



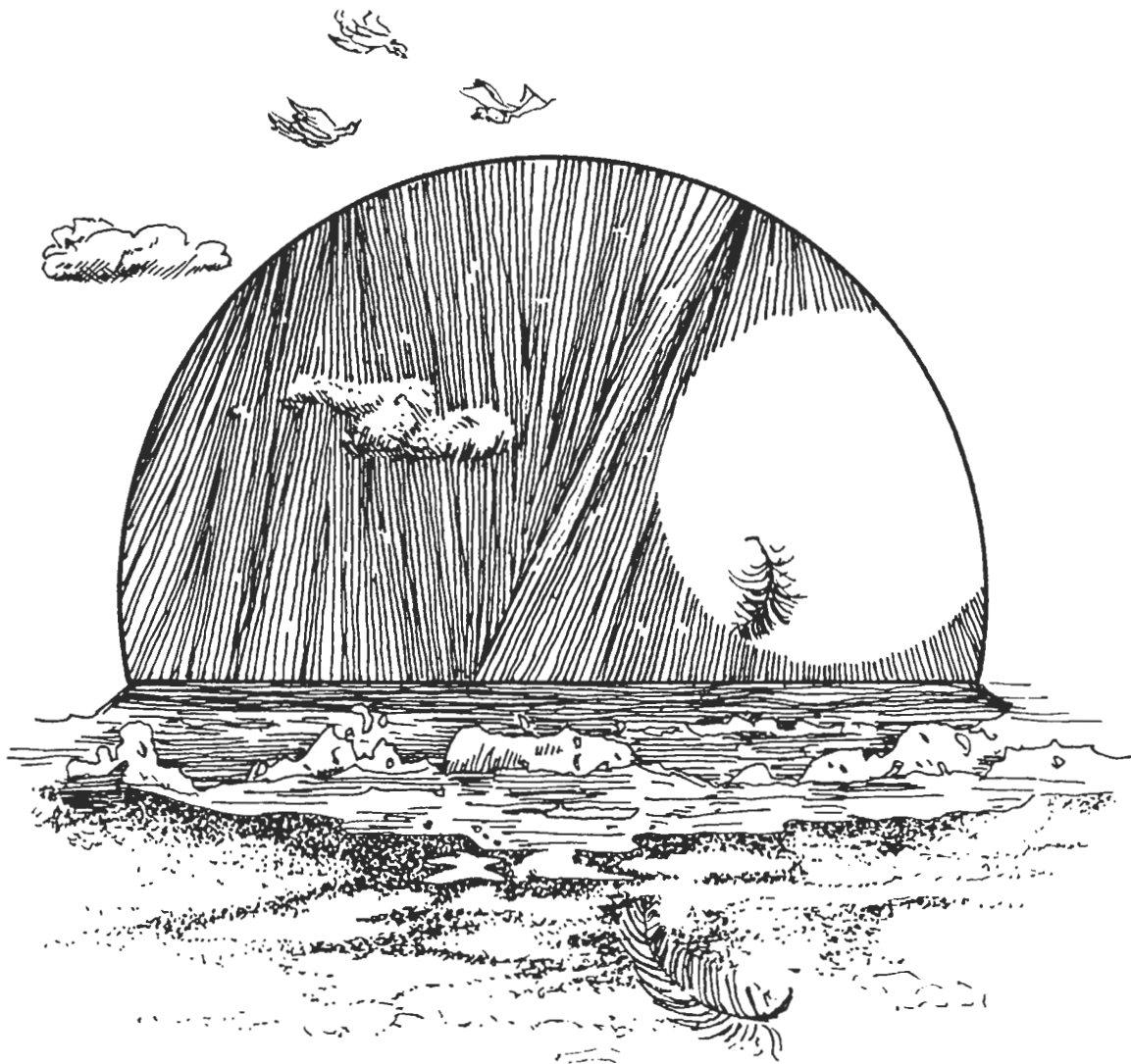
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# THE TRUMPETER

*Voices From the  
Canadian Ecophilosophy Net Work*

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ECOFEMINISM, SCIENCE, MAGIC, TECHNOLOGY & SELF-REALIZATION

# 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 ecophilosophy 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.**

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## Introduction to this Issue

Alan Drengson, Editor

Barry Commoner has been persistent in emphasizing the importance of recognizing that the environmental crisis is not going to be practically addressed until we embrace new policies for the development of technology. Writing in the June 15, 1987 *New Yorker*, he points out that it is the level of technological development that gives one a sure guide to level of pollution. The per capita consumption of resources and production of waste material is highest in countries that are the most technologically developed. Therefore, those who stress that population is the most important factor in the equation of environmental degradation tend to miss an important fact. Demographic statistics alone tell us only about human numbers, not about environmental and social conditions. In our measures of population no attempt is made to count our machines. Machines consume fuel, air, water, space, and produce waste--both solid and gaseous.

At present the policies for the development of new technologies are environmentally chaotic and incoherent. Since World War II, not only has the quantity of pollutants increased as a result of more people consuming, it has also increased on a per capita basis. In addition, the quality of the pollutants has changed. For example, in agriculture the changes in technologies have been enormous and disastrous for the land and farm communities. Commoner states that bioregionalists, population control groups, and environmental groups generally, insofar as they do not emphasize the need for immediate change in technology policy, will fail to realize their objectives of a healthy environment. He also notes that pollution is discriminatory. If you are poor and belong to an ethnic minority, your chances of suffering from environmental degradation are far greater than if you are not. A change in technology policy will involve a change in power for the large, multinational corporations who are now largely in control of its development. The issue of control of technology is of supreme importance and is directly related to practical politics.

It is clear that there are a number of things each of us can do in our personal lives to mitigate our family's burden on the environment, there are things neighborhoods and communities can do. States and provinces can add to this good effort, as well as can national governments. All of this will be for naught, Commoner suggests, unless we go further and use federal, provincial and state governments to enforce and set out guidelines for the development of new, non-polluting, technologies and practices.

The obvious problems here are plain to see. First, the economic system wags the political dog. Second, a lion's share of research and development funds now go to some form of military project, and

globally vast numbers of engineers and scientists are employed in research and development connected with military technology; to redirect these resources is difficult. Third, many large corporations have a vested interest in maintaining the status quo. The profits earned from military R & D are much more lucrative and more secure than those gained by developing and distributing benign technologies and in a highly competitive market. Fourth, if a corporation decides to commit itself to the development of clean, new, appropriate technologies, it faces an established infrastructure that makes such introduction difficult. Finally, even if a federal government establishes guidelines for technology development, international technology development remains anarchical. Nuclear and biogenetic technologies might be curtailed in Canada, but not in the U.S. and Japan.

In *The Trumpeter* we are exploring the thoughts and writings of people who are consciously attempting to create a new environmental philosophy; they are striving for a change in consciousness and in their relations to other beings and the world. The ecology of self, community, and Nature are at the centre of our inquiry. In our explorations we have moved through territory both practical and down to Earth, as in consideration of ecoagricultural practices, as well as highly abstract and theoretical, as in the debate about principles and axiology in connection with Deep Ecology. It should be clear by now, that all these levels are relevant. However, each of us must also act.

Humans are political creatures by their very nature. Even our use of language is in some respects political. If one's language is filled with discrimination, hierarchy and domination, one can become ensnared in this language, and in forms of action consistent with it. Furthermore, one's language tends to reflect one's unconscious acceptance of the cultural matrix in which one is embedded.

In attempting to find solutions to specific problems connected with our interactions with Nature, we turn to science and technology for help in creating a new vision of the world. Perhaps we attempt to create new practical means of living based on science, and technology, but the problems grow worse. One of the most significant things to emerge in the feminist critique of our culture is the realization that science is not as neutral and objective as we tend to believe. It has been limited, since its inception, by a narrow range of values which in part reflect a hierarchical, patriarchal, system of domination and control. The mechanism of classical Newtonian science, and the technology of the machine developed in connection with it, reflect this domination by masculine values. Ecofeminist thinkers remind us that for centuries humans lived in cultures that were

balanced between the masculine and the feminine principles. But later, the feminine side of ourselves, the feminine principle, and women themselves, were suppressed. For ecofeminists the deepest ecology requires the liberation of the feminine principle in each person, male and female, and the rebalancing of the dynamic relationship between the masculine and the feminine in our science, technology practices, economics, and politics. To fully reach this balance, especially in the economic and social sphere, is going to be difficult.

This issue brings together papers with thematic unities that revolve around ecofeminism, new science, technology, magic, the Great Goddess and self-realization. If we are to realize ecosophy (ecological wisdom), we will have to have an ecology of the self deep enough to lead us to the full integration of our Self nature. Realizing this Self to the deepest and fullest extent involves allowing it to reveal itself. This is the receptive intuitiveness of the feminine principle. The ancient Taoist philosopher Lao Tzu observed, the Way that is harmonious with Nature involves "knowing the masculine (yang), but cleaving to the feminine (yin)." If balanced between the masculine and the feminine principles, the metaphors, images, myths and stories we create and live can bless our lives with the fullness of Nature. In this case they would be full realizations of our Self-Nature. Full Self-nature is found in the balanced, dynamic, reciprocal interrelationships of the feminine and masculine principles. Ecofeminism, from a philosophical standpoint, not only critiques our situation, but provides old wisdom and new vision of the integrity of wholeness that this reciprocity involves.

**Patsy Hallen's** article provides a comprehensive exploration of the major issues connected with ecofeminism. She gives us an in-depth look at the nature of science and technology in a culture characterized by patriarchal values and alternatives thereto. **Don Davis** continues this discussion by zeroing in on the epistemological issues connected with a balanced ecological understanding of the world. The feminine principle, he suggests, is connected with the wisdom of holistic insight. **Starhawk** provides a glimpse of some of the larger aspects of an expanded sense of knowledge and wisdom. She explores the Old Religion of the Great Goddess and attempts to show why this Old Religion is important, not only to women, but also to men. She points out that magic is a technology, or a way, of altering our states of consciousness. To perceive Nature as it is in itself is possible when one stops constricting one's own awareness. When we let go of constrictions the world rushes in, our sense of who we are enlarges ultimately to encounter the other as it is, and ourselves as both familiar and other.

**Harold Wood** offers examples of fairly standard objections, not only to the Old Religion and Witchcraft, but to some aspects of ecofeminist critiques of science. This gives **Monika Langer** the opportunity to respond so as to clarify and amplify on the insights that Starhawk and other ecofeminists offer. She shows why it is important to understand these insights, and their relevance to a deeper understanding of Nature. **David Abram** offers personal reflections and experiences in altered consciousness that are part of the realm of magic and connect with shamanic traditions. **Larry Hickman** presents some basic classifications for understanding technology and magic, which are most helpful in this context. It is one thing to call for a new technology policy that will give us new technologies that are environmentally safe, and new practices that respect and appreciate Nature, but before we can redress technology, we must understand it. Hickman's paper serves as a brief introduction to the inquiry of philosophy of technology when we focus on these matters in 1988. Finally, **Arne Naess** presents a detailed, philosophical exploration of the concept and means of self-realization. His paper connects with all of the other themes in this issue, for in all of them the question arises, what is our own self nature? The first requirement of the moral life is that we examine ourselves and understand who and what we are. This is not a one time thing, but an ongoing process of discovery that is both creative and revealing.

It is well to pause from time to time to recollect what we are about in **The Trumpeter**. From the start we have said we are attempting to present a representative sample of ecophilosophical literature and reflections. Ecosophy for us involves, in part, having a truly ecological vision of things. We take ecology here to be not just the biological science of ecology, but an ecological philosophy both practical and theoretic. As such we want to see what policies and practices are most conducive to living lightly and harmoniously on this Earth, with ourselves, with other peoples, with Nature. This leads us to see, after a time, that no one discipline, group, and so on, has all of the answers for everyone else. There are many ways to realize ecosophy. Ecophilosophy, fully understood, involves an appreciation for this diversity within our traditions and between our traditions and others.



**MAKING PEACE WITH NATURE:  
WHY ECOLOGY NEEDS FEMINISM**

By Patsy Hallen

The 'control of nature' is a phrase conceived in arrogance, born of the Neanderthal age of biology and philosophy, when it was supposed that nature exists for the convenience of man. The concepts and practices of applied entomology for the most part date from that Stone Age of science. It is our alarming misfortune that so primitive a science has armed itself with the most modern and terrible weapons, and that in turning them against the insects, it has also turned them against the earth.

Rachel Carson, *Silent Spring*

This paper aspires to illuminate pathways of making peace with Nature. This is not an easy task since everywhere we are so much at war with the Earth, from DDT to deforestation, from acid rain to radioactive fallout.<sup>1</sup>

**A Multi-Dimensional Thesis**

My central thesis is that if we are to make peace with Nature ecology needs to be transformed by the knowledges<sup>2</sup> of feminism. This is a complex and multi-dimensional thesis involving our individual and collective psyche (the psycho-sexual realm), our ways of knowledge (science), and our ways of being (society and the environment). To support this thesis I will draw from philosophical, psychological, sociological and historical sources not in a linear, combative way (statement of main thesis, arguments for main thesis, defeat of objections to main thesis, and so on) but in a spiral, processive way. I do not propose to argue. "Any kind of polemics," writes Heidegger, "fails from the outset to assume the attitude of thinking."<sup>3</sup> I do not propose to be polemical. What I hope to do is to evoke and share a vision.<sup>4</sup> This invitation-to-look approach is a deliberate strategy designed to stand as a testimony to the complexity and the vitality of the deceptively simple claim: ecology needs feminism.

**Science Must Be Mediated by Feminist Knowledges**

Feminist scholarship has shown how modern science is basically a masculine endeavor. As a result, I will suggest, science is one-sided, and potentially life-threatening. We will not overcome this one-sidedness, I will maintain, until our scientific understanding of the living world is mediated by the content of feminist epistemologies---the sensual, the relational, the intimate. Unless our science is grounded in the "caring labour" articulated by feminism,<sup>5</sup> science will continue to be, as Rachel Carson suggests, "against the earth".

Furthermore, I will maintain that these feminist perspectives (which have their roots in traditional

thinkers from Plato through Kierkegaard to Polanyi<sup>6</sup>) have been systematically ignored because of our individual and collective psychotic need to dominate. Ecology's wholesomeness, I will posit, is linked in a profound way to the absence of a need to dominate. This claim, then, necessitates an investigation of the psycho-sexual dimension to uproot the causes of domination.

Thus a related thesis which supports my main thesis is this: that the current ecological crisis has psycho-sexual roots. The ecological crisis has many other causes as well (economic and political), but we have underplayed, even ignored the psychosexual causes until feminist<sup>7</sup> theory invited us to investigate this dimension.

**Why Science Needs Feminism**

Following feminist writers I will maintain that sexism is the expression of a basic psychology of domination and repression. Ecological imbalance is, in part, due to our mistaken<sup>8</sup> belief that we can successfully dominate Nature. So sexism (mind and body pollution) is fundamentally linked to ecological destructiveness (environmental pollution).

I will suggest that ecology as a **science** needs feminism to balance a myopic, mechanical world-view which has fundamentally influenced scientific development; ecology as a **life science** needs feminism to reveal how patriarchal thinking contributes to environmental destruction; ecology as a **practice** needs feminism to ensure that shallow ecology is transformed into a deep ecological perspective. The shallow/deep distinction was drawn by Norwegian philosopher Arne Naess, to contrast reform environmentalism with deep ecology. Reform environmentalism aims to manage the environment based on its use-value, while deep ecology seeks to help us see and feel ourselves as intimately interrelated to an intrinsically valuable Nature,<sup>9</sup> so that when we harm Nature we diminish ourselves.

I will posit that one of the pathways to making peace with Nature is through feminism. Feminism is helpful to ecology as a science, as a life science, and to its practitioners because the multiplicity of differences within feminism offers new ways of experiencing and understanding the world.

Despite the main theoretical differences between feminists (liberal, Marxist, socialist, post-structuralist, radical), feminists adhere to a few basic tenets, as outlined by Marilyn French:<sup>10</sup> that the two sexes are at least equal in all significant ways and that this equality must be publicly recognised; that the qualities traditionally associated with women (nurturing, receptivity) are at least equal in value to those traditionally associated with men (self-assertion, power-seeking) and that this equality must be publicly recognised, not ignored or viewed as irrelevant; finally that the personal is the political, the bedroom is as relevant as the boardroom.

What I hope to show is that each of these tenets of feminism can help to enlarge our scientific understanding of the environment. The first tenet will ensure that more women will participate in the scientific community.

It is crucial that there be more women in science. For as Harding points out, science is the model in our culture of a masculine activity. To quote Harding "women have been more systematically excluded from doing serious science than from performing any other social activity, except perhaps frontline warfare."<sup>11</sup> Hence, to redress the scarcity of women in the peculiarly masculine occupation of scientist is vital.

But this, while necessary, is not sufficient. We do not just need more women in science; the whole nature of the system, the dominant ideology of science, needs to be challenged.

As the researchers of women's struggles to enter science show,<sup>12</sup> even if horizontal segregation (science as an exclusively male domain) is to some degree overcome, vertical segregation (women scientists confined to low status positions) has yet to be eliminated. We not only need more women scientists, we need women to be equally recognised practitioners of science. As Hilary Rose points out,<sup>13</sup> the majority of people actually practicing science---technicians---are women, but their work is marginalised, trivialised, made invisible, and this is so, even when the content of the scientific work done by women is objectively indistinguishable from men's work. This indicates that other, deeper factors are at work. Are masculine gender identities so fragile that they cannot afford to have women as equals to men in science, Harding asks?<sup>14</sup> Until the 'emotional labour' of childcare and housework is seen as desirable for men, the 'intellectual labour' of science and public life will not be perceived as desirable for women. To transform science will require revolutionary change in the social relations between the sexes.

Even if there are more equally recognised female practitioners of science, science's relations to society need to be altered. For women do not want to become 'just like men' in an enterprise that, in the USA for example, devotes 72 percent of its federal funding for scientific research and development to defence.<sup>15</sup> Furthermore, women should not want to become puzzle-solvers in vast industrialised empires devoted to material accumulation, social control and exploitation, activities leading to species extermination and environmental degradation. It is not only bad science (hastily generalized science with inappropriate data bases), but 'normal' science that needs to be criticised since, as the critics of modern science show,<sup>16</sup> so much of it facilitates militarism, ecological disasters and desperate poverty.

By the very same token, we do not just need more ecologists; for ecology can be exclusively reductionist, 'understanding' life in terms of non-life, and so failing to see living things in process, in relation and in context, in terms of dynamic energy patterns. In addition, all-too-often environmental impact statements are fronts, hoaxes. As Neil Evernden points out,<sup>17</sup> Universities willingly disgorge troops of environmental scientists and managerial environmentalists and while they appear to be tools of environmental defense, they turn out---lo and behold!---to serve the interests of the developer. So for truly emancipatory knowledge-seeking the first tenet of feminism, more women ecologists, is not sufficient.

We need the second tenet of feminism whereby the so-called 'feminine' qualities will be cherished and female experience can be incorporated into explanations. This will help to offset what Evelyn Fox Keller calls the "hegemony in science",<sup>18</sup> the 'masculine', virile, domineering nature of science, and to reclaim science as a human, not a masculine project, and so to, in Keller's words, "transform the very possibility of creative vision".<sup>19</sup>

This key rationale will be further substantiated in the course of this paper. For now, suffice it to say that, as Keller points out,<sup>20</sup> despite the wide diversity in the practice of science, there is a monolithic ideology of detachment and domination which crystallised in the 17th Century, and this ideology has deeply influenced the selection of goals, the methods, values and explanations that operate in contemporary science.

While this view draws our attention to how so-called 'feminine' thinking---intuitive and relational thinking---has advanced scientific comprehension, the perspective of valuing feminine qualities is also not sufficient. It is vital to point out the importance of pluralism in the intellectual pursuit of knowledge, but until we understand what motivates the exclusion of these non-macho elements in our scientific story-telling, we will not understand why some ideas gain legitimacy and others do not. So it is necessary to investigate the psychological profile of masculinity: a third level of analysis---the psycho-sexual.

This third tenet of feminism---the personal is the political or the sexual is the scientific---announces a three-storied method.

Firstly, as feminists point out, the public sphere depends upon the private resource base. But this private resource base is often not acknowledged, or if it is, it is trivialised. Feminism insists that we ask why it is trivialised and that we come to terms with the importance of this private dimension.

Secondly, feminist analysis shows us that who we are (in the bedroom) shapes our politics (in the

boardroom). So feminism insists that our sexuality, our sense of self, be articulated in any intellectual endeavor. We must 'begin at the start'. We must start from the personal since it is so formative.

Thirdly, feminism seeks to enlarge our understanding of Nature and the world not just by including feminine experience in explanations, but also by insisting on including those domains of human experience that have been relegated to women: namely the personal, the emotional, the sexual. An example of this method is Brian Easlea's book, *Fathering the Unthinkable*,<sup>21</sup> which analyses a scientific achievement---the building of the bomb---in psychosexual terms. I will go into this example as illuminating the third tenet of feminism in more detail later; for now the announcements must suffice: namely, that including the personal, emotional, sexual dimensions of experience in our explanations will and does make us better scientists, because they alert us to our signatures and in the process help to enlarge our sense of what is possible.

But such theories calling for the integration of the personal and the scientific will be 'fated to remain mere intellectual curiosities---like the ancient Greek ideas about atoms',<sup>22</sup> until we understand the unparalleled importance of our sexuality and the relation between sexual repression and domination.<sup>23</sup> Just as ontogeny (the development of an individual) recapitulates phylogeny (the evolution of the species)---for example a human embryo mirrors our reptilean and amphibean past in its life history---so too cosmogeny (world-building) recapitulates erogeny (sexual building).<sup>24</sup> Until we understand these principles, we will not achieve psychic health or scientific wholeness.

#### **A Relational View of Humans and Nature**

Feminism acknowledges the central importance of the erotic, the private, the personal and as a result it speaks "in a different voice", to borrow Carol Gilligan's phrase.<sup>25</sup> It offers us a mode of thought at variance with the dominant ideology. Its central ontological category is not substance, but relation. This category transcends mere relativism, goes beyond and beneath divisive dualisms and dichotomies and insists on the scientific importance of the personal. To quote Hilary Rose,

[a feminist epistemology] transcends dichotomies, insists on the scientific validity of the subjective, on the need to unite cognitive and affective domains; it emphasises holism, harmony, and complexity rather than reductionism, domination and linearity.<sup>26</sup>

Rose argues that this relational view is easier for women to attain because of their labour. Women's labour is more "in touch with necessity".<sup>27</sup> It is caring labour reflecting the unification of mental, manual and emotional activities ("hand, brain and heart") characteristic of women's work. As such it is more complete and therefore "truer knowledge".<sup>28</sup>

In addition, I surmise this relational view might be easier for women to attain because of their gender identity. Psychologists and social theorists who have studied gender identity (as distinct from sexual identity) tell us that femininity is defined through attachment and connection, while masculinity is defined by independence and separation.<sup>29</sup> The male gender is threatened by intimacy; the female gender is threatened by separation. So gender sensitive theories show us how to better relate to our environment, show us how to more fruitfully connect with Nature.

It is no accident that ecology, which etymologically means 'a study of the household', needs the experience of women. To see the Earth as a life-sustaining home is a vision of ecology which, I believe, is accessible to women.

#### **Scientifically Revolutionary Consciousness**

As a result of women's caring labour and women's gender identities, I propose to you that feminist consciousness is a scientifically revolutionary consciousness. I see feminism and ecology as sharing the same perspective, which represents a new (yet very old) way of seeing, a way of making peace with (rather than war on) Nature. Such a perspective is holistic: everything is connected to everything else and each aspect is defined by and dependent upon the whole, the total context. Life is interconnected and interdependent: we are not above Nature, we are an intimate part of it.

We have been blinded to holism by the gender ideology of science, by our arrogance, by our false sense of superiority, by our fragile identities rendered vulnerable by projecting our inner tensions outward onto 'the second sex' rather than working them through, by our incomplete notions of survival of the fittest with its resultant stress on competitiveness. Even David Attenborough's superb television series, 'Life on Earth', was biased in this way. Its scenes of intense competition far outweighed its scenes of co-operation in the evolutionary story. As John Livingston points out, most wildlife biologists carry around an extraordinary load of assumptions: concepts like dominance, aggression and competition---a "long roster of market-place concepts applied to nature."<sup>30</sup> In addition to this excess baggage, we have been blinded to holism by the spatial metaphor with which we grew up, God a ruling class male above, then man with woman and

Nature (mythed as female) below. This hierarchical picture has dominated Western thought for hundreds of years and it is still very much alive despite the 20th Century revolutions in scientific thinking. I propose that we unconsciously imbibe this worldview, we smuggle it into our conscious mind and let it structure our thoughts.

