

Notes

1. Albert Borgmann, "The Device Paradigm" in *Technology and the Character of Contemporary Life*, (Chicago:U. of Chicago Press, 1984), pp.68-78.
2. Here and elsewhere I am indebted to Borgmann's chapter "The Challenge of Nature" in *Technology*, pp. 182-196.
3. Colin Fletcher, *The Complete Walker III* (New York: Knopf, 1984), p. 51.
4. This Promethean climbing is a traditional example of the will to dominate; technological domination is uniquely different. To technologically dominate a mountaintop would be to secure it with a device and

make it technologically available, e.g. mountaintops secured with highways, trams, or helicopters.
5. Fletcher, p. 428.

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THE POLITICAL ECOLOGY OF HOPE: REFLECTIONS ON POWER, NATURE AND THE UTOPIAN PROPENSITY

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Introduction

The society we envision is rooted in the power of a little plant, which against all odds, and against all "rationality," makes its way up through the cracks in a cement sidewalk. Scientists working on plant roots tell us now that this little plant, left on its own, could grow a network of roots from Toronto to Vancouver. This is also the power of the rhizome, a rootlike, usually horizontal stem that grows under or along the ground, and sends out roots from its lower surface and leaves or stalks from its upper surface. It can be cracked and broken at any point, it starts off again following one or another of its lines.

The "ecological imperative" and the increasing perception of an ecological crisis are changing the way we see the planet and the place of human beings in the biosphere. Within the scientific community, there is a growing process of questioning reductionism, mechanicism and atomism, the pillars of the still hegemonic scientific worldview; and there are many serious attempts to create a scientific project which takes its metaphors, methods and guiding principles from living organisms. This process represents a most profound attack upon the ideological cement that sustains this civilization, the received scientific worldview which has become nothing less than the dominant religion of modernity.

This emerging reformulation of science is finally paying attention to those lonely scholars (like de Santillana, Harshorne, Whitehead, Leopold, Heidegger, and others) who warned earlier in this century about the dangers of anthropocentrism and of the hegemonic scientific discourse inherited from the Scientific Revolution. Philosophers, artists and spiritual figures had sounded in the West the alarm warning of the dangers of seeing "man" at the centre of the universe and at the pinnacle of natural evolution. Old biocentric streams of thought in the East and among native peoples had told us the same earlier still. This recovery of an old wisdom and its emergence from within science is a very exciting process that promises deep cultural implications.

We would like to illustrate this idea, discussing how the ecological imperative has subversive implications for the social sciences. We will present our argument briefly, reflecting upon the inevitable changes required in our understanding of social

power, that mysterious network of relationships and veritable web of roots through which circulates so much that is vital for human beings.

Our global society has finally come to recognize the environmental crisis as the main concern in humanity's agenda. This is an immense step forward. With it, we may have begun to recover an understanding of the inseparability of human beings and nature. The war in the Persian Gulf is of course, a brutal reminder that the corporate-industrial-bureaucratic-military machinery of death (that rules East and West) will remain deaf, blind and suicidal vis-a-vis the suffering of living beings and the demands of the biosphere.

The ecological crisis (that is, the human recognition that human action is threatening the integrity of the biosphere) may lead to a total reformulation of the ways we study society and the ways we understand social power.

From the perspective of an ecological sensibility, social power cannot continue to be understood as a purely inter-human problem: nature intervenes not only providing all the "resources" upon which human society is built and reproduces itself; it provides all the "other" relations upon which human meaning and identity are shaped.

Social scientific literature discussing social power forgets that the energy and the information (that is, the poetry, the music, and the conversation) with which nature talks to us, is the source of everything that keep society alive, that flows as meaning through our nervous systems, our minds and hearts, after being actively elaborated to constitute the "stuff" of social life out of which power relationships emerge. In this sense, nature is the ultimate source of social power. That the biology of our cognition is an active, creative, self-organizing, purposeful ("autopoietic") process does not change, but rather, reinforces the influence of the rest of nature in the conversation with humans. The biosphere with all its creatures, its forms and landscapes, colours and climates, intervenes actively and permanently through all our lifespan in the conversations between human beings, setting constraints and possibilities, and contributing to our socialization. It is an inseparable thread of the fabric of any culture.

