

Vol. 1 No. 4

INSTITUTE FOR ECOSOPHICAL STUDIES

TECHNOLOGY AND ECOSOPHY

Our vast and sophisticated technological systems pose a grave danger to the Earth. Soil, water, air and life forms reel from the shock of technological power and wastes. Technology not only forms the cutting edge of human assaults on nature, it increasingly structures and dynamizes human society itself. The human community displays an ambivalence toward the impact of technology on its traditional values, its interpersonal relationships and its work ethic. Hwa Yol Jung, in his essay, raises the unsettling question of whether we are any longer moral agents in control of technology and its effects or whether it has not reached a stage of autonomy, shaping the future of the human and its relationship with the Earth. Jung argues forefully that to think of technology as an instrumentum or means to an end is outdated and only deepens our illusions about and control by technology. Science and technology are linked to an anthropocentrism and myth of progress that justify our domination of nature. Only a deconstruction of our technological mode of thinking and acting and a shift to a "deep ecology" and ecopiety is radical enough to overcome our present disastrous course.

Thomas Berry, while applauding the efforts of the Deep Ecology Movement, suggests that those individuals and communities involved in developing alternatives to our large-scale technologies point the practical way out of our dilemma. If we are to enter into a "mutually-enhancing relationship" with the Earth, claims Berry, we must move away from those economic, political and social arrangements that are energy-intensive, wasteful and ultimately unsustainable and toward a communal, decentralized and bioregional pattern of existence. The appropriate technology/bioregional approach will give us local control over our destiny, a more intimate relationship with the Earth and will place us within the self-renewing and self-sustaining dynamics of the planet.

The two essays presented in this issue are edited versions of much longer papers delivered at a conference on "Technology and Harmony with Nature," held at Lehigh University. The complete proceedings of the conference, of which the Institute was one of the sponsors, can be obtained by writing to Dr. Stephen Cutcliffe, Director, Technology Resource Center, Lehigh University, Bethlehem, PA 18015. The cost is \$6.00.

THE ARROGANCE AND BANALITY OF TECHNOLOGY: A CRITIQUE FROM THE PERSPECTIVE OF DEEP ECOLOGY by Hwa Yol Jung

Ours is the epoch when technology has become totalizing, one-dimensional, and terrifyingly banal planetary. normalizing; an epoch when technologization has become the rampant and sweeping norm of everything we do, think and know, that is, when everything is technocentric technomorphic. Indeed, our dilemma lies in the fact that man is human because he is technological in the most basic sense of the term. And yet, on the other hand, man's very physical survival hangs in the balance because of his own artifacts. He has reached the point where technology has the potential of destroying and obliterating himself and the this setting, Ιn it is appropriate to suggest that there should be a philosophy of the technological as an encompassing area of philosophical inquiry. It is clear, moreover, that this new inquiry will become the most important form of critique in this epoch.

In 1972 The Club of Rome issued its first report called The Limits to Growth, which focused on the dismal condition of the world evidenced accelerating bv industrialization, rapid population growth, malnutrition, depletion widespread nonrenewable resources, and a deteriorating environment. In the same year, the Norwegian philosopher Arne Naess lectured in Bucharest on the intrinsic connection between philosophy and the ecology movement in the name of "deep ecology:"

> In so far as ecology movements deserve our attention, they are rather ecophilosophical ecological. Ecology is a limited science which makes use scientific methods. Philosophy is the most general forum of debate on fundamentals, descriptive as well prescriptive, and political philosophy is one of subsections. By an ecosophy I mean a philosophy of ecological harmony or equilibrium. A philosophy as a kind of sofia wisdom, is openly normative, it contains both norms, rules, postulates, value priority and announcements hypotheses concerning the state of affairs in

our universe. Wisdom is policy wisdom, prescription, not only scientific description and prediction.

For our purpose here, deep ecology may be defined as an ontological ordering of man and nature in their harmony. Its aim is to create a whole new way of thinking and doing, a new philosophy of life, or a new ecological paradigm. Its approach is <u>radical</u> and holistic.