Both ecology and feminism challenge this hierarchical picture. Both reject the divisive dualism that this worldview implies: heaven-earth, male-female, mind-matter, reason-emotion, objective-subjective. To develop the masculine and the feminine in each of us, to become whole people, to be able to see objects as subjects, to see Nature as a thou, to experience the Earth as a live presence, to feel Nature as part of ourselves---the visions of ecology and feminism dovetail. Co-operation is stressed (not competition), understanding is vital (not power), appreciation is important (not domination). The watchwords are solidarity and sharing, not rivalry and ruling. As Mary O'Brien puts it, what is important is "reciprocal intimacy and not conquest".<sup>31</sup> Both ecology and feminism share a non-hierarchical, egalitarian perspective. Both participate in a common philosophy whereby process and participation are primary. Process philosophy is a deep and complex topic with its sources in the philosophies of Alfred North Whitehead and Henri Bergson.<sup>32</sup> For our purposes it is sufficient to say that feminism and ecology both stress creative activity over inert matter, dynamic order over static laws, partial autonomy over determinism, relation over substance, objects as subjects over subjects as objects. Finally, for both ecology and feminism, as Carolyn Merchant points out,<sup>33</sup> there is no free lunch. This is one of the four laws of ecology articulated by Barry Commoner.<sup>34</sup> We may think that we are getting a cheap digital watch at \$4.99, but the real cost must include the Formosan women who go blind producing the liquid crystals. There is no free lunch. To produce organised matter, energy in the form of work is needed. Reciprocity and co-operation oiling the feedback loops and closing the energy circuits is what is needed, not free lunches.

Whereas patriarchal society needs an inferior 'other' in terms of which to define itself---an insight so clearly articulated by Simone de Beauvoir---(whether that other be 'woman' or 'African' or 'black')<sup>35</sup> a society transformed by feminist consciousness would oppose such hegemony. Feminism argues for a plurality of discourses and for a vision of wholeness based not on divisive dichotomies or defensive competitiveness but on a genuine appreciation of the difference.

The field of primatology has attracted a disproportionate number (compared to other related

fields) of woman researchers, and it is here that we can witness feminist consciousness in action: the explosion of the old models of male-dominated power structure, the realisation of the importance of co-operation and the undermining of this category of 'other'.<sup>36</sup> Likewise as Livingston points out, a study of short grass prairie songbirds in New Mexico came to the (surprised) conclusion that "competition is not the ubiquitous force that many ecologists have believed".<sup>37</sup>

Both the female primatologists and John Wiens' papers on the short-grass songbirds challenge the notions of competition dominance and the concept of 'the other'. They show us how in Nature the self/other distinction is often inappropriate. Success for a species depends upon individual bonding with the environment---an extended consciousness of self that transcends an isolated self. This "participating consciousness" is crucial for the survival of many species, and it is crucial for human survival. And the perception in sensitive science that the environment or the non-self is not 'other', is music to feminist ears.

#### Reciprocal Intimacy in Science

Let me share with you a striking example of how science might be different, of how science might look, when it is based on an attitude of reciprocity and co-operation rather than a competitive 'other'. This attitude of "reciprocal intimacy" in science is illustrated by Barbara McClintock, who in 1983, won a Nobel Prize for her work in Biology in the 1940s. Evelyn Fox Keller has written a moving biography of McClintock called *The Feeling of the Organism*<sup>38</sup> and in it she asks:

What is it in an individual scientist's relation to Nature that facilitates the kind of seeing that eventually leads to productive discourse? What enabled McClintock to see further and deeper into the mysteries of genetics than her colleagues?

Her answer, Keller tells us, is simple:

Over and over again McClintock tells us one must have the time to look, the patience to hear what the material has to say to you, the openness to let it come to you. Above all one must have a feeling for the organism. And McClintock goes on to say: 'No two plants are exactly alike. They are all different. And as a consequence you have to know that difference.' She explains: 'I start with a seedling and I don't want to leave it. I don't feel I really know the story if I don't watch the plant all the way along. So I know every plant in the field. I know them intimately and I find it a great pleasure to know them'.



McClintock calls herself "a mystic in science", this woman whose work has been recognised with a Nobel Prize, and she says that her aim is to "embrace the world", according to Evelyn Keller, "in its very being, through reason, and beyond". Now to embrace the world is something very different, of course, than the desire to conquer it.

Barbara McClintock's articulated desire to respect and embrace the world stands in stark contrast to Francis Bacon's expressed desire to "put nature on the rack and torture her"<sup>39</sup> so that Nature—the ultimate 'other'—will reveal her secrets. Hence, there is within science a very different tradition than that of domination, manipulation and control exemplified by one of the founding fathers of modern science, Francis Bacon. And it is this alternative tradition of science, represented by Barbara McClintock's love of plants, that we need to understand and emulate, if we are going to have an ecologically sound and sustainable society.

McClintock shows us how to open our other eye, how to overcome our long history of one-sidedness. To McClintock science is not premised on detachment, on domination, on a division between subject and object, between self and 'other'. In a more recent book, **Reflections on Gender and Science**, Keller states that McClintock's love of Nature allowed for "intimacy without the annihilation of difference".<sup>40</sup> As Keller says, "division is relinquished without generating chaos".<sup>41</sup> A vivid illustration of this love, this form of attention to things, comes from McClintock's own account of a breakthrough in one particularly recalcitrant piece of analysis. McClintock describes the state of mind accompanying the crucial shift in orientation that enabled her to identify chromosomes she had earlier not been able to distinguish.

I found the more I worked with them, the bigger and bigger the chromosomes got and when I was really working with them, I wasn't outside. I was part of the [system]. . .it surprised me because I actually felt as if I was right down there and these were my friends. . .As you look at these things they become part of you. . .<sup>42</sup>

This account of matter is a far cry from the dead inert matter of the mechanical model. As Keller points out, McClintock allows us to see the profound **kinship** between us and Nature. She encourages us to witness the astonishing diversity and unimaginable resourcefulness of the natural order. She inspires a real feeling for the organism. McClintock sees Nature not as blind, simple and obedient, but as self-generating, complex and resourceful. Nature, for McClintock, is

not more complex than we know, but more complex than we **can** know. Nature is ingenious. 'Anything you can think of, you will find', declares McClintock.<sup>43</sup> Hence, for McClintock the goal of science is not the power to manipulate, but **empowerment**, the power to understand, the power to appreciate, the power to humble.

#### Different Voices Showing Our Ideological Biases

There are real limitations in contemporary science and feminist writers like Keller, and scientists such as McClintock, are helping us to see the ideological biases of science, and so to transcend them. Keller notes that McClintock is not a feminist scientist,<sup>44</sup> since McClintock's vision was of a science not based on sex or gender. But here Keller misses the point: feminism wishes just that. Feminism seeks to transcend the dividing dichotomies between masculine and feminine and to found a new science based on McClintock's vision. What is encouraging is that there is a shift in emphasis in numerous fields which gives weight to the argument developed here.

Nel Noddings revolutionised ethics through her book, **Caring**,<sup>45</sup> by showing how morality (and Ethics) was dominated by certain values and concerns, by talk of principles and justification, rather than by talk of caring and receptivity, relatedness and responsiveness. In her Introduction she says:

One might say that ethics has been discussed largely in the language of the father: in principles and propositions, in terms such as justification, fairness and justice. The mother's voice has been largely silent. Human caring and the memory of caring and being cared for, which I shall argue form the foundation of ethical behaviour, have not received attention,<sup>46</sup> except as outcomes of ethical behaviour.

If care is the foundation of our understanding we will include both categories 'mother' and 'father' as Noddings does, to embrace a new way of relating to Nature.

Likewise, Erazim Kohak in his book **The Ember and the Stars**,<sup>47</sup> states that the aim of the book is to shift the burden of philosophising from the making of arguments to the aiding of vision. Not cunningly devised theories but encountering the wonder of being, this is the objective.

We need these different voices. We need them urgently. Theories can be very influential but to help them be so, as Herbert Marcuse argued in **Eros and Civilization**,<sup>48</sup> they must move from the surface and delve into the deepest biological layers of human energies, the well-springs of human action. Otherwise our theories of political, economic, social or ecological change are rootless; we are

picking up litter, rather than attacking the production of unstable waste in the first place. And this delving into the biological layers is precisely what feminist theory is doing.



Is it an accident that the telegram relating the first successful test of the hydrogen bomb read "It's a boy"? The release of a monstrous force of destruction is represented by the birth of a boy, a birth without a woman. Is it an accident that Edward Teller was called 'father' of the H-bomb? Is it an accident that the first atomic bombs were called, 'Little Boy', 'Fat Man', 'George and Mike'?<sup>49</sup> Is it an accident that the names that the military use are laden with psychosexual overtones: missile erector, deep penetration, soft lay downs? The real reason Trident was purchased by the British, said historian E.P. Thompson with a smile, was because we are in a "post imperial phallic system" and there is need to show we British can "still get it up".<sup>50</sup> Dr. John Gilbert, the British Labour Backbench Defense Minister, referred critically to the "Trident Virility Symbol".<sup>51</sup> The Chairman of the Committee on Public Information during WWI compared military training to national virility.<sup>52</sup>

Helen Caldicott's book, *Missile Envy*, explores this theme<sup>53</sup> and Brian Easlea, for better or worse, takes these images literally in his book *Fathering the Unthinkable: Masculinity, Science and the Nuclear Arms Race*.<sup>54</sup> Why? Because if you look at the nuclear arms race, the intensity could not be explained just by economic factors. It is intense. According to the Swedish Peace Research Foundation, it is an enterprise that engages over 45 percent of all scientists and technologists alive. To Easlea something else is going on: male-female factors are engaged. Men play a relatively small part in the creation of life in our culture, so do they try too overcompensate elsewhere? "Not in creating life, but in risking it---this is the key", says Simone de Beauvoir, and she continues, "it is why superiority has been given not to those who bring forth life, but to those who kill. . ."<sup>55</sup>

Brian Easlea begins his book *Fathering the Unthinkable*, simply but powerfully:

The single most important issue facing human-kind today is surely the nuclear arms race.

It prevents other problems being addressed, like the eradication of desperate poverty, and it will sooner or later lead to unmeasurable catastrophe both for humanity and for much of the wild life with whom we ought to share this planet.<sup>56</sup>

The aim of Easlea's book is to investigate **one** determinant, not the only determinant, but one insufficiently examined determinant of this insane race, namely the overall 'masculine' nature of modern science and weapons research.

Easlea was a nuclear physicist. While working as an English expatriate in Brazil in the 1960s he became aware of the futility of making nuclear weapons. So he switched fields, from science to the history and philosophy of science. This new discipline lead him to study the persecution of witches in the 17th Century. "I came to believe", Easlea remarks, "that economic causes were not sufficient to explain the intensity and brutality of many of these persecutions".<sup>57</sup>

As E.W. Monter has pointed out,<sup>58</sup> witchcraft was by far the most important capital crime for women in early modern Europe. More women were put to death between 1500 and 1700 for the crime of witchcraft than for all other crimes put together. Why? Of course, economic causes were operative---witches competed with the newly formed class of physicians and medical doctors. But the intensity and duration of these persecutions compels us to search for additional motivations. Easlea argues that: ". . .Non-economic factors such as gender identity and sexual attitudes were important to understand the ferocity of the persecutions and the underlying causes".<sup>59</sup> By the same token, if one investigates the nuclear arms race, one must look at the male-female factors involved in order to satisfactorily understand it.

Modern science is basically a masculine endeavour and as such it is lop-sided. The whole nature of the scientific system and its assumptions needs to be challenged, otherwise we will not make peace with Nature. One way to do this is to contrast 'normal' science<sup>60</sup> with alternative traditions within science, such as McClintock's, in which science serves the interests of preservative love. Another way is to pinpoint alternative traditions within philosophy such as Noddings and Kohak, which take account of those areas of human experience deemed 'feminine'. A third way is to attempt to show how a psycho-sexual analysis of science, such as Easlea's, illuminates the patriarchal construction of knowledge, and how this blocks our realisation of a sound ecology.

#### Science and the Interests of Power

All modern, scientific thinking is at bottom power thinking, that is to say, the fundamental human impulse to which it appeals

is the love of power, or, to express the matter in other terms, the desire to be the cause of as many and as large effects as possible.<sup>61</sup>

Ever since Bacon announced that knowledge is power, science has been dominated by a will to power and so has been domineering, as Bertrand Russell argues. Bacon talks about how the new science will be a rebirth. He jeers at the Greeks, who he calls "mere boys" and calls for a masculine birth of time, a rebirth without indebtedness to women.<sup>62</sup> Through this rebirth, the scientific imagery goes, one can conquer the universe. And what does conquering the universe involve? The "death of nature", as Carolyn Merchant points out.<sup>63</sup> At the same time as Bacon, Descartes declared Mother Nature dead—mere matter in motion without sentience, without consciousness. Animals are mere machines, in the Cartesian framework.

Hence, in the 17th Century we have a cognitive attack on Mother Nature through the writings of such influential thinkers as Bacon and Descartes. Coupled with this assault we also have a physical attack on women. In the 16th and 17th Centuries scores of thousands of women were hunted and killed for witchcraft. This link is, Easlea argues<sup>64</sup> no accident. It spells a deep antagonism to women which men cope with by being violent towards Nature. So anti-feminist sentiment feeds ecological disaster, from the testing of atomic bombs to using animals as tools of trivial research projects.

#### The Problems of an Elusive Masculinity

Brain Easlea, in his book *Science and Oppression*<sup>65</sup> argues that sexuality defines the kind of existence one lives and vice-versa. The person who wants to live sensuously and joyously must also love sensuously and joyously. The person committed to frenetic thrusting, for mastery in sexual intercourse, whether male or female, is often also committed to domination and aggression in social relations and to relations of brutality with the natural environment. Easlea's principle argument is that hyperaggressive people seek power over other men and other women and over Nature, "not solely because of harsh material conditions. . .but also because they seek through that power to underwrite and demonstrate an elusive masculinity".<sup>66</sup>

Why do men in our culture face an elusive masculinity? Because of the way our society defines male sexuality exclusively in terms of a partial and limited (and marketable) sexuality---genital sexuality; because in our culture only mothers parent and so men are not equally integrated into the reproductive process, hence there is a cultural alienation regarding paternity; finally, because of the natural alienation men experience from the living products of their own sexuality---men can never be sure if the baby is their child.

Herbert Marcuse argues in *Eros and Civilization*,<sup>67</sup> that there is a direct link between the repression of sexuality and the eruption of aggression. Marcuse argues that our 'permissive' society is in fact sexually repressive. It is dominated by the tyranny of genital sexuality, where permissiveness is linked to marketable commodities. Thus, a partial and limited sexuality has been put to work in service of the established order. This myopic view of sexuality feeds an elusive masculinity which in turn exacerbates aggressive behaviour.

The second cause of elusive masculinity has been explored by Nancy Chodorow in her book, *Mothering*.<sup>68</sup> If only women parent, she argues, it is far more difficult for a male to establish his identity than for a female to establish hers. Why? Because in our culture the male model is relatively inaccessible. In many middle class families, Dad is out of the house nine to five, five days a week. In a boy's search for a male identity, he over-rejects the receptivity, softness and connectedness present in the female model and identifies manhood as an achievement in which he must appear to be hard, separate, relatively unaccessible and super-independent. As a result of this social conditioning, men grow up with blocked access to their receptive, empathetic and compliant aspects, and so they continually try to dominate. Unless men parent, Chodorow argues, men will be less likely to recognise their dependence, specifically their dependence on Nature, which is ultimately the source of our being. If men parent, boys will be more able to be freed from the demands of being aloof and will be more likely to be receptive, empathetic, compliant, playful and tender. Likewise, girls will be liberated from the demands of being exclusively emotional and intuitive and will be able to be exuberant, active and creative.<sup>69</sup>

This theory is limited, Elizabeth Fee notes, because it assigns a primary role to the structure of family relationships as the cause and eventually the solution to other social problems. But while shared parenting between men and women will not be the magic wand to transform the social organisation of gender and to eliminate sexual inequality, it would surely help. Though not a panacea, it provides a useful perspective and a partial solution.

The shared parenting theory has also been criticised<sup>70</sup> because it is based on modern, Western, middle-class nuclear families in which an isolated, full-time mother takes direct responsibility for childcare and housework, while the absent father is occupied in the labour market. But even though the theory is ethnocentric and classist, it must be remembered that it is predominantly white, middle-class men reared in exactly this family situation who hold positions of some power in our society and who, as a result, define the meaning of gender. So the theory alerts

us to an important aspect of one culturally bound, class bound but influential world.

The third cause of an elusive masculinity has been well articulated by Mary O'Brien.<sup>71</sup> The moment of ejaculation can create an alienation from the male creative process. And this alienation which men can experience may heighten their culturally induced paternal alienation.

Hence our thesis is that the insecure identity of sexist, hyper-aggressive men is a significant (but not the only) force underlying the irrationality of our society, intent on plunging the world into ecological and nuclear holocaust. The evidence for this thesis comes from three sources: 1) psychological theories which make intuitive sense about the exaggerated role of genital sexuality and its links to aggressive behaviour; 2) sociological theories about the importance of our primary identification with our parents, which tend to tie men to a role of aloof independence; and 3) philosophical theories about man's natural alienation regarding fatherhood which fans the flames of their insecurity.

#### Science as a Surrogate Sexual Activity

Evidence is also found in the history of science. Brian Easlea's book, **Science and Sexual Oppression**, amasses considerable evidence to show how "so often scientific investigation into the properties of the natural world has been viewed metaphorically as active male penetration into the innermost recesses of a passive female nature".<sup>72</sup>

Scientists often describe their quest for understanding Nature in sexual terms: scientists have to be 'rigorous' in their thinking, 'hard' in their questioning to unfold Nature's secrets. According to Francis Bacon, Nature is very much a woman whose secrets "need to be penetrated".<sup>73</sup> Again, says Bacon, we need "to storm and occupy her castles and strongholds".<sup>74</sup>

The imagery of male, sexual wooing, conquest and penetration of female Nature is very explicit in the 17th Century, as Easlea's scholarship shows. To quote Henry More, a Fellow of the Royal Society: "We must break open her private closet and pierce into her very centre".<sup>75</sup> Henry Vaughan, another notable 17th Century scientist, succinctly identified the sexual imprint of the new scientific spirit of inquiry:

I summoned nature, pierced through all her store;  
broke up some seals, which none had touched before;  
her womb, her bosom, and her head,  
where all her secrets lay a-bed.<sup>76</sup>

As a result of this evidence, Easlea sees

science as a kind of surrogate sexual activity in which scientists can penetrate to the hidden secrets of an essentially female nature, thereby proving their manhood and virility without necessarily running the risk of attempting the same with real, live and perhaps far from passive women.<sup>77</sup>

The sexual language of science has repeatedly been demonstrated by other scholars.<sup>78</sup> Since the 16th Century the message of science has been clear: mind is male, Nature is female, and scientific knowledge must be an aggressive act to penetrate Nature's mysteries, an act for which women are ill-suited. And lest we think we have outgrown the idea that to be a true scientist is to be non-feminine, contemporary examples abound.<sup>79</sup>

At this point the reader might object and declare: the language used by scientists contains a surprising number of sexual metaphors, the practice of science was sexist, as it excluded women, but surely there is nothing remotely sexist about the knowledge-claims of science! At first sight this objection might seem correct, but consider an apparently a-sexual neutral scientific law, Newton's law of universal gravitation. Newton viewed the existence of gravitational attraction as a manifestation of God's direct agency in Nature.<sup>80</sup> It was through God's action that the Earth was attracted to the sun. In Newton's mechanical model of the universe, no action-at-a-distance was possible. Only direct, contact action was conceivable. So, God became the all important medium for gravitational pull. And Newton's God was God the Father. So inevitably male-female relationships entered into the interpretation of gravitational theory.

The reader might continue to object and say these debates about the nature of God were extraneous to science. But such debates were central to the scientific community at the time. Physics and mathematics might be the most removed of all the sciences from the sphere of masculine bias, but why have they become paradigmatic?<sup>81</sup> Furthermore, even these so-called 'hard' sciences are not just sets of symbols; they are actual practices whose research purposes, activities and knowledges are socially produced and as such are determined by values. Hence, even in physics the context and meaning of gravitation related to gender.

#### Male Dominance and the Content of Science

As Easlea points out,<sup>82</sup> how much more so must male-female relationships enter into scientific pronouncements on the nature of life, how it originates and how it reproduces. Surely all kinds of hopes and fears about sexual reproduction will be projected onto these theories, despite claims to

objectivity. Stop to consider the 'master' molecule theory in biology (DNA--the material of which genes are composed), or the exaggerated importance given to male dominance and male initiative in ethology. The concept of the 'master' molecule allowed us to overlook the importance of the cell, and to see it as a subordinate, passive recipient of directions and orders from the master (the organism's genes or genome).<sup>83</sup> And the exaggerated role given to male hierarchies in controlling primate troop behaviour lead to excessive claims like this:

the [primate] females were incapable of 'governing' the group. . .the introduction of but one adult male. . .corrected the situation immediately...primate females seem biologically unprogrammed to dominate political systems. . .<sup>84</sup>

The feminist perspective helps us to see how scientific theories support masculine dominance. As Fee writes,

There is not. . .a single feminist science that represents **only** the interests of women as a unified group. There **is** however, a feminist perspective on science that shows the ways in which gender-based dominance relations have been programmed into the production, scope and structure of natural knowledge, distorting the content, meaning and uses of knowledge.<sup>85</sup>

Men tend to fear women's affinity with Nature, as the witch-hunt craze shows. Male insecurity and the resultant need to dominate Nature led to the persecution of scores of thousands of women who had some understanding of Nature.

Men tend to fear dependence, as the history of science and its language and metaphors show. Therefore, it is not easy for them to think clearly and feel positively about our human dependence upon the ecosystems of the biosphere.

Finally, men tend to fear women's ability to reproduce life, and hence they declared that Nature, mythed as female, was really barren. Nature does not have life-giving powers; she is just a machine to be exploited, a "standing reserve" to use Heidegger's phrase.<sup>86</sup>

#### From Mother Earth to an Inert Machine

The patriarchy's envy and fear of women and the Earth was transformed symbolically into a mechanistic worldview. As Merchant illustrates,<sup>87</sup> the Earth was no longer regarded as a nurturing mother to be cherished, but as a machine to be manipulated and exploited. The transformation from Earth mother to barren inert matter had been accomplished through the scientific revolution of the 17th Century and men hoped to become, through

the medium of science, "masters and possessors of nature".<sup>88</sup>

This mechanical worldview accelerated the exploitation of humans, both men and women, and the exploitation of natural resources. Mechanism saw Nature not as a live presence, but as a system of dead, inert particles moved by external forces. As such, it bears no moral self-examination. Nature is merely material for man's appropriation, a view which suited commercial capitalism.

Both feminism and ecology challenge mechanism's assumptions which make the manipulation and control of Nature seem possible and acceptable. The ontological assumption of mechanism is that matter is not living, interdependent fields of energy, but matter is composed of dead, discrete particles. The epistemological assumption is that knowledge and information can be abstracted without distortion from the natural world, because they are independent of context and value-free. The methodological assumption is that real-life problems can be successfully analysed into parts that can be manipulated by mathematics. The moral assumption is that humans (especially white, upper class males) are more valuable than the rest of Nature.

The mechanical paradigm, though outdated, persists. Francis Crick states: "The ultimate aim of the modern movement in biology is, in fact, to explain **all** biology in terms of physics and chemistry".<sup>89</sup> The project is to explain life (humans, brains) in terms of non-life (machines, computers). The commitment is that Nature is lifeless. And this allows us to perform gruesome experiments on living animals and to write them up "as if the experiments had been done on inert matter".<sup>90</sup>

Contrast two descriptions: Woodridge, a modern psychological researcher, convinces himself that when a monkey with an electric current passing through its 'pain centre' bites objects so hard as to wrench teeth from its jaw---then the monkey is really experiencing pain and not exhibiting 'meaningless or automatic physical symptoms'.<sup>91</sup> Compare this to a description of a chimpanzee being studied by Jane Goodall in the Tanzanian National Park of Gombe Stream. Once a chimpanzee grasped her hand "firmly and gently with his own before scurrying off into the forest". Goodall writes that "at that moment there was no need of any scientific knowledge to understand this communication of reassurance".<sup>92</sup>

Goodall's attitude to non-human life forms is, while superior, not a female prerogative. Martin Buber, for example, has an I-Thou relationship while looking into the eyes of his cat.<sup>93</sup> And people who live close to Nature see Nature not as an 'it', but as a 'thou'. Nature is for so-called 'primitive' people a live presence, each part of

which is unique, and not satisfactorily describable by a universal law.<sup>94</sup> Hence, their relationship with a tree, for example, is emotional, direct, not fully able to be articulated. For many traditional peoples, "Nature is their body".<sup>95</sup>

Communication, at its best is called love; when it breaks down completely, we call it war. And it is a sort of war that is going on now between human beings and the earth. It's not that nature refuses to communicate with us, but that we no longer have a way to communicate with it. For millennia, primitives communicated with the earth and all its beings by means of rituals and festivals where all levels of the human were open to all levels of nature.<sup>96</sup>

We need to recapture this reality. We need, as A.N. Whitehead urges, to develop "a science based on an erotic sense of reality rather than an aggressive, dominating attitude towards reality".<sup>97</sup>

We need to relate the crisis of production (and overproduction) to the crisis of reproduction.<sup>98</sup> We will not solve our environmental crisis, unless we allow the Earth to reproduce.

