into existence."

Strictly speaking, the second proposition is only a mediate consequence of the first since something different—for instance a generalized jam of all traffic flows—could occur instead.

But does the means-ends relationship hold for the parallel or 'synonymous' descriptions, so for instance:

"the worsening of traffic jams is the means to equalize opportunities,"

or:

"the lengthening of commuting times is the means to democratize comparative advantages,"

or:

"the sacrifice of historical buildings, parks, streets, places to loiter and to chat on the altar of a circulation imperative will allow Joe Smith to select his job among a larger pool of opportunities"?

We are already stuck in paradoxes, so either the invariance of the instrumental relationship for (quasi) synonymous descriptions must be given up, or descriptions of actions like doubling economic flows and worsening jams are synonymous. A third possibility, not exclusive of the two first ones is that the coincidence of a causal language —"more traffic allows more intense economic relations" and of a moral or evaluative language —"an intensification of the economic nexus is desirable, hence more traffic is good" —is collapsing.

Instrumental Rationality and Its Demise

I will redefine *instrumental congruence* (or *instrumental rationality*) as a frame of action (or of reasoning) in which it is assumed that:

1. certain actions are *means* to achieve objective situations called *ends*;
2. the consequences of these actions effectively correspond to their *ends* (or: that these actions are the *instruments* to the ends);
3. the final situation (end) can justify the action (means), that is: if the end is morally good, its goodness is transmitted to the action which is its means;
4. there is no 'feedback' of the means upon the ends.

As already alluded in the third point, the framework of instrumental rationality is consistent thanks to the conjunction of *two different types of language* that are heard

as *one*: one that speaks of the causal relationship between actions and their alleged consequences — the increase of traffic flows will cause an intensification of all economic relations —and a second one that ascribes a moral value to those actions and their consequences —economic relations *and* traffic are good (so more of them is better).

The frame of reasoning thus defined is what I would like to call 'the frame of reference of instrumental rationality.' It is more than just a twist of thought: I would like to show that, historically, it has the potentiality of a "practical reason" (Sahlins) or of an 'episteme.' The breakdown of this frame must be seen as something approximately akin to what Foucault called 'an epistemic break' or to what Tom Kuhn defined as 'a change of paradigm.'

Depoliticization of the Present

The behavioristic descriptions of a growth of traffic flows increasingly evoke an Armageddon that nobody would freely choose. As far as the finalistic descriptions are concerned, they tend to describe ever less immediate and ever more mediate and remote situations, which are justified by long range social goals. The outcome is a generalization of '*tomorrow policy-making*,' that is the reinforcement of the trends toward a depoliticization of the present (Thoeny).

If we want to take seriously Gustavo Esteva's claim of: "*politics as if today counted,*" a first step would be to reduce the confusing woodland of quasi synonymous statements to a small set of root-propositions. Most of the mediate situations described in finalistic terms come out to 'more economic relations is good.' As to the behavioristic descriptions, the root-proposition amounts to little more than '[there is going to be] more traffic.' Yet, unless we adopt an extreme form of Machiavellianism, we cannot hold any longer the stance that the goodness of the end (more economy in daily existence) is going to be transmitted to the means (more traffic which means more noise, more destruction of soil, more jams, longer commuting times).

Eating One's Cake and Having It Too

The perceived antinomies of a once unquestioned rationality have elicited several answers.

One consists in claiming:

> "Let technology find a system in which traffic flows could double while jams, noise, fumes, 'asphalt terror' and exhausting commuting times vanish into oblivion" (which amounts to what Ellul called the "technological bluff").

Another consists in saying:

"Let's achieve economic growth by other means than material traffic" (see the Club of Rome proposal of substituting the production of services for that of material goods.)

The first claim questions the (quasi) synonymity of the several factual or 'behavioristic' descriptions of a growth of traffic flows. It pretends to distinguish between the 'causal core' of economic growth and 'unwanted secondary effects.' But this is a semantic sleight of hand: synonymous descriptions of 'there will be more traffic' — like noise, jam, soil destruction —are declared to be undesired side effects of the means to the good end. By a magical 'change of frame of reference' or some still nonexisting 'smart technologies,' the undesired secondary effects will be screened out. When it does not consider its rather narrow liminal conditions, this stance amounts to what I would like to call *technosophic naiveté* (Ellul is harsher). The second position questions the causal relation between traffic and economic growth and considers that there are other routes to the land of economic milk and honey.

If the *equifinality* reintroduced by this model must be welcomed, it must also be said that it obscures a third logical possibility of our frame of reference, the possibility, namely, to question the goodness of unhampered development both of the economy and of its alleged means.

Disvalue and the Paradoxical Reversal of Instrumental Rationality

I feel obliged to mention another possibility which is included in our frame of reference. It is the possibility that the causal relationship— and its approximate invariance in synonymous statements — holds, while the once concomitant positive valuation is turned upside down. Following that conjecture, increased traffic flows, invading surfaces of circulation, time-consuming schedules and even noise and jams *are* effective means to intensify the encroachments of the economic sphere upon daily, common existence. However, it is not the 'goodness' of the end which is transmitted to the means, but on the contrary the evil character of the means that contaminates the end. It is that possibility which Ivan Illich has termed *disvalue*. Following this view, the destruction of values like vernacular skills, spontaneous solidarity among neighbors, the use value of dwelling, silence and clean air is *prior* to the formation of economic values and is perhaps its necessary condition. As a destroyer of spontaneous relations of mutual support between neighbors, silence and the use value of dwelling spaces, *traffic effectively realizes the conditions for increased 'necessary' encroachments of the economy on daily existence.*

I would describe as *infernal* a situation in which a congruent instrumental relationship between transportation and the economy is maintained at the cost of putting

the alleged relationship between instrumental causality and moral values upside down. How far are we from that Hell?

1993

English summary of a speech delivered in German at IFF 93 in Essen.

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Autostop

Ivan Illich, Jean Robert

We want to tell a story that reflects some nonsense about our way of life, and that story is about traffic. We tell the story because we believe that tomorrow morning all could live in a more quiet and perhaps even bicycle-centered society if only people believed that modesty can guide political choice.

Reasoning shows that transport can enhance freedom of movement only within the limits in which one can renounce it. Today, such renunciation is barely viable in a society where the traffic jam has become paradigmatic for all kinds of consumption. Transportation, public or private, carries inevitable consequences. Beyond a certain threshold, it diminishes personal mobility in proportion to more passenger miles generated. Thus transportation is a monument to the basic experience of the age. The more refined and more integrated the transportation system, the more we live in a society of morning joggers tied down during the rest of the day.

Starting with this insight, we invite you to a mental experiment. By limiting the compulsory auto-disempowerment produced by transportation, a society can increase the freedom of movement enjoyed on foot or bicycle.

Not so long ago, everyone knew that the world was accessible. And until quite recently, the "third world" lay within reach of their feet for most of its inhabitants. People could trust their feet, experience their world. And for several decades now, U.S. border guards have admitted their helplessness as they are overrun by auto-mobile transgressors — moving on foot.

In the 1950s, Mexico City was already a metropolis of nearly three million inhabitants, with some forty plazas containing popular markets. Most of these markets were on the same spot where Cortez had found them 450 years earlier. In any given week, less than one out of every hundred persons moved beyond the border of their respective *barrio*. Since then, the population of the city has increased seven-fold. Engineered traffic patterns tear neighborhoods apart; multilane, one-way throughways separate people into artificial ghettoes; a high proportion of the population is the boxed-up victim of daily, long-range transport —there is an efficient subway. Such transport encloses students as well as pensioners, employees as much as women needing pre-natal tests. Five million persons —according to official count —must travel daily to reach inaccessible places.

Historically, walking was never an act of pure leisure. At times, it could be dangerous, painful, disappointing, but at other times adventuresome, enjoyable, or exhilarating. But that is not the issue. What counts is that using one's feet came at no cost. Of

course, everyone had to find the pennies to pay the ferryman. A mule or carriage were confined to the rich. Generalized mobility was enhanced by social virtue: tolerance of the outsider, hospitality, charity, and conviviality at resting places. For the majority, these were more important than inns. People lived in the experience that the place on which they stood was a place they had reached with their feet.

We would like to ask a question: What does it mean that so very little of that which enabled and graced freedom came in the nature of a commodity? Now modern engineers claim that feet are underdeveloped means of self-transportation! Indeed, what equipped our forefathers was inexpensive, from staff and sandals to cloak and sack; later, the bicycle. Distances, when they were counted, were measured in days; they were perceived as life time, not as watch time.

There was nothing like the concept of a passenger mile on land until the postal coach appeared, late in the 18th century; and then the railroad in the early 19th.

The railroad created the minute and the fare that measured the time cost of bridging passenger miles. These concepts are basic and acquire full validity with motorized traffic. Only on the basis of such assumptions could the locomotion of human beings be made into a commodity. And this commodity — traffic — was produced by employed workers, whether railroad men or chauffeurs, proto-passengers making up the consumers. All this changed with Henry Ford's Model T. This innovation brought the news that mobility would be an industrial product to be enjoyed only through *unpaid* labor. Each employee now had the "privilege" of purchasing a car. With this investment, he had to deliver his own work force to the factory door. For many, then, the car became the condition for selling themselves on the labor market, to purchase household needs, to educate their kids, to visit their aged parents.

For twenty-five years we have reflected on transportation because we see in it an ideal type of post-industrial commodities: a synthesis of installment payments, operating costs, insurance premiums, and unpaid labor to make the investment actually useful. Shadow work — the unpaid, time-consuming, disciplined, risky improvement of a commodity to make it pay — became a foundation of modern existence. It is quite surprising how completely this selfenslavement has remained a blind spot of the first two generations of car owners. But we now see that a powerful spell has been cast over them. A mixture of fashion, vanity, commodity fetishism, and greed, sharpened by clever, no-holds-barred advertising created the fantasy of the automobile as a liberator — from schedules, waiting lines, limited horizons, pre-established routes. For most of those born before 1970, the auto is still an enticing symbol of personal freedom through an industrial product. But for a later generation, this is a transparent oxymoron. Rarely does one find the distance between two generations so great.

Now let us come to our story. And the reader can decide whether it is a serious project or a cautionary tale. The story begins with a judgment, one passed down by the Supreme Court. According to the Court, the use of tax-supported roads shall be limited to vehicles in public service. In effect, this means that every car with a free seat must stop when asked. To implement the decision, Congress passes a law that

restricts licenses to drivers who produce passenger-miles and earn income by doing so. No Samaritans needed. Henceforth everyone who is not a driver will be chauffeured, and all drivers are available as chauffeurs.

Is the unthinkable feasible? Can a simple judicial judgment turn the way we now think about economic "goods" topsy turvy? Without any technical innovation, can a society transform its social and physical environment? Can a small change in the character of transportation lead to a moral reevaluation of *place*?

How to imagine the details? Every citizen receives a Hack-Card. If a would-be passenger signals a passing car with an empty seat, the driver must stop. The car contains a computer with as many slots as there are seats. For the construction of the black box, ways of billing the patrons and paying the drivers, Toshiba and the IRS are obviously competent. Or let Sprint instruct highway departments on the management of channels (they have experience following the court decision on the monopoly formerly enjoyed by Bell Telephone).

Let charges be entered on one's tax return (which could make travel cheap and/or free for those with limited incomes) or let them be sent out like the phone bill today. Place regular waiting stops where people signal their direction, and where every passing car with an empty seat must stop if hailed. Make them cozy or warm on lonely corners, and shade them where the sun beats down. Let the people themselves police their waiting lines, as they have learned to do gently in Havana or Mexico. They can report any vehicle which runs a stop. If muggers are rampant in the area, what better place to be but in a car, with one's Hack-Card signaling the whereabouts for the police?

For those who see a project here, there are many practical questions to be examined. For example: How much would traffic accelerate by eliminating tie-ups? How much space would be created for pedestrians and bikes? How many would renounce transportation, and when? And who would finally be able to afford it? How many new jobs would be created for drivers as against those lost in the car industry? What social consequences would result from discontinuing company and government fleet cars? Could one limit the privilege of the policeman to step ahead in line when in uniform? What would be the ecological impact? And would such a decision accelerate the transition to less polluting vehicles? How much would be saved in public investments? How quickly could this saving create the funds to cover the societal "loss" through fewer cars being manufactured, purchased, and driven? How face taxi driver unions when they try to challenge the Supreme Court decision? How tell a better story to open up "the sociological imagination"?

If this is just a cautionary tale, why do we have the experience of people getting angry when we tell it? Are they angry because we do not propose a new technology nor defend an ideology? This seems but a simple proposal for thoughtful consideration.

Contribution to a Symposium on bicycle freedoms in Berlin, Summer 1992.

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A Reflection on "The Idea of a Town" and on the Reality of Cities in an Uncertain Time

Jean Robert

Part I: Urban Prospects After the Demise of the Classical City

More people in cities than in the countryside?

Three years ago, it was announced that the inhabitants of the world's cities had outnumbered the inhabitants of the countryside[1]. In its 2007 report, the UN Fund stated that 3 billion 300 million persons lived by then in urban milieus. One billion of them dwell in what is called slums. The same report forecasts that, if present tendencies continue, by 2030, 5 billion will be urbanites, 80% of them in so-called "developing countries" and adds "many of these urbanites will be poor." When the UN says "poor," it means miserable.

