

FINDING CREATIVITY IN THE DIVERSITY OF ENVIRONMENTAL ETHICS

Johan Hattingh

The contribution is a comprehensive if abbreviated review of different philosophical perspectives on human-environment relationships. Extensively referenced, it outlines historical trends and current debates in the field of environmental ethics. The author argues that the diversity and disagreements amongst environmental philosophers is not a cause for concern, but rather an opening in which new and better positions can be sought, towards a philosophy which can meaningfully enable environmental practice.

INTRODUCTION

In the first thirty years or so of its existence as an academic discipline, environmental ethics occupied itself mainly with the articulation of value theories that could underpin the practical agenda of environmentalism. Its aim was to develop appropriate concepts and methods to discuss our environmental concerns and our policy responses to it. It attempted to establish a rational basis on which we could distinguish environmentally sound from environmentally unsound forms of production and consumption, lifestyles, courses of action and policies. It also made proposals about principles, strategies and structures of decision-making that would enable us to balance concerns about environmental degradation with human interests in things like jobs, housing and survival. And above all, it tried to do this without being unfair to present as well as future generations or compromising what we know today as freedom and human dignity.

Besides its practical focus, environmental ethics as an academic discipline is characterised by a vast array of theoretical positions that have crystallised during the course of its history. Many of these positions significantly overlap, but there are also deep-seated differences. Because of the intensity and abstraction of the philosophical debate between them it often seems as if the practical intent of environmental ethics is obscured by its bent to determine what is philosophically supportable and what is not (Hargrove, 1989:ix).

In this article¹, I would like to focus on this diversity in the various positions that can be found in environmental ethics. My aim is to give an overview of these differences and more importantly to comment on the meaning of this diversity. This could be achieved by defending the following thesis:

environmental ethics has not succeeded in developing a value theory, in the form of a single coherent doctrine, profound enough to support the practical concerns of environmentalism, and is unlikely to develop one in the near future. This is no cause for despair: such diversity should be understood as a characteristic of the historical phase within which environmental ethics finds itself, and as a rich source of creativity² from which to draw when we conceptualise and respond to environmental problems.

The diversity in the theoretical positions in environmental ethics can help us to better and more creatively provide answers to the key questions that form the core components of any practical effort to conceptualise or respond to environmental problems. These questions are (Stone, 1988:140-142):

- * What is the objective of our environmental concern?
- * What is the foundation of our environmental concern?
- * What are the objects of our environmental concern, in contra-distinction to the things about which we are not concerned?
- * What are the concrete actions, duties and obligations into which our concern should be translated?
- * What should we do in the case of conflicting indications?

It is an impossible task, however, to give a comprehensive overview of what went on in a lively and vibrant academic field in over thirty years so I will concentrate on broad trends and provide the interested reader with references for further reading to avoid the risk of caricaturising the positions.

A SHORT HISTORICAL OVERVIEW OF ENVIRONMENTAL ETHICS³

Whilst the intellectual climate for environmental ethics as an academic discipline was prepared during the last years of the sixties, environmental ethics only became known under this name during the seventies. The term 'environmental ethics' is a misnomer. The philosophical thinking practised under this umbrella focuses on ethical principles but also on aesthetics, metaphysics, epistemology, philosophy of science, and social and political philosophy in so far as they contribute to a better understanding of environmental problems and our responses to them (Hargrove, 1989:2,3).

1973 was to be a landmark year. At the 15th World Conference of Philosophy Australian philosopher Richard Routley presented a paper with the title "Is there a need for a new, an environmental, ethic?" In the same year, Arne Naess, a Norwegian philosopher, published the influential essay "The shallow and the deep, long-range ecology movement", in *Inquiry*, inaugurating what became known as the deep ecology movement⁴.

In 1974 John Passmore, a noted social and political philosopher published a book in reaction to Routley entitled *Man's Responsibility for Nature: Ecological Problems and Western Traditions*. He argued that there is no need for a separate ethical field of environmental ethics. He suggested that environmental philosophy was inconsistent not only with Western philosophy, but also with the Western tradition (Hargrove 1989:3). Until the mid 80's, most of the philosophical debate focused on a refutation of Passmore's claims. The most comprehensive challenge to Passmore from this era can be found in Robin Attfield's book on *The Ethics of Environmental Concern* that was published in 1983.

