

# A BIBLIOGRAPHICAL ESSAY ON ENVIRONMENTAL ETHICS<sup>1</sup>

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## *Introduction*

Questions concerning the ways in which human beings can and should interact with the nonhuman natural world can hardly be said to be new. Throughout recorded human history prescriptions concerning human behaviour towards the nonhuman world have existed. Although with reference to restricted periods of time and restricted geographical locations, attempts have been made to categorise such prescriptions and to consider the attitudes which underlie them, to attempt a comprehensive survey would be an enormous task.

My concern here is with a much smaller, more manageable area, and even within this area, I will not attempt to provide a detailed historical survey.<sup>2</sup> I will be considering, primarily, approaches to environmental ethics found in the English-speaking Western world,

<sup>1</sup> The expression 'environmental ethics' is increasingly being used as an umbrella term to cover all kinds of moral debate concerning human attitudes toward, and treatment of, the nonhuman natural world. It is in itself a contentious term, since it could be argued that the very use of the term 'environment' segregates human beings from the natural world and suggests that the significance of the natural world is as something which surrounds human beings rather than as something with independent significance, thus prejudicing the moral debate. For this reason, the term 'ecological ethics' has been preferred by some ethicists. This has its own difficulties, since it can be interpreted as referring to posited ecological relationships within ecosystems, or with reading ethical approaches out of the ecosystem. In this paper I have elected to use the term 'environmental ethics', since it is more popular and less open to misinterpretation than ecological ethics; but its use is not intended to prejudice the question concerning human beings and the nonhuman natural world.

<sup>2</sup> Historical surveys already exist; see, for instance, Roderick Nash *The Rights of Nature* (University of Wisconsin Press 1979); Eugene Hargrove *The Foundation of Environmental Ethics*.

that is to say, the UK, the USA and Australia, during the last thirty years. A further area which, while relevant, will not be explicitly covered in this paper is the range of positions on exclusively 'animal rights' or 'animal liberation' issues. Several historical studies of this subject already exist;<sup>3</sup> and the differing philosophical approaches here are not difficult to identify.

### *A Brief Historical Sketch*

The publication of Rachel Carson's *Silent Spring* in 1962, warning of the dangers to humans and to wildlife of toxic pesticide residues, is widely regarded as the spark which kindled the environmental movement as it is known today. It was not until some time after this, however, that serious philosophical reflection about ethical issues raised by human action in the nonhuman natural world commenced. Perhaps the first significant attempt springs from a conference in 1971 at the University of Georgia, USA, which produced the papers later to be published in 1974 as *Philosophy and Environmental Crisis*. By 1974, the Scandinavian philosopher Arne Naess had published, in *Inquiry* 16, 1973, his article 'The Shallow and the Deep, Longrange Ecology Movement', an article destined to be of peculiar importance in its popular appeal as the founding statement of what later became known as deep ecology. In the field of environmental law, Christopher Stone, had produced and later published an essay entitled 'Should Trees Have Standing?' arguing that 'environmental issues should be litigated before federal agencies or federal courts in the name of the inanimate objects about to be despoiled ... and where inquiry is the subject of public outrage'.<sup>4</sup> Stone's paper, while not in itself contributing substantially to the later philosophical debate, helped to make the application of the language of 'rights' and 'standing' to nonhuman natural objects and areas more familiar (despite its origin in a legal rather than a philosophical context).

By 1975, ethical questions concerning the treatment of nonhumans had begun to become more significant on the philosophical agenda. Peter Singer's *Animal Liberation*, developing a utilitarian approach to the treatment of sentient animals, was published. With the publication

<sup>3</sup> See E. S. Turner *All Heaven in a Rage* (Michael Joseph 1964); for a collection of readings from various periods, see ed. Regan and Singer *Animal Rights and Human Obligations* (New Jersey; Prentice Hall 1976). The two main approaches to the moral status of animals – utilitarian and 'rights' based are put forward most coherently in Peter Singer's *Animal Liberation* (1975; St Albans: Paladin Books, Granada 1977) and Tom Regan's *The Case for Animal Rights* (London: Routledge 1984).

<sup>4</sup> Christopher Stone *Should Trees Have Standing* (Avon Books, p. 12, Discus 1975, ed.).

of this book, and the subsequent proliferation of philosophical work on this topic, ethical questions concerning the treatment of nonhuman animals were well on the way to achieving the philosophical respectability which they now enjoy (something which environmental ethics in general is yet to achieve).

By 1979, there was enough ethical interest in environmental issues for Eugene Hargrove to begin producing *Environmental Ethics*, now indisputably the most significant journal in the field. Shortly after this, in the early 1980s, new and influential collections of essays on environmental philosophy were published, most notably a collection from the Australian National University, *Environmental Philosophy*, (eds. Mannison, McRobbie and Routley 1980) and another collection, also of Australian origin, sharing the same name (eds. Elliot and Gare 1983). By this time, book length studies of environmental ethics had begun to appear. Robin Attfield's *The Ethics of Environmental Concern* (Oxford, Basil Blackwell) for example, was first published in 1983.

From the mid 1980s to the present time, research, publication and teaching in environmental ethics has rapidly expanded. Ethical positions first mooted in articles in *Environmental Ethics* in the early 1980s crystallised into densely argued books; most notable amongst these Holmes Rolston's *Environmental Ethics*, Paul Taylor's *Respect for Nature* and Lawrence Johnson's *A Morally Deep World*, to all of which I shall return. Several American universities began both undergraduate and graduate courses in environmental ethics, most notably the State University of Colorado; while Lancaster University in the UK founded a taught MA course in Values and the Environment. As environmental questions become more pressing, and a generation of young adults concerned with environmental issues enter higher education, it can only be expected that there will be further expansion in the teaching of, and interest in, environmental ethics.

### *Central Questions in the Current Debate within Environmental Ethics*

A wide spectrum of ethical positions is covered by the umbrella term 'environmental ethics'. These positions draw on a variety of ethical traditions, from Plato and Aristotle to Mill and Moore. As one might expect, a vigorous debate is being conducted between those advocating such diverse approaches. Certain key questions lie at its heart.

The first level of debate concerns axiology; that is to say, the value theory which underlies environmental ethical debate. What is considered to be valuable, and from where does its value come? A number of differing concerns are raised by this question.

Firstly, is value 'subjective' or 'objective'? Is all value a creation of human subjectivity, or are values already 'out there' and to be discovered rather than created? This question divides environmental

ethicists, although some have attempted to establish a position which lies between the two (such as Richard Sylvan's concept of the 'nonjective', to which I shall return). Secondly, important to subjectivists and objectivists alike, is the question 'What is value? Where is value located?' Here, an even wider array of answers have been advocated, ranging from the possible attributes of individual living organisms (such as sentience or life) to more abstract qualities such as diversity, richness or balance. A third strand concerns the concentration or distribution of such value. Are degrees of value possible, or is it either present absolutely or absent?

Straddling all these crucial axiological questions is (to use the expression in a somewhat loose way) what has been called the naturalistic fallacy: in this case the possibly invalid identification of something which *is* (such as sentience or life) with something which is *good* or *valuable*. Again, different ethicists have adopted different ways of coming to terms with this problem.

A second level of questions, although one to a large extent dependent on the axiological, is the more directly ethical. How should human beings act in the nonhuman natural world, given the conclusions of value theory? How does one make ethical decisions where perceived values come into conflict? Should one act in order to preserve some kinds of value over others? Obviously, the environmental ethical edifice must, like any other ethical construction, be built on an axiological foundation; the two are, ultimately, inseparable. However, whilst it is only just possible that two philosophers with the same value theory might produce different practical ethical responses, it is entirely probable that two philosophers with different underlying value theories might draw similar practical ethical conclusions.

One further distinction remains to be made at this point: that between ethical *monism* and ethical *pluralism*. The central question at issue here is whether it is possible, within an ethical constituency so large that it could include the entire planet, to arrive at a single governing ethical principle or set of consistent principles to apply to all ethical problems. Ethical monism – the conviction that such consistency is possible – has until recently dominated environmental ethics (as indeed, ethics as a whole). More recently, however, some influential figures in environmental ethics have contended that no one ethical principle or set of principles can possibly perform such a comprehensive function. This has led to the advocacy of differing ethical 'frameworks' with application to different situations. One could not, for instance, expect an ethical principle which we might use when dealing with a domestic cat to be suitable when dealing with the extinction of species.