We should reflect on the consequences of this change. Crowded by immigrants from the countryside, the "cities," megalopolis, conurbations, suburban areas of the late 20th and the 21st centuries are no longer the cities known to history. As to the countryside, it is a different one too. A point has been reached in which the quantitative change has become qualitative. In a sense, as Silvia Grünig, a Spanish urbanist writes: "... the city as we knew it... doesn't exist anymore."[2] And the country, does it still exist? To use a neologism coined by Abdel Halim Jean-Loup Herbert, there is a *rurbanization*, that is a simultaneous ruralization of the city and an urbanization of the countryside. Even if it needs further precision, the word sticks. In that context, let's recall Patrick Geddes, a biologist turned urbanist who, in 1915, coined the word *conurbation*[3]. What the biologist was looking for, was a term aptly defining a process of indifferentiation of

[1] Report on the State of World Population of the UN Fund (2007) "Free the Potential for Urban Growth." http:/unfa.org/swp/2007/English/introduction.html

[2] Silvia Grünig Ibarren, "Promenades et questions d'une urbaniste," *Actualité d'Ivan Illich*, Paris: Journal *Esprit*, no 8, 2010, p. 193–203.

[3] *Cities in Evolution*, London: Williams & Norgate, 1915.

the urban fabric in analogy with a cancer, that is a loss of differentiation between biological tissues. So redefined, *rurbanization* is an adequate word for this indifferentiation process. It differs from a conurbation as a sarcoma differs from a cancer.

De-historicizing metaphors

Those of you who know Geddes's work on the relations between people and people, people and things, things and things and between all these pairs would hardly reproach him to objectify cities and forget about their inhabitants. However, taken up by others, biological metaphors have contributed to the dehumanization and "de-historization" of the discourse on cities. Cities are the products of the cumulative actions of *historical subjects* and as much can be said about the countryside. Due to the division of labor between academic disciplines, "the city" and "the country" are the objects of separate discourses.

In the historical part of my exposition, I will try to show that we can only understand the emergence of cities as an interplay between the emerging "urban" centers and the surrounding "rural" areas, or better between the activities of urban and rural subjects, both in becoming. Following a famous archaeologist, I will define the Neolithic period as the time of the joint becoming of an urban and a rural way of life, a process best illustrated by Anatolian sites. *Urbs* and *ager*, urban and agrarian matters should be seen as complementary realities and not as the objects of strictly separate disciplines. "Tell me what countryside you have and I will tell you how your cities look" should be the adage of scholars who want to be true to that historic complementarity.

In the naïve 60's, politicians, particularly in the South, still expected to give prosperity to rural people by urbanizing them, uprooting them from their traditional territories and traditions. It was the logic of the omelet: you cannot have an omelet without breaking eggs. You cannot have development without uprooting peasants from their land. Politicians made their "underdeveloped" voters believe that urbanization would improve their conditions of life, integrating them into the modern economy, and hence making them benefit from economic development. We know the tragic outcome of that illusion: suicides of expropriated peasants in India and China. What are these cities that induce peasants to commit suicide? Modern politicians and economists are often blind to the complementarity between the urban and the not urban, the *urbs* and the *ager*, the *polis* and the *chôra*. Carlos Hank Gonzalez, a Mexican politician who was Secretary of Agriculture brought that blindness to an extreme. He claimed that his duty was to expel peasants from the countryside. In the 60s, the reckless urbanization of the country was equated to development. However, since the 90s, the *development* side of the equation has been increasingly questioned[4]. For instance, Majid Ranehma, who was successively a civil servant in his country of birth, Iran, and a high functionary

[4] Wolfgang Sachs, ed., *The Development Dictionary. A Guide to knowledge as* Power, London: Zed Books, 1992.

of the United Nations has since become a stern critique of the illusion of development, writing:

> Development was then unanimously received as an ideal of liberation from the sufferings and lacks that impeded the poor to enjoy the advantages of others, more developed than them: a dwelling with a postal address in a respectable street connected to the network of the municipal sewerage, a salaried job, a healthy and safe environment without mosquitoes and without thieves, education for their children, in short a package of services that would free them from the squalor of the shanty town [...].[5]

Yet development was not just the promise of a better life, but of a special type of life: the generalization of the living standards of the better off, the "American way of life" for all inhabitants of the earth. Education, healthcare, services, that meant urbanization. In the 21st century, this dream is not dead. It has just become patently unrealistic. To give an idea to what this ideal of development and urbanization has led, I recommend Mike Davis's book, *Planet of Slums*[6]. About one fifth of the world population lives now in slums. The conditions of life in marginal urbanizations have worsened since the time when John Turner praised the creativity of their inhabitants[7]. Among the alleged causes of this deterioration, the most mentioned is demographic pressure from the countryside, that is internal migration, a phenomenon that in turn would require research into its own causes. In this respect, one of the documents presented at the 2002 Conference of heads of state in Johannesburg stated that the industrialized countries subsidize their agriculture by 350 billion dollars annually, which means about $1000 million every day. One of the effects of these massive subsidies is the bankruptcy of agriculture in the poor countries, making them dependent of the produces of the rich. It is then easy to claim that the poor's survival now depends on technology and their integration into the world market. This fallacy hides a legal form of dumping that is never presented for what it is. The ensuing asphyxia of small farming is then taken as a confirmation that only modernized agriculture can nourish the world.

The future is no longer the future we thought to know

Unable to see the effects of the demise of farming in poor countries, some analysts see cities as the product of a quasi-biologic evolution. Their growth, with its "evolutive" phases, is attributed to endogenous causes or to laws of history which are independent from the volition of historic subjects. Some predict the global village, others the networked city. In analogy to the mathematical catastrophe theory, some city theorists

[5] Majid Rahnema and Jean Robert, *La Puissance des pauvres*, Arles : Actes Sud, 2008. p. 153.

[6] London, New York: Verso, 2006.

[7] *Housing by People. Towards Autonomy in Urban Environments*, London: Marion Boyars, 2000 [1976].

even speak of "catalytic metabolization processes," "phenotypical expressions of hidden genotypes" or, more modestly and realistically, of "the impossibility of any anticipation" of a growth ..." that is not oriented to the good of man." The city is no longer the city we knew, the future no longer the future we were used to, with its forecasts, extrapolations and scenarios. How conceptually manageable did it still appear less than forty years ago, in spite of the nuclear threat! In contrast, Ivan Illich, a man with an antenna for change of mentality and epistemic landslides declared in an interview, some ten years ago:

> The future, [then], was subject to planning, designing and policy-making, [terms which were part of] the new language of the Harvard Business School. But now, all this is receding very fast. It still finds expression in terms of the United States bombing Milosevic or Qaddafi, or Iraq into the recognition of their own citizens. It still nourishes the new book by Rostow about the need to maintain American police worldwide as a condition for the survival of democracy. But the people who speak to me, as opposed to those who spoke to me twenty years ago, recognize a fallacy in this thinking. They recognize that they are in front of a world, not the future world but the present world, which is built on assumptions for which they haven't found the appropriate names yet[8].

It seems to me that what Illich says of planning, policy-making, the future, and the present particularly applies to city-planning, urban policy-making for a future of the city which is no longer manageable. This should invite us to confront instead the present of cities, a present to which most futurologists and many planners have been blind. This new uncertainty about "things to come" should inspire a liberation from what Illich called "the shadow of the future." Yet, compare Illich's sobering words on the lost confidence in planning the future with what French philosopher and urban scholar Henri Lefebvre could still write, in 1970, in *La Révolution urbaine*

> We start from a hypothesis: *society's complete urbanization.* This hypothesis will have to be supported by arguments and illustrated by facts. This hypothesis implies a definition. What we shall call "urban society" results from that complete urbanization, which is, today, virtual and will be real tomorrow[9].

Since 1973, everywhere in the South, shantytowns, *gecekondular* as you say here, grow much faster than planned, formal urbanization. For instance, in 1973, Sao Paolo's favelas represented 1% of the city's population; in 1993, it was almost 20%; since then,

[8] Ivan Illich and David Cayley, *The Rivers North of the Future. The Testament of Ivan Illich as told to David Cayley*, Toronto: House of Anansi Press, 2005, p.221.

[9] Paris: Gallimard (Idées), 1970, p. 7.

it has suffered a yearly growth of more than 16%. The number of Karachi's *katchi abadî* (squatters) double every ten years. Indian squatter settlements grow 2.5 faster than the country's general demography. In Mumbai, more than one million persons live on the street, without a personal shelter. Does this explosion of the "urban phenomenon" confirm Lefebvre's hypothesis? What is the *present* of a world supposedly on the way towards a total urbanization? This virtual object is a totally urbanized world, a total city without a country, an urban whole without its complementary opposite. Lefebvre could hardly have guessed that, halfway towards its realization, his virtual object would become "a planet of slums," just as little as Lewis Mumford could have seen that his "urban prospect"[10] was a "slumization" of the poor countries that would soon extend to the rich.

Despite of all my admiration for Mike Davis, the author of *A Planet of Slums*, I think that his analysis lacks a dimension, which is only palpable to the ones who have immersed themselves into the present of third world cities. It is the *power* that most poor people have, if they can secure a place from where to start, to *found* a human world in extremely harsh conditions. A founding power, as Lisa Peattie stated long ago, that the poor of poor countries still have, and the poor of rich countries have lost[11]. Mrs Peattie, the daughter of American anthropologist Robert Redfield, immersed herself into the reality of Venezuela's hopeful poor.

Another example of such an immersion is Robert Neuwirth. To write his book, *Shadow Cities. A Billion Squatters. A New Urban World*[12], he spent successively several months in the shantytowns of Nairobi, Rio de Janeiro, Istanbul, and Mumbai. He was particularly impressed by Sultanbeyli, near Istanbul. He reports that Turkey has a unique law, called "*gecekondu* law" that states that whoever erects a building during the night and occupies it by dawn cannot be evicted by force. Half of Istanbul's inhabitants, according to Neuwirth, live in shantytowns comparable to Sultanbeyli. However, there is a point on which I cannot agree with Neuwirth: he calls the *gecekondu* law a "legal loophole." Though I personally know the Turkish situation very little, I understand this law as an acceptance of what, in the part of the world where I live, is an illegal custom that can only be tolerated. This custom has the spirit of the old English Common law as it was described by Sir Paul Vinogradoff: If a man builds a house in a forest clearing in one night and by dawn, smoke is seen escaping from the roof and a woman is spotted on the threshold, he acquires the possession of his house and the surrounding land and can consolidate it. We know that in Medieval England, a group of friends would systematically train to erect a house in one night. Interested in Latin American settlements, I have always considered that they had established a custom, a kind of informal law, that allows them the same feat on a much larger scale. The

[10] San Diego: Harper Books, 1968 [1956]

[11] *View from the Barrio*, Ann Arbor: University of Michigan Press, 1968.

[12] London: Routledge, 2004

works of William Mangin,[13] who has studied this process in detail have confirmed me in my conviction. The *gecekondu* law, rather than a "loophole" to be amended, gives testimony of deep anthropological and historical insights of the legislator.

A reassessment of people's creativity

It is often argued that squatter settlements must be removed because their inhabitants lack services, particularly of sanitation. Yet, according to the testimony of many of their inhabitants, they offer a place, a point from which to start. As John Turner insisted, this freedom to build is a freedom to found a place to start with. Neuwirth rightly insists on their decency, their good will, their organization capacity. Lisa Peattie has insisted on their optimism, compared with the pessimism of the American poor, who are better provided with services. In a period of uncertainty, people tend to go back to old practices that have proved to be effective. It becomes vitally important to free the imagination from illusions. Perhaps a glimpse into the joint origin of the city and the country, urban and agrarian life can free our imagination and encourage a new pact between city and country. A pact that cannot ignore history.

Part II: Cities in the Mirror of the Past

What I now propose to you is to contemplate the urban dilemmas of our time in the mirror of the past. Understand me well: I will not search the past for models for the present but rather for a liberation of the imagination. Things will never be again as they were, but they will not always be as they are now. Ankara is a very good place to start from, since it is the seat of the *Anadolu müzesi*, with a unique collection on one of the world's first cities,

Çatal Hüyük.

The two theories about the origin of cities

Since its discovery in the early 60s, this site from the 7th millennium B.C. has led to a complete revision of the origin of cities. It is now generally admitted that the first cities emerged either in the transition between the Paleolithic and the Neolithic periods, or shortly after the onset of the latter.

Paleolithic and Neolithic define here modes of life or, as archaeologists prefer to say, *arrangements*. The Paleolithic arrangement was based on foraging, hunting, and fishing. It was nomadic, and ignored agriculture, ceramic and weaving. Pierre Clastres[14] has insisted on the egalitarian and libertarian character of Paleolithic "institutions,"

[13] *Peasants in Cities. Readings in the anthropology of Urbanization*, Boston: Houghton Mifflin Company, 1970.

[14] *La Société contre l'État*, Paris: Éditions de Minuit, 1974.

characteristics that also permeated gender relations. According to Rita Gross, it is now generally admitted that Paleolithic societies did not discriminate against women.

> [I]t is difficult to imagine that humanity could have survived if early humans had insisted on wasting female productivity and intelligence in the way that patriarchal societies have always done. It is no longer supposed that earliest human foragers could have depended solely on men for their food supply, or that men alone were responsible for the discovery of tools, the development of language, or other crucial advances made by early humans. All cogent reconstructions of early foraging life posit an interdependence and complementarity between women and men, rather than male dominance and patriarchy[15].