Anthropocentrism bv propelled t.he ideology of progress is without doubt the root cause of our ecological predicament today. As such, it is the antithesis of deep ecology. Anthropocentrism is an ordering of man at the apex of all creation. Technology is the kernel of anthropocentrism and the ideology of progress regardless of different political and economic systems. Because technology is a cultural artifact hammered out of the wilderness of nature, deep ecology, as a philosophy of ecological harmony, must include a critique of the technological as an integral component.

Science and technology go hand in hand. The conquest of nature through technology for so-called human progress has its foundation in the theoretical sciences of nature, especially physics. It was Francis Bacon who was the poetic spokesman for science and who built an intellectual edifice for the popular ethos of modern technological-industrial civilization. He was the eloquent, supreme spokesman for progressivist humanism and technomorphic civilization. Ιn pursuit οf paradise," his "enlightened" philosophy of man and nature justified the "greening" of modern scientific, technological, and industrial despite all his civilization and, intentions, opened Pandora's "humanistic" In his philosophy, nature transformed into a world of inert matter and which can be manipulated calculation and experiment for "utility" (utilitas) and "power" (potentia). knowledge is power. By increasing knowledge through "the inquisition of nature," man is capable of extending his dominion over nature for his benefit. Bacon envisioned utility and power as laying the foundation for overcoming the necessities and even the miseries of humanity. The framework of modern technology as instrumental rationality was laid down by Bacon when he insisted on the meaning of human knowledge and power as one and found "in the womb of nature many secrets of excellent use."

The Baconian conception of technology as instrumentum or instrumental facilitation for human well-being and progress has now been replaced by autonomous technology. With this radical shift, the traditional end-and-means continuum is reversed: means has become end itself. As such, the traditional rationale of technology as instrumentum is obsolete. Nonetheless, we continue to justify the "end" of technology in terms of this outmoded idea of instrumentum. In so doing, we still view technology as morally neutral and forget that in technology end has already been subverted by means. In today's world which is dominated by technology, this anachronism constitutes the poverty of moral thinking par excellence.

There can be no ethics in autonomous technology, because it makes obsolete the traditional rationale of technology instrumentum that serves the telos of man. The reversal of end and means is endemic to technocratic mentality and peculiarly characteristic of autonomous technology. is an integral and indispensable part of "rationalization" accompanied by the rise and dominance of scientific and technological thinking (i.e., thinking by calculation). To "rationalize" or "instrumentalize" ends is to norm/alize "efficiency" as the end of our conduct -- the operational demand technocratic mentality and society. The "rationalization" or "instrumentalization" of our conduct is the end of the Kingdom of Ends.

The "instrumentalization" of ends raises the celebrated question of the "banality of evil" whose opposite is the ethics of responsibility. The "banality of evil" is the profound idea Hannah Arendt coined in order to characterize Adolf Eichman -- the man who even misconstrued Kant's notion of duty as blind obedience -- as the paradigmatic case of the violent terror of unthinking men or men of moral indifference and to justify the death penalty imposed on him by the Israeli Government in 1962. For Arendt, Eichmann as doer was neither monstrous nor demonic, but the result of this deed was, nonetheless, atrocious. Indifference or lack of intention to murder does not absolve one's guilt and responsibility for a crime. Objectively speaking, therefore, Eichman was no less guilty and deserving of death than the monstrous or demonic.

In the same way, Arendt's idea of the "banality of evil" can very well be applied to the unintended "evil" consequences of

technology itself. First of all. possibility of moral thinking depends on the notion that we are responsible agents, that is, our ethical conduct presupposes the intentional activation of meaning. To be responsible is to choose one meaning or value over others in the configuration of both ends ethics means. Second, the responsibility must not be equated with an ethics of pure intention and principles alone. Nor should it be confused with an ethics of consequences with disregard for intention and principles. One without the other insufficient because it is one-sided: by focusing on intention and principles alone, one loses sight of consequences, whereas by weighing only consequences, one forgets intention and principles.

The ethics of responsibility must be an ethics of fulfillment in the sense that it fulfills the principled intention of an action in light of the consequences it produces or will produce, whether it be verbal or nonverbal. We do not have to go as far as the uncommon jurisprudential principle that technology is guilty until proven innocent! The "banality of evil" to the "guilt or liability of technology despite its allegedly "innocent," "benign," or "good" intention to humanity's well-being. Quite often, good intentions produce bad consequences for which we ought to be held responsible. To reenchant the world, to deconstruct technology, in sum, is to restore the essence of man as moral being. Otherwise, history will indeed be a nightmare from which there is no awakening. When we become "automated" and "cybernated," we cease to be morally responsible agents. The denial of man's moral agency, or nihilism, is implied in, and the end of, autonomous technology. Critique of the technological must without doubt be the subversion of this nihilism.

