

Catching Fish in Chaotic Waters: An Essay on Empire and Mass Society

by David Watson – *Fifth Estate* 1994

In his book *Shadow Work* (1981), Ivan Illich describes three kinds of issues: "Some are considered legitimate. Others are not to be raised in polite society. A third kind seems to make no sense at all. If you raise these, you risk being thought a fiend or impossibly vain." [1] The *Fifth Estate*, in which this essay was published, has tried to engage contemporary conditions in a creative way that has often brought the third kind of response Illich describes -- even from and sometimes especially from those who claim to be the revolutionary enemies of those conditions.

But contemporary conditions demand a different order of creative thinking. It's more than a question of socialism or barbarism, as Rosa Luxemburg stated it three quarters of a century ago. We've been enmeshed in a deepening barbarism since before her time, a barbarism of which much of the experience of socialism turned out to be just another variety. I am talking rather of a plague of much greater dimensions, worthy of poetic, tragic or mythic terms, like the plagues of the classic Greek drama.

Like Oedipus, we still face the riddle of the sphinx: who are you? what are you? Yet what it means to be human is now in flux, is being contested, in fact, by rival parties. And the old political terms, never entirely useful, don't work. "I'd rather be a cyborg than a goddess," we're told by an ostensibly radical feminist critic. [2] But there is the ominous sense that we will not even get to choose. Other possibilities are equally grim -- including the total physical extinction of our species, and much of the present configuration of complex life along with us. The green world in which we evolved is being shredded by our instruments, our way of life, our very rationality. Yet here, too, we haven't determined the outcomes; they are largely occurring behind our backs.

Neither our technique nor our problem-solving rationality yield adequate responses to this catastrophe. It is a crisis rooted in character and culture, and hard to reach. Mass society lurches along from war to war, technological disaster to disaster, while a slow-acting catastrophe continues silently and incrementally, in natural cycles, in human society, in the psyche. True, the Captain Ahabs at the control panels administer it, but they only direct it to a degree. The man or the occasional woman at the controls is just another creature of the lever. And in ways both great and small, the levers are tending not to function as designed or anticipated.

That tells us something crucial about the tragedy that is history, a tragedy of hubris and unforeseen consequences. Prometheus steals fire, but leaves his dull-witted brother Epimetheus to invent the nuclear reactor. History is filled with prometheans -- Sargon, Caesar, Columbus, Ford, Lenin, Einstein; it's their story. Francis Bacon, perhaps the exemplary promethean, urged the disciples of his new scientific method in the seventeenth century "to unite forces against the nature of things," bind "the harlot" nature "into service," "storm and occupy her castles and strongholds ... and thus extend the bounds of human empire." The human empire is Epimetheus, filled with hubris,

domesticating chaos, splitting the atom and the gene, all to a utopian, messianic fanfare. We're now living half inside the leaky, malfunctioning satellite fabricated by both his rationality and his irrationality, and we go day to day wondering when it will disintegrate altogether.

We are typically and frequently asked how we might practically get from here to there with the modern-primitive synthesis explored in the *Fifth Estate*. We all wonder how to bring about change; we'd like to find a fulcrum. But there isn't any -- and "what to do" can fall into an instrumentality reminiscent of Lenin, whose methodology didn't help him predict the upheavals of 1917, and who, by the time he was done, described his sense of being at the control of a vehicle which did not obey his commands. Furthermore, we are standing at a vague moment not only along the continuum of modern capitalism, but at a crisis akin to the decline of ancient empires. If you have any humility at all, you don't look around in the midst of the fall of Sumer and propose a program. We have to talk tenuously about how an unprecedented, megatechnic empire and its corresponding constellation of cultures might become a qualitatively different kind of society; how a grid might become an organic weave of diverse, egalitarian, communal societies; and how an atomized, mass human being might become a whole person embedded in a community.

No generation has ever faced such prospects. Even many of the former wards of collapsing empires probably had memories of tribal community and skills to sustain themselves. In fact, the greatest revolutions in history were carried out by people with direct connections to archaic communal societies. We, in contrast, face the greatest crisis of detribalization and social decomposition since the birth of the state. Trying to make sense of mass society, to practically respond, is as the Chinese say, like catching fish in chaotic waters.[3] And in some way we are the fish. It goes without saying that we are oppressed by the institutions of industrial capitalism. But we also find that people have been conditioned to be cogs, both functional and dysfunctional (and more and more they are dysfunctional, like all instruments of an instrumental world). We may have nothing to lose but our chains, but they are our own pathological behavior patterns, and conform to an enormous social and material terrain, a terrain we tend to reproduce even as we oppose it.

