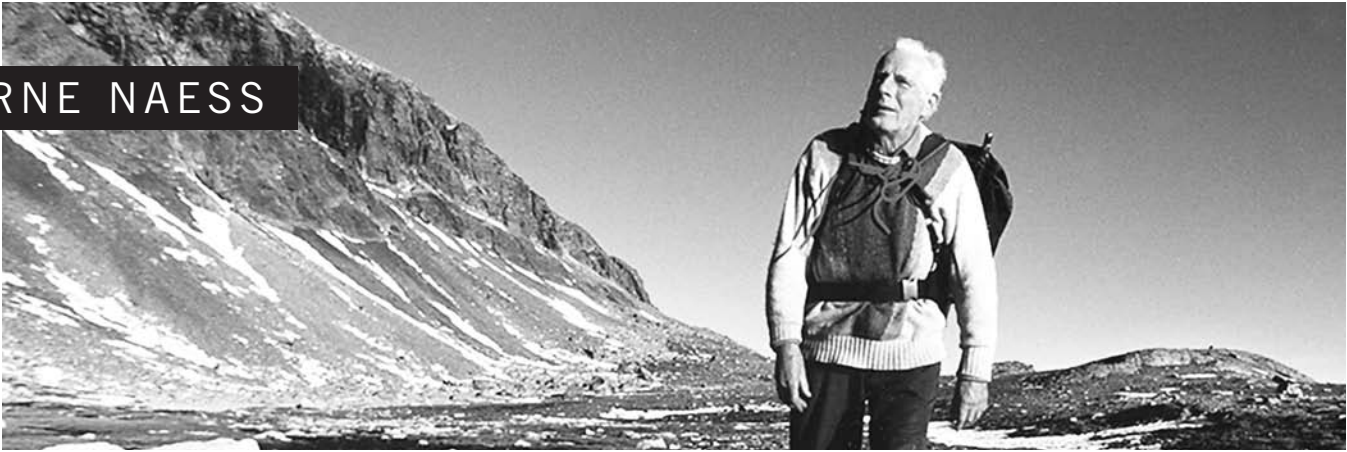




ARNE NAESS

The Deep Ecology Movement

Some Philosophical Aspects BY ARNE NAESS

DEEP ECOLOGY ON THE DEFENSIVE

Increasing pressures for growth have forced the vast majority of ecologists and other environmental professionals into a defensive position. Let me illustrate.

The field ecologist K, who both professionally and personally vigorously advocated deep ecological principles in the late 1960s, encountered considerable resistance. Colleagues at the university said that he should keep to his science and not meddle in philosophical and political matters, that he should resist the temptation to become a prominent “popularizer” through exposure in the mass media. Nevertheless, he continued and influenced thousands (including myself). He became a recognized “expert” in assessing the damage done when bears killed or maimed sheep or other domestic animals

in Norway. According to the law, their owners are to be paid damages. Licensed hunters can get permission to shoot a bear if its misdeeds become considerable.^[1] Growth pressures required consolidating the sheep industry, and sheep owners became fewer, richer, and more prone to live in towns. Because of wage increases, they could not afford to hire shepherds to watch their flocks, so the sheep were left alone in what were traditionally “bear territories.” In spite of this invasion, bear populations grew, and troubles multiplied.

What was K’s reaction? Did he set limits to human encroachments on bear territory? Did he directly apply his deep ecology perspective? Quite the contrary. He adopted a shallow wildlife management perspective that defended the sheep owners: more money in compensation for losses, quicker compensation, and imme-

1. For more about interspecific community relationships, see my “Self-realization in mixed communities of humans, bears, sheep, and wolves” (1979).

diate hiring of hunters to reduce the bear population. Other deep ecology supporters noted with concern his altered public “image”; had K really abandoned his former value priorities? Privately he insisted that he had not, but in public he was silent.

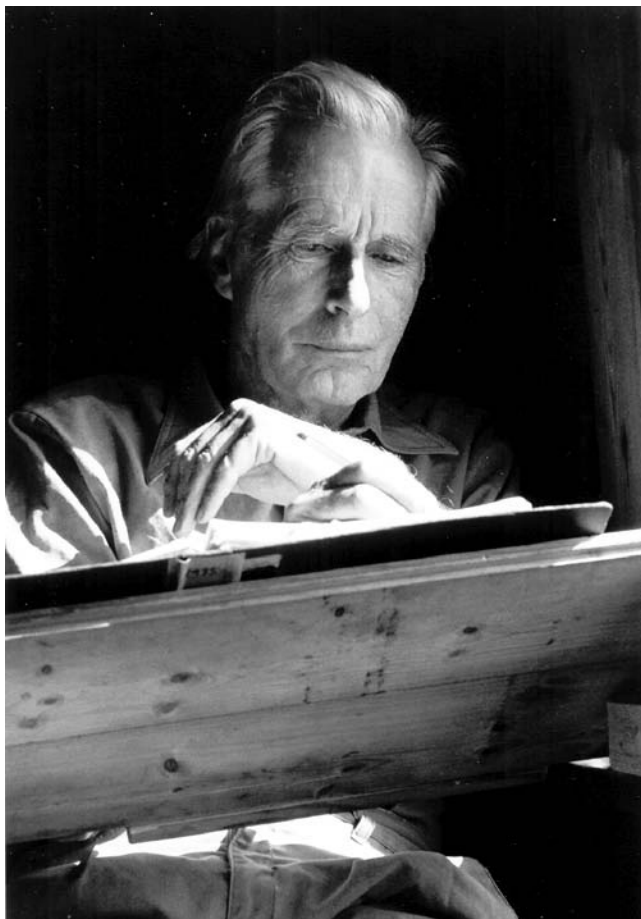
The reason for K’s unexpected actions was not difficult to find: the force of economic growth was so strong that the laws protecting bears would be changed in a direction highly unfavorable to the bears if the sheep owners were not soon pacified by having some of their demands met. Moreover, some of their demands seemed reasonable. After all, it did cost a lot of money to hire and equip rescuers to locate a flock of sheep that had been harassed by a bear and, further, to prove the bear’s guilt. In addition, the bureaucratic procedures involved were time-consuming. In short, K had not changed his basic value priorities at all. Rather, he had adopted a

purely defensive compromise. He stopped promoting his deep ecology philosophy in public to retain credibility and standing among opponents of his principles.

