A Critique of Deep Ecology

Part II

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5. Beyond the value core: central metaphysical and epistemological 'intuitions' of deep ecology. Extension beyond the value core is essential to explain how the core themes can be maintained. In particular, it is required to explain what values-in-nature suggests; how it is, and can be, that natural items have value qualities independently of perceivers. That claim, reminiscent of naturalist claims concerning secondary qualities such as colour, leads directly into epistemology, and on into the metaphysics of objects and systems, to the matter of what qualities, objects and systems have of themselves, as opposed to projected onto them by conscious observers.

An ecological holism has played an important motivational part in the evolution of deep ecology. Indeed (in 1980) Sessions accounts 'the wholeness and integrity of person/-Nature, together with ... egalitarianism' as 'perhaps the key ideas in deep ecology' (p. 7, rearranged) and Devall, not a philosopher, says much the same, removing the 'perhaps'. Naess first starts out from a much stronger metaphysical theme:

> (1) Rejection of the man-in-environment image in favour 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 constituents of A and B, so that without the relation, A and B are no longer the same things. The total-field model dissolves ... the man-in-environment concept ...
> (1973, p. 35),

and indeed it dissolves the picture most ecologists, including deep ones such as Sessions and Devall, thought they had managed to acquire. For under this (idealistic) model there are strictly no men or forests or mountains that also interrelate, no separable objects. As Warwick Fox correctly remarks:

> This 'total-field' conception dissolves not only the notion of humans as separate from their environment but the very notion of the world as composed of discrete, compact, separate 'things'. When we do talk about the world (in quite ordinary ways) as if it were a collection of discrete, isolable 'things' we are, in Naess's view, 'talking at a superficial or preliminary level of communication'.
> (p. 194)

But being trapped at this 'superficial level, is inevitable, and not transcended by deeper ecologists. For there is no way of communicating everything at once, no communication without selection of components and so abstracting from the whole.

Certainly, removing human apartheid and cutting back human supremacy are crucial in getting the deeper value theory going. But for this it is quite unnecessary to go the full metaphysical distance of extreme holism, to the shocker that there are no separate things in the world, no wilderness to traverse or for Muir to save. A much less drastic holism suffices for these purposes. It is enough to reject the excessive theses of individual reductionism, theses that tend to fall down of their own accord. It is enough that certain qualities, value in particular, applying to wholes, do not dissolve to qualities of the individual components. This moderate holism does not require the 'total-field' or other esoteric metaphysical picture; familiar intensional systems theory, among others, will serve for a background representation. Nor does holism undermine ordinary ways of talking about the world; but rather it tends to endorse them while countering individualistic modellings. In short, to reject individualism requires only moderate holism, not more extreme forms. These points can be confirmed by appeal to patron saints of deep ecology, such as Whitehead, Spinoza and Heidegger, who would be dislodged from their pedestals by extreme holism.

The mistaken assumption that deep ecology does involve extreme holism appears to be based on a false dichotomy between mechanistic individualistic materialism and its holistic organismic opposite, paralleling that between shallow and deep ecology - when with both contrasts there are various independent intermediate positions <39>. Thus Fox proceeds to lambast shallow ecology for accepting a 'discrete entity' metaphysics, which he equates with mechanistic materialism. In fact there is nothing in shallow ecology as characterised by Naess, or in the shallow position, to warrant this. Shallowness is well-exemplified historically in a range of non-materialist or non-mechanistic positions, such as many of those of, or influenced by, German idealism. The matrix of (occupied) positions is much larger than Naess and the West Coasters have allowed.

A fallacious argument of considerable popularity has reinforced mistaken extreme assumptions. According to the 'first law' of ecology, everything is related to everything else; that is, there is a 'fundamental interrelatedness of all things' (Fox, p. 196), total connection. But connection implies a certain identification ('the other is none other than yourself'), whence total connection becomes total identity. Everything is one. In this ('Thou art That') form the argument involves a crude fallacy: for that a is related to b, e.g., sister of b, does not imply that a is identical with b. Nor does the 'first law' tell against separable things, but in fact is an analytic truth of relational logic, by virtue of the fact that everything is the same as or different from everything. A different form of the argument (also seized upon by Fox, p. 8) commandeers elements of the idealistic theory of internal relations: 'all entities are constituted by their relationships', which makes everything tightly intertwined to be sure, rendering all connections necessary. But this consequence too is false: that a is wife of b does not imply that a is necessarily wife of b, as a' could easily have been, and almost was, wife of b <40>. And so the constitution theme is

false: a wombat is not constituted by the path it took, or the trees it passed, on an evening's foraging.

All this is to reject what Fox describes as 'the central intuition of deep ecology' (p. 196), but looks like a terminal form of idealism newly warmed-up, a form encapsulated in James's famous image of the world as a seamless whole. For his 'central intuition' is nothing but the defective 'total-field' picture, or as Fox also alternatively puts it: 'the world is not divided up into independently existing subjects and objects.... Rather all entities are constituted by their relationships' (p. 196). The first part of the alternative way of putting it hides, however, an important ambiguity. A forest is not divided up (in a way that involves any act of dividing) into its constituent (interrelated) trees; but these trees are distinct, and seperate one from another. Nor do, or can, these trees exist entirely independently of anything else; the systemic conditions for their continuing lives have to be satisfied. However in the ordinary sense of 'existing independently', trees in temperate forests often exist independently of other trees in a forest, and isolated trees survive virtual clear-felling of a forest, i.e. they continue a clearly independent existence. It emerges, then, that correct ways <41> of expressing the systemic facts of interdependence do not involve extreme holism, but only certain levels of interrelatedness - levels typically underestimated by managers and planners nonetheless.

Nowadays, we are told, any critique of deep ecology is bound 'to refer to the parallels between deep ecology, the mystical traditions, and the so-called "new physics" (i.e. post-1920s physics)', as not to do so 'might well indicate that one has missed the central intuition of deep ecology since, fundamentally, each of these fields of understanding subscribes to a similar structure of reality, a similar cosmology' (Fox, p. 194). 'What is structurally similar about these cosmologies', Fox later reveals, referring to the latter two fields, is that 'they reveal a "seamless web" view of the universe' (p. 196), '... a similar conception of underlying (non-)structure of reality'. 'Like the mystic and the "new physicist", the deep ecologist is drawn to a cosmology of "... unbroken wholeness which denies the classical idea of the analyzability of the world into separately and independently existing parts"' (p. 197). Thus the similarity of 'structure' of these disparate fields - and any other synthetic field - is the trivial one, that they share the erroneous central intuition of extreme holism. The fields are said to differ in their methods of reaching this 'insight', that is 'in their means of arriving at an "ecological awareness" (p. 197). While the fields do differ in methods, little else is right in all this.

The main theories reached differ substantially in themes and principles; for instance, Schrödinger's equation is no part of mysticism or deep ecology, or of the theme of a separate reality of contemporary physics or ecology. None, except perhaps West Coast deep ecology, is committed in mainstream form to extreme holism. The main principles of each are formulated in terms of interrelations of separate partly independent items, e.g. photons, worlds, etc. These principles and themes have little to do with ecological wisdom or awareness. Regrettably, both quantum theory under the Copenhagen interpretation and much of the mystical tradition are unashamedly anthropocentric. In a conspicuous gaffe, Fox enthusiastically concedes as much, but for deep ecology as well as the other fields:

> the fundamental ontology now being revealed can be described as 'largely dynamic, fluid, impermanent, holistic, interconnected, interdependent, foundationless, self-consistent, empty, paradoxical, probabilistic, infinitely over-determined, and inextricably linked to the consciousness of the observer, ...
> (Fox, p. 198, endorsing Walsh)

This is garbage and can mostly be assigned to the deep ecology rubbish basket (as we'll see, a sizeable one is needed), but the salient point is the last one. These observers - experimenters, contemplators, experiencers - are human ones. As it happens, both quantum theory and (less urgently) mysticism have a range of interpretations, some of which are neither anthropocentric nor observer-dependent. Accordingly, attempts based on the 'new physics', for instance, to render consciousness integral to ontology and to any description of the world are entirely inconclusive <42>.

The final indignity comes when Fox cuts his central intuition of deep ecology, with its anthropic encrustations, loose from the standard egalitarian and like impartiality principles (pp. 198ff.). For then the position he accounts deep ecology becomes but a type of moral extension <43>: For take a shallow holism such as James's radical empiricism or Smuts's holism <44>, extend the values assigned beyond the human base class (in a way reminiscent of Bentham's utilitarianism, but following Birch and Cobb) and perhaps throw in some counter-cultural lifestyle principles: then we have approximated Fox's 'deep ecology'. It appears that Fox may be one who missed the central features of deep ecology.

6. Ecological consciousness, and the psychological conversion of deep ecology. Verificationist transposition is strong in ecothinkers as in most philosophers. There is a strong tendency to transpose differences in objects perceived into differences in perception of the objects and, deriving from that, to subjectivise qualities. Valuational and emotional qualities have been major casualties of this transposition (certainly since Hume's famous pronouncement that he could find vice and beauty only in his heart - at which he did not look, else he would not have found them there either). There is an even stronger tendency to transfer all intensional features to subjects who perceive these features (to thinking subjects, or under behavioural reaction, to the acts and conventions of such subjects). So it has been even regarding lower levels of intensionality, with necessity and probability for example. All intensionality, typically represented as mentalistic, has been concentrated in thinking or experiencing subjects. The rest of the objective world is drained of these features <45> leaving mere extension, flat material objects.

Although they are aware that there is something seriously amiss with this kind of picture of the world, with the (purely material) object/conscious subject bifurcation of mainstream philosophy, in terms of which many perceived features of the world, including value, are transposed and concentrated in special subjects, still followers of deep ecology have too often succumbed to similar sorts of verificationist transposition themselves. In particular, value is subjectivised to experience of value, wilderness applauded in terms of wilderness experience, and so on. But the worst excess of this broad type is the consciousness transposition, which converts deep ecology into ecological consciousness.