I wish to propose the idea of ecopiety for subverting and transgressing anthropocentrism whose essence inheres in technological rationality. To reenchant the world is to harmonize man with nature and to deconstruct the technologization of the world. The aim of ecopiety is to harmonize man with nature. But what is harmony? It is a musical concept in which nature may be described as a gathering of many earthly beings and things as an ordered whole. As it assumes a pluralistic universe of living beings and nonliving

things, it becomes a kind of symphony or orchestration of the differentiated many. By using the term differentiated, I mean to accentuate the idea that all beings and things cannot be flattened to a single equation or a fixed formula of equivalences. regard, both anthropocentrism and naturalism are equally one-sided, that is, they are false: one overvalues man, whereas the other undervalues the existential eccentricity of being who is capable of man as moral activating meaning and value. To use a Pascalian expression, man is somewhere in the middle between nothing and everything. term in as in "man in nature" or "man in the landscape" is an ecstatic one in that as an intentional being man is not simply an inert object or matter. In other words, the harmony of man with nature is man's way of attuning himself or herself to the world both natural and social. Mood modulates the tonality of his or her existence in or in relation to the Precisely because mood is not a psychological or subjective category, harmony too cannot be defined as an anthropocentric or mancentered category.

To recapitulate: harmony constitutes the keyboard of understanding reality as social process, for only where there is social process is there reality, and where there is no social process, there is no reality. Harmony is thus not the unitariness of the undifferentiated but a polyphonic chord or orchestration of the differentiated many. social process based on the musical conception of harmony, we mean an intoned nexus of relationships between man and nature on the one hand and between man and man on the other. These two spheres deeply affect each other. We name the encompassing principle of social process among all earthly beings and things as ecopiety, which may be divided into two subcomponents: homopiety and geopiety. Thus, ECOPIETY = HOMOPIETY + GEOPIETY.

Homopiety refers to the <u>conviviality</u> of man with man and geopiety the <u>connaturality</u> of man with nature. As the Greek <u>oikos</u>, from whose etymology both ecology and economics are derived, signifies the "household" (a circle of family, relatives, and friends), both conviviality and connaturality are similarly two different ways of saying <u>filiality</u>, the term for endearment for the Sinistic mind in weaving the basic fabric of social, political, economic, and moral relationships. The unity of ecopiety is "synchronized" in the yang of

homopiety and the <u>yin</u> of geopiety as complementary. One cannot do without the other, the combination of which, I might add, is multifaced.

Above all. ecopiety signifies attitude of reverence for all earthly beings things. It is the sacrament interexistence that affirms the rather than the "I-It" relationships. employ the language of Martin Buber. attitude of reverence should be applied to our own artifacts as well as things social and natural. What is so revealing and saddening about technomorphic mentality, however, is that man is irreverent even to his own artifacts. Junkyards and chemical dumps, for example, show no reverence for man's artifacts products. Geopiety as reverential composure for the "natural spontaneity" of nature confirms the intrinsic value of nature as it is itself rather than for its use value, its extrinsic value. It is, I think, stark contrast between art and technology -- art for intrinsicality and technology for extrinsicality. In Sinism there is an ineluctable connection between the aesthetic and the ethical: the beautiful and the good are intertwined. As the aesthetic is the harmony of man with nature, so is the good the harmonious relationship of man with man. Harmony is, therefore, the essence not only of the aesthetic (the musical) but of the social as well.

In the end, there is no science of the future since the future is unpredictable. That is, it is made by us as responsible agents. The future as history will, indeed, be of our own choosing and making. As Chinese ideography composes "crisis" in the combined characters of "danger" and "opportunity," our option is clear in this time of ecological crises: we have an opportunity of subverting transgressing the Great Chain οf technocentric civilization toward the reclamation of ecopiety. The prospect of our future depends on this radical and momentous choice and switch. Indeed, at the edge of history, ecopiety offers us a radical way of defenestrating technocentric civilization.