In the 1970s environmental ethics was an emerging sub-discipline of applied ethics and was treated for the most part as a curiosity. Mainstream philosophy journals rarely published more than one token article per year (Hargrove, 1998:339). Holmes Rolston's article in *Ethics* in 1975 entitled "Is there an ecological ethic?" brought the existence of environmental ethics prominently to the attention of mainstream philosophy. Until the late seventies *Inquiry* was the primary philosophy journal that dealt with environmental ethics.

This situation changed when Eugene Hargrove

founded a refereed journal, *Environmental Ethics*, in 1979. Two issues dominated the first five years of this journal: the notion of the rights of nature as a foundational basis for environmental ethics and the question of the relationship between environmental ethics and animal rights/animal liberation. The notion of the rights of nature was finally dismissed as a foundation. It was seen as indefensible on philosophical grounds. Animal welfare ethics became a special field with its own journals⁵.

During the second half of the 80s and into the 90s, *Environmental Ethics* carried a wide variety of articles from different points of view⁶. The debate about a philosophically sound foundation for environmental ethics still continues and as yet no single proposal has found general support. Today the debate centres on the question of whether we should be looking for a single foundation supporting a coherent and internally consistent environmental ethic (the position of moral monism), or rather accept a plurality of different principles (the position of moral pluralism).

Within the foundation debate philosophers are also still arguing about whether our moral concern for the environment should be founded on the notion of the intrinsic (or inherent) value of nature. Philosophers seem to fall in two broad camps namely the non-anthropocentric intrinsic value theorists and the anthropocentric instrumental value theorists. Although there are different emphases placed within each grouping, the former denies and the latter affirms that nature only has value in so far as it can be utilised by humans for various purposes, including non-consumptive uses like aesthetic enjoyment.

Within each one of these groupings, however, there exists another division. The anthropocentric, instrumental value theorists argue over the adoption of a strong or a weak anthropocentric position. Among the non-anthropocentric, intrinsic value theorists, it is argued whether the intrinsic value of nature is objective or subjective. Although they differ on many points, Paul Taylor and Holmes Rolston, for instance, argue for an objectivist position, while Callicott contends that value cannot exist in nature without a self-conscious human doing the valuing. According to Callicott's view, the intrinsic value of nature is not inherent in nature, but ascribed subjectively to nature by humans.

The philosophical contributions to *Environmental*

Ethics during the 80s and 90s have also been dominated by two other themes that cut across the divisions mentioned. A substantial number of articles attempted to articulate the ethical meaning of an emerging consciousness that humans in many respects, if not all, are part of nature. This led to articulations of ethical positions in which concepts such as relationships, community, systems, location, context, place, time, and finitude play a central role. An overwhelming number of contributions were also devoted to an explication of principles and decision-making criteria that could be used in the practical context of conservation, environmental policy formulation, regulation and management.

After the tentative beginnings of environmental ethics during the 70s and early 80s, a number of important books were published towards the end of the eighties. Following Robin Attfield's *The Ethics of Environmental Concern* (1983), Charles Birch and John B. Cobb, Jr.'s *The Liberation of Life: From Cell to the Community*⁷ (1981) and the anthology of papers *Ethics and the Environment* (1983), edited by Donald Schreier and Tom Attig, philosophers such as Paul Taylor (*Respect for Nature*, 1986), Holmes Rolston (*Philosophy Gone Wild*, 1986) and (*Environmental Ethics*, 1988), Mark Sagoff (*The Economy of the Earth*, 1988), Eugene Hargrove (*Foundations of Environmental Ethics*, 1989), Baird Callicott (*In Defence of the Land Ethic* 1989), Bryan Norton (*Why Preserve Natural Diversity?*, 1987)⁸, Kristin Shrader-Frechette and many others contributed substantively to the theoretical debates (Hargrove, 1998: 340).