The language of the empire reproduces it. Thus to consider practical technique alone would be to repeat the same arrogant folly we are trying to subvert. And the irrational will still be there, one way or another, to exact its revenge. For, contrary to the declarations of faith of one well-known rationalist defender of order, history is not "precisely what is rational in human development," but also what is non-rational, what is hidden or unknown.[4] Order and disorder, the rational and the non-rational, are organic unities not only in myth and tragedy but in life and history. After centuries of culture and character change in an economic, instrumental civilization, our notions of these polarities are deceptive. Method, practical politics, theory only tell a part of the story; we have to find a way to respond with the whole of being. Without the extra-rational and intuition, reason is incomplete, gaunt.

Here I wish to speak for something simpler and more subtle than programs: a mindfulness about where we find ourselves, our context (certainly a green sensibility), and a respect not only for what we know but also for what we do not know and especially for what we cannot know. This demands some humility, and epimetheans don't care for humility. For some reason they still can't distinguish humility towards what taoists call the "sacred vessel" of the world, and humility toward

one's boss. But when the Lakota medicine man Black Elk, sounding exactly like the old taoists, said, "We should even be as water which is lower than all things, yet stronger than the rocks," he wasn't counseling servility.[5] He was telling us something valuable about strength not as force but as endurance, about radiating power rather than possessing or controlling it, about listening to nature instead of fantasizing about mastering it -- all evocative of the kind of character change necessary to sustain us, even if the state succeeds in mowing down yet another generation of us. Without certain insights into who and what we are, we could never become the seeds of a new society; even our victory would turn into defeat. Those are some of the subtle intuitions that a modern-primitive synthesis suggests. It is also a topic that brings us well into that third realm of discourse with which I began this discussion.

In classic tragedy, as in primal societies, the sacred and profane commingle. They do for us, too, even if we don't admit it. We should be cautiously open to the spiritual and non-rational, and skeptical of the more invisible magical thinking -- what we might call "magical rationalism" -- pervading secular thought and experience in modern society. Science and technology are for most people a new religion, and their orthodoxies are believed with the same fervor. Questioning their monopoly on reason is considered heresy, when not altogether ignored.

What science claims to know is based on a vast body of unexamined assumptions about the nature of language and the language of nature. Even on its own terms, it's worth asking, if all scientific paradigms tend to wear out with time, why shouldn't science as a whole do the same? A future metaphysics, as Mexican poet Octavio Paz once suggested, might begin as a critique of science, asking "the same questions as in classical philosophy," starting not at the traditional moment "before all science but after the sciences." [6] And by classical philosophy we should understand not only western philosophical traditions, obviously, but the Chinese, Indian, aboriginal Australian, Native American, and others.

It follows that Marx's "merciless criticism of all things" -- that now decayed modernist project which claims to be the science of sciences -- must also be scrutinized, as we recognize the compulsions and superstitions of a rationalist, instrumental civilization that it celebrates -- among others, the fantastic idea uttered by Marx that the "practical construction of an objective world, the manipulation of inorganic nature, is the confirmation of man as a species being." Such instrumental rationality, as Jacques Ellul has written, seeks "to transform everything into means," to abolish mystery. But in the process of disenchanting the world it has itself become the repository of the sacred, celebrated through world's fairs, space launches, televised spectacles, and the promise of a bioengineered cornucopia. Thus even those marginalized and ruined by technology, Ellul argues, cannot find a compensating force to resist. Their "bad conscience," as he calls it, is what Lewis Mumford called the myth of the machine: the belief that megatechnic civilization is not only irresistible but ultimately beneficial, a view generally shared by the rulers and those who contest their rule.[7]

The green sensibility, on the other hand, with its attentiveness to the whole of life, suggests to us that this "objective" world is so because it is alienated. The world is not objective -- that is a Cartesian fantasy wedded to the imperial designs of rationalist science. Rather, in a subtle way that it is our responsibility to engage (and not in the inane, literalistic sense that rationalists enjoy refuting), the

world is alive, inspirited. This recognition that the world is alive, now being discussed and debated seriously by scientists, is a metaphor already very familiar to primal and classical societies, is in fact one of their key intuitions.

Many such intuitions are now being "discovered" by science the way the Europeans discovered America. For example, that everything is interconnected was demonstrated with a vengeance when pesticide residues, blowing off fields in Mexico, ended up in a small lake on Lake Superior's Isle Royale. But some people didn't need lab tests to understand it. The rediscovery of such traditions and counter-traditions must be that intelligence, the spirit of the land, slowly working its way into us, as the Lakota philosopher Luther Standing Bear predicted it would. Some social ecologists warn that these ideas, coming from intuitive modes of thought, are unreliable, even dangerous.[8] But since when have rationalism or revolutionary reason been any more reliable? How many people were exterminated in the name of dialectical materialism? One-dimensional irrationality and rationality have both turned our century into a charnel house.