NOTES

- 1. "The Shallow and the Deep, Long-Range Ecology Movement: A Summary," <u>Inquiry</u> 16 (Spring 1973): 99.
- 2. In <u>The Minimal Self</u> (New York: W.W. Norton, 1984), Christopher Lasch lashes

out and deplores what he calls the "siege mentality" and "survivalism" including the ecology movement. While I agree with his positive tone, I question his minimization of the issue of survival.

Hwa Yol Jung, Ph.D. is Professor of Political Science, Moravian College, Bethlehem, Pa. Professor Jung has written extensively in the areas of Ecology, Phenomenology and Political Science. He is presently working on a manuscript entitled Zen and Deep Ecology.

ANOTHER VIEW

Nature is a part of history, an object of history; therefore, "liberation of nature" cannot mean returning to a pre-technological stage, but advancing to the use of the achievements of technological civilization for freeing man and nature from the destructive abuse of science and technology in the service of exploitation. Then, certain lost qualities of artisan work may well reappear on the new technological base.

In the established society, nature itself, ever more effectively controlled, has in turn become another dimension for the control of man: the extended arm of society and its power. Commercialized nature, polluted nature, militarized nature cut down the life environment of man, not only in an ecological but also in a very existential sense. It (and erotic cathexis the blocks transformation) of his environment: deprives man from finding himself in nature, beyond and this side of alienation; it also prevents him from recognizing nature as a subject in its own right -- a subject with which to live in a common human universe. deprivation is not undone by the opening of nature to massive fun and togetherness, spontaneous as well as organized--a release of frustration which only adds to the violation of nature.

Liberation of nature is the recovery of the life-enchancing forces in nature, the sensuous aesthetic qualities which are foreign to a life wasted in unending competitive performances: they suggest the new qualities of freedom.

Herbert Marcuse
"Nature and Revolution"

TECHNOLOGY AND THE HEALING OF THE EARTH By Thomas Berry

Of all the issues we are concerned with at present the most basic issue, in my estimation, is that of human-earth relations. A multitude of interhuman issues at the national and international levels also confronts us; but even at their worst we can probably survive them much better than we can survive continued degradation of the earth in its basic life systems. The 20th century has eliminated the terror of the unknown darknesses of nature by devastating nature herself.

In mentioning our present situation we must also note that humans have, at least since the rise of agriculture at the beginning of the neolithic period some 12,000 years ago, been putting a certain stress on the natural world. This stress increased considerably with the rise of the classical civilizations of the Eurasian, African, and pre-Columbian American continents. Since the rise of the scientific technologies of the 1880s and the rise of corporate enterprises humans have gained an "ascendency," such that, with the coming of the nuclear age, we have finally developed the capability of determining whether the earth shall live or die in many of its major life systems. Thus, a unique situation has developed.

Ultimately it is not an American or European problem, but a species problem. How should humans live upon the earth in a mutually enhancing relation? How can progress be shared by all components of the planet? Can there be true or lasting progress, if it is not shared on a comprehensive scale? Are we really moving into a wonderland so magnificent that it is worth such a destructive presence to the natural world? Answers to these questions have been made by four groups that have developed in the past two decades.

The first and by far the dominant group is entranced with the sense of continuing progress, if not toward wonderland, then toward a constant improvement of the human condition through our scientific industrial has almost no processes. This group sensitivity to the consciousness or degradation of the earth that has been taking place in the 20th century, especially in the post-WW II years when chemical engineering, electronic and nuclear engineering,

engineering, aeronautical and agricultural engineering took control of the North American continent and all its living forms.

When faced with the difficulties and dangers resulting as a consequence of the industrial process, individuals such as Julian Simon and Herman Kahn say that we should press on with our present industrial processes. Recently a new period of the entrepreneur has arrived and with the rise of new technologies comes a new mystique of the corporate enterprise. This mystique is absorbing the mythic and cultural language and even the attitudes and emotions formerly associated with our religious and humanist traditions. This absorption is reflected in such terms as corporate culture, the mythic meaning of the enterprise, the soul of the establishment, the belief structures. All of this attempts to overcome an instinctive awareness that the corporation is in the business of seducing the consumer while plundering natural resources poisoning the environment -intentionally of course. That is the most poignant aspect of our times, the dedication of good and intelligent and competent persons to the improvement of the human situation, but individuals who do not understand the real consequences of what they are doing. They are totally dedicated but simply wrong in their judgment.