What is true of K is true of thousands more. These people often hold responsible positions from which they might strengthen responsible environmental policy. Given the exponential forces of growth, however, their publications are limited to narrowly professional and specialized concerns. Their writings are surely competent but lack a deeper, more comprehensive perspective (although I admit that there are some brilliant exceptions). If professional ecologists persist in voicing their value priorities, their jobs are often imperiled, or they tend to lose influence and status among those who are in charge of general policies. Privately, they may admit the necessity for deep and far-reaching changes, but they remain silent in public. As a result, their positive impact on the public has largely vanished. Deeply concerned people feel abandoned by the “experts.”

In ecological debate many participants know a great deal about particular conservation policies in particular places, and many others have strong opinions regarding fundamental philosophical questions of environmental ethics, but only a few have both qualities. When they are silent, the loss is formidable.

Let me illustrate again. A family of four decides to acquire four chairs for a small room, newly added to the home. They buy the chairs and all have peace of mind. Then one of them gets an urge to put ten more chairs in the room. Two of the family members who are technically talented and eager to satisfy any “need” use their time to solve the sophisticated physical and mathematical problems involved. When they ask the fourth member to work overtime to get the money to purchase the ten chairs, she answers that the chairs are unnecessary for a life rich in intrinsic values and simple in means. She begins to argue for her view, but the two technocrats insist that first she should work through all the alternative solutions to the Ten Chair problem. At last, she wonderfully simplifies the argument. If the ten chairs are not a desired end, it is pointless to dis-



Arne Naess in his study in Tvergastein. PHOTO: DOUG TOMPKINS

cuss the means by which this might be achieved. The technically talented find other outlets for their surplus energy, for there are always enough legitimate problems to work on.

The complicated question of how industrial societies can increase energy production with the least undesirable consequences is of the same kind: a waste of time if the increase is pointless in relation to ultimate ends. When thousands of experts hired by government and other big institutions devote their time to this complicated problem, it is difficult for the public to learn that many of them judge the problem pointless and irrelevant. What is relevant, according to them, are the problems of how to stabilize and eventually decrease consumption without loss of life quality.

A CALL TO SPEAK OUT

What I advocate and argue for is this: even those who completely subsume ecological policies under the narrow ends of human health and well-being cannot attain their more modest aims, at least not fully and easily, without being joined by supporters of deep ecology. They need what these people have to contribute, as this alliance will work for them more often than it works against them. Those in charge of environmental policies, even if they are resource-oriented (and growth-tolerating?) decision makers, will increasingly welcome what deep ecology supporters have to say, if only for tactical and not fundamental reasons. Even though the more radical ethic may seem nonsensical or untenable to them, they know that its advocates are doing in practice conservation work that sooner or later must be done. They concur with the practice, although they operate from diverging theories. If I am right, the time is ripe for professional followers of deep ecology to break their silence and freely express their deepest concerns. A bolder advocacy of deep ecology by those who are working within the shallow, resource-oriented “environmental” sphere is the best strategy for reestab-

lishing some of the strength of this movement among the general public and thereby contributing, however modestly, to a turning of the tide.

What do I mean by saying that even the more modest aims of shallow environmentalism have a need for deep ecology? We can see this by considering the *World Conservation Strategy* prepared by the International Union for Conservation of Nature and Natural Resources (IUCN) with the advice, cooperation, and financial assistance of the United Nations Environmental Program (UNEP) and the World Wildlife Fund (WWF). The argument in this important publication is through and through anthropocentric in the sense that all its recommendations are justified in terms of their effects on human health and well-being. Even the recommended environmental ethic, with its attendant environmental education campaign, has human beings in harmony with nature for human good. “A new ethic, embracing plants and animals as well as people, is required for human societies to live in harmony with the natural world on which they depend for survival and well-being” (IUCN 1980, sec. 13). Such an ethic would surely be more effective if it were acted upon by people who believe in its validity, rather than by those who merely believe in its usefulness. This, I think, will come to be understood more and more by those in charge of educational policies. Quite simply, it is indecent for a teacher to proclaim an ethic only for tactical reasons. Further, this point applies to all aspects of world conservation strategy. Conservation strategy will be more eagerly implemented by people who love what they are conserving, and who are convinced that what they love is intrinsically lovable. Such lovers will not want to hide their attitudes and values, but rather will increasingly give voice to them in public. They have a genuine ethics of conservation, not merely a tactically useful instrument for social and political ends.

In short, environmental education campaigns can fortunately combine anthropocentric arguments with a practical land and sea ethic based on a deeper and more fundamental naturalistic philosophical or re-

ligious perspective, and on a set of norms resting on intrinsic values. The inherent strength of this overall position will be lost, however, if those who work professionally on environmental problems do not give public testimony to these fundamental norms.

This article is hortatory, in the positive etymological sense of that word. I seek “to urge, incite, instigate, encourage, cheer” (Latin: *hortari*). This may seem unacademic in a philosophical journal, but I consider it justifiable because of an intimate relationship between hortatory sentences and basic philosophical views, which I will formulate below.

WHAT IS DEEP ECOLOGY?

So far, I have used the term *deep ecology movement* without trying to define it. One should not expect much from definitions of movements—think of terms such as *conservatism*, *liberalism*, and *feminism*. Moreover, it is not necessary that supporters adhere to exactly the same definition. In what follows, a set of principles, or key terms and phrases, agreed upon by George Sessions and myself, are tentatively proposed as basic to deep ecology.^[2] The list is followed by comments on each of the eight principles.

1. The well-being and flourishing of human and nonhuman life on Earth have value in themselves (synonyms: intrinsic value, inherent value). These values are independent of the usefulness of the nonhuman world for human purposes.
2. Richness and diversity of life-forms contribute to the relation of these values and are also values in themselves.

3. Human beings have no right to reduce this richness and diversity except to satisfy vital needs.
4. The flourishing of human life and cultures is compatible with a substantial decrease of the human population. The flourishing of nonhuman life requires such a decrease.
5. Current human interference with the nonhuman world is excessive, and the situation is rapidly worsening.
6. Policies must therefore be changed. These policies affect basic economic, technological, and ideological structures. The resulting state of affairs will be deeply different from the present state of affairs.
7. The ideological change is mainly that of appreciating life quality (dwelling in situations of inherent value) rather than adhering to an increasingly higher standard of living. There will be a profound awareness of the difference between big and great.
8. Those who subscribe to the foregoing points have an obligation directly or indirectly to try to implement the necessary changes. It is this principle that highlights the importance of *deep questioning* as the process by which to follow/develop/enact the other principles.

