

THE DEEP ECOLOGY MOVEMENT*

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There are two great streams of environmentalism in the latter half of the twentieth century. One stream is reformist, attempting to control some of the worst of the air and water pollution and inefficient land use practices in industrialized nations and to save a few of the remaining pieces of wildlands as "designated wilderness areas." The other stream supports many of the reformist goals but is revolutionary, seeking a new metaphysics, epistemology, cosmology, and environmental ethics of person/planet. This paper is an intellectual archeology of the second of these streams of environmentalism, which I will call *deep ecology*.

There are several other phrases that some writers are using for the perspective I am describing in this paper. Some call it "eco-philosophy" or "foundational ecology" or the "new natural philosophy." I use "deep ecology" as the shortest label. Although I am convinced that deep ecology is radically different from the perspective of the dominant social paradigm, I do not use the phrase "radical ecology" or "revolutionary ecology" because I think those labels have such a burden of emotive associations that many people would not hear what is being said about deep ecology because of their projection of other meanings of "revolution" onto the perspective of deep ecology.

I contend that both streams of environmentalism are reactions to the successes and excesses of the implementation of the dominant social paradigm. Although reformist environmentalism treats some of the symptoms of the environmental crisis and challenges some of the assumptions of the dominant social paradigm (such as growth of the economy at any cost), deep ecology questions the fundamental premises of the dominant social paradigm. In the future, as the limits of reform are reached and environmental problems become more

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serious, the reform environmental movement will have to come to terms with deep ecology.

The analysis in the present paper was inspired by Arne Naess' paper on "shallow and deep, long-range" environmentalism.¹ The methods used are patterned after John Rodman's seminal critique of the resources conservation and development movement in the United States.² The data are the writings of a diverse group of thinkers who have been developing a theory of deep ecology, especially during the last quarter of a century. Relatively few of these writings have appeared in popular journals or in books published by mainstream publishers. I have searched these writings for common threads or themes much as Max Weber searched the sermons of Protestant ministers for themes which reflected from and back to the intellectual and social crisis of the emerging Protestant ethic and the spirit of capitalism.³ Several questions are addressed in this paper: What are the sources of deep ecology? How do the premises of deep ecology differ from those of the dominant social paradigm? What are the areas of disagreement between reformist environmentalism and deep ecology? What is the likely future role of the deep ecology movement?

THE DOMINANT PARADIGM

A paradigm is a shorthand description of the world view, the collection of values, beliefs, habits, and norms which form the frame of reference of a collectivity of people—those who share a nation, a religion, a social class. According to one writer, a *dominant* social paradigm is the mental image of social reality that guides expectations in a society.

The dominant paradigm in North America includes the belief that "economic growth," as measured by the Gross National Product, is a measure of Progress, the belief that the primary goal of the governments of nation-states, after national defense, should be to create conditions that will increase production of commodities and satisfy material wants of citizens, and the belief that "technology can solve our problems." Nature, in this paradigm, is only a storehouse of resources which should be "developed" to satisfy ever increasing numbers of humans and ever increasing demands of humans. Science

1. Naess, *The Shallow and the Deep, Long-Range Ecology Movement*, 16 INQUIRY 95 (1973).

2. J. Rodman, *Four Forms of Ecological Consciousness: Beyond Economics, Resource Conservation*, (1977) Pitzer College.

3. M. WEBER, *THE PROTESTANT ETHIC AND THE SPIRIT OF CAPITALISM* (1930).

is wedded to technology, the development of *techniques* for control of natural processes (such as weather modification). Change ("planned obsolescence") is an end in itself. The new is valued over the old and the present over future generations. The goal of persons is personal satisfaction of wants and a higher standard of living as measured by possession of commodities (houses, autos, recreation vehicles, etc.).⁴ Whatever its origin, this paradigm continues to be dominant, to be preached through publicity (i.e., advertising), and to be part of the world view of most citizens in North America.⁵

For some writers, the dominant social paradigm derives from Judeo-Christian origins.⁶ For others, the excesses of air and water pollution, the demand for more and more centralization of political and economic power and the disregard for future generations, and the unwise use of natural resources derive from the ideology and structure of capitalism or from the Lockean view that property must be "improved" to make it valuable to the "owner" and to society.⁷ For others, the dominant social paradigm derives from the "scientism" of the modern West (Europe and North America) as applied to the technique of domination.⁸

Following Thomas Kuhn's theory of the dominance of paradigms in modern science and the operation of scientists doing what he calls normal science within a paradigm, it can be argued that (1) those who subscribe to a given paradigm share a definition of what problems are and their priorities; (2) the general heuristics, or rules of the game, for approaching problems is widely agreed upon, (3) there is a definite, underlying confidence among believers of the paradigm that solutions within the paradigm do exist; and (4) those who believe the assumptions of the paradigm may argue about the validity of data, but rarely are their debates about the definition of what the problem is or whether there are solutions or not. Proposed solutions to prob-

4. D. PIRAGES & P. EHRLICH, ARK II: SOCIAL RESPONSE TO ENVIRONMENTAL IMPERATIVES 43 (1974). See also THE FUTURE OF THE GREAT PLAINS, H.R. DOC. NO. 144, 75th Cong., 1st Sess. (1937).

5. On the history of the paradigm see V. FERKISS, THE FUTURE OF TECHNOLOGICAL CIVILIZATION (1974). For a critique of the "me now" consumerism of the 1970's see C. LASCH, THE CULTURE OF NARCISSISM: AMERICAN LIFE IN AN AGE OF DIMINISHING EXPECTATIONS (1979). See also *Manager's Journal*, *Monitoring America*, *Values of Americans*, Wall St. J., Oct. 2, 1978.

6. White, Jr., *The Historical Roots of Our Ecologic Crisis*, 155 SCIENCE 1203 (1967).

7. B. WEISBERG, BEYOND REPAIR: THE ECOLOGY OF CAPITALISM (1971); England & Bluestone, *Ecology and Class Conflict*, 3 REV. RADICAL POLITICAL ECON. 31 (1971). On Locke's view of "property," see FERKISS, *supra* note 5.

8. L. MARX, THE MACHINE IN THE GARDEN: TECHNOLOGY AND THE PASTORAL IDEAL IN AMERICA (1967); and L. MUMFORD, THE PENTAGON OF POWER (1970).

lems arising from following the assumptions of the paradigms are evaluated as "reasonable," "realistic," or "valid" in terms of the agreed upon "rules of the game." When the data is difficult to fit to the paradigm, frequently there is dissonance disavowal, an attempt to explain away the inconsistency.⁹

It is possible for a paradigm shift to occur when a group of persons finds in comparing its data with generally accepted theory that the conclusions become "weird" when compared with expectations. In terms of the shared views of the goals, rules, and perceptions of reality in a nation, a tribe, or a religious group, for example, a charismatic leader, a social movement, or a formation of social networks of persons exploring a new social paradigm may be at the vanguard of a paradigm shift.

Reformist environmentalism in this paper refers to several social movements which are related in that the goal of all of them is to change society for "better living" without attacking the premises of the dominant social paradigm. These reform movements each defined a problem—such as need for more open space—and voluntary organizations were formed to agitate for social changes. There has also been considerable coalition building between different voluntary organizations espousing reform environmentalism. Several reformist environmental movements, including at least the following, have been active during the last century: (1) the movement to establish urban parks, designated wilderness areas, and national parks;¹⁰ (2) the movement to mitigate the health and public safety hazards created by the technology which was applied to create the so-called industrial revolution.¹¹ The Union of Concerned Scientists, for example, has brought to the attention of the general public some of the hazards to public health and safety of the use of nuclear power to generate electricity; (3) the movement to develop "proper" land-use planning. This includes the city beautiful movement of the late nineteenth century and the movement to zone and plan land use such as the currently controversial attempts to zone uses along the coastal zones;¹² (4) the resources conservation and development movement

9. T. KUHN, *THE STRUCTURE OF SCIENTIFIC REVOLUTIONS* (2d ed. 1970). For criticism of Kuhn, I. LAKATOS & A. MUSGRAVE, *CRITICISMS AND THE GROWTH OF KNOWLEDGE* (1970).

