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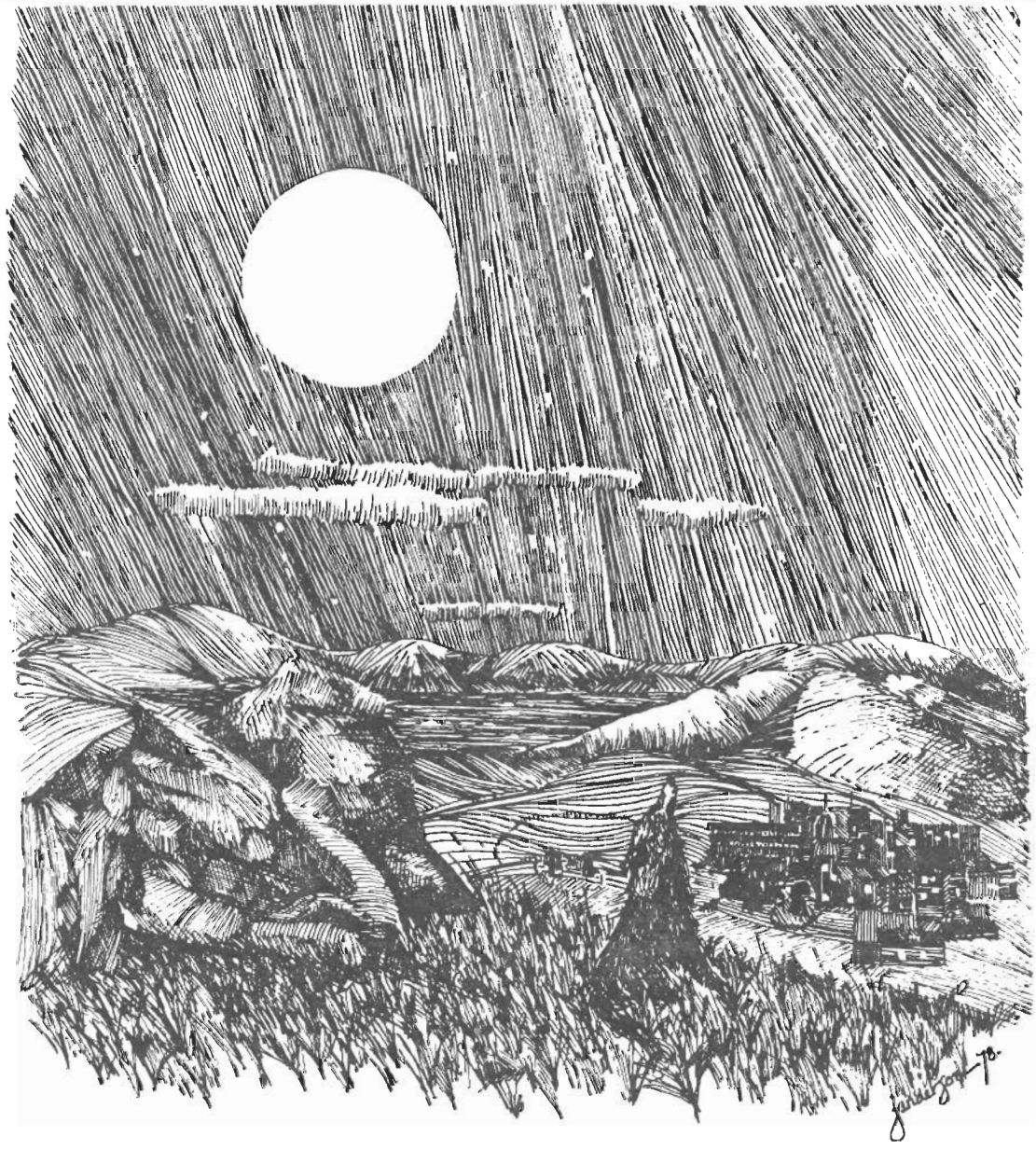
THE TRUMPETER

Voices From the Canadian Ecophilosophy Net Work



ANCIENT AND CONTEMPORARY VIEWS OF NATURE, PLACE AND ANIMALS

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THE TRUMPETER

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The Aims of The Trumpeter

Our aim is to provide a diversity of perspectives on environmental relationships and Nature. By "diversity" we mean cross- and transdisciplinary reflections from both scholarly and nonscholarly sources. Our purpose is to investigate ecophilosopy as this manifests itself in the activities and lives of people working in different ways to come to a deeper and more harmonious relationship between self, community and Nature. **The Trumpeter** is dedicated to exploration of and contributions to a new ecological consciousness and sensibilities, and the practice of forms of life imbued with ecosophy (ecological wisdom). **Published Quarterly by LightStar Press, P.O. Box 5853, Stn B., Victoria, B.C., Canada V8R 6S8.**

FUTURE AND BACK ISSUES: Future issues will feature articles on progress, technology, New Age and Deep Ecology. **Back Issues** of Vols. 1, 2, 3, & 4 are still available. Vol. 1, presents basic ecophilosopical concepts and reading lists; Vol. 2 features a three issue focus on ecoagriculture; Vol. 3 has a three issue focus on wilderness; Vol. 4 features artilces on love, sex, ecology of self, ecofeminism, magic, animals, place and ancient ecology. Each volume of back issues is $10 per set, includes postage and handling, bookrate.

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Introduction to this Issue

Alan R. Drengson, Editor

In this issue of **The Trumpeter** we focus on ancient and contemporary views of nature, place and animals. In the first article **Andrew McLaughlin** discusses three major contributions to the literature of ecophilosophy, the books published by George Sessions and Bill Devall--**Deep Ecology**, Neil Evernden--**The Natural Alien**, and Erazim Kohak--**The Ember and the Stars.** In his discussion of these works McLaughlin brings out the extent to which philosophy of nature and humanity is undergoing a major shift in focus and approach as we deepen our knowledge of ecological processes, and as modern industrial technology threatens to undermine the integrity of those processes. He points to the necessity of understanding the processes of transformation of consciousness. Following his article **J. Donald Hughes** offers reflections on how the ancient Greeks viewed and appreciated landscape. The sorts of classifications and insights they developed were much more sophisticated than many contemporary critics have noticed. Next **Donald P. St. John** offers contemporary reflections on the meaning of place, town and community. If we expand our sense of neighbors we must include animals and plants, and so we turn with **Mary Midgley** for thoughts on our relationships with animals and a critique of the ways in which they have been viewed by our culture, especially within scientific and academic circles during the last few centuries. She brings out the conflict between the way trainers, and others who work with animals, talk and think about them, and the way academic theorists committed to a mechanistic paradigm think and talk about them. Given the mechanistic, reductionist approach, it is a short step to thoughts of constructing new animals and species by means of genetic engineering. **Michael W. Fox** considers the implications of animal patenting and biotechnology not only for wild animal species, but for nature conservation as a whole. Those implications are very grave indeed. **Valerius Geist** in turn raises serious doubts about the wisdom of allowing markets to develop for wildlife meat and parts, and he brings out some disturbing facts about game management systems in place in Europe, which involve privatization of wildlife and hunting privileges for only the elite. The risks to wildlife in North America from wildlife markets are seen to be large ones. Game farming, animal patenting, manipulation of wild environments, all follow from the reductionist's conceptions of animal life. At the same time, field studies and other recent work in ethology and ecology cast large doubts on the reductionists' picture of the way things are. We end the focus on animals with **Jay Vest's** celebration of wild animalness in "Tiger Wild". Also in this issue we have another exchange between **Henryk Skolimowski** and **Warwick Fox,** who continue the discussion which began in the Fall 1986 issue. The last section presents book reviews by **Tim Birch** and **Michael Caley. Fools Crow,** reviewed by Birch, is about the Blackfeet vision of the world and their sense of place and identity. **The Universe is a Green Dragon,** reviewed by Caley, is Brian Swimme's attempt to present a contemporary cosmology based on modern science but told in the mythological forms of earlier times. This is part of the attempt to tell the "new story" of the universe as ongoing creation. In the "new story" undertaking we must be careful not to be seduced into thinking that our creativity--as a reflection of the fire of the universe--has to be exercised in ways that pursue power over other beings. There are many nonviolent, creative possibilities, which would enable us to realize our potentials, contribute to the greening of our communities, and promote the regeneration of ecological integrity.

THE CRITIQUE OF HUMANITY AND NATURE: THREE RECENT PHILOSOPHICAL REFLECTIONS

By Andrew McLaughlin

Truly **fundamental** critique of humanity's relation to Nature faces a serious ethodological problem. Every continuing society must develop a character structure and belief system within its members which enables the society to be reproduced from generation to generation. A radical critique which tries to question the basic belief system and **also** wishes to gain assent from the members of that society must grapple with the fact that any straightforward appeal to "common sense" or "our intuitions" will not go deep enough. **Our "common sense" is an essential part of the problem.** Thus, the question of how people can come to "see beyond" the social veil of conventional "wisdom" presses upon anyone who urges us to revision our relations with Nature. What seems needed are transformative **practices** which can counter the socialization processes, ones which suspend the chatter of normalcy and enable people to re-approach the everyday reality of industrial life with clearer vision. The techniques of philosophy--critique, reasoned argument, and the articulation of counter-visions, among others---are essential, but not likely to be sufficient. Considerations of the process of the transformation of consciousness needs careful examination and incorporation into the critique of humanity's relation to nonhuman Nature. Several recent critiques of our current relations to Nature agree on our radical misadjustment to Nature and recognize the difficulty of escaping the dominant forms of thinking and talking about our world, but their

shortcomings highlight the need for focussing on the process of transforming consciousness.

Deep Ecology

The clearest extended statement of the perspective of deep ecology can be found in Bill Devall and George Sessions' **Deep Ecology: Living as if people mattered** (Salt Lake City, Peregrine Smith Books, 1985). This book develops and extends the perspective of deep ecology as initially articulated by Arne Naess. It is a strong endorsement of the "deep" approach to environmental problems. A strength of the book is its clear focus on the roots of the environmental crisis in the dominant forms of character and culture, thus pointing to the need for fundamental changes in both character and culture. The book is written with the goal of leading to this understanding and providing the encouragement and means to become actively involved in "ecological resisting." It thus is a book which, while articulating and defending a perspective, also goes beyond this to advocate and facilitate personal and collective activity leading towards social change.

One particular value of Deep Ecology is in its attempt to broaden the domain of discourse within which we can think about and act within nonhuman Nature. The critique, from the perspective of deep ecology, of the dominant worldview and reformists responses to environmental problems is of urgent importance. Anyone who believes that truly fundamental changes are needed to bring humanity into harmony with nonhuman Nature is confronted with the fact that practical political activity takes place within a frame of discourse which simply assumes without discussion that the only interests which "really" count are human interests. "Reformist activists often feel trapped in the very political system they criticize. If they don't use the language of resource economists---language which converts---forests into commodity production systems'. . . then they are labeled as sentimental, irrational, or unrealistic." (Ibid. p. 3.) The attempt to enlarge the conceptual framework within which environmental discussions can take place is one important contribution which philosophers are uniquely qualified to make, since it is the particular task of philosophy to unearth and examine the deep and often unarticulated assumptions underlying our thought and action.

The heart of deep ecology, according to Devall and Sessions, is the cultivation of "ecological consciousness. . .[which] involves becoming more aware of the actuality of rocks, wolves, trees, and rivers---the cultivation of the insight that everything is connected. . .learning to appreciate silence and solitude and rediscovering how to listen. It is learning how to be more receptive, trusting, holistic in perception." (Ibid. p. 8) This makes deep ecology a rather more demanding position than contemporary philosophers usually deal with, as it insists on the fundamental importance of the question of what sort of person should I strive to become?

This concern of deep ecology with the development of the self harks back to the concerns of Greek philosophy with the development of character. As such, this pushes philosophy beyond the bounds it has usually accepted in the twentieth-century. It brings to the fore the normative question of how should I be, rather than addressing the more abstract and impersonal questions about the nature of value, the structure of moral argument, and so on. In this shift of focus, deep ecologists open an old and central question in a new context. Devall and Session, however, do not fall into the trap of concern only with one's own consciousness and character, in that they clearly recognize (although do not discuss at length) the role of social and political activity in the transformation of character. Indeed, one chapter of the book is devoted to ways of "ecologically resisting." They understand that political action and personal transformation are synergistically connected, not antitheses.

The two fundamental principles of deep ecology are self-realization and biocentric equality. Self-realization involves the process of the expansion of the sense of identification. It is a process which starts with the identification with family and grows outward going "beyond humanity to include the nonhuman world." (Ibid. p. 67.) Biocentric equality is the "intuition" that "all things in the biosphere have an equal right to live and blossom and to reach their own individual forms of unfolding and self-realization." (Ibid. p. 67.) These two insights are connected, in that they involve the perception that "if we harm the rest of Nature then we are harming ourselves." (Ibid. p. 68.) Devall and Sessions recognize that these "ultimate norms. . .cannot be fully grasped intellectually but are ultimately experiential." (Ibid. p. 69.)

Philosophically, one of the most pressing issues raised by the deep ecology position concerns its foundation in the idea of character development. One the one hand, this is precisely the question that environmental philosophy must address, Disputes over whether or not Nature has or has not "intrinsic value" may not be the central question. After all, how can such questions be answered? On the one hand, various intuitions concerning such issues can be displayed, inconsistencies discussed, and recommendations made. Having done this, the question of fundamentally divergent "intuitions" remains. A casual survey of the literature in environmental philosophy shows that there are widely divergent intuitions about the "value" of Nature, and that these differences rest on yet deeper questions. What should be taken as "Nature?"

Is it that which is discovered by science? Or is it the lively and colorful world that within which we dwell? Can such deeper divergences be resolved by the appeal to "intuition?" If so, whose counts? Perhaps there is the necessity for character development **before** one's "intutions" can be trusted. **But this** risks becoming a dogmatic assertion of moral superiority.

Is it possible for philosophers to fruitfully discuss the question of what kind of person we should strive to become? What is the role of reasoned argument across the divide between those who are convinced of the worth of the transformation recommended by deep ecology and those who prefer the path of the human domination of Nature? These issues are of no small importance to deep ecologists, particularly in that deep ecology is, so far at least, a minority position. The saving grace of deep ecology is its insistence---regularly made by Naess, Devall, and Sessions---upon the continuation of the process of questioning. As Naess puts it: "the essence of deep ecology is to ask deeper questions."(Ibid. p. 74.) It is this insistence upon the questioning process that saves deep ecology from the dogmatic stance of the rigid moralist and places deep ecology squarely within the Socratic tradition.

The Natural Alien

Neil Evernden's **The Natural Alien: Humankind and Environment** (Toronto, University of Toronto Press, 1985), is another attempt to develop a radical critique of the relations between humanity and Nature. In doing so, he covers much interesting terrain, focussing on the questions of how we do, and how we might, think of our world. He starts with a question which may surprise some: why has the environmental movement failed? After all, some think that it has been remarkably successful in a relatively short time. But this is to fail to notice that wilderness has become the crowded domain of four-wheel "off the roaders" and snowmobiles, surrounded by alpine condominiums. Debates about the "environmental impact" of proposed developments rarely lead to the abandonment of projects, but merely to attempts to "minimize" their environmental impact through minor changes. Virtually all public discussion of environmental issues proceeds within the ideology of "resource conservation." Nature is construed as an objectified instrument of human gratification. In reality, according to Evernden, nothing has changed, because majority attitudes towards the non-human have **not** been challenged.

The problem, in part, is that environmentalists have traded their radical vision for the hope of marginal "successes" and, in doing so, have lost the **real** battle. "The kind of evaluation permitted by our societal institutions is simply too narrow to accomodate the [real] concerns of the environmentalist." (Ibid. p. 10-11.) Although these institutions do not simply "mirror" the attitudes of most industrial people, since they rest on coercion as well as consent, it is true that the marjority simply, and usually unreflectively, regards the nonhuman world as valueless and open to whatever exploitation is "prudent." This problem will be experientially clear to anyone who has tried to "sensibly" speak for the inherent worth of a forest at a public hearing. Evernden gives a good example of the problem. When one expresses support for an endangered habitat or species, someone may ask "what good is it?" His suggested reply is worth repeating: "Perhaps the best the environmentalist can hope to do is to reply: 'what good are you?'---not to insult the other but to ilustrate the absurdity of our presumption that one being's existence can be justified only by its utility to another." (Ibid. p. 12.)

One of the problems is that we live within a culture dominated by the assumption that Nature is simply a collection of things to be used at our will. Just as physiologists often cut the vocal cords of animals they are about to operate on so their cries will be silent, "in denying our immediate experience in deference to [science's abstract definition of Nature]. . .we have gone some way towards cutting the earthly vocal cords ourselves." (Ibid. p. 18.) Under this dominant cultural assumption, ecology has been tamed into a science which, in its striving for legitimacy, has conceptualized Nature as a mechanism. It becomes simply a tool in "maximizing" the exploitation of the Earth. In this situation, Evernden endorses deep ecology's call to express an alternative to the concept of a neutral world of mere "resources." He calls upon the environmentalist to cast aside the old map and "attest to his own experience of a meaningful, valuable, colourful world." (Ibid. p. 33.)

Starting from an understanding of environmentalism as a failed movement, Evernden looks for the conceptual roots of a new image of humanity and Nature. Thus arises the question of the nature of the self. We remain trapped within a Cartesian framework, one which separates existence into individual egos surrounded by mathematically describable and meaningless Nature. To recover an alternative philosophy of the self, Evernden draws upon Husserl, Heidegger and others. When we withdraw from categorized experience and seek to discover preconceptual experience, we discover ourselves already in the world and always conscious **of** our world. We are always **already** involved. Pursuing this line with the help of Heidegger, Evernden comes to a conception of the self as a field of care or concern, rather than a Cartesian ego. From this perspective, the self is a "gradient of involvement in the world," rather than a static ego. This new self understanding also opens to

another understanding of the world rooted in our **our** lived experience, rather than in the conceptual abstraction of science's "Nature."

Working out from the phenomenological understanding of the primacy of the life-world, Evernden suggests another type of ecology, one of subjects. This suggests, along with the understanding of the self as a gradient of concern, a focus upon literal interrelatedness, as brother and sister are related by "non-physical bonds of commitment." This amounts to a reversal of the Gallilean image of the real as what would be without life (no secondary qualities), instead mapping the world with the subject at the center of the stage. Using this starting point, Evernden discusses the importance that humans have come to place upon their visual world. Our idea of objectivity is based upon our reliance on vision as the most important sense. Vision allows distance and objectivity, but it also conceals. "Vision permits us the luxurious delusion of being neutral observers with the ability to manipulate a distant environment." (Ibid. p. 84.) One thing lost when we rely on vision is relatedness: "the loss of intimacy and immediacy entailed in our achievement of objectivity could with some justification be cited as the major motivation for the environmental movement. . .[the stance of objectivity] denies what is most basic to the movement: relationship. . .we become persons who are unable to hear the world of life." (Ibid. p. 101.)

The stance of objectivity obscures the context, the whole, the pattern within which the pieces exist, and without which they are not "pieces." It is humans' selective attention which is one of the roots of the very **possibility** of an environmental crisis, for it is at the root of the very existence of an "environment." "The environment exists because it was made visible by the act of making it separate. It exists because we have excised it from the context of our lives. . .Nature is no longer a part of that which defines our existence and which reveals the phenomena of daily life; it is transformed from a definer and revealer to a thing defined and revealed." (Ibid. p. 126-127.) This change precedes and makes possible science and its mechanistic image of Nature.

The point is that there is always a larger context within which meaning occurs, wherein problems are defined and possibilities perceived. We have gotten the context wrong by creating an "environment." Once the "story" has been chosen, then the range of possibilities have been defined. Our freedom is in choosing the "story." "Having chosen a locust-story as his own, the apparent range of choice is delimited by that central theme; we can only choose what seems 'sensible' to a locust." (Ibid. p. 132.) Evernden's point is that the real problem is far deeper than the "problems," for it lies in the very way we understand ourselves and the world. Given our mechanistic conception of the world, we can find there no basis for reciprocity or relationships, and we make ourselves strangers in the world. This is the root. "Given our choice of a subject-less world, it is unlikely that any amount of good intentions can diminish our consequences to the biosphere." (Ibid. p. 137.)