BASIC PRINCIPLE 1

Formulation 1 refers to the biosphere or, more accurately, to the ecosphere as a whole. This includes individuals, species, populations, and habitats, as well as human and nonhuman cultures. From our current knowledge of all-pervasive intimate relationships, this implies a fundamental deep concern and respect. Ecological processes on the planet should, on the whole, remain intact. “The world environment should remain ‘natural’” (Gary Snyder). The term *life* is used here in a

2. I cannot here do justice to the many authors who have contributed to the understanding of the emerging deep ecology movement. Only three will be mentioned. The newsletters written by George Sessions, Department of Philosophy, Sierra College, Rocklin, CA, are indispensable. There are six letters, April 1976, May 1979, April 1981, May 1982, May 1983, and May 1984, about 140 pages in all. The significant contributions by poets and artists are fully recognized. Most of these materials are summarized in Sessions, 1981. Bill Devall provides a short survey, in part historical, in his potent article “The deep ecology movement” (1980). See also Devall and Sessions, 1985. Finally, *The Trumpeter: Journal of Ecosophy* was started in 1983 by Alan Drengson. It was published as a print journal for fourteen years and is now an online journal.

comprehensive, nontechnical way to refer also to what biologists classify as “nonliving”: rivers (watersheds), landscapes, ecosystems. For supporters of deep ecology, slogans such as “Let the river live” illustrate this broader usage so common in most cultures. Inherent value, as used in formulation 1, is common in deep ecology literature. “The presence of inherent value in a natural object is independent of any awareness, interest, or appreciation of it by any conscious being.”^[3]

BASIC PRINCIPLE 2

More technically, formulation 2 concerns diversity and complexity. From an ecological standpoint, complexity and symbiosis are conditions for maximizing diversity. So-called simple, lower, or primitive species of plants and animals contribute essentially to richness and diversity of life. They have value in themselves and are not merely steps toward the so-called higher or rational life-forms. The second principle presupposes that life itself, as a process over evolutionary time, implies an increase of diversity and richness. The refusal to acknowledge that some life-forms have greater or lesser intrinsic value than others (see points 1 and 2) runs counter to the formulations of some ecological philosophers and New Age writers. Complexity, as referred to here, is different from complication. Urban life may be more complicated than life in a natural setting without being more complex in the sense of multifaceted quality.

BASIC PRINCIPLE 3

The term *vital need* is left deliberately vague in formulation 3 to allow for considerable latitude in judgment. Differences in climate and related factors, together with differences in the structures of societies as they now exist, need to be considered. (For some Eskimos, snowmobiles are necessary today to satisfy vital needs; the same cannot be said for tourists.)

BASIC PRINCIPLE 4

People in the materially richest countries cannot be expected to reduce their excessive interference with the nonhuman world to a moderate level overnight. The stabilization and reduction of the human population will take time. Interim strategies need to be developed. In no way, however, does this excuse the current complacency. The extreme seriousness of our situation must first be realized, and the longer we wait the more drastic will be the measures needed. Until deep changes are made, substantial decreases in richness and diversity are liable to occur: the rate of extinction of species will be ten to one hundred times greater than at any other period in Earth's history.

BASIC PRINCIPLE 5

Formulation 5 is mild. For a realistic assessment of the situation, see the unabridged version of the IUCN's *World Conservation Strategy*. There are other works to be highly recommended, such as Gerald Barney's *Global 2000 Report to the President of the United States*. The slogan of “noninterference” does not imply that human beings should not modify some ecosystems as do other species. Human beings have modified the earth and will probably continue to do so. At issue is the nature and extent of such interference. The fight to preserve and extend areas of wilderness or near-wilderness should continue and should focus on the general ecological functions of these areas. One such function is that large wilderness areas are required in the biosphere to allow for continued evolutionary speciation of animals and plants. Most currently designated wilderness areas and game preserves are not large enough to allow for such speciation.

BASIC PRINCIPLE 6

Economic growth as conceived and implemented today by the industrial states is incompatible with

3. Regan, T. (1981). The nature and possibility of an environmental ethics. *Environmental Ethics*, 3, p. 30.

principles 1–5. There is only a faint resemblance between ideal sustainable forms of economic growth and current policies of the industrial societies. Moreover, “sustainable” still means “sustainable in relation to people.” Present-day ideology tends to value things because they are scarce and because they have a commodity value. There is prestige in vast consumption and waste (to mention only several relevant factors). Whereas “self-determination,” “local community,” and “think globally, act locally” will remain key terms in the ecology of human societies, nevertheless the implementation of deep changes requires increasingly global action, action across borders. Governments in Third World countries are mostly uninterested in deep ecological issues. When the governments of industrial societies try to promote ecological measures through Third World governments, practically nothing is accomplished (for example, with problems of desertification). Given this situation, support for global action through nongovernmental international organizations becomes increasingly important. Many of these organizations are able to act globally “from grass roots to grass roots,” thus avoiding negative governmental interference. Cultural diversity today requires advanced technology, that is, techniques that advance the basic goals of each culture. So-called soft, intermediate, and alternative technologies are steps in this direction.

BASIC PRINCIPLE 7

Some economists criticize the term *quality of life* because, they say, it is vague. On closer inspection, however, what they consider to be vagueness is actually the non-quantitative nature of the term. One cannot quantify adequately what is important for quality of life as discussed here, and there is no need to do so.

BASIC PRINCIPLE 8

There is ample room for different opinions about *priorities*: what should be done first, what next; what is most urgent; what is clearly necessary as opposed to highly desirable but not absolutely pressing.

Although many supporters of the deep ecology movement may find the above formulations useful, others will certainly feel that they are imperfect, even misleading. If they need to formulate in a few words what is basic in deep ecology, they will propose an alternative set of sentences. I shall, of course, be glad to refer to those formulations as alternatives. There ought to be a measure of diversity in what is considered basic and common.

Should we call the movement the deep ecology movement?^[4] There are at least six other designations that cover most of the same issues: “Ecological Resistance,” used by John Rodman in important discussions; “The New Natural Philosophy,” coined by Joseph Meeker; “Eco-philosophy,” used by Sigmund Kvaløy and others to emphasize (1) a highly critical assessment of industrial growth societies from a general ecological point of view and (2) the ecology of the human species; “Green Philosophy and Politics” (although the term *green* is often used in Europe, in the United States it has a misleading association with the rather “blue” Green Revolution); “Sustainable Earth Ethics,” as used by G. Tyler Miller; and “Ecosophy,” eco-wisdom, which is my own favorite term. Others could also be mentioned.

Why use the adjective *deep*? This question will be easier to answer after the contrast is made between shallow and deep ecological concerns.