Having thus introduced the questions which lie at the heart of the environmental ethical debate, I shall now move on to examine, as concisely as possible, the various key positions presented by different

environmental ethicists. I will summarize each position and the range of possibilities which lie within it, together with its major proponents. Important critiques of each position, and possible directions in which such a position could be developed will also be considered.

### *Resources Management Approaches*

This category, which I have here labelled 'resource management', barely falls under the heading of environmental ethics at all. This is not to say that it is not axiologically and ethically based, but that such values and ethics as are espoused by resource management approaches are human-based. The environment is thus of instrumental value, as something which can be used to further human ends.

This need not be interpreted to suggest reckless exploitation of the natural environment. Indeed, the very foundation of resource management is that of 'marshalling' or 'stewarding' natural resources for maximum human benefit. The effects of present human actions within the natural world for the health and benefit of future generations for example, is an ethical position of some philosophical significance.<sup>5</sup> Most of the popular environmental issues: depletion of stratospheric ozone, global warming, destruction of rainforests, are focused ethically around their effects on human beings. Indeed, on the level of popular political debate, resource management concerns compose the entire ethical agenda. Several influential international political documents which have an environmental strand such as *North South: A Programme for Survival* (the 1980 Brandt Report); *World Conservation Strategy: Living Resource Conservation for Sustainable Development* (1980) and most of the documents from the Rio Summit (1992) adopt a broadly resource management approach.

More specifically philosophical resource management approaches to the environment have generally been made by philosophers opposing the development of the kind of environmental ethics described later in this paper. John Passmore, for instance, in his influential book *Man's Responsibility for Nature* (London: Duckworth 1980) argues that there is no need for a new environmental ethic. At the root of Passmore's objection to a new environmental ethic – an objection shared by R. G. Frey in *Rights, Killing and Suffering* (Oxford: Basil Blackwell 1983) – is the doubt that there are any rigorous grounds on which values in the nonhuman natural world and direct ethical responses to it can be based. Values are both human-generated and human-focused.

<sup>5</sup> See, for instance, Derek Parfit *Reasons and Persons* (Oxford, Clarendon Press 1984), Robin Attfield in *A Theory of Value and Obligation* (London: Croon Helm 1987).

Resource management approaches have, of course, been profoundly attacked from within environmental ethics; in fact, one might say that the whole project of environmental ethics has been one aimed at rejecting a purely instrumental estimation of the value of the nonhuman natural world. Several specific critiques are, however, important. Arne Naess' 1973 article 'The Shallow and the Deep, Longrange Ecology Movement' in *Inquiry* 16 characterises resource management approaches as 'shallow'. The position which Naess describes as 'shallow' here, however, only overlaps with a small area of what I have called 'resource management' approaches, since 'shallow' ecology, for Naess, fails to take into account even the interests of future generations and the Third World, let alone values within nature. Robin Attfield in *The Ethics of Environmental Concern* offers a critique of Passmore's position, as does Val Routley in her review of Passmore's book in the *Australasian Journal of Environmental Concern* 53, 1975. Both Attfield and Routley argue for a new approach to environmental ethics against that rejected by Passmore.<sup>6</sup>

There is no doubt that, outside the academic field of environmental ethics, different kinds of resource management approaches to the nonhuman natural world remain virtually unchallenged. Within environmental ethics, however, almost the reverse applies; in the pages of *Environmental Ethics*, even in its early days, very few articles advocating such positions have been published. Clearly, then, there is a need for greater interaction between academic environmental ethics and the resource management world of politics and economics. If environmental ethicists are to do more than to address one another, they must import their concerns onto the political and economic agenda. That this is a daunting task is undeniable, since it is rare for the concerns of even responsible resource management (such as the welfare of future human beings) to bear any significant influence where economic necessity is perceived to be overwhelming.

### *Individual Consequentialist Approaches*

'Individual consequentialism' covers a spectrum of positions which are, broadly, in the utilitarian tradition of Bentham and Mill. As with all utilitarian positions, the aim of ethical behaviour is at the best consequences (however the 'best' might be interpreted). In addition, the unit of ethical concern for individual consequentialists is always the individual organism rather than, for instance, the ecosystem or the

<sup>6</sup> Although it is worth noticing that in later publications, Passmore has been more sympathetic towards a more thoroughgoing environmental ethic; see for instance Passmore 'Attitudes to Nature' in *Nature and Conduct* (Royal Institute of Philosophy 1975).

species. However, it is important to make a distinction here: while it is the individual organism which is the unit of ethical concern, it is the state of affairs within the organism, rather than the organism itself which generates value. In consequentialist ethical systems, it is always states of affairs, rather than things in themselves which are valuable. This distinction will become clearer as I proceed.<sup>7</sup>

The most important advocates of individual consequentialism in this context are Peter Singer, Donald VanDe Veer and Robin Attfield. Singer's position, first articulated in *Animal Liberation* (1975) is perhaps the closest to traditional utilitarianism. This initial view was later developed in his *Practical Ethics* (Oxford: Oxford University Press 1979) and his article 'Killing Humans and Killing Animals' *Inquiry* 22 1978. In *Animal Liberation*, Singer's position is that of a straightforward hedonistic utilitarian – that is to say, value is measured in terms of pleasure and pain. The aim of ethical behaviour is to maximize pleasure over pain. Thus to be morally relevant, or 'morally considerable' an organism must have the capacity to feel pleasure or pain, or, more fundamentally, to have subjective experience. The capacity to have pleasurable or painful experience means that an organism has 'interests': an organism which can feel pain has an interest in avoiding it; an organism which can feel pleasure has an interest in sustaining or increasing it. Thus where an organism cannot feel pleasure or pain it is not morally considerable, and has no interests. (It is, however, the experience – the state of affairs – which is valuable, not the organism which has the experience.) This, of course, limits Singer's ethical concerns to sentient animals.

Singer himself recognises that there are problems with his position (aside from those which environmental ethicists might identify). One major problem is that of replaceability: that provided killing is painless, and therefore does not generate painful experience, one organism may be killed and replaced by another, since it is total *experience*, and not the organism, which is valuable. As initially articulated by Singer, this would apply to human beings as well as to nonhuman sentient animals. In order to avoid being seen to uphold such a position, in his later articles, Singer 'adds-on' to his earlier *hedonistic* utilitarian position what he calls *preference* utilitarianism. He divides the 'morally considerable' into two groups: the conscious and the self-conscious. The conscious are organisms which have pleasurable and painful experience, but have no self awareness, no conception of themselves as persisting into the future and hence no preference to go on living. Such organisms are replaceable. However, self-conscious organisms

<sup>7</sup> I am indebted for the clarity of this distinction to Bernard Williams, 'A Critique of Utilitarianism' in J. C. C. Smart and Bernard Williams *Utilitarianism: For and Against* (Cambridge: Cambridge University Press 1973), p. 83.

have conceptions of themselves as individuals who endure through time, with desires and preferences about the future, primarily the preference to go on living. These preferences are, for Singer, morally significant, and thus it is worse to kill an animal which has a preference to go on living than an animal which has no such preference. This allows him to 'ringfence' self-conscious organisms – human beings and a few mammals such as apes and whales – so that they cannot be considered to be replaceable. Singer's position is thus that of a classical utilitarian with preference utilitarianism 'tacked on'. All nonsentient animals, plants and natural formations are thus morally irrelevant to Singer, except instrumentally, that is to say, except in as much as they add pleasurable experience to the lives of sentient animals.

VanDe Veer's position is his article 'Interspecific Justice' *Inquiry* 22 1979 is in many respects similar to that of Singer, although he attempts to develop a more discriminating and detailed account. Like Singer, the ability to feel pleasure and pain, and hence to have interests, is the central ethical pillar of his approach. VanDe Veer's particular concern is with decision making where interests conflict (unlike Singer, he does not address the question of replaceability). Instead he develops a two-pronged system of priority principles for the making of ethical decisions. One prong focuses on the psychological complexity of the organism in question: the more complex, the stronger its claim to priority. The second prong concentrates on the importance of the claim for each organism. Is it a peripheral, or a basic interest which is at stake in any particular conflict? The more basic the claim, the stronger its priority.

The aim of VanDe Veer's principles, as Peter Singer's, is to achieve maximum total utility – the best overall consequences. His account is more meticulous than Singer's, eliding the self-conscious and conscious into one scale of psychological complexity, and also categorising interests into different degrees of significance. For VanDe Veer, like Singer, nonsentient animals, plants and natural formations, are of no ethical significance, except as instrumentally valuable to those animals which are of direct moral concern.