'Deep ecology', an environmental science broadsheet <46> tells us, 'is Naess's expression for an ecological awareness or consciousness'. Spelling deep ecology out, then, becomes a matter of setting down the types of consciousness and awareness and recognition involved, something that is done in a thoroughly anthropocentric way, beginning as follows: 'a consciousness of the implications of ecology for human being'. It is all in fact done in terms of human responses, capacities and psychology. Accordingly, the approach is fundamentally misconceived. For deep ecology is not so anthropocentric, and is no more a matter of environmental psychology than is the value theory or metaphysics which are part of it. The psychological conversion is like claiming that 'Marxism' is an expression for socialist consciousness, or 'music' for musicological awareness.

The conversion of deep ecology into awareness psychology, into a certain sort of exercise in self-realisation or 'liberating ecological consciousness, or consciousness raising', is open to similar objections. Ecology, deep or shallow or systematic, is not ego-tripping or a personal thing. Granted those who do have and share certain attitudes and feelings to natural environments are much more likely to become active supporters or followers of deep ecology or to

adopt a deeper ecological stance, even so such states as self-realisation or ecological consciousness are neither necessary nor sufficient for this.

Such subjective states are not necessary because someone can become a supporter of deep ecology without having attained, or made any effort to attain, these states. Thus consider someone, a dedicated naturalist for instance, who has no deep interest in or understanding of human psychology or sociology so far as these bear on the environment. Such a person is a deep ecologist, but lacks ecological consciousness as it is explained (e.g. by the broadsheet). The case of Peter Singer in the animal liberation movement is instructive; for Singer goes out of his way <47> to explain his disinterest, his comparative lack of zoological consciousness, that he does not identify with animals and so on, yet his impact for animal liberation has been most significant. Analogously, a deeper Singer need not be in love with the Earth but feel rather isolated from it and feel rightly that most of its inhabitants dislike him or are frightened by him. He may have little idea what it is like to be one of them or a mountain, but he may have the right values, adhere to the right philosophy and undertake the right sorts of action and lifestyle.

Nor, even less, are the approved psychological states sufficient. A person into self-realisation may have few or none of the right value-attitudes towards the uninhabited natural environment, but may indeed be rather shallow. Naess tries to avoid this problem in the case of ecosophy by auxiliary assumptions which guarantee that self-realisation for one is self-realisation for all. But even if someone into self-realisation accepts the assumptions - which a shallow self-interested or human-focused person may not - a greater value assumption may also be held; so that only an intermediate position emerges. With ecological consciousness the result is similar: either shallow environmentalism, such as that often exhibited by the wilderness-experienced city person or an intermediate position, such as that of the animal liberationist or new-style Christian, depending on what goes into the often-vague consciousness-package. Ecological depth is by no means assured.

Genuine and specifically deep ecological consciousness has not been well described and is not particularly well defined. And some of the requirements imposed upon it, whatever it amounts to, render it impossible. Thus Fox, echoing others, claims that 'to the extent that we perceive boundaries, we fall short of a deep ecological consciousness' (p. 196). Then we all fall short, since we are regularly confronted by, and perceive, territorial boundaries and a wide range of other demarcation lines and contrasts. Indeed falling short is inevitable; for perception necessarily involves selection and discrimination, and hence separation and boundaries <48>. Deep consciousness is also rendered impossible by some of the identification requirements, drawn from nature mysticism, which are imposed upon it. It is one thing to be in tune with the universe (a metaphor that can be spelled out), quite another, and impossible, feat to be identical with it, since then a proper part would be identical with a whole containing it. Some explication of identification (trans-species and other) is important for the elaboration of deep ecology, but the relation involved (though it concerns shared features, such as perhaps experiences) is not one of identity or making identical, as simplistic etymology may suggest <49>. Other requirements commonly placed on deep consciousness, while they do not exclude it, render it unduly anthropocentric.

None of this is to deny the importance of awareness, sentiment, felt values, and their power as springs for action. But environmental consciousness covers, and reflects, the same range as environmental positions - which may be shallower as well as deep. For depth, then, it is important to encourage and inculcate the right sort of consciousness, that sort tied to deep principles. These principles accordingly have a considerable independence of the experiential base, as cases like that of deeper Singer already reveal. Thus it is a mistake to aim or instil or deepen environmental consciousness first, before the problems of deep ecology are addressed. Both can be done: no such priorities obtain. It is an even grosser mistake to insist upon the need to change interpersonal relations before we address preservation of ecological diversity or of wilderness (Ecophilosophy VI, p. 13) <50>. This would postpone, in a quite unnecessary, decidedly shallow, and perhaps interminable way, what calls for immediate investigation and action. Better is the converse Tao theme that 'human nature could never be brought into order until there was some understanding of the way of Nature' (ibid., p. 18).

7. Paradigmatic expansions of deeper and shallower ecology. The philosophical bases, elaborating the value cores, of deeper and shallower positions relate in two significantly different ways to wider theories. One is Naess's way of derivation (broadly construed) from philosophical, ideological or religious bases, previously illustrated with the case of ecosophy and a matching utilitarianism. The other is the way of paradigmatic expansion. Deep ecology, for instance, expands from its philosophical bases to a much larger theory, indeed it sometimes expands all the way to what is called an alternative environmental paradigm, a social paradigm challenging the presently dominant paradigm. The expansion is not uniquely determined, as there can be various different deeper paradigms. However the expansion characteristically includes a fuller statement of themes already alluded to as in the spirit of deep ecology. The main expansion has in fact been much influenced by counter-cultural themes <51>. In a similar way shallow conservation positions are included in shallower paradigms in the dominant social paradigm. The way in which conservation positions are embedded in much more comprehensive paradigms is indicated in the following diagram.

FIGURE 6(A). A stylised illustration the style of paradigmatic expansion from included positions.

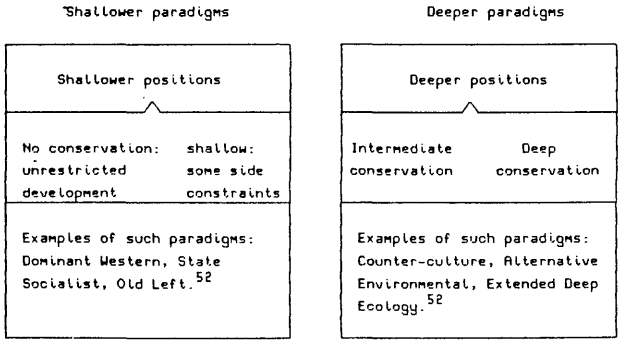


FIGURE 6(B). Typical components of the encompassing paradigms

DOMINANT SOCIAL PARADIGM	DEEP ENVIRONMENTAL ALTERNATIVE
Dominance over nature	Harmony with nature
Natural environment a resource	Values in nature/biospecies impartiality
Material goals/economic growth	Non-material goals/ecological sustainability
Ample reserves/perfect substitutes	Earth supplies limited
High technological progress/ scientific solutions	Appropriate technology/limits to science
Consumerism	Doing with enough/recycling
National/centralised/large-scale	Regional/decentralised/small-scale
Authoritarian structures/coercive methods	Participatory democratic structures/ nonviolent methods

SHALLOW ⟵ ⟶ DEEP

These elements of the contrast between shallower and deeper paradigms figure importantly in applications, such as to human population (and were selected with that application in view). Take the commitment to material (economic) growth. Human population growth contributes to this, since in a well-directed economy, other things being equal, a larger human population can generate a larger GNP than a smaller one. On deeper paradigms there is no commitment to maximum economic growth, or to accompanying population maximisation, or indeed to maximisation at all. All that is sought is enough carefully chosen economic growth to provide a material base for good nonconsumerist lives, a large enough human population to provide sufficient variety in significant respects, but not excess, and, generally sufficiency without surfeit.

The displacement of maximisation in deep paradigms by sufficiency, derives in part from a clearer appreciation of limits, environmental limits to growth especially, but limits as well to technology, power and knowledge (which would seem otherwise to extend environmental limits). The no-limits theme of shallower paradigms, the theme that humans can overcome limits, and always find a way by science and technology, has a common source with the sole value assumption, a set of prejudices about humans and their abilities, as opposed to other creatures, indeed often a celebration of things human. It is from this illusory Cartesian picture of the unbounded possibilities of humans, with nature wax in their hands, that have developed several fantasies as to the escape from limits; the economic delusion that there are no limits to material growth because substitutes for exhausted resources can always be guaranteed through technological means, the grander aquarian delusion that there are no limits to human population growth because space is a new frontier, opened again by human ingenuity and technological know-how. In the end, on prevailing shallower paradigms, population growth is not a problem. There is nothing that cannot be overcome by more planning, more economic growth, more technology, more development. There are no insurmountable limits upon the flourishing of more and more humans. Such at least, in crude outline, is the familiar but false shallower picture, which in unrestrained form tends to neglect entirely the environment and its other inhabitants; the environment is one more resource to be exploited and substituted for when exhausted, and the other inhabitants are largely expendable, often as trivial when compared with human utility.

Although deeper paradigms coincide in opposition to this shallower picture, the paradigmatic expansions of deeper positions so far sketched do differ in some crucial respects, including the displacement of maximisation. While the damage wrought through maximisation of material and economic parameters is appreciated, and maximisation is there resisted and (satisizing) alternatives such as those of sustainability offered, similar restraint is not always shown elsewhere. In personal and psychological areas especially, old-style maximisation is often persisted with, as with such directives as to maximise self-realisation. Such maximising directives are liable to be built into expansions of intermediate positions, especially those of a consequentialist cast, which recommend maximisation of experience or of interest, or of some other measure of biospheric utility. By no means atypical is the central ethical principle of Birch and Cobb's theory, endorsed by Fox, 'that we have an obligation to act so as to maximise richness of experience in general - which includes the richness of experience in the non-human world' (p. 198). This incorporates the biocentric fallacy, and is rightly dismissed by deep ecologists, though for the wrong reason, since it is not anthropocentric (as Fox points out). Rather, it conflates value with richness of experience; and experience has to be removed from the equation, since not all experience is valuable and, conversely, value is distributed more widely than experience. But nor would the directive to maximise richness (simpliciter) be right, since this contracts a bundle of value-endowing universals, including complexity, diversity, scarcity, and so on, to a single element <53>. And, again, there is no obligation to maximise value, or its representatives.