10. R. NASH, *WILDERNESS AND THE AMERICAN MIND* (rev. ed. 1973); Sax, *America's National Parks: Their Principles, Purposes and Their Prospects*, 35 NAT. HIST. 57 (1976).

11. B. COMMONER, *THE CLOSING CIRCLE* (1971); J. RIDGEWAY, *THE POLITICS OF ECOLOGY* (1970).

12. NATURAL RESOURCES DEFENSE COUNCIL, *LAND USE CONTROLS IN THE UNITED STATES: A HANDBOOK OF LEGAL RIGHTS OF CITIZENS* (1977); I. MCHARG, *DESIGN WITH NATURE* (1971).

symbolized by the philosophy of multiple use of Gifford Pinchot and the U.S. Forest Service;^{1 3} (5) the "back to the land" movement of the 1960s and 1970s and the "organic farming" ideology; (6) the concern with exponential growth of human population and formation of such groups as Zero Population Growth;^{1 4} (7) the "humane" and "animal liberation" movement directed at changing the attitudes and behavior of humans towards some other aspects of animals;^{1 5} and (8) the "limits to growth" movement which emphasizes we should control human population and move towards a "steady-state" or "conservator society" as rapidly as possible.^{1 6}

SOURCES OF DEEP ECOLOGY

What I call deep ecology in this paper is premised on a gestalt of person-in-nature. The person is not above or outside of nature. The person is part of creation on-going. The person cares for and about nature, shows reverence towards and respect for nonhuman nature, loves and lives with nonhuman nature, is a person in the "earth household" and "lets being be," lets nonhuman nature follow separate evolutionary destinies. Deep ecology, unlike reform environmentalism, is not just a pragmatic, short-term social movement with a goal like stopping nuclear power or cleaning up the waterways. Deep ecology first attempts to question and present alternatives to conventional ways of thinking in the modern West. Deep ecology understands that some of the "solutions" of reform environmentalism are counter-productive. Deep ecology seeks transformation of values and social organization.

The historian Lynn White, Jr., in his influential 1967 article, "The Historical Roots of Our Ecological Crisis," provided one impetus for the current upwelling of interest in deep ecology by criticizing what he saw as the dominant Judeo-Christian view of man *versus* nature, or man at war with nature. But there are other writers, coming from diverse intellectual and spiritual disciplines, who have provided, in

13. Rodman, *supra* note 2; S. HAYS, CONSERVATION AND THE GOSPEL OF EFFICIENCY (1959); G. PINCHOT, BREAKING NEW GROUND (1947).

14. P. EHRLICH, THE POPULATION BOMB (1968). See generally publications of the organization Zero Population Growth. POPULATION AND THE AMERICAN FUTURE: REPORT OF THE COMMISSION ON POPULATION GROWTH AND THE AMERICAN FUTURE (1972).

15. T. REGAN & P. SINGER, ANIMAL RIGHTS AND HUMAN OBLIGATION (1976); P. SINGER, ANIMAL LIBERATION (1977).

16. D. L. MEADOWS & D. H. MEADOWS, THE LIMITS TO GROWTH (2d ed. 1974); M. MESAROVIC & E. PESTEL, MANKIND AT THE TURNING POINT: SECOND REPORT OF THE CLUB OF ROME (1974); D. MEADOWS, ALTERNATIVES TO GROWTH (1977). For a critique of the limits to growth model see MODELS OF DOOM: A CRITIQUE OF THE LIMITS TO GROWTH (H. Cole ed. 1973); TOWARD A STEADY-STATE ECONOMY (H. Daly ed. 1973).

the cumulative impact of their work, a profound critique of the dominant social paradigm and the "single vision" of science in the modern (post-1500) West.¹⁷

One major stream of thought influencing the development of deep ecology has been the influx of Eastern spiritual traditions into the West which began in the 1950s with the writings of such people as Alan Watts¹⁸ and Daisetz Suzuki.¹⁹ Eastern traditions provided a radically different man/nature vision than that of the dominant social paradigm of the West. During the 1950s the so-called "beat poets" such as Alan Ginsberg seemed to be groping for a way through Eastern philosophy to cope with the violence, insanity, and alienation of people from people and people from nature they experienced in North America. Except for Gary Snyder, who developed into one of the most influential eco-philosophers of the 1970s, these beat poets, from the perspective of the 1970s, were naive in their understanding of both Eastern philosophy, ecology, and the philosophical traditions of the West.

During the late 1960s and 1970s, however, philosophers, scientists, and social critics have begun to compare Eastern and Western philosophic traditions as they relate to science, technology, and man/nature relations. Fritjoff Capra's *Tao of Physics*, for example, emphasizes the parallels between Eastern philosophies and the theories of twentieth century physics.²⁰ Joseph Needham's massive work, *Science and Civilization in China*, brought to the consciousness of the West the incredibly high level of science, technology, and civilization achieved in the East for millenia and made available to Western readers an alternative approach to science and human values.²¹ More recently, Needham has suggested that modern Westerners take the philosophies of the East as a spiritual and ethical basis for modern science.²² Works by Huston Smith, among others, have also contributed to this resurgent interest in relating the environmental crisis to the values expressed in the dominant Western paradigm. Smith and others have looked to the Eastern philosophies for spiritual-religious guidance.²³

17. White, *supra* note 6.

18. A. WATTS, *PSYCHOTHERAPY EAST AND WEST* (1955); A. WATTS, *NATURE, MAN AND WOMAN* (1970); A. WATTS, *THE SPIRIT OF ZEN: A WAY OF LIFE, WORK AND ART IN THE FAR EAST* (1955); A. WATTS, *THE ESSENCE OF ALAN WATTS* (1977).

19. D. SUZUKI, *ESSAYS IN ZEN BUDDHISM* (1961).

20. F. CAPRA, *THE TAO OF PHYSICS* (1975).

21. J. NEEDHAM, *SCIENCE AND CIVILIZATION IN CHINA* (multi. vol. 1954-1976).

22. Needham, *History and Human Values: A Chinese Perspective for World Science and Technology*, 20 CENTENNIAL REV. 1 (1976).

23. H. SMITH, *FORGOTTEN TRUTH* (1976); Smith, *Tao Now: An Ecological Testament*, in *EARTH MIGHT BE FAIR* (I. Barbour ed. 1972).

Several social philosophers have written brilliant critiques of Western societies but have not presented a new metaphysical basis for their philosophy nor attempted to incorporate Eastern philosophy into their analyses. Jacques Euliel wrote on *technique* and the technological society.²⁴ Paul Goodman discussed the question "can there be a humane technology?"²⁵ Herbert Marcuse analyzed "one dimensional man" as the prototypical "modern" urbanite.²⁶ The works of Theodore Roszak have also had considerable impact on those thinkers interested in understanding the malaise and contradictions of modern societies by examining the premises of the dominant social paradigm.²⁷

A second stream of thought contributing to deep ecology has been the re-evaluation of Native Americans (and other preliterate peoples) during the 1960s and 1970s. This is not a revival of the Romantic view of Native Americans as "noble savages" but rather an attempt to evaluate traditional religions, philosophies, and social organizations of Native Americans in objective, comparative, analytic, and critical ways.