Robin Attfield acknowledges a considerable debt to Singer and VanDe Veer; a debt which is more obvious in his earlier book *The Ethics of Environmental Concern* (Oxford: Basil Blackwell 1981) than in his later articles and *A Theory of Value and Obligation* (London: Croom Helm 1987). His position contrasts sharply with both Singer and VanDe Veer in that he severs the exclusive link between experience and value, an uncoupling which is of central importance in environmental ethics. It is not the ability to experience, to feel pleasure and pain, which makes an organism morally considerable; it is, rather, its ability to flourish, to exercise the basic capacities of a species. An organism which has the ability to flourish and develop has an interest in doing so. Thus all organisms, regardless of their sentience, are



morally considerable; it is only inanimate objects, which cannot flourish, which are still morally inconsiderable. However, it is important to note, as Attfield is a consequentialist, that *it is the state of affairs of flourishing* which is valuable, rather than the organism itself, and that this leaves him vulnerable to the usual criticisms of individual consequentialist positions, as will become clear.

This extension of moral considerability makes the need to develop a series of priority principles more pressing, since the greater the number of species admitted to moral consideration, the greater the potential for conflict. In *A Theory of Value and Obligation* Attfield, like VanDe Veer, develops a two-pronged set of priority principles. A sliding scale of psychological complexity, with humans at the top and individual plants at the bottom, forms one prong, while the other is focused around needs, interests, wants and preferences. Basic and survival needs have priority over wants and preferences; more sophisticated organisms have priority over less sophisticated ones. As with VanDe Veer's priority principles, the aim is to achieve maximum total utility, or the best possible consequences.

Numerous objections have been levelled at these individual consequentialist approaches. The identification of value with experience, found in Singer and VanDe Veer, is a particular target of attack from environmental ethicists. John Rodman in his important article 'The Liberation of Nature' *Inquiry* 20 1977, argues that the identification of value with experience is anthropocentric, since it picks a quality paradigmatically possessed by human beings and uses it as a measure by which to judge other species. While Attfield also criticises the identification of experience with value, a similar criticism can be made of the psychological sliding scale proposed by himself and VanDe Veer.

A second criticism concerns replaceability, a problem which, according to his critics, Singer has not solved by his preference utilitarianism, and which VanDe Veer and Attfield do not acknowledge at all. Both Michael Lockwood in his article 'Killing and the Preference for Life' *Inquiry* 22 1979, and R. G. Frey in *Rights, Killing and Suffering* raise serious questions over the ethical adequacy of such positions. If, ultimately, it is maximising a certain state of affairs – be it pleasure, preferences satisfied or flourishing – which is of value, then the possibility of sacrificing any organism if it might lead to the generation of better states of affairs is always open. From the point of view of ethical deontologists, as I shall move on to consider in the next section, individual consequentialists thus fail to ascribe enough significance to the organism itself.

A third criticism, levelled both by Rodman and by Tom Regan in *The Case for Animal Rights* (London: Routledge 1984) is the degree of subjectivity involved in this kind of moral decisionmaking. How can one decide, for instance, whether meat-eating is of basic or peripheral

importance? or whether a bat is more psychologically sophisticated than a cat? How far are such decisions made on the basis of human prejudice?

In contrast with the criticisms of ethical deontologists, that individual consequentialists fail to give enough ethical significance to individual organisms, other environmental ethicists attack the focus on the individual organism altogether. Ethicists such as Callicott in *Animal Liberation: A Triangular Affair, Environmental Ethics* 2 1980, consider the individual organism to be an inappropriate unit on which to focus when working in the field of environmental ethics. In addition, the individual consequentialist position, Callicott argues, makes it difficult to accept predation since all killing is regarded as a loss of value or to support differential ethical treatment for wild and domestic animals. Others, such as Lawrence Johnson in *A Morally Deep World* (Cambridge: Cambridge University Press 1991) and Holmes Rolston in *Environmental Ethics* (Philadelphia: Temple University Press 1988) argue that at least some value should be assigned to ecological collectives, impossible for individual consequentialists, where value is identified solely with individual experience, or with the flourishing of individual organisms.

Aside from the question whether they are ethically satisfactory in general, it is clear that Singer's and VanDe Veer's positions, which only acknowledge sentient animals as ethically relevant, cannot function effectively as environmental ethics. Attfield's position, on the other hand, in acknowledging that in their flourishing all living beings can generate value, is nearer to the establishment of an environmental ethic. However, he is still vulnerable to many of the criticisms made above – as indeed are the next group of environmental ethicists I shall consider, the individual deontologists.

### *Individual Deontological Approaches*

I have called these approaches to environmental ethics 'individual deontological' both because they reject consequentialism, and because their ethical focus is on individuals rather than on collectives. These environmental ethicists consider that individual organisms have value in themselves, value that is not necessarily linked with experience, nor value which is to do with states of affairs within the organism. It is the organism itself which is valuable, not what it is doing.

Kenneth Goodpaster's article 'On Being Morally Considerable' in Scherer and Attig eds. *Ethics and the Environment* (Englewood Cliffs 1983) provides an important basis for many individual deontological positions. Goodpaster considers the question 'what makes something morally considerable?' in some detail, arguing that 'X's being a living thing is both necessary and sufficient for moral considerability so

understood'.<sup>8</sup> Tom Regan considers a similar question in his article 'The Nature and Possibility of an Environmental Ethic' *All That Dwell Therein* (California: University of California Press 1982). Here he suggests that all natural objects have 'inherent goodness' whether living or not. However, he finds this position difficult to sustain, and later in *The Case for Animal Rights* he retreats from it, concentrating on 'rights' which are possessed only by those which are 'subjects of life'. Regan's concept of mammalian rights is an individual deontological position; but its scope is so limited (adult mammals) that it can hardly be considered to be a position in environmental ethics.

More developed deontological approaches to environmental ethics are put forward by Albert Schweitzer (albeit in rather vague fashion); Paul Taylor in his influential book *Respect for Nature* (Princeton: Princeton University Press 1988) and Louis Lombardi in his article 'Inherent Worth, Respect and Rights' *Environmental Ethics* 5 Fall 1983. A consideration of their positions highlights the central divide between deontological individual environmental ethicists: some suggest that all morally considerable individuals are of equal value, while others argue for a hierarchy of value within the individual deontological framework. Schweitzer and Taylor fall into the former category, while Lombardi is in the latter.

Schweitzer, of course, was writing long before the general period which I am considering: *The Philosophy of Civilisation* was published in 1923. However, many of his ideas have been developed in more recent environmental philosophy. Central to Schweitzer's thought is the 'will-to-live', an impulse to self-realisation found in all living things (and even, according to Schweitzer, in crystals and snowflakes: an assertion which immediately generates problems). Recognition of this will-to-live should engender reverence towards all living things by human beings, who experience and wish to actualise their own will-to-live. On this basis, the taking of any life, however necessary, is wrong, and generates a burden of guilt and responsibility. Further, Schweitzer asserts that all wills-to-live are of equal value, and that human beings are not in a position to judge the relative values of different species. (Thus to kill an ant is as bad as to kill an antelope.) However, this perspective stands in tension with another which Schweitzer also seems to uphold, where humans are considered to be superior to other species. A parallel tension can be found where Schweitzer hints at the possibility of *restitution*. Restitution in environmental ethics is a kind of ecological compensation: compensating for damage to or death of one individual organism, species or area by good treatment of either the same organism, individual or area at a different time, or of a different organism,

\* Goodpaster 'On Being Morally Considerable', p. 34, op. cit.

species or area. Schweitzer, for example, suggests that by helping an insect in difficulties, one is 'attempting to cancel out part of man's ever new debt to the animal world'.<sup>9</sup> Laying the merits or otherwise of restitution to one side, as a deontologist, Schweitzer cannot consistently advocate restitution, since wrongs cannot be totalled and compensated for (as would be possible for consequentialists).

These tensions are echoed in Paul Taylor's altogether more complex and sophisticated account which urges 'respect for nature' rather than 'reverence for life'. Taylor's background is clearly Aristotelian. He argues that all organisms are teleological centres of life, pursuing their own good in their own way. This telos gives each individual organism *inherent worth*;<sup>10</sup> and this inherent worth is equally possessed by all living organisms, since all have a telos and a good of their own, a good which is as vital to them as a human good is to a human. This forms the basis of his biocentric view, and the scaffolding for his fundamental principle of species impartiality.