Questionable maximisation also mars the action (meta-)principle, according to which those who subscribe to deep ecology 'have an obligation to try to contribute directly or indirectly to the implementation of necessary changes' (Naess 1983, p. 8, principle (6)). For such a presumed obligation to implement amounts to supererogation. What should have been set down is a commitment corollary. A person committed to the principles will endeavour - to some extent, depending on the level of commitment, weakness of will, and so on - to implement practices and policies of deep ecology. By contrast, the action principle does not follow from other principles, and is open to apparent counter-examples, such as that of impoverished people locked into an exploitative social system.

8. Conspicuous incompleteness in the platform of deep ecology. Despite recent elaboration of a deep ecological paradigm, there are some surprising gaps in deep ecology, a range of areas and issues, some of them rather critical, some already noted, where deep ecology is silent. One of the less sensitive areas is the neglect of the built or fabricated environment, and of what are included in cities, small parks and household gardens. Because the fabrication and management is mainly by humans - the greatest fabricators and managers we know of in the universe, no doubt - it is tempting to think that issues concerning fabricated items are shallow. But that does not in any way follow, and probably reflects a mistaken process/product inferential slide. A rather more sensitive theoretical area, where deep ecological theory remains incomplete and vulnerable, concerns the matter of natural values, and especially the epistemology of value <51>.

However, it is only fair to observe that deep ecology, though it has some sketchy antecedents, is a very new theory and style of theory. It would be expecting more than most theories deliver to find positions on every relevant issue. Still, granting all that, there remain some striking omissions. These concern either sensitive and difficult areas, or else controversial political areas, where revealing the radical corollaries of deep ecology could be politically damaging.

With some justification, Fox complains that deep ecology does not offer a theory of value guiding a 'realistic praxis'.

> Deep ecological theorising has shied away from considering situations of genuine value conflict and ... has not come forth with ethical guidelines for those situations of where some form of kiling, exploitation or suppression is necessitated.
> (p. 199)

Such difficult issues as predation, alteration of natural systems, and the suppression of 'pests' and 'weeds' have been avoided. (How do we suppress what we are supposed to identify with, part of ourselves, for example? Well, we can try to suppress the 'pestilent' parts of ourselves; but then the old problems simply re-emerge in internalised form.) Nor has an impossible no-interference ('hands off' or 'letting be') principle been wrought into a workable limited-interference principle. The guidelines as regards day-to-day living and action for a follower of deep ecology remain unduly and unfortunately obscure.

Earlier formulations of noninterference principles took an expectedly strong form, almost matching biological egalitarianism, for instance 'Man has no right to decrease the diversity of life forms and conditions of welfare among other forms than the human' (Naess's restatement of a 60s theme in 1983, p. 1). But such difficult principles were soon modified, paralleling 'egalitarianism in practice', to permit interference 'to satisfy vital needs' (whichever they are). Thus Naess and Sessions comment on their quite shallow theme that 'present human interference with the non-human world is excessive', as follows:

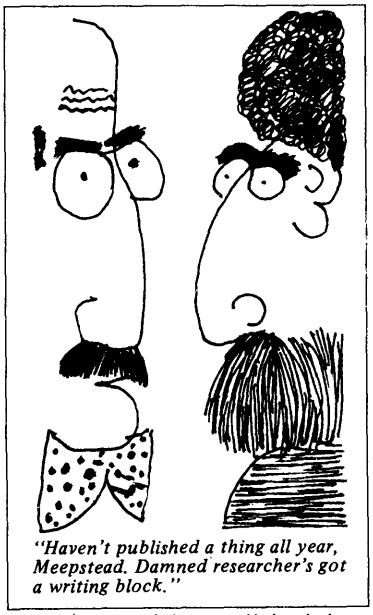
> The slogan of 'noninterference' does not imply that humans should not modify some ecosystems as do other species. ... At issue is the nature and extent of such interference.
> (Ecophilosophy VI, p. 6)

Their modified approach is to try to exclude entirely only certain types of interference - those accounted negative interference - except in special circumstances. Hence Naess's tenet: 'Humans have no right to interfere in a negative way except for purposes of vital needs' (1983, p. 8, principle (3)). This is undoubtedly an improvement. It appears to allow for positive interference in such forms as restoration of damaged land forms and ecosystems (though this conflicts with the approved law, 'Nature knows best'). And it opens the way for a classification of types of interference, among which the bad forms can be excluded, as 'negative'. But that further essential and difficult work, of classification and justification, has not so far been undertaken; so the force of the principle remains obscure. At present it seems to exclude even small-scale gardening - which presupposes previous and perhaps (as in slash-and-burn practices) ongoing rather negative interference - at least where it is undertaken to provide, as well as bare subsistence, for some comforts of life.

The lack of workable limited interference principles is especially conspicuous when it comes to applications of deep ecology to practical environment problems; for much in detailed applications turns on these principles. For instance, to what extent can agricultultural practices interfere with the land? Virtually any agricultural practice involves some interference, but most contemporary practices involve far too much damaging interference. Deeper thought has not found its way around this terrain yet, has not located natural boundaries to interfering practices. It has tended to rely on vague appeals to 'righteous management' practices <55>, which however, insofar as righteous management amounts to proper management, can be granted by the shallowest environmentalism. Meanwhile, deeper restrictions to methods that lie light on the land and environment, and to respectful use, can be put to some light work in applications. The applications are extensive, in principle to virtually any and every environmental problem and issue <56>. On many of these deep ecology offers, or can offer, fresh and often challenging approaches. Many of the more familiar environmental applications can be contracted to a single bundle of things, through the equation connecting impact with the following product: population X consumption X technology. Excessive environmental impact is, thus, typically a matter of too many humans with too high a consumption produced using too dirty a technology. (In turn too high a per capita consumption is due in large measure to too many maximisers in modern industrial communities.) Part of the deeper solution to impact is immediate: many fewer humans with lower consumption and cleaner less-impacting technology. The applications all result, then, by applying limited-interference principles, limiting impact. Other applications to planning are also derivative (though not by deductive means only, because much further information has to be brought in.) But roughly, the way can be argued to deep approaches towards matters such as decentralisation, local involvement, small-scale operations, etc., from features of the broader philosophical basis.

The political corollaries of deep ecology are, by contemporary timid standards, extremely radical; but it remains unclear how envisaged political reorganisation is to be achieved (other than by, what is unlikely, a sufficient change in ecological consciousness combined with democratic change in present power structures). They involve, for instance, drastic reorientation away from economic growth objectives and individual consumerism, for starters. They include the contraction or abolition of private property, and the dissolution of nation-states in favour of bioregional organisation (cf. Fox, p. 195). At bottom, then, the political directions resemble those of social anarchism <57>, though some draconian state and international measures have been proposed at least for the interim (such as Devall's world wilderness police). The underlying route is then a familiar utopian one: a way through strengthened and improved archic arrangements to bioregional anarchic organisations (cf. EP2); a way familiar from both Christianity and Marxism, but with a much more specifically sketched end-state. For many components of the deep ecological paradigm, decentralisation, local control, and so forth, relate to the envisaged end-state, rather than the present or immediate future. The end-state, which is a stable climax system, is seen as some sort of world federation (of federations) of bioregions, which are in turn federations of communities. While considerable scope for different social arrangements is allowed for, a generous pluralism anticipated, the framework of such a pluralism has not been worked out or much worked at. Presumably communities specialising in piracy are not tolerated, nor those practising slavery welcomed to a federation. But what are the bounds of political toleration? How are they guaranteed? And so on.

The deep ecological paradigm lacks a relevant political component which would answer such questions. While there is an interesting and growing ecotopian literature to peruse, there is not a deeper political theory to consult, or criticise. If what a deep framework is like remains obscure, how such a framework diverges from recently outlined minarchic pluralistic frameworks is rather clearer. An acceptable framework will be very different from the libertarian and liberal frameworks (suggested by Nozick and others, or differently Walzer and others), since these typically shallow positions presuppose, in varying forms, essentially laissez-faire capitalistic arrangements, and protection of private property, privilege, and so forth. The political direction of deep positions is very different. Given the underlying egalitarianism and fairness assumptions, the rival assumptions of unlimited accumulation of power and capital and wealth and the protected private property of Nozick's framework, for instance, would certainly not be granted. Nor would the usual liberal right to a 'free go' - to hunt, shoot, erode, reproduce, and so on - be generally conceded. Even from a liberal perspective that 'right' depends on failing to see interference in many cases when it is blatant. Thus, a 'free go' principle, as distinct from a qualified 'fair go' principle, would not be a satisfactory framework principle. Even though deep ecology does not fully echo anarchist stress on freedom, there are significant problems here: how to reconcile environmental and social constraints on creatures' lifestyles with the conditions for liberty.



"Haven't published a thing all year, Meepstead. Damned researcher's got a writing block."

An important and sensitive political issue that has not received much deeper coverage is the matter of private property, even though it is clear that both the notions of property and of privatisation are up for transformation under

deeper perceptions. For certain types of currently recognised property there are however some leads. Naess remarks at one point that the land is not owned: so presumably also it is not to be bought and sold, or ought not to be. While that lops off one leg of capitalism, it does not entail commitment to socialism. The land does not belong to society, or the local community, either: it is not theirs to do more or less what they will with but it is its own thing; it does not belong (to any group). What holds for land must, on deep perception, hold also for creatures on the land. Wild animals are their own creatures, of independent value. They should not be imprisoned, as in zoos or laboratories, for the benefit of humans. Like humans, they should not be marketable commodities - for several reasons: for instance, as mere commodities they are not accorded, or treated with, due respect <58>.