For those totally absorbed in the industrial cycle, however, these signs of the time point to an expansion of life into the future, rather than to a need for reintegration into the cycles of nature. Such is how one group is dealing with human-earth relations. This is the group presently in control of the earth and its resources, our consumption habits, our military and its destructive instrumentalities.

A second response to our present earthhuman situation is a negative critique based on the humanistic and social consequences of our present technological-industrial processes. Among the most incisive and comprehensive of such critics are Jacques Ellul, Theodore Roszak, Ivan Illich, Dorothy Day and Peter Maurin, the socialist party of Norman Thomas, Lewis Mumford, The Papal Encyclicals -- all these form a moral judgment upon the inequality in carrying the burdens and sharing the benefits of the industrial order. They also deal extensively with the deleterious consequences of the technological order for the humanistic and spiritual dimensions of life.

The consequences for the natural world, however, do not appear prominently in their critique nor in the critique given by the Labor Movement. The Labor Movement in Capitalist countries, the Socialist Movement and the Communist Movement are all heavily committed to the technological-industrial process.

A third way of dealing with human-nature relations is represented by those who critique our technological-industrial society because of its disturbance of the natural world in its most basic life systems. The ultimate source of evil in the existing order of life is its homocentric norm of reality and value. This third group insists that nothing very helpful can be achieved until we move away from a homocentric to a biocentric norm.

The effort to present and defend the biocentric norm of reality and value is widespread, but among the clearest and most direct defenders of the biocentric view is the Deep Ecology Movement begun by Arne Naess and later taken up by George Sessions and a number of others. Many of these individuals have thrown their activities, their scholarship, and their life purpose into saving the living world of nature from industrial-technological destruction.

In addition to these three is a fourth group, a group that is evolving the alternative program needed for healing the earth and fostering a mutually enhancing human-earth relation. This group sees the need for confrontational methods such as those used by green Peace and by Earth First!, but it pursues a more positive program. These are the true heirs of Henry Thoreau, John Muir, and Aldo Leopold, the leading personalities who articulated the intimate functional relationship between the human and the natural world.

In the international realm a sequence of important events took place in the 1970s and early 1980s. In 1972 Stockholm Conference on the Environment took place without immediately evident results. Afterwards, however, on their return home the conference representatives led the way in establishing Environmental Protection Agencies in most of the nations of the world.

More immediate to our purposes here are the alternative models of human-nature relations that could remedy or at least modify our present dysfunctional industrial patterns. The most effective models function in the areas of food production, energy, housing, architecture, craft skills, waste disposal, sanitation, health maintenance, and forestry.

Rather than outline specific programs that have been initiated in various other areas of human activities, it might be best to present the basic principles that govern the new patterns that are being presented as a way of moving toward technologies that will be mutually enhancing for both the human community and the earth process.

that The first principle is technologies should function in an integral relationship with earth technologies, not in a despotic or disturbing manner or under the of conquest, but rather in an evocative manner. The spontaneities of nature need to be fostered, not extinguished. Nature has, during some hundreds of millions of years through numberless billions of experiments, ecosystems that worked out the flourishing so abundantly when humans and human civilizations emerged into being. It is a brash and destructive thing for humans to intrude on this system without carefully observing just how these ecosystems work and how humans might best function within this context.

Secondly, there is need to realize the order of magnitude of the changes that are needed. Here we are not concerned with some minor adaptations but with the most serious transformation of human-earth relations that the classical place since has taken The industrial civilizations were founded. age has so alienated and so conditioned the human that survival outside the industrial bubble in which we are enclosed is difficult. Yet we must learn survival within the context of a more intimate relationship with the natural world, since the industrial bubble cannot long endure in its present mode of The urgency is all the greater functioning. humans through consider that we technological cunning have now for the first time attained the power of life and death over the planet in many of its most basic life systems.