Acknowledging the severe difficulties generated by the belief in the inherent worth of every living organism, Taylor devotes much of his book to working out further ethical principles. He recommends four basic principles of duty to the nonhuman natural world: nonmaleficence, noninterference, fidelity, and restitutive justice. In addition to these he suggests five priority principles for resolving situations of conflict: self defence, proportionality, minimum wrong, distributive justice and restitutive justice. While these are too complex to examine in detail here, Taylor considers that careful application of these principles would enable the moral resolution of all conflict between human beings and nonhuman organisms.

Both Schweitzer and Taylor claim to be putting forward a view of 'biocentric equality' – where all living beings are of equal moral status. Lombardi, however, develops an individual deontological approach where values of different organisms are graded. Responding to Taylor, Lombardi argues that the telos possessed by a living thing is, in fact, a capacity, and that inherent worth is assigned on the basis of this capacity. Lombardi then argues that many living beings have additional capacities which increase inherent worth. A plant, for instance, has vegetative capacities which gives it a little 'value-added'; mammals have vegetative capacities, but are also sentient, the added capacity to feel pleasure and pain giving additional value; while human beings, having other additional capacities, such as reflectiveness, have even greater value-added. Thus Lombardi

<sup>9</sup> Schweitzer *Philosophy of Civilization* (1923; Buffalo, New York; Prometheus Books 1987), p. 318.

<sup>10</sup> This may sound as if Taylor is blatantly equating an 'is' with an 'ought'. In fact, he is most careful not to do this; but it is impossible in a background paper such as this to explain this more fully. See *Respect for Nature*, p. 71.

constructs a graded individual deontological environmental ethic built on difference of capacities between species.

Significant criticisms have been made of the individual deontological positions outlined above. Some of these criticisms relate to the very fact that they are deontological. Since this criticism is not confined to environmental ethics, I will not pursue it here. One aspect which is worth noting, however, is the existence in both Schweitzer and Taylor (where it is particularly significant) of the concept of restitution. As I have already pointed out, a point equally made by Peter Wenz in *Environmental Justice* (New York: State University of New York 1988) such a position cannot be sustained in a deontological system. Indeed, it resembles the much-criticised idea of replaceability, which I considered in the preceding section.

The granting of moral considerability to all living things is also questioned by critics. Peter Singer in his article 'The Place of Nonhumans' (Sayre and Goodpaster (eds.) *Ethics and Problems of the 21st Century* Notre Dame: University of Notre Dame Press 1979) and Frankena (also in Sayre and Goodpaster) argue against this view that sentience is necessary for moral considerability. Even more problems are raised by Schweitzer's and Taylor's assertions of the equal value of all living organisms. In actuality, both fail to sustain their positions rigorously. Taylor accepts medical treatment for humans where millions of bacteria may die for one human life; and admits that the infliction of pain makes it worse to kill animals than plants, thus undercutting his egalitarianism. Peter Wenz points out that Taylor also accepts the death and displacement of thousands of organisms to pursue important human projects such as building concert halls.<sup>11</sup> Thus Taylor can be accused of importing a hierarchy by the back door.

The explicit introduction of hierarchy, however, as with Lombardi, opens deontological individual thinking to the same criticism as the individual consequentialists: that of selecting paradigmatic human qualities and judging the value of other organisms by their possession of them. Lombardi's hierarchy would, for instance fall victim to Rodman's arguments about anthropocentrism.

Further criticisms of deontological individualism in environmental ethics again echo those made of individual consequentialists. These criticisms largely stem from collectivist ethicists, such as J. Baird Callicott, whom I will consider in the following section. Firstly, again, individual deontologists are unable to ascribe value to ecosystems or species, except inasmuch as their individual members are valuable. Secondly, again, they are unable to distinguish between domestic and wild animals, and different treatments which may be appropriate to these categories. Diversity is also of no value: a field of wheat and a

<sup>11</sup> Peter Wenz *Environmental Justice* (Albany, New York: State University of New York Press 1988), p. 286.

field of wildflowers are of equal worth, since what is important is the telos or will-to-live of each plant, and not the biological context. Questions about how far humans should 'interfere' in wild nature to protect will-to-live are raised. Indeed, Callicott suggests that such individualist environmental ethics are 'fundamentally life-denying', failing to accept as good the vital evolutionary processes of predation and death, by suggesting that all dying is an evil.<sup>12</sup> Both Goodpaster in 'From Egoism to Environmentalism' (Sayre and Goodpaster, op. cit.) and Kent Baldner 'In Search of the Center' *Between the Species* 7 no. 4 1991, argue that all these individualist systems of environmental ethics are fundamentally egoistic, extending the notion of 'I' into the natural world. Thus all non-individuals: ecosystems, species, the biosphere are excluded automatically from moral consideration.

Within the limitations (if one accepts these as limitations) described above, a significant amount of development within individual deontological environmental ethics is possible. A position which accepted Taylor's criterion of inherent worth as a baseline for moral considerability, combined with a higher grade such as Regan's subject-of-a-life, where rights are assigned, could evade some of the difficulties of both positions. Some kind of priority principles – perhaps like those of VanDe Veer – could be incorporated to ensure that rights did not always trump inherent worth. While this would not solve the problems of considering ecosystems and species, it could make a coherent and workable position within an individualist context.

### *Collective Environmental Ethics*

In contrast with both the individualist positions considered above, there is a strong movement in environmental ethics towards ethical consideration of ecological collectives. There have been attempts to combine the two approaches, attempts to which I shall turn in the next section. In this section, I will consider those ethicists who focus on the collective over and above the individual.

By 'ecological collectives' I am referring to species, ecosystems and the biosphere. I do not intend to prejudice the issue by suggesting that they are 'collections' of individuals, but rather to point out that they are in this context wholes, ethical units. Different language can be used to describe these wholes: community and organism being two of the most popular. These collective approaches to environmental ethics tend to be consequentialist, rather than deontological, aiming at the good of the whole, even where the scale of the whole and what

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<sup>12</sup> J. Baird Callicott 'Non-Anthropocentric Value Theory and Environmental Ethics' *American Philosophical Quarterly* 21, p. 301, no. 4, October 1988.

constitutes good for it are in dispute. A variety of scales and putative goods are suggested by different philosophers, enhanced by different uses of scientific ecology and Darwinian evolutionary theory.

The most important collective environmental philosophers are Aldo Leopold in *A Sand County Almanac* (Oxford: Oxford University Press 1949) (which, like Schweitzer's *Philosophy of Civilisation* was written long before the period which is being considered here) and J. Baird Callicott in a number of articles, most of which are gathered together in his *In Defense of the Land Ethic* (Albany: State University of New York 1989). James Lovelock's *Gaia* (Oxford: Oxford University Press 1979) and *The Ages of Gaia* (Oxford: Oxford University Press 1989) are also significant, although Lovelock does not himself develop an ethical theory.

Leopold's *A Sand County Almanac*, a collection of autobiographical and philosophical essays, was published in 1949. These essays espouse a land ethic which 'enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively, the land'.<sup>13</sup> His guiding principle is famously expressed 'A thing is right when it tends to preserve the integrity, stability and beauty of the land community. It is wrong when it tends otherwise'.<sup>14</sup> It is important to notice (as many critics of Leopold fail to) that this is a principle of extension, not replacement: human ethics are extended to include the land, rather than the land ethic replacing human ethics. Nonetheless, certain ambiguities do slip into Leopold's thinking about the relation of human beings to the land; sometimes he speaks of the land as a 'community' of which human beings are a part; on other occasions he speaks of the land as an 'organism' which human beings are outside.

Leopold's elevation of integrity, stability and beauty of the community to moral status are of particular significance, contrasting strikingly with both individual deontologists and individual consequentialists. Firstly, the community, rather than the individual, is of primary ethical significance. For individual deontologists, the community has moral significance only as a collection of morally valuable individuals; while for individual consequentialists the community is only valuable inasmuch as it contributes to the improvement of individual experience. Secondly, qualities such as integrity and stability are of primary value. Such qualities cannot be valued in either kind of individualist system where individual living organisms or their experiences are the whole locus of value.

Leopold's ethical understanding, while focused around these principles, is by no means systematic. J. Baird Callicott, deeply

<sup>13</sup> Aldo Leopold *A Sand County Almanac* (1949; Oxford: Oxford University Press 1968), p. 204.

<sup>14</sup> Leopold *A Sand County Almanac*, p. 224, op. cit.

influenced by Leopold, was responsible for the editing of an important essay collection about his thought: *Companion to a Sand County Almanac* (Wisconsin: University of Wisconsin Press 1987). Callicott himself has developed an important, more rigorous position of his own, although one which he has substantially modified in recent years. He claims as key influences alongside Leopold, Plato (rather than Aristotle, which is more common in environmental ethics), Darwin and Hume. He places himself in firm opposition to both individual deontological and individual consequentialist environmental ethicists.