What I am talking about is not a philosophy in any academic sense, nor is it institutionalized as a religion

4. I proposed the name Deep, Long-Range Ecology Movement in a lecture at the Third World Future Research Conference (Bucharest, September 1972). “The shallow and the deep, long-range ecology movement: A summary.” (Naess, 1973) is a summary of that lecture. Adherents of the deep ecology movement fairly commonly use the term *deep ecologist*, whereas *shallow ecologist*, I am glad to say, is rather uncommon. Both terms may be considered arrogant and slightly misleading. I prefer to use the awkward but more egalitarian expression “supporter of the deep (or shallow) ecology movement,” avoiding personification. Also, it is common to call deep ecology consistently antianthropocentric. This has led to misconceptions: see my “A defense of the deep ecology movement” (1984). It is better described as nonanthropocentric.

or an ideology. Various persons come together in campaigns and direct actions. They form a circle of friends supporting the same kind of lifestyle, which others term “simple” but they themselves think is rich and many-sided. They agree on a vast array of political issues, although they may otherwise support different political parties. As in all social movements, slogans and rhetoric are indispensable for ingroup coherence. They react together against the same threats in a predominantly non-violent way. Perhaps the most influential participants are artists and writers who do not articulate their insights in terms of professional philosophy, but do express themselves in art or poetry. For these reasons, I use the term *movement* rather than *philosophy*.

DEEP VERSUS SHALLOW ECOLOGY

A number of key terms and slogans from the environmental debate will clarify the contrast between the shallow and the deep ecology movements.

POLLUTION

Shallow approach: Technology seeks to purify the air and water and to spread pollution more evenly. Laws limit permissible pollution. Polluting industries are preferably exported to developing countries.

Deep approach: Pollution is evaluated from a biospheric point of view,^[5] not centering on its effects on human health, but on life as a whole, including life conditions of every species and system. The shallow reaction to acid rain is to avoid action by demands for more research, demands to find species of trees tolerating high acidity, and so on, whereas the deep approach concentrates on what is going on in the total ecosystem and asks for a high-priority fight against the economy

and technology responsible for acid rain.

The priority is to fight deep causes of pollution, not merely the superficial, short-range effects. The Third and Fourth worlds cannot afford to pay the total cost of the war against pollution in their regions, and consequently they require the assistance of the First and Second worlds. Exporting pollution is not only a crime against humanity, but also against life.

RESOURCES

Shallow approach: The emphasis is on resources for human beings, especially the present generation in affluent societies. In this view, the Earth’s resources belong to those who have the technology to exploit them. There is confidence that resources will not be depleted because, as they get rarer, a high market price will conserve them, and substitutes will be found through technological progress. Further, animals, plants, and natural objects are valuable only as resources for human beings. If no human use is known, they can be destroyed with indifference.

Deep approach: The concern here is with resources and habitat for all life-forms for their own sake. No natural object is conceived of solely as a resource. This then leads to a critical evaluation of human modes of production and consumption. One must ask, To what extent does an increase here favor ultimate values in human life? To what extent does it satisfy vital needs, locally and globally? How can economic, legal, and educational institutions be changed to counteract destructive increases? How can resource use serve the quality of life rather than the economic standard of living as generally promoted in consumerism? There is an emphasis here on an *ecosystem approach* rather than just the consideration of isolated life-forms or local situations. There is a long-range maximal perspective of time and place.

5. The technical term *biospheric* should perhaps be avoided because it favors the scientifically fruitful distinction between biosphere and ecosphere. I use the term *life* in a broad sense common in everyday speech, and may therefore speak of landscapes and larger systems of the ecosphere as “living”—ultimately speaking of the life of the planet. The biospheric point of view referred to in the text is not a narrower point of view than the ecospheric because *bios* is used in a broad sense.

POPULATION

Shallow approach: The threat of (human) overpopulation is seen mainly as a problem for developing countries. One condones or even cheers population increases in one's own country for shortsighted economic, military, or other reasons; an increase in the number of human beings is considered a value in itself or as economically profitable. The issue of optimum population for humankind is discussed without reference to the question of the optimum population of other life-forms. The destruction of wild habitats caused by an increasing human population is accepted as an inevitable evil. Drastic decreases of wild life-forms tend to be accepted as long as species are not driven to extinction. Animal social relations are ignored. The long-term substantial reduction of the global human population is not seen as a desired goal. One has a right to defend one's own borders against "illegal aliens," no matter what the population pressures elsewhere.

Deep approach: It is recognized that excessive pressures on planetary life conditions stem from the human population explosion. The pressure stemming from industrial societies is a major factor, and population reduction must have a high priority in those societies, as well as in developing countries. Estimates of an optimal human population vary. Some quantitative estimates are 100 million, 500 million, and 1,000 million, but it is recognized that there must be a long-range human-population reduction through mild but tenacious political and economic measures. This will make possible, as a result of increased habitat, population growth for thousands of species that are now constrained by human pressures.

CULTURAL DIVERSITY AND APPROPRIATE TECHNOLOGY

Shallow approach: Industrialization of the kind manifested in the West is held to be the goal for developing countries. The universal adoption of Western technology is compatible with mild cultural diversity and the conservation of good (from the Western point of view) elements in present-day non-industrial societies. There is a low estimate of deep cultural differences that devi-

ate significantly from Western standards.

Deep approach: Cultural diversity is an analogue on the human level to the biological richness and diversity of life-forms. We should give high priority to cultural anthropology in education in industrial societies. We should limit the impact of Western technology on nonindustrial countries and defend the Fourth World against foreign domination. Political and economic policies should favor subcultures within industrialized societies. Local, soft technologies will allow a basic cultural assessment of any technical innovations. The deep approach freely criticizes so-called advanced technology and concepts of "progress."

LAND AND SEA ETHICS

Shallow approach: Landscapes, ecosystems, rivers, and other wholes of nature are cut into fragments; larger units and gestalts are disregarded. These fragments are regarded as the property and resources of individuals, organizations, or states. Conservation is argued in terms of "multiple use" and "cost-benefit analysis." Social costs and long-term ecological costs are not included. Wildlife management conserves nature for "future generations of human beings." The erosion of soils or of groundwater quality is noted as a human loss, but a strong belief in future technological progress makes deep changes seem unnecessary.