This simple realization leads us to affirm that social power cannot continue to be understood only in terms of the control and use of resources, that is, in terms of the capability to impose one's

will upon others through the control of material resources, of decision-making processes of knowledge and its dissemination, of socialization, and of punitive resources and coercive institutions. This notion of social power and "success" is at the source of many of our current environmental problems.

In the conventional view of social power, the society, group, or individual managing to harness more energy-matter from nature appears as the most successful, the "fittest." If modern society is the expression of this "fitness," the "successful" adaptation of the human species will end in replacing the biosphere with a parking lot where no life will be possible.

Thus, for example, the U.S., with a mere five percent of the world's population, uses over thirty percent of all material resources, and is seen as the most successful, the most evolved and most powerful society in the world (and certainly, this is the view most Americans have of themselves). However, from the perspective of an ecocentric ecological sensibility, it can well be seen as the weakest, the most needy, the greediest, and the most energy-sugar-and-drug-addicted society on earth. It represents a way of life that is responsible more than any other for the current process of destruction of life-supporting "systems." The unprecedented amounts of energy, matter and information harnessed by the U.S. and all the industrialized world, runs parallel with an unprecedented concentration of all dimensions of conventional social power, and an unprecedented destruction of life. It has become an immense vacuum-cleaner, sucking energy resources and wiping out life, biodiversity and cultural diversity in an increasingly accelerated process of cementification and plastification of the world, triggering also as a by-product the population exploding in the Third World. It is at the roots of peoples' hunger and poverty, in which the Third World's transnationalized elites actively cooperate.

According to some estimates (Max-Neff, 1982), each U.S. citizen is equivalent to some fifty Latin American peasants, evolved in the subsistence economy, in terms of the consumption of "resources" extracted from nature resources that we, furthermore, distribute in ways that increase the gap between the rich and the poor in the U.S. This is something to be mindful of in debates on population.

The U.S. in particular and the West in general (and their way of life actively imitated by urban middle and higher classes in the Third World) represent the locomotive that pulls our modern world "train" of direction, down the hill, apparently without brakes.

The view of power as synonymous with the harnessing of increasing amounts of energy from nature, must be counter-balanced by a notion of power as successful "tuning-in" to the constraints and possibilities established by the biosphere. (We felt the temptation of writing about this notion of power as successful "adaptation in nature," but this would also require us to change the meaning of the notion of "successful adaptation," which has become synonymous with reproductive success").

This notion of power as successful "tuning-in" to nature emerges from what we consider to be the central dilemma of our modern industrial civilization: the sharp conflict between the development of what has been called "productive forces," on the one hand, and the concomitant destruction of the conditions that make all life and the "productive process" possible, on the other. Thus, our concern is not centred on the eventual depletion of energy resources life oil and coal, but rather on the broader and

more complex phenomenon of the destruction of all the conditions that make life, including human life, possible.

One fundamental key to this is the notion of an "ecological and social sustainability" as a morality which must accompany an ecological sensibility, since both deligitimize possessive individualism. It leads also, fundamentally, to the introduction of a clear distinction between "productive" and "destructive" forces, a distinction that conventional economics has failed to make. "Productive forces" in our view, are only those whose final products, can be returned to the biosphere, without endangering its stability, sustainability and diversity, or the reproduction and recuperation of life in general. "Destructive forces", have as their final products material and social "substances" which, returned to nature, lead to the extinction of living species and diminish the biodiversity essential to life. This essential distinction need not lead to the cessation of growth but rather, to a clarification and transformation of the answers we give to such questions as "what to produce", "how to produce it," "for whom to produce it," and "who will own or control what?" Ultimately, we need to concern ourselves with the question of preserving and recreating biodiversity.