The Neolithic arrangement comprised sedentary settlements, agricultural – or more precisely horticultural practices—pottery, weaving, and the domestication of animals; it allowed for social stratifications, political inequalities, and a tendency to male dominance. According to French ethnologist André Leroi-Gourhan,[16] Paleolithic space is symbolically *itinerant*, Neolithic space is *radiant*, centered on the hearth and the granary. The contrast between the hunters' itinerant and the horticulturists' radiant senses of space can be illustrated by the frescoes on the walls of Çatal Hüyük's houses. This contrast permits to think that men's symbolic world continued to be "Paleolithic" while women elaborated symbols based on a new attention to plants and insects (viz. bees) and invented abstract patterns inspired by weaving. It is now admitted that the "Neolithic revolution" and the "urban revolution" were unleashed in the time span of a few centuries. Yet, whether agriculture or cities came first is still a matter of debate. I will try to illustrate how the archaeological findings in Çatal Hüyük and other Anatolian sites have profoundly changed the terms of this debate.

According to the conventional version of the story, the foundation of the first cities was preceded by a slow transition to agriculture that started in the Mesolithic, that is in the transition between the Paleolithic and the Neolithic periods. Mesolithic *phyto-improvers* would first pave the way to agriculture with their attention to the characteristics of certain plants. Agricultural *surpluses* would then permit the formation of hamlets, villages, big villages that, then, would fuse into the first urban units. This theory is known as *synecism*, from the Greek preposition *syn*, together and *oikos*, the house or the village (cf Latin *vicus*). It is the theory popularized by Gordon Childe, for instance in *New Light on the Most Ancient East.*[17] According to the synecist theory,

[15] Rita M. Gross, "The Pre-patriarchal Hypothesis: An Assessment," Sylvia Marcos, ed., *Gender / Bodies / Religions*, Adjunct Proceedings of The XVIIth Congress for the History of Religions, Mexico City: ALER Publications, 2000, p. 73–91. Translated into Turkish as "Ataerki-Öncesi Hipotezi: Bir Değerlendirme" (transl. by Balkı Şafak), Sylvia Marcos, derleyen, *Bedenler,Dinler ve Toplumsal Cinsiyet*, Ankara: Ütopya Yayınevi (0 312 43388 28), 2005, ISBN 975-6361-35-2 .

[16] *Le Geste et la parole*, Paris: Albin Michel, 1964.

[17] New York: Norton and Co 1969 [1952].

agriculture permitted sedentary life and engendered the agrarian landscape centered on the fireplace and the granary, with its fields, hamlets and cemeteries.

The findings at Çatal Hüyük were at the origin of a new version of the story that postulates that the Paleolithic *arrangement* can generate enough surpluses to allow for a first division of labor, that is the existence of groups subsisting from others' surpluses. It is defined by the slogan *cities first*. The "cities first hypothesis" was first proposed by the archaeologists that unearthed Çatal Hüyük, and then brilliantly exposed and illustrated by Jane Jacobs in *The Economy of Cities.*[18] According to this hypothesis, the urban revolution was contemporary with, or even preceded the Neolithic revolution. In the third part of my exposition I will argue that, if this is true, current views on cities, past, present, and to come must be profoundly modified.

Studies by the Danish economist Esther Boserup have confirmed that dense settlements preceded agriculture.[19] The late Günhan Danişman, architect, archaeologist and historian of oral culture agrees with the assumption that agriculture is not necessarily a prerequisite for the founding of sedentary settlements:

> Thus it seems necessary, at least in Anatolia, to search for some other explanation than the emergence of agriculture in order to understand the reasons behind man's impetus to create permanent settlements.[20]

If it's not necessarily agriculture, what is it? First of all, I think that the term *agriculture* is used abusively. The first dwellers of permanent settlements and of Neolithic towns were not agriculturists but horticulturists. Their significant tool was the *hoe* and not the *plow*. Primitive urban horticulture often required working with the fingers on a soil in constant formation, because it was made of the town's wastes and night-soil. It was a task in which women excelled. Assimilating the original *horticultural* revolution with a general *agricultural* revolution falsifies history and blurs the subtleties of gender relations. Let's recall the origin of some words. *Urban* derived from *urbs*, Latin for city. *Agrarian* and *agricultural* derive from *ager*, the cultivated field. In classical Antiquity, *urbs*, the city and *ager*, the field — or *polis* and *chôra* in Greek – formed a pair of complementary poles. *Both* were understood in opposition to the *saltus*, the wild. The complementarity of the urban and the agrarian worlds – of *urbs* and *ager* — speaks of the cultural, "artificial" nature of both city and countryside. In recent time, it has led

[18] New York: Random House, 1969. Jacobs questions what she calls *the myth of agricultural primacy*, that is the assumption that people first established agriculture, then established cities. In pre-historic Europe and the Near East, pre-agricultural settlements of hunters have been identified, some of them quite dense in population. As Jacobs shows, cities and agriculture co-evolved, and the "urban-rural divide" emerged from that co-evolution.

[19] *The Conditions of Agricultural Growth: The Economics of Agrarian Change Under Population Pressure*, Chicago: Aldine, 1965.

[20] Günhan Danişman, "The architectural development of settlements in Anatolia," Peter Ucko, Ruth Tringham and G.W. Dimbley, *Man, Settlement and Urbanism*, Gloucester Crescent: Duckworth, 1972, p. 505.

to the persuasion that the country's agriculture feeds the cities and has always done so. In modern times, it is politically "convenient" as far as it permits developers to take possession of urban spaces and open them to the practices of land speculation. Yet, the transition from foraging in the wild to cultivation was *not* a transition to agriculture but rather to *horticulture*, gardening. The word *horticulture* derives from Latin *hortus*, the garden. What the "cities first" hypothesis teaches us is that the Neolithic transition was between foraging and small-scale gardening, and not between hunting-gathering and agriculture. To insist on the fundamental difference between gardening and agriculture is no hairsplitting. It is essential to the undoing of an ideology that paralyses the imagination and blurs the distinction between technocratic utopias and the sense of *what is possible*. Let's recall that, while agriculture uses the *plow* and draft-animals, horticulture uses the *hoe* and the fingers. A way to assess the specificity of gardening would be to coin a new word for it.

A couple of years ago, I proposed the word *urbiculture*, cultivation within the *urbs*, urban gardening. Agriculture is on the contrary cultivation on the *ager*. As to Günhan Denişman's question, it can be affirmed that agriculture is not the only surplus-producing activity. Horticulture also leaves surpluses, and often abundantly, but foragers and hunters too can often keep something to barter with once they have fed and clad themselves and their kin. Archaeological evidence from both the Old and the New worlds shows that many of the first large settlements are rich in obsidian tools. Jane Jacobs has dubbed obsidian the "Neolithic steel." It's a natural glass whose cutting edge is sharper that that of the first copper and bronze knifes. The Aztecs knew some metals such as copper and gold, but they never used them to make knives. They never abandoned obsidian (*itztli*). It is supposed that the first people who prospered from what other's subsistence produced were the makers of obsidian tools. Obsidian was the great mobilizer of surpluses of the Neolithic world.

Instead of one, we must consider two historically important transitions or revolutions: 1. the transition from Paleolithic foraging to Neolithic gardening and 2. the transition from small scale gardening to organized agriculture. Acknowledging this second transition implies the understanding that, at some time between the 2nd and the 1st millennium B. C., due either to internal changes or to invasions by violent outsiders — be they called "Proto-IndoEuropeans" or "Kurgans" —or to a slow peaceful diffusion of farming,[21] most societies of the Old World went through a change that deeply affected their material culture, social hierarchies, the organization of cities, and gender relations. The overall result seems to have been the propagation of male dominated social orders centered on organized violence, that is warfare. Warfare is associated with agriculture because armies depend logistically on huge granaries. The Antique world of Egypt, Greece and Rome was a male-dominated and agrarian world ruled by war

[21] For an assessment of the "Anatolian Homeland Theory," that postulates a peaceful spread of farming from Anatolia beginning shortly after the "Neolithic Revolution," see Colin Renfrew, *Archeology and Language*, London: Jonathan Cape (Random House), 1987.

specialists from cities. Since the historicity of this second transition is not completely recognized, it retains the character of a hypothesis.

> Because the scholarship on which this hypothesis is based is quite technical and difficult, and because of the passion with which [certain groups] argue for and against this hypothesis, one can feel as if one is walking through a mine field when attempting to survey these materials.[22]

In order to gain clarity, we must first untangle this hypothesis from the passions of "certain groups," among them some radical feminist groups of the 60s and 70s, and then compare the militarization and "masculinization" hypothesis with archaeological and historic evidence.

The first city, a matriarchal paradise?

Starting in 1961, the successive publications of the archaeological findings in Çatal Hüyük by the controversial archaeologist James Mellaart gave rise to a wave of early feminist enthusiasm. The ubiquity of female images of power, the paucity of male figures, the distinction, in the abundant paintings on the houses' walls, between the old itinerant sense of space of man the hunter and the abstract motives and delicate stylizations of plants and animals in frescoes most certainly inspired by female weavers, gardeners, and potters seemed to testify to the predominance of women both in power and cultural inventiveness. Here was the confirmation that a matriarchal golden age preceded the patriarchy that characterizes most historical and modern societies. For many pioneers of the feminist movement, this alleged matriarchal past opened to the possibility of an equally matriarchal future. However, many feminists came soon to understand that substituting the image of an original female dominance for male dominance was ideological. An assessment was needed. This assessment is a *pre-patriarchal hypothesis* that does not substitute female dominance for male hegemony but considers rather the possibility and actual historical reality of gender relations based on solidarity and equity.[23] The pre-patriarchal hypothesis claims thus that "the *creation of patriarchy*"[24] or male dominance is a historical event that occurred "in the relatively recent past, due to certain causes and conditions."[25]

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[22] Rita M. Gross, "The Pre-patriarchal Hypothesis: An Assessment," op. cit., p. 73–91.

[23] This is also one of the main insights of a book that would deserve such a thoughtful commentary that it would explode the limited frame of this essay: Ivan Illich, *Gender*, New York: Pantheon Books, 1983.

[24] Gerda Lerner, *The Creation of Patriarchy*, New York: Oxford University Press, 1986.

[25] Rita M. Gross, "The Pre-patriarchal hipótesis: An Assessment," Sylvia Marcos, ed., *Gender / Bodies / Religions*, Adjunct Proceedings of The XVIIth Congress for the History of Religions, Mexico City: ALER Publications, 2000, p. 73–91.

Comparing the hypothesis of a violent transition to agriculture with archaeological data

The re-assessment of the hypothesis about a non-patriarchal past implies that ...an era of peace, prosperity, stability and egalitarian social arrangements that prevailed far and wide for a long period of time before being destroyed violently and relatively quickly by patriarchal and pastoral nomads...[26]

Let's now compare this assumption with materials about the evolution of patterns of urbanization in the Konya plain between the 7th and the 1st millennium B.C.

- 6500–6000: "Çatal phase": a single big agglomeration, Çatal Hüyük, with clear "urban" characteristics: a population of 10,000 or more, sophisticated forms of art and handicraft, excellent construction techniques.[27] James Mellaart has compared Çatal Hüyük with a supernova "that burnt itself out amid the rather dim galaxy of contemporary peasant cultures."[28] [NB: I would substitute "rural" for "peasant" in the sentence]. Then starts a process that evokes the opposite of a synecism: a kind of dispersion of much smaller settlements over the whole territory.

- 5500–4000: Multiple small agglomerations.

- 3000–2000: Small agglomerations and farmsteads. From there on, we can speak of the onset of a synecist agglomeration process: bigger and bigger villages will appear. Yet, up to this point, no defense systems are attested in the Konya plain.

- 2000–1000: Large and small agglomerations, cities. Two sites are larger than Çatal Hüyük: Domuzboğazliyan and Karahüyük.[29] Traces of fortification attest to the practice of warfare.

  > ...warfare is an *effect* rather than the *cause* of the end of the pre-patriarchal society, though some individual pre-patriarchal societies were destroyed by outsiders who had already become patriarchal warriors. We should probably look to increased population pressures.[30]

At the end of the five millennia between Çatal Hüyük and Karahüyük, the societies of the Konya Plain seem to have passed from arrangements based on Neolithic

[26] Rita M. Gross, op. cit., p. 78.

[27] Günhan Danişman, "The architectural development of settlements in Anatolia," Peter Ucko, Ruth Tringham and G.W. Dimbley, *Man, settlement and urbanism*, Gloucester Crescent: Duckworth, 1972, p. 505.

[28] James Mellaart, *A Neolithic Town in Anatolia*, London: Mortimer Wheeler ,1967.

[29] David French, "Settlement distribution in the Konya plain, south central Turkey," in Anatolia," Peter Ucko, Ruth Tringham and G.W. Dimbley, *Man, Settlement and Urbanism*, Gloucester Crescent: Duckworth, 1972, p.,231–238.

[30] Rita Gross, op. cit., p. 85.

horticulture to a form of agriculture that allowed the capitalization of foodstuffs in granaries controlled by warriors. Though I have little direct evidence of it, it is logical to think that the transition from communal gardening to agriculture has profoundly affected gender relations. The hoe favors equitable relations between women and men. The plow and the horse drive women out of the fields.