But what applies to wild creatures no doubt extends to domestic creatures as well. So there will be a severe impact on agricultural practices. Presumably some mutual arrangements can be reached with local hens, and perhaps even a farmyard dairy cow and draught horse or so. But there will be no factory farms of battery hens enslaved just to produce eggs for our friends in the cities. Nor factory farm cows primarily converting fodder to milk. What of the intermediate case of enclosures? - also an early industrial development. Grazing animals are confined by fences in places where they would often not remain given any choice. Meanwhile should deep ecologists be liberating these animals? There are many ways to go here, as on other issues in agriculture; but biological egalitarianism again unduly reduces the options. Given that cutting fences is not violence (despite its structural features; nor strictly are rights infringed since land is not really owned), egalitarians should presumably, by the action principle, be cutting fences (much as intermediate utilitarians should be doing much more for animals than they usually attempt).

One resolution of some of these problems is by way of local pluralism. Under this, deep ecologists, while they would arrange appropriately for their own communities, would not be trying to impose their position on others. A pluralistic framework can allow for a whole range of social positions. The boundaries remain unclear however: for instance, to what extent are shallow claims to private land and forest recognised? And many features of one community are matters of concern for other communities: nuclear weapons production, atmospheric pollution, total population, and so on.

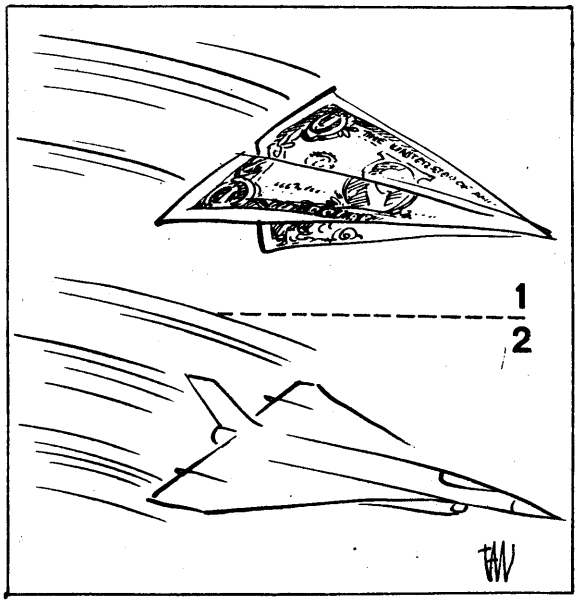
How pluralistic can deep ecology be, given its commitments? Quite pluralistic, and almost necessarily so if it is to be plausible. A deep ecologist may choose a lifestyle of voluntary simplicity; she does not try to enforce it on her shallow friends, though persuasion is permissible enough. Presumably the same holds for such matters as salaries, which, as Naess says, are well over average for the biosphere in wealthier countries. The deep ecologist appropriately redistributes her excess, takes a salary cut, or looks for part-time work; but she does not try to compel her colleagues to do the same. In all these respects the deep ecologist is like a person who adheres to a certain religion or ideology; and the combination of many such religions nowadays, for example in unified churches provide a useful model for pluralism at work <59>.

Such a religious model helps also in meeting sweeping charges, derived from orthodoxy but usually with little foundation, such as that deep ecology is elitist, is parasitic on privilege, depends on a capitalist base structure, etc. Consider such charges redirected against Buddhism for instance. In each case the charges have some force nowadays, but primarily because mixed capitalism has appropriated, and largely controls, main means of production.

The elitist objection to the deep position in fact assumes human chauvinism. That rivers, forests, etc., are valuable for people is the starting assumption. It is claimed that 'most people are indifferent' to mountains and forests - which simply assumes value of such natural items is determined in some type of utilitarian (democratic) way by summation over human personal preferences. But this is an entirely inadequate way of assessing, or beginning to take due account of natural value (see EP).

As well as charges of extreme radicalism and extremism, deep ecology has to counter the converse charge of conservativeness. Deep ecology fails to recognise or allow for evolutionary change, natural catastrophes, and the like. It wants to hold things where they are in some idealised time projected into the past. The charge is mistaken. However there is certainly an emphasis on equilibrium and stability as opposed to change, this emphasis tying in with a general preference for primary ecosystems which are richer, more stable, etc. What goes along with some of this, which is more open to challenge, is the assumption that what is natural is, by and large, good. Or worse, the tendency to personify Nature, as in Commoner's dubious 'law', Nature knows best. Nature, since not a creature with intentions, cannot (significantly) know anything. Of course the 'law' can be spelt out, to something more neutral, like: following natural ways tends to give better results than alternatives <60>. The theme of the goodness and benignness of nature perhaps comes through most powerfully in often cited passages from one of the sacred texts: Leopold. But, once again, not all natural things are necessarily good. Some humans behave as if they are, constitutionally, set on evil programmes. For them to live and blossom, in the sense of carrying through their programmes, much, perhaps unnecessary, evil will eventuate. There is no right for such people to flourish (in this way). This too tells against the alleged 'right for all beings ... to survive and blossom', which is linked to underlying invariant natural goodness assumptions <61>.

9. Changing the underlying, provocative, images engendered by 'deep ecology', and removing the rubbish. Deep ecology has nothing especially deep about it, and no better links with ecology than with many other studies. Certainly some of the notions in this part of the woods, could do with labels, and deep ecology has the advantage of priority for some (one) of them. But that is almost where its advantages end. For both the analogies involved, with ecology and depth, are rather shallow.



'Deep ecology' suggests to the unwary that deep ecology is a part of ecology, much as core physics is of physics or basic chemistry of chemistry. But it is not: this would make deep ecology a branch of biology, which it is not.

Deep ecology is a normative and policy- and lifestyle-oriented theory, whereas ecology is rather a science, a science dealing with the relations between organisms and (their) various environments. As such, ecology involves much laboratory work and field work: ecology has industrial and military applications; for instance as to the levels of pollu-

tion and radiation various tree or fish 'crops' will tolerate. But deep ecology has little in the way of such applications, else it would be better funded and looked upon more favourably by universities. Much ecological research, despite its earlier subversive promise, now sits firmly within the dominant paradigm: it is environmentally shallow and reductionistic, and, though aseptically concerned with the environment, contributes little to change of environmental consciousness. Granted, deep ecology premises many value judgments on ecological universals, but so (indirectly) may shallower positions: granted, deep ecology is, like ecology, bound up with the environment, but so is modern geography: granted, deep ecology concerns the place of organisms in their environments, but so, in ways more congenial than those of industrial ecology, do religions like Tao. For all the limited substance in the comparison with ecology, deep ecology might as well be, what it is sometimes presented as, deep environmentalism.

It is, however, with the much less satisfying depth analogy that the main problems lie. In the first place, there is nothing of substance to sustain the analogy; there is, for instance, no distinctively deep structure contrasting with shallow forms. Compare linguistics, where there really are surface and depth forms, where the data supplies surface forms, and then deeper forms result by complex analysis. There is nothing comparable in the deep ecological case. There need be no complex analysis, and usually is not. Moreover, the shallow right-winger can penetrate below the surface to underlying assumptions just as much, or as little, as the left-leaning greenie.

The notion of deep structure and depth of subjects like linguistics is now similarly applied to physics, for example as follows:

> the hundred regularities of chemistry ... completely shield from view the deep structure underpinning them ... (It turned out) in no way required or right to try to explain such complication of chemical bonds with a corresponding complication of principle. All have their origin in something so fantastically simple as a system of positively and negatively charged masses ... The direction of understanding runs, not from the upper levels of structure to the deep ones, but from the deeper ones to the upper ones.
> (Wheeler, p. 16)

But again there is nothing of the sort underpinning the depth notion of deep ecology. Related points undercut the idea that depth terminology is being applied, somewhat less exactly and strictly, as in subjects like mathematics, where there is (fairly vague) talk of deep results, deep proofs, etc. Often what is meant is that one or more of the following things obtain: an unlikely trick worked, a new and complicated method was introduced, the argument circuited through a remote part of the subject, etc. None of these sorts of considerations properly extends to deep ecology.

However, Naess and Devall and others - who have evidently been embarrassed by the question as to what is deep in or about deep ecology - do want to talk variously about depth of arguing, reasoning, understanding, of argument, premises, or looking back to fundamentals, examining assumptions, and, especially, questioning. None of these is particularly well defined: in no case are there any applicable measures. Naess, however, has measures of chains of reasoning in mind: he speaks of depth in terms of long chains of reasoning going back to fundamentals. This fails to do the requisite job.

Firstly, someone who subscribes to the core values or philosophical basics of deep ecology may not go through any such reasoning. A person may be a deep ecologist by feelings or intuition. Such depth is accordingly not necessary. Nor, secondly, is it sufficient. A shallow utilitarian may, as we have seen, match Naess step by step, in his working back through ecosophy to the fundamental value principle. That shows the flaw in the idea of especial depth in ecosophic thinking, for the derivation doesn't make such a utilitarian deep. In a remarkable sell-out Naess says it does. A person who derives the worst industrialism from Christian premises by a long chain of reasoning would be a deep ecologist according to Naess (in 1984). Naess appears to have lost track of the fundamentals of his own theory. The sell-out also explains an apparent inverse of the curious theme of depth in shallow ecology; that shallow ecology ultimately requires the support of deep ecology (Naess 1983, p. 5). But there is no such inversion; it is simply again that shallow themes can also be given long chains of support. So much for the appealing idea: shallow ecology justifies the deep shift! Rather, deep ecology is sometimes useful for shallow purposes (p. 6). And there may be shallow arguments for some of deep ecology. And much deep ecology may be given shallower disguises. But the divide between shallow and deep remains and cannot be removed in this sort of way.

The divide - which would conventionally reduce to a smooth grade, if any of the proposed measures of depth could be got to work - embarrasses several deep ecologists. Some are disturbed for metaphysical reasons: they are unhappy with any sort of bifurcation or distinctions, and appear rather in the tradition of James and Harvard 'radical empiricism' than the traditions they like to invoke. So results a certain tension between monistic and pluralistic ways. Devall, for example, inveighs against dualisms in general in the very course of setting up the shallow/deep ecology distinction (in 1979). Others are worried about political division (already exploited, especially by the opposition) within the still-too-small environmental movement. It is perhaps with this in view that it is suggested by T. Birch, as well as by Naess and by Drengson (pp. 6-8), that there is really no rift between shallow and deep ecology. But there is a value chasm to begin with, though in many environmental issues this doesn't matter; shallow and deep people can cooperate against the forces of environmental evil.