Some people believe that if the voice can't be picked up by a recording device, or sent by fax, I suppose, it isn't there. They don't recognize their own epoch's magical thinking. The green idea, on the other hand, open to the wholeness of human experience during our million or so years here on this star, suggests that our adventure is not to be found in the manipulation of "inorganic nature," but in that ineffable, numinous relationship with an intelligent, animate world that only a renewed mythopoetics can approach. "The White people never cared for the land or deer or bear," says an old holy Wintu woman. "The White people plow up the ground, pull down the trees, kill everything. The tree says, 'Don't. I am sore. Don't hurt me.' But they chop it down and cut it up. The spirit of the land hates them ... Everywhere the White man has touched it, it is sore." [9]

The testimony of native peoples and the idea of union with nature may strike some as sentimental nostalgia; there is a fearful reaction when not only the land claims of native peoples are affirmed (as all good progressives agree they should be), but their *vision*. That is understandable. We have been shaped by the scientific revolution with its single vision, as Blake called it, and then by multiple waves of permanent industrial revolution that have commodified and mechanized every sphere of life. In contrast to so-called "pre-scientific" peoples' intimate relation to being, mass technics has allowed (or rather, forced) us to live in our heads, shutting out the phenomenal world by constructing an artificial one. As radical psychologist Norman O. Brown points out, "Capitalism has made us so stupid and one-sided that objects exist for us only if we can possess them or if they have utility." Brown's provocative work condemns the dehumanized nature of modern rational subjectivity, which makes the land sore with its calculus of efficiency, compulsion to dominate nature through work, and mania for money and quantification. In contrast to these compulsions, he argues, a nonmorbid science would be erotic. "Its aim would not be mastery over but union with nature." [10]

Such talk may not seem very practical, and some are impatient to get to nuts and bolts. Learn patience; we are going to need it. What appears practical and possible defines the parameters of the ruling ideology. In fact, capitalism now presents itself as life's only option -- either we continue technological development (we can argue about who administers it or reaps the profit) or we'll face collapse and all the horsemen of the apocalypse. Question technicization, mass communications,

electrification, medicalization, organization, and you are looked at like the malicious child who lets the barbarians in through the back gate (all those forces capitalism worked so hard to suppress, witches hanging on the compound wall), or you're treated like a lunatic speaking a language hardly anyone even faintly comprehends.

In any case, capitalism no longer needs to justify itself with claims to be good or eternal, it appears eternal because it's the only game in town. As for the critics, and the people in the path of the bulldozer who find it more and more untenable -- *los perros ladran y la caravana pasa* ("the dogs bark and the caravan passes"). Nuts and bolts rule; the machine trudges on. So the Ukrainian state, in desperate need of energy (meaning capital, growth, production, technology, jobs, commodities, and then all the same in an increasing upward spiral), decided to continue operating the nuclear station at Chernobyl. Talk about a character crisis! Don't the scientists' and bankers' children also get leukemia?

A synthesis of primitive, archaic and modern, given the whole range of a million years or so of human experience, would judge the decision of the Ukrainian politicians differently than the way world bank technocrats do. Since the decision affects life for tens of thousands of years, going well beyond the proverbial seventh generation that native peoples said must determine their actions, it makes sense to seek a similarly deep social perspective. In natural terms, we humans are but one leaf on the enormous world tree of four and a half billion years of Gaian evolution, a marvelous and unique leaf to be sure. In human terms, the last ten thousand years of human society represent one percent of our time on earth. The other ninety-nine percent was lived in small, stateless, propertyless, egalitarian, visionary societies like the Wintu. Only perhaps two hundredths of a percent has been lived in the experiment of urban industrialism. Civilization could arguably be described as an aberration. A deep critique, "after the sciences," would gain from looking at the industrial world, as the Haudenosaunee or Iroquois recommend in their famous Basic Call to Consciousness, "through Pleistocene eyes." [11]

Such a perspective not only encourages a tough-minded humility, it gives us some insight into the origins of the plague we are discussing. I discuss elsewhere the rupture that transforms a harmonious human community, with its myriad reciprocities, into a work pyramid, the ancient slave state, in a process described by Fredy Perlman, Lewis Mumford and others. [12] A discussion of primal society and the different notions of origins would be a discussion easily as long as this overview. Instead, I want to focus briefly on what emerged ... to discern its parallels with today.

It was one of Mumford's great contributions to recognize this new reorientation and reorganization of society into a big machine, or megamachine, as the first machine. The general characteristics of such megamachines are fairly constant: the circle becomes a pyramid. Mutualities become hierarchies, otherhood is suppressed -- in woman, in nature, and eventually in the conquered peoples along a widening frontier. Elites and the drudgery of the oppressed are institutionalized. Monoculture emerges to feed the empire's army -- labor gangs organized for production and armed gangs for destruction -- both using, as Mumford noted, roughly the same methods and principles. Civilization always demands empire, to seize colonies for cheap labor and materials to build its temples and military juggernauts. Every civilization has its empire, and every empire its frontier, with its wretched colonies and denuded sacrifice zones.