From then on,

> [t]he plow, draft animals, complex irrigation systems, a new emphasis on labor intensive grain crops favored men as the primary producers, while women were reduced to processing agricultural produce. [...] All these factors are essential in the transition from a kin-based society to the process of early state formation.[31]

Yet, gardening, mainly performed by women, didn't die out with the organization of agriculture around cereal crops that could be capitalized in granaries and that fed armies. Like women themselves, horticulture entered into a cloud of relative invisibility. Peasant women kept their kitchen-gardens and their orchards around the house, but domestic gardening was now considered a mere extension of the processing of men-generated agricultural produces. As societies were restructured around economic values, gardening was relegated to the invisible domain of subsistence, a domain that contributes little to the GNP and does not generate what now counts, money. However, this domain was not completely invisible. Besides, it seems that, through the ages, rural people, "peasants," have opposed resistance to their definition as agriculturists by external powers interested in capitalizing their surpluses.

E.P. Thompson has shown how, up to the late 18th century, women knew how to defend their *moral economy*. Armed with sickles and scythes and often supported by men clad as women, they were often able to stop the convoys that were transporting the wheat requisitioned from the villages' to the king's granaries.[32] The people's – the "crowd's" – moral economy was not based on *value* but on a shared sense of the *good*. At the eve of industrial society, almost all cities of the world sustained the greatest part of their inhabitants' livelihood with the produce of urban gardens. In Paris' markets, the peasants from the countryside sold wheat, wood, chickens, eggs, and other produce from their farms, but bought vegetables for their households. In the mid 19th century, Paris still produced a surplus of vegetables. A couple of years ago, I had the curiosity to re-read Victor Hugo's *Les Misérables*. From his descriptions, you can deduce that at least one third of the city's soil was occupied by gardens. In 19th-century New York City, dairy farms proliferated: By the mid-19th century, "swill" milk stables attached to the numerous in-city breweries and distilleries provided [New York City] with most of its milk. There, cows ate the brewers grain mush that remained after distillation and

[31] Rita Gross, op. cit., p. 84.

[32] E.P. Thompson, "The Moral Economy of the English Crowd in the 18th Century," Oxford: *Past and Present*, 1971, 50, p. 76–136.

fermentation ... As many as two thousand cows were located in one stable. According to one contemporary account, the visitor to one of these barns "will nose the dairy a mile off ... Inside, he will see numerous low, flat pens, in which more than 500 milk cows owned by different persons are closely huddled together amid confined air and the stench of their own excrements.[33]

Some thirty years ago, the American *Farallones Institute* has reintroduced the "French intensive mode" of urban cultivation in its "urban house" in San Francisco and shown that the productivity of *urbiculture* based on vegetables can be four to five times higher that that of organized agriculture based on grain crops. I have encountered still more striking yields in Mexico's remaining Aztec urban gardens, the *chinampas*. At the beginning of the 20th century, about two thirds of French adults still worked in their own houses, often in small domestic enterprises,[34] many of them still growing food in gardens or in allotment gardens. Today, we attest to a certain revival of urban gardening or urbiculture, often in the less-than-favorable locations, the suburban wastelands of industrial cities in the North as well as in the South (see, for instance, *Le Grand Yoff* near Dakar). This is not a proof that its produces are always healthy, but it testifies to the vitality of a mode of life, an "arrangement," a mode of subsistence that has been conceptually negated, socially obscured, economically disvalued because, like the moral economy of old, its aim was *the good* and not *economic value*.

Part III: After the Demise of Urban Utopias

The rise and the fall of high-energy urban networks

I felt compelled to compare the demise of a broad period of history with its beginning in Anatolia. I could call this broad epoch the era when the *idea of a town* was pregnant, to quote the title of a beautiful book by Joseph Rykwert.[35] By insisting on the *idea* upon which a town was *founded*, Rykwert hoped to revive the perception of the *meaning* of urban patterns and textures, of the relation between houses and open spaces, the public and the private. The renewal of the understanding of the *why* of urban spaces can be an antidote to sheer blind market forces.

In contrast with this historically grounded conception of towns and cities, let's now quote some authors who see in these market forces the irresistible agents of a complete reshaping of what was once call "urban." Michel Bassand is a sociologist based

[33] Melanie DuPuis, *Nature's Perfect Food: How Milk Became America's Drink*, New York: New York University Press, 2002.

[34] Antoine Prost, "Fronteras y espacios de lo privado" (Frontiers and spaces of "the private"), Philippe Ariès and Georges Duby, *Historia de la vida privada*, vol. 9, Madrid: Taurus, 1991, p.21. (Spanish traduction of *Histoire de la vie privée*, Paris: Seuil, 1987).

[35] *The Idea of a Town. The anthropology of the Urban Form in Rome, Italy and the Ancient World.* Cambridge (USA): MIT Press, 1988.

in Lausanne, where he headed the School of Architecture of the Swiss Polytechnical Institute. He is mainly known for his sociological studies on the city of Geneva:

> Certain scholars speak of the urban phenomenon as if they were living in the 19th, or even in the 15th century. This mental gap is particularly conspicuous when these scholars analyze contemporary urban realities as if there still were 'the city,' [and if they had the mission] to revive it. This attitude is not only wrong, it is dangerous, for the city is dead. It only survives as a myth, a trace, a sediment. 'City' and 'town' are no longer the names of real territorial collectivities. (Bassand 1983 [translation .J.R.], quoted in an unpublished RATP-sponsored study by Gabriel Dupuy, 1985).

According to this author, the city, once a place for real experiences, has no place in the wires of high-energy networks. Listen now to Gabriel Dupuy's eulogy of the city:

> [In this new realm], the city is particularly questioned. Unless one considers it as an entelechy, the city, as a form of actual territorial order, is being wiped away by the fantastical developments of the technical networks. So I ask: why not consider whatever will be 'the post-urban network' as a kind of gigantic terminal, that is as the last avatar of that 'social commutator' of which P. Claval spoke? (Dupuy, 1985, p. 4).

French engineer and traffic specialist Gabriel Dupuy thinks that none of the models on which present-day city planning operates can help us to understand today's transformations of urban landscapes. According to him, the future belongs to the "networked cities."[36] As to the view of urban theorists and historians, they are – according to G. Dupuy – enmeshed in old conceptions and perceptions of space, time, and people. A completely new view of the relations between space, time, territory, and man would be required. This new conceptual frame should give primacy to the *New Communication Technologies*. Dupuy argues that it is they, the *N.C.T.*, and not city-planners and culture-imbued urbanists, that engender the new spaces, times, and relations forming a future *(des)-territoriality* that Dupuy dubs "*reticular territoriality*." This territory-negating "territoriality" of the new times will no longer be based on center-periphery relations, on the urban-rural polarity, on geographic and historic boundaries, on zones and limits but on the general requirement to *let circulate*, on the intensification of material and immaterial flows of water, wastes, electricity, messages, vehicles and [last but not least?] people. Independently of the generally obsolete ideas of planners and urbanists, really existing cities grow and will continue to do so under the logic of *distribution networks*. The new (des)-territorial imperative is and will always be more an

[36] G. Dupuy first expressed this view on "networked cities" in English, in Joel Tarr and Gabriel Dupuy, ed., *Technology and the Rise of the Networked City in Europe and America*, Philadelphia: Temple University Press, 1988. He then elaborated it anew in a book published in French three years later: Gabriel Dupuy, *L'Urbanisme des réseaux. Théories et méthodes*, Paris: Armand Colin, 1991.

imperative to get involved in "*networking*." The expansion of the *reticular territory* that it engenders will proceed independently of all ideal models. All ideas and models that do not acknowledge this independence of urban growth from traditions, models, ideas, and, finally, history can be declared *passé*. It is typical that, among the few authors who escape that condemnation, Dupuy mentions Ildefonso Cerdà and Arturo Soria y Mata who, in the 1850s and 1890s respectively, pioneered cities without historical centers, cities proliferating at the rhythm of traffic flows.

Is another world impossible? An opinion and two arguments

Being grounded in history, I must confess a certain dislike for such metonymic tautologies based on one aggrandized aspect of reality, in that case the actual predominance in most modern cities of pipes for water and sludge, cables for electricity and the telephone, roads and tracks for turnpikes, highways and railways. But expressing a dislike is no argument.

My first objection is to identifying people with matters and energies in motion, of submitting people to the laws of material flows and entropy. Ivan Illich, when he was writing *Energy and Equity* still equated the powers of the human body with *energy*, the entity that permits a price to be put on a steam engine's "duty" or on the fuel stocked in your basement for winter heating.[37] In 1983, he expressed regrets for what he considered a lack of scholastic distinctions:

> Fifteen years ago, I worked on a multi-dimensional model of thresholds, beyond which tools become counter-productive. To make my argument, I was then delighted to find others working on energy accounting. I was happy to compare the efficiency of a man with that of a motor, both pushing the same bike—to the clear advantage of the man. I was delighted to belong to the race that had invented the ball bearing and the tire when I found out that, on a bike, I was more "energy efficient" than a sturgeon of my weight.[38]

In the same essay, he confessed that he was not fully aware, then, that by measuring both forms of locomotion in terms of kilowatt-hours, he made himself blind to the essential difference between the two. People and motors do not move in the same kind of space. People constitute the commons on which they walk. Beyond certain thresholds, motorized vehicles transform the commons into abstract spaces, unlimited thoroughfares for the circulation of economic resources. In the quoted passages, Bassand and

[37] London: Ideas in Progress (Calder and Boyars, 1974.

[38] "The Social Construction of Energy," opening talk to a seminar on "The Basic Options within Any Future Low-Energy Society" held at the *Colegio de México* in July 1983, unpublished English manuscript recently published in French translation in the Parisian journal *Esprit*, no 8, 2010, p. 211–227, under the title, "L'énergie, un objet social."

Dupuy speak the language of technocrats who abolish all limits of energy intensities, blur all distinctions between the urban, the rural and the wild, and submit all ideas about town and cities to the iron law of scarcity.

Because I refuse to live "under the shadow of the future," as Illich said, "a future that does not exist," I only mention in passing a second counter-argument: those who claim that the era of cheap oil, cheap gasoline, cheap plastic, cheap trips, and cheap imported food is over might soon be proved right. If they are, the model of the necessarily *energy-intensive* networked city will soon be one more still-born child of an era of technocratic illusions and join Lefebvre's total city in the gallery of last century's utopias and dystopias. All these forecasts and futuristic schemes were finally little more than extrapolations of then existing trends and projections into an unforeseeable future of their authors' trivial certainties. All these extrapolations excluded by construction of what mathematicians call *discontinuities* and that I prefer to conceive as the always possible emergence of the "radically new," that is of surprises. In my view, good surprises are never a total departure from the past but are open to reinventions of the good in the present.

Liberating our paralyzed urban imagination

We have seen that the past of cities is pregnant with many good things and that the possibility of an age of equity between women and men is not the least of them. If communitarian gardening was really the rule in the first towns and cities, as I think it was, then the *hoe* can be seen as a symbol of gender equity in a "moral economy" centered on subsistence and the *good* rather than on the capitalization of grains and economic *values*. Either by endogenous evolution or by external conquest, from the second and first millennium B.C. on, an agriculture using draft animals, managed by men, and protected by the arrow visibly relegated women to the consumption and sale of agricultural products. In spite of all its technological merits, the *plow* could be the symbol of gender inequity and domination by militaristic, male, proto-capitalists reigning on a landscape of cereal fields and granaries, keeping guard of their own reserves and ready to plunder others.'

Yet gardening did not die out with the spread of granary-centered agriculture. It entered the same sphere of shadow as most female contributions to subsistence and domestic economy. The story Gabriel Dupuy and Joel Tarr did not tell is the one of the demise of the modern and efficient urbiculture of late 19th century under the joint assaults of urban sewerage, railroads, highways, and all the NCT's of which their book explores the history.

As a conclusion, like the wanderer who could not enter the new landscape himself, I can only invite you to reflect on the variety of authors, civic initiatives and pop-

ular movements that, from Teodor Shanin's "expolar economies"[39] to Cuba's urban gardens[40] and Via Campesina's[41] aim at the recovery of "gardenable" territories in and out of cities. Noteworthy too are Chiapas' Zapatistas initiatives in Mexico.[42] It entices me to think that another world than that of contemporary high-energy cities is possible and that there are alternatives to the networking of counterproductive patterns of deadening dependency.

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[39] "Chayanov's Message: Illuminations, Miscomprehensions, and the contemporary 'Development Theory,'" introduction to —, *The Theory of Peasant Economy*, Madison: Wisconsin University Press, 1986. See also http://www.msses.ru/shanin/index.html.

[40] Scout G. Chaplow, "Havana's Popular Gardens: Sustainable Urban Agricultura," publication of the *World Sustainable Agricultural Association*, Washington, Fall 1996, vol. 5, no 22.

[41] See *http://www.viacampesina.org*.

[42] Subcomandante Insurgente Marcos, *La Ley Agraria Revolucionaria de los Zapatistas*, San Cristóbal de las Casas, Mexico, January 16, 2008.

About Ivan Illich: (Preparatory Notes for a Seminar)

Jean Robert

Most readers of Illich will admit that there are big differences between his early and later works. However, to speak of a "young Illich" and a "late Illich" might be too reminiscent of an example that has given rise to endless speculation: the "young Marx" and the "late Marx." The turning point (*die Kehre*) is not of the same nature in the two cases. Speaking of Illich, we must consider his intuition that around 1980 a "landslide" (his term), a single epistemic rupture affected Western or modern culture as a whole in a way that radically altered the conceptual and perceptual milieu within which Illich, in the 1970s, formulated his critique of the institutions of industrial society. This means that, if we are to be true to his ideas, we will have to revisit his early critical work in light of his later ones and his 'self-criticism.'[1] According to his last interview with David Cayley,[2] industrial society was the last phase of a historical epoch spanning eight or nine centuries which Illich called the technological or instrumental age or the era of tools.