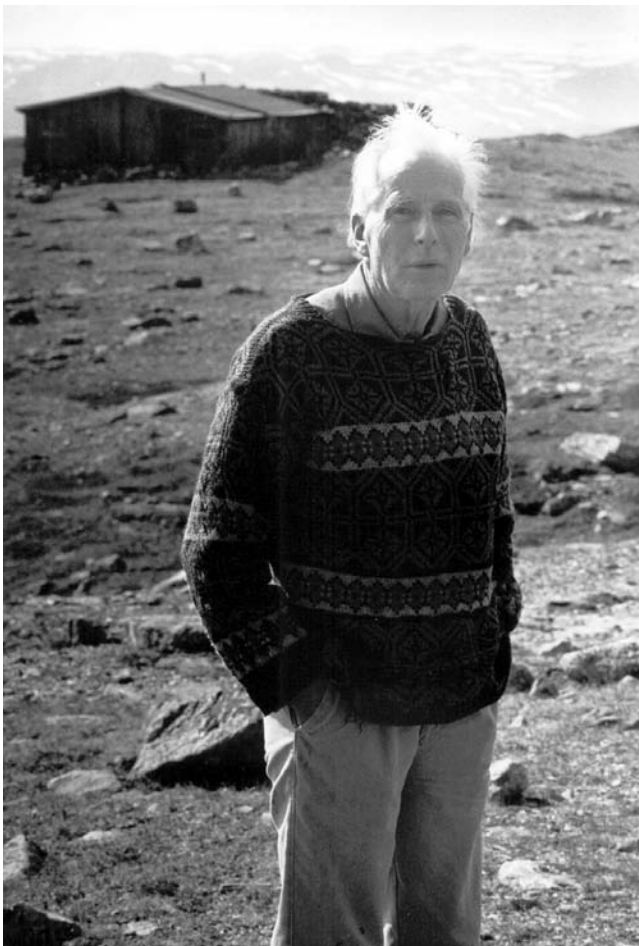
Deep approach: Earth does not belong to human beings. The Norwegian landscapes, rivers, fauna and flora, and the surrounding sea are not the property of Norwegians. Human beings only inhabit the land, using resources to satisfy vital needs. If their non-vital needs conflict with the vital needs of nonhuman life-forms, human beings might yield. The destruction now going on will not be cured by a technological fix. Current arrogant notions in industrial (and other) societies must be resisted.

EDUCATION AND SCIENTIFIC ENTERPRISE

Shallow approach: The degradation of the environment and resource depletion necessitate the further

training of experts who can advise on how to combine economic growth with the maintenance of a healthy environment. We are likely to need highly manipulative technology when global economic growth makes further degradation inevitable. The scientific enterprise must continue giving priority to the “hard” sciences. This necessitates high educational standards with intense competition in relevant “tough” areas of learning.

Deep approach: Education should concentrate on increased sensitivity to non-consumptive goods and on such consumables as we have enough of for all, provided sane ecological policies are adopted. Education will therefore counteract the excessive valuation of things with a price tag. There should be a shift in emphasis from “hard” to “soft” sciences, especially those that stress local culture and global cooperation.



Naess with Tvergastein in the background. PHOTO: DOUG TOMPKINS

The educational objective of the *World Conservation Strategy*, “building support for conservation,” should be accorded priority within the deeper framework of respect for the biosphere. In the future, there will be no shallow movement, if shallow policies are increasingly adopted by governments and, thus, need no support from a special social movement.

WHY A “DEEP” ECOLOGY?

The decisive difference between a shallow and a deep ecology movement hinges on the willingness to question, and to appreciate the importance of questioning, every economic and political policy in public. The questioning is “deep” and public. It asks *why* more insistently and consistently, taking nothing for granted. Deep ecology can readily admit the practical effectiveness of anthropocentric arguments. “It is essential for conservation to be seen as central to human interests and aspirations. At the same time, people—from heads of state to the members of rural communities—will most readily be brought to demand conservation if they themselves recognize the contribution of conservation to the achievement of their needs, as perceived by them, and the solution of their problems, as perceived by them” (IUCN 1980, sec. 13). Since most policies serving the biosphere also serve humanity in the long run, they may, at least initially, be accepted on the basis of narrow “anthropocentric” arguments.

Nevertheless, such a tactical approach has significant limitations. There are three dangers. First, some policies based on successful anthropocentric arguments turn out to violate or compromise unduly the objectives of deeper argumentation. Second, the strong motivation to fight for decisive change and the willingness to serve a great cause are weakened; and, third, the complicated arguments in human-centered conservation documents such as the *World Conservation Strategy* go beyond the time and ability of many people to assimilate and understand and also tend to provoke

interminable technical disagreements among experts. Special interest groups with narrow, short-term exploitative objectives that run counter to saner ecopolitics often exploit these disagreements and thereby stall the debate and steps toward effective action. When arguing from deep ecological premises, one need not discuss at all most of the complicated proposed technological fixes. The relative merits of alternative-technology proposals in industrial societies concerned with how to increase energy production are pointless if our vital needs have already been met. The focus on vital issues activates mental energy and strengthens motivation. The shallow environmental approach, on the other hand, tends to make the human population more passive and less interested in environmental issues.

The deep ecology movement tries to clarify the fundamental presuppositions underlying our economic approach in terms of value priorities, philosophy, and religion. In the shallow movement, argument comes to a halt long before this. The deep ecology movement is therefore “the ecology movement that questions deeper.”

The terms *egalitarianism*, *homocentrism*, *anthropocentrism*, and *human chauvinism* are often used to characterize points of view on the shallow–deep ecology spectrum. These terms, though, usually function as slogans that are open to misinterpretation. They can imply that human beings are in some respects only “plain citizens” (Aldo Leopold) of the planet on a par with all other species, but they are sometimes interpreted as denying that human beings have any “extraordinary” traits, or that in situations involving vital interests, human beings have no overriding obligations toward their own kind. They have!

In any social movement, rhetoric has an essential function of keeping members fighting together under the same banner. Rhetorical formulations also serve to provoke interest among outsiders. Of the better-known slogans, one might mention “Nature knows best,” “Small is beautiful,” and “All things hang together.” Clearly, all things in the universe do not hang

together at the level of quantum physics or relativity theory: the slogan only expresses a doctrine of global, not cosmic, relevance.

Only a minority of deep ecology supporters are academic philosophers such as I. Although deep ecology is not a finished philosophical system, this does not mean that movement philosophers should not try to be as clear as possible. So a discussion of deep ecology as a derivational system may be of value.

DEEP ECOLOGY ILLUSTRATED AS A DERIVATIONAL SYSTEM

Underlying the eight tenets or principles above are still more basic positions and norms, which reside in philosophical systems and various world religions. Schematically, we may represent the total views implied in the movement by streams of derivation from the most fundamental norms and descriptive assumptions to particular decisions in actual life situations (see figure 1).