The first key factor in Callicott's approach (for which he claims Humean ancestry) is his insistence that all value is subjective. This contrasts with views described earlier, such as those of Paul Taylor and Robin Attfield, who consider that values exist in nature independently of conscious valuers. Value, for Callicott, is anthropogenic (human-generated).<sup>15</sup> But while it may be *anthropogenic*, Callicott is anxious to argue that it is not *anthropocentric*. Humans can value things for what they are in themselves, as parents value their children; not because they are useful, but because they are what they are.

The second crucial factor for Callicott is the acceptance of a kind of sociobiology. This manifests itself as a belief in the biological origin of ethics in the community. Callicott argues that ethical behaviour in human beings is instinctive, having been evolutionarily selected for, since ethical responses by individuals in a biological community makes the species more likely to survive. Thus, Callicott argues, our ethical impulses are triggered when an individual is perceived to be part of our 'community'. Thus, if nonhuman animals and, indeed, the entire natural world are perceived to be part of our 'community' humans will consider ethical behaviour to be appropriate in this context. Callicott follows this by arguing, from a Darwinian, evolutionary perspective, that such a perception would be a correct one; all living things have the same biological origins and do form an interdependent community.

Callicott's third point here, which he claims follows in the Platonic tradition, is his emphasis on the ethical priority of the community over the individual. Plato, he says 'shrinks from nothing, as long as it seems to him to be in the interests of the community'.<sup>16</sup> This contrasts very clearly with the individualist focus of the environmental ethicists we have considered earlier.

Beyond this point, there is a discontinuity in Callicott's work. In his earlier writing, such as 'Animal Liberation – A Triangular Affair', he

<sup>15</sup> More recently he has accepted that value may be *vertabragenic*, generated by all animals with spines, broadly, animals which are conscious: 'Rolston on Intrinsic Values: A Deconstruction' *Environmental Ethics* 14, no. 2, 1992).

<sup>16</sup> Callicott *Animal Liberation: A Triangular Affair*, p. 66, op. cit.



argues that to sustain the health of the biological community of which human beings are a part, some individuals will have to be sacrificed for the whole. The most essential species (such as the pollinating honey bee) are more important than, for instance, higher mammals which play a far less vital role in the biological community. This clearly reflects on human beings, who are not only not vital to the system, but who actually destroy it. Indeed, Callicott suggests that the more misanthropy there is in an ethical system, the more ecological it is, and that the human population should be, in total, about twice that of bears.

In his later work, such as 'Animal Liberation and Environmental Ethics: Back Together Again' Callicott retreats from such an extreme position and elaborates a theory of 'nested communities'. Here he argues that human beings exist in the centre of a series of moral communities which fit, one outwith the other, as a series of 'nests' or concentric circles, with ethical obligations diminishing towards the outside. The major communities which Callicott identifies are the human community, the 'mixed' community (of human and domestic animals) and the wild or biotic community. This enables him to distinguish sharply between the obligations owed to human and domestic animals.

The implications of such a position contrast sharply with Callicott's earlier stance, since, unlike in 'Animal Liberation – A Triangular Affair' here, human concerns, being in the 'inner circle' can always trump those of the wild or biotic community.

These differing facets of Callicott's thinking have led to widely divergent criticisms of his work. General criticisms concern his understanding of the place of ecology and biology in ethics, and his presentation of value theory. Most sociobiologists have rejected the kind of group altruism espoused by Callicott, a point raised, for instance, by Antony Weston in his article 'On Callicott's Case Against Pluralism' *Environmental Ethics* 13 no. 3 1991. Callicott's understanding of value as human generated, projected by humans onto the natural world, is also attacked by environmental ethicists such as Holmes Rolston, who contend that there are objective values in nature. Rolston argues against Callicott that values are discovered by human beings in nature, rather than created by human beings, and that, inasmuch as Callicott bases his ethics on human projections, he is proposing a thoroughly anthropocentric axiology.

Specific attacks have also been made on Callicott's practical conclusions, both those of 'Animal Liberation: A Triangular Affair' and 'Animal Liberation and Environmental Ethics: Back Together Again'. The misanthropic possibilities of collective consequentialism have been questioned by Lawrence Johnson<sup>17</sup> and Tom Regan.<sup>18</sup> In

<sup>17</sup> Lawrence Johnson *A Morally Deep World* (Cambridge: Cambridge University Press 1991), p. 239.

<sup>18</sup> Tom Regan *The Case for Animal Rights*, p. 361, op. cit.

contrast, his later, nested communities position has been criticised for being anthropocentric, since human concerns can always trump nonhuman ones, an argument made most clearly by Varner in his article 'No Holism Without Pluralism' *Environmental Ethics* 13 No. 2 1991.

Callicott's differing environmental ethics clearly raise a considerable number of questions which are not answered. Nevertheless, his collective approach, and the perspectives which he offers on communities, predation and distinguishing domestic and wild animals require further examination. One particular direction in which Callicott's ethics could be improved would be by the addition of some kind of discriminatory principle to his 'nested communities' approach, perhaps of the sort developed by Atfield or VanDe Veer. Thus, in situations of ethical conflict, the resolution would depend not only on the closeness of individuals in nested communities, but also on a principle such as the relative importance of the conflicting needs and preferences involved.

While Leopold and Callicott focus on communities, the 'Gaia hypothesis', and the host of metaphysical and ethical questions raised by it, concerns the entire Earth. The 'Gaia hypothesis' originated in the work of maverick scientist James Lovelock in his book *Gaia and The Ages of Gaia*. Lovelock contends that the Earth acts like a single living organism, in that the flora and fauna on Earth act together to regulate the climate and temperature of Earth in order to produce the best conditions for life. Despite scientific criticism to the contrary,<sup>19</sup> Lovelock argues that this is not a teleological, or purposive process, and dismisses all suggestions that Gaia might be conscious or have a deliberate aim. This point is reinforced in *The Ages of Gaia* by the use of a complex computer model of a fictional world entitled *Daisyworld*.

Lovelock himself has not developed 'Gaia' into a thoroughgoing metaphysical or ethical system, (although periodically, he uses language which suggests this). However, there is no doubt that the Gaia hypothesis can have important ethical implications, although these are dependent on the interpretation of Lovelock's hypothesis which is adopted.

Lovelock himself argues that the Earth is not fragile, and that it has survived many potential crises in the past by adapting to changed conditions. This may mean that the Earth moves to new equilibria, but that life still continues. He suggests that the Earth may have 'vital organs' which while possibly essential for life on Earth to survive at all, are certainly essential for the Earth to continue at its current equilibrium. These vital organs, he suggests, may be the tropical

<sup>19</sup> From, among others, Richard Dawkins in *The Extended Phenotype* (Oxford: Oxford University Press 1982) and W. F. Doolittle 'Is Nature Really Motherly' *Co-Evolutionary Quarterly* Spring 1981.

rainforests, deep sea algae and prokaryotic bacteria. Their destruction could mean that Gaia moves to a new equilibrium; an equilibrium which may support some kind of life, but which would not support human life. With this background, the ethical implications of Gaia are not focused around protecting Gaia herself, but rather on the preservation of human beings from the devastating consequences of a new equilibrium. Therefore, actions which might force Gaia to a new equilibrium – such as global warming by an increase in atmospheric CO<sub>2</sub> – should be avoided since it may ultimately lead to the destruction of human beings. This is, as Andrew Dobson points out in *Green Political Thought*<sup>20</sup> a human providential reason for the protection of Gaia.

Other groups have, however, developed different ethical conclusions, loosely based on the Gaia hypothesis. These highlight the living organismic nature of the Earth, and, in contrast with Lovelock, stress its fragility. This can result in militant ethical stances, such as that put forward by some members of the group Earth First! where the 'wellbeing of the planet' is put before the wellbeing of individual human beings. A reduction in human population is thus frequently considered to be an ethical necessity, and some more extreme statements have applauded the AIDS virus and argued for the re-release of the smallpox virus. Such plural ethical interpretations make clear the ambiguous position which Lovelock's hypothesis holds in environmental ethics.

### *Mixed Monistic Environmental Ethics*

The divide between the individual and the collective in environmental ethics is not absolute. Some environmental ethicists have attempted to unite the two within one coherent framework, with varying degrees of success. Most important among these are Holmes Rolston, Lawrence Johnson and Richard Sylvan.