It is not without some trepidation that I launch this suggestion of 're-reading' the first works of a highly public author in the light of his latest works, for the landscape over which Illich flies is so vast that such a proposal could too easily lead to a dialogue of the deaf between specialists locked in mutually tight disciplines and languages. For their part, certain professional historians have already expressed reservations about the "right" that Illich would arrogate to himself to embrace long-term movements over a period of nearly a millennium, or even more in the case of his study of proportionality.

However, we did not meet to discuss *a priori* the formal merits of the most daring intuitions of the "late Illich," but much more to ask ourselves the question that every serious author deserves: "what did he mean? that man? And, to the extent possible, to respond to them on their own terms. This man meant that a unique cultural spime—a space-time, an era or an age in which certain perceptions and conceptions of the here and now, of place and space, of duration and of time, of the flesh and of the body, of the body and of the world, of the interior and of the exterior, of the individual and of the

[1] An autocritique that, in my opinion, was often a didactic device used as a pointer to something more profound: his intuition that his early work was written in and for an epistemic frame that is no more.

[2] *The Rivers North of the Future. The Testament of Ivan Illich as Told to David Cayley*, Toronto: House of Anansi Press, 2005.

social body, of the near and the far and of the border between them, of the generation of things beyond this frontier by a matrix located beyond and forms of causality—began in the twelfth century and ended in the last decades of the twentieth century. In our meeting, it will therefore be necessary to tolerate confrontation between the 12th and the 20th and 21st centuries, that is to say, we will have to allow the confrontation of a phenomenology of the end of the era of tools and a cultural history of its beginnings.

Illich later convinced himself that what separates us from the time during which he wrote, what he will call in retrospect his pamphlets on compulsory schooling, transport or medicine,[3] is a real tectonic flaw, a rupture marking the end of a space-time of nine centuries. The only way, it seems to me, to evaluate a historiographical hypothesis of this magnitude is to judge it by its fruits, the strength of its intuitions, the avenues that it eventually opens. Despite their seemingly unreasonable scope, some of these leads have been very fruitful for many of his friends and colleagues, and I hope some of them can tell us firsthand how they were.

What I am proposing here is at first glance a sort of "backward journey" of Illich's work which, starting from his last lines of research and writings, would lead us regressively to his radical criticism and, in my opinion, revolutionary criticism of industrial society as it could be analyzed thirty-five or forty years ago. This presentation in the opposite direction—at least in part, or rather, as suggested in a different context by his friend, the historian Ludolf Kuchenbuch—this progressive-regressive approach in the manner of a crab seems to me quite appropriate in France, a country where Illich's early works have been widely received and discussed while his later essays are virtually ignored.[4] An additional difficulty is that Ivan, in his later years, liked to express his ideas in conversations, in letters to friends, even in generous contributions to their research rather than in clean books. In this regard, a good dozen witnesses are still alive and could contribute to our meeting, but the majority of them do not speak French.

The Loss of the Senses,[5] The Topicality of Illich's Thought

I will first try to show why, in my opinion, the two themes of Illich's part of the senses and topicality are intimately linked. In very general terms, let us say that Illich

[3] *Deschooling Society*, 1971; *Energy and Equity*, 1974 ; *Medical Nemesis*, 1976.

[4] See the "would be complete"–and still incomplete–bibliography of his works established by his German friends: Ivan Illich, *Bibliographische Sammlung*, Bremen, April 29 2005. CIDOC, the center from which he published his "pamphlets" on industrial society closed in 1976. The works corresponding to the years 1950 to 1976 occupy less than seven pages, while the works written between 1977 and 2002 occupy more than thirty pages. It is hardly an exaggeration to say that one fifth of Illich's work has been written "from the other side" of the epistemic break while four fifths of it has been thought and written "from this side" of the rupture, that is after what he considered the end of the technological epoch.

[5] Ivan Illich, *La Perte des sens*, Paris : Fayard, 2004.

saw, in what was in turn defined as the march towards modernity (Polanyi, Dumont) and the Westernization of the world (Illich, *Le genre vernaculaire,* N 5), a process of disembodiment, that is to say a progressive loss of the sense of the flesh. The fundamental paradox which, relatively early in his life, the theologian Illich stumbled upon, is that this numbness of the carnal senses manifested itself precisely within the culture born out of faith in the Incarnation of the Word, of Western culture. But as soon as he faced this paradox as a theologian and believer, Illich reformulated it in terms of historical immanences, leaving uncapitalized both incarnation and verb.

Since the 12th century, particularly in France, it has been possible to observe and follow step by step a slow dissociation of verb and flesh (lowercase twice). The first steps on this path correspond perhaps to the gradual mastery of silent reading and the concomitant repression of any gesticulatory accompaniment of reading (Jousse[6]). The following steps expunge the context of text, they record the gradual detachment of the text from the page,[7] a movement of which the hypertext on the remote range of the computer is the contemporary avatar. A parallel line of research is the growing separation of the tool from the hand (see the concept of *instrumentum separatum* proposed by historian Ludolf Kuchenbuch) and consequently the increasing distance or distality between the body and the instruments of his studied techniques by anthropologists like Leroi Gourhan[8] or historians like Norbert Elias.[9]

Seeking to establish a non-theological conceptual frame of reference in which the slow separation and increasing distance between flesh and verb, tool and hand can be discussed, Illich proposed to analyze it as a progressive loss of the sense of proportionality. Proportionality is by no means a specifically Christian concept. It may even be a general cultural trait from which only modernity would have departed. Ancient Greece conceptualized it as the foundation of music, and the Middle Ages inherited this conception.[10]

Under names such as *convenentia*, *ratio* or *proportio*, the Schoolmen saw it as proper to the Incarnation of the Word but, from the XIIth century on, Illich claims, they progressively betrayed it by adopting *instrumentality* as the rational foundation of theology (see sacramental theology), philosophy and cosmology. One of the meeting's panels should examine why the concept of *instrumentality* is potentially – or has been — contrary to proportionality.

In the second half of the XIIth century, a fascination for instrumentality or *causa instrumentalis* (Illich) manifested itself. A little like the *system* today, the *instrument*

[6] Marcel Jousse, *L'Anthropologie du geste*, Paris : Gallimard, 1974, *La Manducation de la parole*, Paris : Gallimard, 1975.

[7] Ivan Illich, *The Vineyard of the Text,* Chicago: University of Chicago Press, 1995.

[8] Andre Leroi-Gourhan, *Gesture and Speech,* MIT Press, 1993.

[9] Norbert Elias, *The Civilizing Process,* Blackwell Publishing, 1994.

[10] Matthias Rieger, *Helmholtz Musicus. Eine Studie ü ber Helmholtz' Objektivierung der Grundlagen der Musik, dargestellt anhand einer Textanalyse der* Tonenemfindungen (1877), doctoral dissertation, Brême, 2001.

became an all-compassing and all-explicative metaphor progressively extending its shadow upon what, not being instrumental, had been gratuitous. One century later, it led to what Jean Gimpel has called "the industrial revolution of the Middle Ages"[11] and with it, to the *instrumental* or *technological era* that, according to Illich, lasted until the end of the XXth century. At the same time, the understanding of being, the perception of *what is*, and of symbols expressing it, began to progressively change: symbols ceased to be in *ontological consonance* or "participation"[12] with being and tended to become a class for itself, *conventionally associated* with classes of existents and concepts (Saussure). Perception and its understanding were radically transformed. To sum it up in few words: before the XVIIth century, perception was, as Bachelard would say, "a mutual seizure of the body and of the world" or an adequacy, a fitness, a mutual *convenentia*, *ratio* or *proportio* between the sense organs and the reality wanting to be perceived (Rieger). There are here many resonances between Illich and the Foucault of *The Order of Things*.[13] Both coincide that the history of western mentalities or of the western *epistemè* suffered a radical breach or rupture (an *epistemic rupture* according to Foucault, a landslide according to Illich) at the end of the XVIIth century (Illich) or of the XVIIIth century (Foucault).

For Illich-the-theologian, the prototype of proportionality is the mutual *convenentia* (Aquinas's expression) between the *Verb* and the *Flesh* in the *Incarnatio Verbi*, basic and formative belief of the West. Yet, this proportionality is mirrored in the relationship between anyone's *word* and *flesh* and from now on, Illich contended, the history of their proportionality and of its demise can be studied in historical terms independent of the historian's beliefs or disbeliefs.

Summarizing Illich's historical *theôriâ* (vision, spectacle): two ruptures or "landslides" radically differentiate a "before" from an "after" in the culture of the modern West (taking "modern" in the broad sense): the end of *proportionality* at the time of the invention of the welltempered scale in music, at the end of the XVIIth century, and the demise of *instrumentality* at the end of the XXth century. It is still not clear how both ruptures relate nor what differentiates the place of *proportionality* in early western thought from the place and the effects of *instrumentality*. My reading of the XIIth century abbot Sugerius suggests that instrumentality first appeared as a rationalization of adequacy, appropriateness, fitness, *convenentia* (viz the ambiguity of the word "means," which has both a proportional and an instrumental meaning).

To gain time, I allow myself to stage imaginary debates in which I will enlist several of you. In the first of my "experiments in thought," Professor Ludolf Kuchenbuch would

[11] *La Révolution industrielle du Moyen Âge*, Paris : Seuil, 1975.

[12] Ladner, Gerhart, "Medieval and Modern Understanding of Symbolism: a Comparison," en *Speculum, A Journal of Medieval Studies*, Vol LIV, abril 1979, no 2, pp. 223–256.What distinguishes medieval, always proportional symbology from modern "symbolic codes" is the proportionality between the symbols and the objects they stand for in the first and its absence in the conventions of the latter.

[13] *The Order of Things. An Archaeology of the Human Sciences*, A translation of *Les Mots et les choses*, New: York, Vintage Books (Random House), 1994.

lead a panel on *Illich and history*. Paul Veyne's essay on Foucault could be a starting point: Again, there are points of contact, but also great divergences between Illich's and Foucault's concept of a historian's chores[14]. To summarize Illich's attitude toward history in only two points, I dare to say that:

1. Illich considers that the past is a much richer source of surprise and *estrangement*[15] than any futurology or science fiction, which are at best projections of present-day certainties and illusions into a non-existent space-time, the *future*.

2. The estrangement gained from the confrontation with the radical "otherness" of the past ought to be cultivated by the serious historian. Yet, if, after painful efforts, he can obtain a certain familiarity with a past epoch's mentality and perceptual milieu, this estrangement, changing direction, can affect his vision of *his* epoch, modernity, our present, and reveal its truth in an unfamiliar, unsuspected light.

In his German works and conversations, Illich called *Zeitgeschichte* ("time history") the form of history-writing inspired by a cultivated estranged glance at the present "in the mirror of the past."[16] It is the antonym of *development history*, the painting of vast historic panoramas elaborated, not unlike "peplum-movies," out of selected remnants and debris of the past filtered by modern prejudices and "certainties." Development history is always *retrodictive*[17]: it searches the past for the "origins" of specifically modern situations and reconstructs impressive sceneries out of fragments disembedded from their historical specificities, like for instance "the origins of capitalism in the grain trade between North-Italian cities in the XIVth century." By contrast, *Zeitgeschichte* does not attempt to *visualize* the past in impressive images but rather explores the emergence of improbable or aberrant situations (see the reference to George Steiner in Illich's book *In the Vineyard of the Past*) and of "objets biscornus" (Veyne) among a dense fabric in which they first seem to have no place. Whereas *development history* pretends to co-opt emergent situations as "the origins" of "what we have," *Zeitgeschichte* attempts to show what this cooptation conceals and obscures. It is what Ludolf Kuchenbuch and Thomas Sokol are pointing at, when they write, in reference to the emergence of (wage-) *labor* as a concept and a social fact: "It is not possible to write the history of labor, since labor, as a well-defined object susceptible of being followed, similar to itself, through the ages, simply does not exist."[18] Yet it is partly possible, but difficult,

[14] Paul Veyne, *Comment on écrit l'histoire*, suivi de *Foucault révolutionne l'histoire*, Paris : Seuil, 1978.

[15] See David Lowenthal, *The Past is a Foreign* Country, Cambridge University Press, London, 1985.

[16] Ivan Illich, *In the Mirror of the Past. Lectures and Addresses 1978–1990*, New York – London, Marion Boyars Publishers, 1992.

[17] See Alain Caillé, "L'emprise du marché," in Maurice Aymard, ed., *Lire Braudel*, Paris, 1988, p. 107, quoted by Jean Robert, *Raum und Geschichte. Kurseinheit 1*, Hagen, Fernuniversität, 1998, p. 54.

[18] Ludolf Kuchenbuch et Thomas Sokol, *Grundkurs Ältere Geschichte. Arbeit im vorindustriellen Europa, Kurseinheit 1*, Fernuniversität, Hagen, 1989, p. 4.

to unravel past forms of productive work, of subsistence knowledge, abilities and skills that were uprooted along the road to modern wage labor: what can be followed is the cultural clearing that constituted—not unlike a *chôra*[19]–a "space," an epochal frame, a "time" in which this object with an ever-changing content could progressively take a dominant position. To take another example often mentioned by Illich: Aristotle's "discovery" of the "law of offer and demand" and hence scarcity among the 'sausage' vendors (*kapeloi*) on Athen's marketplace or *agora* and his judgment that this deviant behavior would never generalize itself because it was countered by an institution in which scarcity had no place, *oikonomia* or the administration of one's own house. From there, *development history* postulates an illusory line of continuity between Aristotle's "discovery," late medieval *Hausväterökonomik*, Montchrestien, Mandeville, Marx, Walras, Keynes, von Hayek up to mathematized speculations based on "Peter's and Mary's" tricks in the newest applications of game theory to economics.