A number of questions have been asked. How did different tribes at different times cope with changes in their natural environment (such as prolonged drought) and with technological innovation? What were the "separate realities" of Native Americans and can modern Western man *understand* and *know*, in a phenomenological sense, these "separate realities"? The experiences of Carlos Castaneda, for example, indicate it may be very difficult for modern man to develop such understanding since this requires a major perceptual shift of man/nature. Robert Ornstein concludes, "Castaneda's experience demonstrates primarily that the Western-trained intellectual, even a 'seeker' is by his culture almost completely unprepared to understand esoteric traditions."²⁸

From the many sources on Native Americans which have become available during the 1970s, I quote a statement by Luther Standing

24. J. ELLUL, *THE TECHNOLOGICAL SOCIETY* (1964).

25. Goodman, *Can Technology Be Humane?* in *WESTERN MAN AND ENVIRONMENTAL ETHICS* 225 (I. Barbour ed. 1973).

26. H. MARCUSE, *ONE-DIMENSIONAL MAN* (1964).

27. T. ROSZAK, *THE MAKING OF A COUNTER-CULTURE* (1969); T. ROSZAK, *WHERE THE WASTELAND ENDS: POLITICS AND TRANSCENDENCE IN POST-INDUSTRIAL SOCIETY* (1972); T. ROSZAK, *UNFINISHED ANIMAL: THE AQUARIAN FRONTIER AND THE EVOLUTION OF CONSCIOUSNESS* (1975); T. ROSZAK, *PERSON/PLANET* (1978).

28. R. ORNSTEIN, *THE MIND FIELD* 105 (1976). The works of Carlos Castaneda have been influential. They include *THE TEACHINGS OF DON JUAN* (1968); *A SEPARATE REALITY* (1971); *JOURNEY TO IXTLAN* (1972); *TALES OF POWER* (1974).

Bear, an Oglala Sioux, from *Touch the Earth* to illustrate the contrast with the modern paradigm of the West:

We do not think of the great open plains, the beautiful rolling hills, and winding streams with tangled growth, as "wild." Only to the white man was nature a "wilderness" and only to him was the land "infested" with "wild" animals and "savage" people. To us it was tame. Earth was bountiful and we were surrounded with the blessings of the Great Mystery. Not until the hairy man from the east came and with brutal frenzy heaped injustices upon us and the families we loved was it "wild" for us. When the very animals of the forest began fleeing from his approach, then it was that for us the "wild west" began.²⁹

A third source of deep ecology is found in the "minority tradition" of Western religious and philosophical traditions. The philosopher George Sessions has claimed that:

[I]n the civilized West, a tenuous thread can be drawn through the Presocratics, Theophrastus, Lucretius, St. Francis, Bruno and other neo-Platonic mystics, Spinoza, Thoreau, John Muir, Santayana, Robinson Jeffers, Aldo Leopold, Loren Eiseley, Gary Snyder, Paul Shepard, Arne Naess, and maybe that desert rat, Edward Abbey. This minority tradition, despite differences, could have provided the West with a healthy basis for a realistic portrayal of the balance and interconnectedness of three artificially separable components (God/Nature/Man) of an untimely seamless and inseparable Whole.³⁰

Sessions, together with Arne Naess and Stuart Hampshire, has seen the philosopher Spinoza as providing a unique fusion of an integrated man/nature metaphysic with modern European science.³¹ Spinoza's ethics is most naturally interpreted as implying biospheric egalitarianism, and science is endorsed by Spinoza as valuable primarily for contemplation of a pantheistic, sacred universe and for spiritual discipline and development. Spinoza stands out in a unique way in opposition to other 17th century philosophers—e.g., Bacon, Descartes, and Leibniz—who were at that time laying the foundations for the technocratic-industrial social paradigm and the fulfillment of the Christian imperative that man *must* dominate and control all nature.

29. L. Standing Bear, in *TOUCH THE EARTH* (T. McLuhan ed. 1971). Among the most significant and original theories of Native Americans and non-human nature see V. DELORIA, *GOD IS RED* (1975); C. MARTIN, *KEEPERS OF THE GAME* (1978); S. STEINER, *THE VANISHING WHITE MAN* (1976).

30. Sessions, *Spinoza and Jeffers on Man in Nature*, 20 *INQUIRY* 481 (1977); G. Sessions, Spinoza, Perennial Philosophy and Deep Ecology (1979) (unpublished paper, Sierra College).

31. S. HAMPSHIRE, *TWO THEORIES OF MORALITY* (1977); S. HAMPSHIRE, *SPINOZA* (1956); Naess, *Spinoza and Ecology*, 7 *PHILOSOPHIA* 45 (1977).

It has been claimed by several writers that the poet-philosopher Robinson Jeffers, who lived most of his life on the California coast-line at Big Sur, was Spinoza's twentieth century "evangelist" and that Jeffers gave Spinoza's philosophy an explicitly ecological interpretation.^{3 2}

Among contemporary European philosophers, the two most influential have been Alfred North Whitehead and Martin Heidegger.^{3 3} In particular, more American philosophers, both those with an interest in ecological consciousness and those interested in contemporary philosophers, are discussing Heidegger's critique of Western philosophy and contemporary Western societies. Because Heidegger's approach to philosophy and language is so different from the language we are accustomed to in American academia, any summary of his ideas would distort the theory he is presenting. The reader is referred to the books and articles on Heidegger cited below.^{3 4}

A fourth source of reference for the deep ecology movement has been the scientific discipline of *ecology*. For some ecology is a science of the "home," of the "relationships between," while for others ecology is a perspective. The difference is important, for ecology as a science is open for co-optation by the engineers, the "technological fixers" who want to "enhance," "manage," or "humanize" the biosphere. At the beginning of the "environmental decade" of the 1970s, two ecologists issued a warning against this approach:

Even if we dispense with the idea that ecologists are some sort of environmental engineers and compare them to the pure physicists who provide scientific rules for engineers, do the tentative understandings we have outlined (in their article) provide a sound basis for action by those who would manage the environment? It is self-evident that they do not. . . . We submit that ecology as such prob-

32. Sessions, *supra* note 30. See also A. COFFIN, ROBINSON JEFFERS: POET OF INHUMANISM (1971); B. HOTCHKISS, JEFFERS: THE SIVIASTIC VISION (1975); R. Brophy, Robinson Jeffers, Metaphysician of the West (unpublished paper, dept. of English, Long Beach State University, Long Beach, California).

33. J. COBB, JR., IS IT TOO LATE? A THEOLOGY OF ECOLOGY (1972); C. HARTSHORNE, BEYOND HUMANISM: ESSAYS IN THE PHILOSOPHY OF NATURE (1937); A. WHITEHEAD, SCIENCE AND THE MODERN WORLD, chs. 5, 13 (1925); Griffin, *Whitehead's Contribution to the Theology of Nature*, 20 BUCKNELL REV. 95 (1972).