Thirdly, sustainable progress must be progress for the entire earth community. Every component of the community must participate in the process. For humans to progress by eliminating, degrading, or

poisoning other life-systems is not only to diminish the grandeur of earthly existence but to diminish the chances for human survival in any acceptable mode of fulfillment.

Fourthly, our technologies need to be integral. They need to take care of their Waste disposal should be waste products. associated with the process, either the immediate process or a related process. This law of integrity is among the most widely violated. The brazenness of establishment -- blasting their refuse into the atmosphere or pouring it into a stream or dumping the trash onto the fertile wetlands -is difficult to understand. This refusal to deal with its own waste is one of the most universal, most consistent, and most replusive aspects of our contemporary technologies.

Fifthly, there is need for a functional cosmology, a cosmology that will provide the mystique needed for this integral earth-human presence to each other. Such a mystique is available once we consider that the universe. the earth, the sequence of living forms, and the human mode of consciousness have from the beginning had a psychic-spiritual as well as a physical-material aspect. We do not need such extrinsic spiritual interpretations of the earth process such as are sometimes proposed. What we do need, however, is a sense of reverence, a sense of the sacred such as we find with the great naturalists or such as we find with some of the foremost scientists of our times, scientists such as Freeman Dyson, Sir Bernard Lovell, Brian Swimme, or Ilya Until technologists Prigogine. 1earn reverence for the earth there will be no possibility of bringing a healing or a new creative age to the earth.

Sixthly, nature is violent as well as benign. Our technologies have a defensive role to play. Nature with its sullen droughts, its devastating floods, its hurricane winds, its termites ready to destroy our dwellings, its plague-bearing animals, its malarial infections, assaults and challenges us, and we need all our skills and effective technologies to defend ourselves against such forces that are ever ready to destroy us.

Seventh, our new and healing technologies need to function within a bioregional context not simply on a national or global scale. The functional divisions of the human should accord with the functional divisions of the earth itself and its life forms. The earth is

not given to us in a single global sameness. The earth articulates itself in arctic and tropics, in seacoast and mountain regions, in plains and valleys, deserts and woodlands.

Everywhere, however, life is established on a functional community basis. These distinctive communities can be designated as "bioregions." A bioregion can be described as an identifiable geographical area of interacting life systems that is relatively self-sustaining in the ever-renewing processes of nature. Our future technologies must function primarily on this bioregional scale.

The integrating element in this bioregional context would be the bioregional culture. The poetry and song as well as the architecture and painting, the construction and the transportation -- all would take on the distinctive features of the bioregion. The norm would not be the boxes of Gropius but the more intimate forms suggested by Ian McHarg and Gary Coates. The earth itself would be seen as the primary architect, the primary scientist, the primary educator, healer, and technologist, even the primary manifestation of the ultimate mystery of things.

A person cannot doubt that the technologists of the present are profoundly aware of the nobility and the urgency of their work and also of their competence to fulfill their role in the creative tasks that are before us. We can do nothing adequate toward human survival or toward the healing of the planet without our technologies. Extensive scientific research is needed, if we are to appreciate the integral functioning of the basic life systems of the planet and enter into a mutually enhancing relationship.

Our Western scientific effort over these past few centuries is the most sustained meditation on the universe ever carried out by any human group. If for a while our science became alienated from and antagonistic to the and spiritual humanistic interpretatiions of the existing order of things, this was apparently a necessary interlude, a need for distancing to attain a wider and more authentic understanding. After the distancing a new intimacy, after the mechanistic a more biological sensitivity, after damaging the earth a healing. We need only look at the surrounding universe in its more opaque material aspects; look at it, listen to it, feel and experience the full

depths of its being. Suddenly its opaque quality, its resistence falls away. What seemed so opaque and impenetrable suddenly becomes radiant with intelligibility and powerful beyond imagination. In this way has the work of the scientist been spoken of by Brian Swimme in terms of a shamanic journey into a strange and distant world. As with the shamanic personality so too "the scientist has returned to the larger culture with stories, awesome and frightening, but stories that serve to mediate ultimate reality to the larger culture."

So in our times technologists discovering ways of interacting with this awesome inner world of mysterious forces. What we might hope for is not technologists refuse to enter this world but that, as they participate in its powers, they become increasingly sensitive to those larger patterns of life into which these powers are organized, not simply into individual life forms but into those living communities that are indeed resilient but also extremely vulnerable to disruption by insensitive humans.