The 90s saw the establishment of two more refereed journals and two societies. The UK-based *Environmental Values* was founded in 1992 by Alan Holland, while *Ethics and the Environment*, edited by Victoria Davion, was established in 1995. The International Society for Environmental Ethics was founded in 1990 by Holmes Rolston and Laura Westra. It now has members on all continents of the world. In 1998 Bruce V. Foltz and Robert Frodeman started the International Association for Environmental Philosophy: a phenomenological alternative to the ISEE (Hargrove, 1998:340).

Ecofeminism, social ecology, and bioregionalism also emerged as distinct environmental ethics movements during the 80s. Ecofeminism encompasses a number of feminist positions, and its most

important exponents are Val Plumwood and Karen Warren. Social ecology is based on the work of Murray Bookchin, while bioregionalism is predominantly based on the work of Kirkpatrick Sale. Taken together with deep ecology, these movements could be classified as radical in so far as they share the assumption that mainstream environmentalism and environmental ethics only provide a superficial understanding of the causes and structure of our environmental problems, and therefore respond in a wholly inadequate manner. Instead of slight reformations of our values, preferences, practices and institutions, these radical positions would rather call for a complete transformation, not only of our consciousness, but also of our behaviour and societal structures. What requires transformation are our narrow notions of self-realisation, patriarchy, dualistic thinking patterns, international trade relations and alienation from the very region within which we live. In short all forms of domination, exploitation and rootlessness. Important links between radical environmentalism and environmental ethics were established when the Canadian based deep ecology journal *The Trumpeter*, edited by Alan Drengson, was founded in 1983. *Earth Ethics Quarterly*, established in 1989, is now the mouthpiece of the Centre for Life and Environment which focuses on sustainable development.

The history of environmental ethics then displays at least three important features:

1. It is characterised by a movement, from very tentative beginnings and the question of whether a terrain such as environmental ethics existed at all, to a well established and widely recognised academic field.
2. It is characterised by a tension between philosophical and practical impulses, with the latter driving philosophers to be of practical use in the diverse fields of environmental decision-making and policy formulation. The challenge of course is to maintain a healthy balance but we need to acknowledge that many philosophers apparently are not very successful in doing so. In fact, it could be maintained that the technical philosophical impulse has been dominating environmental ethics from its inception to the detriment of the practical impulse. After all, the journal *Environmental Values* was created in part precisely because *Environmental Ethics* was not very successful when it came to influencing environmental decision-making, policy formulation and education. The same reasons led to the establishment of the

International Association of Environmental Philosophy as an alternative to the International Society for Environmental Ethics (Hargrove, 1998:340).

3. The short history of environmental ethics has been a process of increasing diversification. From this brief overview above it is evident that environmental ethics does not speak with a single, coherent and internally consistent voice. It never has and it seems unlikely that it ever will. Instead the intense internal debates among environmental philosophers contribute to the popular image that philosophers tend to talk to themselves, turning their backs on a world which hopes to gain from the insights they can bring to decision-making strategies used in environmental policy formulation and management.

This predicament begs the question whether we should not rather ignore environmental ethics. I submit that we should postpone an answer until we have confronted the full force of this conclusion in a systematic analysis of the different positions in environmental ethics.

A SYSTEMATIC APPROACH TO DIFFERENT POSITIONS IN ENVIRONMENTAL ETHICS

From a systematic point of view, environmental ethics positions should be seen as loosely integrated sets of values and principles used by people in a variety of contexts to make environmental decisions or formulate environmental policies in everyday life. These sets of values and principles are often not explicitly articulated or consciously supported by people, and rather form part of the world views they live by. Part of the task of philosophers is to articulate and clarify these sets of values and principles, as well as the assumptions informing them and their implications. For the purposes of my overview I would like to suggest a systematic six-way split between different environmental ethics positions: ruthless development; resource conservation; wilderness preservation; extensionism; ecological sensibility; and radical environmentalism.

My description of these positions will be general but with enough detail to demonstrate that it is not only within academia that environmental ethics is fragmented, disjointed and internally incoherent, but also within environmentalism itself. I shall argue later how both the academic field of environmental ethics and environmental practitioners can benefit from this diversity and plurality of

positions.