This pyramidal model has some features in common with hypothetico-deductive systems. The main difference, however, is that some sentences at the top (deepest) level are normative, and are preferably expressed by imperatives. This makes it possible to arrive at imperatives at the lowest derivational level, the crucial level in terms of decisions. Thus, there are *oughts* in our premises, as well as in our conclusions. We do not move from an *is* to an *ought*.

Just as in a hypothetico-deductive system in physics, where only the two upper levels of the pyramid are thought of as forming physics as a system, so also in normative systems only the upper levels are considered to be part of the total system. The sentences in the lowest part are changing from day to day as life situations change.

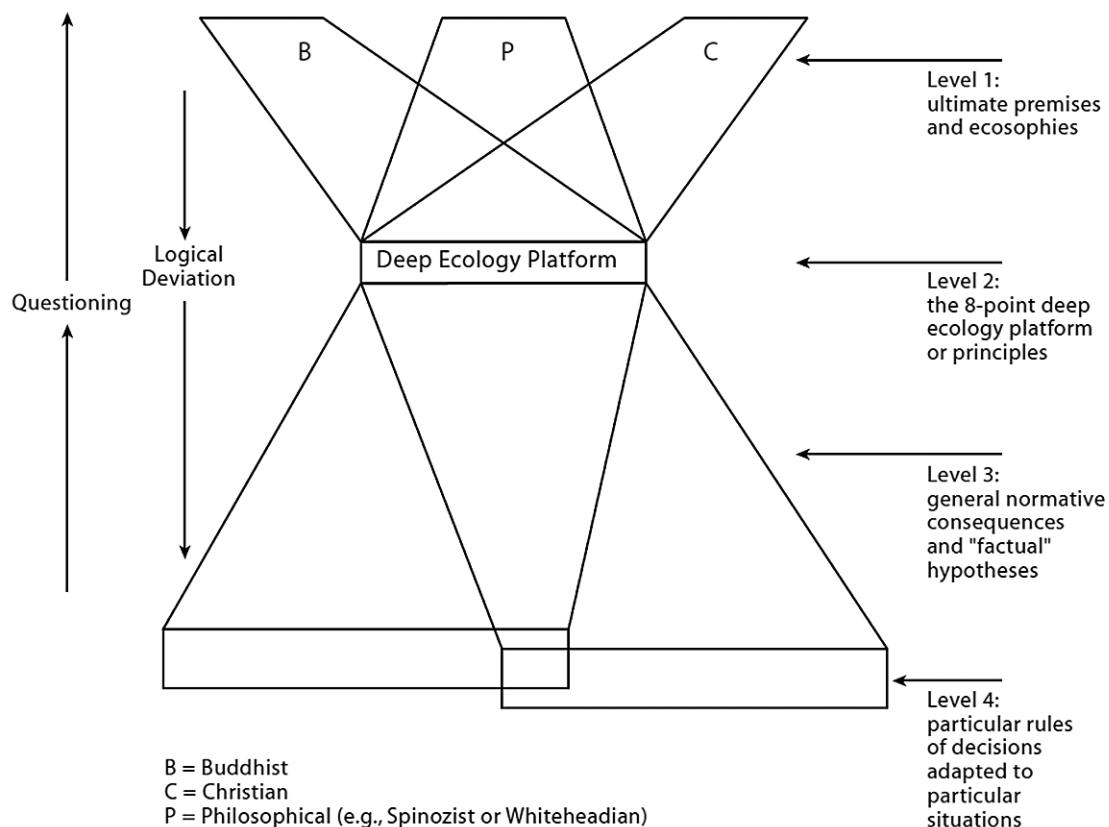
This derivational structure of a total view must not be taken too seriously. It is not meant in any restrictive way to characterize creative thinking within the deep ecology movement. That thinking moves freely in any direction. Nevertheless, some of us with professional

backgrounds in science and analytical philosophy find it helpful.^[6]

Answers to ultimate questions—that is, the highest normative principles and basic assumptions about the world—occur in the upper part of the derivational pyramid. The first three basic principles of deep ecology (as outlined above) belong to the upper level of the pyramid because they assert, in a general way, that

life in its diversity is a value in itself and thus forms a norm against undue human interference. The next four (4–7) tenets belong to the middle region because they are more local; their purview is what is going on at present. They include factual claims and projections about the consequences of current policies in industrial and nonindustrial countries. An application of the last tenet (8) is at the lowest derivational level be-

FIGURE 1: APRON DIAGRAM



6. Many authors take some steps toward derivational structures, offering mild systemizations. The chapter on environmental ethics and hope in G. Tyler Miller's *Living in the Environment* (1983) is a valuable start, but the derivational relations are unclear. The logic and semantics of simple models of normative systems are briefly discussed in my "Notes on the Methodology of Normative Systems" (1977). For defense of the thesis that as soon as people assert anything at all we assume a total view, implicit with ontology, methodology, epistemology, and ethics, see my "Reflections About Total Views" (1964). The best and wittiest warning against taking systematizations too seriously is to be found in Søren Kierkegaard's *Concluding Unscientific Postscript* (1941).

cause it imposes an obligation to take part in actions to change policies. Such an obligation must be derivable from principles higher up in the pyramid.

There are a few propositions at the top of the pyramid, a great variety at the middle level, and innumerable recommendations at the bottom.

MULTIPLE ROOTS OF THE DEEP ECOLOGY PRINCIPLES

The deep ecology movement seriously questions the presuppositions of shallow argumentation. Even what counts as a rational decision is challenged, because “rational” is always defined in relation to specific aims and goals. If a decision is rational in relation to the lower-level aims and goals of our pyramid but not in relation to the highest level, then the decision should not be judged to be rational. If an environmentally oriented policy decision is not linked to intrinsic values, its rationality is yet undetermined. The deep movement connects rationality with a set of philosophical and religious foundations. One cannot expect the ultimate premises to constitute rational conclusions. There are no “deeper” premises available.

The deep ecological questioning reveals the fundamental normative orientations. Shallow argumentation stops before reaching fundamentals or jumps from the ultimate to the particular, that is, from level 1 to level 4.

It is not only normative claims that are at stake. Most (perhaps all) norms presuppose ideas about how the world functions. Typically, the vast majority of propositions needed in normative systems are descriptive. This holds of all levels.

Notice, however, that it does not follow that supporters of deep ecology must have, on ultimate issues, identical beliefs. They do have common attitudes about intrinsic values in nature, but these can, in turn (at a

still deeper level), be derived from different, mutually incompatible sets of ultimate beliefs.