34. M. HEIDEGGER, THE QUESTION CONCERNING TECHNOLOGY AND OTHER ESSAYS (W. Lovitt trans. 1977); G. STEINER, MARTIN HEIDEGGER (1979); V. VYICINAS, EARTH AND GODS: AN INTRODUCTION TO THE PHILOSOPHY OF MARTIN HEIDEGGER (1961). On the approach taken by Heidegger and the contemporary ecological consciousness, see D. LACHAPPELLE, EARTH WISDOM (1978) (Chapter 9, "Martin Heidegger and the Quest for Being"). The writings of Michael Zimmerman on Heidegger are also useful, including his *Beyond "Humanism": Heidegger's Understanding of Technology*, 12 LISTENING 74 (1977). See also Zimmerman, *Marx and Heidegger on the Technological Domination of Nature*, 12 PHILOSOPHY TODAY 99 (Summer 1979).

ably cannot do what many people expect it to do; it cannot provide a set of "rules" of the kind needed to manage the environment.³⁵

Donald Worster, at the conclusion of his scholarly and brilliant history of ecological thinking in the West, is of the same opinion.³⁶

But ecologists do have an important task in the deep ecology movement. They can be *subversive* in their perspective. For human ecologist Paul Shepard, "the ideological status of ecology is that of a resistance movement" because its intellectual leaders such as Aldo Leopold challenge the major premises of the dominant social paradigm.³⁷ As Worster in his history of ecology points out:

[A]ll science, though primarily concerned with the "Is," becomes implicated at some point with the "Ought." The continuing environmental crisis makes it obvious that man's moral visions and utopias are little more than empty enterprise when they depart too far from nature's ways. This is the major lesson we have learned from studying the effects of men's hands on environment. An ecological ethic of interdependence, man in nature may be the outcome of a dialectical relation between scientist and ethicist.³⁸

A final source of inspiration for the deep, long-range ecology movement is those artists who have tried to maintain a sense of place in their work.³⁹ Some artists, standing against the tide of mid-century pop art, mini-malist art, and conceptual art have shown remarkable clarity and objectivity in their perception of nature. This spiritual-mystical objectivism is found, for example, in the photographs of Ansel Adams.⁴⁰ For these artists, including Morris Graves, who introduced concepts of Eastern thought (including Zen Buddhism) into his art, and Larry Gray, who reveals the eloquent light of revelation of nature in his skylscapes, men reaffirm their spiritual kinship with the eternity of God in nature through art.⁴¹

35. Murdoch & Connell, *All About Ecology* in WESTERN MAN AND ENVIRONMENTAL ETHICS (I. Barbour ed. 1973).

36. DONALD WORSTER, epilogue, NATURE'S ECONOMY (1977). The importance of the thinking of ecologist Aldo Leopold should be emphasized. There are many articles interpreting Leopold's message. See e.g., Jung, *The Splendor of the Wild: Zen and Aldo Leopold*, 29 ATLANTIC NATURALIST 5 (1974).

37. Shepard, *Introduction: Man and Ecology*, in THE SUBVERSIVE SCIENCE 1 (P. Shepard & D. McKinley eds. 1969). See also Everndon, *Beyond Ecology*, 263 N. AM. REV. 16 (1978).

38. D. WORSTER, *supra* note 36.

39. Huth, *Wilderness and Art*, in WILDERNESS, AMERICA'S LIVING HERITAGE 60 (D. Brower ed. 1961); Shepard, *A Sense of Place* 262 N. AM. REV. 22 (1977).

40. Adams, *The Artist and the Ideals of Wilderness*, in WILDERNESS, AMERICA'S LIVING HERITAGE 49 (D. Brower ed. 1961).

41. M. GRAVES, THE DRAWINGS OF MORRIS GRAVES (1974).

THEMES OF DEEP ECOLOGY

I indicated in preceding pages that many thinkers are questioning some of the premises of the dominant social paradigm of the modern societies. They are attempting to extend on an appropriate metaphysics, epistemology, and ethics for what I call an "ecological consciousness." Some of these writers are very supportive of reformist environmental social movements, but they feel reform while necessary is not sufficient. They suggest a new paradigm is required and a new utopian vision of "right livelihood" and the "good society." Utopia stimulates our thinking concerning alternatives to present society.⁴² Some persons, such as Aldo Leopold, have suggested that we begin our thinking on utopia not with a statement of "human nature" or "needs of humans" but by trying to "think like a mountain." This profound extending, "thinking like a mountain," is part and parcel of the phenomenology of ecological consciousness.⁴³ Deep ecology begins with Unity rather than dualism which has been the dominant theme of Western philosophy.⁴⁴

Philosopher Henryk Skolimowski, who has written several papers on the options for the ecology movements, asserts:

[W]e are in a period of ferment and turmoil, in which we have to challenge the limits of the analytical and empiricist comprehension of the world as we must work out a new conceptual and philosophical framework in which the multitude of new social, ethical, ecological, epistemological, and ontological problems can be accommodated and fruitfully tackled. The need for a new philosophical framework is felt by nearly everybody. It would be lamentable if professional philosophers were among the last to recognize this.⁴⁵

Numerous other writers on deep ecology, including William Ophuls, E. F. Schumacher, George Sessions, Theodore Roszak, Paul Shepard, Gary Snyder, and Arne Naess, have in one way or another

42. M. SIBLEY, *NATURE AND CIVILIZATION: SOME IMPLICATIONS FOR POLITICS* 251 (1977) (chapter 7, "Nature, Civilization and the Problem of Utopia"). Sibley makes a case for more utopian visions from contemporary intellectuals. Although many people have been revolted by the visions of Marxism and Fascist dictatorships, "the student of politics has an obligation not only to explain and criticize but also to propose and explicate ideals. We need more utopian visions, not fewer. For if politics be that activity through which man seeks consciously and deliberately to order and control his collective life, then one of the salient questions in all politics must be: Order and control for what ends? Without utopian visions these ends cannot be stated as wholes; and even a discussion of means and strategies will be clouded unless ends are at least relatively clear." *Id.* at 47.

43. Jung, *To Save the Earth* 8 *PHILOSOPHY TODAY* 108 (1975).

44. Sessions, *supra* note 30.

45. Skolimowski, *Ecology Movement Re-examined*, 6 *ECOLOGIST* 298 (1976); Skolimowski, *Options for the Ecology Movement*, 7 *ECOLOGIST* 318 (1977).

called for a new social paradigm or a new environmental ethic. We must "think like a mountain" according to Aldo Leopold. And Rob-erick Nash says:

Do rocks have rights? If the time comes when to any considerable group of us such a question is no longer ridiculous, we may be on the verge of a change of value structures that will make possible measures to cope with the growing ecologic crisis. One hopes there is enough time left.⁴⁶

Any attempt to create artificially a "new ecological ethics" or a "new ontology of man's place in nature" out of the diverse strands of thought which make up the deep ecology movement is likely to be forced and futile. However, by explicating some of the major themes embodied in and presupposed by the intellectual movement I am calling deep ecology, some groundwork can be laid for further discussion and clarification.⁴⁷ Following the general outline of perennial philosophy, the order of the following statements summarizing deep ecology's basic principles are metaphysical-religious, psychological-epistemological, ethical, and social-economic-political. These concerns of deep ecology encompass most of reformist environmentalism's concerns but subsume them in its fundamental critique of the dominant paradigm.