If the central concern of our productive activities becomes the protection and recovery of biodiversity, we may witness a deep transformation of all our social institutions, for such a central concern must ultimately be founded on social diversity. The ecological imperative may lead to the gradual dismantling and replacement of all high-entropy institutions, because they are ecologically maladaptive, weak rather than powerful: the nation state, the military, and the multinational corporation may need to be replaced by low-entropy institutions. Contributing to the conception of a sustainable society (which is not the same thing as "sustainable development"), and articulating a vision of the transition to it, are the most challenging and significant intellectual tasks of our epoch. The alternative may well be a post-human biosphere.

If the establishment of ecological sustainability as a morality is fundamental, even more so is the type of experience that leads people to expand their self (not their ego) towards full identification with nature, that is, towards an ecological sensibility. We fully agree with A. Naess when he insists that "we need not say that today man's relation with the nonhuman world is immoral. It is enough to say that it lacks generosity, fortitude, and love" (1982:315-16). And "...perhaps we should in environmental affairs primarily try to influence people towards beautiful acts. Work on their inclinations rather than morals." (quoted in Fox, 1990:220). This idea is not new: it corresponds to the ways human societies of gatherers and hunters made sense of the world.

The long history of human society -- not the last three hundred years, but the more than 100,000 years of Homo sapiens -- is rich in lessons for us; these come mainly and more often from the "weak," the people who rooted in nature, knew (and know) so much of what we are beginning to discover. The doctrine of progress and the idea of evolution have, in fact, helped to repress the memory of the long history of the human race, as much as childhood memories are repressed in adults' conscious lives. As we know today, both conscious and unconscious are sources of profound wisdom.

The Human Need for Hope

We recognize that the previous section of this article has a strong Utopian flavour. Its "realistic" character though, is provided by its firm advocacy of biodiversity and cultural diversity, something that is often missing in Utopian views. Although the paper is an expression of our own need for hope, we want to interrogate ourselves about what it is that motivates this widespread urge, an urge that appears in so many cultures and in so many historical epochs.

The need for hope permeates many religious, artistic, philosophical and cosmological expressions, but we will use the Utopian propensity as an illustration.

Our interest focuses here on the human tendency to imagine and to create societies in which human beings could satisfy their needs and attain happiness, as defined in each case by the creator of the Utopia. To call an idea "Utopian," or to neglect it simply as the fruit of somebody's imagination, with little correspondence to reality does not answer the question of why it was necessary for the Utopianist to imagine something better in the first place.

We assume that the creation of Utopias is historically, culturally, and ecologically conditioned. Thus, we realize that different cosmologies open or close the space for the creation of Utopias, depending on whether or not they recognize efficacy in the intervention of human will in the shaping of social reality. However, it seems that the Utopian phenomenon also shows a transhistorical and transcultural dimension: imagining a life of total happiness, and a society constituted in ways that make it possible, seems to be part of the battery of human resources with which we face pain and suffering. The Utopian phenomenon could be seen then, also, as an expression of the human capacity to ensure the flow of life, in direct reference to forces pushing towards life or towards its negation. The Utopian inclination and the unfolding of hope could be seen as compensatory and balancing flows of energy which oppose and, at the same time, contain entropic tendencies.

We recognize, however, the dangers inherent in the Utopian phenomenon, its authoritarian potential, and the historically recurrent dissonances between the conception of Utopias and the attempts to carry them out. We also realize that intellectual rejections of Utopias as irrational, such as are found in scientific literature, also become a kind of Utopian phenomenon themselves. History inevitably selectively filters Utopian propositions, producing totally unexpected combinations and movements and generating new cultural scenarios.