We need to appreciate reproductive values, such as a recognition of our own death. Freud did not consider aggression a basic psychological fact. Aggression for Freud was rather a secondary manifestation of a more fundamental instinctual force, the death instinct.<sup>99</sup> Norman O. Brown, analysing Freud in *Life Against Death*,<sup>100</sup> felt that we could learn to channel our aggressive behaviour positively, if only we could learn to contain death within life, that is, if we were not "fugitives from our own death",<sup>101</sup> in short, if we learnt how to die with dignity.<sup>102</sup>

As Barbara McClintock reminds us, we need a new scientific basis whereby we recognise that each organism is unique and that it is an integral part of an ecosystem. We need a new psychological basis whereby we see, as Carl Jung reminds us,<sup>103</sup> that to heal is to make whole, as in wholesome, to reunify our split selves, to integrate the masculine and the feminine in each of us. We need a new epistemological basis whereby we realise, as Norman O. Brown reminds us,<sup>104</sup> that we must have carnal knowledge, a copulation of subject and object. We need a new ethical basis whereby we recognise, as the Aboriginal peoples show us, the intrinsic value of and our dependence upon the non-human aspects of Nature. Finally, we need a new ontological basis whereby we experience, as Hegel details,<sup>105</sup> that reality is a process and that the truth is just as much subject as substance---that the truth is the whole.

#### Why We Need Each Other

We need to recognise that the whole is more than the sum of the parts and that the parts themselves

take meaning from the whole. Each part is defined by and dependent upon the total context. Isolation (as in a laboratory) distorts the truth because it distorts the whole. As it is valid to interpret the higher (life) in terms of the lower (non-life), so it is also valid to interpret the lower in terms of the higher. 'Aim' can be applied to cells; 'enjoyment' can be applied to gorillas. Reality is a complex and dynamic web of energy. Nature is alive and active and its parts are fundamentally interconnected by cyclical and developmental processes.

We need a reversal of mainstream, malestream values and the triumph of feminism, a revolution in economic priorities and a steady-state economy,<sup>106</sup> a peace force for a just and sustainable society,<sup>107</sup> a social force for voluntary simplicity,<sup>108</sup> and collective action for the ecological reconstruction of society.<sup>109</sup>

We need to overcome our dichotomies and to discover our deep sources, our springs, as Rachel Carson did.

We need each other.

#### Notes

1. In this paper I talk about women being more in touch with nurturing than men. This talk is problematic insofar as it might reinforce traditional stereotypes of women. The variability among men and women in a wide range of diverse traits is much greater than the difference between men and women. (See Marion Namerwirth, "Science Seen Through a Feminist Prism" in Ruth Bleier, Ed., *Feminist Approaches to Science*, New York: Pergamon Press, 1986, p. 38.) In this paper I also draw upon the distinction between sex and gender. This is a very useful distinction separating our biology from our socialization, our sex from our sexuality. But it is also a problematic distinction highlighted by the argument about the role of Nature vs. nurture. Gender is a fundamental organizing category, and as Sandra Harding points out, whether it applies at the individual level, at the structural level or at the symbolic level, gender is always asymmetrical, with the feminine defined (in Western culture since the Christian era) as inferior. (See Sandra Harding, *The Science Question in Feminism*, Ithaca: Cornell U. Press, 1986, esp. pp. 55-57.)

2. Michel Foucault, *A History of Sexuality*, Vol. I, New York: Random House, 1980.

3. Martin Heidegger, "What calls for thinking?" in D.F. Drell, et al. (eds), *Basic Writings*, New York: Harper and Row, 1977, p. 354.

4. Erasmus Kohak's goal in his eloquent book *The Euber and the Stars: A Philosophical Inquiry into the Moral Sense of Nature*, Chicago: University of Chicago Press, 1984, p. xiii.

5. See, for example, Hilary Rose, "Beyond Masculinist Realities: A Feminist Epistemology for the Sciences" in Ruth Bleier (ed.), *Feminist Approaches to Science*, op cit., pp. 57-76; or Hilary Rose, "Hand, Brain and Heart: a feminist epistemology for the natural sciences", *Signs: Journal of Women in Culture and Society*, 9, No. 1, 1983.

6. Plato, *The Collected Dialogues Including the Letters*, edited by Edith Hamilton and Huntington Cairns, New York: Pantheon Books, Bollingen Series LXXI, 1961; Soren Kierkegaard, *Concluding Unscientific Postscript*, translated by Walter Lowrie, Princeton: Princeton University Press, 1956; Michael Polanyi, *Personal Knowledge*, New York: Harper Torchbooks, 1958.

7. For example Simone de Beauvoir's fruitful framework of analysing women's status as 'the other'. See *The Second Sex*, Trs. & Ed. by H.M. Parchley, Harmondsworth, Middlesex, England: Penguin, 1975.

8. For instance, the treadmill situation of pesticide use in California. See Robert van den Bosch, *The Pesticide Conspiracy*, New York: Doubleday, 1978. Bosch documents how pesticides poison humans, other animals and birds, not pests. We have not successfully eliminated one species of pest, only their predators. Hence, we are using vast quantities of pesticides and still losing more crops to the resilient and genetically variable pests than ever before: a treadmill situation.

9. Arne Naess, "The shallow and the deep, long-range ecology movement", *Inquiry*, 16, (1973), pp.95-100; see also Ariel Kay Salleh "Deeper than deep ecology: The eco-feminist connection", discussion papers *Environmental Ethics*, Winter, 1984.
10. Marilyn French, *Beyond Power*, New York: Harper and Row, 1985.
11. Harding, op cit., p.31.
12. Michele Alrich, "Women in Sciences", *Signs: Journal of Women in Culture and Society*, 4, NO. 1, 1978; Rita Arditti, "Women drink water: Men drink wine" in R. Arditti, P. Brennan and S. Cavrak (eds), *Science and Liberation*, Boston: Solithend Press, 1980; Alice Rossi, "Why so few?", *Science*, 148, 1196, 1965; Margaret Rossiter, *Women Scientists in America: Struggles and Strategies to 1940*, Baltimore, Md: John Hopkins University Press, 1982.
13. Rose, "Beyond Masculine Realities", op cit., pp.60-62.
14. Harding, op cit., p.64.
15. *Science*, 9 April 1985.
16. Hilary and Steven Rose (eds), *Ideology of/in the Natural Sciences*, Cambridge, Mass.: Schenkman, 1976.
17. Neil Evernden, *The Paradox of Environmentalism*, symposium proceedings, the Centre for Environmental Studies, Toronto: York University, 1984, p.9.
18. Evelyn Fox Keller, *Reflections on Gender and Science*, New Haven, Yale University Press, 1985, p.4.
19. *Ibid.*, p.178.
20. *Ibid.*, p.134.
21. Brian Easlea, *Fathering the Unthinkable: Masculinity, Scientists and the Nuclear Arms Race*, London: Pluto Press, 1983.
22. Harding, op cit., p.146.
23. Norman O. Brown, *Life Against Death*, New York: Random House, Vintage Books, 1964.
24. These ideas were born for me in listening to the lectures of Professor John Raser, a Foundation Professor of Murdoch University, Perth, Western Australia.
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26. Hilary Rose, "Beyond Masculinist Realities", op cit., p.72.
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**Patsy Hallen** is a foundation lecturer in the School of Social Inquiry at Murdoch University in Perth, Western Australia. She obtained her Ph.D. from Boston University and taught at the University of Lagos, Nigeria, before moving to Australia. Her research interests are in the area of environmental philosophy and eco-feminism.

### ECOSOPHIA: TOWARD A FEMINIST EPISTEMOLOGY

By Don Davis

The term **ecosophy**, as coined by Arne Naess, provides an excellent point of departure for this discussion. An etymology of this word reveals that it contains **sophy**, the feminine Greek word for wisdom derived from **sophia**. It is certainly fortuitous that Naess chose this term for the root of his neology as **sophia** is an idea that is conceptually valid if one is to understand the epistemological foundations of ecofeminism.<sup>1</sup>

To understand Sophia properly one needs to steer clear of traditional analyses of language and semantics found, for example, in positive or analytical experience, excluding scientific, rational, and even diachronic interpretations or hermeneutics. Sophia goes beyond science and art alone. Wisdom, as a metaphysical category or as a highly intuitive symbolic metaphor, does seem to be an intrinsic characteristic of the feminine psyche, since the female approach to knowledge has long been regarded as somewhat psychic or clairvoyant, as a seeing beneath surface logic. For centuries men seem to have been masters of the "logos spermatikos," while women have found the masculine emphasis upon language, logic, and the verbal and written arts incomplete and one-sided.<sup>2</sup>

Interestingly, language systems are seldom used within noetic, mystical, or hermetic traditions, since the language arts cannot readily compete with the ineffable wisdom of the "corporeal" arts.<sup>3</sup> The androgyne or feminine mystical experience with its proper synthesis of mind and body precluded the conscious expression of language by rendering it superfluous and unnecessary. With this point in mind it should come as no surprise that Taoist sages such as Chung Tzu (c. 350 B.C.) are not at all concerned with words and formulas about

reality, except as they might be an aid, and not a barrier, to the direct existential grasp of reality itself. Wisdom is transmitted transversally with a touch of empathy and awareness that goes beyond words: The map is not the territory and the name is not the thing named.<sup>4</sup>

It does appear that the universalization of **logos** or calculative reality as the primary method of understanding and interpreting reality has patriarchalized Western modes of thought within all social structures. Language, as the symbolic expression of masculine ignorance, has left Western man a one-sided being or, to use religious language, a "fallen body." If we are to accept Marcuse's notion that "psychological categories become political categories," then it is obvious that feminine epistemologies have been severely ignored by Western culture.<sup>5</sup> The politicization of the male interpretation of reality, as Michael Foucault has aptly demonstrated, legitimizes the social order by condemning all other social or psychological realities to "madness,"<sup>6</sup> or prescientific, therefore, regressive myths.

As gender becomes projected into the ultimate, the status quo epistemology "freezes" reality. In essence, alternative visions are not only ignored but condemned. Patriarchy is given universal status because the universe itself becomes a male ego writ large and, therefore, "we study---as Murray Bookchin points out. . . history, which is history, i.e., the story of the power exploits of the male's ego search for domination and control."<sup>7</sup> As Charles Ferguson notes:

The male thinks of himself as the universal, so that you find much about Man (embracing Women) in such stentorian terms as Man's Unconquerable Spirit, Man and his Destiny, Man and Civilization, Man and his Gods, Man and Humanity, Man and the Future, Man against Nature, Man and the Universe.<sup>8</sup>

Jungian psychoanalyst June Singer has also described with clarity the political suppression of feminine perceptions of reality. Her analysis similarly accounts for the androcentric universalization of male consciousness. She writes that

the repression of the feminine is not only reflected in the need to depreciate the eros principle in men, but also [it] lent support for the depreciation of women, since they are the natural carriers of the eros principle as their leading function.<sup>9</sup>

My own interpretation is that the suppressive male attitude has always been a fragmentary one. Knowledge for the female has been participatory,



empathetic, and often "unconscious." This is due not only to the fact that "women were the first observers of the basic periodicity of nature," but also because woman was the first to note a correspondence between an eternal process she was experiencing and an external process in nature."<sup>10</sup> As metahistorian William Irvin Thompson puts it:

She is the one who constructs a more holistic epistemology in which subject and object are in sympathetic resonance with one another. . . The world view that separates the observer from the system he observes, that imagines the universe can be split into mere subjectivity and real objectivity, is not of her doing.<sup>11</sup>

At this level, Western science and philosophy as the "dualistic" objectification of nature can be very easily equated with masculinity. As the subject/object became increasingly separated by male consciousness, science and its technological applications (which are expressions of masculine power) made nature a huge "killing field." In fact, it is this very alienating principle that allows for the unrestrained "advancement" of science and technology. Since nature can now be seen as existing outside and independent of the individual's perception of reality, the destruction of nature escapes any moral or ethical critiques.<sup>12</sup> In contrast, pagan or primitive perceptions of nature have no existential criteria for establishing any fundamental differences between the observer and the observed. They share a common goal of living in attunement and harmony with nature, and because of this "they tend to view humanity's 'advancement' and separation from nature as the prime source of alienation."<sup>13</sup>

In essence, alienation has been routinized. As the technological process of the domination of nature was politicized by the alienated male, the male "victors" as the dominant class "featherbedded" and routinized their wanton exploitation of nature by monopolizing language which in turn, gave them the power to control other institutions.<sup>14</sup> Elizabeth Dodson Gray writes:

The thinking and writing of history, philosophy, and literature through the ages have been almost exclusively a male enterprise. Cultures world-wide have been dominated in their life by the decisions and thought-world of males.<sup>15</sup>

As Charles Ferguson has noted, the male thought world with its "arbitrary" use of language is even used to sanctify masculine theological positions:

They [the males] project gender to its ultimate. And it is projected also into the

infinite, for the very idea of the Very God is expressed commonly, not to say solely, in the masculine. To refer to God as feminine gets a laugh from shock or embarrassment. The godhead is encased by theologians, virtually all of them men, in phrases that persevere and sanctify the male ego.<sup>16</sup>

The male enterprise with its self-congratulatory theology can even sacralize technology but sacralizing the machine---the male phallus extraordinaire. "The machine itself," as Lewis Mumford has written, "tended to become an agent of masculation and defeminization."<sup>17</sup> By its very masculine nature, the machine has undermined the sacred quality of androgynous justice by placing the "higher" male over the "lower" female. The machine in a masculine society is revered for its destructive, controlling capacities. The machine in a matriarchal society, however, is ignored for these same reasons. In the *Myth of the Machine*, Mumford states that "Protection, storage, enclosure, accumulation, continuity---these contributions to neolithic culture largely stem from women and women's vocations."<sup>18</sup> The myth of the machine is a male myth.

In the Cartesian sense of subject/object dichotomy, all of Western science and its "machismo" technological applications can be connected to male mythology. Evelyn Fox Keller in her important book, *Reflections on Gender and Science*, asserts that the separation of subject (res cogitans) and object (res extensia) was also a separation of (masculine) mind and (female) nature.<sup>19</sup> Science becomes equated with masculinity. Subsequently, "this separation of reality into objective and subjective knowledge, and the subdivisions of the objective sphere led to tremendous advances in knowledge, prediction, and control of the 'objective world.'<sup>20</sup>

The political as well as scientific consequences of a patriarchal epistemology must be reconsidered. Since the politics of the male have dominated both women and nature, patriarchy cannot proceed as usual.<sup>21</sup> Patriarchy must give way to an androgynous nonhierarchical political process that condemns the chauvinistic humanism of male society as andropocentric "speciesism." A proper ecophenomenology such as Heidegger's, Hartshorne's, or Whitehead's can help redefine the way we perceive man/woman/nature without resorting to "gender assumptions."<sup>22</sup>

A body politic that is equally concerned with the liberating of all living things should be the primary concern of the environmental movements. Not just the liberation of women or men, but the entire vital process we call nature. A political platform must be developed, in conjunction with this alternative approach to epistemology, that insures the formation of an alternative political process.

Jeremy Rifkin, in his **Declaration of a Heretic** has proposed such a platform:

The new political context is based on a set of assumptions that are very different from the ones now operative within the current world political frame. By exchanging empathy for power, equity for advantage, borrowing from growing, participation for control and sacred for productive, we establish a new point of reference for all political decisions. Within this new political context, environmentalists, feminists, stewardship Christians, and other new age movements no longer have to ask where they fit in. They are no longer simply constituencies advancing issues. That's because the principles of empathy, equity, borrowing, participation and sacredness happen to be the central values of all these movements. By taking the fundamental principles of these movements and making them the context of the new political philosophy, society adopts their outlook as its own.<sup>23</sup>

All political and epistemological considerations aside, mind and body, psyche and nature, male and female must merge into the fuller reality offered by the inclusion of the ecofeminists' position. Epistemology must be wedded to ontology since being and knowing (as Sophia) are two sides of the same coin.

Authentic knowledge is not power and control, as the Enlightenment taught us, but participation in the ongoing harmony of nature. The separation of the sexes like the separation of humanity from nature can only be resolved if we choose to become equal partners with each other and the rest of the earthly creation. "The rift between God and nature would vanish if we knew how to experience nature, because what keeps us apart is not a difference of substance but a split in the mind."<sup>24</sup> Our minds have been split by the wedge of masculine Western science and philosophy and by the prevailing orthodoxy of technomorphic culture. To merge the two minds would not only provide the nexus for an empathetic science, but it would also provide the theological basis for a total reconceptualization of the "becoming" process. A truly biocentric epistemology if applied in this manner, could exist within the parameters of process, liberation, and feminist theology.<sup>25</sup>

Wisdom, as the "feminine" alternative to traditional epistemology, allows for an entirely different approach to the pursuit of knowledge: one that could fundamentally change the very basis of sociality. To "de-hierarchicalize" knowledge by "de-masculinizing" knowledge, one reduces the controlling powers of knowledge by encouraging a participatory partnership with all other living

things. Under this new rubric, to "know" is preeminently related to humans' participation with their surroundings and each other. Knowledge in this manner breaks down barriers of separation and encourages the potential for a **participatory** epistemology, a community of understanding knowers. And with the progression of this new epistemology of participation, mankind, in contrast to current wisdom, could see the world in its entirety. Current wisdom, says Murray Bookchin, is that of a one-eyed man, the one-eyed many of Nordic mythology.

In the Norse Legends, Odin, to obtain wisdom, drinks of the magic fountain that nourishes the World Tree. And in return, the God [Odin] must pay a penalty for acquiring the insight that gives him a measure of control over the natural world and breaches its pristine harmony. But his "wisdom" is that of a one-eyed man. The "wisdom" of Odin involves a renunciation of not only what Josef Weber has called the "primordial bond with nature," but also the honesty of perception that accords with nature's early unity.<sup>26</sup>

The wisdom of sophia involves both a renunciation of the primordial bond with nature and the honesty of perception found in primitive or pagan epistemologies. The Western world, if it is to regain this lost androgyne consciousness, must reopen its eyes to an entirely different way of perceiving the environment. To embrace Sophia as an epistemological equal is to rekindle the dying embers of the feminine fire within each of us.<sup>27</sup> If the use of the feminine metaphors can accomplish this, so much the better. To become spiritually whole, the masculine must embrace the feminine in an androgyne act of empathy and love. In my opinion, the deep ecology movement cannot become a socially liberating force unless "men are brave enough to rediscover and to love the woman inside themselves."<sup>28</sup>

#### Notes

1. The gnostics were perhaps the first to fashion the metaphoric feminine archetype Sophia into a cosmological system. Such texts as the "Pistis Sophia" (faith-wisdom) have entire theologies built around the personified "mother of all things." See Carl Schmidt, ed., *Pistis Sophia* (Leiden: E.J. Brill, 1978); Elaine Pagels, *The Gnostic Gospels* (New York: Vintage Books, 1981), pp. 57-83; Kurt Rudolph, *Gnosis: The Nature and History of Gnosticism* (San Francisco: Harper & Row, 1983). For a new-gnostic or ecophenomenological exposition in the traditions of Heidegger and Hillman, see Robert Avens, *The New Gnosis* (Dallas: Spring Publications, 1984).
2. In most hermetic traditions, wisdom is antithetical to language. See William Irvin Thompson, *The Time Falling Bodies Take to Light*, pp. 15-16. For a study of the relationship between language and the evolution of consciousness, see Walter J. Ong, *Interfaces of the Word* (Ithaca: Cornell University Press, 1977). In addition, if we are to define language as a sexo-religious phenomenon, we must consider the arguments put forth by some neo-Freudian scholars concerning the suppression of eros, the "female" principle. See N. O. Brown, *Love's Body* (New

York: Vintage Books, 1968); Herbert Marcuse, *Eros and Civilization* (Boston: Beacon Press, 1955).

3. See Michael Polyani, *Personal Knowledge: Towards a Post-Critical Philosophy* (Chicago: Chicago University Press, 1985); *The Tacit Dimension* (Garden City, N.Y.: Doubleday, 1967).

4. Alfred Korzybski, quoted in June Singer, *The Energies of Love* (New York: Doubleday, 1983).

5. Herbert Marcuse, *Eros and Civilization* (Boston: Beacon Press, 1955), p. xi.

6. See Michael Foucault, *History of Sexuality* (New York: Vintage Books, 1980); *Madness and Civilization* (New York: Mentor Books, 1967).

7. These remarks relayed to me by Alan Drengrson, and are quoted from remarks Bookchin made at a Humanities conference held at the University of Victoria.

8. Charles W. Ferguson, *The Male Attitude* (Boston: Little, Brown, and Co., 1966), p. 227.

9. June Singer, *Energies of Love*, p. 120.

10. William Irvin Thompson, *The Time Falling Bodies Take to Light*, p. 97. The relationship of the body and its chthonic grounding in the earth has been explored in David Michael Levin, *The Bodies Recollection of Being* (Boston: Routledge and Kegan Paul, 1985), pp. 281-350.

11. *Ibid.*, p. 97.

12. One of the most lucid analyses of man's domination of nature via science and its application as technology has been given by William Leiss, *The Domination of Nature* (New York: George Braziller, 1972).

13. Margot Adler, *Drawing Down the Moon: The Resurgence of Paganism in America* (New York: Viking Press, 1979), p. 78. For a discussion of the primitive's participatory epistemology see Janake Highwater, *The Primal Mind* (New York: Harper & Row, 1981), chap. 5; Owen Barfield, *Saving the Appearances* (New York: Harcourt Brace Jovanovich, 1965), pp. 28-45.

14. Michael Foucault has demonstrated that power and knowledge are intimately related. In his great, incomplete multivolume study on sexuality, Foucault elaborated on this central thesis observing that the hegemony of ideas transposes to social power which, in turn, legitimizes gender subversion and exploitation. It seems that knowledge, at least in its rational form, does operate in this sycophantic mode of circular reasoning. See Michael Foucault, *Archaeology of Knowledge* (New York: Harper & Row, 1976); *History of Sexuality* (New York: Vintage Books, 1980).

15. Elizabeth Dodson Gray, *Why the Green Nigger?* (Wellesley, Mass.: Rountable Press, 1979), p. 28.

16. Charles W. Ferguson, *The Male Attitude*, p. 227.

17. Lewis Mumford, *The Myth of the Machine* (New York: Harcourt Brace Jovanovich), p. 227.

18. *Ibid.*, p. 141.

19. Evelyn Fox Keller, *Reflections on Gender and Science* (New Haven: Yale University Press, 1985). Quoted in *The New York Times Book Review*, 21 April 1985, sec. 7, p. 36.

20. Lawrence LeShaw and Henry Margenau, *Einstein's Space and Van Gogh's Sky: Physical Reality and Beyond* (New York: Macmillan Publishing Co., 1982), p. 30 (my emphasis).

21. A body politic is needed which goes beyond the simple Hegelian notion of process. By giving centrality to the Sartrean notion of "project," the task of epistemology becomes an active transformational one. To transform the spiritual world and not just simply understand it is also, I argue, one of the basic characteristics of the gnostic and ecofeminist "visions."

22. See, for example, Bruce V. Peltz, "On Heidegger and the Interpretation of Environmental Crisis," *Environmental Ethics* 4 (1984): 323-38; Michael E. Zimmerman, "Toward a Heideggerian Ethos for Radical Environmentalism," *Environmental Ethics* 2 (1983): 99-131; John B. Cobb, Jr., "Process Theology and Environmental Issues," *Journal of Religion* 4 (1980): 440-58.

23. Jeremy Rifkin, *Declaration of a Heretic* (New York: Routledge, Kegan Paul, 1985). I was graciously allowed by Mr. Rifkin a glimpse of the unedited version of this book. Unfortunately, this passage was edited out of the final draft.

24. Alan Watts, *Nature, Man, and Woman* (New York: Pantheon Books, 1985), pp. 188-89. The theoretical and epistemological awareness of this split has been discussed at length in Morris Berman, *The Reenchantment of the World*, (New York: Bantam Books, 1984), pp. 127-46.