According to deep ecology:

(1) *A new cosmic/ecological metaphysics which stresses the identity (I/thou) of humans with non-human nature is a necessary condition for a viable approach to building an eco-philosophy.* In deep ecology, the wholeness and integrity of person/planet together with the principle of what Arne Naess calls "biological equalitarianism" are the most important ideas. Man is an integral part of nature, not over or apart from nature. Man is a "plain citizen" of the biosphere, not its conqueror or manager. There should be a "democracy of all God's creatures" according to St. Francis; or as Spinoza said, man is a "temporary and dependent mode of the whole of God/Nature." Man flows with the system of nature rather than attempting to control all of the rest of nature. The hand of man lies lightly on the land. Man does not perfect nature, nor is man's primary duty to make nature more efficient.⁴⁸

(2) *An objective approach to nature is required.* This approach is found, for example, in Spinoza and in the works of Spinoza's twen-

46. Nash, *Do Rocks Have Rights*, 10 CENTER MAGAZINE 2 (1977).

47. Skolimowski, *supra* note 45.

48. J. NEEDLEMAN, A SENSE OF THE COSMOS 76-77, 100-02 (1975).

tieth century disciple, Robinson Jeffers. Jeffers describes his orientation as a philosophy of "inhumanism" to draw a sharp and shocking contrast with the subjective anthropocentrism of the prevailing humanistic philosophy, art, and culture of the 20th century West.^{4 9}

(3) *A new psychology is needed to integrate the metaphysics in the mind field of post-industrial society.* A major paradigm shift results from psychological changes of perception. The new paradigm requires rejection of subject/object, man/nature dualisms and will require a pervasive awareness of total intermingling of the planet earth. Psychotherapy seen as adjustment to ego-oriented society is replaced by a new ideal of psychotherapy as spiritual development.^{5 0} The new metaphysics and psychology leads logically to a posture of biospheric egalitarianism and liberation in the sense of autonomy, psychological/emotional freedom of the individual, spiritual development for *Homo sapiens*, and the right of other species to pursue their own evolutionary destinies.^{5 1}

(4) *There is an objective basis for environmentalism, but objective science in the new paradigm is different from the narrow, analytic conception of the "scientific method" currently popular.* Based on "ancient wisdom," science should be both objective and participatory without modern science's subject/object dualism. The main value of science is seen in its ancient perspective as contemplation of the cosmos and the enhancement of understanding of self and creation.^{5 2}

(5) *There is wisdom in the stability of natural processes unchanged by human intervention.* Massive human-induced disruptions of ecosystems will be unethical and harmful to men. Design for human settlement should be with nature, not against nature.^{5 3}

(6) *The quality and human existence and human welfare should not be measured only by quantity of products.* Technology is returned to its ancient place as an appropriate tool for human welfare, not an end in itself.^{5 4}

(7) *Optimal human carrying capacity should be determined for the planet as a biosphere and for specific islands, valleys, and continents.* A drastic reduction of the rate of growth of population of

49. Sessions, *supra* note 30. Spinoza is one of the important philosophers for deep ecology. The new translations of Spinoza's work are absolutely essential for understanding his thought. See P. WEINPAHL, *THE RADICAL SPINOZA* (1979).

50. R. ORNSTEIN, *supra* note 28.

51. Sessions, *supra* note 30; G. SNYDER, *THE OLD WAYS* (1977).

52. CAPRA, *supra* note 20; Sessions, *supra* note 30; NEEDLEMAN, *supra* note 48.

53. Commoner, *supra* note 11; McHarg, *supra* note 12.

54. NEEDLEMAN, *supra* note 48; Sessions, *supra* note 30.

Homo sapiens through humane birth control programs is required.^{5 5}

(8) *Treating the symptoms of man/nature conflict, such as air or water pollution, may divert attention from more important issues and thus be counter-productive to "solving" the problems.* Economics must be subordinate to ecological-ethical criteria. Economics is to be treated as a small sub-branch of ecology and will assume a rightfully minor role in the new paradigm.^{5 6}

(9) *A new philosophical anthropology will draw on data of hunting/gathering societies for principles of healthy, ecologically viable societies.* Industrial society is not the end toward which all societies should aim or try to aim.^{5 7} Therefore, the notion of "re-inhabiting the land" with hunting-gathering, and gardening as a goal and standard for post-industrial society should be seriously considered.^{5 8}

(10) *Diversity is inherently desirable both culturally and as a principle of health and stability of ecosystems.*^{5 9}

(11) *There should be a rapid movement toward "soft" energy paths and "appropriate technology" and toward lifestyles which will result in a drastic decrease in per capita energy consumption in advanced industrial societies while increasing appropriate energy in decentralized villages in so-called "third world" nations.*^{6 0} Deep ecologists are committed to rapid movement to a "steady-state" or "conservor society" both from ethical principles of harmonious integration of humans with nature and from appreciation of ecological realities.^{6 1} Integration of sophisticated, elegant, unobtrusive, ecologically sound, appropriate technology with greatly scaled down, diversified, organic, labor-intensive agriculture, hunting, and gathering is another goal.^{6 2}

(12) *Education should have as its goal encouraging the spiritual development and personhood development of the members of a com-*

55. E. SCHUMACHER, *SMALL IS BEAUTIFUL, ECONOMICS AS IF PEOPLE MATTERED* (1973). See as an example of this argument P. EHRLICH, A. EHRLICH & J. HOLDREN, *ECOSCIENCE* (1977).

56. W. OPHULS, *ECOLOGY AND THE POLITICS OF SCARCITY* (1977). SCHUMACHER, *supra* note 55.

57. S. STEINER, *supra* note 29; SNYDER, *supra* note 51; P. SHEPARD, *THE TENDER CARNIVORE AND THE SACRED GAME* (1974).

58. P. BERG, *REINHABITING A SEPARATE COUNTRY* (1978).

59. R. DASMANN, *A DIFFERENT KIND OF COUNTRY* (1968); N. MYERS, *THE SINKING ARK: A NEW LOOK AT THE PROBLEMS OF DISAPPEARING SPECIES* (1979).

60. R. DASMANN, *ECOLOGICAL PRINCIPLES FOR ECONOMIC DEVELOPMENT* (1973).

61. W. OPHULS, *supra* note 56. On the "steady-state" see *TOWARD A STEADY-STATE ECONOMY* (H. Daly ed. 1973).

62. E. SCHUMACHER, *supra* note 55.

munity, not just training them in occupations appropriate for oligarchic bureaucracies and for consumerism in advanced industrial societies.⁶³

(13) *More leisure as contemplation in art, dance, music, and physical skills will return play to its place as the nursery of individual fulfillment and cultural achievement.*⁶⁴

(14) *Local autonomy and decentralization of power is preferred over centralized political control through oligarchic bureaucracies. Even if bureaucratic modes of organization are more "efficient," other modes of organization for small scale human communities are more "effective" in terms of the principles of deep ecology.*⁶⁵

(15) *In the interim, before the steady-state economy and radically changed social structure are instituted, vast areas of the planet biospheres will be zoned "off limits" to further industrial exploitation and large-scale human settlement; these should be protected by defensive groups of people. One ecologist has called such groups a "world wilderness police."*⁶⁶

COMPETING POLITICAL SOLUTIONS TO THE CONTINUING ENVIRONMENTAL CRISIS

Major theorists in both reformist environmentalism and deep ecology are of the opinion that the environmental crisis is continuing and becoming more severe. Reformist environmentalists continue to argue, however, that the problems can be solved within the dominant social paradigm. For example, they advocate redefining some private property rights and responsibilities.⁶⁷ Reformers advocate passing more laws to regulate polluters or provide incentives to "clean up the mess."⁶⁸ Some reformers seek to extend the idea of *legal rights* to

63. T. ROSZAK, *supra* note 27.

64. J. HUIZINGA, *HOMO LUDENS: THE PLAY ELEMENT IN CULTURE* (1950). Collier, *The Fullness of Life Through Leisure*, in *THE SUBVERSIVE SCIENCE* 416 (P. Shepard & D. McKinley eds. 1969).

65. W. OPHULS, *supra* note 56; *THE SUSTAINABLE SOCIETY* (D. Pirages ed. 1977); P. BERG & R. DASMANN, *REINHABITATING A SEPARATE COUNTRY* (1978).