Thus, while a specific decision may be judged as rational from within the derivational system (if there is such) of shallow ecology, it might be judged irrational from within the derivational system of deep ecology. What is rational within the deep ecology derivational pyramid does not require unanimity in ontology and fundamental ethics. Deep ecology support as a conviction, with its subsequently derived practical recommendations, can follow from several more comprehensive worldviews. Deep ecology is a grassroots movement, not a worldview.

Those engaged in the deep movement have so far revealed their philosophical or religious homes mainly to be in Christianity, Buddhism, Taoism, or a personal philosophy. The top level of the derivational pyramid can therefore be made up of normative and descriptive principles that belong to forms of Christianity, Buddhism, Taoism, and various philosophical creeds.

Since the late 1970s, numerous Christians in Europe and America, some of them teachers of theology, have actively participated in the deep ecology movement. Their interpretations of the Bible and their theological positions in general have been reformed from what was, until recently, a crudely anthropocentric emphasis within Christianity.

There is an intimate relation between some forms of Buddhism and the deep ecology movement. The history of Buddhist thought and practice, especially the principles of non-violence, non-injury, and reverence for life, sometimes makes it easier for Buddhists to understand and appreciate that movement than it is for Christians, despite a (sometimes overlooked) blessedness that Jesus recommended in peacemaking. I mention Taoism chiefly because there is some basis for calling John Muir a Taoist.^[7]

Ecosophies are not religions in the classical sense,

7. Trusting Bill Devall, one may say that “Muir is now understood as the first Taoist of American ecology” (Devall, 1982); see also Cohen (1984).

but general philosophies inspired by ecology. In the next section I will introduce Ecosophy T.

The adherents of different religions and philosophies disagree and may not even ultimately understand each other at the foundational levels of conviction and experience. Nevertheless, they can have important derived views in common, and these, though themselves derived, are nevertheless deep enough to form what I wish to call the upper level of the deep ecology derivational pyramid.

Some have worried that the mixture of religion and environmentalism could prove a source of dogmatism, intolerance, and “mysticism” (in the sense of obscurantism). So far, there is no evidence that this is happening. Nature mysticism has little to do with obscurantism.^[8]

ECOSOPHY T

The main theoretical complaint against the shallow ecology movement is not that it is based on a well-articulated but incorrect philosophical or religious foundation. It is, rather, that there is a lack of depth—or complete absence—of guiding philosophical or religious foundations. In his excellent book on how to “live in the environment,” G. Tyler Miller writes:

The American attitude (and presumably that of most industrialized nations) toward nature can be expressed as eight basic beliefs [four of which are reproduced here]. 1. Humans are the source of all value. 2. Nature exists only for our use. 3. Our primary purpose is to produce and consume. Success is based on material wealth. 4. Production and consumption must rise endlessly because we have a right to an ever increasing material level of living.^[9]

Miller adds an important reservation:

Although most of us probably would not accept all of these statements, we act individually, corporately, and governmentally as if we did—and this is what counts.

When they are so badly exposed, we might find that few people would explicitly subscribe to what Miller characterizes as “the American attitude.” Nevertheless, as Miller notes, most modern people (and not only Americans!) behave as if they believed such a creed. There is no articulated philosophical or religious view from which “the American attitude” is carefully justified.

The shallow movement has not offered examples of total views comprising the four levels in our illustration. I am tempted to say that there will be no examples. Serious attempts to find a deep justification for the way life on the planet is treated today (including the threats of using nuclear “weapons”) are doomed to failure. What I say is meant as a challenge: is there a philosopher somewhere who would like to try?

My main purpose in announcing that I feel at home in “Ecosophy T” is didactic and dialectic. I hope to get others to announce their philosophy. If they say they have none, I maintain that they have but perhaps do not know their own views, or are too modest or inhibited to proclaim what they believe. Following Socrates, I want to provoke questioning until others know where they stand on basic matters of life and death. This is done by using ecological issues, and also by using Ecosophy T as a foil. Socrates, though, pretended in debate that he knew nothing. My posture seems to be the opposite. I may seem to know everything and to derive it magically from a small set of hypotheses about the world. Both interpretations

8. For empirical studies of attitudes of “Wilderness-users,” see the survey by C.R. Kent (1981), in his thesis *The Experiential Process of Nature Mysticism* (Arcata, CA: Humboldt State University).

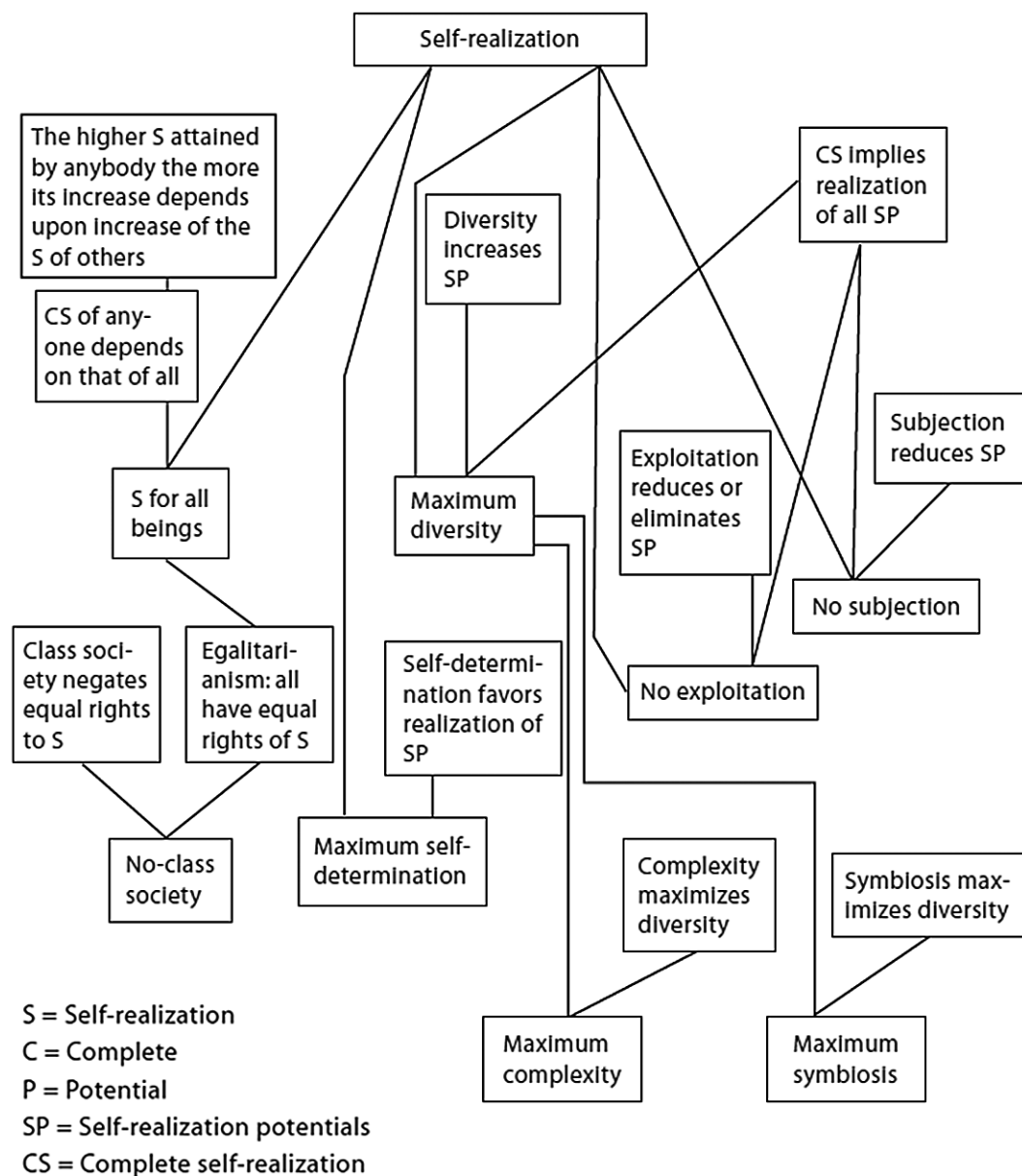
9. Miller, G. T. (1983). *Living in the Environment* (3d ed.). Belmont, CA: Wadsworth, p. 489.

