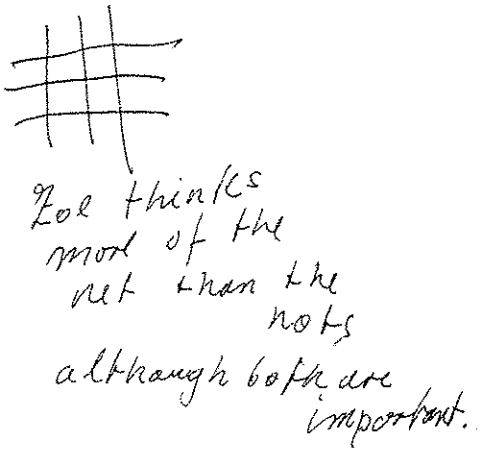
down, what with resurgent nationalism, racism, violence both random and organized, and increasing social and economic inequality. There are whole nations for whom daily life is an ongoing disaster. I still stand by the basics of "Four Changes."

—Gary Snyder
1995



16 THE SHALLOW AND THE DEEP, LONG-RANGE ECOLOGY MOVEMENTS
A SUMMARY

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THE EMERGENCE OF ECOLOGISTS from their former relative obscurity marks a turning point in our scientific communities. But their message is twisted and misused. A shallow, but presently rather powerful movement, and a deep, but less influential movement, compete for our attention. I shall make an effort to characterize the two.

I. *The Shallow Ecology movement:*

Fight against pollution and resource depletion. Central objective: the health and affluence of people in the developed countries.

II. *The Deep Ecology movement:*

1. Rejection of the man-in-environment image a favor of *the relational, total-field image.* Organisms as knots in the biospherical net or field of intrinsic relations. An intrinsic relation between two things A and B is such that the relation belongs to the definitions or basic constitutions of A and B, so that without the relation, A and B are no longer the same thing. The total-field model dissolves not only the man-in-environment concept, but every compact thing-in-milieu concept—except when talking at a superficial or preliminary level of communication.

2. *Biospherical egalitarianism*—in principle. The "in principle" clause is inserted because any realistic praxis necessitates some killing, exploitation, and suppression. The ecological field-worker acquires a deep-seated respect, or

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even veneration, for ways and forms of life. He reaches an understanding from within, a kind of understanding that others reserve for fellow men and for a narrow section of ways and forms of life. To the ecological field-worker, *the equal right to live and blossom* is an intuitively clear and obvious value axiom. Its restriction to humans is an anthropocentrism with detrimental effects upon the life quality of humans themselves. The quality depends in part upon the deep pleasure and satisfaction we receive from close partnership with other forms of life. The attempt to ignore our dependence and to establish a master-slave role has contributed to the alienation of man from himself.

Ecological egalitarianism implies the reinterpretation of the future-research variable, "level of crowding," so that *general* mammalian crowding and loss of life-equality is taken seriously, not only human crowding. (Research on the high requirements of free space of certain mammals has, incidentally, suggested that theorists of human urbanism have largely underestimated human life-space requirements. Behavioral crowding symptoms, such as neuroses, aggressiveness, loss of traditions, are largely the same among mammals.)

3. *Principles of diversity and of symbiosis.* Diversity enhances the potentialities of survival, the chances of new modes of life, the richness of forms. And the so-called struggle for life, and survival of the fittest, should be interpreted in the sense of the ability to coexist and cooperate in complex relationships, rather than the ability to kill, exploit, and suppress. "Live and let live" is a more powerful ecological principle than "Either you or me."

The latter tends to reduce the multiplicity of kinds of forms of life, and also to create destruction within the communities of the same species. Ecologically inspired attitudes therefore favor diversity of human ways of life, of cultures, of occupations, of economies. They support the fight against economic and cultural, as much as military, invasion and domination, and they are opposed to the annihilation of seals and whales as much as to that of human tribes and cultures.

4. *Anti-class posture.* Diversity of human ways of life is in part due to (intended or unintended) exploitation and suppression on the part of certain groups. The exploiter lives differently from the exploited, but both are adversely affected in their potentialities of self-realization. The principle of diversity does not cover differences due merely to certain attitudes or behaviors forcibly blocked or restrained. The principles of ecological egalitarianism and of symbiosis support the same anti-class posture. The ecological attitude favors the extension of all three principles to any group conflicts, including those of today between developing and developed nations. The three principles also favor extreme caution toward any over-all plans for the future, except those consistent with wide and widening classless diversity.

5. *Fight against pollution and resource depletion.* In this fight ecologists have found powerful supporters, but sometimes to the detriment of their total stand. This happens when attention is focused on pollution and resource depletion rather than on the other points, or when projects are implemented which reduce pollution but increase evils of other kinds. Thus, if prices of life necessities increase because of the installation of anti-pollution devices, class differences increase too. An ethics of responsibility implies that ecologists do not serve the shallow, but the deep ecological movement. That is, not only point five, but all seven points must be considered together.

Ecologists are irreplaceable informants in any society, whatever their political color. If well organized, they have the power to reject jobs in which they submit themselves to institutions or to planners with limited ecological objectives. As it is now, ecologists sometimes serve masters who deliberately ignore the wider perspectives.