The 'Ethical' Position of the Ruthless Developer

The ethical position of the ruthless developer, who seeks to maximally exploit and develop the natural resources of the earth, can only be seen as an ethical position from a technical point of view. It entails a framework within which certain goals for resource utilisation are articulated, together with notions justifying it and gives us details about the things we should take responsibility for, as well as how to do it and what to do when interests clash. From the point of view of environmentalists, however, this position is patently unethical and constitutes to a large extent the main target of their criticism.

From a technical point of view, the 'ethical' position of the ruthless developer can be characterised as extremely anthropocentric. The non-human world is valuable only in terms of instrumental value (Fox, 1995:149). From a practical point of view, the 'ethical' position of the ruthless developer supports an unrestrained exploitation and expansion of natural resources. This can be further explained in the following points (Fox, 1995:152-153):

- * The physical transformation value of the non-human world: what is emphasised is the value that humans can acquire by physically transforming the non-human world, for example, by farming, damming, pulping, and slaughtering.
- * Growth and Progress: the physical transformation value of the non-human world is not only measured in terms of economic value, but equated with economic growth which is seen as progress.
- * The myth of superabundance: in order to justify the continuous expansion of resource exploitation, this approach relies on the myth that there is always 'more where that came from'. Shrader-Frechette (1981:31-44) has referred to this as 'cowboy' or 'frontier ethics': if we have exhausted the resources in one place, we move on.
- * Short term thinking: its anthropocentrism does not extend to include consideration of the interests of future generations of humans. Callous as this may seem, it is consistent with the radical anthropocentric position adopted here, which argues that we can safely afford to ignore the problems of future generations, since the capacity of human ingenuity to meet these problems as they arise, is infinite.

* Technological optimism: The faith in the power of the human mind ties in with the belief that science and technology will always deliver us from all possible harm caused by our continued unrestrained exploitation and expansion of resources.

Here is an approach that has much, if not everything, to do with the current environmental problems we are facing. As such it can hardly be seen as an ethical position that deserves any support. People with even the slightest concern about the exhaustion of our resources and the interests of future generations would move away from the arrogant selfishness of this position.

Resource Conservation and Development

Resource conservation and development can be characterised as anthropocentric with a slight bent to moderation. The focus here is still on the value that humans can gain from the physical transformation of resources, but it at least recognises that there are limits to material growth: there is not always more where something came from (Fox, 1995:153). Furthermore, it has a longer-term focus than the unrestrained exploitation and expansion approach. This follows from the acknowledgement that there are limits to growth, and is informed by the humanitarian (Kantian) ideals of respecting the freedom and dignity of every person and serving the well-being of all humans. This implies concern about the interests of fellow and future humans when we decide upon courses of action (Fox, 1995:153).

This approach is further characterised by a strong aversion to wasting resources, which is considered sinful. There are two ways to waste: inefficient use, or failing to use potential resources when they are available, for example taming a wild river to generate electricity (Fox, 1991:154). In accordance with its anthropocentric point of departure resource conservation also embraces science and utilitarian cost-benefit analyses to guide us in finding optimum levels of resource utilisation⁹. Such concerns are expressed in phrases like 'wise use' or 'maximum sustainable yield'.

In the history of American environmentalism Gifford Pinchot adopted this conservationist position. Standing midway between unlimited exploitation and absolute protection, Pinchot supported rational planning and development of resources for maximum sustainable yield that would conserve resources for future generations.

This view was carried over to most of the new breed of professional foresters that Pinchot developed during his lifetime. Consistent with its utilitarian calculus, however, this led to the opening of federal land for mining, grazing and lumber companies in areas that many environmentalists would have preferred left untouched.

Aldo Leopold started his career in forestry within the conservationist framework made available by Pinchot. Later in his life, however, Leopold severely criticised this approach. In a revealing essay entitled "Thinking like a Mountain" (1991:137-140) Leopold reflected on the part he had played in a predator eradication program in the Rockies, the purpose of which was to get rid of all the wolves and mountain lions in order to increase the number of deer that could be harvested during the hunting season. The idea was that the hunters took over the ecological function of controlling the deer population. It was only after they had shot the last mountain lion and experienced first the devastation of the mountainside by a runaway deer population and then the subsequent crash of the deer population itself, that Leopold realised how wrong-headed their scientific management program was. He came to the insight that only a mountain has lived long enough to listen objectively to the howl of the wolf.