If a cosmology based on human mastery over nature strengthened the Utopian propensity in the West, it nevertheless generated its opposites. Many Utopian worldviews envisioning harmony between humans and the natural world share many elements present in other cultures, which, in spite of their low production of Utopias, displayed (many until today) exactly the same need for collective hope. As R. Levitas (1984) points out:

Many, if not most, societies have some kind of myth of an earthly paradise, and, in spite of variations, these reveal a number of similarities. Their content revolves around common human concerns of survival, aging, pain and death, with an emphasis on abundance and physical ease. Many mythological paradises have clement weather and abundant food and water but also contain a tree of life, a source of eternal youth, a substance with miraculous powers of healing. Such themes occur in the biblical account of Eden and in the

Celtic tales of the Isles of the Blessed, and recur in modern fiction. (Levitas, 1984:19).

To envision a life of total happiness and a society built in a manner along the lines that can make this vision real is, then, an inseparable ingredient of human life. It seems to be a part of the battery of resources with which humans face pain and suffering. Whether the world of happiness is a golden past to be recreated or remembered, or a future to be attained, does not matter for this particular discussion.

Happiness cannot exist without reference to anguish and suffering, paradise without reference to hell, Utopia without reference to dystopia. It is the realization of the desperate human need of imagining something better than anguish which creates the drive for hope. The loss of paradise, hope or Utopia represents (at least in the West) the disappearance of meaning; depression and even suicide, and makes life impossible.

We cannot see the Utopian impulse only as an escape from "reality;" "reality" is not "something" in between anguish and hope, horror and ecstasy. Human reality is also made out of these "materials," for they represent the extremes of human existence: life and death. If this is acceptable we have to admit that social reality goes beyond knowledge, because nobody has the capacity to perceive the phenomenal immensity of life contained in the totality of myths and Utopias, in dreams and events, in art, religion, philosophy and material production, in falsity and truth. These are all fragments of the broken mirror of "reality." If we were able to put together all the pieces of this puzzle (which, reflecting "light," actively contributes to the construction of reality), we would gain access to "truth." But this is beyond the ability of our minds.

Then, it is hard to conceive of a "reality" devoid of the borderlines of horror and ecstasy, of the invisible immensity of the cosmos and the bits of happiness and pain of daily human life. If these are the materials or our "real reality," is it not appropriate to see the Utopian impulse, the setting in motion of hope as a particular manifestation of life, of the sparkling obscurity that leads our bland desire for total happiness? Utopia seen from this light is simply the normal flow of the principle of life (unless we see human reason as a sort of "genetic" error of the constant trials of nature, an "error" destined to be corrected by its eventual disappearance).

The idea of Utopia as expressive of the human equipment of adaptation to ensure the flow of life can be illustrated with reference to entropy and syntropy (or "negative entropy"), to death-enhancing and life-enhancing phenomena. This perspective of Utopia cannot but be very speculative. The idea here is to see the Utopian impulse, the unfolding of hope, as a compensating and balancing flow of energy, that, actively elaborated in the human cognitive process, becomes meaning which opposes and simultaneously contains entropic tendencies. This perspective does not appear explicitly articulated in the literature on Utopia that we have reviewed, but one can find many hints of it in the works of L. Mumford, T. Roszak, M. Bookchin, and several authors with a "deep ecological" sensibility.

It is precisely through inquiring into the explanatory power of thermodynamics that J. Wagensberg (1984) approaches, in a stimulating essay, the question to Utopia. Although at this stage of elaboration the contribution of this author does not transcend the attempt to find in the language of thermodynamics and information theory some concepts with explanatory value, the exercise remains useful.

Wagenberg's starting point is Paul Tillich's consideration of the idea of Utopia as a phenomenon in which opposing values, positive and negative, coexist. The former consists of the truth of Utopia (the essence of human existence), its fertility (the utopian anticipation of ways to follow) and its power (it offers the strength to produce changes. The latter, the negative one, is its falsity (Utopia forgets human finiteness), its sterility (it presents as possible the impossible) and its powerlessness (because it leads to frustration). Both these elements inhabit Utopias and act with and against their creativity. In Tillich these forces are opposed; their results can have one or another sense or outcome, but they are both guaranteed. Utopia, then, is useful because it ensures a situation of imbalance, of non-equilibrium, which is the minimal state of any living system.