What is to be done? The question is the problem! Categorizing the world into problems and solutions "characterizes our conventional world-view and condemns us to continue in this path of existence." (Ibid. p. 140.) What is left is the possibility of backing out of our concepts, developing "wonder," experience without categories. This is a solitary task without any clear direction or known ending. It is the suspension of the locust story and awaiting to see what other story arises. "In encouraging wonder we simply prepare the ground for the public germination of an idea that may have lain dormant, or semidormant, in our society for a very long time." (Ibid. p. 142.) The one "practical" suggestion that Evernden does offer is based on his idea that environmentalism is really about Being, about "the inseparability of self and circumstances." In that case, one positive step would be shedding the fundamentally misleading label of 'environmentalist.' "The demise of 'environmenalist' may be a first step in the cultural mutation." (Ibid. p. 144.)

The Ember and the Stars

Starting from a different philosophical perspective, Erazim Kohak's **The Ember and the Stars: A Philosophical Inquiry into the Moral Sense of Nature** (Chicago, University of Chicago Press, 1984) is both artfully integrated philosophical-poetic meditation on humanity and Nature, and a radical critique of our present relations with Nature. The book is skillfully constructed by intertwining Kohak's particular experiences of living in an isolated cabin, along with deep reflection on humanity and Nature from a personalist philosophical perspective. More than provide an extended argument, the author has attempted "to evoke and share a vision." (Ibid. p. xiii.) Kohak, along with Devall, Sessions and Evernden, sees our pressing need for a greater clarity of vision, rather than merely more careful argument. Thus,

> in our preoccupation with **techne** we stand in danger of losing something crucial---clarity of vision. Surrounded by artifacts and constructs, we tend to lose sight, literally as well as metaphorically, of the rhythm of the day and the night, of the phases of the moon, and the change of seasons, of the life of the cosmos and of our place therein. The vitsl order of nature and the moral order of our humanity remain constant, but they grow overlaid with forgetting. We come to think of

> a mechanistic construct, ordering a world of artifacts, as 'nature,' losing sight of the living nature of our primordial experience in which boulders, trees, and the beasts of the field and forest can be our kin, not objects and biomechanisms. (Ibid. p. x-xi.)

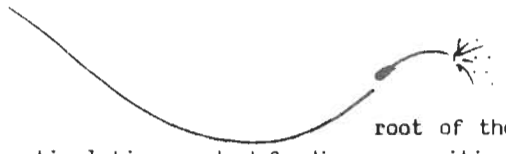
In a variety of ways, Kohak carries through on this fundamental point. Thus, he argues that Western humans, in the last few centuries, have become deluded into seeing themselves as "strangers contingently thrown into a meaningless, mechanical world." (Ibid. p. 11.) This development is due **both** to the development of a scientific construct mistaken as Nature---instead of taking the world as experience---**and** the **realization** of this in the construction of a world of artifacts within which most of us live out our daily lives. The solution Kohak attempts is a "radical bracketing," a bracketing which includes the Husserlian bracketing of constructs, but goes beyond Husserl to include a "**practical bracketing**" of the world of artifacts. Thus, Kohak writes from a cabin in a forest clearing outside the electric grid and paved highways---his practical bracket. "In such a context, the place of the human in the cosmos stands out in unobscured clarity." This sense is obscured in the world of artifacts, and our alienation from the cosmos is "the by-product of the fogetting which becomes so easy," when technology and its products distorts the bond between humans and their world. Of the many tasks of philosophy, the most urgent may be "uncovering the forgotten sense of the cosmos and our lives therein." (Ibid. p. 26.) Thus, again we find a philosopher claiming that we have lost our connectedness and vision, become rootless strangers befouling the world, and that our intuitions have become clouded and untrustworthy.

From this stance of "practical bracketing", Kohak writes persuasively of the concrete **experience** of a moral sense of Nature. It is not "simply there" but rather it has "its own intrinsic sense. . .an integral mode of being." (Ibid. p. 69.) But further than merely a sense, it has a moral sense: "the reason why humans ought not to devastate nature is not simply utilitarian. . .More deeply it is **moral**: to destroy heedlessly, to pluck and discard, to have and leave unused, is an act of profound disrespect to the eternal worth of nature. . .the sense of nature as humans encounter it in radical brackets is also moral, a presence of value." (Ibid. p. 72.) It is a measure of the depth of argument of the book that Kohak's meaning in this claim cannot be briefly explained. Among other things, Kohak believes that our ordinary use of 'moral' has trivialized the concept, and that we have misconstrued the basic questions of ethics over the last three centuries. Our problems now require a remembrance of a moral consensus of humanity, which we have mistakenly come to see as arbitrary, in part because we **do** live within the arbitrary patterns of a constructed urban space.

Kohak's rejection of anthropocentrism still leaves the question of the proper role for humans within the moral order of Nature. What is humanity's role? From one perspective, humans are simply one element of the natural order and are good as such, just as is the boulder or the snake. Given our destructiveness, "it is a free gift, agonizing for being so painfully undeserved." (Ibid. p. 93.) But from another perspective, we are also "intrinsically temporal" creatures who make choices. "We must bear the responsibility of stewards, daring to make decisions and learning to recognize that there is not only the absolute value of being, but also the relative value of beings in the order of time." (Ibid. p. 99.) This, of course, means that humans **can** make a difference for the better, even if we haven't been doing so lately. Yet Kohak goes further and sees more than stewardship, he sees the need for love.

> Humans are justified by the power of their love to bring the world alive, to give things the love, care, and use they need for their fulfillment. . .[it] is not a matter of taking possession of the world but of making it our own in a bond of mutual belonging. (Ibid. p. 108.)

The latter part of **The Ember and the Stars** is a development and defence of a philosophy of personalism. By this Kohak means that we must choose between taking the "person" or "matter" as **the** fundamental metaphysical category or as the root "philosophical metaphor." Is the "order of the cosmos. . .ultimately causal or moral?" (Ibid. p. 126.) This philosophic foundation cannot here be discussed adequately. What can be praised is Kohak's courage and persistence in going to the



root of the issue and articulating and defending a position. Even more fundamental is Kohak's admission that all he offers is a start. He concludes with a "credo," not conclusions, and this is because he is trying more to articulate some "incoercible givens" from which a reconceptualization of nature must begin, rather than final conclusions. "The search for a more adequate conceptualization of nature and our own humanity must, I am convinced, begin with a radical seeing, encountering the cosmos and ourselves within it in the full richness of meaningful experience." (Ibid. p. 182.)

From this new vision, we might begin to "repersonalize" our world. Such a process includes seeing the inanimate world as "not an impersonal store of raw materials from which to take but rather a personal world to which to give. If we honor it, we may become less affluent for it, yet also far richer." (Ibid. p. 212.) This process of repersonalization perhaps comes more easily in our relations with the animal world, which involves approaching it with respect, not simply convenience. So too must the world of persons be repersonalized. Can all this succeed? Kohak suggests that, particularly in the light of the ambiguity of "success" in twentieth-century "revolutions," we may need to redefine success.

> The fulfillment of life cannot be in its future. That future is always an end. We know that: we ought not to wonder that something perishes. We hurt when we forget that the point of life is not that it should last forever. Its overlooked wonder is that once it was; there once was a man, there once was a racoon. This is the miracle, that is the point. (Ibid. p. 218.)

Final Reflections

Although these three attempts to develop a radical critique of our relations to Nature all start from different places and use quite different sources along their paths, they all arrive at the same clearing in the forest. They all are articulate protests against the radical break between humanity and Nature which we have thought, constructed, and lived in the last few centuries. They all urge a return to the concrete experience of being-in-the-world prior to conceptualization, and they all see this as a solitary task each of us must do on our own. Further, they all agree that such experience brings a clear sense of a vibrant and meaningful world infused with value. From the base of this solitary experience of the world, we may collectively start to recover the sense of connectedness and love which could begin the journey toward refinding our place in the Cosmos.

In the end, what is required is a transformation of experience. We may see this new experiential base for environmental philosophy as a renewed "vision," or as growing out of "wonder," or the cultivation of "ecological consciousness," but what all involve is a radical transformation of experience. Although all the authors recognize this need for transformation, they have very little to say about how such a transformation can actually be carried out. While such transformation cannot be reduced to a recipe or technological formula, we need to address the problem of what sort of advice can be given to those who seek to harmonize their relations with Nature. In exploring this approach to environmental philosophy, the relevance of Eastern approaches to life looms large. Eastern thought and the personal practices recommended there reflect several millenia of focus upon personal transformation. Such practices as yoga and meditation are aimed precisely at transformation from a self-centered state of consciousness to a state of consciousness extending outwards to include what is beyond the individual. Increasing attention to the problem of the transformation of consciousness may help develop modes which will work in the West.

Some of the problems for such a direction for environmental philosophy need to be recognized at the outset. The call for personal transformation, correct though it may be, is limited in two directions. First, it is unpersuasive except to those already open to such change. The scope and depth of our crises are such that by the time that the necessity for change becomes obvious to the majority of people, it will be too late to avoid much suffering. Secondly, the call for personal transformation is apt to ignore the ways in which societies change. This is one lesson which can be drawn from the experience of many "new age" communities. The focus on personal transformation can easily degenerate into a self-absorbtion with little effect beyond one's personal life. Personal transformation does make a difference, but it seems unlikely to make enough of a difference. Those who understand the fatal flaws in our relations with the rest of Nature need to direct their attention to the processes of social change, as well as to the processes of the transformation of consciousness. We need to understand the processes of socialization, such as the family and schooling, as well as understand the economic and political forces which propel industrial civilization. Then we need to find ways of acting within those settings without reinforcing the dominant forms of thought and action. How to do all this is not clear, but it is clear that it must be done.

Andrew McLaughlin is with the Department of Philosophy at Lehman College, Bronx, N.Y., 10468. In the Winter 1987 Trumpeter we had a note on the special issue of Philosophical Inquiry on philosophy and ecology which he edited. It is a representative collection of articles by

philosophers working in environmental philosophy. Available from him for $8 U.S.

THE VIEW FROM ETNA: A SEARCH FOR ANCIENT LANDSCAPE APPRECIATION

By J. Donald Hughes

I. The Ascent of Etna

In an old alchemy book there is a print of Mt. Etna with snow on its summit and smoke rising into the atmosphere. Below it is written gelat et ardet, "It freezes and burns,"[1] the conjunction of opposites at a single point. Such a place held fascination for the Greeks and Romans, and there were many who were drawn to it.

The reason that the ancients gave for climbing mountains were varied, but the famous answer, "Because it is there," was not among them. Probably the strangest reason was attributed to Empedocles, the philosopher, who "set forth on his way up Etna; then, when he had reached it, he plunged into the fiery crater and disappeared, his intention being to confirm the report that he had become a god. Afterwards, the truth became known, because one of his sandals was thrown up by the flames."[2] Few ancient writers believed that story, because of its inherent absurdity and the fact that it was told by Empedocles' rivals. But no one doubted that Empedocles could have, or would have, climbed Mount Etna, the highest active volcano in the Mediterranean basin. Indeed, it was something one could have expected of him, he who was first to arrange the elements in opposing pairs: wet and dry, cold and hot.

Others climbed Etna. Seneca did so by proxy; having heard that his friend the younger Lucilius, was about to travel to Sicily, he wrote him to ask if he would climb Etna and see if the mountain was shrinking or its flames diminishing, as report had it.[3]

Even a mountaineer of imperial rank, the Emperor Hadrian, "climbed Mount Etna to see the sunrise, which is many-coloured, it is said, like a rainbow."[4] Hadrian was Rome's most famous alpinist, having also ascended Mount Casius in Syria by night, again "for the sake of seeing the sunrise." There he made a sacrifice on the summit, but "a rainstorm arose. . .and a thunderbolt descended, blasting the sacrificial victim and the attendant."[5] Obviously Jupiter himself had taken a hand. Another time Hadrian climbed the mountain of Pontus from where Xenophone's soldiers, on their long difficult march out of Persia, had gained their dramatic first view of the Euxine Sea, shouting, "Thalatta, thalatta!"[6]

Perhaps the most oft-recalled ancient ascent was that of Mount Haemus by Philip V of Macedonia, who had been told that both the Pontic and Adriatic seas could be seen from the top, and so thought that he could plan his military campaign from there.[7] He was disappointed.

If the impression one gains from a list of famed ascents like these is that the ancients only rarely climbed mountains, the impression is wrong. Etna was a usual sight to be "done" by the able-bodies tourist in Sicily. As Starbo the geographer remarks in passing, "Near Centoripa is the town of Aetna, ...whose people entertain and conduct those who ascend the mountain; for the mountain-summit begins here."[8] And not only Etna was so treated; the traveler-guide Pausanias gives advice on various routes to the summit of Parnassus where "the Thyiad women rave...in honour of Dionysos and Apollo."[9]

In all this ancient mountain-climbing, several motives, often mixed, can be discerned. There is the military-utilitarian motive: to see the lay of the land, plan campaigns, or seize the high ground. Then there is the historic-touristic motive: to visit the place where a famous event happened. In addition to these motives, there are three that may help us to understand Greco-Roman conceptions of the landscape. First, the aesthetic motive: the mountain is a viewpoint that enables the beholder to see what is beautiful: a great mountain and the far-flung landscape and the effects of sun and cloud visible from it. Second, the religious motive: the mountain is a sacred place where the gods are worshipped. And third, the scientific motive: the mountain is an interesting phenonmenon to be studied, and from it may be seen a number of other things; that is, the mountain is an observatory where knowledge may be gained and curiosity satisfied. In the balance of this essay, we shall discuss each of these, and conclude by asking whether they enabled the ancients to appreciate the landscape ecologically or not.

II. The Serene Countenance of Olympus

If Empedocles made an ascent of Etna, we can believe he did so to admire the beauty of the peak and the view. His sensitivity to the visual splendor of the high country is clear because it was he who said, "The sun flashes back from Mount Olympus with serene countenance."[10] The image is clearly that of the glory of dawning sunlight reflecting from a mountin summit. At this point we must reject the temptation to amass a series of quotations to prove that the Greeks and Romans did, in fact, think that lanscape was beautiful. Others have done this already, and have waged with proof-texts the battle over whether the ancients admired scenery or not.[11]

The problem seems to be that these nineteenth and early twentieth century scholars wrote within the context of a romanticism that delighted in escstatic descriptions of nature. Poets and prose writers of the time expatiated on "Mountain Gloom and Mountain Glory."[12] When they turned to the Greeks and the Romans, they found that these percursors of Western civilization did not do this

very much. So some Victorian aestheticians concluded that ancient writers lacked true landscape appreciation, while others scoured classical literature for loci to demonstrate that Homer and Virgil had anticipated Wordsworth. Neither side had it right; the task rather should be to establish how the ancients viewed landscape, and by extension the natural world.

They distinguished three major kinds of landscape, according to the ways in which they were used, or not used, by human beings. First there was the town or city, polis, urbs, the landscape occupied by and most altered by human beings. Citizens were expected to love their cities, though a Theban, Pindar, could extol the beauty of Athens. But when Pericles told his fellow Athenian, "What I want you to do is to gaze every day on the visible glory of our city until you become lovers of her power,"[13] he was hardly speaking of the charm of the urban landscape, even if the edifices he had caused to be built on the Acropolis did, as Plutarch was to say, "breathe with an eternal newness."[14] Athens was notorious for narrow, winding streets and a general lack of planning. And Rome, for all her temples, ampitheatres, and basilicas, was an urban environment unpleasant enough to make longing for the country a literary commonplace.

The second landscape, the productive rural area where the results of human labor were evident, was divided into three district categories, mixed as they might be in the actual countryside. Cultivated land was aroura or ager, fields bearing crops both annual and perennial. No one denies that the Greeks and Romans found that a pretty sight. As Homer says of the horsetamer Bellerophon, "...the Lycians meted out for him a temenos pre-eminent above all, a fair tract of orchard and ploughland, to possess it."[15]

Next was grazing land, nomos or saltus, with its herds of sheep, goats, cattle, equines, and swine. This is also a landscape admired for its beauty and usefulness by every rural pen from Homer through Theocritus to Ausonius. Then they distinguished hyle or silva, woodland, forests used as source of fuel, timber, and fodder. Here the aestheticians are less certain. Forests can be beautiful, but the younger Pliny regards them as impediments to the view of cropland, and the useful woodlot of the farmer, if one goes too far, may imperceptibly intergrade into the impassable Ciminian Forest.

This brings us to the third landscape, wilderness: eremos or eremia in Greek; deserta, solitudo, or vastitas in Latin. These words all refer to the emptiness of the land, its lack of people. This is the touchstone of the ancient landscape aesthetic and the crux of the traditional argument over their view of nature. Did they fear and avoid the wilderness? Or simply ignore it? Were they capable of delighting only in a visibly humanized landscape? Ruskin and others thought the answer to the last question was yes.[16] To look at the ancient experience with mountains is therefore a good test case of attitude, since a mountain peak, particularly an active one like Etna, is the quintessential solitude, the place without human inhabitants.

One of the terms used to designate a mountaintop is skopia, a lookout, a place from which to gain a view. Lynceus, the sharp-eyed one, "Went to Taygetus...and climbed to the summit, where he overlooked the whole island of Pelops."[17] In describing the towering hill of Acrocorinth, Strabo says, "From the summit, looking toward the north, one can view Parnassus and Helicon---lofty, snow-clad mountains---and the Crisaean Gulf, which lies at the foot of the two mountains."[18] Here Strabo does not wax eloquent about the beauty of the far-flung scene, but there is no doubt that he saw it and thought it worth recording. It was what we would call a wild landscape and the aesthetic use of that landscape was to view it with the human eye.

Only twice in all Greek literature are mountains explicitly called "beautiful" (kalos). One is in the **Homeric Hymn to Aphrodite**, where Anchises speculates, "Maybe you are one of the nymphs that inhabit this beautiful mountain."[19] The other is in the **Critias**, where Plato says that the plain in mythical Atlantis was surrounded by "beautiful mountains".[20] This is hardly enough to build an aesthetic on, although Greek had other choice adjectives for mountains, such as "blessed" (eudaimon). And one recalls the view from Acrocorinth when reading these words addressed to Apollo: "All mountain peaks and high headlands of lofty hills and rivers flowing out to the deep and beaches sloping seaward and havens of the seas are your delight."[21]

The Romans were slightly more generous in their praise of wild scenery. Virgil, for example, exclaims in the **Georgics**: "How fair the sight of firtrees, mountain-born, /And beauteous lands that owe no debt or wage /To implement of man..."[22] And in the **Aeneid**, he calls the roll of mountain peaks: "Great as Athos, great as Eryx, or as father Apennine himself, when he roars with his gleaming oak-forests, and rejoices in lifting his snowy summit to the skies."[23]

We have now answered in the negative the question as to whether the ancients ignored wild scenery. We have shown that some writers sometimes admired and praised beauty in all the types of landscape.[24]

But if the ancient traveler gained a summit to make it a viewpoint, a human eye had been placed in the center of a scene. What that eye saw would be organized and understood in human terms. In the passage from the **Aeneid** just quoted, the mountains are treated anthropomorphically, or at least

theriomorphically. Virgil does this in a conscious metaphor, but it is something human beings do all the time; that is, they project the archetypes of the human mind on nature. Is father Apennine a mountain, a human father, a roarying hairy animal, a monster, or a god? He can be any of these, but however the ancients imaged the landscape, they did so in terms of its relationship to human beings. Thus their categories of landscape are not according to ecosystems as the forms and species found there. An oak forest, for example, could equally be eremos if unused, hyle if logged or visited by charcoal-burners, and nomos if pigs were customarily driven into it to forage on the acorns. The distinguishing factor is human use, and although both could be thought beautiful, the fundamental dichotomy is between the wilderness and the inhabited land.

III. Zeus' Pillar Piled on Typhon

If Empedocles ascended Etna because he wanted to be thought a god, we may say that the association of mountain and god was a close one in ancient minds. It was a particularly dramatic association in the case of Etna, because the myth of Etna represents the opposition between sky and earth.