But genuine compatibility - as distinct from tolerant pluralistic coexistence with chasmic differences - would require idealised 'shallow' people. According to Naess, 'It may sound paradoxical, but with a more lofty image of maturity in humans, the appeal to serve deep, specifically human interests is in full harmony with the norms of deep ecology' (Ecophilosophy VI, p. 9). It is paradoxical, and full harmony is an illusion if 'specifically' means restrictedly. For, shallowly, natural items without sufficient human sponsorship will tend to be done down (a sorry way for such things to have been done, by patronage, but the present dominant way: see the discussion of the blue whale case in EP). Birch rightly sees some discord. However, in arguing that 'there should be no rift between deep and shallow ecologists', he claims, 'nor does deep ecology condemn the respectful use of the land for practical needs'. But this claim hides an ambiguity. While admitting some land uses, deep ecology may condemn its use for practical needs which a shallow ecologist applauds, such as the conversion of an old forest to a plantation monoculture. Nor is deep ecology a matter of giving shallow ecologists 'deeper reason' for their eco-simplifying practices, which is what Birch alarmingly goes on to suggest.

The aspects of depth which do, to some extent, accompany deep ecology, and especially the deep ecological paradigm it informs, are indicative of a shift in thinking, of a new paradigm, rather than anything distinctive of deep ecology. For instance, to take deep questioning as characteristic of deep ecology is to confuse a general indicator of new paradigms with just one such paradigm. Rather, deep questioning tends to be indicative of dissatisfaction with any entrenched paradigm and to mark the challenge to it and shift away from it. It is a fallacy to construe the deep questioning of deep ecology as more than a special case of this phenomenon.

Depth measures, of argument, understanding, or questioning, represent a mistaken approach to an explication of depth. It would be better perhaps, to talk of depth or searchingness of perception of value: a deep ecologist with deeper perception sees value where traditional shallow

people missed it. But this analogy has its problems too. Maybe depth here just is a rather suggestive and infectious metaphor, and best left as such, as in John Seed's 'The well of ecology is deep'. Yet deep and shallow do mark out significant differences, but differences which could easily be differently labelled. For example, to appeal to another metaphor with some vogue, they could be seen as green-ecology and grey-ecology, or better green theory (or green thought) and grey theory, or differently, and better still, deep-green theory and pale-green theory. The colours do have some appropriateness, in Europe, in summer; green forests and green fields, as against grey business suits, grey cities and grey warships <62>. Even so, these colours have only rather shallow connections with the richer theory concerned, which is at bottom a philosophical (value) theory with social and political implications. Nor does the green/-grey contrast fare so well for environments like Australia; but perhaps its most damaging aspect is its association with the immature/aged contrast. The shades-of-green terminology, which helps emphasise the range and continuity of environmental positions, avoids the worse of these positions.

Ordinarily, with such defective introductions as 'paradigm' and 'deep ecology' the inclination is to let them go, to say something like: Well, the expression is established, its scope and limitations more or less known. But in the case of 'deep ecology' little of that sort of justification is true. Main exponents of the motion are not so evidently aware of the limitations of the expression concerned, and have gone to prodigious lengths to explain and justify use of the self-congratulatory term 'deep'. Nor is the scope of the term or the extent of the notion intended at all well established. Among the reasons for disquiet with deep ecology outlined were the vagueness and amorphousness of the notion as it figures in the source literature. Among the results are that it means different things to different exponents and confuses its critics; and presents only a false dichotomy with its intended opposition, shallow ecology. This is enhanced by the narrowness of some of the themes, especially egalitarian themes, with the further result that the theory loses its pluralistic appeal.

But the main reason why the terminology has to go, why appealing new terminology is needed if the notion is to be retained in service and not retired, is that the term 'shallow' incorporates an ad hominem claim against the intended environmental opposition, to the effect - what may be entirely inaccurate - that they are shallow, superficial in their positions, reasoning, understanding, etc. No wonder that Passmore, often taken as representative of the opposition, felt obliged to remark parenthetically, 'I need hardly add that this terminology was invented by the self-styled "deep" ecophilosophers' (in 1983). New terminology, like the green/-grey contrast, would avoid the ad hominem and associated bad features.

As well as new terminology for a rectified notion, a wider clean-up programme is needed. Passmore was not wrong (in his own provocative final chapter of 1974) about removing the rubbish, though he somehow failed to observe the large amount on his side of the fence, and shortsightedly mistook much at a philosophical distance that was not rubbish for rubbish. But, certainly, the deep ecology movement carries an excessive amount of rubbish with it (in contraversion, so to say, of its own platform). That does not imply that there is not a clean sound position to be discerned when the often inessential rubbish is removed, the fallacy rubbish-removing empiricists tend to tumble into quite unaided.

One striking example of rubbish, which in the fashion of much deep ecology conflates ontology with epistemology, has already been exhibited (it comes from Fox, who repeated it from Walsh, see p. 29). Some further examples of very dubious anthropic material that should be removed, drawn from the rich deep ecological sources, follow: According to Naess, who 'proclaims that essentially there is at present a sorry underestimation of the potentialities of the human species' <63>, 'our species is not designed to be the scourge of the earth' (Ecophilosophy VI, p. 9). Given the environmentalist record, there are substantial grounds for claiming it already has been; given the probability of a human-induced nuclear winter, the claim is at best very dubious. It is hard to avoid the impression that Sessions and Naess are not taking the human environmental record of massive destruction and extermination seriously when they say, in elaboration of a Values-in-Nature theme of all things, 'Ecological processes on the planet should, on the whole, remain intact.' "The world environment should remain 'natural'" (Gary Snyder) (Ecophilosophy VI, p. 5). For very many places it is already too late.

The theme of cosmic identity, often included in the deep ecology package, generates much further rubbish. According to this theme, which identifies person with planet or even cosmos, you and I are identical with other natural objects, up to and including the universe. The theme, like any number of outrageous principles, has worthwhile applications. Since I am the forest, the destruction of the forest is the destruction of me; so, as a matter of self-interest, I resist the destruction. Unfortunately, the theme also has bizarre consequences. Since I am the forest, I cover several acres and comprise many mossy trees, but cannot significantly have, as I do have, a face or feet. Since you and I are one with the planet, and you thin and I fat, you are both fat and thin, old and young. And so on. There are ways out of this mess <64>, but the way of extreme holism, which would obliterate you and me as separate persons, simply makes things much worse.

It is the worse way deep ecology has taken (cf. Fox above). For supreme examples of resulting rubbish we need look no further than the oft-cited pronouncements of one of the gurus of deep ecology, Fritjof Capra. According to Capra, who extends the Copenhagen interpretation of quantum theory virtually to absurdity,

> Quantum theory thus reveals the basic oneness in the universe. ... The human observer constitutes the final link in the chain of observational processes, and the properties of any atomic object can only be understood in terms of the object's interaction with the observer. This means that the classical ideal of objective description of nature is no longer valid. The Cartesian partition between I and the world, between the observer and the observed, cannot be made when dealing with atomic matter. In atomic physics we can never speak about nature without, at the same time, speaking about ourselves.
> <65>

But the Copenhagen interpretation - which does assume the relativisation of quantum experimentation and measurement to a classical framework, which may however include no human observers - in no way sustains this wild holistic, anthropocentric extrapolation. (The italicised 'thus' and what follows are without warrant from standard quantum theory texts.) Further, the Copenhagen interpretation is only one interpretation of quantum theory; so it is not compulsory. Rather it is an idealistic verificationist interpretation, thoroughly out of keeping with what should be the anti-reductionist thrust of green-theory. With more satisfactory interpretations, we can perfectly well do in atomic physics those things Capra tries to insist we cannot: we can speak of nature, its features and value, independently of humans. We do not have to remain silent about rubbish.

It is a serious question, then, how much effort should be expended on deep ecology, looking for improved formulations and new terminology, for a type of theory that should be either substantially transformed or else largely abandoned (not demolished, not bulldozed, but simply dehabited.) For most of the acclaimed major themes of 'insights' of deep ecology in original form should be set to rest: biocentrism (of values), biospheric egalitarianism, extreme holism, cosmic identity, maximal self-realisation, ..., all go down. Yet, as much still remains, there are two different ways to proceed:

restoration or abandonment. Restoration strips off the worst excesses from the basically sound structure, and, where requisite, makes suitable replacements (one outcome is deep-green theory, sketched in the Appendix Para. 3). The other way, abandonment or total removal, is typically premised on the wasteful assumption that what is partly rubbish is (probably) largely or entirely rubbish, and it is easy to see how shallower positions, not noticing the sounder parts of deep ecology, would view it that way, and condemn, the whole edifice. But because there is much that is solid and worthwhile in deep ecology, what should be preferred is the first way, of restoration and reconciliation.

Richard Sylvan <66>

APPENDIX

1. Survey methods as a way of pinning down deep ecology. How does the sort of picture shown in Figure 1 - which is worth persevering with, elaborating and applying - fit in with the burgeoning deep ecological literature? It is surely not just tangential to that, so that we should look elsewhere to grasp the deeper features of deep ecology? The core themes, and philosophical basis, and extension themes, were assembled in a quite impressionistic fashion, namely working through much of the literature and all the more basic work, and setting down the themes which on reflection seemed to be presented or emerge. Something like this is still a main method of research in the humanities, e.g. in history, history of ideas, and philosophy.