When we ask the more comprehensive question of where the human fits into the earth process, the answer is simple: The human is that being in whom the earth community reflects on and celebrates itself in conscious self-awareness. The earth is a celebratory event. The end and purpose of all science, industry, manufacturing, technology, is commerce, and finance celebration, planetary celebration. This is what moves the stars through the heavens and the earth through its seasons. The final norm of judgement concerning the success or failure of our technologies is the extent to which they enable us to participate more fully in this grand festival.

Thomas Berry, Ph.D., is Director of the Center for Religious Research, Riverdale, N.Y. Professor Berry is President of the American Teilhard Association and in the forefront of contemporary movements in ecophilosophy, bioregionalism and ecological spirituality. His article on bioregionalism appeared in the first issue of Ecospirit.

16

COSMIC MISSILES OF EPIPHANY

Upper Amazon Basin to Northville, New York Intercontinental Missiles!--

chimney swifts

who wing each Spring 8000 miles between

the Upper Amazon Basin

& the chimney of a burned-out baseball factory in the Adirondack foothills!

Miracolo! Miracolo!

Intercontinental missiles of Bird Migrations should be worshipped by us

not nuclear missiles & The Book of Armageddon.

Factory ruins where chimney swifts nest are more sacred

than the little bankvaults on high altars

where priests coop the Holy Spirit

in a gilded birdcage. Northville, New York is blessed by a miracle more cosmic than Fatima

and the route of those little gray birds should be lined with people

the way people line the streets when

a pope or president goes by in a motorcade.

Plenary Indulgence Beatific Vision!

--Jeff Poniewaz

From Dolphin Leaping in the Milky Way, Homeward Press. Permission of author.

NEWSLETTERS/JOURNALS RECEIVED

- Creation. Friends of Creation Spirituality, Inc., P.O. Box 19216, Oakland, CA 94619. Magazine. \$3.00 per issue. Six per Yr.
- The Deep Ecologist. Newsletter of Australian Deep Ecology Network. 10 Alamein Ave., Warracknabeal, VIC. 3393 Australia. Bi-Monthly.
- The Eleventh Commandment Newsletter. Published by The Eleventh Commandment Fellowship. P.O. Box 14727, San Francisco, CA 94114. Write for information.
- Harbinger. The Journal of Social Ecology. P.O. Box 328, Cooper Station, N.Y. 10276. Occasional. \$3.00 per issue.
- Institute of Noetic Sciences Newsletter. 475 Gate Five Road, Suite 300, Sausalito, CA 94965. Newsletter with membership. Write for information.
- Minding the Earth. A Thinly Disguised Journal of Environmental Ethics. Joseph Meeker, ed. c/o The Latham Foundation, Clement and Schiller, Alameda, CA 94501. \$10/yr. A Quarterly.

- New Options. A Newsletter. Mark Satin, Ed. Every four weeks. 1346
 Connecticut Ave., N.W. Ste. 924, Washington, D.C. 20036.
 \$25/yr., \$32/yr. Canada.
- Regeneration. Newsletter from the Regeneration Project, Rodale Press, Inc., 33 E. Minor St., Emmaus, PA 18049. \$12/yr.
- Teilhard Perspective. Newsletter/Journal. Teilhard Assoc., Box 67, White Plains, N.Y. 10604. Available with membership.
- The Trumpeter. Voices from the Canadian Ecophilosophy Network.

 Alan Drengson, Editor, Lightstar, 1130 Richardson St.,

 Victoria, British Columbia, Canada V8V 3C8. Quarterly.

 \$8/yr.

Editors: Don St. John
Paul Larson
Ed Moran

Thanks to Jean Siska, typing and layout.

The <u>Institute</u> <u>for</u> <u>Ecosophical</u> <u>Studies</u> is an educational non-profit organization located at but independent from Moravian College.

 $\frac{\text{Ecospirit}}{\text{from the Lehigh Valley Association of }} \text{ Independent Colleges.}$

INSTITUTE FOR ECOSOPHICAL STUDIES c/o Donald P. St. John, Ph.D. Moravian College Bethlehem, PA 18018