Zeus was king of the sky, but he had gained the throne by a coup, having overthrown his father Kronos, the son of Earth, who had himself earlier usurped the place of his own father Ouranos. Earth took Kronos' side and sent an army of her children, the giants, against Zeus and the other gods. During the war, the giants piled several mountains on each other in an unsuccessful attempt to storm the sky. Their defeat prompted one last act of revenge by Mother Earth, who deliberately conceived an awesome monster, Typhon, in the Corycian cave, an obvious symbol for her womb.[25] Typhon is the quintessential monster, with a hundred heads, arms a hundred leagues long, vast wings, and the ability to vomit fire and flaming rocks. In other words, he is a dragon related to every other fearsome monster in Greek mythology, including the Python (Python-Typhon, not an impossible metathesis in Greek). He is counterpart both of the Egyptian Set, the enemy who dismembered Osiris, and of the Babylonian Tiamat, the chaos-dragon whose dismemberment by the hero-god Marduk resulted in the original division of sky and earth.[26] His name came into English as "typhoon".[27]

Initially Zeus' thunderbolts were of little use against Tyhon, who seized the sky god and dismemberd him by removing his tendons and hiding them in a bearskin (the bear, who spends winter underground, is Mother Earth's animal). But Hermes, the trickster, with the aid of Pan, the nature-god, managed to reassemble Zeus and the battles continued. It is interesting to note that mountains were both locale and weapons in these battles. Finally Zeus threw the monster down and piled on top of him Mount Etna, which thus became "the wind-swept trap of brutal Typhos".[28] The eruptions of Etna come from Typhon's fiery screams as he rages helplessly. But the flames have a positive use: they power the forge of the metal-working fire god, Hephaestus. Etna is seen as the location both of god and titanic anti-god, and is at the same time their battleground and the place where sky-born and earthly energies combine in a work of creativity. Mythologically, then, the ancients saw a particular feature of the landscape as the topos of opposed and contending forces. Of course, it was not only Etna that so figured, since every major peak had its own myth or myths, and they are far too numerous even to summarize here.

That the gods inhabited mountains was commonly known by every school child until a few years ago, though nowadays one can't assume that college freshmen will have heard of Mount Olympus. But it wasn't just Olympus. Every prominent hill was believed to have a deity in residence, so that it was a natural thing to ascend them to visit the gods. Could this have been because mountains are landmarks, and therefore places of guidance? Dodds reminds us that the poets Hesiod and Pindar received divine inspiration on mountains, and that Philippides met Pan on Mount Parthenion.[29] When Romulus and Remus wished to observe the auspices, they climbed hills. Many peaks had temples on top, and although Zeus was the predominant god of such places, with sanctuaries atop Athos, Lycaeum, and Atabyrion on Rhodes, to take only three examples, there were also summit-temples in various places dedicated to Athena, Hermes, Aphrodite, Artemis, and others.[30]

These mountain sanctuaries are examples of a more general tendency to see certain places in the landscape as touched with sacred power in a special way. Each of these had a genius loci, a deity of the locale. I wish to suggest that these were spots where two distinct elements came together in a notable configuration. With springs, it was earth and water; with boundary-stones, two dispensations of the land; with mountains, the upmost point of the earth's gesture toward the sky. Where two opposing principles could be perceived together, the ancients saw a god's presence.

For the earliest inhabitants of the Mediterranean lands, the ancestral hunters, the landscapes themselves had been godscapes. Mountains were preeminent features of a sacred geography, not exclusively hallowed points. But all this had changed by classical times, and the dichotomy of dedicated areas and ordinary profane land was sharp enough to be marked by a temenos wall.

It is of the greatest interest to note that the gods' land, the land of the upper slopes of the mountains or within the temenos, was treated as eremos, wilderness. The human uses that distinguished the other types of landscape, that is, cutting of trees, grazing, cultivation, and the erection of dwellings, were forbidden not only by traditional custom but also by legal enactments which are witnessed by many surviving inscriptions.[31] So by the classical period, it was wilderness that had come to be the quintessential godscape, the land of the gods.

The gods, of course, were believed to approve, support, and enforce this state of affairs. Everywhere environmental change was envisaged, the gods were perceived to be on the side of the status quo. Zeus, through the Delphic Oracle, put a stop to the canal-building project of the Cnidians.[32] When the Phocians cultivated a grove dedicated to Apollo, it precipitated the Sacred War.[33] These are historical, not mythological events. The Greeks believed Croesus' defeat at the hands of Cyrus to be the retribution of the gods for his diversion of the River Halys, and Xerxes' debacle in Greece to have resulted from his ordering his soldiers to flog the sea, letting his army drink rivers dry and set sacred forests on fire, and instigating violations of the temene of the gods.[34]

But the demesne of the gods gradually shrunk, and the dichotomy between sacred landscape and profane landscape proved to be a fatal one to the landscape in general. By the time Christians climbed the mountains to dismantle the last pagan chapels, or turn them into shepherds' shelters, Greek and Roman scepticism and legal cleverness had already found a hundred ways of circumventing the regulations that preserved the gods' acres.

IV. **Fire and Ice**

Now I want to speculate as to the real reason why Empedocles climbed Mt. Etna. It was to observe the mountain itself and associated natural phenomena. There Empedocles could study all four of his elements and their interactions at once: the great upheaval of earth; air in the winds that constantly sweep the summit; water in the melting ice and snow; and fire in the glowing seething caldera.

We do know that many of those who climbed Etna did so to study its vulcanism. The author of the poem **Aetna** developed a scientific theory of how eruptions are engenedered within a volcano that is little closer to the truth than the story about Thyphon. When Strabo, the geographer, describes the ascent of Etna, he says nothing about the wider view, but describes the appearance of the crater in detail and tells how the smoke and fumes rise into the air in a column.[35]

Such a use of mountains as observatories of the physical world was common among philosophers. Philostratus tells us that Anaxagoras used to climb the mountain Mimas to study the heavenly bodies, and Thales similarly ascended Mount Mycale.[36] Others, he continues, scaled Pangaeus or Athos. Lucretius reports that he himself climbed mountain trails and observed that heights are windy places.[37]

Among the facts the protoscientists tried to ascertain were the elevations of the mountains themselves. Apparently Aristotle's student Dicaearchus was the first to do this, followed by Apollodorus, Xenagoras, Strabo, Pliny the Elder, and others.[38] Although the figures they gave were wide of the mark as a rule, it is worth nothing that they undertook the effort. Xenagoras, it is said, "did not take his admeasurement carelessly, but according to the rules of techne, and with instruments for the purpose,"[39] but the actual methods used are nowhere described.

Today scientists will travel thousands of miles to observe a solar eclipse; in ancient times they would scale a mountain to view the sunrise. The fact that from a mountain crag the sun could be seen to rise while darkness still reigned in the depths below was a cause of wonder to the ancients. Strabo says, "Mount Athos is...so high that on its crests the sun is up and the people are weary of plowing by the time cock-crow begins among the people who live on the shore."[40] This was, of course, one of the reasons adduced for believing in the sphericity of the earth. Observing it caused difficulties for the climber. Hadrian ascended Casius by night so he could see the sunrise, but on Etna he apparently had a shelter house built so he could sleep overnight on the summit.

From the standpoint of ecology, the most important observations made on mountains were the botanical studies of Theophrastus. Mountains have proved to be excellent outdoor laboratories in which to observe "life zones" and microclimates, and this was known to Aristotle's great student and successor. "On great mountains such as Parnassus, Cyllene, the Pierian and Mysian Olympus, and such regions anywhere else," Theophrastus observed, "all kinds (of plants) grow, because of the diversity of positions offered them. For such mountains offer positions which are marshy, wet, dry, deep-soiled, or rocky; they have also their meadow land here and there, and in fact almost every variety of soil; again they present positions which lie low and are sheltered, as well as others which are lofty and

exposed to the wind; so that they can bear all sorts."[41] He also noted the presence of unique plants ("narrow endemics") isolated on particular mountains, and that "different mountains have their own forests".[42] Even on the same mountain, he knew, the exposure will produce differences: "Wild woodland is more beautiful and vigorous on the north side of the mountain."[43] This, by the way, is true in Greece. Theophrastus' comments are clearly the result of his personal observations on mountains he had climbed himself.

Theophrastus' observations about the ecology of mountain plants are examples to fit his more general theories concerning the influence of topos (place, the local environment) on plants, their presence and their habits of growth. Others noticed the same phenomena, although none commented on them as perceptively and systematically as Theophrastus.[44]

Theories of environental influences analogous to those Theophrastus advanced for plants could be made also for human beings, and his **characters** is worth study in this light. But others had speculated on the formative power of topos on people, most notably the Hippocratic author of **Airs, Waters, Places** and Plato in the **Laws**. "Some localities have a more marked tendency than others to produce better or worse men, and we are not to legislate in the face of the facts," says the latter, implying that nomos, human culture, must be altered to accord with the natural environment in a particular place, or topos. "Some places, I conceive, owe their propitious or ill-omened character to variations in winds and sunshine, others to the waters, and yet others to the products of the soil, which not only provide the body with better or worse sustenance, but equally affect the mind for good or ill." Plato continues, and then makes a very mysterious comment: "Most markedly conspicuous of all, again, will be localities which are the homes of some supernatural influences, or the haunts of spirits who give a gracious or ungracious reception to successive bodies of settlers. A sagacious legislator will give these facts all considerations a man can, and do his best to adapt his legislation to them."[45] These sentences seem to offer us a Platonic version of geomancy, the ancient science known best in China which claimed to locate the best site for a town or building with reference to the spiritual energies found in the features of the landscape. As we shall see, the Greeks evidently practiced geomancy when deciding how to place and orient a temple, but I have never seen this passage from Plato explained in those terms.[46] Clearly, this is not the Plato we know best.

One could follow the history of environmental influences on human physis and nomos down through Roman times, with Cicero's assertion that Rome's climate and location destined her to rule the nations, and the advice of city planners like Vitruvius to lay out streets, squares, and buildings in accord with exposure, winds, and drainage. But I believe it will be more rewarding to recognize that we have passed from the sphere of observation to that of making general statements, that is, from science to philosophy. It will be useful at this point to remind ourselves of some of the ways of thinking about nature which are characteristic of classical antiquity.

V. Love and Strife

Empedocles postulated two basic and opposed principles in the universe, eros and eris, love and strife. The one holds a mountain like Etna together; the other threatens to tear it apart. The elements in their neatly opposed pairs---earth and air, fire and water---are brought into union by eros or separated by eris.

This careful making of distinctions, this arranging of ideas and qualities in balanced pairs, was the genius and also the mind-set of all ancient philosophy deriving from the Greeks. It described nature by establishing dichotomies. Even as ecologically oriented a thinker as Theophrastus operated entirely with this method. In his botanical writings, he tried to understand plants through a series of opposed qualities: cold/hot, moist/dry, thick/thin, strong/weak, male/female, natural/unnatural, wild/domestic, etc., to give only a sampling.[47] He approached human types in the **Characters** in the same general way.

The way in which the opposites in each pair of qualities exclude such others will be familiar to anyone who has read Plato and Aristotle. Although a third, intermediate state is always possible, the distinguished opposites exclude each other. Gray can partake of both black and white, but black can never be white.

So to return to landscape. The classical view will aways sunder nature from the human entity that beholds it. Now what, in ancient philosophy, divides humankind from nature? In Platonic and Aristotlian thought, it is the rational soul. And the distinction that is made is not that of man/nature, but of soul/nature. The human body is part of nature, so that the fundamental division is felt both within (soul/body) and without (soul/nature). Perhaps the ancients really did feel a sense of soul/body estrangement within, and projected that on the external landscape, where they saw it writ large as the soul/nature estrangement. The other ancient variations on this scheme do not really improve the relationship of human beings to the landscape. The mechanistic views deny the existence of the soul, or make it material, but instead of an interacting world of organisms, they see a concatenation of abstract and invisible atoms and void. The Pythagoreans broke the wall between human beings and other forms of

life by granting rational souls to animals and plants (at least), but the endeavor of these souls, whether they be entrapped in the bodies of humans, fish, or trees, was to escape through purification the state of physical incarnation altogether.[48]

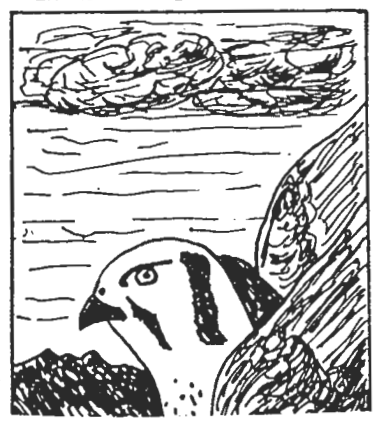
The failure in all of these views is that they both desacralize nature and rend the unity of the human organism. For them, the landscape is an assembly of transitory phenomena which has only derivative value. Thus it follows that the distinctions between the various kinds of landscape were as a matter of course made on the basis of human use, not on the basis of the species found there, their interactions, or even the landforms themselves.

Yet we must not leave it at that. The Greek and Roman heritage bulks large in our history, and it would be surprising if we could not find in it something more healing for an age that has done far worse things to the landscape than the ancients ever did, even counting the desertification of the Mediterranean margins and the deforestation and erosion of their heartlands.

Despite what we have said, the Greeks and Romans did not universally hate their bodies. Their education held as an ideal the perfection of mind and body together; mens sana in corpore sano. The Athenians admired as their cultural model the well-rounded man who could win an Olympic contest, command a navy, and write a play. Hippocrates taught that the physician must endeavor to find healing for soul and body as a single organism.

In the association of the body with the landscape, there were positive identifications. One of the words for a mountain summit, for example, is koryphe, which also means the crown on top of the head. So a mountain could symbolize the highest point, the acme of the body, in language. Similarly Delphi, on the side of the centrally located Mount Parnassos, was the place of the omphalos, the navel of the world. A great mountain could be a center-symbol, the axis mundi; this seems to be reflected in the name of Pangaios, a notable Macedonian peak, which means "all the earth". Vincent Scully has pointed out how the landforms were perceived as body forms, with breasts and hollows and masculine promontories, and that temples and other sacred locations were recognized and sited with reference to these shapes.[49] What temples and visible landforms represented on a local, symbolic level was the indwelling spirit of place. One recalls Plato's surprising excursion into geomancy in the passage from the **Laws** mentioned above. But Plato, following Pythagoras, extended the idea of a spirit inhabiting a place to the entire universe, which he envisioned as a living body inhabited by a world soul in vast organic unity. In this view every landscape forms a meaningful part of the whole, the wilderness no less than the oikoumene, the part of the world that is the habitat of humanity. Pluarch, remarking that most of the earth's surface is occupied by the sea, deserts, and other unihabitable areas, nonetheless maintains that these deserted places are essential to the health and vitality of the inhabited parts, since, for example, the sea's gentle exhalations bring rain to the land.[50] If the cosmos is a living whole, then human beings are part of that whole. Their bodies are part of nature and their souls are manifestations of the world-soul. So landscape as it represents the macrocosm, also has an affinity for, a oneness with, the microcosm, the human organism. We are still a step away from ecological consciousness here, since the image is that of an organism rather than a biotic community, but it seems closer to the ecological model than the other Greco-Roman image of the alien soul yearning for release from its bondage to the body.

The antidote for the alien soul is a sense of belonging in one's own place in the world, of being at home within one's own particular landscape. This is a feeling often reflected in ancient literature. Horace remarks, when far from his home, " coutryside mine, when will I see you again?"[51] Even when the poets complain of the disadvantage of their native places, one can hear a deeper love underlying it: Hesiod speaking harshly about poor infertile Ascra, for example, but cherishing his own earth. When one truly lives in a place, one becomes incarnate there. The soul is at one with a place, a soul-place, as the soul is at one with the body. Achieving this oneness, this wholeness, this health in the landscape is a kind of cultural therapy. Often it seems that the ancients expected it to happen in one of the humanized landscapes, but it could happen in the wilder borderlands, too. As Cicero remarked, "When we have lived there for some time, you and I come to take delight in forests and in mountains."[52]



There is a sense in which a mountain like Etna, as meeting place of fire and ice, sky and earth, could be seen as an emblem of the meeting of soul with nature. A landmark and guide for travellers on land and sea, it could also serve as the symbol for guidance toward integrity, a relationship in which the human individual, no longer an alien spirit, could be a true inhabiter of earth.

NOTES

1.C.G. Jung, **Psychology and Alchemy, Collected Works**, Vol. 12, Second Edition, (Princeton, 1968), par. 297, fig. 94.
2.Diogenes Laertius, **Life of Empedocles** 8.69.
3.Seneca, **Epistles** 79.2,3. On the evidence of this sentence, Lucilius was once thought to have been the author **Aetna**, the long Latin scientific poem about the volcano. (See section IV, first paragraph, below).
4.Scriptores Historiae Augustae, Aelius Spartianus, **Hadrian** 13.3 For the most complete collection of references to ancient ascents, see Henry Fanshawe Tozer, **A History of Ancient Geography**, Second Edition (Cambridge: Cambridge University Press, 1897. Reprint. New York: Biblo and Tannen, 1964), pp. 314-337.
5. S.H.A., **Hadr.** 13.12.
6.Arrian, **Periplus** 1; Xenophon, **Anabasis** 4.7.24.
7.Livy 40.21,22; cf. Strabo 7.5.1., who gives Polybius as source.
8.Strabo 6.2.8, C273-74.
9.Pausanias 10.32.7, cf. 10.5.1
10.Empedocles, fragment 44.
11.Among those who have discussed this subject are: John Campbell Shairp, **Poetic Interpretation of Nature** (Boston: Houghton, Mifflin and Co., 1889); Francis T. Palgrave, **Landscape in Poetry from Homer to Tennyson** (London: Macmillan, 1897); George Soutar, **Nature in Greek Poetry** (London: Oxford University Press, 1939); and Henry R. Fairclough, **Love of Nature among the Greeks and Romans** (New York: Cooper Square, 1963).
12.Marjorie Hope Nicolson, **Mountain Gloom and Mountain Glory: The Development of the Aesthetics of the Infinite** (Ithaca: Cornell University Press, 1959), pp.38-42.
13.Thucydides 2.43.
14.Plutarch, **Life of Pericles** 13.3.
15.Homer, **Iliad** 6.194-95.
16.Soutar, **Nature in Greek Poetry**, p.44.
17.Stasinus, **Cypria**, in Duntzer, **Die Fragmente der epischen Poesie**, p.13.
18.Strabo 8.6.21, C379.
19.Homeric Hymn to Aphrodite 98.
20.Plato, **Critias** 118B.
21.**Homeric Hymn to Delian Apollo** 22-24.
22.Virgil, **Georgics** 2.437-42.
23.Virgil, **Aeneid** 12.701-3.
24.It may be that in support of these assertions I have marshalled texts as I promised not to do, and I apologize.
25.Robert Graves, **The Greek Myths** (Harmondsworth: Penguin Books, 1955), Chapter 36; cf. 21.2.
26.In a Sumerian version of this myth, Kur is slain by Ninurta.
27.It is also the root of "typhus" and "typhoid".
28.Pindar, **Olympian Ode** 4.9, translated by C.M. Bowra, **Pindar** (Oxford: Clarendon Press, 1964), p.241.
29.E.R. Dodds, **The Greeks and the Irrational** (Berkeley: University of California Press, 1951), p.117.
30.Tozer, **History of Ancient Geography**, p.318; Pausanies 2.25.3, 8.17.1, 8.21.4; Strabo 6.2.6, C272.
31.I have discussed these in more detail, with references, in "Early Greek and Roman Environmentalists", in **Historical Ecology: Essays on Environment and Social Change**, edited by Lester J. Bilsky (Port Washington, New York: National University Publications, Kennikat Press, 1980), pp.47-49; and "Deforesstation, Erosion, and Forest Management in Ancient Greece and Rome", **Journal of Forest History** 26(1982): 71-71.
32.Herodotus 1.174.
33.This was the Third Sacred War, 356-347 B.C.
34.Herodotus 1.75, 7-8 passim.
35.Strabo 6.2.8, C273-74.
36.Philostratus, **Life of Apollonius of Tyana** 2.5.
37.Lucretius, **De Rerum Natura** 6.466-67.
38.Tozer, **History of Ancient Geography**, pp.336-37; Strabo 4.6.12, 8.6.21.
39.Plutarch, **Life of Aemilius Paulus** 15.7
40.Strabo 7, fragment 35.
41.Theophrastus, **Historie Plantarum** 3.2.5.
42.Ibid. 3.2.6.
43.Ibid. 1.9.2.
44.E.g. Virgil, **Georgics** 2.109-13; Palladius 1.3-4.
45.Plato, **Laws** 5.747D-E.
46.Vincent Scully, **The Earth, the Temple and the Gods** (New York: Frederick A. Praeger, 1969), p. 187, makes good comments on Platonic thought in general, but fails to note this passage.
47.Theophrastus' distinction of these pairs of characteristics is best in **De Causis Plantarum**, which has been translated by Benedict Einarson and G.K.K. Link, but only the first of three volumes has appeared so far (London and Cambridge, Mass.: Harvard-Heinemann, Loeb Classical Library, 1976).
48.For a full discussion of this, see J. Donald Hughes, "The Environmental Ethics of the Pythagoreans", **Environmental Ethics** 3 (Fall, 1980): 195-213.
49.Scully, **The Earth, The Temple, and the Gods.**
50.Plutarch, **Concerning the Face which Appears in the Orb of the Moon, Moralia** 938D-E.
51.Horace, **Satires** 2.6.
52.Cicero, **De Amicitia** 68.