According to Wagenberg, the thermodynamic meaning of a "system in balance" is absolute homogeneity and uniformity. This is, in particular, the state to which all isolated systems tend, whose environment forbids any exchange of matter, energy and information with the rest of the universe. As explained by the Second Law of Thermodynamics, any isolated physical system will proceed spontaneously in the direction of ever increasing disorder, expressed mathematically as "entropy" (from energy and "tropos," the Greek word for transformation or evolution).

Thus, entropy is a quantity that measures the degree of evolution of a physical system. According to the Second Law, the entropy of an isolated physical system will keep increasing, and because this evolution is accompanied by increasing disorder, entropy can also be seen as a measure of disorder. Wagenberg illustrates the idea comparing a fish swimming in the sea with a fish conserved in a can. In the latter state all points of the body are at the same pressure and temperature, nothing flows through it and nothing is exchanged with its exterior. The canned fish is as eternal as its isolation permits. It is an isolated, uniform and homogeneous system. The opposite in the case with the fish swimming in the sea: it is a living system, in constant exchange with its environment.

In Wagenberg's elaboration, Utopia is referred to as a living system (human ensemble, society) and it is in open interaction with its environment, its evolution being the outcome of changes in such interactions. Or, we may suggest, the human being and his/her society constituting "open systems," one could see the Utopian impulse as part of the adaptative equipment of humans to their environment, to counteract entropic tendencies. Still, one could add another speculation: single Utopias act over the mainstream of society as natural expressions of the diversity and complexity of all living systems, and represent an adaptative capability. However, Utopias often represent ideas of highly uniform, homogeneous societies. That is, Utopias also contain in themselves the seeds of entropy. Although Wagenberg's argument does not elaborate on the ideas we suggested above, we share his conclusion: that the emergence of a new Utopia follows a crisis, resulting from the imposition by the environment of violent conditions that require not only adaptation but "self-organization," that is, a state of internal organization of the system in rebellion against the conditions imposed by the environment. Since systems are not stable, any fluctuations can grow until they pull the system into a new state. This is the ability of nature to create "authentic novelties" (Wagenberg, 1984).

L. Mumford also looks at this particular dimension of the Utopian phenomenon, that is, its quality as belonging to the complex system of adaptation of all living systems. Mumford's

enterprise is by no means an attempt to glorify the Utopian impulse. His study of the problem looks at history for explanatory clues. His excursion through history shows the ugly destiny of many wonderful exercises of human imagination. His conclusion is a dramatic warning.

All ideal models have this same life-arresting, if not life-denying property: hence nothing could be more fatal to human society than to achieve its ideals. But fortunately, nothing is less likely to happen, since as Walt Whitman observed, it is provided in the nature of things that from every consummation will spring conditions that make it necessary to pass beyond it...An ideal pattern is the ideological equivalent of a physical container: it keeps extraneous change within the bounds of human purpose. With the aid of ideals, a community may select, among a multitude of possibilities, those which are consonant with its own nature or a promise to further human development...But note that a society like our own, committed to change as its principal ideal value, may suffer arrest and fixation through its inexorable dynamism and kaleidoscopic novelty no less than a traditional society does through its rigidity. (Mumford, 1979: 244).

Wherein lies the danger of Utopias, materialized often in forms that completely deny the dreams of those who envisioned them in the first place? One characteristic of Utopias seems to be the uniformity of such projected societies or the existence of universal agreement or prevailing values as a precondition for the Utopia's fulfilment. Universal agreement does not necessarily mean that Utopias cannot in some ways be democratic. Universal agreement can be enforced and manipulated -- as it is for Orwell -- or it can be spontaneous -- as in some of the 18th century Utopian writers. Universal agreement means, by implication, the absence of structurally generated conflict: this lies the very perfection all Utopias strive for, and here is also their main weakness. For the illusion of a Utopia's eventual materialization forgets a fundamental characteristic of human beings: our lack of consistency, our inability to live in absolute accordance with any system of values permanently and constantly; the human mind (particularly in societies emphasizing the efficacy of human will) is restless and unpredictable, constantly desiring novelty, and shaken by unforeseen discoveries.