25. I.e., to combine the feminist/liberation/process epistemologies under the rubric of biocentrism.

26. Murray Bookchin, *The Ecology of Freedom* (Palo Alto: Cheshire Books, 1982), pp. 82-83.

27. See Berman, *The Reenchantment of the World*, pp. 147-85.

28. Ariel Kay Salleh, "Deeper than Deep Ecology: The Eco-Feminist Connection," p. 145; see also Charlene Spretnak, ed., *The Politics of Women's Spirituality* (New York: Doubleday, 1982); Robin Morgan, *The Anatomy of Freedom* (New York: Doubleday, 1982); Ynestra King, "The Ecology of Feminism and the Feminism of Ecology," *Harbinger* 2 (1983): 16-22; Leonie Caldecott, ed., *Reclaim the Earth* (London:

Women's Press, 1983); Marti Kheel, "The Liberation of Nature: A Circular Affair," *Environmental Ethics* 2 (1985): 135-49.

Don Davis is at the Institute for Social Ecology, Goddard College, Plainfield, Vt., USA 05667. He holds a masters degree in psychology from West Georgia College, Carrollton, Georgia. He is currently doing advanced study in psychology and social ecology. He also serves as a research assistant and consultant to the Foundation on Economic Trends in Washington, D.C. He would like to thank Kimberly Tibbals, Nickey Perlas, Jeremy Rifkin, and Michael Edmondson for their support and encouragement and Alan Drengrson for his many constructive comments and suggestions. A longer version of this paper appeared in *Environmental Ethics* 2, Summer 1986, pp. 151-162, under the title "Ecosophy: The Seduction of Sophia?" Reprinted here with the permission of *Environmental Ethics* and the author.

### Snowstorm

by Paulus Utsi

Through the snowstorm  
I saw reindeer grazing  
The old dog saw them too  
sent out his barking

Their antlers were like bushes  
the forehorns like tree roots  
When they sprang away  
it was a birch grove  
that vanished in the storm

The noise from their bells  
the clatter of their hooves  
shaken off by the wildness of the wind

Translated by Jean Pearson

### The Hut's Smoke

by Paulus Utsi

The hut's smoke  
leads to the village

to the reindeer  
to the high mountains

to the days of light

Translated by Jean Pearson

## THE RELIGION OF THE GREAT GODDESS

By Starhawk

**Fire**

by Paulus Utsi

Fire is a dear friend  
 who won't let you embrace him  
 His warmth and light  
 give counsel and good cheer  
 open the paths of the heart  
 to the world far beyond here

Translated by Jean Pearson

**Thought Work**

by Paulus Utsi

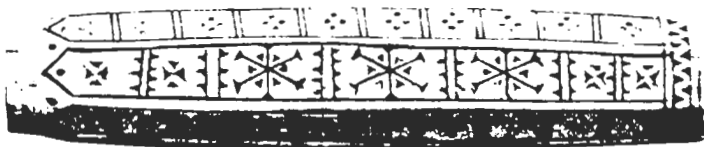
Tool in, tool your thoughts  
 in silver, wood and bone

Spin, spin your reflections  
 into rope and threads of skin  
 Weave, weave fast your fate  
 in shoe-laces and wagon straps

Twist, twist a necklace  
 for your own special friend  
 Braid, braid a pretty braid  
 for your little one's head

Translated by Jean Pearson

**Paulus Utsi** is a well known poet of Swedish Lapland. He died in 1980. The poems presented here in English were translated from Swedish by Jean Pearson. The poems were originally written in Lapp and were translated into Swedish by Paulus' son. The Swedish collection bears the name **Gjela Gjelain** which means "trapping with language." Paulus said of his native language, "The words we use are tied to nature, difficult to translate into foreign languages. It is enough if we can be understood, so that our way of thinking and our gentleness will not disappear." **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*.



On every full moon, rituals. . .take place on hilltops, on beaches, in open fields, and in ordinary houses. Writers, teachers, nurses, computer programmers, artists, lawyers, poets, plumbers, and auto mechanics---women and men from many backgrounds---come together to celebrate the mysteries of the Triple Goddess of birth, love, and death, and of her Consort, the Hunter, who is Lord of the Dance of Life. The religion they practice is called Witchcraft.

"Witchcraft" is a word that frightens many people and confuses many others. In the popular imagination, Witches are ugly old hags riding broomsticks, or evil Satanists performing obscene rites. Modern Witches are thought to be members of a kooky cult, primarily concerned with cursing enemies by jabbing wax images with pins, and lacking the depth, dignity, and seriousness of purpose of a true religion.

But Witchcraft is a religion, perhaps the oldest religion extant in the West. Its origins go back before Christianity, Judaism, Islam, before Buddhism and Hinduism, and it is very different from all the so-called great religions. The Old Religion, as we call it, is closer in spirit to Native American traditions or to the shamanism of the Arctic. It is not based on dogma or a set of beliefs, nor on scriptures or a scared book revealed by a great man. Witchcraft takes its teachings from nature, and reads inspiration in the movements of the sun, moon, and stars, in the flight of birds, in the slow growth of trees, and in the cycles of the seasons.

The worship of the Great Goddess, which is at the heart of Witchcraft, underlies the beginnings of all civilizations. Mother Goddess was carved on the walls of paleolithic caves and sculpted in stone as early as 25,000 B.C. In the seventh millennium B.C. cities arose on the Anatolian plateau that developed a rich, Goddess-centered culture, combining agriculture, hunting, and early crafts, in which women were leaders, held positions of power, and served as priestesses in the shrines of the Mother. From excavations done at Catal Huyuk and Hacilar in the 1960s, we get a picture of an egalitarian, decentralized, inventive, and peaceful society, without evidence of human or animal sacrifice or weapons of war.

Similar cultures underlay the civilization of Mesopotamia, Egypt, Greece, India, Central and South America, and China. For the Mother the giant stone circles, the henges of the British Isles, were raised. For Her the great passage graves of Ireland were dug. In Her honor sacred dancers leapt the bulls in Crete and composed lyric hymns within the colleges of the holy isles of the Mediteranean. Grandmother Earth sustained the soil of the North

American prairies, and Great Mother Ocean washed the coasts of Africa. Her priestesses discovered and tested the healing herbs and learned the secrets of the human mind and body that allowed them to ease the pain of childbirth, to heal wounds and cure diseases, to practice magic, which I like to define, with Dion Fortune, as "the art of changing consciousness at will." Yoga, in fact, far predates patriarchal Hinduism: seals showing figures in yogic postures are found in the Goddess culture of Mohenjo-Dara.

In the great urban centers, as society became more centralized, a new type of power developed: power-over, the ability of one group of human beings to control another. War became common and finally endemic, and as warfare shaped culture, women were driven from power and the rule of men over women ensued. This rule brought with it inheritance through the father and the sexual control of women, necessary to ensure that a father's children were truly his. In Europe, the Middle East, and India, this process was intensified by waves of invasions by the warlike patriarchal Indo-Europeans, who venerated male sky-gods and glorified battle.

The change to patriarchy was not an instant process. The old cultures resisted, and the transition lasted thousands of years (from approximately 4,000 to 1,500 B.C.) in Europe and the Middle East. The written myths and legends that have come down to us all date from this transitional era.

Yet the Mother never completely died. In India She survived (and still does today) in village celebrations and in the goddesses of the Hindu pantheon. In Greece, She became the goddesses of Olympus. Her worship lived on in mystery cults and folk traditions and in the healing practices and rituals of the "pagans" (from the Latin, meaning "country dweller"). The Great Mother was also Christianized as the Virgin Mary, whose worship is especially strong to this day in Latin America.

Those who held to the Old Religion of the Goddess were called Witches, from the Anglo-Saxon root *wic*---meaning "to bend or shape." They were shamans, healers, benders and shapers of reality, strongly tied to village and peasant culture, linked to the land and the round of seasonal celebrations.

As the culture of Europe changed in the 16th and 17th centuries, the Catholic and later the Protestant churches persecuted Witches as a way of breaking down peasant culture to open the land to more profitable exploitation; as a way of increasing the power of the male medical profession by driving women out of healing; and as a way of consolidating social control by attacking sensuality, the erotic, and the mysterious. Torture, terror, burning, and lies were their tools, and the deaths of hundreds of thousands

(some estimate as many as nine million) victims, primarily women, established an aura of fear that still surrounds the word "Witch" and the Western view of supernatural powers and abilities.

After the persecutions ended in the 18th century came the age of disbelief. Memory of the true Craft had faded, and the hideous stereotypes that remained seemed ludicrous, laughable, or tragic. Only in this century have Witches been able to "come out of the broom closet," so to speak, and counter the imagery of evil with truth. The word "Witch" carries so many negative connotations that many people wonder why we use the word at all. Yet to reclaim the word "Witch" is to reclaim our right, as women, to be powerful; as men, to know the life-spirit within as divine. To be a Witch is to identify with victims of bigotry and hatred and to take responsibility for shaping a world in which prejudice claims no more victims.

Witchcraft has always been a religion of poetry, not theology. The myths, legends, and teachings are recognized as metaphors for "That-Which-Cannot-Be-Told," the absolute reality our limited mind can never completely know. The mysteries of the absolute can never be explained---only felt or intuited. Symbols and ritual acts are used to trigger altered states of awareness, in which insights that go beyond words are revealed.

The primary symbol for "That-Which-Cannot-Be-Told" is the Goddess. The Goddess has infinite aspects and thousands of names---She is the reality behind many metaphors. She is reality, the manifest deity, omnipresent in all of life, in each of us. The Goddess is not separate from the world---She is the world, and all things in it: moon, sun, earth, star, stone, seed, flowing river, wind, wave, leaf and branch, bud and blossom, fang and claw, woman and man. In Witchcraft, flesh and spirit are one.

Goddess religion is old, but contemporary Witchcraft could just as accurately be called the New Religion. The Craft, today, is undergoing more than a revival; it is experiencing a renaissance, a re-creation. Women are spurring this renewal and actively reawakening the Goddess.

Since the decline of the Goddess religions, women have lacked religious models and spiritual systems that speak to female needs and experience. Male images of divinity characterize both Western and Eastern religions. Regardless of how abstract the underlying concept of God may be, the symbols, avatars, preachers, prophets, gurus, and Buddhas are overwhelmingly male. Women are not encouraged to explore their own strengths and realizations; they are taught to submit to male authority, to identify masculine perceptions as their spiritual ideals, to deny their bodies and sexuality, to fit their insights into a male mold.

Mary Daly, author of *Beyond God the Father*, points out that the model of the universe in which a male God rules the cosmos from outside serves to

legitimize male control of social institutions. "The symbol of the Father God, spawned in the human imagination and sustained as plausible by the patriarchy, has in turn, rendered service to this type of society by making its mechanisms for the oppression of women appear right and fitting."<sup>1</sup> This unconscious model continues to shape the perceptions even of those who have consciously rejected religious teachings. The details of one dogma are rejected, but the underlying structure of belief is imbibed at so deep a level that it is rarely questioned. Instead, a new dogma, a parallel structure, replaces the old. For example, many people have rejected the "revealed truth" of Christianity without ever questioning the underlying concept that truth is a set of beliefs revealed through the agency of a Great Man, "possessed of powers or intelligence beyond ordinary human scope. Christ, as the "Great Man," may be replaced in their theology by Buddha, Freud, Marx, Jung, Werner Erhard, or the Maharaj Ji, but truth is always seen as coming from someone else, as only knowable secondhand. As feminist scholar Carol Christ points out, "Symbol systems cannot simply be rejected, they must be replaced. Where there is no replacement, the mind will revert to familiar structures at times of crisis, bafflement, or defeat."<sup>2</sup>

The symbolism of the Great Goddess is not a parallel structure to the symbolism of God the Father. The Goddess does not rule the world; She ~~is~~ the world. Manifest in each of us, She can be known internally by every individual, in all her magnificent diversity.

The importance of the Goddess symbol for women cannot be overstressed. The image of the Goddess inspires women to see ourselves as divine, our bodies as sacred, the changing phases of our lives as holy, our aggression as healthy, our anger as purifying, and our power to nurture and create, but also to limit and destroy when necessary, as the very force that sustains all life. Through the Goddess, we can discover our strength, enlighten our minds, own our bodies, and celebrate our emotions. We can move beyond narrow, constricting roles and become whole.

The Goddess is also important for men. The oppression of men in Father God-ruled patriarchy is perhaps less obvious but no less tragic than that of women. Men are encouraged to identify with a model no human being can successfully emulate: to be mini rulers of narrow universes. They are internally split, with a "spiritual" self that is supposed to conquer their baser animal and emotional natures. They are at war with themselves; in the West, to "conquer" sin; in the East, to "conquer" desire or ego. Few escape from these wars undamaged. Men lose touch with their feelings and their bodies, becoming the "successful male zombies" described by Herb Goldberg in *The Hazards*

**of Being Male:** "Oppressed by the cultural pressures that have denied him his feelings, by the mythology of the woman and the distorted and self-destructive way he sees and relates to her, by the urgency for him to 'act like a man,' which blocks his ability to respond to his inner promptings both emotionally and physiologically, and by a generalized self-hate that causes him to feel comfortable only when he is functioning well in harness, not when he lives for joy and personal growth."<sup>3</sup>

The Goddess does not exclude the male; She contains him, as a pregnant woman contains a male child. Her own male aspect embodies both the solar light of the intellect and wild, untamed, animal energy. The symbol of the Goddess also allows men to experience and integrate their animal/sexual self as a life-giving, culture-creating force, as well as to find their power in nurturing and sensitivity.

Our relationship to the earth and the other species that share it has also been conditioned by our religious models. The image of God as outside of nature has given us a rationale for our own destruction of the natural order and justified our plunder of the earth's resources. We have attempted to "conquer" nature as we have tried to conquer sin. Only as the results of pollution and ecological destruction become severe enough to threaten even urban humanity's adaptability have we come to recognize the importance of ecological balance and the interdependence of all life. The model of the Goddess, who is immanent in nature, fosters respect for the sacredness of all living things. . . .

Love for life in all its forms is the basic ethic of Witchcraft. Witches are found to honor and respect all living things, and to serve the life force. While the Craft recognizes that life feeds on life and that we must kill in order to survive, life is never taken needlessly, never squandered or wasted. Serving the life force means working to preserve the diversity of natural life, to prevent the poisoning of the environment and the destruction of species. . . .

Witchcraft offers the model of a religion of poetry, not theology. It presents metaphors, not doctrines, and leaves open the possibility of reconciliation of science and religion, of many ways of knowing. It functions in those deeper ways of knowing that our culture has denied and for which we hunger.

Mother Goddess is reawakening, and we can begin to recover our primal birthright, the sheer, intoxicating joy of being alive. We can open new eyes and see that there is nothing to be saved from, no struggle of life against the universe, no God outside the world to be feared and obeyed; only the Goddess, the Mother, the turning spiral that whirls us in and out of existence, whose winking eye is the pulse of being---birth, death, rebirth--

-whose laughter bubbles and courses through all things and who is found only through love: love of trees, of stones, of sky and clouds, of scented blossoms and thundering waves; of all that runs and flies and swims and crawls on her face; through love of ourselves; life-dissolving world-creating orgasmic love of each other; each of us unique and natural as a snowflake, each of us our own star, her Child, her beloved, her Self.

#### Notes

1. Mary Daly, *Beyond God the Father* (Boston: Beacon Press, 1973), p. 13.
2. Carol P. Christ, "Why Women Need the Goddess," in Carol P. Christ and Judith Plaskow, *Womanspirit Rising: A Feminist Reader in Religion* (San Francisco: Harper & Row, 1979), p. 275.
3. Anton Ehrenzweig, *The Hidden Order of Art* (London: Paladin, 1967), p. 190.

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- Gimbutus, Marija. *The Goddesses and Gods of Old Europe* (Berkeley: University of California Press, 1982).
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Starhawk is founder of two covens in San Francisco, and a licensed minister of the Covenant of the Goddess, a legally recognized church. She is a filmwriter and author of numerous articles and poems. This article is excerpted and adapted from her book *The Spiral Dance* (Harper & Row, 1979). Copyright © 1979 by Miriam Simos. A longer version of it was published in *Yoga Journal*, May/June 1986, pp.38-57. Reprinted here with permission of Harper & Row, Publishers, Inc., the author and *Yoga Journal*. All rights reserved. The book can be ordered by calling toll-free: 1-800-638-3030.

#### MAGIC OR RELIGION: A PANTHEIST RESPONSE TO WITCHCRAFT

By Harold W. Wood, Jr.

Starhawk attempts in *The Spiral Dance* to make a case for Witchcraft as an ecological religion. She traces the history of Witchcraft as Goddess religion, distinguishing the concept of Witchcraft as the "old religion" from the popularized notions of occult witchcraft which is often incorrectly believed to be a satanic cult responding to medieval Christianity. In reality, Starhawk points out that what is today known as Witchcraft was the widespread religion in Europe prior to the coming of Christianity, and it was not truly "demonic" as

later centuries surmise. Although Starhawk advocates a "magic" of sorts, it is a magic to influence human minds in a conscious manner, not necessarily a calling of supernatural forces out of hiding to make magical changes in the non-supernatural world.

According to Starhawk,

Our relationship to the earth and the other species that share it has been conditioned by our religious models. The image of God as outside of nature has given us a rationale for our own destruction of the natural order, and justified our plunder of the earth's resources. We have attempted to "conquer" nature as we have tried to conquer sin. Only as the results of pollution and ecological destruction become severe enough to threaten even urban humanity's adaptability have we come to recognize the importance of ecological balance and the interdependence of all life. The model of the Goddess, who is immanent in nature, fosters respect for the sacredness of all living things. Witchcraft can be seen as a religion of ecology. Its goal is harmony with nature, so that life may not just survive but thrive.

Although Starhawk's obvious commitment to finding a genuinely intelligent alternative to patriarchal religion is laudable, she falls short in identifying a religious framework with truly vital relevance to the problems of the modern world and the ecological-spiritual crisis.

First, her reliance on ancient symbols is of historical interest, but not truly stimulating to a modern, nature-oriented spiritual renaissance. Proposing symbols such as a Goddess, the Horned God, and the Four Elements of the Ancient world as the foci for religion seems to me to border on the same sort of barbarism and supernaturalism that is rife within the Judeo-Christian tradition. While there may be an improvement in such an approach over the Europeanized concept of God as a Patriarch mighty with vengeance, the symbols remain weak because they remain anthropomorphic. Such an approach only aids the cause of anthropocentrism. If we need symbols at all, let us choose ones that emphasize planetary unity and harmony, not merely yet another human personality.

Using the Four Elements (Earth, Air, Water, Fire) is not much better, because it presents a scientifically inaccurate picture of the natural world every bit as silly as the anti-evolutionary dogma of Christian fundamentalists. "Earth, Air, Water, and Fire" do indeed have relevance to modern man in his ecological predicament, but they are better understood as cycles in ecological systems, not as static "elements." Thus, Earth is better represented as the living ecosystem we call soil,

(with all the changes in structure over time as in any ecological succession) upon which most living things depend: Air is better depicted as the Carbon, Nitrogen and Oxygen Cycles; Water should be celebrated as the hydrological cycle and not just in its directly consumptive form; and Fire, or Energy, is likewise better celebrated as something exercised by the laws we understand as chemistry and physics, rather than the primitive idea of "fire" as an "element."

Second, Starhawk's proposed rituals again rely on ancient symbols---such things as "casting the circle" of the coven, casting spells, arranging physical objects in so-called "spiritual" ways or positions. While a circle is indeed an excellent symbol, and as a framework for group worship superior to the traditional notion of a congregation facing a minister, I see a real danger in "casting a circle" where the "relevant few" are included inside and everyone else is excluded. I would cast ~~my~~ circle to encompass the whole planet **at the least**; our world has had too much dividing lines between and among races, species, nationalities and ecosystems. Perhaps the idea of a ripple in a pool would serve us well, but casting a "holy circle," even where the celebrants sit just outside it, is simply too divisive.

Finally, Starhawk's idea of casting "spells" as magic to "bind in energy," "attract love," etc. seem to me dangerously close to such superstitions as what we fear might happen when a black cat crosses in front of you, or the number 13 turns up. Starhawk, to be honest, makes some attempt to distinguish such superstitions from her form of magic-making, but shouldn't Deep Ecologists prefer a celebration of the wonders of nature---enhanced, not reduced by, scientific discovery? We don't need people re-establishing supernaturalisms such as horoscopes, "making spells," or black magic---we need an application of the discoveries of modern ecology to control the technical imperialism of the dominant paradigm.

Despite these criticisms, there is much in Starhawk's cosmology which merits approval. The celebration of "earth's holidays"---the solstices and equinoxes---are to be encouraged, as is a return to keeping a closer awareness of the phases of the moon. But let us not stop there---we need an increased awareness of many of the cycles of nature that flow through our lives other than those measured simply by time---such things as the cycles within our own bodies, of nutrients passing through ecosystems, of oceanic currents, and so on.

In contrast to Starhawk's proposal of Witchcraft as an ecological religion, the principles of Pantheism provide a basis for a religion of greater relevance to both the needs of our biosphere and the spiritual needs of most people today. While an understanding of ancient Goddess religion is a

helpful way to overcome the constricting notions of the Judeo-Christian heritage, the study of comparative religion including cultures other than European paganism, is equally important. For example, Shinto provides a model for an ecological religion with a great deal of substance, although it too suffers from many of the superstitious defects of other world religions. Likewise for Hinduism, Buddhism, Taoism, Confucianism, and African, Australian, and Amerindian tribal religions.

Yet to attempt a "religion" maintaining a close connection with all such religions while accepting none, such as Unitarian-Universalism, is too eclectic and diffuse to truly satisfy the yearnings of the human spirit. I would have the winds of all cultures blowing through my house, but I cannot survive on eclecticism alone. Is there then a solution to the need to find new spiritual expressions, while avoiding both over-reliance on a historical path like Witchcraft or an unacceptable eclecticism?

By contrast with ancient Witchcraft, a modern Pantheism presents a solution to the ecological crisis in accord with the best of human nature and the challenge of Deep Ecology. The word "Pantheism" comes from the Greek, meaning "All---God." In Pantheism, "God" is seen neither as male nor female---neither god nor goddess---but is conceived of as the sum total of the Universe. The nature of the Universe can be understood best not by myth and superstition, but by the insights of modern science---by which I include not only the rational, analytical, linear thinking which most of us were taught constituted science, but also the irrational, non-analytical, non-linear comprehension of the Universe required by modern physics.

Just because a scientific understanding of, say, weather, makes propitiating a Rain God or Cloud Goddess irrelevant, surely that same scientific understanding of the Hydrological Cycle presents a concept no less worthy of reverence and awe than the most imaginative of winged, haloed, animist, or ghostly beings which primitive man cooked up to explain the vagaries of the weather. Let us worship Nature, not as a Being separate and apart from us, but as Ultimate Being itself, of which we humans are a part. The rightful worship and respect which we can devote to the hydrological system (as a manifestation of the Deity of the Universe) will be properly seen in the way our part within that cycle is played. If we pollute streams, poison the rain, and ingest impure water, we are acting disrespectfully to a bio-geochemical system which is best understood as sacred---i.e., "worthy of reverence or respect."

Starhawk apparently believes that small covens of women and men carrying out ancient Goddess religions will help us regain that sense of



reverence, apparently for no better reason than because a bowl of water is included as a sacred object within her rituals, rather than being sprinkled or doused on us as is the practice in the Christian tradition. I fail to see how such an approach really provides much improvement, or a true opportunity to really improve our relationships with that magical substance, water.

On the other hand, a Pantheist approach proposes a focus for ecological understanding through a combination of the three traditional ways of worship found in every religion---the way of knowledge, the way of devotion, and the way of works. Using the hydrological cycle as an example, we pursue knowledge through scientific discovery, ever fresh and new, not through a sterile study of dusty manuscripts purportedly containing wisdom (whether from ancient Wiccan texts or otherwise); we pursue Devotion through artistic endeavor or even ritual, helping to bind us through beauty and appreciation; and we pursue the way of works through careful application of conservation principles, including eliminating pollution, conserving the quantity of water we use, and taking care in our use of it. Our worship thus would be one which celebrates truth and beauty, health and wholeness, not superstition and myth.

Rather than having a return to ancient Goddess religion, let us resurrect Pantheism as a way of life consistent with the Deep Ecology way, and seek the proper participation of all mankind in all the cycles of life!

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Harold W. Wood, Jr. is a member of the Board of Directors of the Universal Pantheist Society. He is the author of "Modern Pantheism as an Approach to Environmental Ethics," *Environmental Ethics*, Summer, 1985, Vol. 7, No. 2.

#### FEMINISM AND THE MAGIC OF THE GODDESS: AN APPRECIATION OF STARHAWK

By Monika Langer

Harold J. Wood's critique of *The Spiral Dance* misses the essence of Starhawk's position; hence, I am prompted to offer a brief rejoinder, lest his criticisms strengthen the current misrepresentations of Starhawk's work. Central to that work is the notion of "magic"; consequently, Woods does well to draw the reader's attention to it at the outset. He is correct, moreover, in indicating that Starhawk's meaning differs from the common conception of magic. Unfortunately, Wood's own comments regarding Starhawk's use of the term are themselves quite misleading. Among other things, Starhawk is concerned to counter the mind/body dualism which underlies so much of our Western culture. To say, as Wood does, that her magic aims "to influence human minds in a conscious

manner", is to reinforce that dualism and miss the fundamental reintegration of our being as humans which Starhawk attempts to reestablish.