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PLACE: HOME, TOWN, COMMUNITY

By Donald P. St. John

Wilderness is an in-depth experience of the spirituality of the Earth. The person who enters wilderness, however, usually has a long history of self-development centered not on space, but place. Place is not a grove of trees, a temple or a Cathedral; it is a room, a home, a town (or, in an urban area, a neighborhood). What one experiences in a pure, simple way in wilderness, one experiences in a more mediated, complex way in place. While wilderness puts us in touch with the wildness of Being, place puts us in touch with its enveloping, nurturing and formative qualities.

Wilderness is the horizon of place and its center. It bears witness to the creative energies of the universe which build the tissue of place and circulate through its body. While place helps form our individual identities, wilderness speaks of our universal self. Place is where the Earth in its human mode defines and refines itself. Although space is the source of place, it is in place that the values and virtues that will determine the destiny of wilderness are molded. Yet wilderness reminds us that place cannot define itself by itself but needs the larger cosmic-earth context to give it meaning, direction and purpose. Wilderness keeps place from becoming idolatrous.

Place is not an experience born with the rise of cities and towns. It is a primary mode of presence to the world of humans. In and through place one is awakened to being and the power of being. This power enables one to realize self-presence and to transcend self. Place enters the self to take up its abode there, to become the center that allows one to realize the numinous presence within. Place beckons one forth to be present outside of self and to experience the presence of and for others.

Place, then, empowers and invites one to be and to become.

The sense of place also grows through the confrontation with non-place. Non-place threatens one with lostness and meaninglessness. One wanders in non-place without any bearings or contact with the reassuring presence of familiar things. Non-place is the stuff of nightmares and childhood's frightening moments. Non-place as threat of non-being is not the same as other places. Even when other places are relatively unfamiliar to us, they can soon become place for us. Our developed sense of place "works" in another place.

The demonic perversion of place occurs when one experiences other places as threats. Place becomes idolatrous and unable to transcend and relativize itself. Pathology causes one to identify place with ego and both as opposed to "the other". The sense of place has been reduced to an obsession with a particular place.

Place is a gratutious gift and blessing of the Earth in its biocultural dimension. In its "external" contours and structures it is the result of billions of years of Earth development and various years of human effort. Place bestows self-identity as blessing and awaits the response of giving. The richness of place is increased as one blesses it and contributes to its vitality. This ecological cycle of mutual blessing is learned in place.

Blessing is likewise experienced in a new place. The culture, land, traditions and community are not the result of one's own creative activities, but are "given". If one is to make this place home, one must bless it and give to it from what one has received elsewhere, and from what is now receiving in place.

We are always discovering place/identity and creating place/identity. What had been given as blessing must now be reowned and claimed anew. This is impossible if one's model of one's life is that of "breaking away". This is to condemn oneself to be always in adolescence. It is neither an appreciation of the old or the new.

This new has little content if it is identified as merely an alternative to the old, nor has it any value as merely a negation of the old. A person who becomes victim to this process creates a false sense of self, identifying it only with the present social status or level of consumption. The result is a self that is out of touch with its own deeper dynamics and lacks a context within which to ground stability. This self becomes vulnerable to the manipulations of the marketplace and the latest social or intellectual fads. Moreover, cynicism regarding the supposed parochialism left behind makes the needed recognition of those abiding values and structures of self extremely difficult. Liberals are frequently at war with themselves simultaneously boasting of their liberation and cursing the superficiality of current society.

To leave one's place and to venture forth into and through other places does not negate the influence of place. That influence is basic to one's self-understanding. Frequently in midlife one feels the need to return to place, to remember where one has come from in order to understand who one is, so that the wisdom that should accompany later life is possible. We begin to understand that life is not only liberation, it is also gratitude for blessing and it is commitment, work and trust. An oak is an unfolding of a seed and not a liberation from it.

Place is not a zone on a developer's map, but a biocultural symbol implying continuity, attachment, relationships, care and responsibilty. Place joins past with future, ancestors with children. But it also joins culture and biology into a unique entity. Earth is embodied in and mediated by place, and so becomes present to humans in another mode. Although there may be thousands and millions of places, each is a unique joining of the human-cultural with the cosmic-ecological. It is a spirituality of the Earth, a metapattern for human individuals.

It is in and through place that the Earth forms the human mode of being. To view this wondrous process as simply a result of the contractual arrangements of atomistic individuals only reflects the non-ecological mode of consciousness into which we have fallen. Place, rather, is an organic pattern of entities and events, by which biocultural life sustains and perpetuates itself. If this particular embodiment and revelation of the spirituality of the Earth is allowed to function correctly, a child born within it will grow to experience an interconnectedness with and a care and concern for this wider dimension of itself.

A child's early sense of place is synonomous with home. Home is neither a collection of people nor a collection of things. Personal presence intertwines with the presence of walls, stairs, windows, doors and furniture to create a living world. Home plays an active role in the formation of self-identity. It weaves into the mind and heart a tapestry of color, sights, sounds, textures and odors. Years later, emotions can well-up when one smells a porch warming in the sun or catches the sight of a window aglow in the dark.

Home is a cultural achievement whereby succeeding generations transmit and explore the human mode of being. One generation acts as model and teacher for the next of the values, affections and behavior proper to home. The younger generation, through its own experience, shapes its special bonds with and leaves its own mark on home.

Because it is a cultural creation, home cannot be measured in quantitative terms. The richness of home is not equatible with or reducible to the market value of house. Where the sense of home has not been imparted or when external societal forces make ambiguous its value, the younger generation

may forsake it. The in-comparable nature of home becomes reduced to a consumer item competing with other buildings of comparable worth. Place is reduced to space, the currency of realtors.

Those who think of home as place will object to its being damaged because something of intrinsic value is thereby violated. Those who think of home as merely house and space will object to that action because it lowers the market value of the property.

As one's sense of place expands beyond home, it moves out to encompass and embrace neighborhood and town. A "hometown" is a place, i.e. a cultural and ecological whole. Homes, lawns, trees, gardens, parks, animals, plants, streams, streets, buildings and nests form into a complex living whole. A good town is a richly differentiated yet dynamic reality that interacts with various patterns of fields, forests, towns and distant cities.

Town as place is shaped by the work, traditions and visions of a community. The social relations and institutions that shape and structure a community and are shaped by it, also influences the particular sense of place absorbed by the young. For those who go through the "rites of passage", from initiation into a community to rest in its history, a town has a profound influence on their character. Correlatively, the continuity of the town as community rests with the image its offspring have of its value and therefore their willingness to commit themselves to its furtherance. If it is truly place, then most of its people will care for it and invest their time and talents in its future.

A town that is a place receives its distinctiveness, takes its shape and sustains itself through a rich interplay of humans, buildings, land, animals and plants. This history of a town is seen in the faces of its inhabitants, the architectural styles of its buildings and the relationship of both to the geological and biological elements within and around them. A town is alive with stories about its founders, ancestors, and local environs. Like traditional myths of the gods, these stories give a person a sense of identity and of participation in a living, colorful tradition.

For many towns and small cities, the organic connections and community spirit that flowed through them have been strained to the breaking point. The economic and social changes of recent years have led communities on various boom-and-bust scenarious. The boom itself began the unweaving of the threads of community.

One area this deterioration affected was that of local business. An integrated business life connects its owners on many dimensions with the life of the wider community. Business is a part of the community and serves the needs of the community. When chain stores, discount marts and surrounding malls take over, both the perceptions of the "owners" and "customers" change. Those who were once neighbors of the business people now become merely consumers. The humaneness of transactions becomes reduced to a one-dimendional quantitative exchange. The owners do not feel responsible to the community but to their superiors hundreds or thousands of miles away. The accounting ledgers of the home-office (a mystifying term) judge the success or failure of the local store strictly in terms of profit and loss. Other considerations, such as its contribution to or disruption of the local community are secondary or irrelevant.

A large corporation, like large technology, cannot adjust itself to the variety of places, each of unique, organic quality. It does not belong to any particular place and in turn reduces all places to points on a map linked by capital. If one point does not produce, another is started, since each is replaceable as parts in a machine. There is no stake in or connection with the past and future of the place within the dot site, for the dot is moveable and represents a transcendence of locale.

Even the frequent standardizations of architectural design makes one store indistinguishable from the others, no matter if in Allentown, Miamai or Des Moines. The procedures for erecting these monuments to anonynmity---especially if a mall---involves the plowing down of hills, the turning of parks into parking lots, and the piping of standarized music, unconnected with the tradition of the area, attempting to lull the consumers into a buying trance. Fast-food cooking replaces local cuisine, and self-service masks indifference and no-service. When genuine caring and personal relations disappear, then cliches and public relations gimmicks arise.

The center begins to lose its power to hold things together and dynamize the surroundings. Living, working, shopping and playing become detached from the town as a place for these activities. People who live in the town may drive miles to a shopping center or to their place of work. Recreation is not the spontaneous play of neighbor with neighbor, but is now handed over to specialists on T.V. The town as **place** begins to unravel as layer upon layer of interconnections are abandoned.

When the sense of community is destroyed in a place, either by its members submitting to the propaganda of the uprooted or by the influx of opportunists, one's whole sense of self-presence and of presence to and for others is fragmented. As Wendell Berry notes:

> The modern specialist and/or industrialist in his modern house can probably have no clear sense of where he is. His sense of his whereabouts is abstract: he is in a certain "line" as signified by his profession, on a

> certain "bracket" as signified by his income, and in a certain "crowd" as signified by his house and his amusements. Where he is matters only in proportion to the number of people's effects he has to put up with. Geography is defined for him by his house, office, his commuting route, and the interiors of shopping centers, restaurants, and places of amusement---which is to say that his geography is artificial; he could be anywhere, and he usually is. (**The Unsettling of America**, New York: Avon Books, 1977, p.53.)

With this attitude comes a lack of responsibility for the place and its future. He/she has so defined their existence that it could function almost in any part of the country. It resembles the attitude of British imperialists in India and Africa who sought immunity from the traditions, geography and history of their residence. Everything and everyone around him/her was simply a resource for their own lifestyle and amusement. The concept of vulnerability to the interdependencies of place or of feeding back into the community something of what has been taken were usually not entertained. Even their religious traditions, or especially their religious traditions, were unconnected with the place.

The modern American colonist moves across our land in much the same way. They may attend the "local" Catholic or Presbyterian church, contribute to its building funds and even play a role in its governance. Since these churches frequently are colonists themselves, not opening up to the sacred as it dwells in the place, the individual finds no moral teaching or spiritual guidance that challenges his/her "lifestyle".

The sense of responsibility for local place is not a product of institutions. It is something that is passed on from other humans beings through concrete living. It goes far beyond obeying traffic laws, paying taxes, or voting. It is the result of a successful initiation into the cultural mode of being and hence is a personal transformation rather than a set of requirements, legal or political. When a community begins to dissolve and people think of themselves in the abstract terms mentioned above, and no longer feel that they are responsible for the initiation of the community's young, or the causing and curing of the community's ills, or the care of the community's biological and geological traditions, then they hand these tasks over to institutions and specialists. The latter, of course, are primarily concerned with performance of their specific task: education, health care, public works, development, etc. Hence, few have a sense for or responsibility to the whole. Children raised in such an "environment" (something simply surrounding them) are not imbued with such concerns or ways of seeing, feeling and acting. That is, they do not develop a spirituality of place, an ecological spirituality, because the community's spirituality as an organic whole has deteriorated. There is no larger life-pattern within which meaning, place and purpose are found. No self-transcendence moves people to care for something beyond their own economic success.

What had remained hidden in the exuberance of economic prosperity becomes apparent in the depression of the aftermath: "These corporations don't care about people or their communities...they only care about higher and higher profits. We were making money for them. But not enough, I suppose. Cheaper labor overseas, diversification and the buy-out of other companies are all they care about. The stock-holders and not the workers are their concern."

Towns which are seeking revitalization must turn away from the temptation of "quick fixes". The abilities, talents, aspirations and even idiosyncracies of the actual community should be thoroughly understood and built on. Rather than further deteriorating the cultural and ecological bonds that hold the community together by imposing on it the standards and labor needs of non-placed corporations (who may soon move on to cheaper labor markets abroad), they should create a place that includes the whole region to which the town belongs and draws upon already existing structures and talents.

Today such realizations promote attempts at shaping or reshaping, inhabiting or reinhabiting, settling or resettling place. Present movements, such as bioregionalism and regenerative economics are ecological praxis. They aim to give people a sense of participation in their communities and in the choices that shape the destiny of their communities. Sensitive and nuanced responses to the Earth cannot be translated into local programs, if the power to choose and act is concentrated in the hands of distant, centralized institutions, corporations and states. The health of an ecocommunity cannot be defined in economic terms alone. Economics must be regrounded in ecology, both the ecology of home and community and of the natural systems interpenetrating and surrounding them.

The transition toward a society that fits in with natural processes of the biosphere requires a practical counter ethic to immediate economic gain. The goal of **reinhabitation**, becoming full members of the life-community where we live, gives substance to the otherwise amorphous shape of post-industrial society. The restoration and maintenance of **bioregions**, naturally defined locations of natural and human communities, can be the basis of an effective counter ethic.

This counter ethic is basically the ethic of place, of being concerned with its health, of taking responsibility for one's role as part of

place and exercising one's rights as a member of place---these form moral character and prepare one for larger spheres. A bioregion unifies the human and natural in such a way as to reflect the larger whole of Earth.

Ecological spirituality is embodied in the human mode of existence on many levels, including: individual, family, community, bioregion and worldwide ecumene. These are spiritualities within spiritualities, each an integral whole that is also a part of a larger pattern of life. Symbols such as place and home point to the common structures, principles and powers that link the individual to these wider patterns, making them present to and for him/her and allowing him/her to be present to them.

Through place we are linked to past and future, human and natural systems. It gives us a sense of the abiding while caught up in the changes of modern life. It says that the Earth is truly a home and that we have a "place" in its unfolding mystery. Yet it says that we have to remember our limits, not as a damper on creativity and aspiration, but as that for which we must assume responsibility and to which we must be committed.

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EMBARRASSING RELATIVES:
Changing Perceptions of Animals
By Mary Midgley

"He who understands baboon would do more towards metaphysics than Locke." Charles Darwin's Notebooks

1. The Founder

A Tibetan lama, who was explaining the transmigration of souls to an audience of New Yorkers, was met by an interesting difficulty. How (he was asked) if souls transmigrated, could human beings have increased their numbers so much in the last couple of centuries? Where did the extra souls come from for all these new people, and especially for all these new Americans? "Yes indeed," responded the lama with concern, "And have you ever wondered where all those buffaloes went to?"

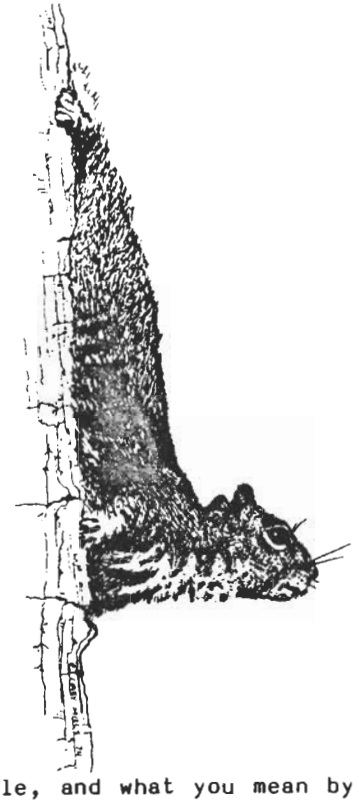
Western thought has rather strongly resisted this kind of thinking. It has preferred, on the whole, to emphasize always the gap between our own species and others, rather than the continuity. And once this was done, it has often been inclined to dismiss enquiry about the other species as somewhat perverse and trivial. This attitude runs counter to an important principle of scientific enquiry which forbids all such snobbish discrimination among subject-matters. J.B.S. Haldane, when asked what motives his long biological experience led him to attribute to the Creator, replied "An inordinate fondness for beetles." Many Christian naturalists of the last century, such as Charles Kingsley and the young Darwin, would have accepted this notion with no sense of uneasiness. For them, the Lord was indeed glorified in all his creatures. Fuller study of any of them could only reveal further wonders, which would continually redound to his praise. But, when doubts were cast on the separate creation of man, this sense of harmonious co-existence began to seem dangerous. The notion of humanity as growing up on equal terms with its fellow-creatures and arising out of them, instead of being sent from above to rule them, shocked, and still does shock, the Western imagination in countless ways. Difficulty in accepting it has distorted many studies. But possibly none of them has been thrown into such grave confusion by it as the study of animal intelligence. Its history during the past century deserves attention.

For Darwin, continuity between **Homo sapiens** and other animals was always a central theme. He hated the human conceit which systematically exaggerates our uniqueness, and saw it as a crucial source of dishonesty in the old religious tradition. To his mind, the first essential for attempting to understand scientifically our relation to other species was to conquer this seductive bias. It was not just that science in general always demands impartiality, but that in this case the way forward lay straight through a humiliating comparison from which religious belief had so far protected us. If indeed human beings had arisen from a matrix of other species, then the study of that matrix must surely be a most promising source of new light on human nature. And if our mental as well as our physical nature was to receive that light, then the mentality of other species must be taken seriously and studied in honest comparison with our own. While never doubting that the differences remained enormous, Darwin insisted that human beings, like any other mysterious item, would become more comprehensible if they were placed in a context of comparable entities, instead of being studied in the vacuum where past metaphysicians, including even scientifically based ones such as Locke, had inevitably always seen them. So Darwin, though he had little time to pursue this study himself, called for it vigorously and left no doubt what he thought must be studied, and studied seriously, without **a priori** prejudices which would ensure that it never looked like anything human. Beetles and baboons were no longer just a joke. The time had come to take them seriously.

2. The Successors

The upshot of this call was a strange one. Since

Darwin, a great deal of the psychological work has indeed, sooner or later, been done on various animals. Indeed, the study of rats alone has absorbed an immense amount of laboratory space, time and money. But for a long time the dominant theme of most of it, especially in Britain and the United States, was that animals scarcely had any mental life at all. Directly contrary to Darwin, these investigators perceived the scientific spirit as demanding above all an economical, mechanistic, reductive explanation of animal behavior, which would place it as far away as possible from the subtleties traditionally ascribed to human action. This policy was sharply expresed in Lloyd Morgan's famous canon of 1898, which ruled that "in no case may we interpret an action as the outcome of the exercise of a higher psychical faculty, if it can be interpreted as the outcome of one which stands lower in the psychological scale". The effect of that rule naturally varies according to what other principles you recognize, what alternative explanations you are prepared to consider



plausible, and what you mean by 'higher' and 'lower'---vague terms which Darwin had always distrusted. Lloyd Morgan himself applied his rule quite mildly. But in the seventy years that followed him, drastic interpretation of it was professionally enforced with sharp crusading zeal. It was then as much as any psychologist's career was worth to suggest that an animal in any way "reasoned", had "intentions" or "knew what it was doing". Terms like these, even when enclosed in shudder-quotes and brought in only for the sake of examination and analysis, were, for much of the time, damned as radically unscientific.

Changes like this in the current notion of science are hugely influential, yet those who make them seldom see fully what they involve. Darwin's notion of science was a positive one, concerned with ends. He thought of it centrally as the increase of understanding. His successors were moving towards a more negative notion, chiefly concerned with means. What chiefly struck them was the need to **avoid** ways of understanding which belonged to everyday life---to cut out vernacular methods of thinking.