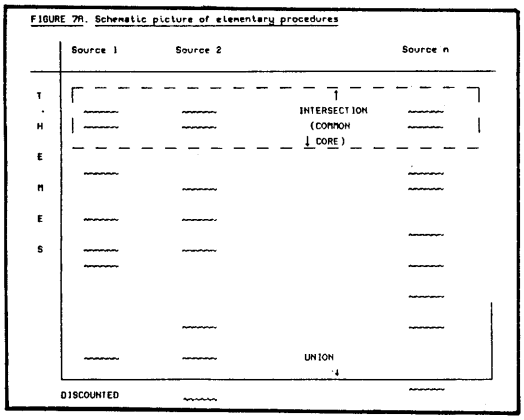


FIGURE 7A. Schematic picture of elementary procedures

But here, with deep ecology, there were prospects of doing better than such impressionistic methods, or so I thought. Empirical, or at least quasi-empirical, methods could be employed. The main idea is that the set of relevant sources is assembled, and the same statistical and set-theoretic work is done on the themes extracted from these sources; so the method is an elaboration of the sort of technique larger dictionaries such as the Oxford adopt in pinning down the standard senses of a term. The hope was that analysis of the serious philosophical literature (pretty rough selection criteria these, to be sure) on deep ecology would lead, not to despair, but in particular in two directions: Firstly, to what is more or less common to the positions presented - the intersection of theories, giving the core or basic theory. And secondly, to what results when all the theories are put together - the union of themes, giving an approximation, after some sifting, to a deep ecological paradigm.

As you might have anticipated by now, this thematic method hardly worked to perfection. Still it is worth explaining the method in a little more detail since, despite its limited success, it reveals much. First a set of sources is assembled. Here there is scope for sampling and statistical methods, so beloved of social scientists; but in the case of deep ecology it seemed feasible to gather for winnowing all more serious texts accessible in Australia. That latter limitation (all to familiar in environmental research) imposes a perhaps unfortunate parochial geographical constraint; but it induces no violation of such adequacy requirements as that sources introducing the notion be included in the bundle, as are all sources referred to in several other sources. With the rise of networking magazines concerned with deep ecology, there are many references to deep ecological thinking and experience which get discounted, as not appropriately serious. Increasingly often, any sort of deeper experience or thought gets assigned under the 'deep' heading, no matter how anthropocentric. This is one of the many problems with the depth notion and deep terminology, rather counteracting the valuable idea of penetrating below the conventional surface of received environmental assumptions, that it is important to think deeper than the assumption of Environment Z-land, for instance, that the environment should be managed for present and future generations of humans - a typical governmental surface assumption, often announced, but much less often put into practice.

Once the sources are assembled, a beginning can be made on unscrambling themes, something that calls for a good deal of judgement also, especially in such matters as deciding whether themes from different sources come to the same or not. Here and elsewhere care is required not to penetrate too deeply, to expose only so much of the surface themes as is necessary (a well-known principle in logical analysis). When the themes are duly marked out, there is some smoothing of the thematic data, for instance evidently remote and irrelevant themes in one source may be deleted. (It is like the judging of a diving contest or the massaging of statistic: isolated wild elements are removed from the sample used for assessment.) Then the elementary set operations of union and intersection are applied, again subject to some qualification. In particular, if a very prominent theme in some formulations is omitted from, or only approximated in, one formulation, then that theme will be put, initially at least, in the intersection. (Logicians and mathematicians, for example, sometimes omit intended or assumed axioms; e.g. Parry in analytic implication, Maclean in category theory.)

A striking example concerns the very introduction of the notion of deep ecology into the philosophical liqerature (Naess 1973), which fails to present the fundamental value thesis, that intrinsic value is not confined solely to humans or human features. While it can be argued that rejection of the sole and greater value assumptions is implied by what is said concerning biospheric egalitarianism (the equal right to live and blossom), the argument is not decisive, since value is only involved indirectly and perhaps only instrumentally. (as Naess's appeal to effects on the 'life quality of humans' and to our ecological dependence might suggest).

Naturally one does not attempt this sort of analysis entirely in the dark, but in the partial expectation that certain kinds of results will emerge; three especially:

1. The core represents a significant deviation from mainstream assumptions, a deviation which has been encountered before.

2. The total theory, or union, is not simply a jumble of theses, but has some coherence.

3. There are ways of getting from the core toward the total theory.

In the case of deep ecology it would have been pleasant to report triumphantly that these expectations, and more, are fulfilled; indeed that the theory is so well integrated it represents a (sub)cultural paradigm. What conceit! Still there is a good deal there. Partly the thematic enterprise did not succeed because of the poor calibre of the leading presentations of 'the' deep ecology intuition, and because exponents had and have different intuitions, messages and objectives.

2. Towards deeper environmental pluralism. Partly, however, it didn't work because it was misconceived. Taking the union, in particular, assumed that there was much wider common ground - something that could be called the deeper ecological paradigm which could be approached in this sort of way - rather than a plurality of positions. Pluralism is fine and feasible, and should be encouraged just about everywhere, but taking the union of themes of some plural-

FIGURE 7B. Actual results, in note form, of a survey of some main sources.

Naess 73	Naess 83	Naess-Sessions 84/ Naess 84	Devall 79	ROUGH CLASSIFICATIONS
———	Intrinsic value (1)	Intrinsic value of life (1)	———	VALUE CORE
Biological egalitarianism (2)	———	———	———	
Diversity/richness (3)	Diversity/richness (2)	Diversity/richness (1)	Diversity (10)	GROUNDS AND BASES
Complexity not complicafion (6)	———	———	———	
Total field holism (1)	———	———	New person/planet metaphysics (1)	
———	———	———	Objective approach to nature (2)	
———	No negative interference rights, excepting vital needs (3)	No negative interference, etc. (3)	Earth wisdom, limited interference	VALUE AND ACTION COROLLARIES
———	———	———	More leisure (13)	
———	Action obligation (6)	Action obligation (8)	———	
———	Present interference excessive (4)	Present human interference excessive (5)	———	POLICY AND LIFESTYLE APPLICATIONS
———	Policy adjustments to economic and ideological structures (5)	Policy adjustments, etc. [Also to technological structures] (6)	Interim policy: steady state (15),(8) Soft technology (11)	
———	———	Objective life quality rather than higher living standard (7)	Life quality rather than quantity of products (6)	
———	———	World population reduction (4)	Reduction of population to optimum (7)	
Anti-pollution/ resource depletion (5)	———	———	Emphasis on pollution and like topics counterproductive (8)	
Local autonomy/ decentralistion (7)	———	———	Local autonomy/ decentralisation (11),(14)	
Anti-class posture (4)	———	———	———	
———	———	———	New psychology (3) with rejection of dualisms: man/nature, subject/object, etc.	DISCOUNTED: NEW SUBJECTS
———	———	———	New philospohical anthropology (9)	
———	———	———	New objective science (4)	
———	———	———	New education (12)	
Embedding in ecosophy	———	———	? Embedding in updated Spinoza (2)	EMBEDDING PHILOSOPHY/ RELIGION

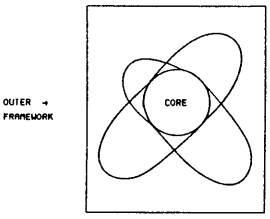
Notes: 1. Bracketed numerals indicate theses numbers in the sources.

2. The disappointing absence of core themes can to some extent be compensated for by appeal to statements of them or implying them elsewhere in accompanying texts and commentaries.

istic system of positions is likely to lead only to intractable inconsistent sets, and perhaps to trouble. Consider, to illustrate, the United Religion, about to sweep California, a pluralist grouping made of representations of the world's great religions. While the refined common core of these positions is likely to be interesting, the union is not: it will contain, for example, all of the following inconsistent triad: many gods exist (from e.g. Hinduism); exactly one god exists (from e.g. Islam); no gods exist (from e.g. Buddhism).

There is analogous trouble in combining deep ecological sources, with such results as that stones and mountains both do and do not have inherent value. But likewise this does not show that the notion of a deeper ecological paradigm is illusory. It only reveals some of the pluralistic features, not duly recognised at the deeper end of the ecological movements. And it only indicates that a different route should be taken in getting to a deeper paradigm. For the alternative environmental, and deep ecological, paradigm covers a spread of positions, much as the contrasting dominant social paradigm does.

FIGURE 8. Preliminary picture of (paradigmatic) pluralism.



Pluralism is set within, and restricted by, a framework. The framework is open to further determination in several different, and perhaps conflicting, directions, allowing for a plurality of positions. A formulation of pluralism is achieved by not settling too many issues; it is achieved not by closure of issues, but by deliberately leaving much open - open not just for later determination, but for different directions or patterns of determination, or for cheerful nondetermination. Some of the sources on deep ecology have tried to settle too much, sometimes in very questionable ways (thus, e.g., Devall on dualisms). What would have been preferable to dogmatic closure on issues that are neither core nor framework, would have been statements to the effect that the issues are left open. Then needless disputes would have been removed, since differences could be absorbed pluralistically.

Of course deep ecology has to amount to something, to exclude certain widespread assumptions, namely central assumptions of the dominant social paradigm. For this purpose, it is easier to formulate core themes of depth ecology negatively than positively, to set the themes up in opposition to the dominant paradigm. So it is with the sole value assumption, according to which value is not confined to features of humans and their circle (e.g. honorary humans, and Gods fashioned in human likeness). Even a more positive recasting of them as wider values or values-in-nature; that values also reside, are to be found, in non-human nature, somewhere, does not indicate exactly where or what the locus of value is. This feature, a certain shallowness or imprecision in formulation, which may look at first glance like a serious drawback, turns out to be a considerable advantage when it comes to pluralistic formulation. Naess's later formulation of a wider value theme, that life on earth is intrinsically valuable, illustrates the point. As already explained, the restriction to life on earth is much too parochial (and incompatible with the ethical requirement of universalizability). Worse still is the restriction to life. Life is a value-making characteristic, but it does not always succeed, and it is by no means the only value-making characteristic (e.g. richness, diversity, complexity, stability, are others). A much more open formulation would have avoided these sorts of difficulties, for instance as follows: Among the various nonhuman things that are intrinsically valuable are many living creatures.

Naturally, pluralistic frameworks cannot be entirely indeterminate, and it is essential to offer some elaboration of ways claims can be filled out. Elaboration of the values-in-nature theme of deeper positions illustrates the matter. By virtue of this theme some natural items have value, exhibit value qualities, in a way furthermore that does not reduce to aspects of those who sense or notice the qualities, namely valuers of some sort. Some account is then eventually owed of how these items can have these (tertiary) value qualities independently of their being somehow perceived. In fact the attempts in this direction so far in the deep ecology literature are not very satisfactory. What is required however is not a satisfactory, or an authorised, account, but a sufficient indication that some such account is possible. It can be left open which accounts various different strands of deeper environmental pluralism adopt.