Magic, for Starhawk, is not a method of enticing human **rationality**---as the term "minds" suggests, but rather a practice which appeals to and engages the whole human being and resists reduction to any single aspect of that being, be it emotional, intellectual, or sensual. Similarly, the words "not necessarily" are unfortunate insofar as they imply that the magic which Starhawk advocates may in some instances be "a calling of supernatural forces out of hiding to make magical changes in the non-supernatural world". The notion of "supernatural forces" and the "non-supernatural world" connotes the kind of hierarchical thinking which Starhawk herself criticizes. Strictly speaking, the supernatural has no place here, for there **are** no forces or deities above ("super") Nature. To posit something transcendent to the natural order, as the traditional patriarchal religions have done, and to characterize the world accordingly as "the non-supernatural", is to devalue the latter and rationalize its destruction---as the passage which Woods himself quotes from Starhawk indicates. Starhawk's notion of magic is therefore not **in any sense**---rather than "not necessarily"---summoning of hidden "supernatural forces" to transform "the non-supernatural world".

In light of the crucial role which magic plays in Starhawk's approach, it is worth pausing to ensure an adequate understanding of her use of this term. It might be helpful to note some relevant points from *Dreaming the Dark: Magic, Sex and Politics*.<sup>1</sup> In that work, Starhawk locates magic in a space where there is no split between the spiritual and the political. Here, magic is "the art of evoking power-from-within and using it to transform ourselves, our community, our culture, using it to resist the destruction that those who wield power-over are bringing upon the world."<sup>2</sup> But why does Starhawk use the term **magic** to designate this power which is the antithesis of the domination underlying patriarchal societies? Is she not aware of the term's connotations which all but invite the reader's misunderstanding? On the contrary, Starhawk deliberately employs the word so as to make her readers uneasy, in hopes that this unease will prompt them to recognize how alienated their society actually is. As she points out, "the words we are comfortable with, the words that sound acceptable, rational, scientific, and intellectually sound, are comfortable precisely because they are the language of estrangement."<sup>3</sup> Such language serves to mask and maintain our estrangement from aspects of our own selves, from Nature and from other people. By contrast, Starhawk's deliberate use of language which makes us uncomfortable is itself part of magic to the extent that it transforms our awareness. Generally,

we tend to equate magic with "hokus pokus" and to dismiss it as superstition unworthy of civilized adults. If we consider magic as being in any way real, then—as Wood notes---we usually relegate it to the realm of the "demonic". Hence, our unease at any suggestion that magic is profoundly ethical as Starhawk argues. A keen awareness of the fundamental interconnectedness of everything lies at the very heart of magic. From this perspective, humans are inextricably part of the world and any violence which they perpetrate on the latter thus ultimately affects them also---so that, for example, the rape of the land, is in the final analysis destructive of the violator's own well-being. Applying the power-over principle cannot halt this destructive cycle; only by renouncing that principle entirely and cultivating the power within the whole network of relations, can human well-being be established. Starhawk calls power-from-within "immanence"; however, the abstractness and coldness of this word prompts her to supplement it with the symbolic term "Goddess".

From the foregoing, it is clear that for Starhawk it is not a matter of "identifying a religious framework", as Wood suggests. Further, he seems to have missed the significance of Starhawk's symbolism when he declares that her dependence on ancient symbols is merely "of historical interest". (He does acknowledge later that "an understanding of ancient Goddess religion is a helpful way to overcome the constricting notions of the Judeo-Christian heritage".) According to Wood, such symbols not only lack any genuine relevance to our contemporary problems, but also verge on "barbarism and supernaturalism". I would argue that Starhawk's symbols are in fact singularly well suited to remedying the present pervasive rootlessness and encouraging a much needed sense of ecological responsibility.

To appreciate the profound relevance of her approach, it is instructive to ponder the position of the philosopher Martin Heidegger regarding the crisis of our time. In his 1955 **Memorial Address**, Heidegger contends that the seventeenth century scientific and philosophical revolution ushered in a radical transformation of outlook and a concomitant fundamental change in humans' relation to the world. The resulting "technical" attitude has become ever more firmly entrenched and is increasingly considered to be the only viable approach in our technological age. Heidegger stresses that the price we pay for regarding the world as an object to be attacked by "calculative thought" is a "loss of rootedness" ourselves. Only by uprooting ourselves from Nature were we able to turn it into 'a gigantic gasoline station, an energy source for modern technology and industry'. By doing so, we have come perilously close to the denial and loss of our "essential nature" as humans.<sup>4</sup>

Heidegger's concern has been eloquently echoed and elaborated by contemporary historians of science such as Morris Berman. In his book **The Reenchantment of the World**, Berman explains

that in the course of the seventeenth century Western Europe hammered out a new way of perceiving reality. The most important change was a shift from quality to quantity, from 'why' to 'how'. The universe, once seen as alive, possessing its own goals and purposes, is now a collection of inert matter... Finally, atomism, quantifiability, the deliberate act of viewing nature as an abstraction from which one can distance oneself---all open the possibility that Bacon proclaimed as the true goal of science: control. The Cartesian or technological paradigm is...the equation of truth with utility, with the purposive manipulation of the environment. The holistic view of man as a part of nature, as being at home in the cosmos, is so much romantic claptrap. Not holism, but domination of nature; not the ageless rhythm of ecology, but the conscious management of the world; not... 'the magic of personality, [but] the fetishism of commodities.'<sup>5</sup>

Berman argues that the "disenchantment" of reality must be reversed through the restoration of "participating consciousness", if we are not to lose forever the meaning of being human. He points out that "for more than 99 percent of human history, the world was enchanted and man saw himself as an integral part of it. The complete reversal of this perception in a mere four hundred years or so has destroyed the continuity of the human experience and the integrity of the human psyche. It has very nearly wrecked the planet as well. The only hope...lies in a reenchantment of the world."<sup>6</sup> It is precisely to facilitate such a reenchantment that Starhawk invokes ancient symbols and rituals in **The Spiral Dance**. By returning to the very roots of our pre-scientific attitude to the world, she draws our attention to a more holistic tradition so as to encourage us to abandon our current approach of abstraction and manipulation. In reforging our link with an ancient, enchanted world, Starhawk seeks to engender on our part an attitude of participation in an organic cosmos and a reintegration of ourselves with the latter. The Goddess symbolizes this participatory, holistic approach especially well.

As Starhawk explains in **Dreaming the Dark: Magic, Sex and Politics**, the Goddess is not any single image but a whole constellation of images and associations which challenge our contemporary estrangement from the world. Thus "the ancient

images, symbols, and myths of the Goddess as weaver, birth-giver, earth and growing plant, wind and ocean, flame, web, moon and milk, all speak...of the powers of connectedness, sustenance, healing, creating". The Goddess represents "the awareness of the world and everything in it as alive, dynamic, interdependent, interacting, and infused with moving energies: a living being, a weaving dance". Starhawk explicitly cautions against the temptation to turn this symbol into the fulcrum of "a new belief system". She stresses that her use of the term does not sanction any such reduction of the Goddess to an object of belief: "Let us be clear that when I say **Goddess** I am not...proposing a new belief system. I am talking about choosing an attitude...". Whilst the term "immanence" accurately denotes the attitude symbolized by the Goddess, Starhawk prefers the symbol to the concept because the concept evokes only intellectual responses, whereas the symbol calls forth emotional and sensual ones as well.<sup>7</sup>

These various aspects of our experience must indeed be evoked, since the restoration of holism requires that we recognize the interdependence of thoughts, images, words, actions, and feelings. We must reintegrate matter and spirit, mind and body, Nature and culture, self and others, individual and community. In abolishing all these dichotomies, we eliminate any "exterior" or "interior" retreat from which to continue our devaluation of the world. Reintegration thus involves our becoming concerned about the whole, our refusal to devalue any part of the cosmos. Holism consequently implies an "ethics of integrity". Such an ethic values diversity; hence, the rich array of images symbolizing the attitude of power-from-within is highly appropriate. In light of my earlier comments concerning the Goddess, it is evident moreover that Starhawk's symbolism does indeed "emphasize, planetary unity and harmony"---Wood's implication to the contrary notwithstanding. Further, her anthropocentrism actually strengthens Starhawk's symbols, instead of weakening them as Wood claims. After all, to counteract the abstract, impersonal attitude which characterizes our present scientific approach, it is imperative that we cultivate what Berman calls "participating consciousness"; and what could be more fitting to encourage this than images suggestive of a **personal** relation, evocative of what Norman O. Brown termed "the magic of personality"?<sup>8</sup> Pantheism, whose resurrection Wood advocates, seems to me to be far too abstract and impersonal to effect any genuine reversal of our current approach. While the notion of "Nature...as Ultimate Being itself" may appeal to us on an intellectual level, it strikes me as inadequate to speak to the other aspects of our experience.

Finally, it is important to recognize that the Goddess symbol is singularly appropriate for facilitating women's self-empowerment in Western patriarchal societies. In her article "Why Women

Need the Goddess: Phenomenological, Psychological, and Political Reflections", Carol P. Christ argues that the longstanding Judeo-Christian male symbolism of God has produced extremely powerful "'moods' and 'motivations'" which render women psychologically dependent on men and their authority, whole simultaneously supporting and legitimating male interests and patriarchal socio-political institutions. Within this context, Goddess symbolism becomes very fecund in that it engenders radically different "'moods' and 'motivations'" which challenge the existing psychological and socio-political patterns. The long tradition of patriarchy has devalued women's power, distrusted their will, denigrated their bodies, denied their bonds and dismissed their heritage. In place of the pervasive devaluation of women, the symbol of the Goddess offers the affirmation and legitimation which is so vital for the creating of a new, non-repressive and non-oppressive culture.<sup>9</sup>

Earlier, I discussed the importance of Starhawk's focus on the ancient world. Wood's dismissal of Starhawk's use of the Four Elements as "silly", and his proposal that we replace those elements with a scientifically accurate account, makes it necessary to add an additional comment. Wood seems to concur with Starhawk's contention that our religious models have conditioned our relationship to the world. He too is critical of patriarchal religion and recognizes the need for an alternative which is in keeping with "the principles of Deep Ecology". Unfortunately, however, Wood abandons that questioning approach in his uncritical acceptance of the scientific paradigm. Thus he rejects the Four Elements as "scientifically inaccurate" and advocates instead "a scientific understanding"---in which, for example, "Fire, or Energy, is...celebrated as something exercised by the laws we understand as chemistry and physics"! In failing to query the **status** of such an understanding, Wood implicitly endorses the common mystification of science as "some sort of absolute, transcultural truth", to quote a phrase used by Morris Berman.<sup>10</sup> As Berman explains, modern science considers the thinking of earlier times muddled, misguided, superstitious, animistic and childish, while congratulating itself, by comparison, on its own sophistication. In its estimation, the further we go back in history, the more erroneous are the worldviews we encounter. Berman, on the contrary, demonstrates "that it is this attitude, rather than animism, which is misguided."<sup>11</sup> According to Berman, scientific consciousness is fundamentally alienated. Its method, its definition of reality, and its cognition are inextricably bound up with the development of industrial capitalism; moreover, "science, and our way of life, have been mutually reinforcing."<sup>12</sup> The whole complex---abstraction, opposition of subject and object, experimentation,

quantification, technological manipulation, exploitation of humans and the environment, materialistic accumulation, and the fetishism of commodities---has been deeply destructive of ourselves and of the planet as a whole. To think that we can radically alter our way of life while retaining our scientific paradigm, is simply to deceive ourselves.

Like Berman, Ruth Hubbard, a Harvard biologist, stresses the inherent difficulty of recognizing that scientific consciousness---our modern consciousness---involves a **definition**, and even a **construction**, of reality; that science is inevitably value-laden. Hubbard notes that like everyone else, scientists "find it difficult to see the social biases that are built into the very fabric of what they deem real...There is no such thing as objective, value-free science. An era's science is part of its politics, economics and sociology: it is generated by them and in turn helps to generate them".<sup>13</sup> Wood's demand for a scientifically accurate account of the world, sidesteps this whole issue and keeps us firmly entrenched in that very attitude to the world which he himself deplures---his call for control of "the technical imperialism of the dominant paradigm" notwithstanding. It is, in my view, not a matter of **control**, or of the **application** of certain scientific discoveries. Nor is it simply a question of adding "the irrational, non-analytical, non-linear comprehension of the universe required by modern physics", to the traditional "rational analytical, linear thinking". What is required, rather, is a far more fundamental questioning of our scientific consciousness itself, along the lines suggested by writers such as Hubbard and Berman. Wood's assertion that "the nature of the Universe can be understood best not by myth and superstition, but by the insights of modern science", shows just how little he appreciates the need to undertake such a radical inquiry.

In light of his uncritical adherence to the scientific conception of the world, it is not surprising that Wood regards Starhawk's suggested rituals---which draw on ancient symbolism---as "dangerously close" to correct superstitions about black cats. He considers proposals such as "casting a circle", or casting spells, to be an unnecessary, devisive, and dangerous re-establishment of "supernaturalisms". As I argued earlier, such a critique rests on a fundamental misunderstanding of Starhawk's position---more specifically, on a failure to appreciate the significance of magic in her work. Wood's own approach precludes legitimating "the 'Hermetic wisdom'...dedicated to the notion that real knowledge [occurs] only via the union of subject and object, in a psychic emotional identification with images rather than a purely intellectual examination of concepts".<sup>14</sup>

The casting of a circle is not a matter of including some people and excluding others,

contrary to what Wood suggests. Such a view is profoundly static, insofar as it implies that casting a circle amounts to erecting a barrier, building a circular fortification. Starhawk's symbol, on the contrary, is inherently dynamic. As in Nietzsche's philosophy, so in Starhawk's, the image of the circle is inextricably intertwined with that of the dance---as the very title of her book, *The Spiral Dance*, indicates. It is a matter of symbolically "preparing the ground" ---in Heidegger's sense---for a new attitude to, and relationship with, one another and the planet at large. That symbolic preparation, that ritualistic casting of a circle, carries the multifaceted efficacy of all ancient symbolism---that is, it appeals to all the various levels and aspects of our being. Thus it invokes a metamorphosis of our entire experience, "clears the ground" and puts us "on the way"---as Heidegger would say---to a new rapport with one another and a fundamentally different, non-alienating, world view.

Carol P. Christ's discussion of ritual magic and spellcasting and, more specifically Goddess circles, is illuminating in this regard. As she explains, such circles evoke and develop "energy as power". They affirm and legitimate women's will and, in doing so, provide a very "different understanding of the will than that available in the traditional patriarchal religious framework. In the Goddess framework, will can be achieved only when it is exercised in harmony with the energies and wills of other beings".<sup>15</sup> Nor is it a question of restricting our awareness to "**the cycles of nature...measured simply by time**". Indeed, Wood's words (my emphasis) indicate a thinking which remains firmly tied to the scientific paradigm. Rituals such as those proposed by Starhawk certainly heighten our "awareness of many of the cycles of nature that flow through our lives". As Christ shows in her discussion of women's need for the Goddess, "in the ancient world and among modern women, the Goddess symbol represents the birth, death and rebirth processes of the natural and human worlds. The female body is viewed as the direct incarnation of waxing and waning, life and death, cycles in the universe...The Goddess as symbol of the revaluation of the body and nature thus also undergirds the human potential and ecology movements".<sup>16</sup>

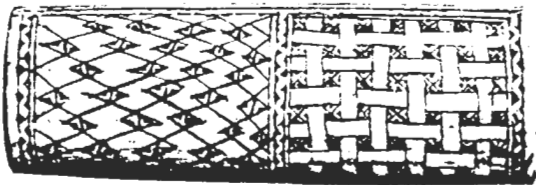
Starhawk does not deny the importance of studying "comparative religion including cultures other than European paganism", as Wood implies. Rather, her intent in returning to ancient Goddess religion is to prompt us to trace **our** roots (which, after all, **do** lead us back to European paganism) so that we might reintegrate ourselves into a tradition more holistic than that of our scientific conception and, thereby, empower ourselves to establish a new rootedness truly appropriate to our own age. In characterizing **his** approach as "one which celebrates truth and beauty, health and

wholeness", whilst dismissing Starhawk's as "superstition and myth"; in reducing the latter's method to "a sterile study of dusty manuscripts purportedly containing wisdom" and a placing of bowls of water instead of Christian sprinklings or dousings, Wood ultimately only impoverishes himself.

#### Notes

1. Starhawk, *Dreaming the Dark: Magic, Sex and Politics* (Boston: Beacon Press, 1982).
2. *Ibid.*, p.xi.
3. *Ibid.*, p.13.
4. Martin Heidegger, "Memorial Address", in *Discourse on Thinking* (New York: Harper & Row 1969), pp.49-56.
5. Morris Berman, *The Reenchantment of the World* (Ithaca: Cornell University Press, 1981), pp.45-46.
6. *Ibid.*, pp.132, 230.
7. *Dreaming the Dark: Magic, Sex and Politics*, pp.4, 9-12.
8. *Ibid.*, pp.37, 43; and Norman O. Brown, *Love's Body* (New York: Random House, 1968), p.139.
9. Carol P. Christ, "Why Women Need the Goddess: Phenomenological, Psychological, and Political Reflections", in Marilyn Pearsall, ed., *Women and Values: Readings in Recent Feminist Philosophy* (California: Wadsworth Publishing, 1986), pp.211-220. (Reprinted from *Hexesias* (Spring 1978), in C.P. Christ and J. Plaskow, eds., *Womanspirit Rising* (New York: Harper & Row, 1979), Chapter IV.) See also Patricia Campbell "Redeeming Spiritual Experience in a Feminist Group", *Canadian Journal of Feminist Ethics*, Vol. 1, No. 2, Summer, 1986, pp.6-9.
10. Morris Berman, *The Reenchantment of the World*, p.150.
11. *Ibid.*, p.70. See all of Chapter 3, and pp. 130ff, 151-152.
12. *Ibid.*, p.22.
13. Ruth Hubbard, "Have Only Men Evolved?" (Subsection "Science and the Social Construction of Reality") in *Women Look at Biology Looking at Women*, Hubbard, Henfin and Fried, eds. (Boston: G.K. Hall, 1979), pp.8-11.
14. Berman, *The Reenchantment of the World*, p.73.
15. *Women and Values: Readings in Recent Feminist Philosophy*, pp.215-216.

**Monika Langer** is an Associate Professor of Philosophy at the University of Victoria, in Victoria, B.C., Canada V8W 2Y2. She has written on a variety of topics in the past and has a book forthcoming in spring 1988 with Macmillan Press Ltd and Florida State University Press entitled **Merleau-Ponty's Phenomenology of Perception: A Guide and Commentary**.



**DEEP ECOLOGY AND MAGIC:**  
**Notes of a Sleight-of-hand Sorcerer**  
 By David Abram

These are dark times for magic. There are not many people in North America who even believe in magic nowadays. And no one has contributed to this sad state more than the magicians themselves---those sleekly suspicious characters who perform at our gatherings and bedazzle us on television, making things vanish and appear amidst a flurry of sequined assistants. Since the days of vaudeville, our magic has become an increasingly secular craft,

forgetful of its origins in initiation, in communion and secret communication with wild Nature, in trance. Today, having mislaid the original significance of the rites they perform, my fellow magicians prefer to call themselves "illusionists". For although they sense something great and mysterious in the work that they do, the rational language and worldview of the time fails to provide any way to acknowledge that mystery. "Your magic", say the scientists, "is really just an illusion set up to fool our perceptions, for as everyone knows the real world is not magic." As a result, many modern magicians suffer from terrible guilt complexes for "fooling" their audiences. Many of them, like repentant sinners, have become professional debunkers. They spend much of their time straining to demonstrate that all psychics and faith healers are frauds, and that everything mysterious is really just a trick.

And yet there are a few magicians, just a handful of us, who still believe in magic. As sleight-of-hand practitioners, we know that we are connected with an ancient and timeless tradition by the fact that we work with the sacred mysteries of perception---the same mysteries that were studied and guarded by our progenitors, the tribal shamans and sorcerers. Magicians, whether witchdoctors or warlocks, have always been those individuals chosen to follow the way of the incarnate of Earthly powers. As a result of their deep trust in bodily or sensual experience, these individuals became adept at activating the imagination of the senses. It was by tapping this wild, perceptual creativity in his or her clients that the tribal sorcerer was able to effect numerous transformations and remarkable cures.

But the role of the sacred magician has shifted with the rise of civilization. Through the progressive domestication of tribal humanity, through the spread of institutional religion and urban logic, our species has all but lost its native ability to smell, to hear, to see deeply and creatively. Today's magician has the great task, then, of reawakening the deep creativity of perception. Through the use of his or her sleights and subterfuges, the magician endeavors to trick the senses free from their static holding patterns. If and when the magician is successful, we abruptly find ourselves immersed in a perceptual world far more vivid and wild than our tame definitions.

In 1980 I received a generous fellowship from the Watson Foundation to support a year's research into modes of perception utilized by traditional sorcerers in the equatorial islands of Indonesia and the mountain heights of Nepal. One aspect of this grant was especially unique: I was to journey into rural Asia not as an anthropologist or sociologist, but rather as a magician in my own right, in hopes of gaining a more direct access to

the native practitioners. By approaching them not as an academic researcher, but as a magician from the West, I would explore from the inside the relation between these traditional magicians and their magic. Here I will not write at great length about my encounters with the shamans. It suffices to mention that my unorthodox approach was ultimately quite successful, that my own magical skills brought me into the company of several exceedingly powerful and bizarre individuals of the sort known as "dukuns" in Indonesia or "djankris" in Nepal. Indeed, it was while staying in the household of one of the djankris that I experienced a unique shift in my own sensory awareness.

On one of our first walks along the narrow cliff trails that wind from his village high in the Himalayas of eastern Nepal, my host had casually pointed out to me a certain boulder that he had "danced" on before attempting some especially difficult cures. It was a large rock thrusting out several feet beyond the cliff's edge, its surface alive with pale white and red lichens. I recognized the boulder two days later when hiking back alone to the village from the yak pastures above and I climbed out onto the rock to sit and gaze at the snow-covered mountains across the valley. It was a sparkling blue Himalaya morning, clear as a bell. Between the gleaming peaks, two lammergeier vultures floated on the blue sky, wings outstretched, riding invisible currents. Without thinking, I took a silver coin out of my pocket and began an aimless sleight-of-hand exercise, rolling the coin over the knuckles of my right hand. One of the huge birds swerved away from the snow peaks and began gliding over the valley, heading in my general direction. I stopped rolling the coin and stared. At that moment the lammergeier halted in its flight and just hung in the air, motionless for a moment against the peaks, then wheeled around and headed back toward its partner in the distance. I pondered for several seconds, then on impulse began rolling the coin down my knuckles once again, letting its silver surface catch the sunlight as it turned, reflecting the rays back into the sky. Instantly the bird swung out from its path and began soaring in a wide arc. As I watched it approach, my skin began to crawl and come alive, like a community of bees in motion. The creature loomed larger—a sort of humming grew loud in my ears—and larger still, until it was there: an immense silhouette hovering just above my head, huge wing feathers rustling ever so slightly as they mastered the breeze. My fingers were frozen, unable to move—the coin dropped out of my hand. And then I felt myself stripped naked by an alien intelligence ten times more lucid than my own. I do not know how long I was transfixed...only know that I felt the air streaming past naked knees and heard the breeze whispering in my feathers long after the Other had departed.

It was dusk before I returned to the village, stunned and wondering at this strange initiation. Elements of my own magic (the coin-rolling exercise) and the djankri's magic (the sacred boulder) had been woven together by the sunlight into an unlikely meeting, an experience suggesting that the deepest magic has its source not in humanity itself, but in the meeting, the encounter of the human with what is not human. I had had intimations of this teaching many times in the past, but I had never felt its implications as clearly as I did that evening, and as I have ever since. After a dinner of potatoes dipped in salt and ground peppers, I took out my field notes, settled down in a corner, and began to write some conclusions. What follows in the next section is excerpted from my research notes written in the Thami Valley, Eastern Nepal)

It would be good if I began writing more often, rather than merely recording observations, for I have made some grand progress in that task, set for me some months ago by a Javanese witch, of thinking sensually---thinking, that is, with the senses, or sensing with the thoughts. It is a sort of clairvoyance, really, since we usually imagine thoughts to take place in some interior space (we say that we think thoughts "inside" or that we are being "inward" when we are thinking) while the senses are in direct contact with the exterior world. But to have one's thoughts in direct contact with an exterior, open space---thoughts not just processing and interpreting data from the other senses but thoughts which themselves are feeling their way through the shifting contours and textures of an open world---how is this possible?