Two processes going on at this time shaped this movement and gave it peculiar force. One was the professionalization of science. Under T.H.Huxley, a stern battle was fought at the end of the century to replace the amateur gentleman-naturalists, such as Darwin and Lyell, by properly trained, salaried and specialized scientists---a term which only came into general use at that ti . The other was the dazzling success of classical physics. Unthreatened as yet by Einstein, this study seemed then to guarantee an understanding of the world as certain and final as that offered earlier by religion, but set on a much firmer basis. It seemed about to furnish at last that final key to all the mysteries which Descartes had foretold---to reduce the world to mathematics. What was significantly called the "physical" universe was to be displayed as a vast machine, fully understandable in terms of its particles and the forces which bound them together. The methods of all other studies would then be shown up as only provisional; perhaps entirely superseded. No wonder that the emerging tribe of scientists were dazzled by this vision. For them, the distinguishing mark of their new professionalism quickly became to insist on always using this esoteric way of explaining phenomena, and to dismiss all others, especially everyday ones, as merely superficial.

This mistaken hope, now thoroughly exploded by physics itself, did a good deal of harm all over the biological field, but it was a piece of quite gratuitous bad luck which allowed it to distort psychology as well. The label "social science" happened to have been stuck on psychology, and on some other emerging studies, **before** words like "science" came to centre on the restrictive model of mechanistic physics. Had this not happened---had they, for instance, been classified, as they quite easily might have, as the neighbours of history and philosophy---there would have been no temptation for psychologists who wanted to clinch their professional status to do it by inventing quasi-physical atoms of behaviour---tropisms, conditioned reflexes, responses to stimuli---and all the rest. There would have been no pressure to by-pass full observation, simplify description, and make always for some limited question which allowed of an experiment. Accordingly, there would not have been any need for animal psychology to get drawn into

the strange role of providing, by hook and crook, support for the reductive quasi-physical theories---a role for which it was fitted, partly by the general ignorance about it which made odd theories look more plausible there than they would have done for human beings, and partly, of course, because it was the only field where experimentation could go on freely without any reference to the wishes of its subjects.

3. The Reducers in the Saddle

The forces making for this use of animal psychology were strong enough to sweep the studies which Darwin had started right off the board. By another piece of bad luck, the man whom Darwin had hoped to leave as his heir to these enquiries, George Romanes, happened to be a thoroughly informal naturalist of his own kind, but without his fierce mental discipline. Romanes was easily dismissed as casual and "anecdotal". What was needed was someone able to combine this sort of wide curiosity with an increase in scientific rigour, and so develop a proper discipline of observing and interpreting animal behaviour, especially in the wild. In our century, this need has been met by Konrad Lorenz, Niko Tinbergen and their ethological colleagues. At the turn of the century, nobody thought this possible. Quite a number of animal psychologists did protest that the complexity of their subject was somehow becoming lost and distorted, but they were borne down.

The reducers could easily prevail merely by suggesting that those who wanted the complexity of the facts respected were anthropomorphic, sentimental and "anecdotal". What is remarkable is that these accusations of bias seem always to have been one-sided. They were never aimed at the reducers. Yet the attractions of ruling that animals are hopelessly stupid machines, not comparable with people, were enormous. This course not only gratified a general human conceit and habit of exploitation. It had, for psychologists in particular, the further double advantage of qualifying them as members of the mechanistic scientific community, and also of demonstrating that it did not matter how they treated their experimental animals.

Obviously the fact that these inducements existed does not in itself show that theorists were moved by them. The point is just that, if irrelevant motives were always to be suspected on one side, they ought to have been on the other as well. But they were not suspected because the reducers supposed themselves to be entirely moved by the ideal of parsimony, expressed in Lloyd Morgan's canon. They do not seem to have seen how tendentious that ideal was. If one approached human life in the same spirit, determined never to assume that higher faculties were at work where it was in any way possible to think that lower ones might be, one would reach some very odd conclusions and might reasonably be asked what on earth had made one start by laying the burden of proof in that strange place. It is not more economical to make one enormous initial assumption---such as that animals are simple machines---than it is to look for a variety of different explanations for the different aspects of complex phenomena---initial probabilities have to be considered. People who actually work with animals---grooms, keepers, mahouts, hunters, shepherd---do not treat them as if they were simple machines, but assume that they are conscious fellow-creatures, viewing life basically in the same way as themselves, even though with very different faculties and with aims that may sometimes be hard to penetrate. It is only by allowing for that independent viewpoint and keeping it constantly in mind that they are able to do their work effectively and safely. Reductive psychologists do not usually deny this, but they tend to treat it as just an anecdotal detail of everyday life, irrelevant to science. In this field, in fact, thorough experience of the subject matter is held to be a positive disqualification for contributing data to the theorist. Or, to look at it another way, the real subject matter is not held to be animals as such, but animals isolated under peculiarly sanitary and distorting conditions in the laboratory.

4. Reducers Slightly Reduced

In the last few decades, all this has been changing fast. Ethological observations in the wild have shown that animals constantly do all sorts of things which they had been proved not to be able to do, and have also introduced useful conceptual schemes for describing and classifying these activities. Ten years back, one particularly bold psychologist, Donald Griffin, incorporated much of this material in an admirable book called **The Question of Animal Awareness**, firmly using every one of the taboo words, from consciousness to introspection, and showing the impossibility of talking sensibly on these matters without them. Though he provoked a lot of discussion, the lightning did not strike him, and by now a fair number of far-sighted rats (you should pardon the term) have begun to leave the reductive ship. He has lately brought out another book called **Animal Thought.**

But the dispute is certainly not over, and at present an extraordinary ambivalence reigns in the subject. Naturally it reflects the similar ambivalence that exists in human psychology, which once led an exasperated psychologist to remark to me that, "Watson and Freud between them made it impossible to do psychology for fifty years"---a period which Eysenck and others are busily trying to prolong. In animal psychology, however, the clash is much grosser, because the extremes lie

even farther apart. It can be seen in a pure state, quite without any attempt to make sense of it, in a collection of papers called **Animal Intelligence**, edited this year (1986) by L. Weiskranz and brought out by the Cambridge Press. Here, side by side, one finds discussions by people like the Gardners and Jane Goodall, who treat chimpanzees with scrupulous respect as intelligent fellow-creatures, and others by people whose way of investigating intelligence is to train monkeys in boring and pointless tasks, cut out pieces of their brains, and then see whether they do the tasks better or worse. It is clear that however intelligent the animal in question might be---even, for instance, if it were a human being under investigation on another planet---the second method would never reveal that fact, because the tasks have deliberately been split up into elements too simple to evoke any of the "higher faculties". If one actually wanted to grasp the whole range of those faculties---which is what the title "intelligence" suggests---one would do much better to join Jane Goodall at the descriptive end, or to read that splendid little book **Behind the Mirror** by Konrad Lorenz, where the meaning that should be attached to the idea of a conscious subject is explored right across the evolutionary scale, with invaluable breadth of reference both to scientific findings and to the grander human faculties. It has to be admitted, however, that this survey of a long, continuous scale of differences, not always classed as "higher" and "lower" would not be as effective a way of providing a simple, cast-iron guarantee of human supremacy, nor of becoming sure that one would not be reborn as an experimental monkey. Where you start does tend to determine where you will end.

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NATURE CONSERVATION, ANIMAL PATENTING & BIOTECHNOLOGY

By Michael W. Fox

The Context

In April 1987, the U.S. Patent and Trademark Office ruled that all animals that have been genetically altered through various biotechnological techniques, such as gene insertion, can be patented. There are already 15 animal patents pending. And there are giant mice and sickly pigs that now possess the human growth gene in their genomes. Even Weyerhauser, the logging company, is developing a "super salmon" through genetic engineering.

If the ruling of the U.S. Patent and Trademark Office that all genetically-engineered animal species can be patented is not rescinded by congressional legislation, the impact on wildlife worldwide will be devastating. This is because through biotechnology, farm animals will be modified genetically so that they will be able to adapt to presently unsuitable tropical, arid, wetland and other habitats. They will be made resistant to various diseases (such as sleeping sickness) to which they are presently susceptible, in the same manner in which indigenous wildlife species are now disease-resistant. The patenting of genetically modified animals will as a consequence escalate the rate of destruction of wildlife habitat, accelerate the decline in biodiversity, and some predict, lead in the direction of the end of the natural world.

As a consequence of patent protection, the livestock industry will have the incentive to expand rapidly into new and hitherto unexploitable or inaccessible wildlife habitats. This final transformation of remaining wilderness areas and its consequent reduction in biodiversity worldwide, by the introduction of animals genetically adapted to new habitats, will be intensified further by the introduction of patented, genetically engineered plants, likewise adapted to new habitats.

Peasant and native farmers who were formerly self-sufficient, as well as the farmers of developed nations, currently use dangerous pesticides, many of which are so harmful that they are banned for use in their countries of origin. Soon they will be using patented, genetically engineered bacteria, the "new generation of bacterial pesticides" that the petrochemical companies are now developing as a substitute, since fossil fuel reserves are dwindling. (Petrochemicals are used in the manufacture of poisonous pesticides, which were developed from World War II poison-gas warfare.) These companies are now beginning to acknowledge that pesticides devastate wildlife populations and threaten all terrestrial and aquatic ecosystems worldwide. We now have pesticide-laden rain and fog, drinking water, and mother's milk. The entire food-chain and chain of life have been contaminated. There would be equivalent profound environmental consequences following the release of genetically altered microorganisms. They will soon be followed by genetically engineered fungi, viruses, nematodes, insects, and other plant parasites developed to protect crops from diseases. The U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service will now be in charge of

"regulating" all of this transformation (**Federal Register 52**, No. 115, 1987, pp. 22892-22915). The entire, complex ecology of Earth will be consequently transformed into an industrial "biosystem".

This next round with new pesticides and fertilizers from genetically engineered pest-killing and nitrogen-fixing bacteria, along with herbicide and disease-resistant seeds and feed-efficient, disease-resistant livestock will cause the displacement and extinction of wild plant and animal species. Some call this progress, but the patenting of life---its privatization---is purely for profit.

The patenting of animals will be the final seal of approval for the exclusive human ownership and control of all life. The natural world is already rapidly reaching this point of global industrialization and desecration.

The U.S. Patent Office ruling over the patenting of animals is arbitrary and capricious and should be voluntarily rescinded. The ruling is surely at variance with the intent of Congress that has recognized the importance of protecting and enhancing biodiversity (as through their funding of international development agencies for such projects).

The few tropical forests that remain in the biotech world of the future will be protected as valuable genetic "banks" for the pharmaceutical and chemical industries. It is vital that these areas be saved from the loggers, the dam builders, monoculture foresters and the cattle and sheep ranchers. Recent studies have shown that large areas of natural habitat must be preserved in order to protect and ensure maximal biodiversity.

More and more captive animals (and plants in herbaria) will be genetically reproduced, and their germ plasm (seed, sperm, ova and embryos) stored for future use. This conservation may help save endangered species from extinction. However, no matter how many zoos and herbaria and aquaria we have, we will not have sufficient resources to save many species. And if their natural habitats are destroyed, where in the future could they be introduced?

Not only conservationists and environmentalists, but also those who are actively involved today in the conservation of domestic varieties of seed stock and also various breeds of domesticated animals, should see the patenting of animals by the biotech industry as a major threat to the biosphere. The patenting of genetically engineered animals will herald the end of traditional breeds of domesticated animals. New patented varieties and chimeras of greater utility will result in the gradual extinction of existing animal breeds and contamination of gene pools (as by inserting human growth genes into mice to make them into "giants"). Thus a further reduction in genetic biodiversity of domesticated gene pools will be predictable. And the same will happen with wild animals---deer, musk ox, salmon, and other wild species will be changed, patented and exploited for food and other by-products.

The biotechnology industry is potentially one of the most serious threats to the biodiversity of planet Earth. The threat will become a reality if this technology is applied with the same perception and values toward life and the biosphere that sanctioned and promoted the wholesale application of pesticides and the development of capital intensive monoculture farming and forestry, and that now permits the release of all genetically altered plants (from grain to trees), microorganisms and invertebrate "pests". **But this is not to say that this new technology could not be used appropriately,** as for example, to engineer plants to help halt the spread of deserts; and to develop microorganisms to synthesize essential biologics, such as insulin and antibodies, and to help in water treatment to remove pesticides, heavy metals and other industrial and agrichemical poisons.

Even so, the patenting of animals is both unnecessary and detrimental. It should therefore be a matter of great urgency for all informed and concerned citizens to decry the patenting of animals and guide the biotech industry to act responsibly and creatively for the sake and future of all life on Earth. And this entails not simply respecting the natural world or the sanctity of being, but of realizing that it is prudent economically in the long-term, as history has taught us, to preserve the integrity and diversity of biotic communities. Moreover, from a purely practical point of view, the U.S. does not need patenting to protect the meat, egg and dairy industries that suffer from chronic overproductivity. Patenting will simply lead to monopolies and the end of diversified, sustainable agricultural practices.

From a cultural point of view, wild animals (if not domesticated ones) are held by the public as a common trust. The potential for the total privatization of wild animals through the patenting process, following the insertion or deletion of but one gene, is surely a violation of the democratic, cultural tradition that wild animal species cannot be "owned" exclusively by anyone.

A deer that has its genome altered to the tune of one or two genes is still a deer, and would probably still be able to breed with other deer not subjected to genetic alteration. However, under its new ruling, the U.S. Patent Office would regard it as a "new" species. While there is a precedent in wildlife law for human ownership of individual animals, there is no precedent for the ownership of entire species. If biotechnology is applied to wildlife, even altering one or two genes for

utilitarian purposes will have predictable consequences, and it could cause great suffering and damage to the health of wildlife populations. For example, the U.S. Department of Agriculture's pigs that carry the human growth gene are lethargic, arthritic and have weakened immune systems that increase their susceptibility to diseases.

Clearly, the patenting of animals cannot be condoned. Several European countries have ruled against any releases of genetically engineered life forms into the environment. But the U.S. has already begun. Should we not all pause for a moment and think?

The Integrity and Future of Creation

Theologian Thomas Berry has written, "Every being has its own interior, its self, its mystery, its numinous aspect. To deprive any being of this sacred quality is to disrupt the total order of the universe." (**The New Story**, American Teilhard Association for the Future of Man, Inc., 867 Madison Ave, New York, 1978.) Now the bio-engineer can penetrate and rearrange the interior (genetic structure) of living beings to an unprecedented degree and rate (in contrast to traditional methods of selective breeding and hybridization). And it is a matter of record that the august panel of scientists serving on the National Institutes of Health Recombinant DNA Committee have disavowed that living beings have their own interior, their own **telos**, or "beingness". (See, M.W. Fox, "Genetic Engineering: Nature's Cornucopia or Pandora's Box," **The Animals' Agenda**, March 1986, pp.9-15.)

To reduce animals to the level of patentable commodities, to regard them as useful genetic assemblies and resources, and to cross the biological boundaries of species and to change the natural order of creation by switching genes between widely different creatures (to make transgenic animals) entails more than scientific knowledge and skill. It also entails a conscious denial of the inherent value, nature, and **meaning** of living things. The mechanistic and instrumental valuation of life has come to take precedence over respect for the sanctity of life and its inherent value.

The deeper meaning of the Creation thus becomes trivialized and directed to serve exclusively human ends. The social benefits of creating transgenic animals and of patenting life must be weighted against the many costs to society, as well as to the natural world and the created order.

Society, on the edge of the new Genetic Age, may lose its sense of reverence and wonder for the deeper meaning, significance and mystery of the Creation and substitute materialistic values for those higher values associated with respect for the sanctity of being and for the created order.

When life has meaning only in terms of human utility, it is perceived as being devoid of inherent value and meaning. This perception can only serve to alienate humanity further from the natural world. Some now fear the eventual patenting of human life because this perception will logically lead to an increasing valuation of human life in terms of its instrumental value to society. The inherent value and meaning of the individual and the sanctity of human life will, like the rest of creation, become subordinate to the world-industrializing values of the techocracy.

Indeed the scientific establishment's world-objectifying view has even denied animals inherent nature or **telos**. This unscholarly and unfeeling subjective consensus is sanctified by a religious community that interprets "dominion" (Genesis 1:26) as domination; and the natural world as imperfect, not for us to "dress and to keep" (Genesis 2:25) but to exploit however we choose. It is widely held by the leaders of this religious community, which is part of the technocracy, that animals and all living things are intended for man's use. This accords with the view that all non-human life forms have no inherent value, deeper meaning, and a life of their own.

The patenting of life will only serve to further sanction this world-as-object-resource-to-be exploited view. It is rooted in two emotions that underlie the patina of hubris, rationalism and materialism. One is fear---a fear that blinds us to the adverse cultural and ecological consequences of the genetic engineering of life that the U.S. Patent Office will only exacerbate by giving economic protection to those who would create profitable "new" life forms. This fear, of pestilence, famine, suffering, death, and loss of our loved ones, is arguably the legacy of the Black Death of Plague that killed off one-third of the European community, crippling industry, agriculture, and the economy. (See Thomas Berry's **The New Story**.)

As Theologian Thomas Berry observes, "There were two basic responses to this terrifying experience of the Plague. From these two responses were formed the two communities of the present; the believing (redemption) religious community and the secular scientific community."

Fear of life and death turns the wise planetary stewardship of dominion into selfish domination. The genetic engineer becomes the scientific priest of hope. Hope is the second emotion that harms our objectivity, because it is imbued with self-interest. We hope for redemption, salvation, a millenium to come of a global industrial utopia with a surfeit of food and freedom from all disease and suffering.

In contrast to the optimists' utopia which the patenting of life will help ensure, there is the rationalist's view that is more pessimistic, but no

less altruistically human-centered. This view sees genetic engineering as being vital for human survival---to feed our ever-growing numbers and to treat and prevent such plagues as AIDS and the pestilence of bugs and blights that destroy our crops, as well as the droughts and salination of an abused Earth. Drought, salt, and pest-resisting extra-nutritious, soil-fertilizing crops, fast-growing, highly productive and disease resistent farms animals will be created, as man adapts to a dying, polluted and depleted planet.

Bacteria, plants, and animals alike will be engineered also to produce biochemical compounds useful to agriculture, medicine, and other industries. Animals will, regardless of how much they suffer as a consequence, be genetically engineered into human surrogate "models" of various diseases for the biomedical researcher to discover new ways of treating the plagues and epidemics that afflict humanity. With the hope of science, the biological engineer will save us and we shall be redeemed.

Yet beyond fear and hope, the promises of genetic engineering will become a Promethean nemesis if this technology is not applied in accordance with the emerging new world view of modern science and creation-centered ethics.

Our basic values, in order to avoid continuation of what Rev. Berry calls "the terrifying assault upon the Earth with an irrationality that is stunning in its enormity while we were being assured that this was the way to a better, more humane, more reasonable world," depend on conformity with the Earth process. "To harm the Earth is to harm man, to ruin the Earth is to destroy man."

If genetic engineering technology is not applied with respect for the sacred order, unity and interdependence of all life, then man will be harmed; and if the natural world is destroyed, then that which is human will be destroyed as well. We may survive in physical form, possibly using biotechnology to help us adapt, but then we will no longer be human. For to be fully human is to be a part of the creation and the natural world.

There is an alternative. Beneath the emotions of fear and hope there is, in the deep heart's core, a longing for a world of creative beauty, diverse vitality, and harmonizing peace. This world is within our reach; it is still there, around us and within us, but it is being destroyed at an accelerating rate of entropy. The new world view of modern science, whose physics, molecular and evolutionary biology and ecology reveal that this Earth is part of a unified field of self-organizing intelligence, supports a theology of Creation that moves us to live in communion: and to respect the created order, beauty, vitality, diversity and harmony of the natural world. If we do violence against the Creation and the natural world, we will ultimately harm ourselves because we are part of the same unified field.

Genetic engineering, applied within the broad ethico-spiritual, ecological and socio-political framework of this new world view, entails a creative and loving sense of participation in the Earth process: a planetary stewardship that respects the sanctity of life by giving equal and fair consideration to all living beings, and recognizes that the human role in the Earth process cannot be one of control and selfish exploitation. It is ours only in sacred trust. Those who would genetically engineer and patent life should reflect on the implications and consequences of their values and world view, and ponder the relevance of the ancient medical maxim, "do no harm."

The basic teachings of all the world's major religions teach respect for life and for the integrity of Creation.

It is not simply a question of whether Nature belongs to humankind only, or to all life in our common trust; nor is it a question of whether animals can suffer or have rights and souls.