A second great mutation was the rise of the capitalist world system -- the first global megamachine or system of interlocking megamachines; the scientific and the industrial revolutions occurring in production and later in culture and consumption have managed to internalize the empire, wire it into subjectivity, in a way no previous form could. Capitalism, first financed by the mutation resulting in the vast discovery and plunder of Africa and the Americas in particular, has become itself a system of permanent revolution, constantly finding new commons to enclose and new colonies to vampirize. For the first time in history, the instrumental and economic transformation of the world has become the central cultural motive.

This process of conquest, looting, regimentation of labor and leisure, and growing dependency on an energy/capital/production grid continues today, not only in the hinterlands of India, Mexico and the Amazon, where remnants of vernacular cultures persist, but in the soil, seeds, oceans, sky and gene pool. The empire of man over things has been firmly established. We marvel at its miracles and disasters, take for granted its transubstantiation of the life web into resources, of real plenitude into pseudo-wealth. As if watching a televised war, we cannot avert our gaze from the spectacles that its official loudspeakers and apologists, in a duckspeak both sophisticated and simple, call Progress. But of course, in a fundamental sense, we are still in ancient Mesopotamia, even more deeply mired in it. And nature, for us, is mostly dead. In its place a machine is telling us, "Stay tuned."

In old mythic terms, we have been taught to revere, instead of life, a two-headed Beast: the promise of mastery over mechanical slaves and the bribe of a world awash in artifacts. Understanding both idols requires our skeptical attention. Yet a critical skepticism of megatechnics and industrial pseudo-plenitude is exactly what elicits the most resistance, bringing accusations of indifference to the suffering of the poor or irresponsible luddism, or utter incoherence. This is the myth of the machine in operation, where the denial is strongest, and the fetters most difficult to break.

The empire is a brutal, mechanized pyramid that cannot exist without colonies and sacrifice zones: once established, quantitative value flows from one direction to another. Thus at one end of the spectrum we find an idyllic, manicured park, and at the other the slag heap which paid for it. At one end society chokes on its waste and excess, while at the other, starvation is permanent, institutionalized. The "winners" in the imperial war-of-all-against-all now find themselves in the industrial enclaves, where they can shop at air-conditioned malls or snow-ski on indoor, ambient-controlled ski-slopes, as one can now do in Japan. The losers are in places like Bhopal, Serra Pelada or the slums of Detroit. Except for the high-rise bastions of the rich (which are also turning out to be toxic with synthetics, electromagnetic radiation, antibiotics and stress), the world is being reduced to a junk pile, a slum, a barren mountain of debris picked over by hungry ghosts.

In the high-rises those who long ago would have had little but been much, to use Fredy Perlman's incisive formulation, now have much but are little.[13] With global industrialization and the modernization of poverty, the others who continue to have little are tending also to be less and less. In the train stations of India, I've been told, where poor people actually live, there are public monitors broadcasting American television programs. Some of the world's poorest people are vicariously witnessing the transubstantiation of spirit into money, and they are now craving that impossible living death in the tower, when in fact only the village can save them.

Various reformers and noble souls, be they leftist revolutionaries with political programs or U.N. technocrats with satchels full of blueprints, are determined to deliver the "much" to the have-nots. If you suggest that bringing an industrial existence to the poor is neither ecologically feasible nor culturally desirable you are usually accused of privileged elitism. Yet not only is this viewpoint connected to age-old insights of both primal societies and classical philosophy, it is coming to be taken seriously by radical critics in the so-called underdeveloped world and in indigenous communities. "My people are tired of development," one activist told a development conference in the mid-1980s, "they just want to live."

"More commodities and more cash mean less life," Indian ecofeminist Vandana Shiva has written. Or Illich has noted, the organization of the economy toward a "better" life is undermining the possibility of a good life.[14] People in rich nations and poor are beginning to realize that we must all get off the treadmill, that what we need is not a higher standard of living but a deeper one.

This is fertile anti-imperial discourse, not a rigid position, as both the defenders and the reformers of empire usually maintain. But the critique of empire has other crucial applications. It doesn't just focus on peons working the banana plantation to feed the global supermarket, the image of empire to which we are accustomed; industrialism is structurally and ecologically an empire in other ways. You cannot have petrochemicals without colonies and sacrifice zones -- waste pits, oil spills, refinery row, ruined areas and lives. You can't have mass dependence on a global chemical-industrial grid without unanticipated incidents and accidents. You can't have the empire of man over things and mastery over a complex of mechanical slaves without feedback and without becoming, like Dr. Frankenstein, the creature of your monsters.