A good example of the above problem can be found in Skinner's Utopian attempt. In his Utopian novel *Walden Two*, this author puts in the mouth of Frazier, the creator of the Utopian colony, the following words:

I deny that freedom exists at all. I must deny it or my program would be absurd. (Skinner, 1948:214).

Skinner seems to go out of his way to say that freedom is only another name for behaviour not understood, that freedom is normally expressed as madness, impulse or disobedience. Skinner seems to assume that the success of his enterprise requires the end of democratic government and its replacement by an entirely planned process of socialization. The inhabitants of Skinner's Utopia are plain and nice, they work well and like to listen to serious music. They are polite enough; they are devoid of harshness and fanaticism. They have no spirituality, no disguises, no indirectness, no playfulness or humour. Skinner's creatures have no inner life. Yet, his model of society requires a certain state of mind, a certain consciousness perceived by the

author as the higher expression of lucidity. And as in any other idea of society based on a supposedly lucid minority's claim of exclusive wisdom, we find here the seed of authoritarianism, the claim to authority that decides what is in the genuine interests of society, and decides this even against its own wishes.

Together with the idea of an homogeneous society, whose members are the embodiment of enlightenment, comes a third danger: Utopian authors do not provide an answer to the question of how to attain the desired society; that is, there is no appropriate theory of transition from our current state of affairs into the ideal state. And whenever the attempt has been made, the result is characterized by the need of an vanguard (a charismatic leader, a group of enlightened members of an enlightened community, a revolutionary party a la Jacobin or Lenin). The vanguard must then somehow inoculate its consciousness into the backward masses, or strive to create a transitory dictatorship to set in place practices of socialization that will overcome the general state of "false consciousness." Moreover, the more the institutions of Utopia succeed, the more they determine the minds of its members, and the fewer possibilities exist for furthering creative and purposeful change.

A fourth fundamental problem of Utopias stems out of the previous considerations: the attainment of Utopia requires a social situation devoid of social conflict. Since more often than not social conflict is seen (by "lucid" minorities) as the result of one fundamental contradiction that must be solved in order to build the Utopian society (i.e., social regulation preventing the "free hand" of the market to perfectly allocate resources; the existence of a given type of relations of property; the domination of one class over the rest of society; the domination of one gender over the other; of one ethnicity over all others; etc.) what follows is the belief that the overcoming of the "main" contradiction or oppression will lead to the elimination of all others. The result, then, would be a society free of social conflicts.

However, whenever there is social life, there is social conflict. It is not the presence but the absence of social conflict that is surprising and abnormal. Conflict does not need to be violent, uncontrolled or catastrophic. Social conflict can be temporarily suppressed, regulated, channelled and controlled, but not abolished altogether. Human societies are held together simultaneously by conflict and consensus. Further, conflicts arise always on the fields of shared values: for example, for a class conflict to exist, it is necessary that both workers and capitalists consensually share an appreciation for the appropriation of surplus. Without this consensus, there is no conflict.

In fact, human collectivities express simultaneously both types of behaviour. Every society is held together by a given set of shared assumptions displayed in the background of deep-seated values that shape the collective identity: this is the historical role of cosmologies. However, within any society there is always social conflict accompanied by mechanisms to regulate and prevent it from becoming catastrophic. These mechanisms correspond to a given manner of establishing intellectual and moral leadership in the society. Deep cultural transformation always requires a deep change in the most widely shared assumptions of a given society, something that happens only when the previously existing system of meaning fails to provide guidance in overcoming problems that threaten it with social disintegration, and that could prevent the survival of the given society.