Rather, more fundamental than the ethics of land ownership and the exploitation of other sentient nonhumans, and even more fundamental than the issue of the existence and theology of God, is how we should live and influence the future of the world and the lives of our children's children.

These basic teachings are very simple. They formed the ethical and legal codes of organically functional, healthy, wealthy and self-sustaining human communities for generations past, until the transition into the Industrial Age. And as we endeavor to build a post-industrial, global community, we should all reflect---theists and atheists alike---upon the wisdom and pragmatism of our ancestral religious-community leaders, teachers and prophets.

If we waste, we shall want. This is the law of frugality. If we are destructive and violent, we shall suffer the consequences. Violence toward any living thing, human or non-human, is violence, regardless of "how much" suffering results. Likewise, destructiveness of any vital living system, be it ecological or social, is destructiveness, regardless of "how much" we may claim to possess and have power over. We do not own the land, we borrow it from our children.

Without respect for life and living a life that accords with the principles outlined above---of frugality, nonviolence, compassion, humility, and generosity of heart---the Creation of Earth will have no future.

The despoiled state of this desacralized Earth, and the suffering and extermination of the animal kingdom, is evidence enough that we must, singly and collectively, dedicate our lives to restore Nature and so help protect the future of the Creation.

Any religion concerned primarily, if not exclusively with "saving souls," commits the dualistic fallacy of seeing humans as separate from Creation, and in so doing, separates humans from God. A non-dualistic world view sees humanity, animals, and Nature as all part of the same Creation. Thus, saving the Earth and saving human souls is one and the same. From this holistic perspective Father Sean McDonagh offers a cosmic view of sin from a Christian orientation, stating, "If sin destroys harmony between human beings and the natural world, then redemption, to be complete, must heal and renew the primal unity and recreate the Earth whenever it has been injured through human greed and vice." (**To Care for the Earth: A Call to a New Theology**, London, Geoffery Chapman, 1986.)

Our attempt to make over the natural world in our own image as an unnatural industrial utopia is failing. The Earth and the animals are telling us as much. It is time for all of us to listen, because the Earth is now in our hands. Such is our power over the planet, the atom, and the gene. How we decide to wield this power will determine the future of the Creation. As Lao Tzu advised in the 6th century B.C., "The Earth is sacred. You cannot improve it. If you try to change it, you will ruin it. If you try to hold it, you will lose it."

Concern for the environment, for the planet and animal kingdoms, and for the integrity and future of Creation, is becoming a common unifying concern of all nation states and of the world's religions. It can be the catalyst for a world community of peace and of a new economic order, based not upon competition and exploitation, but upon a cooperative attitude and creative relationship between nation states and between humanity and the rest of Creation.

Michael W. Fox is Director of the Institute for the Study of Animal Problems, and Scientific Director of the Humane Society. He has written extensively on animal husbandry and related topics. He has recently published **Agricide**, Schocken Books, New York, a study of our current nonsustainable agricultural practices. He has asked us to note that the Humane Society and the Foundation on Economic Trends has formed the Coalition Against the Patenting of Animals (CAPA), more information about which can be obtained by writing to CAPA in care of Humane Society of the U.S., 2100 L St., N.W., Washington, D.C. 20037, phone (202) 452-1100.

LEST WE FORGET:
THE THREAT OF WILDLIFE MARKETS TO CONSERVATION

By Valerius Geist

The reader of **The Trumpeter** must be aware of the many small groups working in some way or another to make environment matter. Typical of occidentals, we are concerned with the future, with betterment---but there is little stock taking and concern with the past. For effective action, however, both are needed. I hope to illustrate this with the following, unfortunately, all too real example.

Few realize that our richness in wildlife and biota in North America is the consequence of several vital policies laid down about 70 years ago.[1] These were:

1) The outlawing of markets in wild game (meat, feathers, etc.).

2) The allocation of wildlife harvest by law, not by the pocket book, birthright, social position, land ownership, etc, and consequently the ownership of wildlife in the public, not private domain.

3) The use of wildlife for food or other, nonfrivolous, purposes.

These policies had wide repercussions. They have been eroded and forgotten over time, and are about to be disbanded. Should this happen, then what we do subsequently to save nature will matter preciously little.

Between 1913 and 1921 markets in wildlife meat, feathers and parts became illegal in Canada and the U.S. This was the cornerstone of our remarkably successful system of nature conservation. It is also the policy about to be dismantled by short term interests hoping to market Labrador caribou in retail outlets, or elk meat raised on game ranches.[2] This basic policy had several consequences: with no markets in wildlife meat, to consume wild meat became a matter of personal involvement in obtaining it, and no professional killers could be hired. Since no market existed for allocation, wildlife, now a public property, had to be publicly allocated. That is, wildlife was allocated for consumption by law. This is the second cornerstone of wildlife management in North America, but ultimately also of nature conservation. It too had repercussions.

The third policy, rarely explicitly stated or consequently acted upon, is that wildlife, if it is to be killed, shall be killed for food (fur bearers, which served a luxury market were excluded, although native trappers traditionally made use of these animals for food as well). Provincial or state game laws stating that no edible meat is to be left in the field, is one consequence of this policy. A conflicting worldview, hunting for "recreation or sport" spread with urbanization.

The logical consequence of the three policies were state maintained organizations to manage

wildlife, including developments of treaties covering wildlife that crosses national boundaries.[3] The distribution of wildlife for consumption in small shares led to a wide "plebian", that is, non-elite participation in America in wildlife harvest, void of the excesses so typical of private ownership of wildlife. With broad participation there came organized voices for wildlife, political power and the passage of laws that taxed the population on behalf of wildlife.[4] This all followed the great depletion of wildlife across North America by the early decades of this century. Prior actions had seen the establishment of national parks to protect wildlife, as well as the use of the military to protect wildlife against marketeers in these enclaves.[5]

What arose was a system of state management, a network of institutions to train wildlife managers as a profession, as well as numerous citizen bodies that promoted the welfare of one species or another. They raised funds and lands directly, or lobbied for legislation toward this end.

The self interest of the small shareholder in wildlife, led to a network of sanctuaries and funds to aid in the conservation of game species. Since such cannot exist by themselves, the retention of habitats---and management practices on public lands---allowed North America to retain a broad spectrum of species. It also conditioned the political climate for conservation organizations to be effective, since "nature" emerged as a public concern, not the private concern of owners of wildlife and forests.

It also led to a remarkably cheap, effective and civil system of wildlife protection. It does protect wildlife despite millions of firearms in private hands, and that through a few, usually unarmed game wardens. In part it was because the public had legitimate outlet to consume wildlife, in part because the public watched jealously, in part because the lack of markets insured that wildlife was not seen by the public as so many $$$ on the hoof or wing.

For 70 years now there has been a continent-wide ban on the sale of wildlife meat and parts in North America. The ban on the sale of venison has been corroded here and there, particularly in Canada[6], but by and large it is still in effect. In the past two decades the notion has gained ground that deer ought to be farmed and their meat sold in retail outlets. A "game ranching" lobby has arisen, aided by the "success" of New Zealand, Scottish and Argentinean operations. The virtues of deer as meat producers are touted and this promotion has made noticeable inroads, at least in Canada. Game ranching was enshrined in the "Guidelines for Wildlife Policy in Canada" signed by all provinces. "Experimental" elk ranches were permitted in Manitoba, Alberta and Saskatchewan. The National Science and Engineering Research Council funds "game ranching" research in a special funding category. In the Province of Alberta, the Wildlife Act of 1984 lays the basis for a legal market in venison and wildlife parts, though public opposition has caused deferral of that section for three years now (a new initiative to make wildlife meat marketable, now with the aid of agriculture, commenced in October 1986 with another government paper on game ranching).[7] Game ranching organizations have formed and are lobbying, or going to courts to see that their view of existing legislation is the accepted one. Some wildlife managers and biologists in provincial and federal agencies are encouraging "game ranching", although they are in the minority. In a quiet, unobstrusive fashion that bypassed the public, executives of major conservation organizations were convinced of the virtue of game ranching. And it is exceedingly easy to fall for it---I know, because I fell for it for 8 years! I not only fell for it, I organized with Dr. Fritz Walther, then of Texas A & M University, in 1971 a major conference in which game ranching was a major issue. We found funds to pay for the attendence of South African, Rhodesian, and Texan game ranchers. Some 18 or 54 published proceedings papers dealt with husbandry issues. I was enamoured by Dr. Raymond Dasmann's arguments for African game ranching, as were many other colleagues. However, a decade ago I realised that game ranching was unacceptable, and I dropped game ranching as a subject of worthy pursuit. Not only has game ranching little merit, but it is a serious threat to wildlife conservation on this continent. No matter how much money one can make with game ranching, it is utterly unacceptable from a perspective of wildlife and nature conservation, and here briefly are the reasons why.[8]

In order to thrive, game ranching requires a local and export market in venison, but especially an oriental market in folk medicine for various parts of the ranched wildlife, such as velvet antlers, sex organs, tails, "tusks" of elk, and hides. Should "game ranching" take hold, then it will likely supply gall-bladders, paws, claws, teeth and the milk of bears (there are attempts to "ranch" bears underway) and whatever else is salable. It is but a small leap to song bird tongues, horned lizard tails and bat wings to supply delicatessen and voodoo cults.

With the proliferation of retail outlets for venison, and the establishment of an infrastructure to market wildlife parts for export, excellent opportunities arise for the illegal disposition of wildlife killed for gain. Our large terrestrial mammals are highly vulnerable to this. The opportunity to convert them into cash, despite the absence of legal marets, is fairly great today; it will then become greater. There are plenty of historical facts to back up the contention that a

market in wildlife will be a gold-plated gift to organized poachers.

There is the North American experience that led to a ban on venison markets continent-wide between 1913 to 1916. It followed the decimation of wildlife by a large wildlife market, including the extinction of several once common species.[9] The ban led to a progressive recovery of wildlife and the development of a uniquely American system of wildlife conservation, far superior to any European system!

Between 1860 and 1916 wildlife was virtually stripped from this continent by the insatiable demands of urban centres, as well as by the many work crews and settlers. The pressure on wildlife, legal and illegal, was so severe that the U.S. Cavalry was called out to protect Yellowstone and other national parks against poaching. When a fad for "elk-tusks" arose, even the U.S. Cavalry was taxed beyond capacity.[10] The U.S. Army functioned as a protector of wildlife from 1886-1918, a span of 32 years, as is vividly described in Professor Duane Hampton's book on that subject. There was preciously little left to protect by the time the markets in wildlife were made illegal. However, this policy became the cornerstone, not only of a rather spectacular recovery of wildlife on this continent, but also the cornerstone of a system of wildlife management and nature conservation that is the most successful in the world by some distance, and is envied and imitated elsewhere.[11]

The venison markets of a century ago were based on weaponry, transportation, communication and product marketing far inferior to current ones, which allow swift killing of vulnerable animals and the rapid transfer of their valuable parts across state and provincial boundaries. The technical systems in the aid of poaching far exceed anything known previously, while our abilities to police--as I am vividly informed by conservation officers---is not equally matched.

An excellent example of what it takes to control poaching in the presence of an open market in wildlife is given by West Germany. The German system of wildlife management, so often touted as exemplary by immigrants who do not understand our system (a failure they share with most Americans and Canadians, wildlife managers included!), has many lessons for us. Despite a market in venison and small game, wildlife in Germany is very abundant. Wildlife is a prestige item mostly under the control of a select, wealthy elite. It is, however, a system poorer than ours, both as a conservation and management system. It is today in deep trouble, so much so that the Green Party of Germany has proclaimed its opposition, and is trying to introduce a system similar to **ours**. That, however, is another story.

The West German system of wildlife protection works as follows. Its 85,000 square miles of hunting land are divided into 40,000 hunting territories that are leased or owned by 65,000 of the 260,000 registered, tested hunters. Each of the 65,000 is deputized as a police officer in order to carry out the responsibility of wildlife protection, and is granted in law a special privilege, that of "extended right of weapon use".[12] This means that the law recognizes that in confrontations with armed poachers the protector of wildlife is in imminent danger of life, and that at dusk and dawn, or in cover with uncertain light, there may be uncertainty as to the degree of danger. It therefore grants the wildlife protector the benefit of the doubt should he shoot and kill. Regular police forces in Germany do not have that right today.

Wildlife protection is by force of arms. It is a no nonsense business as hunter training instructions make plain.[13] The 65,000 owners and lessees can, and do, pass on their status to any other registered hunter by so putting it in writing, and sealing it with their signature. They employ, depending on their wealth, about 1,000 "professional hunters" that are full time in charge of wildlife protection and management on the different hunting reserves. In addition, there are about 5,000 foresters doing similar work in state forests. These men carry not only potent weapons and are experienced in their use, but they are invariably accompanied by a dog as well. Dogs used in big game areas, such as the large German wirehair pointers, are reputed to be quite useful in wildlife and forest protection as well (they rapidly subdue an offender when released and so commanded). Also, once elevated to the ranks of a hunter, a person may carry concealed handguns.

Wildlife protection is greatly aided by a number of factors. Germany's citizenry is disarmed; it is difficult to obtain firearms, and weapon possession is greatly restricted. Hunters are exempt of course, but they are required to undergo police screening before they are licenced. Unlike North America, in Germany there are not millions of firearms in private hands.

The Germans have a rigid inspection and control system on all wildlife from the point of kill to the retail outlet. An army of food inspectors, armed with no nonsense laws, examines the quality and the origin of wildlife meat. The supply side control is severe.

Regular police forces are also drawn into wildlife protection.

Thus the system of wildlife protection consists for 85,000 square miles of land of 65,000 primary wildlife protectors, heavily armed and with special rights in weapons use; of 1,000 highly trained professional hunters, also armed and usually accompanied by dogs; of several thousand foresters, equipped as any professional hunter; a "reserve" of about 190,000 men readily drafted into active

wildlife protection; a disarmed citizenry; a closely policed system of food inspection to oversee the marketing of wildlife. In the affluent Germany of today poaching is not a great problem.

In my home province of Alberta, there are 258,275 square miles of land, and only 115 **unarmed** conservation officers to protect wildlife.

Please consider these figures.

They tell of a staggering achievement in civility, of how we deal with one another. These figures also show how effective and cheaply the **absence** of a market protects wildlife!

The North American system of wildlife management builds on the small shareholder, the citizen, each of whom has access to a legal share---and the right to decide, whether or not to use his or her share. However, the law specifies that they cannot sell that share, or buy the shares of others, or delegate this right to others. They cannot hire professional killers of wildlife. To eat venison citizens must obtain it through personal effort; they must put forth a large personal effort in skill, knowledge, stamina, planning, equipment acquisition, reading, many trials and errors, much practice, and all that for fairly modest success. However, that investment generates a real concern for wildlife, a willingness to spend money on their behalf, resulting in the plethora of conservation clubs that characterize the North American conservation scene. That personal stake in wildlife by so many citizens is the foundation of our system of conservation and management.[14]

We cannot dismiss lightly the threat to civil liberties that policing of wildlife markets entails. This can be seen from what happened in New Zealand, with the introduction of game ranching and marketeering in deer carcasses. When in 1977 legislation was passed pertaining to these matters, it first of all banned the public from large areas of public land turning deer over for private gains by marketeers and it gave the foresters policing powers to keep the public off public lands, and prosecute citizens for "poaching". The legislators had created a new crime, and made the public pay for the benefits obtained by deer ranchers and marketeers. Moreover, foresters now enjoyed greater powers than did New Zealand's regular police forces. In response to their concerns, the regular police forces were given powers equal to that of foresters.[15]

As Dr. Graeme Caughley shows in his most instructive book **The Deer Wars**, neither the New Zealand public nor the legislators were fully aware of the consequences of the legislation. While New Zealand's foresters are not the same as the 7th U.S. Cavalry marching into Yellowstone National Park, or the regiments of Germany's armed no-nonsense Jaeger, or the trigger-happy vigilante posses kept today on big Texas ranches where wildlife is big business, collectively they remind us of the fact that we have much to loose if we allow markets in wildlife.

That game ranching will not likely stop at the borders of private lands, can be deduced from the promise of game ranchers to make productive "marginal" lands, and "to give land to the landless". In New Zealand the less than glowing commercial success has meanwhile led to the leasing of public land for "trophy ranching", since there is a well heeled elite that will pay handsomely for man-made freaks, whose heads are to adorn trophy rooms and offices, victims of conspicuous consumption.[16]

It may not be widely recognized, but "marginal" land is today heavily used for wildlife by native people, trappers, but also by the local residents of our hinter lands for whom the wildlife harvest is an important economic factor in a non-monetary economy. Taking that land for game ranching will not make it miraculously more productive, but will merely redistribute the wildlife harvest from the many to the few. It may make some native treaties worthless, and at least one advocate of game ranching advanced just that as an important objective. "Marginal" land under game ranching will be stripped of predators, it will be subject to the introduction of more productive or more marketable foreign species, and it will be altered so as to maximize the production of desired species. It will no more remain wilderness, than under regular agricultural or forestry use. It will revert to just that use if markets in game turn soft, and domestic stock becomes more profitable. Game ranching, contrary to its advocates, is not of benefit to native conservation, but a threat to it.

Game ranching cannot exist in the presence of predators. New Zealand has no deer predators. The Europeans long ago exterminated theirs and continue with the practice. Professor Pruitt, noted that in the reindeer areas of Finland, should a fox, marten or raven cross over from the USSR, there results an uproar till the intruder is killed. Germany not only exterminated large predators, but also artificially feeds deer in winter and selectively

culls the animals to create "ideal" antler types. The indigenous stocks of deer were mixed with foreign stocks in order to improve "antler quality". Exotic stock was introduced. The country at large was treated as a game ranch. Roe deer in particular were very common. Forest damage is severe today, and the ability to protect rare plants and ecosystems is very limited, in good part because of dense wildlife populations. Germany's system of wildlife management is a good **production system** for a few, select, desirable species, but it is a poor **conservation system.**

Let us assume Quebec will succeed in creating a venison market and begin to exploit commerically the George River Caribou herd, now some 500,000 strong. They will create an infrastructure of slaughterers, distributors, retailers dependent on a continuous availability or caribou. It will be but a matter of time before others north of 60 will want to get in on the act and sell "their" caribou, or the decline of the George River herd will turn the dependent commercial operators on the other herds.

Mark my words, predators will be blamed for the decline of the herd! Once the special interests are in place, and caribou are commercialized, there will be no effort spared to get rid of wolves, grizzly bears, black bears (a surprisingly effective predator as a study I am currently involved in has shown), wolverines and maybe also of eagles and ravens. That is, we shall have caribou management "Finland style". The price of Quebec's venison market would be in the long run, not only our rare tundra grizzlies, our wolves and other carnivores, but the integrity of our whole tundra and taiga ecosystem. Assuming the George River caribou will crash (and they will!), the lobby of those now dependent on marketing caribou will be ferocious and the resulting political action unpredictable.

Worse still, a success by Quebec in marketing vension will really see a push for "game ranches" nation-wide, and a complete disaster for wildlife conservation. With markets in velvet antlers, venison, elk-tusks, bear paws and gall bladders and what other parts the Orient is willing to pay us for handsomely, I will not give a plugged nickel for the safety of the last elk in the furthest corner of Banff National Park, nor for the last grizzly!

A third major concern deals with the following problem. North America's fauna is of rather recent origin. It formed from Siberian immigrants and a few indigenous primitives after the Ice Age fauna of America collapsed some 14,000-8,000 years ago. The Siberians, who had a long history of cold, dry climates, appear to be sensitive to the diseases carried by their European counterparts, who appear hardy against a broad spectrum of diseases and parasites. When European and Asian fauna meet their American counterpart, the disease transmission is pretty well one way, to the detriment of American forms. Domestic sheep transmit various illnesses to Rocky Mountain bighorns; wapiti released among red deer in warm climates usually succumbed or did not nearly as well as red deer; New Zealand deer farmers today recognize that wapiti are "soft" compared to "red deer"; and Europeans passed their diseases on to American Indians, getting back little themselves.[17]

Furthermore, where Asiatic or European stock has been pitted against American big game species such as in New Zealand or in Europe, American species have done poorly. Our native fauna appears to be a sensitive one. Game ranching which will bring in all sorts of exotics, endangers in the long run its American counterparts, be it by diseases or by establishing accidental feral populations. The threat is already a reality due to a trophy market for "exotics". Now it was shown in New Zealand how quickly ranched deer can gain freedom: irate citizens with wire cutters got back at game ranchers by cutting fences and releasing deer. 4,280 red and hybrid deer escaped in one release![18] Imagine that happening beside Banff National Park.