The common attitude toward technology is a weird amalgam of optimism, resignation and denial. While explicitly acknowledging the profound changes in culture and social institutions, in the rare instances when it ponders the shifting social contract mass technics have imposed, the ruling ideology concludes that we must adapt. The gigantic technological structures, the reorganized forms of life and new reorientation in thought, and the very modification of the experience of reality itself are all considered necessary "trade-offs" for the industrial bribe. Contained in the idea that we cannot get the genie back into the bottle, that there is "no going back," is a dim recognition that technology can indeed undermine human autonomy.

Yet strangely, technology is usually thought to be neutral, or the product of social relations, never a determinant that itself imposes conditions. This is true even among some radical greens and others critical of technology, expressed for example in Brian Tokar's remark in *The Green Alternative*, "Technologies are only as good as the society that creates them; the more powerful the technology, the more it can amplify the qualities of the society it was designed to serve." [15] Missing from this view is the recognition that technology -- actually an interlocking system of apparatus, rational techniques and organization -- doesn't merely follow design but changes the world in a systemic, ecological way.[16]

Neither tools nor technology are neutral. They are inevitably powerful constituents of our symbolic world. Technology imposes not only form but content wherever it comes into use.

Industrialism is the grand example, shattering the medieval world with its dynamism and synergy, its tendency to irreversibility and pervasiveness. (Here it is important to emphasize that modern industrialism and capitalism emerged in tandem as a unitary phenomenon. Industrialization and capital accumulation have always occurred synergistically, both in the period of the early rise of capitalism, and later in the various state formations of industrial capitalism during the nineteenth and twentieth centuries.) But even one supposedly isolated technological addition can easily come to reshape society, creating qualitatively different conditions, a famous example being how the introduction of snowmobiles rapidly exploded Sami (Lapp) society in the 1960s. In a matter of a few years, the snowmobile undermined ancient modes of life of the reindeer-herding people, altering the behavior of the reindeer, further opening the society to the world market, and creating new dependencies and a class society where there had previously been none. Proving again that everything is interconnected.[17]

The process is not entirely deterministic, but clearly, technology is more than the sum of its parts. The automobile, for example, is more than a tool; it is a component in a total system of production, energy, distribution, roadways, techniques, laws and other attendant processes that extend throughout the culture and reshape it behind our backs. Thinking in terms of our individual, enlightened use of the single component -- be it a car, computer or television -- misses the whole picture. We forget that a socialization process is taking place in individuals and their society, that the totality of means, apparatus and organization is having its effect. "Seen as a way of ordering human activity," writes Langdon Winner in *Autonomous Technology*, "the total order of networks is anything but neutral or tool-like. In its centrality to the daily activity and consciousness of ... the function-serving human component, the technical order is more properly thought of as a way of life."

"Machinery is aggressive," commented Emerson. "The weaver becomes the web." By this he meant that gradually the means come to undermine and reshape the ends, and the world is qualitatively altered. And what is worse, the system, once fully in operation, no longer responds to human guidance. The dream of mastery gives way to desperate attempts to manage the feedback. "The means," writes Winner, "accomplish results that were neither anticipated nor chosen and accomplish them just as surely as they had been deliberate goals." He quotes Nietzsche on the utilitarians, who knew the next step or two, but no more. Said Nietzsche, "They have no conception of the grand economy, which cannot do without evil." [18]

Today's utilitarians are the crackpot realists (to borrow C. Wright Mills' rich term) in the research labs, military command centers, board rooms and universities planning out each new stage of a new-improved world, free of war, hunger and disease -- or so they promise. Meanwhile they have created an exterminist system with its daily litany of death -- Bhopal, Prince William Sound, Minamata, Chernobyl, Love Canal, the burning Amazon, the Gulf War. And let us not forget the invisible, undramatic, slow-acting catastrophe -- the "climate death" now discussed by climatologists, the depleted ozone, the massive pervasive contamination of the food chain, a ton of toxic waste a year per person in the U.S. [19]

But it's not just corporate criminals who are to blame (though we have plenty of them, too). It's also Nietzsche's "grand economy." Incidents, accidents and systemic disasters are inevitable. No amount of citizen control, double-hulled tankers or fail-safe backup systems will prevent them. To

think otherwise is to fall into what has been called the engineering fallacy, a form of denial. As Charles Perrow writes in *Natural Accidents: Living With High-Risk Technology*, "Systems that transform explosive or toxic raw materials or that exist in hostile environments [and this could almost serve as a basic definition of industrialism itself], appear to require designs that entail a great many interactions which are not visible and in expected production sequence. Since nothing is perfect -- neither designs, equipment, operating procedure, materials and supplies, nor the environment -- there will be failures ... These accidents then are caused initially by component failures, but become accidents rather than incidents because of the nature of the system itself; they are systemic accidents, and are inevitable, or 'normal' for these systems." This passage should bring to mind not only single dramatic disasters like Bhopal, but the systemic catastrophe that industrialism is for the entire web of life.[20]