There are pluralisms and pluralisms, a plurality of them, some natural and significant, some not. Two types of pluralistic groupings are especially important so far for environmental action and practice: broad environmental pluralism, which comprises all environmentally oriented positions, shallow and deeper: and deeper environmental pluralism, which, with a more restricted shared value framework, includes animal liberation but not resource conservation. For most environmental campaigns (where numbers, visibility, alliances, etc., matter) broad environmental pluralism is appropriate; only occasionally (e.g. in the treatment of animals, or plants) will it be necessary to fall back to a deeper level.

Pluralism lets other positions within a given framework be, does not endeavour to grind them into the ground, even if it ranks them as (decidedly) less adequate, further from the truth, and so on. So it is with (restored) deep ecology, as regards various pluralistic groupings: it is a much more satisfactory position than resource conservation, and a vast improvement on mainstream theorising, and of course much more congenial to deep-green theory than these or any greyer positions.

3. Green, deep green and deep ecology. The critique of deep ecology has led to a different sort of position, tentatively entitled 'deep-green theory'. It is worth pulling together leading themes of this theory, and comparing and contrasting them with those of deep ecology, as is done in Figure 9.

FIGURE 9. A COMPARISON OF DEEP ECOLOGY AND DEEP-GREEN THEORY, IN CAPSULE FORM.

Deep ecology	Shared themes	Deep green theory
biospheric egalitarianism biocentrism	wider-value theme rejection of greater value assumption, by	biospecies impartiality axiocentrism
extreme holism cosmic identity	ecological universals as defeasible value-making characteristics natural systems as integral, irreducivle	moderate holism transpersonal identification
maximal self-realisation		satisizing on value determinates
hands-off practices	limited interference only with natural systems; restricted rights thereto	respectful use
strong action principle	commitment to implement principles	weak action principle
	applications to economics, politics and policy, especially in environmental areas (see figure 1) inclusion in deeper environmental paradigm (see figure 6B)	

A major difference between the theories lies in the distribution of values. Deep ecology, like simpler utilitarianism, offers a unique initial distribution: each living thing is assigned equal value and nothing else has intrinsic value. Deep-green theory, while rejecting both the themes upon which this simplistic assignment depends, is much less specific as to how value is distributed. But certainly it is spread on to things - wholes, collectives, systems as well as individuals - which are not alive, and it does not cover all things that are living. Nor is it distributed into those things that have the quality in an equal fashion, except in the trivial sense that all have, or partake of, value. Some things that have value are much more valuable than others; there is some weak (and partial) ordering of things with value. It is these things that are worth conserving, preserving, and so on, the more the more valuable they are. Thus the theory is axiocentric, value-centred.

Value is assessed through some mix of value-making characteristics, including such defeasible ecological universals as stability, resilience, naturalness, diversity, richness, scarcity and so forth (cf. also Rodman, p. 90). But there are considerable constraints on how this is done. For example, constraints may rule out forestry enrichment of a natural primitive forest by foreign pioneer species. One constraint, that of impartiality, substitutes for (satisization) egalitarianism. According to the requirement of biospecies impartiality, which excludes certain types of class chauvinism, a thing cannot be ranked as valuable or ahead of another simply by virtue of belonging to some species (e.g. being human) or favoured biological class; such class features are not in themselves value-making characteristics. Such an account of how value is assessed remain however far from specific, and sometimes of little use in practice. Undoubtedly deep-green theory too owes some more exact theory of value.

Deep-green theory, in turn, invites comparison with the platform of the West German Greens. They have much in common. Both fit together within a deeper environmental alternative to the dominant social paradigm; compare Figure 6(B) which in fact sets out several of the main objectives of the Greens. The four central principles of the Greens' platform, namely ecological, social, grassroots democratic, and nonviolent politics, and much of their more specific elaboration (e.g. through themes of more selective economic growth, harmony with nature, priority to local community bases, etc.) likewise appear in elaborations of deeper environmental paradigms <67>. Of course Greens and deep-green do not coincide everywhere by any means; to take a rather trivial example, deep green theory would take some exception to the Green metaphor of partnership with nature (in place of exploitation). Where they may diverge conspicuously is over the principles which make for depth, such as biospecies impartiality. The Greens' platform, designed to cover a broad alliance of ecologically-inclined members, quite properly makes room for shallower environmental positions. The divergence emerges particularly in the 'overall image of the ideal green society' (which Mares finds emerging from the Green Party's platform, p. 34); for the landscape envisaged remains a human dominated socially owned one, devoid, it seems, of large wild creatures, wild rivers and wilderness.

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39 There is a nest of false dichotomies hereabouts, several of them, including that of individualism/holism, disentangled in EP2.

40 This theme is argued in detail elsewhere, e.g. JB. This familiar case against all relations being internal also tells against Naess's metaphysical position, often erroneously written into deep ecology.

41 There are again satisfactory middle ways between idealist total unification and (Humean) empiricist separation; for details see EP2 and also JB.

42 For part of the detailed argument, see Sylvan 84. For some of the other interpretations of quantum theory, see e.g. DeWitt and Graham. For a neutral formulation of mysticism see Plumwood and Routley: such formulations undermine a key part of Passmore's argument in 74 from deeper environmentalism to rubbish.

43 As discussed in EP, p. 141ff.

44 Under Fox's presentation, 'deep ecology' has some strange bed-fellows (but to fail to recognise these fellow travellers is to fail to appreciate the metaphysical thrust of deep ecology and its true antecedents). The American philosopher, William James, long ago popularised Fox's 'central intuition' of the world as a 'seamless whole', but his pragmatic pluralism, though presumably allowing for nature mysticism along with Christianity, affords no glimpses of deep ecology proper. The philosophy of holism of the South African philosopher-statesman, Jan Smuts, anticipated the holistic/mechanistic confrontation of West Coast deep ecology, and the victory of holism, but again, like the neo-Hegelians, without requisite ecosystemic depth. However Smuts grasped 'the biological news' (Fox, p. 198) slightly earlier and rather more obviously than Whitehead.

45 An inadequate description is often given of this process of deadening, when what it predominantly amounts to is deintensionalization, and life and mental features are only some among a spectrum of intensional ones. And restoration involves not so much reenchantment or revitalisation as reintensionalisation.

46 Advertisement from Monash University, headed 'Earth First', for three seminars by Naess, October 1984.

47 For instance, in Animal Liberation.

48 Extreme holism, which has nothing essentially ecologically deep about it, doesn't blend easily or satisfactorily with perception theory.

49 Also at work is the curious drive to reduce relations to identity. The positive task of explication of identification, like a number of other tasks in the positive elaboration of a replacement for deep ecology, is not attempted here.

50 A recent conference theme approvingly reported by Devall. A related, and equally mistaken, chauvinistic theme of personal development first, before environmental matters, is also advanced by Devall (83, p. 7).
The 'major theme emerging through the conference' shares several of the defects of the consciousness approach. It is the theme of "'finding in your own roots" some basis for a more ecological social structure and psychology'. Many people have little or nothing in their own roots. Those that do may find only a shallow basis. And in any case, much may be new and not well represented in history (as e.g., the use of clever, simple ideas or technology).

51 For the main expansion see Drengson 83 and DEP No. 1. There is now a rich literature on the environmental paradigms and the connection with deep ecology: for references see especially The Trumpeter.

52 For leading theses of all these paradigms, see the tabulation in Routley 85.

53 Unless of course this single parameter (value, in some guise, really) is specially engineered to reflect the other features; for an inadequate and overly anthropocentric attempt to do this through richness, see e.g. Miller. A major difficulty with richness, for instance, is that there are cases (some indicated below) where increasing richness, in the straightforward sense, decreases net value.

54 Very recent work designed to plug the gap, by Naess and others, cannot be regarded as particularly successful. The issues will be taken up in later publications, e.g. Sylvan 85.

55 However Devall and Sessions mistakenly equate righteous management (which they trace to Muir) with essentially 'hands off' management (84, p. 14). But the equation can only hold for bioregions zoned or left as such, and fails elsewhere, e.g. for regions where restoration is attempted, where production agriculture or forestry is practised, and so on. Devall and Sessions are continuing to operate in terms of an old false contrast, between modern economic use and no use at all. But in between lie such important intermediate notions as that of needful use and of respectful use (discussed in EP).

56 Apart from topics already listed in Figure 1, there is now a standard range of applications to such issues as: nuclear and other hazardous materials and wastes, dangerous chemicals, genetic engineering, arid lands and desertification, acid rain, ozone destruction, etc., etc. The applications Naess has outlined (in 83) afford a useful start on some of the topics concerned, and on showing the very significant differences between shallow and deep theory. But it is a start only; most of the hard work remains to be attempted.

57 See, similarly, Naess 85. But Naess believes it 'inevitable to maintain some fairly strong central political institutions (p. 15). Here however Naess is moving against the strong current of green thought.

58 All this turns on the 'extent' of intrinsic value they have. What has requisite independent value (e.g. through its own worthwhile telos) presumably should not be owned, or simply bought and sold, and so cannot serve fully as a commodity.

59 In several respects deep ecology has a religious, almost biblical, ring about it. Consider, for instance, the recent emphases on righteous ways, for instance righteous livelihoods and righteous agricultural management, the idea of salvation through consciousness change or conversion, the reestablishment of right relations, i.e. earth relations under a new paradigm (an internalised relation), and the adaption (as in the Greenpeace organisation) of the Quaker practice of bearing witness. It is not however that the dominant paradigm is free of religious aspects; consider, for instance, the also unlikely assumptions of salvation through industrialisation (e.g. as resolving overpopulation problems) and through concerted economic growth (e.g. in eliminating poverty and improving quality of life and environment).

60 Of course people committed to agribusiness, Western medicine, and the like, will dispute this. But the flimsiness of their case is increasingly evident as the term lengthens. On the complexity of the matter of following Nature, which, so the Law implies, is what we should do, see Rolston. Commoner himself explain the Law as follows: any major man-made change in a natural system is likely to be detrimental to that system (p. 41).