Another dimension emphasized by authors describing the dangers of Utopia is its paralysing effect. K. Popper (1948)

believes that Utopias are malignant, dangerous and self-destructive, and that humankind would be better off tackling concrete evils rather than attempting to pursue an abstract good. However, his approach cannot lead but to a very narrow, piece-meal social engineering that, in our view is a form of surrender to the dictates of "empirical reality" as defined and manipulated by the cultural hegemony of a given model of science (mechanicism, reductionism, and atomism); such an approach prevents even the imagining of a potentially different reality. Without the Utopian dream, the achievements (and problems) of the democratic revolution could never have been accomplished. Neither could we imagine today ways out of the ecological crisis. And although nothing guarantees that we will find those ways, without the wildest mobilization of our ability to hope and to imagine a preferred world, we will never rediscover our place within nature.

Ideas in history never advance in pure form and in a straight line. From the perspective of an ecological sensibility, we are certainly "out of track", and our civilization in all basic respects has much to learn from the way hunting and gathering societies managed to live tuned-in within the constraints and possibilities and the cycles of the biosphere. Those that still remain, are (in spite of the devastating impacts that they are receiving from the megamachine of industrial power) sources of deep wisdom.

Human action can be inspired and strengthened by the Utopian impulse, and although a Utopian model can never materialize in its totality, the waves of history appropriate selectively and fulfil many Utopian ideals through complex and convoluted processes. Hope does not ensure anything, but without it our tragic species may be already doomed.

Just one year ago, we felt full of motives for hope and optimism: a worldwide movement of democratization the defeat of authoritarian regimes in Eastern Europe and in several Third World countries, was accompanied by a process of demilitarization and the transcendence of the Cold World mentality. The legitimacy of the machinery of death was in question. The world was talking about the planet. Environmental concerns were impregnating the consciousness of all peoples. "Glasnost" and "Perestroika" in Eastern Europe appeared as processes of the diffusion of social power, the opening up of public space, greater transparency in social relations, unilateral disarmament, new possibilities for the environment and peace, and all of that without (until then) violence.

We do not know if the project of radical democracy represented one year ago by M. Gorbachev and his then allies has been already totally defeated. The picture of inter-ethnic violence chauvinism, and the reactivation of the machinery of death in the USSR no longer appears to be very inspiring. However, we are persuaded that a vision of radical democracy in Eastern Europe and elsewhere, needs to be articulated with ecological wisdom if it is to resist a re-concentration of power this time, perhaps not in the hands of the bureaucratic minority controlling the state, although this remain a possibility, but in the hands of the Western mega-machine and its transnational military-industrial-corporate power structure.

As hundreds of thousands of bombs kill innocent civilians victimized by the thirst for power and self-aggrandizement of blind leaders in the West and the Middle East, and as millions of animals, plants and marine organisms are killed for the control of resources, we need more than ever the mobilization of hope and the power of life. The voice of a movement of green,

democratic, non-violent, pacifist solidarity must be heard louder than ever.

References

- Fox, W. 1990: *Toward a transpersonal ecology*. Shambala, Boston & London.
- Levits, R. 1984: "Need, Nature and Nowhere." In A. & R. Bill (eds.) *Utopias*. Ebenezer Baylis and Son. North Wales.
- Mumford, L. 1979: *Interpretations and Forecasts: 1922-1972*. Harvest Books. New York.
- Naess, A. 1982: "Environmental Ethics and Spinoza's Ethics: Comments on Genevieve Lloyd's article". *Inquiry* 23:313-325.

- Max-Neef, M. 1982: *From the outside looking in*. Experiences in "barefoot economics." D. Hammar skjold Foundation. Uppsala.
- Popper, K. 1948: (Reprinted in 1963) "Utopia and Violence." In K. Popper, *Conjectures and Refutations*. Routledge, London.
- Skinner, B.F. 1948: *Walden Two*. Macmillan, New York.
- Wagensberg, J. 1984: "Sobre la disolucion termodinamica del concepto Utopia." In J. Morente (ed.) *Lo Utopico y la utopia*. Integral, Barcelona.