CFCs are an example of a combination of the grand economy and capitalist greed. The refusal to stop using chlorine-based compounds is certainly a kind of denial based on greed. But CFCs were originally a result of fragmented, "problem-solving" science, produced to replace toxic compounds with an environmentally more benign alternative, not simply to generate profits. No one could have known all the far-reaching effects they would have.[21] This is true of pesticides, biomedical technologies, synthetic chemicals, mass communications, and electromagnetic grids -- all seen as beneficial developments, tools that need proper and responsible management. We don't yet know their total impact, since even with toxic chemicals and the ozone depletion we are only seeing the results of activities of decades ago. We notice what we think are the aberrations in the system, even protest them, without realizing that industrialism itself is one vast Bhopal.

Television is another example, in the realm of meaning. Television has changed language and culture, is even changing the shape of the human brain. Computers and video games have added to the equation. Selective viewing -- or not viewing at all, for that matter -- is to some degree only a private response to a pervasive environment. Memory has come to resemble what the machine records, and sensual reality is eroding into a labyrinth of mediatized images. People can focus less than they once could. Discourse is being reduced to simple signals. The culture is increasingly fast-paced, frenetic, technicized, numb. Silence and the art of sitting still are all but extinct. The human subject is becoming what Mills called "the spectator of everything and the human witness of nothing."

"The sight of immediate reality," said the prescient Walter Benjamin, "has become an orchid in the land of technology." [22] Nevertheless, because of greed, ignorance, and universal character malaise, the command remains the same: "full steam ahead," either to create post-modern paradise or to ameliorate the disasters already upon us. When, to give a small personal example, I ask the teachers with whom I work how we decided that elementary school children needed computer literacy rather than gardening, I am either told to "get with it," or given a blank, somewhat puzzled look. The technology is "here to stay"; we have to learn to use it or be left behind. Yet we are not certain what it is doing to us or what it will do to our children. This passivity among people whom I respect in other regards brings to mind Mumford's comment that even when dangers or malfunctions are suggested, people can "see no way of overcoming them except by further extension of automation and cybernation ... It is the system that, once set up, gives orders." This "self-inflicted impotence [is] the other side of 'total control.'" [23]

The tree says, "Stop. I am sore." But the technician doesn't listen. The life web says, "Stop. I am suffering." But the empire plants more surveyor stakes, isolates the genetic Holy Grail, hooks its children to a keyboard, demands more studies. And the life web suffers, as the immune systems of plants, animals and people, undermined by this pervasive Bhopal, succumb to viral and bacterial predators they once could resist. In many places mother's milk -- it is difficult to find a more powerful representation of the sources of life -- is so contaminated with dioxins and other chemicals that it is thought to be dangerous to the nursing child. The sources of life become the sources of death -- the ultimate feedback.

So, what to do? I'm glad I'm no political organization with a need to invent a nuts-and-bolts plan for everything from what to do with toxic waste to the health care system to a green party program. We're all droplets of water in the stream described by Black Elk, carving away at the rock of history. There is plenty to do. If transformation is a question of culture and character, and doesn't depend on a single method, then on a certain level we can, in fact we must, relax. (A key taoist principle, by the way.) That will help us to endure. In some contexts that simply means showing concern and affection for life around us, proof we exist not because we know, as the decaying world view has it, but because we care. In our daily life, respect for both what we know and for what we cannot know might mean learning patience, or the attentiveness with which we drink our tea. An ecological society knows how to drink its tea properly, and mindfully.

It may sound strange to hear me describe the apocalypse called modernity, then counsel something sounding like "everything I know I learned in kindergarten." I'm in no way nullifying analysis, critique, social action. I'm proposing to harmonize them to the fullness of life. As for proposing global strategies, let's be careful not to fall into instrumentalism in our desire to be practical. In the final sections of *The Myth of the Machine*, Mumford writes, "To describe even in the barest outline the multitude of changes necessary to turn the power complex into an organic complex, and a money economy into a life economy, lies beyond the capacities of any individual mind ..."[24] He thought the reemergence at a new level of the organic vision and its corresponding lifeways would take at least as long as it did for the modern megamachine to replace medieval society.