66. *Editorial*, *GREENPEACE CHRONICLES* 3 (March, 1979), I, No. 14. On the suggestion for a "world wilderness police" see Iltis, *Wilderness, can man do without it?*, in *RECYCLE THIS BOOK: ECOLOGY, SOCIETY AND MAN* 167 (J. Allan & A. Hanson eds. 1972). On "earth festivals" and getting in touch with nature again, see D. LaCHAPELLE, *supra* note 34.

The world wilderness police is a defensive force. The defense of nature against despoilers is the goal. I think the prototype of this policeman is Morel, the hero of Romain Gary's novel *THE ROOTS OF HEAVEN* (1958). Only after all appeals to the United Nations, to all nations, to all reasonable men have failed does Morel turn to force of arms to defend the elephants of central Africa from poachers.

67. *MANAGING THE COMMONS* (G. Hardin & J. Baden eds. 1977).

68. J. PASSMORE, *MAN'S RESPONSIBILITY FOR NATURE* (1974).

the natural environment, broadening common-law precedents to include a legal recognition of every person's right to a habitable environment.⁶⁹ Some reformist writers argue that incremental changes in laws and social institutions is the most that can be done at the present point in developing our political traditions to include some idea of environmental quality.⁷⁰ Even a leading ecologist such as Eugene Odum does not suggest that a change in metaphysics or epistemology is necessary,⁷¹ and the most radical "blueprints" of a "conservator society," such as the Friends of the Earth book *Progress as if Survival Mattered* and Amory Lovins' treatise on soft energy paths as an alternative to reliance on nuclear and coal-fired electric generation, do not base their political-economic programs on any new metaphysics or epistemology nor call for a religious conversion.⁷² Neither reformists nor deep ecologists call for violent overthrow of the established institutions or governments.

Reformist environmentalists such as Bond argue that visionaries are of limited use in battles for power, and that "as long as the discussion remains at the theoretical level it runs the risk of being both unrealistic and irrelevant as the basis of an effective environmental ethic."⁷³ Reformers claim they are "realistic" and "pragmatic" and suggest "extension, elaboration and refinement of existing social and political traditions and attitudes, which even if not now dominant, are not beyond the realm of our common experience" and would best serve the environmentalist cause.⁷⁴

Even some reformers are suggesting, however, at the beginning of the 1980s, that more dramatic action must be taken to change society and protect the environment. An editorial in the *Greenpeace Chronicles* in 1979 says:

[H]umanistic value systems must be replaced by supra-humanistic values that bring all plant and animal life into the sphere of legal, moral and ethical consideration. And in the long run, whether anyone likes it or not, force will eventually have to be brought to bear against those who would continue to desecrate the environment.⁷⁵

69. J. SAX, *DEFENDING THE ENVIRONMENT: A STRATEGY FOR CITIZEN ACTION* (1971).

70. Bond, *Salvationists, Utilitarians, and Environmental Justice*, 6 *ALTERNATIVES* 31 (Spring 1977).

71. E. ODUM, *FUNDAMENTALS OF ECOLOGY* 516 (2d ed. 1973).

72. *PROGRESS AS IF SURVIVAL MATTERED* (D. Brower ed. 1977). See also, W. LEISS, *THE LIMITS TO SATISFACTION* (1978); A. LOVINS & J. PRICE, *NON-NUCLEAR FUTURES: THE CASE FOR AN ETHICAL ENERGY STRATEGY* (1975).

73. Bond, *supra* note 70, at 33.

74. R. CAHN, *FOOTPRINTS ON THE PLANET* (1978).

75. Hunter, *editorial*, *GREENPEACE CHRONICLES* 3, No. 15 (April 1979). Greenpeace Foundation has sponsored confrontations with France over atmospheric testing of atomic

As to the tactics of ecological resistance, peaceful but direct confrontations with whalers (by Greenpeace Foundation) and at nuclear power plants (by a number of anti-nuclear groups) have been increasing in frequency during the 1970s.⁷⁶

Theorists of deep ecology argue that the best of reform environmentalism can be incorporated into deep ecology.⁷⁷ However, just changing laws to control air and water pollution, or providing procedures for safety of nuclear reactors, or setting aside small areas of land as "designated wilderness areas" is not enough. Indeed, in treating the symptoms of the malaise some of these actions may be counter-productive. At best they are temporary, limited stop-gap measures attempting to handle the problem of the environment within the values of the dominant social paradigm.

Although deep ecology requires fundamental change, the movement does not have a fully articulated political-economic program, and many theorists would consider such a program to be sterile and inappropriate at this time. Instead, most deep ecologists have limited themselves to critiques of the dominant social paradigm and to suggesting alternative visions of man-in-nature without specifying how these visions may be realized. This is the case with Gary Snyder's "Four Changes," which was written at the beginning of the "environmental decade" of the 1970s and remains one of the most cogent *political* statements of deep ecology.⁷⁸

At the end of the 1970s, writers such as Theodore Roszak and Raymond Dasmann were making specific recommendations for changes in lifestyles. Both Roszak and Dasmann prefer small-scale communities. Roszak suggests revival of the "household economy." He links the search for "personhood" with the development of ecological consciousness.⁷⁹ Dasmann elaborates on the process of "re-inhabiting" landscapes which have been exploited and degraded by previous generations of humans. He wants a decentralized, small-scale, caring community.

How can such "creative disintegration" be brought about? Some writers, such as Peter Berg and Raymond Dasmann, have suggested exemplary roles for the post-industrial society. Taking inspiration

devices in the South Pacific, with the Russian whaling fleet over the killing of whales and with seal killers on islands in the St. Lawrence River. See also R. RODDEWIG, GREEN BANS, THE BIRTH OF AUSTRALIAN ENVIRONMENTAL POLITICS (1978).

76. Barkan, *Strategic, tactical and organizational dilemmas of the protest movement against nuclear power*, 27 SOCIAL PROB. 19 (1979).

77. Naess, *supra* note 1.

78. G. Snyder, *Four Changes*, in THE ENVIRONMENTAL HANDBOOK 323 (G. Debell ed. 1970).

79. ROSZAK, *supra* note 27.

from Native Americans who lived in relative comfort and with plentiful food in northwestern California for many thousands of years before the invasions of white men, Berg and Dasmann have refined the idea of the "future primitive," of "living-in-place." They develop a theory of "reinhabitation" whereby men undertake "activities and evolving social behavior that will enrich the life of the place, restore its life-supporting systems, and establish an ecologically and socially sustainable pattern of existence within it."⁸⁰ Dasmann is a human ecologist whose career has spanned the range from university professor to international bureaucrat. He concludes, after spending much time in international travel, that his experiences led him to lose faith in governments and laws and institutions, but restored his faith in the individual person. Changing persons, he suggests, is more important than changing governments in the 1980s.⁸¹

In contrast to leading exemplary lives, other deep ecologists argue that the appropriate tactic is to join those reformers who would pursue "ecological resistance," to help confront, confound, and dramatize the ecological crisis with direct action. John Rodman calls ecological resistance

an affirmation of the integrity of a naturally diverse self-and-world. Its meaning is not exchanged by its success or failure in the linear sequence of events, since its meaning lies also in the multi-dimensional depth of an act in one realm that simultaneously affirms a principle valid in many realms. Ecological resistance thus has something of the character of a ritual action whereby one aligns the self with the ultimate order of things.⁸²

In sum, the paradigm of deep ecology is revolutionary in its metaphysics, epistemology, and cosmology, but deep ecologists do not seek to overthrow governments by force of arms or to issue anything like a comprehensive, all-embracing political program for bringing about the new order.⁸³ The contemporary deep ecology movement seems to be what Robert Nisbet has called a "withdrawal and renewal" movement such as has periodically arisen in Western society since the fall of the Roman Empire. In this discussion of different types of communities, Nisbet wrote of the ecological community that:

80. BERG & DASMAN, *supra* note 65.

81. Dasmann, *Conservation, Counter-culture, and Separate Realities* 1 ENV'T'L CONSERVATION 133 (1974).

82. Rodman, *Theory and Practice in the Environmental Movement: Notes Towards an Ecology of Experience*, in THE INTERNATIONAL CULTURAL FOUNDATION, THE SEARCH FOR ABSOLUTE VALUES IN A CHANGING WORLD 54 (1978).