Game ranching is very much like a sugar coated cyanide pill. It is sweet, but deadly when swallowed. Its economic benefits are small, but its devastation of wildlife has been historically severe. It has negative social consequences, and contrary to claims, it is nothing new, but only the resurrection of a very old way of exploiting wildlife. It will destroy the great economic benefits now flowing from public wildlife (more than four billion dollars annually).[19] It is an additional, needless drain on tax dollars. What politician will be willing to use our already scarce tax dollars to adequately police on behalf of wildlife?

NOTES

1. See C. Gordon Hewitt. 1921. **The Conservation of the Wildlife of Canada.** C. Scribner's, New York, 344pp. This book gives a good overview and introduction. Also see, P. Matthiessen. 1959. **Wildlife in America.** Viking Press, New York, 304 pp. Appendix II gives a chronology of representative legislation. The volumes produced by the **Commission of Conservation of Canada** are most useful. A good introduction to the philosophy of wildlife management in the U.S. and Canada is D. L. Allen. 1962. **Our Wildlife Legacy.** (Revised edition.) Funk & Wagnalls, Reader's Digest Books, Inc., New York. 422pp.

2. V. Geist. 1985a. Game ranching: threat to wildlife conservation in North America. **Wildl. Soc. Bull.** 13:594-598.

3. The most celebrated example is the convention protecting migratory birds between the U.S. and Canada (1916), but precedence setting was the 1911 "Seal Treaty" between the U.S., Canada, Japan and Russia, aimed at giving fur seals and sea otters some protection. Unless the public takes note, this treaty may not be re-ratified, and fur seals will again be slaughtered on high sea by Japan.

4. See **Audubon Wildlife Report 1985** for details of taxation on behalf of wildlife in the U.S. pp. 266-270. National Audubon Society, 950 Third Ave., New York, 10022/4.

5. See H.D. Hampton. 1971. **How the U.S. Cavalry Saved Our National Parks.** Indiana Univ. Press. Bloomington. 246 pp.

6. There are provisions for the sale of wildlife meat in the Northwest Territories and Newfoundland. The federal government in 1986 changed meat inspection requirements to facilitate the slaughter of Labrador caribou for retail markets.
7. **Game Ranching Issues Discussion Paper.** October 1986, Alberta Agriculture & Alberta Forestry, Lands and Wildlife, Edmonton. 27 pp.
8. See Geist, V. 1985a.
9. See Matthiessen, P. 1959.
10. D. R. Potter. 1982. Recreational use of Elk. (Ch. 13) in J. W. Thomas and D.E. Toweill (eds.) **Elk of North America.** pp. 509-560. Stackpole Books. Harrisburgh.
11. Ironically, the German conservation movements are not convinced of their traditional approach. The Green Party has declared its opposition, and appears to aim at a system not unlike our own. The Germans were late to introduce Science to wildlife management, but now have several such instituted and an excellent journal of wildlife research. It also got its first national park, very much of an American idea. Japan's system also resembles the American one in that it distributes wildlife broadly by licence and small personal bag limits.
12. For details see: Deutscher Jagdschutz-Verband. **Handbuch 1986.** edited by M. Wiese. Available from: Johannes-Henry Str. 5300 Bon 1, Germany, Federal Republic.
13. F. Nuesslein. 1983. **Jagdkunde.** (11th ed.) BLV Verlagsgesellschaft, Munich. pp. 44-56. This gives an account of the current legal situation in Germany, which is less draconic than the historical conditions.
14. According to David Neave, executive director of Habitat Canada, there are over 350 registered conservation organizations in Canada alone. I have not verified this figure.
15. G. Caughley. 1983. **The Deer Wars.** Heinemann Publishers. 4 Front Street, Exeter, New Hampshire 03833 USA. 187 pp. An Excellent (and entertaining) account of where good intentions can lead.
16. W. Massey. 1986. The Lilybank Safari. **The Deer Farmer.** Jan 1986, pp. 12-13. (Wellington, N.Z.)
17. V. Geist. 1985b. On Pleistocene bighorn sheep: some problems of adaptation, and relevance to today's American megafauna. Wildl. Soc. Bull. 13:351-359.
18. W. Massey. 1986. Escape! The crisis faced by Robbie and Barbara Oldman. **The Deer Farmer,** Sept. 1986, pp. 6-10.
19. F.L. Filon, S.W. James, J. Ducharm, W. Pepper, R. Reid, P. Boxall and D. Teillet. 1983. **The Importance of Wildlife to Canadians.** Supply and Services Canada. Cat. No. CW66/1983E.

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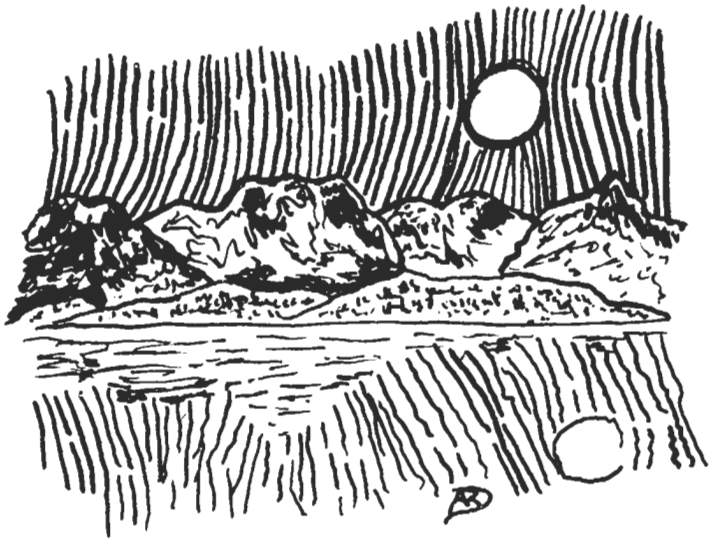

IN THE SEASON OF POSSIBILITIES IN THE REAL WORLD

By Jean Pearson

In spring I wander with my dog along a river,
and the river's our own. No one else
puts up a claim this early in March.
Only the purple mottled hoods of skunk cabbage
and coltsfoot trotting green all over the ground.
The water wanders with ducks on its back.
They live here year-round in this room
that's my spring cabin. We're old acquaintances.
They always remember my dog.
Soon we'll step out the back door of April
into the silkweed and blue-eyed grasses of May.
Now, though, the first yellow fuzz
begins its whisper at the top of a willow.
O, this capable river. Such handiwork,
such implicit, high technology!
And I am still a small creek of a girl
playing beside it, for all my forty years.

Jean Pearson, whose poetry has appeared in the **Trumpeter** and elsewhere, is an animal rights advocate, ecopoet, Ph.D. in Germanic literature, and formerly was on the faculty at Moravian College. Her publications have appeared in a wide variety of journals and papers such as the **American Poetry Review, Milkweed Chronicle, Earth's Daughters, Stone Country** and the **Christian Science Monitor.** She is also a translator of the poetry of Paulus Utsi.

TIGER WILD

By Jay C. Vest

"The tiger does not declare its tigertude, the tiger leaps."

The tiger leaps without declaring its tigertude because it is the **way** of tigerness.

This quotation and response provide an insightful basis for reflection on questions of environmental ethics. Once when arguing for the moral consideration of "land"---all soils, plants, animals, ecological processes---I was confronted with the remark "tigers and lions do not show moral regard for humans, why should we show moral regard for them?" In response, I declared, "tigers and lions are tigers and lions, but we are human and in our humanness we aspire to be moral beings." It is in this aspiration that we exhibit our "wild" value---our greatest sense of being in the world, our ecological disposition.

Wild Values and the Human Moral Imperative

The Earth as an ecological community is life oriented, albeit the reality of death. It is the Earth's present disposition to increase life with the continued accumulation of solar radiation.

Hence, in the three and one-half billion years of living things on Earth, there are countless more living today than in the beginning when the first life forms emerged. This life is itself the result of the Earth-Sun logos---a **will** of solar-terrestial unity---which has produced the biocentric present.

But in the biocentric present, there is an ecological reality reflecting a logos of life and death. Moreover, that life continue, a reasonable death ratio is required of living things. Thus the Earth's biocentricism is modified by the ecological process of death. This law of nature may properly reflect an ecological egalitarianism among species. For in no ordinary ecological case does one entire species die for the sake of another species. The exception is "man" who has become responsible for violating this ecological will and extinguishing manifold species for their collective desire. This example constitutes a moral failure on behalf of the human species, and furthermore it implies a failing of wild value for humanity.

By wild value, then, I mean the ecological disposition of a species---its being in the world. The implications of wild value are fundamentally specieshood and survival value. Specieshood is the condition by which a species enjoys an ecological niche in a natural order of interrelationships and interdependence. Survival value is the primary means which a given species employs for its survival. For example, the human species primarily relies upon its intelligence and morality (which implies culture) for its survival: these are fundamentally the wild values of "man". In the case of a tiger, it is stealth, speed, and power which permit it to survive. Hence, tigers must leap without declaring their tigritude, if they are to be successful in their species survival.

Conversely, in another case of specieshood, wolves assert themselves in order to have the challenged prey declare its potential for predation. Moreover, Barry Lopez (**Of Wolves and Men**, 1978: 58) explains

> Prey animals...apparently announce their poor condition to the wolf in the subtleties of a stance, a peculiarity of gait, a rankness of breath, or more obvious signs of physical incapacity, such as wounds, massive loss of hair, or visible infection. Wolves are alert to such nuances; further, by forcing a hunch, so to speak, by making a moose run or testing it, the wolf may realize that its lungs are impacted from wheezing, labored breathing. It might know that the moose is not going to run very far before collapsing.

Accordingly, it would appear that in specieshood there is something on the order of ecological determinance factored upon the interrelationship and interdependence between predator and prey. For example, wolves can choose to kill or not to kill specific prey. This is surely a sophisticated cognitive process, but it is subtlely drawn along ecologically determined lines. Darwin said something about fitness in this survival context, and we observe this when wolves kill entire herds of domestic sheep, without any possibility for using all of it for food. Herein, there is something of the lack of will exhibited by domestic livestock which the wolves properly recognize. Hence, wolves systematically cull them, thus exalting ecological fitness.

Conversely, "man" may manipulate her or his prey along domineering lines of domestication and habituation for insurance against famine. While this ability demonstrates the species rationality of humanity, it may violate the moal species of humankind. This moral violation is predicated upon excessive tampering and extinction of species for human desire. That the triviality of desire violate the sensibility of need fundamentally demonstrates moral failure in the ecological context of our human disposition unto the world. Furthermore, this consumation of desire over the mandate of wildness illustrates lack of ecological responsibility. Our moral mandate must be ecological egalitarianism among species, where life and death are predicated upon necessity and not desire, and wherein we sacrifice our instrumental demands for the intrinsic value of others.

Conclusion: Willful Action and Ecological Egalitarianism

In the West, one is inclined to perceive the tiger's leap without declaring its tigritude to be significant for power over others. Indeed, such action comports well with competitive politics, economics, sports, etc. which dominate desireful life. But such is not the true meaning of the tiger's leap in this reference unto wild value. Moreover, as we take the leap of the tiger to be demonstrative of our proper disposition, then we compound moral failure with wild failure. Our instructive understanding of tigritude must be founded upon tigerness---for it is the nature of the tiger to be unable to overcome prey by endurance running; hence, tigers must stalk in stealth and leap upon unsuspecting prey. Such is their wild value; it is their tigritude. It is in acknowledging this tigritude or wild value of tigerness, that we as humans are instructed by this example. For it is not endurance or swiftness but rational action and moral obligation which gainsay wildness for we humans. For in wildness, we become truly disposed unto others---including the "land"---and in this natural disposition there are moral obligations which constitute our wild value within the world.

Let the tiger leap in unsuspecting tigritude, but let "humans" declare their moral responsibility unto nature in aspiring to human wildness.

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TO CONTINUE THE DIALOGUE WITH DEEP ECOLOGY

By Henryk Skolimowski

When dogmatisim decreases, dialogue increases. When dialogue increases, dogmatism decreases. I have been honored to have my views discussed by a galaxy of minds representing the deep ecology movement, (**Trumpeter Fall** 1986). Though gratified by the variety of responses, I have not been impressed by their depth. The culture of dialogue, so superbly refined by Plato, is one of the great inventions of the enlightened mind. Let us use it well for the sake of promotion of views and visions which are important for the salvation of the planet and for the enshrining of the glory of the human condition. I shall be unrepentant in singing the glory of the human species, for otherwise I would feel a traitor to my species. One of the Masai proverbs maintains: "The ostrich cannot hate its feathers." Equally I find it rather morbid when some human beings think that the human lot is the bottom of the pit. There is something pathological in the contention that humans are a cancer among the species. This kind of thinking is not sane and it does not promote the sense of wholeness which we need nowadays.[And it is certainly not the thinking of deep ecologists. Ed.]

Let me very briefly mention some of the issues which, in my opinion, have not been satisfactorily addressed by the deep ecology people responding to me. One of these issues is evolution. Thus Bill Devall writes that other species should be not infererred with and should be allowed to follow their own destinies. (This is the argument that is also repeated by Warwick Fox.) The argument looks right. Until one starts reflecting on it more deeply. Then one finds that the argument says precious little. To take evolution seriously is to become aware that we are a part of the unfolding flow. The consequences of this are tremendous and dramatic. Deep ecology simply has not come to terms with the idea of evolution, and consequently has not absorbed the idea into its thinking. To quibble that Teilhard's view of evolution is too anthropocentric (argeed, it is) is not enough. One has to work out one's own idea of evolution, correcting Teilhard's one-sided view. I have done so. Deep ecology has not yet. Again to merely use the hatchet of anti-antropocentrism against Teilhard (or whomever) is not enought, particularly as anti-antropocentrism has proved to be ambiguous and indeed a double-edged sword---it cuts both ways; it cuts deeply into **every** contention of deep ecology for each of these contentions is a **human** contention.

As usual, there is not much in Arne Naess's views I wish to quarrel with. However, his contention that deep ecology is in good conceptual health is a bit exaggerated. I will give it the benefit of doubt: by pretending and assuming that we are in good health we sometimes promote and acquire good health. And we wish it well.

Yet there is one deeply disturbing matter in the point in the Sessions/Naess manifesto ("The Basic Principles of Deep Ecology"). And it is point 4, very clumsily expressed:

> The flowering of human life and human culture is compatible with a substantial decrease of the human population. The flourishing of nonhuman life requires such a decrease.

What Sessions/Naess wanted to express was quite simply this: We must substantially reduce human populations for the sake of the flowering of nonhuman life. But they did not have the courage to say so. Deep ecology praises itself for its courage and straightforwardness. Therefore, it must have the courage of its fundamental convictions and state them without evasion. But some evasions are there. And for a good reason, I think. Now, if substantial decreases of human populations are required and demanded, the immediate question arises: where do we cut, where should this 'reduction' take place? It has been suggested, sometimes in jest, sometimes seriously, that if the total population of the United States were eliminated, most of the Earth's problems would be elimintated, including the stress on nonhuman life. The significant fact is that the U.S. consists of only 5.8% of the total population. How do Sessions and Devall view the prospect of being **decreased** (read simply: eliminated), along with 20 million other Californians? We Americans, perhaps especially Californians, constitute the greatest burden on the Planet---in terms of energy and raw materials we consume, and in terms of everything else that goes into supporting our life style. Thus, we have to tread gently and compassionately in this realm so that we are not accused of being population fascists and elitists of the worst kind.

Warwick Fox is a bit funny when he entitles his response, "Post Skolimowski Reflection on Deep Ecology". I can assure him that I am here to stay. I also find it puzzling, if slightly discomforting, when Fox maintains that Sessions had previously taken me to task for my excessively anthropocentric view of evolution. Fox refers to Sessions' article published in **Environmental**

Ethics; but he fails to mention my response to Sessions, also published in the same journal, in which I show quite unequivocally that Sessions is attributing contentions to me that I do not hold. Thus I find Fox's way of conducting scholarly debate rather lacking.

I was sorry that nobody has taken up my idea concerning intrinsic values. The subject is important. I have proposed what (I think) is an original position regarding intrinsic values. I suggested that the intellectual insight must be distinguished from the moral one. The two are different faculties. One is in the realm of the intellect. The other is the realm of what I call the axiological consciousness. This distinction enables us to defend intrinsic values as trans-subjective, as species-specific. Values reside in the core of the axiological consciousness which (to emphasize) is species-specific. I take a singular exception to Baird Callicott and others who maintain that values, conceived as species-specific, are subjective or subjectivist. No, they are not. It is so in the very nature of the meaning of language: subjective is limited to a particular subject. If, on the other hand, a property or value is distributed over or held by many subjects, then it is trans-subjective or intersubjective. We must use our lanaguage with prudence. I maintain that although intrinsic values are not objective, they are nevertheless trans-subjective. Our axiological consciousness, shared by most if not all, determines the nature of intrinsic values.

If I were allowed to summarize succinctly my attitude to deep ecology and express it in a friendly and colloquial way, I would say: You fellows are doing a tremendous job. You have made enough waves. The world has heard you. And listens to you. But now you have to go deeper than you have gone so far. After all, you claim to be **deep** ecology movement. So be deep. Don't stay on the level of propagandistic arguments. You have to work out a new cosmology and a new value system. In this work you need to rely on cooperation with others. Be inclusive rather than exclusive. May compassion guide you in your entire undertaking.

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FURTHER NOTES IN RESPONSE TO SKOLIMOWSKI

By Warwick Fox

1. What's in a title?

The title of my article "Post-Skolimowski Reflections on Deep Ecology" (**The Trumpeter** Fall 1986, pp.16-18) was simply intended to mean "here are my reflections on deep ecology after reading Skolimowski's article." It was not intended to be in any way disrespectful. I regret that Skolimowski seems to think otherwise, when he says in regard to my title: "I can assure (Fox) that I am here to stay." No other reader has said that they interpreted my title in such a way as would warrant this kind of response. Moreover, I would have changed my title to a clearer and even more pedestrian one (such as the title here) had the possibility of such an interpretation occurred to me. [It certainly never occurred to me. Ed.]

2. Evolution

Skolimowski criticizes me for referring to Sessions' critical review of Skolimowski's book **Ecophilosophy** (**Environmental Ethics** 6 (1984): 167-174) while not also taking into account his own reply to Sessions (**Environmental Ethics** 6 (1984): 283-288). However, in making this criticism, Skolimowski misses the point that was under discussion. I was responding to Skolimowski's erroneous claim that "proponents of deep ecology behave in their verbal utterances as if evolution did not exist." I referred to Sessions' critique of Skolimowski's view of evolution in the context of providing a particularly striking counter-example to Skolimowski's mistaken claim: here is Skolimowski saying that proponents of deep ecology "behave in their verbal utterances **as if evolution did not exist**" when in fact Sessions, a prominent proponent of deep ecology, has taken Skolimowski himself to task **on the basis** of evolutionary considerations!

Whether Sessions' criticisms of Skolimowski **justified** (and, hence, the question of whether Skolimowski's reply to Sessions was relevant to my own discussion) is a quite separate issue to the question of whether or not "proponents of deep ecology behave in their verbal utterances as if evolutions did not exist." Yet on the basis of his failure to perceive that it was the latter point that was at issue, Skolimowski explicitly proceeds to conclude that he "finds (my) way of conducting scholarly debate rather lacking." My only comment here is that, for reasons of courtesy and economy of language, most scholars would not bother to say such a thing explicitly, even when they **have** understood the point under discussion. Rather, it is usually considered that that kind of judgement should be left to one's readers to make on the basis of the **arguments** that one has set forth.

In regard to the issue that Skolimowski raises concerning the merits of Sessions' review, I would simply add here that, notwithstanding Skolimowski's response, I consider Sessions' review to be an insightful corrective to the evolutionary rhetoric in Skolimowski's (certainly) valuable and inspiring book. If, as Skolimowski claims, Sessions does attribute contentions to him that he does not hold, then much of the responsibility for this must rest with the fact that Skolimowski's style is so rhetorical. It is hard to know precisely what is meant by grandiose, abstract claims to the effect that "Spirituality, sacredness and divinity are singular attributes of one chapter of evolution (Man);" that "we acquire godliness by making gods of ourselves at the end of our evolutionary journey;" and that humans are the "crowning glory" (of evolution), "the custodians and the treasury of evolution," the "awkward, dim, unpolished fragments" (of God) and "God-in-the-process-of-becoming" (**Eco-Philosophy** p. 86, 86, 74, 75, 66 and 115, respectively). One can only go on what seems to be implied, yet, when criticized, such rhetorical claims can be tamed to the point of being noncontroversial, simply because they admit so many possible interpretations. In the face of these kinds of claims (which prevade Skolimowski's book), evolutionary theorists themselves tend either to throw up their hands in dismay, or to proceed to tear to pieces the assumptions upon which such statements appear to be based.