The point of Leopold's metaphor was that the science used in their management plan was grossly inadequate. Leopold suggested that they had used a mechanistic model of science that can only be applied with success to static systems with interchangeable parts. The 'atom of management' selected was the predators, and the idea was to replace it with another part which could fulfil its functions, namely 'hunters'. This in itself proved to be a disastrous choice. Leopold contended that they were also mistaken in misreading the nature of the ecological system of the mountain, seeing it as a mechanism, whose behaviour could be predicted and managed on the basis of certain, regular patterns. They only thought in terms of maximising benefits to humans in the short term. The mountain 'thought' in terms of ecological and geological time: the time it took to evolve plants and animals and behaviour patterns appropriate to the conditions of the mountain slopes, and the time it will take for a devastated mountain vegetation to regenerate.

So, in spite of moderating its anthropocentric character on the basis of enlightened self-interest, this

conservationist ethic only differs in shade from the free-for-all approach of the ruthless developer. Many environmentalists would therefore refuse to accept conservationism as an adequate ethical basis from which to address environmental problems, in particular when it comes to wilderness areas.

Wilderness Preservation

The ethical position of wilderness preservation is neatly captured when one contrasts the etymology of the word 'conservation' with that of 'preservation' (Fox 1995:155). Both of these words derive in part from the Latin *servus*, which means slave. *Pre* carries the meaning of 'before' in Latin, while *con* means 'together' or 'with'. Conservation therefore has the implication of 'together with a slave', while preserve has the meaning of 'before slavery', which in turn carries the suggestion of preventing something from becoming a slave. In practical terms, preservationism stresses the instrumental values that can be enjoyed by humans if they allow presently existing members or aspects of the non-human world to follow their own characteristic patterns of existence (Fox, 1995:154).

This position is not non-anthropocentric because the basis and objective of leaving certain aspects of the non-human world untouched is still the instrumental: the use/value that humans can gain. Commentators differ on the number of arguments that can be formulated for the preservation of the non-human world, but the following captures most of them (Fox, 155-161):

* The *life support system argument*: the non-human world serves as a source of different kinds of free goods and services that are essential to our healthy physical survival and development. At the same time it serves as a natural sink for the absorption of the waste that we generate.

* The *early warning system argument* is closely related. It emphasises that the non-human world serves as a source of information about deterioration in the quality or quantity of the free goods and services that are provided by our life support system. In this regard, Fox (1995:158) also uses the analogy of an instrument panel in a space ship with indicator lights and gauges to monitor the 'vital signs' of the spaceship. This argument then requires of us not to damage the instrument panel linked to our life support system - acknowledging that it is only humans for whom this 'instrument panel' exists.

* According to the *silo argument* the non-human world serves as a stockpile of genetic diversity for agricultural, medical and other purposes. In an era in which we make more and more use of genetically engineered seeds which are also genetically reduced in many aspects, it is important to have stockpiles of genetic diversity at hand to replenish the genetic lines of key food crops.

* The *laboratory argument* appeals to the view that the non-human world serves as a resource for scientific study. By studying untouched nature we can gain knowledge about ourselves, but also about ecological systems and evolutionary processes that can enable us to better understand life in general, as well as how to maintain and repair it, if necessary.

* According to the *gymnasium argument* the non-human world serves as a space for recreation, and as a challenge against which we can measure ourselves. Similarly the non-human world can serve as a source of aesthetic pleasure or spiritual inspiration: the *art gallery argument* and the *cathedral argument* respectively. The argument here is that we should keep the quality of these 'services' of nature intact.

* Within this context, there is also much support for the *monument argument* in which the non-human world serves as a source of symbolic instruction. People may differ about the contents of these symbols, but they can include reminders of human freedom: unmanaged places are often seen as setting a standard of freedom and autonomous behaviour. Unmanaged ecosystems are also frequently seen as models of efficiency: they show us that nothing is wasted in nature, work as models of co-operation and harmony; or illustrate how vastly different kinds of entities can work together for mutual advantage.