Zeitgeschichte rather attempts, which is more difficult, to recover the perceptions, concepts and words associated with suppressed realities hardly imaginable by the modern mindframe. It stresses discontinuities and the surge of the unexpected. Besides, in its light, history can look more like a *history of losses* than of gains, another rejoinder with Foucault and his insistence on the hecatomb of empirical knowledge in modernity and the possibility or even necessity of *retours de savoirs* if we are going to continue thinking.

Body History and Medicine

In collaboration with Professor Barbara Duden, Illich has inaugurated a chapter of history or better a discipline in which the aims of *Zeitgeschichte* become very clear. It is *body history*. What is body history, also termed *historical somatics*? It is the search for the *felt body* of past epochs and the history of the steps of its repression by the modern imputation of a mapped, anatomical body.

In the history of this *felt body* and its successive transmogrifications, the "theological paradox" can become an expression of the "*corruption optimi quae est pessima*," the corruption of the best which is the worst. The culture that took shape around the celebration of the Incarnation is precisely the one that has buried the vivacity of the perception of oneself, and silenced the flesh under layers and layers of writs and prescriptions. This betrayal of the word and of the flesh, and of their proportional relation,

[19] In my opinion, the activity of the *development historian* more than poetically evokes the grubbing acts of the *chôritès* ("peasant") that uproots a piece of nature in order to open a *chôra* (field, "empty space" for Plato) where to edify a new order. The verb *oikodomeo* expressed this destruction preparing a construction or a culture. Since this act was the founding act *par excellence*, the development historian is a founder in the sense that, not unlike Cain, he murders his neighbor by erasing his memory. *Development history* is always an act of power implying violence to the dead. *Zeitgeschichte* is the history of the renouncement to power, of *ahimsa* and of due respect to the dead.

finds today a clear expression in philosophy as well as in medicine. The *soma* as self-perception of the body does not interest any scientific discipline. Only the anatomically mapped body is a "scientific fact." The flesh of the dead is an unexplored territory of history. Western philosophy looks like an attempt to say something reasonable without ever considering the body.[20] Modern medicine has become the "bedside anatomy" of a still living corpse.[21]

Ivan Illich and Barbara Duden endeavored to "recover past somatic experience," that is the lived flesh of past epochs, not the representation of the body of other times by the history of medicine or art history. They wanted to study the *soma*, meaning by that, "what people mean when they say 'I'," that is the "felt body" as an incarnated self. They coined the catchword *body history* and established it as the name of a discipline.

As body history takes shape, we are able to understand how each historical moment is incarnated in an epoch-specific body. We now begin to decipher the body of subjective experience as a unique enfleshment of an age's ethos.[22]

The betrayal of this carnal presence to oneself and to the neighbor has two consequences: first a totalitarian hetero-definition of the body—today in bio-medical guise— ,second, the imputation of a somatic experience founded on a professional exegesis of the lived body. *Body history* or *historical somatics* is "the study of the *soma's* autoception."

Of Illich's studies before her collaboration with him, Barbara Duden writes:

> These studies allowed him to recognize the heterogeneity of the flesh, the soma of old and the contemporary technogenic science-attributed and self-inflicted body.[23]

In the 1970's, Illich wrote a critique of medical services aimed at illustrating the counterproductivity of all service producing institutions beyond "certain thresholds" of size and power.[24] The working title of this essay was "Limits to Medicine." Twenty-five years later, he was able to analyze modern (bio-) medicine and its unlimited claims to truth and power as a lab for the thwarting of incarnate self-perceptions and the production of a "technogenic, science-attributed and self-inflicted body." He wrote:

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[20] This sentence was pronounced by the chair of the Philosophy Department, Professor Joseph Kockelmans, at the occasion of a meeting with Ivan Illich and Barbara Duden at Penn State University.

[21] Foucault, Michel, *The Birth of the Clinic: An Archaeology of Medical Perception*, New York: Pantheon, 1973.

[22] Illich, Ivan, "Nachwort" in —. *Die Nemesis der Medizin*, München: Beck Verlag, 1995, p. 206.

[23] Duden, Barbara,"The Quest for Past Somatics," in Lee Hoinacki and Carl Mitcham (eds.), *The Challenges of Ivan Illich*, Albany, NY: State University of New York Press, 2002, S. 226. Read the expression of her irritation at Illich's contention that he had written *Medical Nemesis* "just" to illustrate the counter-productivity of a specific service institution. She proposes nothing less that to re-write this book in the light of the somatic intuitions gained by body history. Yet, those who knew Illich well will not escape the hunch that this reductionist view of his previous work was a didactic pointer to something more important, like saying "watch out, this is new stuff."

[24] Ivan Illich, *Medical Nemesis.The Expropriation of Health*, New York: Pantheon Books, 1976.

> I want to indict health care not as a demoralizing but as a nihilist activity. The decisive result of every brush with the health care system today is epistemic – a recasting of the ego — .... What is done in the pursuit of health boomerangs as an interpretation of the self.[25]

In *The Rivers North of the Future*, a volume of interviews of Illich by David Cayley,[26] Ivan stresses the point that, among all disciplines of Western knowledge, the medical arts were among the last to have been reshaped and "scientificized" by the introduction of the instrumental mind-frame. Professor Samar Farage's study of ancient Arab medicine shows how important the notion of proportionality was for the medieval *hakim* (for instance, in the *mimesis* with the patient) and also how many diversified, carnal, common sense forms of hygienic knowledge have been extinguished by the instrumentalization of medicine. In a reading of ancient sources in classical Arabic, Professor Farage recovers many of these forms of "pre-instrumental," proportional, medical knowledge (for instance the ability to perceive several kinds of pulse). On my imaginary stage, I fancy that Barbara Duden could lead a panel of the history of the body in which Samar Farage would bring examples from Arab medicine.

History of the Gaze

For Illich and Duden, *body history* led to a *history of the gaze*, premonitory of a history of the carnal and the inner senses.

What we were looking for was to unlock the doors to the perception and the ethical orientation of a human activity, namely the act of looking[27].

They carefully explored three ways of distinguishing a historic reality from its modern form: 1. *opsis*, the knowledge of the active visual ray versus *optics*, the knowledge of the light ray; 2. the *gaze*, that is the act of looking by which I establish a relation with a being or a thing versus the *elaboration of an image*, be it on a screen, a photograph, or in what is called today "space"; 3. the *visibilia* born out of the *copula* of a radiating sensorial truth with my visual ray versus the *eye* conceived instrumentally as a camera, a scanner or a *de-codifier of optic phenomena.* According to Duden,

> [f]or Illich, it was equally important to avoid reducing the act of looking to an activity of the eye, but to consider it rather as an act involving the whole person with heart, soul, flesh and blood, mind, and inner senses.[28]

[25] Ivan Illich, "Vorwort," loc. Cit., p. 212.

[26] David Cayley, *The Rivers North of the Future. The Testament of Ivan Illich as Told to David Cayley*, loc. ct..

[27] Barbara Duden, "´De oculo morali': Ivan Illich zur Blickgeschichte und zum bedrohten Blicken heute," Gabriele Wimböck, Karin Leonhard, Markus Friedrich, ed., *Evidentia, Reichweiten visueller Wahrnehmung in der fruhen Neuzeit,* published by *Pluralisierung und Autoritat, Sonderforschungsbereich 573*, Munich, Münster, University of Munich/Litt Verlag, 2007, pp. 481–503.

[28] Barbara Duden, "*De oculo morali...,*" loc. cit., p. 484.

In short, the *gaze* is seen here as a form of behavior which is *historical* and can be studied under its epoch-specific modalities. Historically, there is no general frame for the analysis of the antique, the classical, the medieval or the early modern gaze: nothing comparable to the consumption of images on screens. To reduce past *scopic* perceptions to the consumption of images is to colonize the past with modern concepts, percepts, and prejudices. It is what *development history* does and what Illich absolutely refused to do. His "disciplined, courageous and extravagant studies"[29] search the past, not for "origins" of present situations, but for lost perceptual modes allowing him to gain distance from the axiomatic certainties and unquestioned assumptions of the present.

Proportionality of Ear and Sound, of Music & the Demise of the Great Tradition

To the difference between *opsis* vs *optics*, *gaze* vs *elaboration of images*, the perception of *visibilia* vs the *decoding of optic phenenomena* that Illich and Duden analyzed in the *history of the gaze* corresponds, in the history of sound perception, the opposition between the *proportional relation of ear and sound* vs a scientific *acoustic theory* for which the act of hearing is ahistorically reduced to the record of vibrations of given frequencies.

Professor Matthias Rieger[30] has studied the history of music in the transition from a proportional to a scientific, allegedly "natural" and "universal" understanding of ear and sound. Before scientific acoustics, there was no sound without an ear. The *musical tone* was the incarnation of the proportionality between sound and ear, just as the intelligibility of the world was a proportional relation between sensible reality and reason. The rupture of the balance of the humors in medicine (Farage), the transition, in music, from the Pythagorician consonances to chains of well-tempered instrumental accords, the redefinition of the economy as economics, a theory of scarcity and of equity as arithmetical equality, as well as the drift of architecture toward functionalism, are, according to Rieger and Illich, symptoms of the demise of the Great Tradition of Proportionality. In the mirror of that tradition, modernity could be characterized as the epoch of disproportionality.

Critique of Scarcity as a Social Construction

While Illich's conversations with Professor Barbara Duden allowed him to radically reformulate the thesis of *Medical Nemesis* asking what modern, instrumental medicine *says* rather than what it *does*, his conversations with Professor Teodor Shanin have

[29] Barbara Duden, loc. cit., p. 482.
[30] *Helmholtz musicus*, op. cit..

deepened his capacity of estrangement from modern economic certainties already questioned in his early works.

The fundamental axiom of formal economics and economy, defined as the assignation of limited means to alternative (read unlimited) ends is *scarcity. Scarcity* is the ever-widening gap between limited means and unlimited needs, wants or desires. Under its derivatives like *utility* or *ophelimity*, it can be expressed in mathematical functions whose *maxima* and *minima* can be determined and *derivates* calculated. In other words, *scarcity* makes of economics what Foucault calls a *formal knowledge* that can even be thoroughly mathematized.[31]

Yet, economics pretends to have an empirical side, in other words, there are or there have been *empirical economic knowledges* and, according to Foucault, some or even most of them might have been suppressed by the great movement of the *formalization of empirical knowledge* that started in the XVIIIth century. This suppression of (empirical) forms of knowledge is what Illich meant by the neologism *disvalue*, defined as the suppression of vernacular abilities and skills that allowed people to produce *values of use*, and to *subsist* from them, a suppression that was necessary to make households dependant on *exchange values*. Before what Marx, and after him Rosa Luxemburg, analyzed as *primitive accumulation* (a typical concept of *development history* that, by *petitio principii*, presupposes a primitive predominance of exchange values), *disvalue,*[32] the destruction of vernacular "values," abilities and knowledges, had to create the need for substitutive commodities. In this view, the march to a modern market society is not at all an elevation to a post-scarcity paradise but a progressive enforcement of the iron law of scarcity that now rules even the most abundant goods (example: water[33]).

Marx, in this a good pupil of Ricardo, could never free himself from the law of scarcity,[34] which led a famous historian of economic thought to classify him as a not too deviant member of the *liberal tradition.*[35] This insight must lead to a revisiting of his theses about the subordination of *superstructures* to ("economic") *infrastructures*. How could a theory based on scientific constructs[36] be the substratum of all manifes-

[31] *Les mots et les choses*, Paris : Gallimard, 1966, p. 261.

[32] I would contend that, like the founding act of uprooting ecological mutual support relations in order to establish a *chôra*, *disvalue* is the true founding act of modern economics and economies. It institutionalizes scarcity and makes not only a market society possible, but also a *development history of economics*. Illich's sketches of a *Zeitgeschichte of economics* is a sign that he considered modern economics a dead end, a "dismal field" on which nothing more should be founded.

[33] Jean Robert, *Water Is a Commons*, Mexico City: Habitat International Coalition, 1992. Though almost selfevident in the standard definition of economics, the relation between *instrumentality* and *scarcity* needs to be elucidated.

[34] Paul Dumouchel, "L'Ambivalence de la rareté ," in Paul Dumouchel et Jean-Pierre Dupuy, *L'Enfer des Choses*, Paris : Seuil, 1979.

[35] Louis Dumont, *From Mandeville to Marx. The Genesis and Triumph of Economic Ideology*, Chicago: University of Chicago Press, 1977.

[36] Sajay Samuel, "In defense of vernacular ways" in (eds) J. Murton, D. Bavington, & C. Dokis *Subsistence under Capitalism* McGill University Press 2016, argues for the distinction between scientific constructs and commonsense concepts.

tations of culture, science, politics or the arts? Yet, particularly in his study of the remote medieval origins of some of the concepts, percepts and habits that coalesced into the birth of modern times, like the *individual*, *instrumental cause* or *silent reading*, Illich has often given Marxist ("development") historians the impression that he put *superstructures* at the bottom, where *infrastructures* should be. Teodor Shanin, after an ongoing conversation of more than thirty years on that topic with him, concluded saying: "it is when a theory meets its internal contradictions that it becomes interesting."