83. Many writers on deep ecology have been personally involved in the practical politics of reformist environmentalism.

It would be a mistake, I believe, to refer to this pattern of the search for community as politically revolutionary . . . But there can be no questions of the inherent radicalism of this type of community. Even so, revolution is not its essential character; for whereas the overriding objective of revolutionary action is the overthrow and capture of an existing social order, with immediate forced adaptation of human behavior to revolutionary power and design, the objectives of the action and thought with which [the ecological community] is concerned are, with rare exceptions, peaceful, not concerned with capture and forced adaptation, noncoercive and seeking fulfillment through example or vision rather than through revolutionary force and centralization of power. The uncovering of those autonomous and free interdependences among human beings which are believed to be natural to man and his morality: this—not the violent capture of government, army, and police—is the most fundamental aim of the tradition of community in Western social thought I call ecological.⁸⁴

There is no political party of “deep ecology,” no cadre of political revolutionaries. This is not an appropriate approach for deep ecologists. No frontal confrontations with reformist environmentalists or with the dominant social/political order is desired. It would be counter-productive by making people more defensive of their ideological position. Deep ecology is not an attempt to add one more *ideology* in the crowded field of modern ideologies. Deep ecologists are questing for ways to liberate and cultivate the ecological consciousness. From ecological consciousness will naturally flow an ecological resistance. John Rodman uses the concept of “receptive capacity” from Herbert Marcuse to express this questing for ecological consciousness and the liberating of nature. As Rodman says, however:

[T]he “receptive” capacity by itself does not lead to action. Action is made possible by the recognition that, beyond the perception of otherness lies the perception of psyche, polity, and cosmos as metaphors of one another, and that the ancient dictum to “live according to Nature” now translates into Thoreau’s maxim, “Let your life be a counter friction to stop the machine.”⁸⁵

As their contribution to the development of ecological consciousness, deep ecologists seem to prefer to act as exemplary models and to teach through acting. Teaching is a process of conserving in itself

84. R. Nisbet, *The Ecological Community*, THE SOCIAL PHILOSOPHERS: COMMUNITY AND CONFLICT IN WESTERN THOUGHT 319 (1973).

85. Rodman, *The liberation of nature?*, 20 INQUIRY 83 (1977). P. WEINPAHL, THE RADICAL SPINOZA (1979).

and of cultivating one's own ecological consciousness and the consciousness of others. Some deep ecologists, such as Gary Snyder, advocate taking roles which are not highly valued in society. As Alan Watts suggests in his *Psycho-therapy East and West*, if the teacher wants to change the perception, the world view, the "basic assumptions" of ego, it is best not to confront, challenge directly, assault, or preach at Ego. Ego will become hostile, fearful, and rejecting when directly confronted. Watts suggests the model of Orpheus,

the priest, the mouthpiece of the gods, who tames both men and beasts by the allure and magic of his harp. His method is not that of the preacher or the politician but that, in its wildest sense, of the artist. For in the value system of civilization, of compulsive survival, the artist is irrelevant. He is seen as a mere decorator who entertains us while we labor. As strolling minstrel, player, clown, or poet he can pass everywhere because no one takes him seriously.⁸⁶

The poet-philosopher Gary Snyder has assumed this role in the deep ecology movement. He lives an exemplary life of "re-inhabitation" on a mountain near Grass Valley, California, and travels here and there reading his poetry and giving talks. He has written of the revival of Coyote Man—the trickster, the man/beast of Native Americans who appears again and again in stories within stories of the oral traditions of many Native American nations. The parables and stories of Coyote man are frequently unexpected in their endings. There is a message within the story that is not obvious—subtle, yet profound. In his essay on Coyote, Snyder says:

Coyote . . . was interesting to me and some of my colleagues because he spoke to us of place, because he clearly belonged to the place and became almost like a guardian, a protector spirit. The other part of it has to come out of something inside of us. The fascination with the trickster. A world fold image of the trickster, suppressed or altered in some cultures; more clearly developed in others. For me I think the most interesting psychological things about the trickster, and what drew me to it for my own personal reasons was that there wasn't a clear dualism of good and evil established there, that he clearly manifested benevolence compassion, help to human beings, something, and had a certain dignity; and on other occasions he was the silliest utmost fool; the overriding picture is old Coyote Man, he's just always traveling along doing the best he can. . . . So, when the Coyote figure comes into modern American poetry, it is not just for a sense of place. It is also a play on the world-wide myth, tale, and motif storehouse. Poetry has always

86. A. WATTS, *PSYCHOTHERAPY EAST AND WEST* 182 (Vintage ed. 1975).

done this—drawing out, recreating subtly altering for each time and place the fundamental images.⁸⁷

SOCIAL ORGANIZATION OF DEEP ECOLOGY

While reformist environmentalism is content to work with the bureaucracies and legislatures of modern societies and within large-scale voluntary environmental organizations such as the Sierra Club, Audubon, etc., deep ecologists harbor a deep distrust of big organizations.⁸⁸ Indeed, deep ecologists see that during the 1970s reform environmentalists have spent great amounts of time and resources maintaining the “images” of their organizations and that political leaders view environmentalists as “just another constituency” in the balancing of interest groups.

As a “constituency,” reformist environmentalists had “push” during the early 1970s to obtain normative changes—wilderness designations, standards for air and water quality, land use legislation, nuclear power plant safety legislation, etc. The leaders of these voluntary associations negotiated with leaders of unions, oil companies, etc., for “compromise” legislation. New bureaucracies, such as the Environmental Protection Agency, were established in the United States to implement some environmental legislation. Many commentators, of course, recognize there has been and is unequal power between environmental associations and oligarchic business organizations. John Quarles in his excellent analysis of the operations of the Environmental Protection Agency wrote:

Left alone, our government will always not look after the public interest. In the environmental area there is a natural, built-in imbalance. Private industry, driven by its own profit incentives to exploit and pollute our natural resources uses its inherent advantage to exert political pressure to resist environmental requirements. The machinations of industry explain at least in part why the abuses of pollution become so severe before steps are taken to establish controls.⁸⁹

Even though the reformist environmental movements have been remarkably free from the bitter fights between leaders found in

87. G. SNYDER, *supra* note 51, at 83, 84, especially his essays “Re-inhabitation” and “The incredible survival of coyote.” For a critical explanation of Snyder’s work before the publication of *THE OLD WAYS* see B. STEUDING, GARY SNYDER (1976).

88. T. ROSZAK, *PERSON/PLANET* (1978). Roszak’s thesis that “bigness” in government, corporation, size of cities, etc., is one of the causes of our contemporary problems had inherently a solution in “appropriate scale,” in local community, small groups, concern by a person with a particular place.