* The *psychogenetic argument* also emphasises the therapeutic function of untouched nature or wilderness areas. Sessions (1989), for example, emphasises the importance of bonding with wild or unmanaged places in order to maintain psychological health. He also speaks of the importance of unmanaged places as refuge from heavily managed aspects of existence.

The ethical stance of preservationism stands in sharp contrast to that of conservationism and the more radical position of the ruthless developer. An illustration of this can be found in the life of John Muir, the founder of the Sierra Club in 1892, who campaigned tirelessly for legislation to protect the wild areas of the American West from human intervention (Norton, 1994:17-38). Branded by

many as a romantic and a mystic who has turned his back on the dirty cities, Muir espoused a philosophy of wilderness preservation based on what he, like Thoreau, sensed as a divine harmony in nature and a freedom not possible in the artificial constraints of civilisation (Barbour, 1980:27). For him, untouched wilderness was a refuge and a source of serenity in a decadent urban society (Barbour, 1980:21).

Many environmentalists have a high appreciation for the ethical position of preservationism, but find it inadequate to grant only a nominal intrinsic value to the non-human world. This criticism is found in the positions of both extensionism and ecological sensibility. The criticism put forward by radical environmental ethics is that preservationists seriously neglect the political forces and power relations that put wilderness areas under threat or make their preservation possible. These points will be taken up next.

Ethical Extensionism

From a conventional point of view, ethics is a domain that is reserved for humans. It is argued that only humans can make distinctions between what is morally acceptable or unacceptable and act accordingly and therefore be held responsible for their actions. In this sense of the word, ethics is indeed only a human concern, but it does not follow that humans are the only entities in the world which are morally considerable. If moral considerability were restricted to humans the non-human world would have value only in instrumentalist terms.

Many environmentalists reject this restriction and argue for an extension of the boundaries of our moral concern to include at least some animals. Following the lead of Jeremy Bentham, environmentalists of this persuasion argue that the validity of some of the criteria used to confer exclusive intrinsic value on humans, e.g. a special relationship with God, the possession of a soul, rationality, self-awareness, free will, the capacity for symbolic communication or to enter into reciprocal relationships entailing duties and obligations, or the capacity to project a future, can be questioned (Fox, 1995:149-150,162). If these criteria were applied strictly in order to exclude all animals, we might find that many humans would also be excluded from the domain of moral considerability (e.g. primitive peoples, heathens, infants, the senile, and the comatose).

If the arguments of anthropocentrism would be followed consistently, then individuals in the categories just mentioned and thus falling outside of the sphere of moral considerability will have no intrinsic value, and accordingly, only instrumental value. Those with intrinsic value would then possess the moral right to use those without intrinsic value in any way they see fit, e.g. throw the heathens to the lions for pleasure, or use primitive people as slaves. The logic of anthropocentrism can thus be shown to have untenable consequences, forcing us to lower the entry standards for admission into the realm of moral consideration to include all humans (Fox, 1995:163). But if this is done, we will find that certain animals have also entered the sphere of moral considerability.

But where should the line be drawn? Again following Bentham, some advocates of extensionism argue that the criterion should be sentience, that is, the capacity for sense perception, or, the capacity to feel or perceive. If an entity is sentient, it has interests: it seeks pleasurable states of being and seeks to avoid pain. Since pleasure is pleasure and pain is pain regardless of the species to which they attach, it is arguably arbitrary to respect human interests simply because it is humans who are the bearers of these interests. If an entity is not sentient it is incapable of having any interests of its own, and is arguably owed no moral consideration (Fox, 1995:163-164). The main ethical task we are faced with in terms of this argument, then, is to ascertain if a being is capable of suffering or not (Fox, 1995:164).

A serious problem arises for ethical extensionism at this point however, since the application of the utilitarian calculus of Bentham can be interpreted in two opposing ways, the one making nonsense of any serious moral consideration of animals. Fox (1995:164-165) points out, however, that extensionism should not be read as an argument for the maximisation of pleasure for sentient beings, but rather as an argument for the reduction of pain we inflict upon non-human animals. This is made clear in the work of the two well-known exponents of this extensionist position, animal liberationist Peter Singer and animal rights advocate Tom Regan.