Perhaps it's best to begin with this fact: there is, indeed, an interior into which I commonly close myself when I think, but it is not really inside my particular body or brain. It is, rather, the "inside" which my brain shares with all other brains that think in the same fashion. This interior is a sort of cave that has opened among the sounds of the world, an auditory hollow that continues to define its limits and to isolate itself. It is, in other words, this verbal space, the house of human language, this one region of the world which is inhabited strictly by us humans, and which we therefore feel to be an "inside" or an "interior" in relation to the "outside" world which we appear to share with so many other forms of life. We readily perceive that this planet has given birth to many species, to so many styles of awareness, so many ways of being, yet our everyday thoughts as human beings currently inscribe themselves within a region of awareness that seems strictly our own and which presumptively shuts out all other styles of consciousness. Today we see and hear all the rest only in the terms of this privileged space---all the other animals, all the

trees and oceans and rocks and storms, all that lacks a human tongue, including the Earth itself, we view only from within our insiders' space of purely human discourse. "If it cannot be put into words, then it does not exist," we say, efficiently banishing all other types of awareness from the picture. What arrogance! That to be human is a unique thing is quite certain, but surely it is also unique to be a crow, or a frog, or even a night-blooming cereus. To be able to think with words is a neat power, indeed, but that crow can actually fly!

By way of analogy: a person who is gifted with a certain type of intelligence is not thereby rendered unable to understand, empathize, and communicate with the rest of humanity. If she chooses to shut herself up within her particular sensitivity and to communicate solely with those few who share her gift, well then so much the worse for her and her potentially wondrous sensitivity, which will become swollen and distorted. In a like manner, our collective gifts as homo "sapiens" hold a wonderful promise, but we betray that promise when we hide behind those gifts and use them as a barrier between us and all that lives. We have such potentially grand powers for empathy and communication, since there is something in us of every animal, and also something of plants and of stones and seas, for we are woven of the same fabric as everything on the Earth, and our textures and rhythms are those of the planet itself...

And yet we have staked out and established a space that contains only what we believe is unique and privileged in ourselves. All who cannot speak our type of language are necessarily mute and dumb, not really alive; nothing is mindful but ourselves--all else is inert, determined, and therefore fit only for our observation and manipulation. We have closed ourselves into a universe of human verbiage.

How strange this is, and sad---and how clear it is why we have come to a crisis in our particular history which is also a great crisis for the planet. How can we ever become fully human when we refuse to admit that this human is a species of animal---when we have forgotten how to be genuine animals?

The magicians that I have traded with during the last nine months---like that monsoon magician of the rice paddies, or this mountain shaman whose medicineless cures are so remarkably successful---these are persons who struggle to regain those memories. That is what sets the magician's path at some distance from that of the mystic; while others seek to move out of their bodies, the magician fights to return to his body, to recover a place in this material world from which he feels somehow cut off and estranged. Thus the successful sorcerer is hardly a transcendent being---he is an animal, human, a creature of Earth. And his magic, far from

being a supernatural power, grows out of an almost proto-human attentiveness to Nature itself---out of his ability to listen not only with his verbal mind, but with his animal mind, his plant mind, his soil, rock, river, and deep Earth mind. For the sorcerer knows that the verbal space, this human gift, only makes sense for those who have learned how to enter that space, how to grow into it out of the silence; how to grow into the head from the body itself.

And yet, and yet; there are so many, these days, who speak of communication with supernatural powers and other, a-physical worlds, so many who write that our destiny as conscious beings lies not with the planet but elsewhere, on other more spiritual worlds or in other dimensions. The new-age lecture halls resound with such assertions backed up with accounts of profound mystical experiences, of deeply spiritual sensations, of magic. I have an elegant intuition about all of this, an intuition born from certain sensations experienced as a young boy drawn to the study of conjuring back in the States, and then again, here, among the shamans of Asia. For I, too, have had some extraordinary mystical experiences in my life, some powerful bursts of oceanic awareness, although somehow these shifted states were always caught up in the material world that surrounds; they did not take me out of this world into that purely spiritual region of disembodied freedom and light about which so many of my cohorts speak and write. No, for the young magician those experiences always revolved around a heightened and clarified awareness of the organic world that enveloped him. Far from drawing him outside his domain, his "spiritual" or "ecstatic" experiences never failed to make him that much more startlingly aware of his corporeal presence, here, in the midst of a mysteriously shifting but none-the-less thoroughly physical world. And so there grew in me, steadily, a sense that the so-called spirit is really the breath of the material world; indeed, that there is no spirit more spiritual than the dance of light on the water's surface, or the wind rustling in the leaves. What the conjuror is ever straining to express with his vanishing coins and color-changing cards is that the world of the most mysterious and mystical transformations is **this** world, right here, under our noses. And yet still I am confronted by news of another world, more eternal than this one (can it be?), an utterly transcendent, non-physical realm to which all truly mystical revelations give us access. From this I am forced to conclude either that my own ecstasies and visionary experiences have in fact nothing to do with the genuinely religious path---that they are in fact false ecstasies and unreal revelations still basely "attached" to the "physical plane" as my neighbors tell me, or else that there is some sort of mundane clarity in my own ecstatic experience which is lacking in the experience of those who feel the

need to postulate the existence of some other, wholly transcendent source.

Which brings me back to my aforementioned intuition about all our mystical encounters and revelations from elsewhere. Can it be that such experiences are, indeed, intimations of another, larger world than the one we usually inhabit with our everyday thoughts and perceptions, but that the larger world to which we gain access is none other than this very Earth, this very sphere within which we move, seen now, however, for the first time clearly? Is it possible that at such times we actually do break out of a limited, constricted world, although that limited world is not the material landscape that surrounds us, but is rather our particularly limited and prejudiced human way of perceiving these surroundings, that stuffy house into which we lock our sensibilities by considering all other forms of life and existence to be without consciousness, inert, and determined? I want to ask, finally, if it is possible that our ecstatic or mystical experiences grow precisely out of our receptivity to solicitations **not** from some other non-material world but from **the rest of this world**, from that part of our own sphere which our linguistic prejudices keep us from really seeing, hearing, and feeling---from, that is, the entire non-human world of life and awareness, from the sphere of whales with their incredible alien intelligence, of goats and apes and the fantastically organized and industrious insect colonies, of flowers and hurricanes, of lightning and earthquakes and volcanoes. It is the living, breathing, conscious Earth of creatures who are being bred and "harvested" as meat in our mechanized farms, of great schools of fish choking in polluted waters, of whole rain-forest universes, whole intercommunicating systems of elements, insects, plants and animals that are falling apart and dying from our fear, our species-amnesia, our refusal to recognize awareness anywhere outside our own brain. It is the live, breathing space of a planet whose sacred fluids are being sucked dry and whose breath is being poisoned by one little part of itself, a planet that is feeling sick, a world-space that has been made unhealthy by one of its favored children.

The other animals have given us much, and they have been patient with us, as have the plants, the rivers, and the land itself. Many creatures have donated their lives to our quest---many have undergone excruciating pain in our laboratories before being "sacrificed"---yet still their relatives are unaware of our purposes. The fish find it more and more difficult to swim in the stinging waters, while the passage upstream is blocked by freshly built dams; birds spin through a chemical breeze, hunting in circles for that patch of forest which had been their home. They are not alone in their dizziness, for things are worsening

throughout the biosphere. Naturally, then, the mountains, the creatures, the entire non-human world is struggling to make contact with us; the plants we eat are trying to ask us what we are up to, the animals are signaling to us in our dreams or in forests, the whole Earth is rumbling and straining to let us remember that we are of it, that this planet, this macrocosm is our own flesh---that the grass is our hair and the trees are our hands and the rivers our own blood---that the Earth is our real body, and that it is alive. And so everywhere, now, our "interior" space of strictly human discourse begins to spring leaks as other styles of communication make themselves heard, or seen, or felt, and all over, in so many different ways, we feel intimations of a wholeness that is somehow foreign to us, and we see the traceries of another reality. It is indeed a time for magic, a magic time. But it is no supernatural thing, this magic. We are simply awakening to our own world for the first time, and hearing the myriad voices of the Earth.

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**David Abram** is a writer, follower of deep ecology, and free-lance magician. He has exchanged magic with shamans in Indonesia, Nepal; and North America, and has written articles on ecological perception and magic for *Parabola*, *Orion*, *Nature Quarterly*, *The Ecologist*, *Appalachia*, and other journals. Active in the North American Bioregional Congress, he has an abiding interest in animal awareness and interspecies communication. He is currently teaching courses in phenomenology, while doing graduate work in philosophical ecology at the State University of New York at Stony Brook. A different version of this article is available from Way of the Mountain Learning Center, P.O. Box 542, Silverton, Colorado, USA, 81433.

#### TECHNOLOGICAL SCIENCE AND THE MAGICAL ARTS

By Larry Hickman

"Technology," like "science" and "magic," is a general term that has useful meanings only within specified contexts. For present purposes, I shall specify a context by dividing technology into three species: those I call Big Technology, scientific technology, and quotidian or everyday technology.

By "Big Technology" I mean more or less what Jacques Ellul earlier in his career called "technique," and what others (including the recent Ellul) have called "the technical system." This type of technology includes "scientific" technology because at its core resides a constantly changing matrix of theories which range from less to more abstract. These theories include hunches, working hypotheses, and the well entrenched theories often termed "the laws of science." Scientific technology, in turn, utilizes but does not exhaust



quotidian technology. It utilizes the practical manipulation of materials, tools and artifacts as an aid to the generation of its theoretical components, to perform tests of its theories, and to express and render accessible the results of those tests. Put another way, quotidian technological practice conditions the theoretical components of scientific technology and it is the means of bringing its theories to fruition and disseminating them in the sphere of concrete human activities.

Beyond its scientific component, Big Technology exhibits an organizational component by which it provides for the delivery of the fruits of experimental science and maintains the social conditions it finds favorable to its growth. Large computer databases, for example, apply the work of scientific technology along lines that are not always or necessarily justified from the standpoint of experimental science, but which are deemed by the high level practitioners of Big Technology important to the continuing stability of the system.

Besides its scientific theories, for which it is usually claimed that tests are available, Big Technology, like other large systematic phenomena such as religious institutions, also generates theories which may be called "metaphysical" and "mythic." Metaphysical and mythic theories are stories we tell that go "beyond" (meta) the objectivity of the experimental sciences. They are said by some to lack the testability component of hunches, hypotheses and laws.

Because of its size, the ubiquity that is consequent on its successes, and the power of its metaphysical-mythic component, Big Technology has been characterized by some, including Ellul, as having become *too* big, as being autonomous and out of control, and as having usurped from religion the domination of our milieu. Martin Heidegger saw Big Technology as both symptom and cause of what he called mankind's progressive uprootedness from the Being of the World. Hans Jonas has called this technological system a "second nature"; others have compared its organizational apparatus and effectiveness with that by means of which the Roman Catholic Church managed to dominate the culture of Western Europe for more than a millenium.

Quotidian technology, although it forms an important component of Big Technology, predates it. More akin to what the Greeks called "teche," it also predates the experimental science which began to flourish during the seventeenth century. Most fundamentally it involves the practical manipulation of materials, tools and artifacts in the absence of a comprehensive, coherent, or well articulated theoretical apparatus. Although quotidian technology may have theories appended to it, it most often functions quite well in their absence. For this reason it is more an art than a

science. John Dewey discussed this type of technology in 1934 in *Art and Experience*, and it is similar to what Ortega y Gasset called "technology of the craftsman."

Although there is a widespread belief, particularly among academics and practitioners of Big Technology and experimental science, that quotidian technology requires a lower level of intelligence than that of the scientific sort, some, such as Claude Levy-Strauss and John Dewey, argued that the intelligence it requires is fully equal to that demanded by scientific technology. It is simply that its materials are different than those of scientific technology.

Because it functions at the level of practice, usually expressing the meanings of its materials in the absence of theoretical components, especially hypotheses and laws, quotidian technology is considered by some to be less threatening than is Big Technology. It has even been argued that the tools and artifacts of quotidian technology may serve to mediate the forces of Big Technology. Everyday technology, this argument goes, because it is concrete and perceived as manageable (even if not always managed), offers opportunities and mechanisms for stabilizing the self against the threat of its dissolution, a threat that seems to be endemic to Big Technology especially during the latter's phases of massive innovation.

Long before there were scientific hypotheses and laws, men and women were engaged in satisfying their needs, celebrating their successes, and forming and maintaining the worlds of their experience; and this by utilizing tools, artifacts and methods.

Quotidian technological practice may involve maintaining and driving a personal automobile, the use of tools and implements of sports such as are used in fishing and golf, the making of pottery, woodworking, painting, cooking, gardening, sailing, and even the recently popular activity of "sculpting" one's own body by means of "pumping iron."

Both Big and quotidian varieties of technology may function in the presence of appended metaphysical-mythic components. The question of whether there has been progress in these two areas of technology provides a good, even if somewhat difficult, example of this kind of overlay. Its difficulty lies in the fact that you and I might in general agree on the facts, yet differ regarding the way that they ought to be arranged. We might agree, for example, that there has been a virtual eradication of smallpox in the United States and that this is a triumph of scientific technology. We might also agree that practice in the arts and crafts I just mentioned is ever more sophisticated and that new means of bringing inquiry into these materials to a satisfactory conclusion have been developed. If this is all we wish to say, then we

will have used the term "progress" to designate the satisfactory resolution of a problematic situation, whether that problem be theoretical or practical in nature.

But many who argue for or against progress have something different in mind. They wish to say that there is a global sense in which things are (or are not) better now than they were previously, that is, that taken in sum, things have (or have not) changed for the better.

Complicating this matter is the fact, on which those on both sides of the issue can usually agree, that what is regarded as satisfactory at one time may be regarded as unsatisfactory at another time. Examples of this phenomenon abound; fascinating cases may be encountered in the nuclear power and agricultural industries.

The idea of progress, then, is an example of a metaphysical-mythic overlay over what human beings actually do and accomplish. For its proponents, as for its opponents, it is a story told about the totality of human scientific and technological endeavors. Of course the story is different in each case, even though the data for the story may be the same. But to say that it is a metaphysical or mythical account is not to say that it is without effects.

William James understood this phenomenon well, and outlined a treatment of it in his essay "The Will to Believe." It was there that he suggested that when the data themselves do not force a decision on a particular matter, then given that our options be what he called live, forced and momentous, that is, that they offer a real choice, it is necessary that we decide. We have a right to adopt a particular mythic overlay to the facts. Moreover, if our options are indeed live, forced and momentous, our decision will have consequences that are important. His caveat, of course, was that the consequences of our choice will feed back into the system, and will color our future selection of data. In so arguing he sought to extend the notion of testability to include metaphysical and mythic accounts.

Put in this way, metaphysical and mythic overlays in general, and more particularly those of Big Technology and technology of the quotidian variety, turn out to be a kind of magic. But "magic," too, is a word that we have made too generous. I do not intend its sense as "sleight of hand," but as the art of "influencing the course of events. . . or bringing into operation some occult controlling principle of nature."<sup>1</sup> To clarify matters further, I shall need to distinguish at least four kinds of magic: magic may be natural or supernatural, and it may be theoretical or practical. There are many other ways that magic can be understood, but these four categories taken together offer a key to understanding some of its many interfaces with technology.

The division of magic into natural and supernatural varieties is a very old distinction, probably going back to the neoplatonists, but certainly to Marcilio Ficino. D.P. Walker, in his classic work *Spiritual and Demonic Magic From Ficino to Campanella*,<sup>2</sup> argues that the tradition, "as Ficino left it, comprised two kinds of magic, the natural spiritual magic of the *De Vita Colelitus Comparanda* and the demonic magic, only hinted at in that work, but quite easily discoverable from his other writings."<sup>3</sup> Walker acknowledges a tradition of supernatural magic associated with demons and tending to the reckless, unorthodox magic of Agrippa and Paracelsus. But he also sees a tradition of natural magic which was associated with the arts of music and poetry.

In natural magic, for example, planetary influences may operate on the imagination of an individual. Ficino distinguished five powers which may be activated by the force of the imagination (*vis imaginativa*): the power of images (*vis imaginum*), the power of words (*vis verborum*), the power of music (*vis musices*) and the power of things (*vis rerum*). Each of these powers is associated with one of the arts, and each expresses itself either publicly and objectively or in a recondite manner. The power of images, for example, may express itself in the visual arts or in talismans, the power of words in oratory and poetry or in incantations, the power of music either in music and song or in the harmonies of sympathetic magic, and the power of things either in terms of their elemental and well known qualities or in terms of their occult qualities.

Two important features of Ficino's treatment of magic that I wish to emphasize here are first, that he has a very modern notion of a feedback relationship between magical operations, whether they are public or recondite, and both the imagination and the physical body of the operator. When the operator is able to influence others, the primary feedback relationship is transformed into a transitive one, which in turn may be either purely physical or psychosomatic.<sup>4</sup>

A second important feature of his account for us here is that there is no appeal to supernaturalism to make his system work (as, of course, there is both for demonic magic and the magic of orthodox religious groups).

Clearly, both Big Technology and everyday technology utilize natural magic in Ficino's sense of the term. There is, for example, a sense in which expectations regarding the fruits and methods of Big Technology may leap far in advance of what is justifiable on the grounds of common sense or experimental science. The Strategic Defense Initiative, for example, exhibits promises of success in technical areas that are at best only dimly understood even by specialists in those areas. Yet those hopes are not only proffered, but

profoundly affect both funding and political climate. The powers of images, words, music and things have all been brought to bear on the task of articulating and marketing SDI. Myths of military superiority, myths of the future of artificial intelligence, and myths of progress (or its absence) all function as imaginative, in this case magical, overlays to the non-magical matrices of facts that are testable in terms of experimental sciences.

But natural magic also functions at the practical, everyday level. The imaginative power of automobiles, fashionable clothing and trendy domestic appliances provides use-enchancement which is neither based on articulable theories nor clearly integral to the artifacts in question had they to function outside that imaginative framework. Again, their enhanced use-value is tied to the powers of images, words, music and things.

If the use of natural magic has become common in our time, supernatural magic has by no means disappeared. The eucharist offered by the priest of the Roman Catholic Church is an example of supernatural magic, as are the electronic performances of his fundamentalist counterpart.

There is also a sense of natural magic that is even closer to the roots of technology in *techne*, an undifferentiated "practical arts, fine arts, making and doing" as it was understood by the Greeks. But to understand this connection it is necessary to mount a second distinction, that between theoretical magic and practical magic. Quite simply put, theoretical magic claims to work **because** its theories are correct and therefore applicable, whereas practical magic often operates without explicit theories, or, where there appears to be a theoretical basis for its practice, it is often more properly a metaphorical-ritual accompaniment than a true theoretical basis. In their use of practical magic, it is not so much that men and women in a technological milieu understand and therefore use its tools and artifacts; it is more accurate to say that those tools and artifacts serve a function and that they are therefore used.

Given this distinction, the natural magic of quotidian electricity looks very different from the natural magic of, say, SDI. Electricity works even for men and women even who do not care about the theories of amperage, wattage and voltage. It works, and is therefore used. SDI, on the other hand, secures power over its faithful through its theories, even though those theories appear to some of its critics to be decreasingly congruent with its practice.

This is just to say that practical magic works either in the absence of a theoretical basis or independently of what might appear to be one. The case is quite different with theoretical magic. The eucharist could not work in the absence of theory,

for example, nor could the magic performed by television evangelists. There is, indeed, something about the category of the supernatural that resists the generation of purely practical cases, since belief in the supernatural is by definition belief in a set of theories, even though they may be very simple ones. But to recall the claim of William James, this is not to say that supernatural magic does not often have distinctly practical results. As was the case during the middle ages and Renaissance, supernatural magic is in our own time often utilized as a hedge against the claims of natural magic in both its theoretical and its practical senses.

The present global revival of fundamentalist magic may thus be seen as offering its devotees a sense of security against the threats of the magic of Big Technology, which is for the most part natural and theoretical, as well as against the magic of quotidian technology, which is largely natural and practical. Why do fundamentalists consider themselves in need of protection against the magic of natural quotidian technology? I submit that the source of its threat to them lies in the fact that natural practical magic functions quite well without soteriology, eschatology or transcendent ground of values. For the proponent of supernatural magic, quotidian technology constitutes a threat precisely because it often exhibits success without any of these elements. It is, as religionists of both left and right proclaim, without a supernatural archimedean point.

Magic that is both practical and natural is a species of *Techne*. Pliny noted this in his characterization of magic, when he interdefined **magike** and *techne*,<sup>5</sup> and there is obviously "craft" in witchcraft. As E. William Monter<sup>6</sup> has reminded us, the numerous "cunning folk" in Tudor-Stuart England practiced a kind of magic that mixed pharmacologically effective remedies with verbal and other rituals. His suggestion is that their activities were "unofficial and even plainly illegal, but they were not necessarily fraudulent."<sup>7</sup>

Further insights into the nature of practical magic as *techne* may be found in Margot Adler's book *Drawing Down the Moon*.<sup>8</sup> She reports an interview with a contemporary witch: "If [we] have a law," she says, "that law would be 'If it works, do it; if not, throw it out.'"<sup>9</sup> Further, "I was shown how to do certain things, practical things. How do you make your garden grow? You talk to your plants. You enter into a mental rapport with them. How do you call fish to you? How do you place yourself in the right spot? How do you encourage them?"<sup>10</sup> Another witch tells Adler of the transmission of her craft through her mother: "I learned from her that the Craft is a religion of hearth and fireside. The tools of the Craft are kitchen

utensils in disguise. It's a religion of domesticity and the celebration of life."<sup>11</sup>

Adler's definition of magic turns out to be remarkably similar to that of Ficino. "Magic," for her, "is a convenient word for a whole collection of techniques, all of which involve the mind."<sup>12</sup> There is, however, an important difference between the two characterizations. For Ficino there is an elaborate theoretical basis for forms of natural *techne*, but for most of the subjects interviewed by Adler, the theoretical component is either insignificant or nonexistent. Their magic "floats" pragmatically.

Since it is a species of *techne*, natural magic bears important similarities to other forms of *techne*: while it may work at the level of practice, whatever theories it exhibits do not always adequately describe or explain what it does. This was a feature of *techne* noted by Plato on his visit to the artisans in order to find out if they were wise, i.e. if they could explain in ordinary Greek what they were about. And John Dewey, who drew conclusions very different from those of Plato, remarked on it when he noted that the triumphs of the scientific revolution of Kepler and Galileo came as a result of ever more adequate practice with tools and artifacts to which was wedded sometimes obsolete metatheoretical apparatus, specifically a metaphysics of a finished universe with its confederate epistemology of contemplation.

In short, magic that is practical and natural, like other forms of *techne*, involves the use of tools and artifacts according to a method in order to achieve certain desired results. What sets it apart from other forms of *techne* is its gnostic core, its recondite quality. Why is such practice recondite? It may be so because stronger and more established social institutions have attempted to foreclose on the forms such practice takes. The medieval church arrogated all magic to itself and condemned as heretics those who persisted in "freelancing."

Similar situations have occurred in the history of the physical sciences and in the medical arts. This may also be so because special talents exhibited by a gifted minority are often resented and suppressed by a majority. Further, practical natural magic, almost without exception, constitutes attempts by individuals and subgroups to gain and stabilize power against systems and dominant groups, respectively. This is of course also a feature of systems of supernatural magic in our own secular milieu.

But perhaps the most significant feature of natural magic that sets it apart from other forms of *techne* is that it may both begin and end with the imaginative faculties, thus falling outside the realm of what has normally been taken to be the acceptably tangible in *techne*.



Stanley Cavell<sup>13</sup> has suggested that myths of magic are the reverse of the myth of Faust. Faust desired to have power over Nature, but found its burdens too heavy. The same is true of the myths of Prometheus and Frankenstein. Myths of natural magic, such as the ones encountered by Adler, involve a wish not to need power, a wish not to have to bear its burdens. There is in the natural magic of hearth and garden a sense of cooperation with Nature, a treatment of Nature as sacred but not supernatural. By contrast, supernatural magic usually exhibits a desire to have control over Nature, but that control is projected onto a super craftsman, for example, in theist, deist or demonic systems. Plato further realized that this type of supernaturalism becomes a kind of bad-faith *techne*. Unfortunately, however, he lost his clear view of this matter by the time he wrote the *Timaeus*, and the *Laws*.

I have presented a fourfold categorization of magic, suggesting that natural practical magic is a species of *techne*. I have further suggested that natural practical magic is often used as an antidote to the magic of Big Technology. If I am correct, Big Technology, because of its theoretical component, has more in common with supernatural magic than it does with the technological arts.