Professor Shanin, one of the world's most knowledgeable scholars of the history and the sociology of *peasants*, thinks—not quite unlike Foucault—that formal, and *a fortiori* mathematical, economics is a veneer of formalized and self-consistent conceptualizations concealing the contradictions of the real world, or expelling them at its margins.

> At margins, lay forms of political economy which are structured differently from the prevailing system, its general dynamics and its assumed logic (to a Marxist, the dominant mode of production). Once evolutionism is injected (or taken for granted [in the form of a development history of economic ideas, for instance, N.E.], the status of the margins becomes that of the not-yet-dissolved "past in present" and/or a cul-de-sac with no autonomous dynamic and no long-term future. Their survival is due to social inertia and/or to the transitional service they may offer to the core/mainstream of power and economy, dynamics, and forms. The margins' subsumption to the core must result in their eventual demise.[37]

At these margins, where "the not-yet-dissolved" supposedly lay, are the never quite extinguished forms of what Polanyi called *the livelihood of man*, the means by which most historical societies have shaped their sense of "the good life" in relative affluence, creating original and diverse *material cultures*, generally without most supposed precursors of the modern economic nexus. Shanin gives right to Alexander Chayanov, the soviet agrarian economist executed in 1937 for his alleged "revisionist" conception of the economy of peasants and his opposition to their proletarization and/or reduction to the *kolkhose*. According to Shanin, in a world increasingly deprived of peasants and other traditional direct producers—people who eat what they produce and produce what they eat — Chayanov's "peasant economy," becomes paradoxically very important because, with the foreseeable collapse of dominant formal economies more and more people will have to make a living among their remainders, *on the margins* of a vanishing world. Thus, any ill-advised attempt on their part to "live following the

[37] Teodor Shanin, "Expolary Economies: A Political Economy of the Margins. Agenda for the Study of Modes of Non-Incorporation as Parallel Forms of Social Economy," *Journal of Historical Sociology*, 1988, Vol. I, No. 1, p. 1.

old rules" will only throw them into misery, which is poverty deprived of autonomous means of subsistence or *livelihood*.

In an article written at the moment of the collapse of the state-planned pole of formal economies, and the trumpeted "victory" of the free-market pole, Teodor Shanin insisted on the existence of economic practices that belonged to neither poles. He defined them negatively as *expolary*, of neither pole:

> The term "expolary" was used to circumscribe a territory which tends to escape systematic viewing but is central for the realistic study of the economic and social forms of our time. One can speak of it alternatively as of the modes of non-incorporation into the dominant political economy, ever remembering the relative and partial nature of such "non-incorporations." Social and functional characteristics which are particular, which combine, and which consistently differ from the assumed logic of "the poles" of state economy and market economy *sensu strictu* define it positively. To test its significance and to specify its characteristics is to establish analytically and empirically the alternative ways expolary economies operate vis-a-vis the dominant political economies of "state plan" or "free market" and especially the industrial/bureaucratic complexes at their centre.[38]

There is a *development history* of economic ideas and realities in which nature, logic or the "forces of history" would contribute to the blossoming of the "mature economy" to come— be it the "perfect market" or the "communist paradise"—whose historical forms were necessary evolutionary steps. However, this evolutionary optimism is increasingly contradicted by the growth of misery at the margins of all known formal economies and by diseconomies and frustrations at their core. What Shanin proposes here, is to adopt a view of (economic) history more open to discontinuities and surprises. He often mentions the example of the very effective improvisation of "expolary" forms of economic relations combining the "old and the new," "the legal and the illegal," "economic goals with the pursuit of a way of life" that allowed the Russian people to survive the collapse of the Soviet economic system after 1992.

In my imaginary stage, I dream of inviting Professor Shanin to lead or contribute to a panel (this reserve in consideration of the linguistic difficulty: Professor Shanin does not speak French) on "livelihood and economy after the collapse of economics" in which I hope to count with the participation of members of the MAUSS (*Mouvement anti-utilitariste en sciences sociales*), of *La Ligne d'Horizon, Association des amis de François Partant*, as well as of other non-conventional economic critics and observers of "what happens at the margins."

Another, in my opinion, very important participant to the *Livelihood After the Economy?* panel should be Gustavo Esteva, in his own terms a *deprofessionalized*

[38] Teodor Shanin, loc.cit., p. 7 (my numeration).

intellectual, winner of Mexico's National Economics Award, co-founder of the *Universidad de la Tierra*, and of several associations supporting peasant and village life and author of many books in Spanish and English.[39] The concept of *disvalue* is essential to his understanding of the present war on village subsistence fought against Mexican peasants by economic and political powers.

Illich's Contributions to These Critical "Economic" Reflections

During the period of what he later called his "pamphlets" (*Deschooling Society*, *Energy and Equity*, *Medical Nemesis*), Illich felt the urge to make a radical economic statement. In a way, it was a response to the Club of Rome's proposal of reorienting the economy from the intensive and polluting production of short-lived material goods to a multiplication of immaterial services that supposedly wouldn't harm nature. In the early 1970's, from Cuernavaca, Mexico, Illich claimed that "beyond certain thresholds, the production of services would do more harm to culture than the production of goods has already done to nature." It is in order to demonstrate it with concrete examples that he successively analyzed the counter-productivity of industrial education, transport and housing, as well as health services.

In the 1980's, in short articles and still more in conversations with friends and colleagues, Illich started to address the axiomatic certainties that underlie modern "social theorems." But, contrary to historians of economic ideas who, like Paul Dumouchel, for instance, retraced the historical phases of the social construction of *scarcity,*[40] the fundamental axiom of all formal economic theories, Illich paid attention to its alleged perceived manifestations as *needs*, *values* (the "need" for them), *waste* and *disvalue*. Each of these topics was the object of controversies with certain specific groups or personal friends. *Needs* was the object of Illich's contribution to the collective that wrote and edited the *Development Dictionary.*[41] *Values* were first discussed in the context of the opposition *values of use* vs *values of exchange* or *vernacular "values"* vs *commodities*. A more radical step was then taken, that opposed *value* to the sense of the *good*. *Waste*, as the material final stage of all economically produced *value*, was opposed to the metaphorical use of the eminently abstract thermodynamic notion, *en-*

[39] See for instance: David Barkin, Gustavo Esteva: *Inflación y democracia. El caso de México*, Mexico City: Siglo XXI, 1979; Gustavo Esteva and Madhu Suri Prakash, *Grassroots Post-Modernism*, London and New York: Zed Books, 1998.

[40] One exception, at least as far as the title is concerned, is Ivan Illich, "Einführung in die Kulturgeschichte der Knappheit" (Introduction to the cultural history of scarcity), Stephan Pfürtner,ed., *Wider den Turmbau zu Babel. Disput mit Ivan Illich* (Against the (re)construction of the Babel tower), Reinbek bei Hamburg : rororo aktuell, 1985, pp. 12–17.

[41] Ivan Illich, "Needs," Wolfgang Sachs, ed., *The Development Dictionary. A Guide to Knowledge as Power*, London, Zed Books, 1992, pp. 88–101.

tropy, by a collective of Japanese alternative economists and social scientists who had founded an institute called the *Japanese Entropy Society*. Elaborating on the notion of waste production as a way to create, maintain and even increase a "convenient level of market dependency,"[42] one could say, paraphrasing the Norwegian criminologist Nils Christie, that the maintenance of a commodityintensive economy requires the constant production of "a suitable amount of waste." Yet, if "immaterial services" could possibly substitute for the production of material goods—in fact an illusion, since the production of services induces needs for more material goods and reciprocally the economic role of *wasting* as programmed obsolescence or as simple garbage production would be entirely played by *disvalue*—then the result would be the destruction of vernacular abilities and "values" that sustained people's livelihood in a complete or relative autonomy from the market and its "laws." In fact, in economies that multiply services and simultaneously intensify the production of material goods, material, visible *waste* and less directly perceptible *disvalue* go hand in hand.[43] On my imaginary stage, Professor Nils Christie would lead a panel on "a suitable amount of crime" as a metonym for disvalue.

After years of disseminating his economic intuitions in short essays and above all in conversations with friends in which K. Polanyi,[44] E.P. Thompson,[45] C.B. MacPherson,[46] L. Kohr,[47] E. Halévy,[48] and P. Dumouchel were recurring references, Illich finally suggested that he might finally write a "history of scarcity" as a radical critique to all formal economics. Years later, he received a parcel from the Netherlands containing a book by the Dutch philosopher Hans Achterhuis whose dedicatory read: "Dear Ivan, since you never wrote the book of the history of scarcity you had promised, I had to write it."[49]

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[42] For a comparable argument in an apparently different domain, see Nils Christie, *A Suitable Amount of Crime*, London, Routledge, 2004. An outstanding Norwegian criminologist, Professor Christie has been in conversation with Ivan Illich for more than two decades.

[43] Ivan Illich, "Alternatives to Economics: Towards a History of Waste," speech to *The Eastern Economic Association Meeting, Human Economy Session*, Boston, March 11, 1988.

Waste, "garbage," reveals the true foundation of economics which is *disvalue*. Disvalue has historical and logical priority over (economic) values: before any values can be produced, autonomous and vernacular abilities and knowledges must be destroyed in order to create the need that will justify these values. This essay is Illich's response to his Japanese friends Yoshiro Tamanoy, Atsuchi Tsuchida, and Taskeshi Murota, "Towards an entropic theory of economy and ecology," in: *Économie appliquée*, Vol. XXXVII, 1984, No 2, p. 279–294. Contrary to the scientific concept, *entropy*, out of place in social theory, *disvalue* is a genuine social-theoretical concept.

[44] *The Great Transformation*, New York: Octagon Books, 1975.

[45] *The Making of the English Working Class*, New York: Random House, 1966.

[46] *The Political Theory of Possessive Individualism: Hobbes to Locke*, London: Oxford University Press, 1962.

[47] *The Breakdown of Nations*, Routledge and Kegan Paul, London, New York, 1986 [1857].

[48] *The Growth of Philosophical Radicalism*, Kelly reprint, 1972.

[49] Hans Achterhuis, *Het rijk van de schaarste, van Thomas Hobbes tot Michel Foucault* (The Empire of Scarcity, from T. Hobbes to M. Foucault), Utrecht (Pays-BAS), Ambo, 1988.

The Ultimate Scarcity: The Impoverishment of Sensory Experience and the "Loss of the Senses"

True to his historiographic ethics, Illich always refused to project modern concepts and certainties upon the past. He could eventually coin a modern word there where "epochal terms" (Kuchenbuch) led to misunderstandings—like, for instance, *proportionality* instead of the genuine Greek term *analogía*, whose cooptation by modern discourse obscures its original meaning. But he wanted to approach the dead and their perceptions of the world, their *autoception*, their body and the stuffs that permeated it without thwarting them under the shadow of modern falsely universal certainties and the associated words and concepts.

Aspects of the Reception of Ivan Illich's Ideas

A French participant in the seminars at CIDOC, Cuernavaca, in the 1970's summarized, twenty years later, "the rise and fall" of the popularity of Illich's theses more or less in those terms:

> From 1970 to 1980, Illich's radical critique to the main institutions of industrial society was thrilling. Imagine you were a teacher at a French *lycée* or a medical doctor working for an insurance company. You felt that something in your practice was not at the height of your youthful ideals, but in order to give expression to your discontent, you needed more than one glass or two and the following morning, your insights went down the drain with your hangover. Perhaps you decided to spend a couple of weeks in Cuernavaca during your *congés payés*. If you were a doctor, you might have coincided with the hundreds of M.Ds who came to discuss *Medical Nemesis* with Illich, or with the authors of the *Cuernavaca Manifesto* on education if you were a teacher. You would have heard, for instance, a famous surgeon of Chicago's main hospital interrupting Illich with the words: "No Mr. Illich, you are too bland! In reality, things are much worse than what you describe." After two of three weeks of what was finally a pleasant holiday, with a weekend or two in Acapulco, you would return, duly tanned, to your routines, and capture your colleagues' attention for a couple of days, or weeks if you were a good storyteller.

As to the question, what Illich's intentions were then, one has to read his early essays. In 1970, he wrote for instance:

> It is my purpose to develop theoretical principles leading to a taxonomy of revolutionary transgressions, for the precise purpose of planning a revolutionary strategy aimed at a radical renewal of the Latin American system

> of public education. I call an act "revolutionary" only when its appearance within a culture establishes irrevocably a (significantly) new possibility, a trespass of cultural boundaries which beats a new path. A revolutionary act is the unexpected proof of a new social fact, which might have been foretold, expected, or even called for, but never before irrevocably shown as possible.[50]

If one neglects some terms that the "later Illich" would no longer use in a positive sense, like *developing*, *planning*, *strategy*, *system*, the "revolutionary aim" of his career as a public thinker is clearly stated: give the proof of a new social fact that had never before been irrevocably shown as possible. In the 1970s, the fact that was perhaps "expected and called for" was double: 1. the path of industrialization leads to a dead end and is particularly destructive as "development of the third world"; 2. the possibility of a radical *institutional inversion* that would liberate modern tools' potential aptitude for enhancing the autonomy of individuals and small groups only needed to be demonstrated.

Illich, with the exception of a few bouts generally motivated by an irrepressible indignation, was not a social militant but an extraordinarily hardworking thinker who often crafted his phrases by reading them aloud to friends until they *fitted*. He considered his duty to document facts and, as far as possible, establish the truth about them. In the 1970s, he repeatedly claimed that his ambition was to prepare "the great debates of the end of the XXth century" writing "the epilogue of industrial society." I personally belong to those who consider that exploring the paths he opened to be well worth the hard work.