### *Holmes Rolston*

Holmes Rolston is one of the most important figures in the current environmental ethical debate, most prominently for his early collection of essays *Philosophy gone Wild* (1979; Buffalo, New York: Prometheus 1989) and his later book *Environmental Ethics: Duties to and Values in the Natural World* (Philadelphia: Temple University Press 1988). In his recent article 'Deconstructing Rolston' *Environmental Ethics* (Summer

<sup>20</sup> Andrew Dobson *Green Political Thought* (London: Unwin Hyman 1990), p. 45.

1992) J. Baird Callicott presents a helpful summary of Rolston's position.

Like Taylor and Attfield, and unlike Callicott, Rolston argues for objective value in the natural world. The baseline of individual value is the *telos* of each individual organism. All organisms, according to Rolston, defend their own kind as a good kind, and thus have value to themselves, even if this is not conscious. To this extent, Rolston demonstrates some closeness to Taylor, and to Taylor's fundamentally Aristotelian origins. However, in a way more like Lombardi or Lawrence Johnson (to be considered shortly) Rolston contends that different characteristics – such as sentience or ability for conscious reflection – adds value, so that the more sophisticated a living organism, the more valuable it is.

Alongside this individual approach, Rolston also develops an understanding of intrinsic value applicable to ecosystems and species. Species, he argues, provide the normative genetic 'set' for the individual, and this genetic set is 'as evidently the property of the species as of the individual through whom it passes'.<sup>21</sup> Thus a species is a form of life which defends itself and, according to Rolston, this gives it value. The ecosystem, and indeed the biosphere as a whole is a life-creating process. Ethical attention should be focused not on ecosystems as individuals, but rather as an interconnected matrix within which life evolved and continues to develop. As the womb of life, both producing and nurturing it, the ecosystem is an appropriate unit for moral concern.<sup>22</sup> It would be bizarre, Rolston insists, to value the organisms, the products of the system, without valuing the process which produced them.

A further important factor in Rolston's position is his sharp division between 'nature' and 'culture'. Within these two spheres, different ethical principles apply. However, domestic animals are thus left suspended between nature and culture. In practice, Rolston adopts the same principles as Callicott: that domestic animals are cultural artefacts and that, provided no more suffering is inflicted on them than they would suffer in the wild, human use of them is acceptable. This aspect of Rolston's approach, as with Callicott, has been widely criticised.

Numerous problems with Rolston's approach have been raised. Callicott, in the article mentioned earlier, criticises Rolston's understanding of science, arguing that Rolston has failed to come to terms with the implications of the 'new physics'. Other criticisms concern the closeness of Rolston's systemic value to instrumental value, that is, that the system is valuable because it produces life, and in particular human beings, rather than valuable in itself. He also

<sup>21</sup> Homes Rolston *Environmental Ethics*, p. 149, op. cit.

<sup>22</sup> Rolston *Environmental Ethics*, p. 176, op. cit.

provides no clear adjudicatory principles for resolving ethical conflict between systemic value and individual value, such as in the case of culling wild animals. Indeed, it would be possible to argue that Rolston tends towards a pluralist position by advocating a kind of systemic value based on very different principles from his value assessment of individuals.

*Lawrence Johnson*

Johnson's most developed views are expressed in his book *A Morally Deep World* (Cambridge, Cambridge University Press 1991). Fundamentally, Johnson adopts an individual deontological position like that of Taylor and Schweitzer, focusing on the concepts of 'wellbeing' and 'interests'. Every organism, as an 'ongoing, coherent, organic whole'<sup>23</sup> has its own wellbeing which can be advanced or damaged. Thus, every organism has an interest in advancing its own wellbeing and in avoiding damage to its wellbeing, whether it is conscious or not. To this extent, Johnson's system resembles that of Taylor. However, unlike Taylor, Johnson adopts a value hierarchy, arguing that different wellbeing interests are worth different amounts. Mammals, for instance, have a wellbeing which involves avoiding pain and increasing pleasure, and hence have an interest in not being hurt, an interest which plants do not have. Human beings have a psychological wellbeing which few nonhumans have, as far as we know; it is in their interests not to have their psychological wellbeing damaged. Thus, the same interests, e.g. avoidance of pain have the same weight, but extra interests give extra weight according to the importance of the interest to the individual involved.

Johnson's argument moves from the wellbeing interests of individual organisms to that of species (including humanity), ecosystems and the biosphere. All of these, he argues, are coherent wholes and have, in his words, 'self-identify' beyond the aggregate interests of the organisms composing them. Thus, species, ecosystems and the biosphere, like individual organisms can be considered to have a wellbeing and consequently, morally significant interests. These interests need to be taken into account alongside individual human and nonhuman interests when taking ethical decisions involving the nonhuman world. Thus, Johnson begins with a quality derived from an individual, and argues that it can also apply to a group because the group, in relevant ways, is itself an individual (having a wellbeing and interests).

This is the most problematic and contentious part of Johnson's book, since the degree to which a species or an ecosystem may be

<sup>23</sup> Johnson, p. 133, op. cit.

regarded as a coherent whole is, as we have seen, debateable. In addition, his position is open to the criticism that it is anthropocentric, with a value hierarchy where human qualities, such as psychological wellbeing confer the highest value status.

Johnson's position is coherent and his attempt to extend moral consideration to include individuals and ecological groups is an important one. While lacking the precision and detail of Paul Taylor's *Respect for Nature*, Johnson's is the most comprehensive deontological approach to environmental ethics yet produced.

### *Richard Sylvan*

Richard Sylvan (formerly Richard Routley) based at the Australian National University, Canberra, was one of the pioneers in the development of environmental ethics, delivering a paper in 1974 at the XV World Congress in Philosophy entitled 'Is there a Need for a New, and Environmental Ethic?' The claim that just such an ethic is required is repeated throughout his work. His most important publications in environmental ethics are his paper 'Human Chauvinism and Environmental Ethics' in the festschrift *Environmental Philosophy* (Australian National University 1980) which he co-edited; his paper 'A Critique of Deep Ecology' in *Radical Philosophy* 40 and 41; and a number of extended papers published by Australian National University in their Environmental Philosophy series.

Sylvan's primary concern is to attack what he describes as 'chauvinistic Western ethics', with chauvinism defined as 'substantially differential, discriminatory and inferior treatment for those outside the class ... for which there is not sufficient justification'.<sup>24</sup> Western ethics, he claims, is based on the establishment of a superior class which is worthy of moral consideration, and an inferior class which is not. This attitude characterises not only 'resource management' approaches but also positions such as that of Peter Singer, which Sylvan calls 'moral extensionism'. The base class of the privileged in such approaches is extended, but the fundamental absolute value divide remains.

In place of this, Sylvan wishes to propose his own, multilayered environmental axiology and ethic (heavily influenced by the philosophy of Meinong). As a logician, Sylvan presents this in terse, and thus somewhat impenetrable form. Firstly, he rejects the idea that there is a dichotomy between objective and subjective value, generating his own term, nonjective, to describe his position. He contends that there are no values entirely independent of a valuer, but argues that

<sup>24</sup> Routley 'Human Chauvinism and Environmental Ethics', p. 96, op. cit.

this does not mean that his understanding of value is subjective.<sup>25</sup> Like Callicott, Sylvan insists that valuers can value qualities within things which are neither generated by human beings nor useful to them. A wide range of possible values exist and should be taken into account when making ethical decisions; including species values and wilderness values. Again like Callicott (and possibly the origin of Callicott's own thought), Sylvan suggests that humans have a nested series of ethical obligations to a wide variety of different kinds of objects. To stress the broadness of this approach to value, he decentres person-based ethical language such as 'rights' and 'duties' in favour of language with a much broader application such as 'concern', 'responsibility' and 'respect'. To a nonlogician, Sylvan's ethical position remains somewhat opaque. His critical articles, in particular those on Deep Ecology, are far more accessible and have made a much greater impact on environmental ethics than has his own constructive work.

Rolston, Johnson and Sylvan have all attempted to reconcile positions which are frequently perceived to be mutually hostile in environmental ethics: the individual and the collective approach. However, as has become evident, there are difficulties with all three. Short of moving away from ethics as the Deep Ecology movement has done, or of turning to ethical pluralism, which is becoming increasingly popular in environmental ethics, this reconciliation must be the aim of any developing environmental ethic. The construction of a coherent ethical system which can attribute value both to individuals and to species and ecosystems, and can also provide some way to resolve situations of ethical conflict between them, is a central concern of environmental ethics.