Mumford believed the necessary planet-wide reorientation of culture would first appear in evidence of inner change, and in a wide variety of gestures of refusal, non-conformity and creative, alternative forms of practice. Like a diverse constellation of radical greens, native traditionals, ecofeminists, anarchists, libertarian socialists and many others drawing from an enormous wealth of traditions and counter-traditions, he understood that below the surface of the empire, ancient forms of human sociation and alternative forms of reason continue to work organically, even if under harsh conditions and in distorted ways: mutual aid, solidarity, community, love, friendship, affection, celebration, self-reflection, the struggle for personal autonomy, the arts as a school of wisdom, and the manifold, archetypal forms of the nurturance of life. Thus much of the transformation is already going on around us, within us. People in wide-ranging projects are already answering the question, "what to do." I wouldn't presume to tell them. Mistakes will surely be made, but the important point is to keep doing what we think enhances community, solidarity, the nurturance of life -- to endure. There are many areas where this can occur. They tend to coalesce as we begin to make the connections.

I do think creative response points to a basic frame of mind and practice beyond the tepid proposal to democratize industrialism; we have to find ways to challenge its basic assumptions. A radical vision for today demands a luddite politics starting from a technological skepticism toward the entire structure and content of technological society. It demands a focus on the process of empire, not only the innumerable hydra heads that are its symptoms. Such a practice would ask the fundamental philosophical questions I mentioned earlier -- question number one being how to prevent the mystique of a mechanized paradise from destroying the possibility for a deeper form of life.

Global industrialism is a dead end, in social and in evolutionary terms. We can choose to abandon it voluntarily, through a new reorientation in our values and our practice, or it will occur in a different way, suggested by what we have seen happen to people in places like the former Yugoslavia or Iraq during the Gulf War. Such a new orientation would seek to turn society into a school of inquiry for deconstructing industrial and technological dependencies. I am thinking here of a kind of great moratorium on development and scientific-technological expansion that would renew the vernacular domain of doing for self by exploring how to create subsistence and culture at home in one's community.

Restoration and renewal would be key values -- of wilderness, the land, community, and the self, all presently contaminated and eroded by the external and internal structures of the megamachine. This suggests a kind of salvage operation, from the rich compost of former cultures and from the industrial junkyard we are gradually going to have to clean up. Realistically, it will also mean a prosthetic technics, as Theodore Roszak once suggested, but consciously in a direction far different than either "going back" -- which we have never proposed and which could never occur anyway -- or going forward into technotopia.[25] It means a third way that will come from asking the kinds of questions and raising the kinds of issues that make no sense either to business-as-usual or to palliative reform. Isn't the green idea potentially the exemplar of a "third way"?

Finally we must remember to approach this with the entirety of being. What does that mean? To see the world as ourselves. Writing of the Chipko movement in northern India, which has hugged trees to keep loggers from cutting them, Vandana Shiva tells how at one point village women suffered brutal beatings by hired thugs from the logging companies, but still held their ground. Shiva asked a woman how she could keep going, keep smiling. The woman replied, "Can you see all this grass growing? We come to cut this grass and every year it grows back. And the power in that grass is the power in me. Do you see those trees growing? They're two hundred years old. Every year we lop those trees to feed our cattle and to keep our children alive, so that the children have milk, and still the trees keep growing and still keep nurturing us, and that shakti [energy, the life principle] is in me." [26]

To see the world as yourself means to practice in the same manner, no matter what your expectations of winning or losing. It's the kind of organic reason that compels us to plant a tree, even on the last day of the world -- how human community will endure its long wandering through civilization and empire, mass society and catastrophe. If you think these ideas seem impractical, remote from what many people see as their immediate concerns, you are right. But in relation to mass society, even a more pragmatic, green reform appears impossible. We need to be realistic by demanding the impossible. If we don't, who will? To paraphrase Eugene Debs, we are better off fighting for what we want and not getting it than fighting for what we don't want and getting it.

"On the terms imposed by technocratic society," Mumford writes, "there is no hope ... except by 'going with' its plans for accelerated technological progress, even though [our] very organs will be cannibalized in order to prolong the megamachine's meaningless existence." Here we are reminded of the current fascination with cyborgism that I mentioned earlier. "But for those of us who have thrown off the myth of the machine," says Mumford, "the next move is ours: for the gates of the technocratic prison will open automatically, despite their rusty hinges, as soon as we choose to walk out." [27] There are no easy answers to the question of how can we open those rusty gates once and for all and walk free. That isn't the adventure any of us would have chosen, but it's the one we all face. It is an adventure, nevertheless. Let's be worthy of it.