6. *Complexity, not complication.* The theory of ecosystems contains an important distinction between what is complicated without any Gestalt or unifying principles—we may think of finding our way through a chaotic city—and what is complex. A multiplicity of more or less lawful, interacting factors may operate together to form a unity, a system. We make a shoe or use a map or integrate a variety of activities into a workaday pattern. Organisms, ways of life, and interactions in the biosphere in general, exhibit complexity of such an astoundingly high level as to color the general outlook of ecologists. Such complexity makes thinking in terms of vast systems inevitable. It also makes for a keen, steady perception of the profound *human ignorance* of biospherical relationships and therefore of the effect of disturbances.

Applied to humans, the complexity-not-complication principle favors division of labor, not *fragmentation of labor.* It favors integrated actions in which the whole person is active, not mere reactions. It favors complex economies, an integrated variety of means of living. (Combinations of industrial and agricultural activity, of intellectual and manual work, of specialized and non-specialized occupations, of urban and non-urban activity, of work in city and recreation in nature with recreation in city and work in nature . . .)

It favors soft technique and "soft future-research," less prognosis, more clarification of possibilities. More sensitivity toward continuity and live traditions, and—more importantly, towards our state of ignorance.

The implementation of ecologically responsible policies requires in this century an exponential growth of technical skill and invention—but in new directions, directions which today are not consistently and liberally supported by the research policy organs of our nation-states.

7. *Local autonomy and decentralization.* The vulnerability of a form of life is roughly proportional to the weight of influences from afar, from outside the local region in which that form has obtained an ecological equilibrium. This

lends support to our efforts to strengthen local self-government and material and mental self-sufficiency. But these efforts presuppose an impetus towards decentralization. Pollution problems, including those of thermal pollution and recirculation of materials, also lead us in this direction, because increased local autonomy, if we are able to keep other factors constant, reduces energy consumption. (Compare an approximately self-sufficient locality with one requiring the importation of foodstuff, materials for house construction, fuel and skilled labor from other continents. The former may use only five percent of the energy used by the latter.) Local autonomy is strengthened by a reduction in the number of links in the hierarchical chains of decision. (For example a chain consisting of a local board, municipal council, highest sub-national decision-maker, a state-wide institution in a state federation, a federal national government institution, a coalition of nations, and of institutions, e.g., E. E. C. top levels, and a global institution, can be reduced to one made up of a local board, nation-wide institution, and global institution.) Even if a decision follows majority rule at each step, many local interests may be dropped along the line, if it is too long.

1) Summing up then, it should, first of all, be borne in mind that the norms and tendencies of the Deep Ecology movement are not derived from ecology by logic or induction. Ecological knowledge and the life-style of the ecological field-worker have *suggested, inspired, and fortified* the perspectives of the Deep Ecology movement. Many of the formulations in the above seven-point survey are rather vague generalizations, only tenable if made more precise in certain directions. But all over the world the inspiration from ecology has shown remarkable convergences. The survey does not pretend to be more than one of the possible condensed codifications of these convergences.

2) Secondly, it should be fully appreciated that the significant tenets of the Deep Ecology movement are clearly and forcefully *normative.* They express a value priority system only in part based on results (or lack of results, cf. point six) of scientific research. Today, ecologists try to influence policy-making bodies largely through threats, through predictions concerning pollutants and resource depletion, knowing that policy-makers accept at least certain minimum norms concerning health and just distribution. But it is clear that there is a vast number of people in all countries, and even a considerable number of people in power, who accept as valid the wider norms and values characteristic of the Deep Ecology movement. There are political potentials in this movement which should not be overlooked and which have little to do with pollution and resource depletion. In plotting possible futures, the norms should be freely used and elaborated.

3) Thirdly, insofar as ecology movements deserve our attention, they are *ecophilosophical* rather than ecological. Ecology is a *limited* science which

makes use of scientific methods. Philosophy is the most general forum of debate on fundamentals, descriptive as well as prescriptive, and political philosophy is one of its subsections. By an *ecosophy* I mean a philosophy of ecological harmony or equilibrium. A philosophy is a kind of *sophia* wisdom, is openly normative, it contains *both* norms, rules, postulates, value priority announcements *and* hypotheses concerning the state of affairs in our universe. Wisdom is policy wisdom, prescription, not only scientific description and prediction.

The details of an ecosophy will show many variations due to significant differences concerning not only "facts" of pollution, resources, population, etc., but also value priorities. Today, however, the seven points listed provide one unified framework for ecosophical systems.

In general systems theory, systems are mostly conceived in terms of causally or functionally interacting or interrelated items. An ecosophy, however, is more like a system of the kind constructed by Aristotle or Spinoza. It is expressed verbally as a set of sentences with a variety of functions, descriptive and prescriptive. The basic relation is that between subsets of premises and subsets of conclusions, that is, the relation of derivability. The relevant notions of derivability may be classed according to rigor, with logical and mathematical deducations topping the list, but also according to how much is implicitly taken for granted. An exposition of an ecosophy must necessarily be only moderately precise considering the vast scope of relevant ecological and normative (social, political, ethical) material. At the moment, ecosophy might profitably use models of systems, rough approximations of global systematizations. It is the global character, not preciseness in detail, which distinguishes an ecosophy. It articulates and integrates the efforts of an ideal ecological team, a team comprising not only scientists from an extreme variety of disciplines, but also students of politics and active policy-makers.

Under the name of *ecologism,* various deviations from the deep movement have been championed—primarily with a one-sided stress on pollution and resource depletion, but also with a neglect of the great differences between under- and over-developed countries in favor of a vague global approach. The global approach is essential, but regional differences must largely determine policies in the coming years.