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TRANSITION AND TRANSLATION IN THE GREENING PROCESS

Joel Russ

It's 9:35 a.m. on a Thursday morning. I'm ticking away at the computer keys, trying to polish a first draft to the point where I can mail it off to my editor. Haven't talked to him in weeks, and this is the first time I've written for his mag. I'm "on-assignment," but our agreement was made over the phone. No written contract - and this article represents a month's pay. Feels slightly shaky. Better get this draft to him to keep the connection solid.

Click - on goes the tape recorder. Got to play back that quote once more, type it out accurately.

On, yeah. I did get that C.V. from Anthony, the photographer, in the mail a few days ago. Better remember to FAX that out to Anne today. I'd really like to have Anthony be the photographer on that land-trust piece. Where'd I put that C.V., anyway? Wonder if it's under that pile of printouts and receipts saved for the tax people? As soon as I print this draft, I'd better find the C.V. and write Anne a cover letter....

Rrrringg! Oh, dear. There's the phone. Wish I didn't have to stop now, I've got good momentum. But, phone calls do lead to more writing work. Got to have work.

"Hello?" It's Hans, out in Toronto. Did a story on his eastern-Canada architectural-glass work last year. What's he getting at? A story on him for a Japanese magazine? "Yeah, keep in touch. I'd probably have time to do a piece like that in a couple months. Good to hear your voice, Hans. Take care. Bye."

Ah, who really cares about architectural glass when our planet is headed toward being unfit for human habitation? Oh, well. Buck up. I can still hear birdsongs drifting in on sunbeams through my office window.

Ought to be able to print out this draft by 11:30....

There's work, and then there's "the real work."¹ Each makes a valid, separate appeal for our time and energy, unless we're among that fortunate few, "the independent of means" - or among that other fortunate group, those employed in some sort of green occupation, those for whom work and ideals coincide precisely.

We've entered the '90s, the "turn-around decade." The public focus will likely continue to shift more toward matters biospheric and ecological. This is reasonable to expect, because some acute problem areas are becoming ever more widely and indisputably recognized - things like CFC's and the ozone, pulp mill effluent

and estuaries, CO₂ and global warming. Policies for dealing with these will propel changes throughout industrial society, with a possible long-term end-result of the transcendence of industrial society as we now know it. Through all, people and workplaces will maintain continuity by the art of adaptation.

Yet there is an important distinction to be made between changes in social and economic patterns that are **compelled** by circumstance and those that are **chosen** voluntarily by a populace. **Who** will decide to change, and **why**? These continue to be thought-provoking and open-ended questions. Still, I feel nineteen years of involvement with lifestyle experimentation and with environmental work, in both local and wider spheres, have demonstrated to me some things that are pertinent to the very important realm of voluntary change.

For one, structural realities of the system in which we live in North America - social, cultural, and, not least, **economic** realities - resist our attempts to change lifestyle patterns on the household and local or regional levels. To observe that "things are slow to change" is to acknowledge a certain stability. Ironically, what I'm pointing out is perhaps a little like a given ecological community's inclination toward stability within the larger biome. Or again, as an artist might understand the principle, a picture's overall composition can limit the alterability of isolated elements.

I admit the aforementioned parallels, while perhaps useful, could be misleading if they suggest (as I wouldn't wish to) that social and economic patterns can't change; history clearly tells us they can and do, in response to technological transition, for instance. In the early '80s, Paul Hawkin, hopeful about certain aspects of the emerging economy, with its sophisticated "post-industrial" technologies, wrote: "In the information economy, learning will be essential for all healthy economic activity. This learning results from paying attention to the feedback provided by the environment to the economy."²

Nevertheless, here's a specific example of the difficulty presented by the current "big picture." A major impediment to succeeding in establishing that most excellent of institutions, a land trust, is the often outrageously inflated cost of the land that such a non-profit group (a land-trust society) might wish to put into trust. The **big** reality - that land has been viewed as a