Yet, not every doctor, teacher, architect or social worker who came to Cuernavaca was ready to "pay the price" of a radical critique that was inevitably an auto-critique. According to a New York saying, "old age is not for sissies." The same can be said of maintaining a critical attitude up to old age. What, according to our French friend, happened is that many participants to Illich's seminars danced at the drum of Cuernavaca —with its *mariachis*, its bougainvillea, and its tutelary volcanoes —only as long as their check was coming at the end of the month and their professional position unthreatened.

The 1980s were the beginning of the end of the *trente glorieuses*, the thirty "glorious years" after WW2, when capitalism showed a relatively human face, workers gained "victories," and jobs offered "security." In an increasingly turbulent economic environment, people who had had an ear for Illich five or ten years earlier, now listened to the "voice of reason": Full employment can be restored if people follow the discipline of market economy. Think of your children's future. Be cool, don't make waves. As an example of admonitions to this alleged "return to reason," I would mention the beautifully acted film by Michel Albert and Jean-Claude Guillebaud, in which an aging

[50] Ivan Illich, "Dissidence, Deviance and Delinquency in Style," *The Dawn of the Epimethean Man and other Essays*, CIDOC Cuaderno No 54, Cuernavaca, 1970, p. 8/1.

but frisky Yves Montand warns the French with a series of courteous but firm "if not, then." It would be interesting to analyze why this kind of message doesn't pass at all today. Today, as Gustavo Esteva would say, such exhortations are met with either an embarrassed smile or a sardonic laughter.

> One after the other, the broken dreams have become nightmares: dreams of industrialization, of urbanization, of economic growth, of development and progress. The dreams of the American way of life and of capitalism, but also of socialism are but ruins. In their wake, the horror is still there. Every calamity, be it natural or social, bears the mark of an injustice, in a world where less than one hundred persons own more material riches than all other men and women, and where this gap is widening.[51]

The great debates of the ending XXth century, for which Illich and his friends were preparing themselves, did not occur. In order for these debates to have been possible, an "epistemic continuity" with the thrust of Illich's early critique would have had to be maintained. For instance, his analysis of the *counter-productivity* of modern tools and institutions ("institutions-as-tools") presupposed that it was in the nature of tools to serve the *personal* purposes of carnal users. After 1980, the nature of what was still called "tools" began to change so radically, that the concepts used twenty years earlier to analyze them seemingly ceased to address the predicaments of the new epoch.

Among all of Illich's books from those years, *Tools for Conviviality*[52] is the one that could more convincingly be claimed to be a "revolutionary act" aiming at establishing a new possibility, that is to prove a new social fact "which might have been foretold, expected, or even called for, but never before irrevocably shown as possible." In the last period of his career, Illich showed that this premonition, this eagerness for freedom, had indeed a long history. In 1128, a monk who was also a goldsmith, Theophilus Presbyter, had published a book, whose *incipit* was *De variis artibus,*[53] that showed the benches of several craftsmen, displaying their specific tools as if they were offering themselves to him or her who wanted to take them. A contemporary witness seemed to document a certain unease with that display, as if it were somehow indecent to expose tools independently from the hand to which they traditionally belonged.[54]

This, and several other later works and inventions by craftsmen as well as by Schoolmen, progressively established *instrumentum*, the tool, as a root-metaphor for any artifact or arrangement that incorporated an intentionality. The instrumental age was

[51] Gustavo Esteva and friends, *Célébration du réveil*, manifesto signed by participants in the seminar *Conviviality in the Era of Systems* celebrated in Cuernavaca in memory of Ivan Illich, December 2007.

[52] New York: Pantheon, 1973.

[53] See C.R. Dodwell, *Theophilus, Presbyter: The Various Arts.* New York: T. Nelson, 1961.

[54] See Ivan Illich, *In the Vineyard of the Text. A Commentary to Hugh's "Didascalicon,"* Chicago: The University of Chicago, 1993. Hugh's *Didascalicon* was equally published in 1128. Hugh acknowledges the birth of a new attitude towards what he calls *mechanica*, a word whose etymology he erroneously retraces to the Greek word *moichos*, adulterer, an error that expresses a moral judgment on the new attitude.

the epoch during which there were ever more tools around for ever more personal goals. But it was also the time in which every act, every moment, every achievement was increasingly seen as an instrumental means to reach something else, supposedly better. The instrumental age multiplied means to personal ends, but the instrumental mind-frame progressively killed all gratuity and all sense of "enjoying something for itself."

The Critique of Industrial Tools, Technology, *La Technique*: Ellul and Illich

As the last phase of the instrumental age, the industrial period had aggregated potentially liberating artifacts into contraptions, machines, "technological systems" that, by their oversized dimensions and the excessive power that they concentrated in the hands or under the buttocks of few individual users, encroached upon most people's autonomy, freedom, and rights. Besides, beyond certain thresholds, they became counterproductive even for their users. The automobile is the paradigm of a disproportional aggregation of a few inventions which were the jewels of XIXth century mechanics, and, combined in another manner, produced the best example of an intrinsically *convivial tool*, the bicycle.

The social fact, "which might have been foretold, expected, or even called for, but never before irrevocably shown as possible" was that dismantling industrial arrangements without rejecting the basic inventions that founded them could liberate the true potentialities of tools, *enhancing their users' autonomy and productive liberties* rather than "satisfying their needs." For the still non-industrialized nations, the *fact* was that another path was still open to them. This fact has never been invalidated. Yet, it has been obscured by a change in the conception and perception of what a tool is.

In 1977, Jacques Ellul wrote:

> Until recently, the great technical ensembles had little mutual interrelations: twenty-five years ago, it was not yet possible to speak of a *système technicien* ("technological system") because all there was, was a growth of *la technique* ("technology") in all realms of human activity, but, since this growth was still anarchic, these realms remained specified by the conventional division of human operations; there was no relation between them.[55]

What Ellul had previously called *La Technique*[56] –a mind-frame rather than only a toolbox – was progressively transforming itself into the *technological system*. What is at the root of the transformation of the technological society into a system? According to

[55] Jacques Ellul, *Le système technicien*, Paris : Calmann-Lévy, 1977.

[56] Jacques Ellul, *The Technological Society*, New York, Knopf, 1964, translation of *La Technique ou l'enjeu du siècle*, Paris : Armand Colin, 1954.

Illich, it is the demise of *instrumentality*, an ultimate step toward dis-incarnation that frustrates "tool" users from their former liberties making a mockery of the previously unquestioned *personal* character of purposes and intentionalities. As to Ellul, he ascribes the bolting together of loose relations between specific technologies into a system of interconnected parts or subsystems to computerized informatics whose "...function it is to allow the immediate, flexible, informal, and purely technical junction between all technical subsystems."[57] Yet, a commentator of Jacques Ellul points out that Ellul understood perfectly what, for Ivan Illich, was the *crux* of the transmogrification of the *technological society* into a *system*: in the latter, "the instrumentalist approach of "technology" is no longer relevant."[58] Why then continue to speak of "technique" and "technology" if what was the technological era's historical characteristic, the use of tools for *personal* purposes, is rapidly vanishing? Yet, besides divergences in linguistic usage, there are many affinities between Ellul's and Illich's thought.

Both perceived fatal omens in the growing power of the *technological system* (Ellul) or of *the System* and its never-ending *show* that, according to Illich, swallows up the *personal* ends, finalities or intentionalities at the service of which the classical tool was. Both detected in this demise a betrayal of the vocation of the West to itself. This vocation was a call to freedom. Tools are only compatible with freedom if they can be *taken* or *left* at will. According to Illich, systems are no tools because they can hardly be left once "taken," or, more exactly, once a "technological" system has taken, swallowed you and transformed you into one more of its subsystems. In 1993, in Bordeaux, at a meeting in honor of Jacques Ellul, Ivan Illich recognized his debt toward him:

> I strove to follow you in a filial spirit, with all the false steps that it implies. Accept the harvest; I hope you will distinguish the flowers among what you might see as weeds. I thus express my gratitude toward a master to whom I owe an orientation that definitively influenced my path since forty years.[59]

In my inner stage, I fancy that Professor Daniel Cérézuelle could lead a panel on the profound sense for one's and the other's incarnate presence shared by three authors that he likes: Bernard Charbonneau, Jacques Ellul and Ivan Illich (in order of seniority).[60]

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[57] Jacques Ellul, "La technique considérée en tant que système », *Cahiers Jacques Ellul* no 2, *La Technique*, Bordeaux, March 2004 (1977).

[58] Pierre de Conninck, "Pour une approche constructive de l'autonomie de la technique," Patrick Troude-Chastenet, *Sur Jacques Ellul*, Bordeaux : L'esprit du Temps, 1994.

[59] Ivan Illich, "Hommage d'Ivan Illich à Jacques Ellul," *La perte des sens*, Paris: Fayard, 2004, p. 153, 154, (poorly) re-translated from the French.

[60] Daniel Cérézuelle, "De l'exigence d'incarnation à la critique de la technique chez Jacques Ellul, Bernard Charbonneau et Ivan Illich, Patrick Troude-Chastenet, ed., *Jacques Ellul, Penseur sans frontières*, Bordeaux : L'Esprit du Temps, 2005, pp. 227–247.

Critique of the Late Dominant Professions, of "Professionalism" and its Aftermath: The Demise of the Professional and the Rise of the "Facilitator"

It is here that my "regressive" method meets its limits. To approach this theme, I should have presented the debates at CIDOC in the 1970's as the first instance of a radical critique of the then still dominant professions, and I should have gone from there to Illich's autocritique of his failure, then, to consider the role of professional associations. Considering it, it becomes obvious that professionals held the three powers whose concentration, on one hand, America's Founding Fathers considered the mark of despotism. A medical doctor, for instance, has the power to diagnose, a form of *legislative power*, to prescribe a cure, an *executive power*, and, through his professional association, to sue any patient or colleague who deviates from the norm, a *judicial power*.

Starting in conversations with Ivan Illich, Professor Sajay Samuel has studied the encroachments on democratic principles perpetrated by professionals since the mid XIXth century, and, still more important, the profound changes affecting the professional-client relation since the last two decades of the XXth century. He has paid particular attention to the shift from a relation mediated by the concept of *needs* to one dominated by the notion of *decision*. I dream of hearing Sajay explaining to us why professions were inherently anti-democratic and why their rapid demise announces the era of apparently "gentle" facilitators whose role is in fact to be *interfaces* between their clients and the system. In the case of medical facilitators, their clients are *patients* and their role as *interfaces* is to transform them into subsystems of the biomedical system.

Dr Silja Samerski has her PhD in genetics by carefully listening to the women attending the (not yet) obligatory genetic consultations in a German town. Her observations fully confirm the hypothesis that the new personage alternatively dubbed *facilitator* or *counselor* is something very different from the professional of yesteryear. She writes:

> In this work, [...] I will discuss in which measure the conversations between pregnant women and genetic counselors are exemplary of a transmogrification of the notion of *decision*. I will then examine the new significances of the term, *decision*, introduced by the counselors and follow the implications and consequences of this new way of thinking for pregnant women in particular and more generally for the clients of the innumerable counselors of all types presently offering their services.[61]

[61] Silja Samerski,*"Sie müssen irgendwann 'ne Entschaidung treffen" Eine Untersuchung über die Popularisierung eines neuen Entscheidungsbegriffes in professionnellen Beratungsgesprächen, dargestellt am Beispiel der genetischen Beratung.* ("You will finally have to take a decision." A study of the popularization of a new concept of decision in the conversations between counselors and their clients,

Late Night Thoughts

There is a theme that I avoided to approach frontally—it is theology. The first, obvious reason is that I want to eschew all form of soft theology. The second is that I want to be true to the apophatic attitude that author Ivan Illich maintained during most of his works. The third is my intuition that his faith, more than his theology was perhaps his platform of departure, but that his arrival platform was history, the discipline, but also his commitment to his fellow historians of all persuasion. Some of you might desire to discuss the comparison sometimes made between his attitude and Dietrich Bonhöffer's, the German theologian who preached a non-religious faith in the Gospel: I will not be on this panel. On several occasions, David Cayley and Lee Hoinacki have presented the difficult theme of the distinction between *mysterium iniquitatis* and *corruption optimi quae est pessima*. I hope that they will be invited. What both have to say goes much beyond theology. Cayley is the author of a series of interviews with Ivan Illich that have revealed surprising aspects of his personality, and Hoinacki has been Illich's mentor in English stylistics for more than thirty years. The deep reason for my oblique interest in theology is my inner necessity to define a *hexis*, an attitude, toward possible impending catastrophic changes about which I don't want to speculate. I would like to be able to say, like Ivan: "I don't want to live under the shadow of the future." How could one say, today, "*Und auch wenn ich wüsste, dass die Welt morgen unterginge, doch plänz'ich noch heute mein Apfelbäumlein?"* And even if I knew that the world would end tomorrow but am I still planting my apple tree today?

Another theme has been neglected in this thematic sketch—it is friendship.

I didn't speak of it in order to leave it virgin. And yes, I didn't speak explicitly of the vernacular genre either, but this theme can be treated as an aspect of proportionality—unless it's the other way around. Now, after this exercise of a "gradual-regressive" approach, we are, at last, ready to revisit Illich's critiques of service institutions and his theory (vision) of tools.

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illustrated by the example of the genetic consultation. Doctoral dissertation, University of Bremen, 2001.

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