61 Again the transposition of 19th century anarchist social assumptions is evident. The points outlined also tell against various shallower attempts in the Philosophy Department, Research School of Social Sciences, Australian National University to offer foundations for morality, notably Stanley Benn's in terms of persons, and Keith Campbell's through a modified Stoic theory.

62 Though grey (for granite) was for a time Muir's favoured apparel colour, and green has distressingly wide use for battle fatigues. Blue, instead of grey, is definitely wrong, despite (and because of) its conventional links with conservativeness. The shades-of-green contrast can be conveniently combined with the useful European three-dimensional replacement of the out-dated two-dimensional left-right political classification. The combined dimensions are those depicted:

blue
pale green (right)

deep green

red
(left) green

63 This common 19th-century social anarchist sentiment, hardly confirmed since then, seems to underlie several of Naess's and Devall's pronouncements. The assumption appears to be that in the sought end-state, ecotopia or the future primitive or whatever, the natural goodness of (mature) humans will emerge (or reemerge).

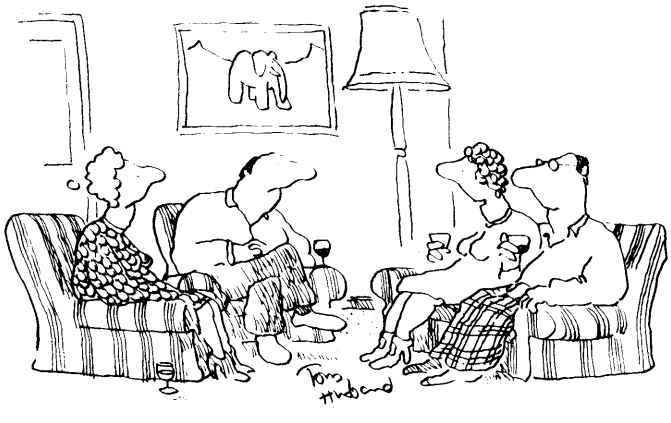
64 What is wanted is a relation, not of identity, but of (partial) identification (cf. footnote 48). It is such a relation which enables a person to be put in the position of another (there but for ... go I) or of a quite different thing: it is such a relation which operates behind veils of ignorance which remove irrelevant features, permitting qualified substitution.

65 The Tao of Physics, pp. 68-9, italics added. This book is among the 'Books of Deep Ecology', and is much cited by followers of deep ecology.

66 William Aiken, Brian Martin and Louise Sylvan made valuable comments on an earlier version of this critique. Arne Naess has already drafted a response to the critique, and other responses are, I understand, to follow.

Note: DEP abbreviates Discussion Papers in Environmental Philosophy. Other acronyms are indicated in the reference list.

R. Attfield, The Ethics of Environmental Concern, Blackwell, Oxford, 1983.
R. Attfield, Review of D. Scherer and T. Attig's Ethics and the Environment, Metaphilosophy 1984, to appear.
D. Bennett (ed.), Environment, Ethics, Ecology, Canberra, 1985, to appear.
C. Birch and J.B. Cobb, The Liberation of Life, Cambridge University Press, 1983.
M. Bookchin, The Ecology of Freedom, Cheshire Books, Palo Alto, 1982.
F. Capra, The Tao of Physics, Fontana, Glasgow, 1976.
B. Commoner, The Closing Circle, Knopf, New York, 1971.
B. Devall, 'Stone/sky: Reflections on the "real work" of deep ecology', in Bennett 85.
B. Devall and G. Sessions, Deep Ecology, Peregrine Smith Books. Layton, Utah, 1984.
B. Devall and G. Sessions, 'The development of natural resources and the integrity of nature: contrasting views of management', typescript, Rocklin, California, 1984.
B.S. DeWitt and N. Graham (eds.), The Many-Worlds Interpretation of Quantum Mechanics, Princeton University Press, 1973.
A. Drengson, Shifting Paradigms, LightStar, Victoria, BC, 1983.
A. Drengson (ed.), The Trumpeter, LightStar, Victoria, BC,; several issues 1983-4.
W. Fox, 'Deep ecology: a new philosophy of our time?', The Ecologist 14 (1984), 194-200.
A. Gare, 'The shallow and the deep, long-range critique of science', typescript, Murdoch University, 1982.
N. Griffin and D. Bennett, 'The ethics of triage', Discussion Papers in Environmental Philosophy, No. 8, Research School of Social Sciences, Australian National University, 1984.
G. Hardin, Exploring New Ethics for Survival, Penguin, 1977.
W. James, Essays in Radical Empiricism, Harvard University Press, Cambridge, Mass., 1976.
A. Leopold, A Sand Country Almanac with other essays in Conservation, Oxford University Press, New York, 1966.
D. Mannison and others (eds.), Environmental Philosophy, Research School of Social Sciences, Australian National University, 1980.
P. Mares, 'Green ideals, German realities', Chain Reaction 39 (1984), 33-36.
P. Miller, 'Value as richness', Environmental Ethics 4 (1982), 100-114.
G.E. Moore, Principia Ethica, Cambridge University Press, 1903.
A. Naess, 'The shallow and the deep, long-range ecology movement. A summary', Inquiry 16 (1973), 95-100.
A. Naess, Økologi, samfunn og livsstil, Universitetsforlaget, Oslo, 1974.
A. Naess, 'Notes on the methodology of normative systems', Methodology and Science 10 (1977), 64-79.
A. Naess, 'Philosophical aspects of the deep ecological movement', typescript, Oslo, 1983.
A. Naess, 'What is basic in deep ecology?', typescript, Canberra, 1984.
A. Naess, 'Intuition, intrinsic value, and deep ecology', The Ecologist 14 (1984), 201-203; referred to as 84b.
A. Naess, 'Notes on the politics of the deep ecology movement', typescript, Canberra, 1985.
R.L. Nettleship (ed.), The Works of T.H. Green, Three volumes, Longmans, Green, London, 1889.
R. Nozick, Anarchy, State and Utopia, Blackwell, Oxford, 1974.
W. Ophuls, Ecology and the Politics of Scarcity, Freeman, San Francisco, 1977.
E. Partridge (ed.), Responsibilities to Future Generations, Prometheus Books, Buffalo, 1981.
J. Passmore, Man's Responsibility for Nature, Duckworth, London, 1974; second edition 1980.
J. Passmore, 'Political ecology: responsibility and environmental power', Melbourne Monthly Review, February 1983.
V. Plumwood and R. Routley, 'The inadequacy of the actual and the real: beyond empiricism, idealism and mysticism', in Language and Ontology (ed. W. Leinfellner, E. Kramer, and J. Schank), Höldner-Pichler-Tempsky, Vienna, 1982, pp. 49-67.
J. Rodman, 'Four forms of ecological consciousness reconsidered', in Ethics and the Environment (ed. D. Scherer and T. Attig), Prentice-Hall, New Jersey, 1983.
H. Rolston III, 'Can and ought we to follow nature?', Environmental Ethics 1 (1979), 7-30.
R. Routley, Exploring Meinong's Jungle and Beyond, Research School of Social Sciences, Australian National University, 1980; referred to as JB.
R. Routley, 'In defence of cannibalism I. Types of admissible and inadmissible cannibalism', Discussion Papers on Environmental Philosophy, No. 2, Research School of Social Sciences, Australian National University, 1982.
R. Routley, 'People vs the Land: the ethics of the population case' in Populate and Perish? (ed. R. Birrell and others), Fontana, Sydney, 1984.
R. Routley, 'Maximizing, satisficing and satisizing: the difference in real and rational behaviour under rival paradigms', Discussion Papers in Environmental Philosophy, No. 10, Research School of Social Sciences, Australian National University, 1984.
R. Routley, 'Culture, philosophy, and approaches to the natural environment - an Australian perspective', in Bennet 85.
R. Routley and N. Griffin, 'Unravelling the meanings of life?' Discussion Papers in Environmental Philosophy, No. 3, Research School of Social Sciences, Australian National University, 1982.
V. and R. Routley, 'Against the inevitability of human chauvinism', in Moral Philosophy and the Twenty-First Century (ed. K. Goodpaster and K. Sayre), Notre Dame University Press, 1979.
R. and V. Routley, 'Human chauvinism and environmental ethics', in Mannison, 96-189; referred to as EP.
R. and V. Routley, 'Nuclear energy and obligations to the future' in Responsibilities to Future Generations: Environmental Ethics (ed. E. Partridge), Prometheus Books, Buffalo, 1981.
R. and V. Routley, 'An Expensive Repair Kit for Utilitarianism', Discussion Papers in Environmental Philosophy, No. 7, Research School of Social Sciences, Australian National University, to appear.
V. and R. Routley, 'Social theories, self management and environmental problems', in Mannison, 217-332; referred to as EP2.
J. Schell, The Fate of the Earth, Avon, New York, 1982.
J. Seed (ed.), Deep Ecology, typescript, Lismore, NSW, 1983.
G. Sessions, 'Shallow and deep ecology: a review of the philosophical literature' in Ecological Consciousness (ed. R.C. Schultz and I.D. Hughes), University Press of America, 1981.
G. Sessions (ed.), Ecophilosophy III, Sierra College, Rocklin, Cal., 1981.
G. Sessions (ed.), Ecophilosophy VI, Sierra College, Rocklin, Cal., 1984.
P. Singer, Animal Liberation, Random House, New York, 1975.
R. Sylvan, 'Towards a cosmo-logical synthesis', typescript, Canberra, 1984; to appear in Grazer Philosophische Studien.
R. Sylvan, 'The way of values: a free variation on Meinong's theory of impersonal values', Essays on Meinong (ed. P. Simons), Philosophia Verlag, Munich, 1985.
M. Tobias (ed.), Deep Ecology, Avant Books, San Diego, California, 1984.
M. Walzer, Spheres of Justice: a defense of pluralism and equality, Basic Books, New York, 1983.
J.R. Wheeler, 'Genesis and observership' in Foundational Problems in Special Sciences (ed. R.E. Butts and J. Hintikka), Reidel, Dordrecht, 1977, 3-33.



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