### *Deep Ecology*

The expression 'deep ecology' was first used by Arne Naess in his 1973 Inquiry article 'The Shallow and the Deep, Longrange Ecology Movement'. In this article, Naess contrasts 'deep ecology' with 'shallow ecology' which corresponds to narrower versions of the 'resource management' approach discussed earlier. In 1973, Naess attributed a number of both metaphysical and ethical concepts to deep ecology. With ethical priority was the statement that deep ecology espoused biocentric equality in principle and the equal right of all living organisms to blossom and flourish. This egalitarian, deontological

<sup>25</sup> He supports this argument by reference to 'possible world' theory which he develops from Meinong and examples in Moore; unfortunately, it is not possible to examine this more closely here.

attitude immediately resembles that of Albert Schweitzer and Paul Taylor. However, while Naess does acknowledge that some killing of living organisms will be necessary in practice, like Schweitzer, he fails to make clear exactly what this necessity might permit.

Extraordinary practical difficulties accompany this position, as Naess and other deep ecologists have been forced to realise. By 1984, Naess had, for instance, argued that living things could be treated differently without different grades of value being ascribed to them.<sup>26</sup> By 1992, he accepts the terminology of value hierarchy in nature.<sup>27</sup> Other deep ecologists had already perceived this; Warwick Fox, an important deep ecologist, suggested a value hierarchy based on complexity of experience.

However, what is now known as the 'deep ecology movement' is not primarily based around the development of an ethic at all. In more recent years the metaphysical thread of Naess' 1973 article has been developed, making deep ecology into a 'consciousness movement', rather than an ethic. Indeed, in his 1987 Schumacher Lecture, Naess himself comments that 'moralizing is not a great force in the world' while Warwick Fox goes so far as to say that deep ecology 'renders ethics superfluous'.<sup>28</sup> It is a shift in human consciousness which is required, rather than a change in our ethical structures (although an altered consciousness may issue in a changed ethic).

This change of consciousness focuses around two key concepts: *holism* and *the extension and realisation of the self*. Holism, as used by deep ecologists is based on the claim that everything is fundamentally one. Nothing can be separated from the whole; indeed there are no isolable 'things' but an interlocking web of relations in a constant state of flux. Individuals are 'knots in a web' or 'centres of interaction' – constituted entirely by their relationships. The concept of the extension and realisation of the self is closely related to this. If everything is fundamentally one, then the distinction between what is self and what is not-self can no longer be simply sustained. Deep ecologists argue that this is true on a physical level since the physical body cannot be in isolation from its surroundings (a view which deep ecologists reinforce by citing quantum physics and scientific ecology). With this knowledge, human beings can extend their self-identification beyond the confines of their body to include others. Once the factual impossibility of the separation of self from world is recognised, the necessity to extend one's understanding of what constitutes one's self is revealed. If everything is part of one's self, and one is aiming at self-realisation (which deep ecologists assume to be the case) then the clear

<sup>26</sup> Naess, 'Intuition, Intrinsic Value and Deep Ecology' *The Ecologist* 14 15/6 1984.

<sup>27</sup> Personal communication, January 1992.

<sup>28</sup> Warwick Fox *Towards a Transpersonal Ecology* (New York: Shambhala 1991), p. 225.



conclusion to be drawn is that the realisation of all (living) organisms is necessary for one's own full self-realisation.

Both the ethical and the metaphysical approaches to deep ecology have been severely criticised; most systematically by Richard Sylvan in his 'A Critique of Deep Ecology' (op. cit.). On the ethical side, in its initial egalitarian form, deep ecology shares all the problems of Schweitzer and Taylor, without Taylor's attempt to provide workable conclusions. Later attempts to construct value hierarchies both depart radically from the earlier position and face the accusation of anthropocentrism, and hence loss of 'depth'.

The metaphysical 'consciousness-shifting' side of deep ecology can be criticised even more intensely. First, the use of scientific ecology and modern physics has been challenged, in particular by Andrew Brennan in *Thinking About Nature* (London: Routledge 1988). Secondly, the philosophical acceptability of the form of holism which Naess appears to be advocating has been subject to philosophical criticism for many years, criticisms best summarised in D. C. Phillip's book *Holistic Thought in Social Science* (Stanford: Stanford University Press 1976). The fragility of this understanding of holism undermines the concept of the extended self. This concept also faces a number of difficulties in its own right. If everything is part of one's extended self, then the resolution of conflict becomes impossible, since one identifies with both the hunter and the hunted; with the rainforest, the indigenous tribes and with tree fellers. Alternatively, identification with everything, that is to say with the planet itself, may lead to the view that the best actions are those which put the entire Earth first. As was seen with just such an interpretation of the Gaia hypothesis, this can lead to views which can be described as 'eco-fascist'. Finally the importance of the self in this deep ecological analysis can also be questioned, as Tim Luke argues in his article 'The Dreams of Deep Ecology' (*Telos* Summer 1988). It is, he contests, an anthropocentric view in itself, since the self here is purely an extended human ego, which is projected onto the world, making it become part of oneself and failing to acknowledge it as Other.

Much of the theory which underlies the deep ecology movement, both ethical and metaphysical, is, to say the least, structurally unstable. The significance of deep ecology does not lie in its intellectual rigour, but rather in its popular emotional and motivational appeal. As such, unspecific concepts about the value of living organisms, and feelings for them can be used as a force for political and social ends. It is in this, more popular, context that developments in deep ecology are likely to occur.

### *Revivalist Positions*

A wide variety of approaches to environmental ethics are gathered together under this heading. They have in common the attempt to

base environmental philosophy in general, and ethics in particular, on the exposition and development of the ideas of a single philosopher or philosophical school of the past.

Prominent among these attempts is process philosophy and theology, based on the thought of the philosopher A. N. Whitehead (1861–1947) primarily as laid out in his *Process and Reality* (Cambridge: Cambridge University Press 1929). His philosophy has been developed in an ecological context by philosophical theologians such as Charles Hartshorne in his article 'The Rights of the Subhuman World' *Environmental Ethics* 1 no. 1 Spring 1979 and John Cobb in his books *Is It Too Late? A Theology of Ecology* (Benzinger, Bruce and Glencoe 1972) and, with Charles Birch, *Liberating Life* (Cambridge: Cambridge University Press 1981).

As Hartshorne and Cobb point out, certain elements of Whitehead's thought are particularly favourable to an ecological interpretation. Whitehead's insistence that everything in existence is composed from fleeting moments of subjective experience or 'actual occasions', coupled with his claim that it is just this subjective experience which is the ultimate location of value form the basis of such interpretations. Existence itself, for Whitehead, is value-charged.<sup>29</sup> However, this does not mean that everything which exists is of equal value; value varies in relation to what Whitehead calls the 'intensity' and 'harmony' of the fleeting moments of experience. Thus, the more intense and harmonious a moment of experience is, the more valuable it is. This provides a kind of 'mechanism' by which actions can be judged according to which generates the greatest value.

This affirmation of the presence of degrees of value in the natural world immediately suggests the accessibility of Whitehead's thought for the development of an environmental ethic. Such an ethic, as expressed by John Cobb in particular, bears some resemblance to the sort of utilitarianism suggested by Peter Singer and Donald VanDe Veer. Value is experience-based, and value is added according to greater harmony and intensity of experience (which, according to Whitehead and Cobb, derives from greater psychological complexity). However, unlike Singer or VanDe Veer, process environmental ethics can include plants and even inanimate objects, since they too are composed from valuable moments of experience, although the lower intensity of such experience means that it is of lesser value.

This similarity with broadly utilitarian perspectives in environmental ethics generates problems for process thinking of a similar kind. It is impossible for such an experience-based ethical

<sup>29</sup> This raises the philosophical question that if everything is valuable then value has no meaning, a question pithily put 'If everyone is someone then no-one is anyone'. This question cannot be dealt with here, but Whitehead's hierarchical understanding of value may resolve the problem.

approach to attribute any value to diversity or rarity, or species and ecosystems, beyond any experiential impact which they might have. It is possible that process ethics could be reformed in order to take account of this problem.<sup>30</sup> As currently constituted, however, process thinking would seem to be an inadequate basis for an environmental ethic.

A second philosopher frequently 'revived' in an ecological context is Spinoza. His philosophy forms the foundation of Naess' deep ecological position, as is suggested by Naess' article 'Spinoza and Ecology' *Speculum Spinozanum 1677–1977* ed. Hessing. Spinoza's philosophy is also an important factor in Freya Mathews' *The Ecological Self* (London: Routledge 1991). Naess argues that Spinoza's insistence on all 'all inclusive, creative, infinitely diverse' God or Nature provides an important basis for environmental philosophy.<sup>31</sup> Every being has its own 'essence' or 'power' which takes the form of attempting to preserve itself; thus Spinoza rejects the belief that the ordained end of nonhuman living beings is to benefit humans. In addition, the acceptance of a pantheism such as Spinoza's, it has been argued, might lead to a more general reverence for the natural world.