are misleading! Socrates did not consistently claim to know nothing, nor do I in my Ecosophy T pretend to have all that comprehensive a knowledge. He claimed to know, for example, about the fallibility of human beings' claims to know.

So, here is Ecosophy T (see figure 2). Its funda-

mental norm is "Self-realization!" I do not, however, use this expression in any narrow, individualistic sense. I want to give it an expanded meaning based on the distinction between Self and self as conceived in certain Eastern traditions of ātman, comprising all the life-forms, and selves (jivas) as usually interpreted in

FIGURE 2: ECOSOPHY T



social and personal life.^[10] I use only five words: *maximum* (*long-range, universal*) *Self-realization!* If I had to give up the term fearing its inevitable misunderstanding, I would use the term *symbiosis*. “Maximize Self-realization!” could be interpreted in the direction of colossal ego trips, but “Maximize symbiosis!” could be interpreted in the opposite direction, that of the elimination of individuality in favor of collectivity.

Viewed systematically, not individually, maximum Self-realization implies maximizing the manifestations of life. So I next derive the second term, “*Maximize* (*long-range, universal*) *diversity!*” A corollary is that the higher the levels of Self-realization attained by a person, the more any further increase depends upon the Self-realization of others. Increased self-identification is increased identification with others. “Altruism” is a natural consequence of this identification.

This leads to a hypothesis about an inescapable increase of identification with other beings when one’s own self-realization increases. We increasingly see ourselves in others, and others in ourselves. This self is extended and deepened as a natural process of the realization of its potentialities in others.

Universalizing, we can derive the norm “Self-realization for every being!” From “Diversity!” and a hypothesis that maximum diversity implies a maximum of symbiosis is derived the norm “Maximum symbiosis!” Further, we work for life conditions such that there is a minimum of coercion in the life of others. And so on!^[11]

A philosophy as a worldview inevitably has implications in practical situations. Therefore, Ecosophy T moves on without apology to concrete questions of lifestyle. These will obviously show great variation because

of differences in *hypotheses* about the world in which each of us lives and in the “factual” statements about the concrete situations in which we make decisions. I shall limit myself to a couple of areas in which my “style” of thinking and behaving seems somewhat strange to friends and others who know a little about my philosophy. First, I exhibit a somewhat extreme appreciation of diversity: a positive appreciation of the existence of styles and behaviors that I personally detest or find nonsensical (but not clearly incompatible with symbiosis); enthusiasm for “the mere” diversity of species or varieties within a genus of plants or animals; support, as the head of a department of philosophy, of doctoral theses completely at odds with my own inclinations, with only the requirement that the authors are able to understand fairly adequately some basic features of the kind of philosophy I myself feel at home with; and a combination of *seemingly* incompatible interests and behaviors, which makes for an increase of subcultures within industrial states and might to some extent help future cultural diversity. So much about “Diversity!”

Second, I have a somewhat extreme appreciation of what Kant calls beautiful actions (good actions based on inclination), in contrast to dutiful ones. The choice of the formulation “Self-realization!” is in part motivated by the belief that maturity in human beings can be measured along a scale from selfishness to a broadening and deepening of the self, rather than measures of dutiful altruism. I see joyful sharing and caring as a natural process (which, I regret, is somewhat retarded in myself).

Third, I believe that many-sided, high-level Self-realization is more easily reached through a “spartan” lifestyle than through the material standard of average citizens of industrial states.

10. The term *ātman* is not taken in its absolutistic senses, not as a permanent indestructible “soul.” This makes it consistent with those Buddhist denials (the *avātman* doctrine) that the *ātman* is to be taken in absolutist senses. Within the Christian tradition, some theologians distinguish “ego” and “true self” in ways similar to these distinctions in Eastern religion. See, e.g., the ecophilosophical interpretation of the Gospel of Luke in Verney (1976, pp. 33–41).

11. For criticism and defense of this fundamental norm, and my answer, see *In Sceptical Wonder: Essays in Honor of Arne Naess* (Gullvag & Wetlesen, 1982). My main exposition of Ecosophy T was originally offered in the Norwegian work *Økologi, samfunn og livsstil* (1976), later published in English as *Ecology, Community, and Lifestyle* (1989). Even there, the exposition is sketchy.

The simple formulations of the deep ecology platform and Ecosophy T are not meant primarily to be used among philosophers, but in dialogues with “the experts.” When I wrote to them personally, asking whether they accept the eight points of the platform, many answered positively in relation to most or all the points—even top people in ministries of oil and energy! It is, however, still an open question to what extent they are willing to let their written answers be widely published. It is also an open question to what extent they try to influence their colleagues who use only shallow argumentation. The main conclusion is moderately encouraging: there is a philosophy of the human/nature relationship widely accepted among established experts responsible for environmental decisions, and this philosophy requires a pervasive, substantial change of current policies—in favor of our “living” planet, and not only for shortsighted human interests.

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