89. J. QUARLES, *CLEANING UP AMERICA* 174 (1976). See also Train, *The Environment Today*, 201 *SCI.* 320 (1978).

many other social movements, and even though there is a constant process of building coalitions between reformist groups over legislation of common concern (such as clean air and water legislation, Alaska national interest lands legislation, etc.), these reformist groups cannot equally compete dollar for dollar and lobbyist for lobbyist with any of the major industries (such as the oil industry). In some of these groups, as well as in government agencies dealing with environmental concerns, there has been a tendency for a cadre of professional environmentalists to develop. The Sierra Club and other large reformist organizations replicate the staff of government agencies, with their own energy experts, urban transportation specialists, wilderness experts, etc.⁹⁰

Some deep ecology writers warn that such a trend toward "professional environmentalists" is detrimental to radical transformation of society. Raymond Dasmann calls these people "eight to five environmentalists" and says:

The traditional conservationist narrows his vision down to those wild species or areas that are of interest or concern to him. . . . [He] probably likes to be respectable and acceptable to governments and to the Establishment, and welcome in good society. He does not like to raise embarrassing issues, since he feels dependent upon the support of rich people or the government. He certainly does not question the System—the political/social/economic basis on which his country operates. He may get along well as a fellow professional or club member with those who are destroying most of the natural world, since his demands are limited, and of course he recognizes "economic necessity," "the needs of the real world."⁹¹

Being distrustful of hierarchical-bureaucratic or charismatic-fascistic organizations and models (such as People's Temple), deep ecologists have formed loosely organized social networks. These social networks can be as extensive as the limits of shared communications and can take a variety of forms. For example, a "tutorial college" modeled after medieval universities, is now offering experiential learning in "the new natural philosophy."⁹² Some deep ecologists exchange ideas at conferences such as the one on the rights of nonhuman nature held at Claremont, California, in 1974. One eco-

90. W. DEVALL, *THE GOVERNING OF A VOLUNTARY ORGANIZATION: OLIGARCHY AND DEMOCRACY IN THE SIERRA CLUB* (1970).

91. Raymond Dasmann, Horace Albright Memorial Lecture, XVI, University of California, Berkeley (1976). On the relation of scientists in university settings and support for the dominant social paradigm see Livingston & Mason, *Ecological Crisis and the Autonomy of Science in Capitalist Society: A Canadian Case Study*, 8 *ALTERNATIVES* 3 (1979).

92. Catalogue on New Natural Philosophy, International College, Los Angeles, California. See also Carey & Abbs, *Proposal for a New Ecological College*, 7 *THE ECOLOGIST* 56 (1977).

philosopher, George Sessions of Sierra College in Rocklin, California, has published, irregularly, an ecophilosophy newsletter for those reading and writing in ecophilosophy. The first issue was in April 1976, the most recent in May 1979. Some conferences and workshops, such as the "Reminding" conference at Dominican College in San Rafael, California, in June 1979, attract some eco-philosophers who share ideas with each other.

Much of the intellectual ferment which makes up deep ecology is found in articles published in journals such as *Inquiry*, *Environmental Ethics* and the occasionally published *Eco-philosophy Newsletter*. Only within the past two years have major books been published which may be as important for deep ecology perspectives as Rachel Carson's *Silent Spring* was for reformist environmentalism during the 1960s. In particular, David Ehrenfeld's *The Arrogance of Humanism* (1979) and John Lovelock's *Gaia* (1979) may be such books.

At the end of the 1970s, many articles are being written on the possibility of an environmental ethic, and Robert Cahn subtitles his review of environmentalism in the 1970s "a search for an environmental ethic" in his *Footprints on the Planet* (1978).

Articles utilizing deep ecology perspectives did not appear during the 1970s in periodicals published by major reformist environmental groups such as the Sierra Club and the National Audubon Society. Deep ecologists are concerned with developing appropriate approaches for discussions with leaders of environmental organizations.

Conferences and meetings, such as the national conference on philosophy sponsored by Reminding in San Rafael, California, in June 1979 bring together some persons interested in cultivating deep ecological consciousness.⁹³

Social networks among deep ecologists are forming but there is no formal organization with a name. There are some attempts among social scientists to suggest a new paradigm for the "environmental" social scientists, but the positivistic orientations of social science in America make it difficult to obtain understanding for ecological consciousness among American social scientists.⁹⁴ Social scientists have

93. An early conference on deep ecology was titled, "The Rights of Non-Human Nature" (An invitational conference held at Claremont, California, April 18-20, 1974). Sponsored by Pitzer College, The School of Theology at Claremont and National Audubon Society. Speakers included John Cobb, Jr., Vine Deloria, Jr., Joel Feinberg, Garrett Hardin, Charles Hartshorne, William Leiss and John Lilly.

94. For a critique of positivist science see Nielsen, *Some theses in search of an argument: reflections on Habermas*, 69 NAT. FORUM 27 (1979). See also, Naess, *Notes on the methodology of normative systems*, in 10 METHODOLOGY & SCIENCE 64 (1977). On the development of an environmental paradigm in sociology see Dunlap & Catton, Jr., *Environmental Sociology: a Framework for Analysis*, in 1 PROGRESS IN RESOURCE MANAGEMENT AND ENVIRONMENTAL PLANNING 57 (T. O'Riordan & R. D'Arge eds. 1979).

tended to pigeonhole reformist environmentalism as "just another social movement" active in the spectrum of interest-group politics in the "liberal" state, as Theodore Lowi calls contemporary American politics.⁹⁵ Deep ecology is not just another interest group representing just another ideology.

In sum, then, the role of deep ecology in contemporary society is liberating, transforming, questing. There is Utopia in deep ecology, a Utopia based not on man's continued and intensified conquest or domination of nonhuman nature but based on a questing for self-realization.⁹⁶

In his theory of "the coming of post-industrial society," sociologist Daniel Bell suggests that Utopia is a vision of the most vanguard prophets and intellectuals of an era. He writes:

Inevitably, a post-industrial society gives rise to a new Utopianism, both engineering and psychedelic. . . . Utopia has always been conceived as a design of harmony and perfection in the relations between men. In the wisdom of the ancients, Utopia was a fruitful impossibility, a conception of the desirable which men should always strive to attain but which, in the nature of things, could not be achieved. And yet, by its very idea, Utopia would serve as a standard of judgment on men, an ideal by which to measure the end. The modern *hubris* has sought to cross that gap and embody the ideal in the real; and in the effort the perspective of the ideal has become diminished and the idea of Utopia has become tarnished. Perhaps it would be wiser to return to the classic conception.⁹⁷

Deep ecology is liberating ecological consciousness. The writers I have cited in this paper provide radical critiques of modern society and of the dominant values of this society. They also provide, or some of them do, a profound Utopian alternative. The elaborating of or deepening of ecological consciousness is a continuing process. The goal is to have action and consciousness as one. But the development of ecological consciousness is seen as prior to ecological resistance in many of the writings cited. This ecological consciousness may not be very well articulated except by intellectuals who are in the business of verbalizing. But they, as much as anyone, realize the limitation of just verbalizing. Consciousness is *knowing*. From the perspective of deep ecology, ecological resistance will naturally flow from and with a developing ecological consciousness.

95. T. LOWI, *THE END OF LIBERALISM* (1969).

96. On Spinoza's theory of "self-realization" versus "ego-gratification" as the goal of society see P. WEINPAHL, *supra* note 49. See also Naess, *The place of joy in a world of fact*, 258 N. AM. REV. 53 (Summer 1973).

97. D. BELL, *THE COMING OF POST-INDUSTRIAL SOCIETY* 488 (1976).