Endnotes

1. Ivan Illich, *Shadow Work* (Boston and London: Marion Boyars, 1981), p. 29.
2. Donna Haraway, "A Manifesto for Cyborgs: Science, Technology and Socialist Feminism in the 1980's," *Socialist Review* 80 (1985), pp. 65-107.
3. The "catching fish" idea comes from N. J. Giradot, *Myth and Meaning in Early Taoism* (1983; Berkeley and London: University of California Press, 1988), p. xiii.
4. Murray Bookchin, "History, Civilization and Progress: Outline for a Criticism of Modern Relativism" (*Green Perspectives* 29, March 1994), pp. 4-5, emphasis in original. For a critique of Bookchin's work, see my *Beyond Bookchin: Preface for a Future Social Ecology* (Detroit and New York: Black & Red / Autonomedia, 1996).
5. Black Elk quoted in Joseph Epes Brown, *The Spiritual Legacy of the American Indian* (1982; New York: Crossroad, 1985), p. 43.
6. Octavio Paz, *Alternating Current* (New York: The Viking Press, 1973), p. 116, emphasis in original. See also Morris Berman's inspired *The Reenchantment of the World* (Ithaca: Cornell University Press, 1981), which takes Paz's idea as its starting point.
7. The "merciless criticism" is the marxist revolutionary project, the idea of "species being" from Marx's *Economic and Philosophic Manuscripts*. Jacques Ellul's remarks are from *The Technological Society* (1964), pp. 141-6.
8. I mean in particular Murray Bookchin and his associate Janet Biehl, in a number of recent books and articles, especially Bookchin, *Remaking Society: Pathways to a Green Future* (Boston: South End Press, 1990), and Biehl, *Rethinking Ecofeminist Politics* (Boston: South End, 1991).
9. Quoted in T.C. McLuhan, *Touch the Earth: A Self-Portrait of Indian Existence* (New York: Simon & Schuster, 1971), p. 15.
10. Norman O. Brown, *Life Against Death: The Psychoanalytic Meaning of History* (1959; Middletown: Wesleyan University Press, 1977), pp. 238, 236.
11. *Basic Call to Consciousness*, edited by Akwesasne Notes (1978; Mohawk Nation, via Roosevelttown NY, 1982), P. 69.

12. See "Civilization in Bulk," in part IV of this book.
13. Fredy Perlman, *The Reproduction of Daily Life* (Detroit: Black & Red, 1972), p. 24.
14. Vandana Shiva, *Staying Alive: Women, Ecology and Development* (London: Zed Press, 1989), pp. 13, 7; Ivan Illich, *Tools for Conviviality* (New York and London: Harper & Row, 1973).
15. Brian Tokar, *The Green Alternative: Creating an Ecological Future* (second edition, San Pedro: R. & E. Miles, 1992), p. 83. This same idea of a neutral technology is common in the works of Bookchin as well. See, for example, his comment that technology only "magnifies more fundamental economic factors" (in *Remaking Society*, page 93, emphasis in original), and in *Social Anarchism or Lifestyle Anarchism: An Unbridgeable Chasm* (San Francisco and Edinburgh: AK Press, 1995), that capitalist relations "blatantly determine how technology will be used. ..." (pp. 28-9, emphasis in original).
16. This discussion is informed by Langdon Winner's indispensable *Autonomous Technology: Technics-out-of-Control As a Theme In Political Thought* (Cambridge and London: MIT Press, 1977). See also Neil Postman's *Technopoly: The Surrender of Culture to Technology* (New York: Knopf, 1992) for the use of the idea of "ecological" change.
17. See "The Snowmobile Revolution," in part III of this book.
18. Winner, *Autonomous Technology*, pp. 201; Emerson's *Works and Days* cited p. 195, Nietzsche's *The Will to Power* cited p. 96.
19. C. Wright Mills, *The Causes of World War Three* (New York: Simon & Schuster, 1958). For discussion of climate death, see Tim Thompson, "Where Have All the Clouds Gone?," *Earth Island Journal*, Spring 1992.
20. The "engineering fallacy" idea comes from Michael Edelstein, *Contaminated Communities: The Social and Psychological Impacts of Residential Toxic Exposure* (Boulder and London: Westview Press, 1988). Perrow quoted in *Tara Rate Killing: Bhopals Will Happen* (London: Free Association Books, p. 243. This theme is discussed in "Stopping the Industrial Hydra," in part II of this book.
21. CFCs were of course used by corporations to clean components and for other industrial tasks after the problem with aerosols was discovered. But they and many other such products, nevertheless, came from problem-solving science, not simply from irresponsible greed.
22. Mills, *ibid.*, p. 78; Walter Benjamin, *Illuminations* (New York: Schocken Books, 1969), p. 233.
23. Lewis Mumford, *The Pentagon of Power: The Myth of the Machine Volume Two* (New York and London: Harcourt, Brace Jovanovich, 1970), p. 184.
24. Mumford, *ibid.*, p. 433.
25. Theodore Roszak, *Where the Wasteland Ends: Politics and Transcendence in Postindustrial Society* (1972; Garden City: Doubleday/Anchor, 1973), pp. 379-408.
26. Quoted in a review by Frederique Apffel-Marglin of Vandana Shiva's *Staying Alive*, in *Capitalism, Nature, Socialism* (Summer 1989, Volume 1, Number 2).
27. Mumford, *ibid.*, p. 435.