This ecological understanding of Spinoza is attacked by Genevieve Lloyd in her article 'Spinoza's Environmental Ethics' *Inquiry* 23 1980. While accepting that Spinoza does claim all beings to have their own power or essence, she draws attention to comments in his *Ethics* concerning the extent of moral relations. These only hold in Spinoza's thought, she points out, between beings which have the same nature; and Spinoza is quite clear that nonhuman beings do not have the same nature as human beings. Thus, humans can treat nonhumans how they wish, since moral obligations do not extend to them. Lloyd concludes that this undermines the possibility of using Spinoza as a basis for environmental ethics.

Certainly, the use of Spinoza as a basis for environmental ethics seems to be questionable. This is also true of another philosopher also cited in an ecological context, Heidegger, primarily by Michael Zimmermann in his article 'Towards a Heideggerean Ethos in Radical Environmentalism' *Environmental Ethics* 5 no. 2 Summer 1983. Concentrating on Heidegger's *Poetry, Language and Thought* and *The Question Concerning Technology*, Zimmermann emphasises Heidegger's rejection of the resource view of nature: that it is 'ready-to-hand' a storehouse for human beings to use. Indeed, in a way resembling some deep ecologists, Heidegger suggests that even assigning value to natural objects and beings betrays an exploitative attitude towards them. Heidegger's fundamental desire here is that humans should 'let

<sup>30</sup> I have suggested such a move in the Conclusion of my doctoral thesis *Process Theology and the Challenge of Environmental Ethics* (Unpublished, 1992).

<sup>31</sup> Naess 'Spinoza and Ecology', p. 418, op. cit.

beings be' so that they can reveal themselves in their own ways, rather than imposing human patterns upon them.

Yet, as Zimmermann also points out, ambiguities exist in Heidegger's position, since Heidegger suggests that beings can only fully be when they are in the presence of human beings; that human beings can be described as the 'clearing' within which all beings can manifest themselves. Heidegger, like Whitehead and Spinoza, is thus another ambiguous figure in environmental philosophy.

Whitehead, Spinoza and Heidegger certainly do not exhaust the philosophers who have been called upon in the construction of environmental philosophy. Others include Dewey (William Chaloupica 'John Dewey's Social Aesthetics as a Precedent for Environmental Thought' *Environmental Ethics* 9 no. 3) Merleau Ponty (David Abram 'Merleau Ponty and the Voice of the Earth' *Environmental Ethics* 10 no. 2) Leibniz (Walter Bryant 'Leibniz's Contribution to Environmental Philosophy' *Environmental Ethics* 2 no. 3). This is by no means a complete list. Indeed, as environmental philosophy expands there will inevitably be further forays into the work of past philosophers and philosophical schools, to analyse, criticise and develop their attitudes towards the nonhuman natural world.

### *Pluralist Approaches to Environmental Ethics*

All the approaches to environmental ethics I have so far considered have been monistic in structure; that is to say, despite differences in content, they have all advanced a single principle or coherent set of principles with which to address ethical problems. However, some recent approaches to environmental ethics have affirmed moral pluralism. Moral pluralism in this sense has been defined by Peter Wenz as an approach which 'contains a variety of principles which cannot be reduced to, or derived from, a single master principle'.<sup>32</sup> Thus there is no single key to ethics and one cannot necessarily appeal to the same principles for resolving very different situations of conflict. To put this rather colloquially, moral pluralism rejects the 'one size fits all' approach to ethics.

Moral pluralists in environmental ethics frequently use the language of frameworks or matrices which can be brought to bear on different situations. Indeed, Andrew Brennan goes so far as to say 'An indefinite number of frameworks can be brought to bear. When we restrict our modes of thinking to just one framework, we thereby choose to ignore the perspective supplied by other relevant frameworks'.<sup>33</sup> To take an

<sup>32</sup> Peter Wenz *Environmental Justice* (New York: State University of New York Press 1988), p. 310.

example: an area of forest is to be felled for housebuilding. A resource manager will consider the economic value of the trees and perhaps the loss of amenity effects on those living close by. A utilitarian such as Singer will consider the pains of the beings which would lose their habitat, and the losses and gains to humans by the deprivation of amenity, provision of housing for the homeless, etc. A moral pluralist would take these perspectives, and also ethical approaches such as those of Taylor and Callicott into consideration as different ethical frameworks being brought to bear on the one situation. Thus, it can be argued, moral pluralism allows a large range of factors to be taken into account when making ethical decisions about the environment.

The primary advocates of such an approach in environmental ethics are Christopher Stone in *Earth and Other Ethics* (New York: Harper and Row 1987); Andrew Brennan in *Thinking about Nature* (op. cit.) and Peter Wenz in *Environmental Justice* (op. cit.). Their approaches, however, are somewhat different.

Stone's major concern is to advocate moral pluralism in general, using the nonhuman natural world to illustrate the failings of monistic ethics and the need to adopt pluralism, Brennan, on the other hand, does not actually use the term 'moral pluralism', but his advocacy of multiple frameworks for the framing of ethical decisions makes his pluralistic position clear. Ultimately, Brennan adopts a position which he calls 'eco-humanism', its ecological nature consisting of the inclusion of evolutionary and ecological frameworks not generally taken into account when making ethical decisions. Wenz proposes a pluralist ethics which he calls 'The Concentric Circle Theory' (in some ways resembling Callicott's nested communities) where different degrees of closeness entail different principles and degrees of moral commitment.

Attractive as these pluralist positions are, obvious difficulties are generated by them. How can one make moral decisions when two frameworks deliver conflicting ethical responses? How can an unscrupulous moral agent be prevented from switching between frameworks in order to make personal gains? Such questions are difficult if not impossible to answer. Wenz suggests that 'good judgment' is needed in order to make ethical decisions where competing conclusions are derived from different approaches. One cannot help thinking that this response begs the question. If different ethical frameworks lead to the conclusion that two different and even opposing actions are right, how could it be 'bad' judgment to make one decision and not the other? How far could the specific context indicate what good judgment would conclude when ethical frameworks conflict?

To pursue this question would open up an extensive moral debate, which I do not wish to pursue here. It is clear that the moral pluralism developed (in differing ways) by Wenz, Brennan and Stone generates

<sup>31</sup> Andrew Brennan *Thinking about Nature* (London: Routledge 1988), p. 3.

substantial difficulties rivalling those of the monistic systems which they reject. However, pluralist approaches to environmental ethics of this sort do have the advantage of being context-sensitive, open-ended, prepared to engage with the sometimes severe complexities of making ethical decisions. They acknowledge the impossibility of producing clear-cut answers in many ethical situations – especially when considering the difficult questions engendered by the nonhuman world. This differs from monistic approaches which can impose inappropriate dogmatic general principles onto difficult ethical situations without fully coming to terms with the complexities involved.

### *Conclusion*

The variety of approaches to environmental ethics described in this paper indicate the diversity and complexity of the current debate. All the approaches to ethics found in current general ethical theory have been applied within environmental ethics. In addition, the necessity to consider the possible ethical significance of groupings such as ecosystems and of abstractions such as diversity has led to the development of largely new ethical approaches such as that suggested by the Gaia hypothesis, or by Callicott. The environmental problems of the present have drawn attention to the insight that ethical questions are raised by human behaviour towards not only nonhuman individuals, but towards ecosystems, species and the biosphere itself. Deciding what sort of ethical response is appropriate to such questions is the task of environmental ethics. The importance of the existence of such responses is beyond doubt.

For those wishing to develop and expand environmental ethics, a number of different strategies could be pursued. Firstly, in the short term, given that most philosophers work within particular philosophical traditions, developing these particular traditions, where they are amenable to such development in an ecological direction is a priority. This paper has indicated, for instance, that the Aristotelian philosophical tradition can yield important insights into environmental ethics. Secondly, existing monistic approaches to environmental ethics could be tightened up, developed or reformed to cope with some of the criticisms with which they are faced. Thirdly, a more sophisticated and satisfactory moral pluralism could be constructed which takes account of these approaches. The position of environmental ethics, both at the cutting edge of ethical theory and as practically expedient in a world facing numerous environmental problems, makes such continued research and development vital.