#### Notes

1. Oxford English Dictionary, s.v. "Magic."
2. Walker, D.P. *Spiritual and Demonic Magic: From Ficino to Campanella*. Mendeln/Liechtenstein: Kraus, 1976.
3. Walker, 1976, p. 75.
4. No form of metaphysical dualism is implied by this terminology.
5. Oxford English Dictionary, s.v. "Magic."
6. Monter, E. William. *Witchcraft in France and Switzerland: The Borderlands During the Reformation*. Ithaca: Cornell University Press, 1976.
7. Monter, p. 173.
8. Adler, Margot. *Drawing Down the Moon*. New York: Viking, 1979.
9. Adler, p. 73.
10. Adler, p. 74.
11. Adler, p. 73.
12. Adler, p. 8.
13. Cavell, Stanley. *The World Viewed*. New York: Viking, p. 40.

Larry Hickman is a member of the philosophy department at Texas A & M University in College Station, Texas. He teaches courses in philosophy of technology and other subjects and is the editor of an excellent anthology in philosophy and technology entitled *Philosophy, Technology and Human Affairs*, published by Ibis Press of College Station, Texas, 1985.

**SELF-REALIZATION:  
An Ecological Approach  
to Being in the World**  
By Arne Naess

For about 2500 years humankind has struggled with basic questions about who we are, what we are heading for, and of what kind of reality we are part. Two thousand, five hundred years is a short period in the lifetime of a species, and still less in the lifetime of the Earth, to whose surface we belong as mobile parts. I am not capable of saying very new things, but I can look at things from a **somewhat** different angle, using somewhat different conceptual tools and images.

What I am going to say more or less in my own way and that of my friends, may roughly be condensed into the following six points:

1. We under-estimate ourself. I emphasize 'self'. We tend to confuse it with the narrow ego.

2. Human nature is such that with sufficient allsided maturity we cannot avoid 'identifying' ourself with all living beings, beautiful or ugly, big or small, sentient or not. I need of course to elucidate my concept of identifying. I'll come back to that.

The adjective "allsided" in 'allsided maturity' deserves note: Descartes seemed to be rather immature in his relation to animals, Schopenhauer was not much advanced in his relation to family (kicking his mother down a staircase?), Heidegger was amateurish--to say the least--in his political behaviour. Weak identification with nonhumans is compatible with maturity in some major sets of relations, such as those towards family or friends. I use the qualification 'allsided', that is, 'in all major relations'.

3. Traditionally the **maturity of self** has been considered to develop through three stages, from ego to social self, comprising the ego, and from there to the metaphysical self, comprising the social self. But Nature is then largely left out in the conception of this process. Our home, our immediate environment, where we belong as children, and the identification with human living beings, are largely ignored. I therefore tentatively introduce, perhaps for the first time ever, a concept of **ecological self**. We may be said to be in, of and for Nature from our very beginning. Society and human relations are important, but our self is richer in its constitutive relations. These relations are not only relations we have to other humans and the human community. (I have introduced the term 'mixed community' for communities where we consciously and deliberately live closely together with certain animals.)

4. Joy of life and meaning of life is increased through increased self-realization. That is, through the fulfilment of potentials each has, but which never are exactly the same for any pair of

living beings. Whatever the differences, increased self-realization implies broadening and deeping of self.

5. Because of an inescapable process of identification with others, with growing maturity, the self is widened and deepened. We 'see ourself in others'. Self-realization is hindered if the self-realization of others, with whom we identify, is hindered. Love of ourself will fight this obstacle by assisting in the self-realization of others according to the formula 'live and let live!' Thus, all that can be achieved by altruism--the **dutiful, moral** consideration of others---can be achieved---and much more---through widening and deeping ourself. Following Kant we then act beautifully, but neither morally nor immorally.

6. A great challenge of today is to save the planet from further devastation that violates both the enlightened self-interest of humans and non-humans, and decreases the potential of joyful existence for all.

---Now, proceeding to elaborate these points, I shall start with the peculiar and fascinating terms 'ego', 'self'.

The simplest answer to who and what I am is to point to my body, using my finger. But clearly I cannot identify my self or even my ego with my body. Example: Compare

I know Mr. Smith with "My body knows Mr. Smith; I like poetry with My body likes poetry; The only difference between us is that you are a Presbyterian and I am a Baptist, with The only difference between our bodies is that your body is Presbyterian whereas mine is Baptist.

In the above sentences we cannot substitute 'my body' for 'I'. Nor can we substitute 'my mind' or 'my mind and body' for 'I'. More adequately we may substitute 'I as a person' for 'I', but of course this does not tell us what the ego or self is.

---A couple of thousand years of philosophical, psychological and social-psychological thinking has not brought us to any stable conception of the I, ego, or the self. In modern psychotherapy these notions play an indispensable role, but, of course, the practical goal of therapy does not necessitate philosophical clarification of the terms. It is for the purpose of this paper important to remind ourselves about the strange and marvellous phenomena we are dealing with. They are extremely close. Perhaps the very nearness of these objects of thought and reflection adds to our difficulties. I shall only offer one single sentence resembling a definition of the ecological self. The ecological self of a person is that with which this person identifies.

This key sentence (rather than definition) about the self, shifts the burden of clarification from the term 'self' to that of identification, or rather 'process of identification'.

What would be a paradigm situation of

identification? It is a situation in which identification elicits intense empathy. My standard example has to do with a non-human being I met 40 years ago. I looked through an old-fashioned microscope at the dramatic meeting of two drops of different chemicals. A flea jumped from a lemming strolling along the table and landed in the middle of the acid chemicals. To save it was impossible. It took many minutes for the flea to die. Its movements were dreadfully expressive. What I felt was, naturally, a painful compassion and empathy. But the empathy was *not* basic, it was the process of identification, that 'I see myself in the flea'. If I was alienated from the flea, not seeing intuitively anything even resembling myself, the death struggle would have left me indifferent. So there must be identification in order for there to be compassion and, among humans, solidarity.

One of the authors contributing admirably to clarification of the study of self is Erich Fromm.

The doctrine that love for oneself is identical with 'selfishness' and an alternative to love for others has pervaded theology, philosophy, and popular thought; the same doctrine has been rationalized in scientific language in Freud's theory of narcissism. Freud's concept presupposes a fixed amount of libido. In the infant, all of the libido has the child's own person as its objective, the stage of 'primary narcissism', as Freud calls it. During the individual's development, the libido is shifted from one's own person toward other objects. If a person is blocked in his 'object-relationships', the libido is withdrawn from the objects and returned to his or her own person; this is called 'secondary narcissism'. According to Freud, the more love I turn toward the outside world the less love is left for myself, and vice versa. He thus describes the phenomenon of love as an impoverishment of one's self-love because all <sup>1</sup>libido is turned to an object outside oneself.

What Erich Fromm attributes here to Freud, we may today attribute to the shrinkage of self-perception implied in the ego-trip fascination. Fromm opposes such shrinkage. The following quotation concerns love of persons, but as 'ecosophers' we find the notions of 'care, respect, responsibility, knowledge' applicable to living beings in the wide sense.

Love of others and love for ourselves are not alternatives. On the contrary, an attitude of love toward themselves will be found in all those who are capable of loving others. Love, in principle, is indivisible as far as the connection between 'objects' and one's own

self is concerned. Genuine love is an expression of productiveness and implies care, respect, responsibility, and knowledge. It is not an 'effect' in the sense of being effected by somebody, but an active striving for the growth and happiness of the loved person, rooted in one's own capacity to love.<sup>2</sup>

Fromm is very instructive about unselfishness--diametrically opposite to selfishness, but still based upon alienation and narrow perceptions of self. We might add that what he says applies also to persons experiencing sacrifice of themselves.

The nature of unselfishness becomes particularly apparent in its effect on others and most frequently, in our culture, in the effect the 'unselfish' mother has on her children. She believes that by her unselfishness her children will experience what it means to be loved and to learn, in turn, what it means to love. The effect of her unselfishness, however, does not at all correspond to her expectations. The children do not show the happiness of persons who are convinced that they are loved; they are anxious, tense, afraid of the mother's disapproval, and anxious to live up to her expectations. Usually, they are affected by their mother's hidden hostility against life, which they sense rather than recognize, and eventually become imbued with it themselves.  
. . .

If one has a chance to study the effect of a mother with genuine self-love, one can see that there is nothing more conducive to giving a child the experience of what love, joy, and happiness are than being loved by a mother who loves herself.<sup>3</sup>

We need an environmental ethics, but when people feel they unselfishly give up, even sacrifice, their interest in order to show love for Nature, this is probably in the long run a treacherous basis for conservation. Through identification they may come to see their own interest served by conservation, through genuine self-love, love of a widened and deepened self.

At this point the notion of a being's interest furnishes a bridge from self-love to self-realization. It should not surprise us that Erich Fromm, influenced as he is by Spinoza and William James, makes use of that bridge. What is considered to constitute self-interest, he asks, and he answers:

There are two fundamentally different approaches to this problem. One is the objectivistic approach most clearly

formulated by Spinoza. To him self-interest or the interest 'to seek one's profit' is identical with virtue.

The more each person strives and is able to seek his profit, that is to say, to preserve his being, the more virtue does he possess; on the other hand, in so far as each person neglects his own profit he is impotent. According to this view, the interest of humans is to preserve their existence, which is the same as realizing their inherent potentialities. This concept of self-interest is objectivistic inasmuch as 'interest' is not conceived in terms of the subjective feeling of what one's interest is but in terms of what the nature of a human is, 'objectively'.<sup>4</sup>

'Realizing inherent potentialities' is one of the good less-than-ten-word clarifications of 'self-realization'. The questions "Which are the inherent potentialities of the beings of species x?" and "Which are the inherent potentialities of this specimen x of species y?" obviously lead to reflections about and studies of x and y.

As humans we cannot just follow the impulses of the moment when asking for our inherent potentialities. It is something like this which Fromm means when calling an approach 'objectivistic', opposing it to an approach 'in terms of subjective feeling'. Because of the high estimation of feeling and low estimate of so-called 'objectivization' (Berdinglichung, reification) within deep ecology, the terminology of Fromm is not adequate today, but what he means to say is appropriate. And it is obviously relevant when we deal with other species than humans: animals and plants have interests in the sense of ways of realizing inherent potentialities which we can only study interacting with them. We cannot rely on our momentary impulses, however important they are in general.

The expression 'preserve his being' in the quotation from Spinoza is better than 'preserve his existence' because the latter is often associated with physical survival and 'struggle for survival'. A still better translation is perhaps 'persevere in his being' (perseverare in suo esse). It has to do with acting out one's own nature. To survive is only a necessary condition, not a sufficient condition.

The conception of self-realization as dependent upon our insight into our own potentialities makes it easy to see the possibility of ignorance and misunderstanding as to which are these potentialities. The ego-trip interpretation of the potentialities of humans presupposes a marked underestimation of the richness and broadness of our potentialities. In Fromm's terms, "man can deceive himself about his real self-interest if he

is ignorant of his self and its real needs. . .

The 'everything hangs together' maxim of ecology applies to the self and its relation to other living beings, ecosystems, the ecosphere, and the Earth with its long history.

The scattered human habitation along the arctic coast of Norway is uneconomic, unprofitable, from the point of view of the current economic policy of our welfare state. The welfare norms require that every family should have a connection by telephone (in case of illness). This costs a considerable amount of money. The same holds for mail and other services. Local fisheries are largely uneconomic perhaps because a foreign armada of big trawlers of immense capacity is fishing just outside the fjorda. The availability of jobs is crumbling.

The government, therefore, heavily subsidized the resettlement of people from the arctic wildernesses, concentrating them in so-called centres of development, that is, small areas with a town at the centre. But the people, as persons, are clearly not the same when their bodies have been thus transported. The social, economic **and natural setting** is now vastly different. The objects with which they work and live are completely different. There is a consequent loss of personal identity. 'Who am I?' they ask. Their self-respect, self-esteem is impaired. What is adequate in the so-called periphery of the country is different from what counts at the so-called centres.

If people are relocated or, rather, transplanted from a steep mountainous place to a plain, they also realize, but too late, that their home-place has been part of themselves, they have identified with features of the place. And the way of life in the tiny locality, the density of social relations has formed their persons. Again, 'they are not the same as they were'.

Tragic cases can be seen in other parts of the Arctic. We all regret the fate of the Eskimos, their difficulties in finding a **new identity**, a new social and a new, more comprehensive ecological self. The Lapps of Arctic Norway have been hurt by interference with a river for the purpose of hydroelectricity. In court, accused of illegal demonstration at the river, one Lapp said that the part of the river in question was 'part of himself'. This kind of spontaneous answer is not uncommon among people. They have not heard about the philosophy of the wider and deeper self, but they talk spontaneously as if they had.

The sentence "This place is part of myself" we may try to make intellectually more understandable by reformulations, for example 'My relation to this place is part of myself', 'If this place is destroyed something in me is destroyed'. 'My relation to this place is such that if the place is changed I am changed'. . .

One drawback with these reformulations is that they make it easy to continue thinking of two completely separable, real entities, a self and the place, joined by an external relation. The original sentence, rather, conveys the impression that there is an internal relation of sorts. 'Of sorts' because we must take into account that it may not be reciprocal. If I am changed, even destroyed, the place would be destroyed according to one usual interpretation of 'internal relation'. From the point of phenomenology and the 'concrete content'-view the reciprocity holds, but that is a special interpretation. We may use an interpretation such that if we are changed, the river need not be changed.

The reformulation 'If this place is destroyed something in me is killed' perhaps articulates some of the feelings usually felt when people see the destruction of places they deeply love or to which they have the intense feeling of belonging. Today more space is violently transformed per human being than ever, at the same time as their number increases. The kind of 'killing' referred to occurs all over the globe, but very rarely does it lead to strong counterreaction. Resignation prevails. 'You cannot stop progress.'

The newborn lacks, of course, any conceptions, however, rudimentary, corresponding to the tripartition---subject, object, medium. Probably the conception (not the concept) of one's own ego comes rather late, say after the first year. A vague net of relations comes first. This network of perceived and conceived relations is neutral, fitting what in British philosophy was called 'neutral monism'. The whole, their universe and altogether, lacks the tripartition at this early stage. In a sense, it is this basic sort of crude monism we are working out anew, not by trying to be babies again, but by better understanding our ecological self. It has not had favourable conditions of development since before the time renaissance glorified our ego by putting it in some kind of opposition to what else there is.

What is now the practical importance of this conception of a wide and deep ecological self?

Defending Nature in our rich, industrial society, the argument of the opponent often is that we are doing it in order to secure beauty, recreation, sport, and other non-vital interests for us. It makes for strength if we, after honest reflection, find that we feel threatened in our innermost self. If so, we more convincingly defend a vital interest, not only something out there. We are engaged in self-defence. And to defend fundamental **human** rights is vital self-defence.

The best introduction to the psychology of the self is still to be found in the excellent and superbly readable book **Principles of Psychology**, published in 1890 by the American psychologist and philosopher William James. His 100 page chapter on

the consciousness of self stresses the plurality of components of the wide and deep self as a complex entity. (Unfortunately he prefers to talk about the plurality of selves. I think it may be better to talk about the plurality of the components of the wide self.)

The plurality of components can be easily illustrated by reference to the dramatic phenomenon of alternating personality.

Any man becomes, as we say **inconsistent** with himself if he forgets his engagements, pledges, knowledge and habits. . . In the hypnotic trance we can easily produce an alternation of personality, . . . by telling him he is an altogether imaginary personage.

. . .<sup>6</sup>

If we say about someone that he or she is not himself today, we may refer to a great many different **relations** to other people, to material things and certainly, I maintain, to what we call his or her environment, the home, the garden, the neighborhood. . .

When James says that these relata **belong** to the self, it is of course not in the sense that the self has eaten the home, the environment, etc. Such an interpretation testifies that the self is still identified with the body. Nor does it mean that an **image** of the house **inside** the consciousness of the person belongs to the self. When somebody says about a part of a river-landscape that it is part of himself, we intuitively grasp roughly what he means. But it is of course difficult to elucidate the meaning in philosophical or psychological terminology.

A last example from William James: We understand what is meant when somebody says "As a **man** I pity you, but as an official I must show you no mercy." Obviously the self of an official cannot empirically be defined except as relations in a complex social setting. Thus, the self cannot possibly be inside the body, or inside a consciousness.

Enough! The main point is that we do not hesitate **today**, being inspired by ecology and a revived intimate relation to Nature, to recognize and accept wholeheartedly our ecological self.

The next section is rather metaphysical. I do not **defend** all the views presented in this part of my paper. I wish primarily to inform you about them. As a student and admirer since 1930 of Gandhi's non-violent direct actions in bloody conflict, I am inevitably influenced by his metaphysics which to him personally furnished tremendously powerful motivation and which contributed to keeping him going until his death. His supreme aim was not India's **political** liberation. He led a crusade against extreme



poverty, caste suppression, and against terror in the name of religion. This crusade was necessary, but the liberation of the individual human being was his supreme aim. It is strange for many to listen to what he himself said about this ultimate goal:<sup>7</sup>

What I want to achieve---what I have been striving and pining to achieve these thirty years---is self-realization, to see God face to face, to attain **Muksha** (Liberation). I live and move and have my being in pursuit of that goal. All that I do by way of speaking and writing, and all my ventures in the political field, are directed to this same end.

This sounds individualistic to the Western mind. A common misunderstanding. If the self Gandhi is speaking about were the ego or the 'narrow' self ('jiva') of egocentric interest, the 'ego-trips', why then work for the poor? It is for him the supreme or universal Self---the **atman**---that is to be realized. Paradoxically, it seems, he tries to reach self-realization through 'selfless action', that is, through reduction of the dominance of the narrow self or the ego. Through the wider Self every living being is connected intimately, and from this intimacy follows the capacity of **identification** and as its natural consequences, practice of non-violence. No moralizing is needed, just as we need not morals to make us breathe. We need to cultivate our insight:

The rockbottom foundation of the technique for achieving the power of non-violence is belief in the essential oneness of all life.

Historically we have seen how Nature conservation is non-violent at its very core. Gandhi says:

I believe in **advaita** (non-duality), I believe in the essential unity of man and, for that matter, of all that lives. Therefore I believe that if one man gains spirituality, the whole world gains with him and, if one man fails, the whole world fails to that extent.

Surprisingly enough, Gandhi was extreme in his personal consideration for the self-realization of other living beings than humans. When travelling he brought a goat with him to satisfy his need for milk. This was part of a non-violent demonstration against certain cruel features in Hindu ways of milking cows. Furthermore, some European companions who lived with Gandhi in his ashrams were taken aback that he let snakes, scorpions and spiders move unhindered into their bedrooms---animals

fulfilling their lives. He even prohibited people from having a stock of medicines against poisonous bites. He believed in the possibility of satisfactory coexistence and he proved right. There were no accidents. Ashram people would naturally look into their shoes for scorpions before using them. Even when moving over the floor in darkness one could easily avoid trampling on one's fellow beings. Thus, Gandhi recognized a basic, common right to live and blossom, to self-realization in a wide sense applicable to any being that can be said to have interests or needs.

Gandhi made manifest the internal relations between self-realization, non-violence and what sometimes has been called biospherical egalitarianism.

In the environment in which I grew up, I heard that what is serious in life is to get to be somebody---to outdo others in something, being victorious in comparison of abilities. What today makes this conception of the meaning and goal of life especially dangerous is the vast international economic competition. Free market, perhaps, yes, but the law of demand and supply of separate, isolatable 'goods and services', independent of needs, must not be made to reign over increasing areas of our life.

Ability to cooperate, to work with people, making them feel good **pays**, of course, in a fiercely individualist society, and high positions may require that; but only as long as, ultimately, it is subordinated to career, to the basic norms of the ego-trip, not to a self-realization worth the name.

To identify self-realization with the ego-trip manifests a vast underestimation of the human self.

According to the usual translation of pali or sanskrit, Buddha taught his disciples that the human mind should embrace all living things as a mother cares for her son, her only son. Some of you who never would feel it meaningful or possible that a human **self** could embrace all living things, might stick to the usual translation. We shall then only ask that your **mind** embraces all living beings, and your good intention to care and feel with compassion.

If the sanskrit word translated into English is **atman**, it is instructive to note that this term has the basic meaning of 'self', rather than 'mind' or 'spirit', as you see in translations. The superiority of the translation using the word 'self' stems from the consideration that if your 'self' in the wide sense embraces another being, you need no moral exhortation to show care. Surely you care for yourself without feeling any moral pressure to do it---provided you have not succumbed to a neurosis of some kind, developing self-destructive tendencies, or hating yourself.

Incidentally, the Australian ecological feminist Patsy Hallen [see her article in this issue, ed.]

uses a formula close to that of Buddha: We are here to embrace rather than conquer the world. It is of interest to notice that the term 'world' is here used rather than 'living beings'. I suspect that our thinking need not proceed from the notion of living being to that of the world, but we will conceive reality or the world we live in as alive in a wide, not easily defined sense. There will then be no non-living beings to care for.

If self-realization or self-fulfilment is today habitually associated with life-long ego-trips, isn't it stupid to use this term for self-realization in the widely different sense of Gandhi, or, less religiously loaded, as a term for widening and deepening your 'self' so it embraces all life forms? Perhaps it is. But I think the very popularity of the term makes people listen for a moment, feeling safe. In that moment the notion of a greater 'self' should be introduced, contending that if they equate self-realization with ego-trips, they seriously **underestimate** themselves. "You are much greater, deeper, generous and capable of more dignity and joy than you think! A wealth of non-competitive joys is open to you!"

But I have another important reason for inviting people to think in terms of deepening and widening their selves, **starting** with the ego-trip as a crudest, but inescapable point zero. It has to do with a notion usually placed as the opposite of the egoism of the ego-trip, namely the notion of **altruism**. The Latin term **ego** has as its opposite the **alter**. Altruism implies that **ego** sacrifices its interest in favour of the other, the **alter**. The motivation is primarily that of duty: it is said that we **ought** to love others as strongly as we love ourselves.

It is, unfortunately, very limited what humankind is capable to love from mere duty, or, more generally, from moral exhortation. From the Renaissance to the Second World War about 400 cruel wars were fought by Christian nations for the flimsiest of reasons. It seems to me that in the future more emphasis has to be given to the conditions under which we most naturally widen and deepen our 'self'. With a sufficiently wide and deep 'self', **ego** and **alter** as opposites are stage by stage eliminated. The distinction is in a way transcended.

Early in life, the social 'self' is sufficiently developed so that we do not prefer to eat a big cake alone. We share the cake with our friends and nearest. We identify with these people sufficiently to see our joy in their joy, and see our disappointment in theirs.

Now it is the time to **share** with all life on our maltreated Earth through the deepening identification with life forms and the greater units, the ecosystems, and Gaia, the fabulous, old planet of ours.

Immanuel Kant introduced a pair of contrasting concepts which deserve to be extensively used in our effort to live harmoniously in, for and of Nature: The concept of 'moral act' and that of 'beautiful act'.

Moral acts are acts motivated by the intention to follow the moral laws, at whatever the cost, that is, to do our moral duty solely out of respect for that duty. Therefore, the supreme **test** of our success in performing a pure, moral act is that we do it completely against our inclination, that we, so to say, hate to do it, but are compelled by our respect for the moral law. Kant was deeply awed by two phenomena, "the heaven with its stars above me and the moral law within me".

But if we do something we should do according to a moral law, but do it out of inclination and with pleasure---what then? Should we then abstain or try to work up some displeasure? Not at all, according to Kant. If we do what morals say is right because of positive inclination, then we perform a **beautiful act**. Now, my point is that perhaps we should in environmental affairs primarily try to influence people towards beautiful acts. Work on their inclinations rather than morals. Unhappily, the extensive moralizing within environmentalism has given the public the false impression that we primarily ask them to sacrifice, to show more responsibility, more concern, better morals. As I see it we need the immense variety of sources of joy opened through increased sensitivity towards the richness and diversity of life, landscapes of free Nature. We all can contribute to this individually, but it is also a question of politics, local and global. Part of the joy stems from the consciousness of our intimate relation to something bigger than our ego, something which has endured through millions of years and is worth continued life for millions of years. The requisite care flows naturally if the 'self' is widened and deepened so that protection of free Nature is felt and conceived as protection of ourselves.

Academically speaking, what I suggest is the supremacy of environmental ontology and realism over environmental ethics as a means of invigorating the environmental movement in the years to come. If reality is like it is experienced by the ecological self, our behaviour **naturally** and beautifully follows norms of strict environmental ethics. We certainly need to hear about our ethical shortcomings from time to time, but we more easily change through encouragement and through deepened perception of reality and our self. That is, deepened realism. How is that to be brought about? The question needs to be treated in another paper! It is more a question of community therapy than community science: Healing our relations to the widest community, that of all living beings.

The subtitle of this paper is "An Ecological Approach to Being in the World". I am now going to speak a little about 'Nature' with all the qualities we spontaneously experience, as identical with the reality we live in. That means a movement from being in the world to being in Nature. Then, at last, I shall ask for the goal or purpose of being in the world.