3. Value Theory

To say that values are intersubjective is to say (at least) that they are shared by a certain culture (or sub-culture) and, hence, that they are culturally relative or (what amounts to the same) culturally determined, change your culture and you change your values. To say that values are species specific (as both Callicott and Skolimowski do) is to say, further, that (at least some) values are trans-cultural; that they are relative to or (again, what amounts to the same) determined by one's species, change your species and you change your values. Now, as Callicott realizes and Skolimowski does not, ethical theorists may and do refer to both of these positions as subjectivist ones. This is because these positions see the existence, not merely the perception, but the existence, of values as bound up with the consciousness of perceivers (and all experience is **subjective**, whether or not modes of feeling and thinking are assumed to be highly idiosyncratic or largely shared by members of a culture or members of a species). (Some theorists prefer to speak in terms of "noncognitivist" approaches rather than in terms of "subjectivist" approaches, but that is a side issue here.) Objectivist positions, in contrast, see the existence of values in terms of facts about the world that obtain independently of whether or not this individual or that culture or species exists or recognizes these values. Thus, when ethical theorists such as Callicott speak of a subjectivist approach, they do not mean that values are "**limited** to a particular subject," as Skolimowski takes the word "subjectivist" to mean, but rather that the kind of justification or grounding that is provided for the existence of values is in terms of what subjects think and feel, rather than in terms of the way the world "really is" independently of perceivers. But whatever Skolimowski wishes to **call** his position (subjectivism, noncognitivism, trans-subjectivism, intersubjectivism), the essential point is that he has not overcome the basic problem of relativism that besets all subjectivist or non-cognitivist positions. If my values are simply a function of my culture or of my species then what claim do they have to be any better than those of any culture or species (we can imagine other species like us but with quite different values)?

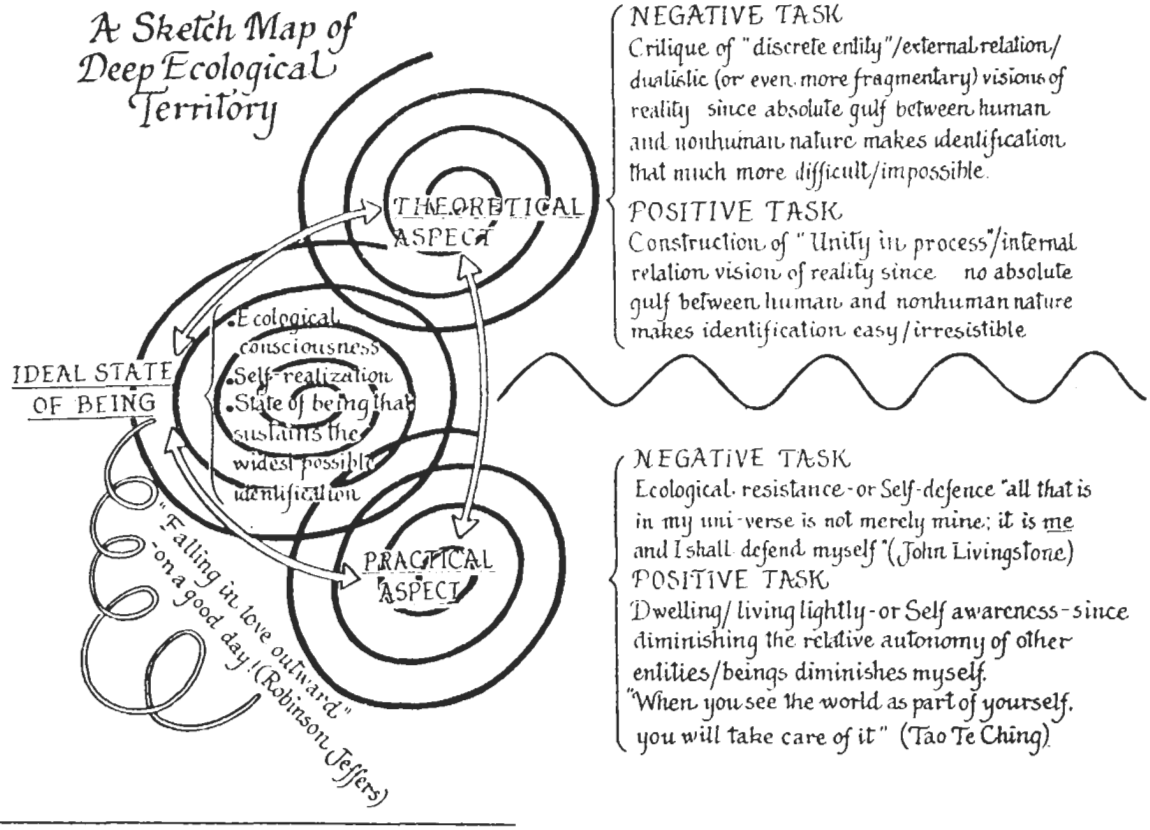
4. Weak and Strong Anthropocentrism

Skolimowski makes the point that "every contention of deep ecology...is a human contention." Who would want to argue with this? But like so many other writers in ecophilosophy who make this kind of point, Skolimowski fails to distinguish between the weak, trivial, tautological sense of anthropocentrism and the strong, informative, substantive sense of the term. (Skolimowski's sense of anthropocentrism in the context of the above quote is weak in that it does not allow us to make any distinctions between statements---all human statements are **equally** human statements; trivial in that it simply states the obvious; and tautological in that it is true by definition.)

Consider the following. The tautological fact that everything I think and do will be thought and done by a male or a person with white skin, for example, does not mean that my thoughts and actions be sexist or racist in the strong, informative, substantive sense, which is the sense that really matters, i.e., unwarranted differential treatment of other people on the basis of their sex or race. Similarly, the tautological fact that everything I think and do will be thought and done by a human (the weak, trivial, tautological sense of anthropocentrism) does not mean that my thoughts and actions need be anthropocentric in the strong, informative, substantive sense, which, again, is the sense that really matters, i.e., unwarranted, differential treatment of other beings on the basis of the fact that they are not human. To imply that the views of nonanthropocentrists (such as supporters of deep ecology) are anthropocentric in some informative, significant sense thus represents a logical sleight of hand that can only be accomplished by conflating the weak and strong

senses of anthropocentrism. It confuses the inescapable fact of our human **identity** (Skolimowski's weak sense of anthropocentrism) with the entirely avoidable possiblity of human **chauvanism** or human **imperialism** (the strong sense of anthropocentrism). Such a confusion amounts to the same as implying that a male who argues for equal opportunity or affirmative action for women is being "sexist" simply on account of the fact that his view is "androcentric" (i.e., male-centred) in the weak, trivial, tautological, sense that it is a view put forward by a male. If this is granted, then all male views (and all female views for that matter) are equally sexist and the significant function of the word "sexist" is lost.

This kind of confusion between different senses of a term in order to enable a conclusion that would not otherwise be possible commits what philosophers technically refer to as the fallacy of equivocation. However, since this practice is so common in ecophilosophical discussion, I propose that we identify this particular form of the fallacy of equivocation by referring to it as the **anthropocentric fallacy** or, more generally (to cover the same fallcy in regard to issues of race, class, age and sex, as well as species), **the perspectival fallacy** since it conflates obvious and inescapable facts about a speaker's perspective with the substance of the speaker's view. Whenever the anthropocentric fallacy occurs in ecophilosophical discussion (or whenever moves are made in that direction), it should be pointed out immediately that while all human views are equally anthropocentric in the weak ("all our views are human views") sense of the term, they are stunningly different in the strong (chauvanistic, imperialistic) sense of the term, i.e., in the extent to which they see humans as all important or at least morally superior to other beings and, hence, in the extent to which they advocate or at least legitimate the relentless exploitation of the nonhuman world by humans.



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In Meditation
By Warwick Fox

Doing nothing,
  expecting Nothing:
Just being myself.
Realizing the One Great Life
  of which we are all part.

AUTUMNAL CELEBRATION OF TREES & FALLING LEAVES

By John S. Frank

Here on my big white porch railing perch
I take in the descending acrobatic colors.
Orange, red, yellow leaves spiraling,
somersaulting to Earth.
Blanketing the ground they block out the green
grass, reminiscent
of color they used to be,
living cover of their tree form.
They now nourish the Earth interacting with worms,
who were food for the trees' avian cohabitants.
They nourish too the roots below,
becoming building blocks with the aid
of microscopic life, helping to produce
more leaf progeny in spring.
Lying there they are tread upon by many creatures,
gathered in mass to be transported elsewhere,
provide a means for children's play,
become compost that nourish floral kin.
They do not descend in great numbers,
like the crystalline bodies of winter,
yet they are just as graceful
in their colors of fall.
Their life is short, spanning two seasons
beginning with blooming buds that herald
vibrant new life.
They covered the trees, made food from sun,
provided shade and shelter for those who fly.
Only goodness have the trees and leaves given-
to Mother Nature, and in their demise please
the hearts of awestruck ignorant animals,
mammals of humankind, compelled to understand
the essence of their order, until--
the realization of their part in grand design.
How can something so rooted in the Earth elevate
our sensibilities through heightened senses,
and provide for our survival?

John S. Frank has most recently been a student of social ecology and is active in the Earth-care activities of environmental education groups.

BOOKNOTES

FOOLS CROW, By James Welch, Viking, 1986. Reviewed by Tom Birch, Dept of Philosophy, University of Montana, Missoula, Mt.

On the surface, James Welch has written an historical novel depicting the fall of the Blackfeet Nation (one of the last of the Native American Nations to be conquered by the white man), and depicting it from the Blackfeet point of view. The two reviews I have seen so far, although favorable, have not dug much beneath the surface. I shall try to point up a little of what may be found there, not, I hope, to presume, but to entice others to look deeply for themselves.

The power of the writing immerses one immediately and totally in the world and mind of the Blackfeet. (James Welch is a Blackfeet.) In part, Welch accomplishes this by a natural use of Blackfeet names for places, animals, and people. Many of these---and this is important---are names of living persons: Mountain Chief, Yellow Kidney, Kipp, descendants of the persons of the novel; and the names of real places on the Rocky Mountain Front of northern Montana: Feather Woman Mountain, Morningstar, Two Medicine River. Welch has re-translated these into English, this time accurately, by using them in the context of their original world. It has been said of us white colonialists that before we destroy a culture we mistranslate it. Our mistranslations now stand corrected.

In the world and mind of the Blackfeet, dreams and visions and myth must be taken seriously. They must be understood correctly, because they are what should shape what one must do or not do. In the Blackfeet world nonhuman animals give to and demand of humans. It is a world firmly rooted in the details of place, and it is a world that is full of gods. It is a world in which everything is inextricably interconnected with everything else. What we call myth is basic to rationality, to making sense of things, to the evaluation of action and practice, and to the discovery of right practice. Of course, the novel itself is composed in this tradition of myth and thus is not fiction in the usual Western sense. (Or is it that all good fiction is really myth?) The fact that the novel is itself written in the tradition of living myth is essential to understanding the questions the novel raises.

Somehow, inscrutably, the world is thrown out of balance, and it begins to disintegrate, externally as the land and the Nation are massacred by the Napikwans (the whites), and internally as families are decimated by disease and the violation of tradition, and as mind can no longer comprehend, and as the timeless medicine loses its power,

because humans have lost the power to see how to use it. Yet, even though the defeat of the Nation is decisive, faith in the Blackfeet world endures, and perhaps an understanding of what has happened is achieved in terms of this world. The world is never abandoned, and it is never denied in favor of the white man's world---the eschatological fantasies of the sort of "salvation" for which the exile hopes. What counts is survival, survival of humans and of all those others who compose the world.

After its relentless and devastating portrayal of the defeat of the Blackfeet Nation and the savaging of the Blackfeet world, the novel Concludes:

> That night there was much feasting in all the Pikuni camps. Winter was over and the men talked of hunting, of moving the camps out of the valleys, of moving on. The women prepared their meager feast and fed their men, their children, their relatives and friends. They knew that soon the meat pots would be full and the hides would be drying in the sun. Outside, the children played in the rain, chasing each other, slipping and skidding in the mud. They were Pikunis and they played hard.
>
> Far from the fires of the camps, out on the rain-dark prairies, in the swales and washes, on the rolling hills, the rivers of great animals moved. Their backs were dark with rain and the rain gathered and trickled down their shaggy heads. Some grazed, some slept. Some had begun to molt. Their dark horns glistened in the rain as they stood guard over the sleeping calves. The blackhorns had returned, and, all around, it was as it should be.

Is this a dream; or a vision; or an unbearable irony? Or is it the literal truth? It is all of these. The world is essentially spatial and timeless (non-chronological), and therefore it endures---metaphysically it is ensconced in eternity. In practical reality, however, it will endure only as long as it has survivors.

James Welch is not the only survivor. The timeliness of his novel is astonishing. Other traditional Blackfeet are fighting right now to save the last of their sacred lands (the Badger-Two Medicine Roadless Area in the Lewis and Clark National Forest) from roading and gas and oil drilling.

If the fight for these last sacred lands is lost, and if they are not kept free from business as usual, will the Blackfeet world survive? Although it will always exist and cannot be destroyed in the metaphysical sense, that is small consolation at the level of practical reality. Traditional Blackfeet continue to use these lands for sacred purposes---these lands are necessary components of the traditional world. The practical survival of the Blackfeet will require the preservation of these lands unprofaned, in order to retrieve what has been lost and to put it into practice together with what has been retained. Then the Blackfeet world will survive.

The Universe is a Green Dragon: A Cosmic Creation Story, By Brian Swimme, Bear & Co. Inc., Santa Fe, NM, 1984. Reviewed by Michael Caley, who is an Advisor of Science, Technology and Society, with the Futures Compendium Secretariat, Alberta Economic Development and Trade.

Brian Swimme uses dialogue to convey his fascination with the new cosmology that has developed from modern science in the past few years. THOMAS (in honour of Thomas Berry) explains the significance of the new cosmology to YOUTH. Swimme's language is prose, but with the drama and colour of poetry. There is no doubt that the author is truly fascinated.

Why call the universe a green dragon, when it obviously is not? In Swimme's words:

> I call the universe a green dragon to remind us that we will never be able to capture the universe in language.
>
> Because the universe is a singularity! To speak, you need to compare things...But there is only **one** universe. We cannot compare the universe with anything. We cannot **say** the universe.
>
> I call the universe a green dragon because I want to avoid lulling you into thinking we have the universe in our grasp, like a stray dog shut up in its kennel. I want to remind us of this proper relationship as we approach the Whole of things.

This conceptual stance should be familiar to ecophilosophers. We reach out in search of Wholes. Ecology and philosophy lose their meaning when reduced to their bits and pieces; so to, in Swimme's cosmology, does the universe. We were born with the big bang.

> Imagine that furnace out of which everything came forth. This was a fire that filled the universe---that **was** the universe. There was no place in the universe free from it. Every point in the cosmos was a point of this explosion of light. And all the particles of the universe churned in extremes of heat and pressure, all that we see about us, all that now exists was there at the beginning, in that great burning explosion of light.

We, the Earth, the plants, the stars, quasars, neutron stars and black holes are all composed of the particles that existed at the beginning of

time. We are starstuff. Our relationship to the world and the universe is direct.

To Swimme a fundamental property of the universe is creativity. A purpose of the universe is creativity. Our purpose is to fulfill our "creative potential." The history of the Earth is an explosion of creativity, with humans as a new form.

Humans have the power to be self-reflexive. Swimme describes humans as the universe's creation that can reflexively reveal the beauty of the universe, and, as he says, "We have not even begun!"

Humans have had, according to Swimme, three eras in which they have achieved increasingly more complex visions of beauty.

> During the tribal-shamanic age, the great mysteries of Earth and Sky and Sun burst into human consciousness. . .In the second era of human history, that of the great classical civilizations, we witness the rise of the Chinese, the Indian, the European, the Middle Eastern, the Amerindian. ...In this matrix the great scriptures of the world were written, the classical spiritual disciplines forged. ...there developed an appreciation for the human world as the intersection of the transphenomenal and phenomenal development. ...The scientific-technological era is humanity's third phase of development . . .The scientific-technological period has enabled the dynamics of the universe to unfold in human consciousness.

At present, the human species moves into its fourth era, what we might call "The Age of Earth". Building on the three previous ages, "the creative fire within the human venture now focuses on bringing forth something entirely new, a form of life that envisions itself within the interconnected dynamics of the unfolding Earth reality."

Swimme goes on to discuss Allurement as a fundamental property of the universe, then to Our Destiny as Enchantment and Evil from Cosmic Risk. I give you these chapter titles to intrigue you.

His discussion of Gaia through Sea, Land, Life, Fire and Wind will warm the hearts of all ecophilosophers. The language has its own beauty and Enchantment. The final chapters on Societal Transformation and Geological Activity and The Art of Forging Cosmic Fire provide a most optimistic view of a possible human future.

If you have feelings of pessimism observing the continued activities of the Robber Barons in the 20th Century, as I often do, The Green Dragon is a very, very, bright spot.

I have been reading the book aloud to my daughters, Erin 13, and Megan 10. I read until we hit a word or concept that they don't understand. They stop me and I do my best to explain and on we go again. We all enjoy this very much. Their conception of their place in the scheme of things is enhanced, I get to know them better and we, all three, learn.

I can heartily (with my starstuff heart) recommend **The Universe is a Green Dragon** to all ecophilosophers. Some of the information you know, some will be new. The interrelationships are startling and refreshing. As an act of self-reflexion at the cosmic level, it is inspiring.

> The universe bestows on us fire from the beginning of time, simultaneously evoking our profound reverence for this fire. The universe demands our response: Do we awaken, dedicating ourselves to a vision of beauty worthy of our fire's origins? Do we shape this fire as it has shaped us, aware of the awesome work that has gone into providing it? As we lie in bed each morning, we awake to the fire that created all the stars. Our principal moral act is to cherish this fire, the source of our transformation, our selves, our society, our species, and our planet.

* * *

***Adam's Task: Calling the Animals by Name** by Vicki Hearne, Knopf, N.Y., 1986. ($17.95 U.S.) Major portions of this excellent book originally appeared in the **New Yorker**. This is one of the most detailed studies of the conflict between mechanistic academic theories of animals and the language of those who work with and train them. Highly recommended.

***Environmental Ethics: Duties to and Values in the Natural World** by Holmes Rolston, III, Temple University Press, Broad and Oxford Sts. Philadelphia, Pa. 19122. ($21 U.S. prepublication price.) According to the advance notice, "[t]his book is a systematic account of values carried by the natural world, coupled with an inquiry into duties towards animals, plants, species and ecosystems. A comprehensive philosophy of nature is illustrated by and integrated with numerous actual examples of ethical decisions made in encounters with fauna and flora, endangered species, and threatened ecosystems. The ethics developed is informed throughout by ecological science and evolutionary biology. With attention to the logic of moving from what is in nature to what ought to be" in our actions. The ethical theory is applied in detail to social contexts. Rolston's other papers and books are outstanding examples of the best from philosophy, informed by years of direct experience with the natural world. He writes with imagination, clarity, and poetic grace.

***Shifting Paradigms: From Technocrat to Planetary Person**, by Alan R. Drengson. Available from Lightstar, P.O. Box 5853 Stn. B., Victoria, B.C., Canada V8R 6S8. $10 U.S. overseas and to the U.S., $10 Can. within Canada.

CONFERENCES

***Correction:** The North American Bioregional Congress is going to meet in the Vancouver, B.C. region from the 21-26 of August in 1988. Contact persons: In Canada Glen Makepeace, P.O. 69004 Stn. K, Vancouver, B.C. V5K 4W3, (604) 733-6527; in the U.S. Erik Haugland, P.O. Box 71001, Seattle, Wash. 98107, (206) 789-3620. The meeting was not in 1987 as stated in the last issue.

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