Is joy in the subject? I would say "no". It is just as much or little in the object. The joy of a joyful tree is primarily "in" the tree we should say—if we are pressed to make a choice between the two possibilities. But we should not be pressed. There is a third position. The joy is a feature of the **indivisible**, concrete unit of subject, object and medium. In a sense self-realization involves experiences of the infinitely rich joyful aspect of reality. It is misleading, according to my intuitions, to locate joys inside my consciousness. What is joyful is something that is not 'subjective', it is an attribute of a reality wider than a conscious ego. This is philosophically how I contribute to the explanation of the internal relation between joy, happiness, and human self-realization. But this conceptual exercise is mainly of interest to an academic philosopher. What I am driving at is probably something that may be suggested with less conceptual gymnastics: It is unwarranted to believe that how we feel Nature to be is not like how Nature really is. It is rather that reality is so rich that we cannot see everything at once, but separate parts or aspects of separate moods. The joyful tree I see in the morning light is not the sorrowful one I see in the night, even if they in abstract structure (physically) are the same.

It is very human to ask for the ultimate goal or purpose for being in the world. This may be a misleading way of putting a question. It may seem to suggest that the goal or purpose must be somehow outside or beyond the world. Perhaps this can be avoided by living out "in the world". It is characteristic for our time that we subjectivize and individualize the question asked of each one of us: What do **you** consider to be the ultimate goal or purpose of **your** life? Or, we leave out the question of priorities and ask simply for goals and purposes.

The main title of this paper is partly motivated by the conviction that 'self-realization' is an adequate key-term expression one uses to answer the question of ultimate goal. It is of course only a key-term. An answer by a philosopher can scarcely be shorter than the little book **Ethics** by Spinoza.

In order to understand the function of the term 'self-realization' in this capacity, it is useful to compare it to two others, 'pleasure' and 'happiness'. The first suggest hedonism, the second eudaemonism in a professional philosophical, but just as vague and ambiguous jargon. Both terms

connote states of feeling in a broad sense of the term. Having pleasure or being happy is to **feel** well. One may of course find the term happiness to connote something different from this, but in the way I use 'happiness', one standard set of replies to the question "How do you feel?" is "I feel happy" or "I feel unhappy." This set of answers would be rather awkward: "I feel self-realized" or "I do not feel self-realized."

The most important feature of self-realization as compared to pleasure and happiness is its dependence upon a view of human capacities, better potentialities. This again implies a view of what is human nature. In practice it does not imply a general doctrine of human nature. That is the work of philosophical fields of research. An individual whose attitudes are such that I would say that he or she takes self-realization as the ultimate or fundamental goal has to have a view of his or her nature and potentialities. The more they are realized the more there is self-realization. The question "How do you feel?" may be honestly answered in the positive or negative whatever the level of self-realization. The question may, in principle, be answered in the negative, but at the point following Spinoza I take the valid way of answering to be positive. The realization of fulfilment—using a somewhat less philosophical jargon—of the potentialities of oneself is **internally** related to happiness, but not in such a way that **looking** for happiness you realize yourself. This is a clear point, incidentally, in Stuart Mill's philosophy. You should not look hard for happiness. That is a bad way even if you take, as Stuart Mill does, happiness as the ultimate or fundamental goal in life. I think that to look for self-realization is a better way. That is, to develop your capacities—using a rather dangerous word because it is easily interpreted in the direction of interpersonal, not intrapersonal, competition. But even the striving implied in the latter term may mislead. Dwelling in situations of intrinsic value, spontaneous non-directed awareness, relaxing from striving, is conducive to self-realization as I understand it. But there are, of course, infinite variations among humans according to cultural, social, individual differences. This makes the key term self-realization abstract in its generality. But nothing more can be expected when the question is posed like it is: What might deserve the name of ultimate or fundamental goal? We may reject the meaningfulness of such a question—I don't—but for us for whom it has meaning, the answer using few words is bound to be abstract and general.

Going back to the triple key terms pleasure, happiness, self-realization, the third has the merit of being clearly and forcefully applicable to any beings with a specific range of potentialities. I limit the range to living beings, using 'living'

in a rather broad sense. The terms 'pleasure' and 'happiness' I do not feel are so easily generalized. With the rather general concept of 'ecological self' already introduced, the concept of self-realization naturally follows. Let us consider the preying mantis, the formidable group of voracious insects. They have a nature fascinating to many people. Mating is part of their self-realization, but some males are eaten when performing the act of copulation. Is he happy, is he having pleasure? We don't know. Well done if he does! Actually he feeds his partner so that she gets strong offspring. But it does not make sense to me to attribute happiness to these males. Self-realization yes, happiness no. I maintain the internal relation between self-realization and happiness among people and among some animal groups. As a professional philosopher I am tempted to add a point where I am inspired by Zen Buddhism and Spinoza: Happiness is a feeling yes, but the act of realizing a potential is always an interaction involving as one single concrete unit, one gestalt as I would say, three abstract aspects, subject, object, medium. What I said about joyfulness in Nature holds of happiness in Nature. We should not conceive them as mere subjective feelings.

The rich reality is getting even richer through our specific human endowments; we are the first kind of living beings we know of which have the potentialities of living in community with all other living beings. It is our hope that all those potentialities will be realized---if not in the near future, at least in the somewhat more remote future.

#### Notes

1. Clark E. Moustakas, ed., *The Self: Explorations in Personal Growth*, New York, Harper Books, 1956, p. 58. This and the following quotations are from Fromm's contribution "Selfishness, Self-love, and Self-interest".

2. *Ibid.*, p. 59.

3. *Ibid.*, p. 62.

4. *Ibid.*, p. 63.

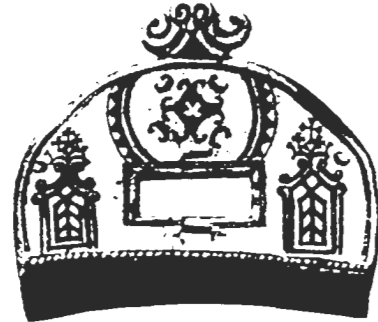
5. *Ibid.*, p. 63.

6. James, Vol. 1, p. 379.

7. This and other quotations from Gandhi are taken from my *Gandhi and Group Conflict*, Oslo, 1974, p. 35, where the metaphysics of self-realization is treated more thoroughly.

**Arne Naess** is at the Institute for Philosophy, University of Oslo, P.O. Box 1116, Blindern, Oslo 3, Norway. Arne has written extensively on environmental philosophy as well as other areas. His book *Ecology, Community and Life Style* is now available in English translation. His papers in ecophilosophy have been widely influential. He is one of the modern founders of deep ecology philosophy. The paper published in this issue of *The Trumpeter* was originally published by Murdoch University in 1986 (ISSN 0811-5959, ISBN 86905-101-

6), and was earlier delivered as the Fourth Keith Roby Memorial Lecture in Community Science, March 12, 1986. Reprinted here with the permission of Murdoch University, Murdoch, Western Australia, 6150. Arne will be at the University of Victoria, Victoria, B.C., Canada, as a Lansdown fellow for a week this fall starting on September 21.



#### Alaska Fjord

by Richard F. Fleck

Sheer glaciated walls  
glisten in northern sun  
with tufts of alder  
clinging to wet rock  
echoing cracks of thunder  
from calving bergs  
so intensely blue,  
and then stillness---  
interrupted only by  
ancient Haida notes  
from a stone flute  
one hundred years ago.

#### Sunbeads

by Richard F. Fleck

Beads of resin  
from a hemlock root  
gleam like beacons  
for myriad insects  
scampering along a  
dark woodland trail.

**Richard F. Fleck** is a professor of English at the University of Wyoming. He is the author of one novel, three collections of poetry, various scholarly articles, and prefaces to books on Muir and Thoreau. He is also author of *Henry Thoreau and John Muir Among the Indians*, Archon Books, Hamden, Conn., 1985.

## BOOKNOTES

**An Annotated Bibliography of Ecofeminism**

Selected readings on the links between ecological and feminist theory and practice. (Note: these readings come from the participants of a Faculty of Environmental Studies course on Ecofeminism offered in the summer of 1986 by Miriam Wyman. Contributors include: Anne Champagne, Lisa Dunn, Allan Greenbaum, Jane Horsley, Tanya Lewis, and Joyce Peterson.)

\*Caldecott, Leonie and Stephanie Leland, Eds., **Reclaims the Earth**, The Woman's Press, London, 1983. A series of articles presenting a wide range of social and environmental issues from a feminist perspective. Includes: Ynestra King's "The Eco-Feminist Imperative" in which she criticizes our habit of "objectification"; Stephanie Leland's "Feminism and Ecology: Theoretical Connections" in which she uncovers the destructive polarities and subject/object distinctions of our culture; Jean Freer's "Gaea: The Earth as Our Spiritual Heritage" in which she advocates spiritual awareness as a means and end of social change; and Hazel Henderson's "The Warp and the Weft, The Coming Synthesis of Eco-Philosophy and Eco-Feminism" which also deals with the creation of "other" as the psychological root of our disharmony.

\*Cameron, Anne, **Daughters of Copper Woman**, Press Gang Pub., Vancouver, 1981. Tales from the Nootka people presenting their holistic view of how human beings should live in harmony. A deeply satisfying book.

\*Daly, Mary, **Beyond God the Father: Towards a Philosophy of Women's Liberation**, Beacon Press, Boston, 1973. Begins by questioning the agenda of sexism within theology, ethics and language, and then discusses the social and political implications of a feminist spirituality. Ideally, feminism and Christianity can be reconciled by changing the nature of "god" from noun to "verb". This requires a communal participation of sisterhood.

\*Davis, Don. "Ecosophy: The Seduction of Sophia", **Environmental Ethics** 8, (1986). This article is reprinted in part in this issue of the *Trumpeter*.

\*Dillard, Annie, **Pilgrim at Tinker Creek**, Bantam Books, New York, 1974, and **Holy the Firm**. Poetic accounts of a woman's experiences living with nature.

\*Dodson Gray, Elizabeth, **Patriarchy as a Conceptual Trap**, Roundtable Press, Mass., 1982. An action packed book, light and funny, but scholarly and radical as well. The author is a feminist theologian environmentalist with a sense of humour and beauty. Starting from a general discussion of conceptual traps, she moves to themes such as "The Social Construction of Reality" and "Imaging Our

Place as Humans on Planet Earth". She studies separation, hierarchy and patriarchy as social myths, especially where they come from and who controls the myth system. In the final chapter, "Looking Ahead", she suggests diversity and holistic thinking (remything our culture in general) may reset the balance with nature. Highly recommended.

\*Dodson Gray, Elizabeth, **Green Paradise Lost**, Roundtable Press, Mass., 1979. (Previously titled: **Why the Green Nigger?**) Another very enjoyable but scholarly book, exploring the above themes more deeply and without comics. Topics in chapters 1-5 include: "The Anthropocentric Illusion", "Does Human Uniqueness Mean Superiority?", "Psycho-Sexual Roots of Our Ecological Crisis", "From Nature-as-Mother to Nature-as-Wife, and "The Threat of Death and the Appeal of Mastery". Chapters 6 to 15 explore alternative worldviews which move with the "Natural Grain of Life". Adopting a feminine and holistic vision will enable us to "Re-Myth Genesis". Some beautiful passages on the consciousness of whales and dolphins. The philosophical and political implications of this book are profound.

\*Easlea, Brian, **Witch-hunting, Magic and the New Philosophy: An Introduction to the Debates of the Scientific Revolution 1450-1750**, Harvester Press, Sussex, 1980. Easlea emphasizes how the violent hatred of women and morbid fear of female sexuality that characterized the first part of the period gave way, not so much to more humane or liberal attitudes, as to a greater confidence on the part of upper-class men in their ability to control and dominate women, nature and society by means of scientific rationality. He argues that both magic and witch-hunting died out by the end of the period because with the rise of mechanism and capitalism both nature and women had come to be seen as essentially passive, inert, sexless and unthreatening.

\*Easlea, Brian, **Fathering the Unthinkable: Masculinity, Scientists and the Nuclear Arms Race**, Pluto Press, London, 1983. Easlea argues that the psychological roots of the nuclear arms race lie in male envy and contempt for the female role in reproduction. Weapons inventors "give birth", through intellect and culture, not biology, to a "baby" befitting their "masculine" disdain for the soft processes of life.

\*Ebenreck, Sarah, "A Partnership Farmland Ethic", **Environmental Ethics** 5 (1983) 33. Ebenreck contrasts the "stewardship ethic" with the non-hierarchical ecofeminist approach of Susan Griffin and Elizabeth Dodson Gray. She argues that an ethic of equally respecting and attending to the "rights", "needs", or "voices" of the land and its organisms is incoherent when applied to farming, and proposes instead a holistic, reciprocal conception of "working with" as the basis for an ecofeminist farmland ethic.

\***Fireweed** No. 22 (1986) Native Women Issue. This special issue of **Fireweed** is a diverse collection of poetry, fiction and essays by Native women from all over North America. Spiritual affinities with the natural world experienced by Native women, as women, are a recurring theme. Also of interest is Marilou Awiakta's discussion of matricentric elements in traditional Cherokee mythology and politics.

\*French, Marilyn, **Beyond Power; On Women, Men and Morals**, Summit Books, N.Y., 1985. The quality and depth of this monumental book cannot be overstated. From anthropology and zoology, to political science and psychology, French traces the images of self, woman and nature from prehistory to the present. Men and women alike can learn about the monolithic institutions we live within and how they perpetuate the power structures. For example, she includes a section on the "Pillars of Society" such as corporations (especially multinationals) and the professions. Chapters 6 & 7 explore the possibilities for change, through feminism, environmentalism and restructuring values. French's novels, **The Women's Room** and **The Bleeding Heart**, are very enjoyable and thought provoking looks into anger, love and creativity modern women experience when they struggle to transcend patriarchal relationships.

\*Galland, China, **Women in the Wilderness**, Harper Colophon Books, New York, 1980. This book explores ways women can use their wilderness experience to strengthen and encourage each other, by learning new skill and pleasures, and by reflecting on inner souls.

\*Gilligan, Carol, **In a Different Voice**, Harvard University Press, Cambridge, Mass., 1982. Gilligan has some important insights into the creation of women's "reality" as distinguished from men's, concluding that our basic dilemma is our conflict between self-sacrifice and self-development. Using questionnaire research, Gilligan argues that women's morality uses context, attachment and relationship as its base, and refutes the traditional view that women are less morally developed than men.

\*Griffin, Susan, **Woman and Nature: The Roaring Inside Her**, Harper & Row, New York, 1978. This book is written in an intense, daring style from a deeply emotional perspective. It is very strange and difficult to describe, but is an adventure worth trying. Once you get used to the poetic complexity, the ideas are worthwhile. It is a history of men's abuse and exploitation of women and nature and the ways in which both have been perceived in our culture.

\*Griffin, Susan, **Pornography and Silence: Culture's Revenge Against Nature**, Harper & Row, New York, 1981. This work is like a case study of one insane aspect of our culture which reflects the insanity of the whole. What is done to nature is done to all people, not just to women, and her analysis of

pornography shows the parallels between our objectification of people and nature.

\*Griffin, Susan, **Made From the Earth**, is an anthology of Griffin's writings from 1967 to 1982. Harper & Row, New York, 1982. If you try the first two and like them, then try this, a chronology of Griffin's personal and theoretical insights over 15 years. Even more poetic and difficult. The first part is about feminist theory, while the second and third parts are prose and poetry.

\***Heresies** No. 13 (1981), Feminism and Ecology Issue. One of the best sourcebooks on ecofeminism. Contains "academic" articles on origins of the state, feminist utopian novels, and some documentary articles on a wide range of environmental, health and safety, and animal issues, as well as on Native, Gypsy, Indian and Chinese Women. Includes exciting, funny and moving artworks (including poetry, photography, environmental sculpture and the uncategorizable). Subtitled "Earthkeeping/Earthshaking". The issue is dedicated to Rachel Carson and Karen Silkwood.

\*Keller, Evelyn Fox, **Reflections on Gender and Science**, Yale University Press, New Haven, 1985. Essays on the history, philosophy and psychology of science. The book is divided into three parts. Part 1 is historical, and examines the metaphorical relationships of sexuality, gender, knowledge, etc. from antiquity to the 17th century. Part 2 is psychological and develops a distinction between "static objectivity" (sharp subject/object dichotomy, detached or aggressive stance) and "dynamic objectivity". Part 3 illustrates the way scientific thought patterns rooted in static objectivity impede the development of "descriptions appropriate to a conception of nature orderly in its complexity rather than lawful in its simplicity".

\*Kheel, Marti, "The Liberation of Nature: A Circular Affair", **Environmental Ethics** 7 (1985): 135. Kheel argues that the debate between the holistic ecological school of biocentric ethics and the individualist animal rights school is a product of the dualistic heritage and excessive rationalism of male philosophy. She urges that environmental ethics be based on a "unified sensibility" which, as articulated in feminist thought, embraces both reason and emotion.

\*Kramarae, Cheri and Treichler, Paula, **A Feminist Dictionary**, Pandora Press, Boston, 1985. A reframing of language from a feminist perspective. A thoughtful and delightful tool.

\*Merchant, Carolyn, **The Death of Nature: Women, Ecology, and the Scientific Revolution**, Harper & Row, New York, 1980. Demonstrates how the mechanistic worldview of science sanctioned the exploitation of nature, unrestrained economic growth and socio-economic order that subordinates women. Uses many primary sources, such as Bacon, Descartes, Harvey, Newton, and Leibniz to expose

the driving forces behind the rise of modern science. Incorporates politics, literature, art, religion, philosophy, popular culture, physics, math and technology in its examination of Western culture's treatment of nature and women. Very scholarly and rich, not a bedtime book.

\*Merchant, Carolyn, "Feminism and Ecology" in George Sessions and Bill Devall **Deep Ecology: Living as if Nature Mattered**, Gibb Smith Books, Salt Lake City, 1985. An inadequate and uninspired summary of the intersection between deep ecology and feminism.

\*Morgan, Robin (Ed.), **Sisterhood is Global**, (An anthology from the International Women's Movement), Doubleday, New York, 1984. A massive, up-to-date collection of articles from all over the world, including third world and soviet perspectives on global and other issues.

\*Peavy, Fran, **Heart Politics**, Black Rose Books, Montreal, 1986. An autobiographical account of Peavy's many activist endeavors, underpinned by a philosophy which unites the personal and the political in an inspiring way. The central point of the book is that we will only develop a sincere belief in the possibility for change if we are experiencing change in ourselves. In this way, ecofeminists have a responsibility to get involved in issues or projects in a way which reflects the deepest principles of ecofeminism: care and inter-connectedness.

\*Plumwood, Val, "Ecofeminism: An Overview and Discussion of Positions and Arguments", in **Women and Philosophy**, supplement to vol. 64 of the **Australian Journal of Philosophy**, 1986. An extended review of the ecofeminist literature by a leading environmental philosopher. She divides ecofeminist analyses into three groups: 1) those that locate the problem of women and nature in a set of dualisms which have their origins in antiquity; 2) those that locate the problem in the rise of modern, mechanistic science; and 3) those that locate the problem in sexually differentiated personality formation and consciousness. She finds the ecofeminist project to be suggestive and promising but inadequately developed so far.

\*Rohrlich, Ruby and Baruch, Elaine (Eds.), **Women in Search of Utopia: Mavericks and Mythmakers**, Schocken Books, New York, 1984. Articles about ancient, historical and modern utopic visions and realities, including such "experiments" as Findhorn and covering the countries of Israel, the U.S.A. and Scotland.

\*Rothschild, Joan (Ed.), **Machina ex Dea: Feminist Perspectives on Technology**, Pergamon Press, Toronto, 1983. This is a wide ranging book, but the most relevant chapters are: "A Revised History of Technology" by Autumn Stanley; "Mining the Earth's Womb" by Carolyn Merchant, "Toward an Ecological Feminism and a Feminist Ecology" by Ynestra King, "An End to Technology: A Modest

Proposal" by Sally Gearhart, and "What if. . . Science and Technology in Feminist Utopias".

\*Ruether, Rosemary Radford, **New Woman, New Earth**, Seabury Press, New York, 1975. The last section of this book, "Women's Liberation, Ecology and Social Revolution", deals with the vision of community based on feminist principles and respect for environment. Organic restructuring of work and home activities would nurture awareness of ecological relationships with nature and create emotional webs in the human community. It discusses a new spirituality which would be possible in such a community, and would make aggressive and destructive treatment of nature less likely.

\*Salleh, Ariel Kay, "Deeper Than Deep Ecology: The Eco-Feminist Connection", **Environmental Ethics** 6 (1984): 339. Salleh's critique of deep ecology makes 3 general points: 1) that male deep ecologists' analysis, in overlooking the realities and influence of patriarchy, "loses its genuinely deep critical edge"; 2) that women's reproductive biology and socialization "could provide an immediate living social basis for the alternative consciousness which the deep ecologist is trying to introduce as an abstract ethical construct; and 3) that the discourse of deep ecology is betrayed by lapses into the language of "technocratic managerialism" and "grim intellectual determination".

\*Todd, Judith, "On Common Ground: Native American and Feminist Spirituality Approaches in the Struggle to Save Mother Earth", in C. Spretnak (Ed.) **The Politics of Women's Spirituality**, Anchor Press, New York, 1982. Both Native American and feminist spirituality maintain that we must revere "mother earth" or we will destroy the balance of nature and along with it human life. Discusses historical conceptions of earth as living and female, and its effect on the ethical use of nature. Contrasts the 16th Century European view of nature as passive with the Native perception, which attributes no gender to the Great Spirit that animates nature and which believes in the interrelatedness of all things. Native and feminist spirituality as among strongest hope to counter ecological destruction.

\*Watts, Alan, **Nature, Man and Woman**, Vintage Books, 1958. The central theme of this classic is "interconnectedness" and it is explored at many levels, from the relationship between man and woman to the relationship between self and the universe. Watts shows how our distorted relationships are reflected in our sexuality and in our treatment of nature, and recommends an inner search for our true nature, along the lines of Eastern thought.

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**Miriam Wyman** is on the Faculty of Environmental Studies at York University.

**\*Our Common Future**, The Brundtland World Commission on Environment and Development Report. Oxford University Press, 1987. The most recent, comprehensive report on the state of the world. Commission chaired by the Prime Minister of Norway.

**\*State of the World**, Lester R. Brown, Norton, New York, 1987. A Worldwatch Institute Report on Progress Toward a Sustainable Society. This is the most comprehensive report that is issued on a regular basis, with detailed statistics and analyses, plus material on prospects for a sustainable society, options, etc. This and the report above give one a broad knowledge of the current situation; excellent sources.

**\*To Care for the Earth: A Call to a New Theology**, Sean McDonagh, Bear and Co., Santa Fe, New Mexico, 87504-2860, \$9.95 U.S. One clear vision of a new Christian stewardship theology with visions of co-creation and compassion. Good for those who want some sense of what the stewardship Christian tradition is all about.

#### PERIODICALS, ORGANIZATIONS AND CONFERENCES

**\*The Northwest Environmental Journal**, a quarterly published in Seattle, Washington at the University of Washington, available from the Institute for Environmental Studies, FM-12, U of W, Seattle, Wa., 98195. \$16 U.S. Reviews, articles, current research notes, interviews, etc. High quality, professional journal.

**\*Sea Wind**, is a Bulletin of the International Marinelife Alliance, published quarterly, dedicated to providing information, poetry, appreciations, etc. of the diversity of marine life, its

preservation and restoration in accordance with the goals of IMA. Canadian Address: 2883 Otterson Dr., Ottawa, Ont. K1V 7B2. Editor, Don McAllister. Membership and Bulletin are \$15. The articles and poetry are all of high quality. Very interesting material, not found readily in the literature.

**\*North American Bioregional Congress** will hold its next Congress in Vancouver, B.C., Sept. 26/27, 1987. Contact: NABC III Site Committee, c/o G.R. Ash, Box 69004 Stn K, Vancouver, B.C. Canada V5K 4W3.

**\*Ish River Bioregional Confluence** is scheduled for August 14-16, 1987, Fairhaven College, Bellingham, Washington. This is the North American, North Pacific Coast regional meetings of the bioregional movement. At this confluence a major goal will be learning how to tell the story of our place. Contact: Ish River Bioregional Confluence, P.O. Box 71001, Seattle, Wa., 98107. Ish River Confluence involves people from B.C. and Washington, Western side of the Cascades.

**\*The North American Conference on Christianity and Ecology** will be held August 19-22, 1987 at the Epworth Forest Conference Center, North Webster, Indiana. The new organization putting on this conference is the North American Conference on Christianity and Ecology. This is a coalition of over 40 different organizations of Canadian and American churches which will bring together people concerned about pollution, land abuse, and ecology. They hope to generate a mighty wave of spiritual-ecological compassion, protection, healing and revitalization of the Earth. Contact: The Registrar, NACCE, P.O. Box 14305, San Francisco, Ca. 94114.



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