Singer's animal liberation perspective is a plea for the moral consideration of all sentient entities (Singer, 1975). He suggests that a broad class of non-human animals, mammals, birds, fishes and reptiles, should be included in the sphere of moral

considerability. He is not so sure whether insects can suffer pain or not. His main point, however, is that there is no reason to ignore suffering when it occurs. His argument therefore goes against eating from the realm of that which suffer from it, and also against experimentation with live animals (vivisection), factory farming, killing for fur and killing for sport (Singer, 1993:54, 55, 58).

Regan (1983) is much more restrictive, since he links the possession of rights to the subject of a life criterion. He argues that anything that is the subject of a life has rights that are to be respected. This criterion can only be satisfied by entities that have beliefs and desires, perception, memory and a sense of the future, including their own future, and an emotional life. He is therefore referring to entities with a psychological identity over time, and as he sees it, mentally normal mammals of a year or more old satisfy this criterion. On the basis of this, Regan calls for the total abolition of the use of animals in science, the total dissolution of commercial animal agriculture and the total elimination of commercial sport hunting and trapping.

Both of these two writers try to expand our moral horizons so that practices that were previously seen as natural and inevitable are now taken as intolerable. According to Singer, animal slavery should join human slavery in the graveyard of the past. Both of these writers are trying to overcome speciesism, that is, a bias towards our own species. They urge recognition of our attitudes to non-human animals as prejudicial and no less objectionable than racism or sexism. Singer and Regan argue that sentient non-human animals should not be treated as utilities and we should question and resist the entire system of treating them as mere resources. They both appeal for more than just a change in our attitudes; they argue for an incisive change in conduct, a change in our lives (Singer, 1993:51-52, 56-58; Regan, 1995:79).

From an anthropocentric point of view, these arguments and their implications are very hard to swallow. One of the problems anthropocentrists would have with this approach, is that sentient beings are allocated the same rights as humans, and that, for example, killing a fish therefore has the same moral status as murdering a person. Another contention would be that concepts such as rights, interests, and even pain are concepts that are at home within a human world, and that it is impossible to extend them legitimately to non-human sentient entities. So, praiseworthy as the require-

ment of more altruism from humankind towards animals might be for anthropocentric environmentalists, the grounds for such an appeal seems to be philosophically unsupportable.

There are other environmentalists though, who would reject extensionism for its anthropocentric leanings on the one hand, and for its ecological naïvety on the other hand - particularly in so far as it concentrates on the well-being of individual non-human sentient beings. From an ecological sensibility it seems as if sentience cannot be the only criterion for moral considerability; there are other, more ecologically informed considerations to be accounted for as well. Part of this is that individual non-human sentient beings are sometimes less morally considerable than species or ecosystems. These perspectives are discussed in the next section.

Ecological Sensibility

Environmental ethics based on an ecological sensibility incorporates a wide variety of positions, but they are united in their rejection of instrumental value theory. Arguing from a non-anthropocentric position, ecologically based environmental ethics would contend that we need a different, a new, environmental, ethics, not one based on a mere extension of already existing human values. In fact, many environmental philosophers from this persuasion would say that an anthropocentric environmental ethics is an oxymoron and that it cannot be taken seriously as an environmental ethics.

One of the many ways to argue against anthropocentric and extensionist positions, is to point out that sentience (awareness) is too restrictive a category to take as basis for the interests of non-human entities. The point is rather that every living thing has an interest in its own survival, maintaining its life and well-being, irrespective of its being aware of it or not. All living things also have an interest to flourish, to be what they are as living entities and to develop their own biological powers fully (Taylor, 1995:126). This can be deduced from the fact that all living things seek to realise certain states of being and avoid other states of being (again: regardless of being aware of it or not). This can be interpreted as seeking to realise a good of their own. This means that living entities are not primarily means to ends external to themselves but are ends in themselves. They therefore have intrinsic value. Accordingly, all living things deserve

moral respect (Fox, 1995:166, 172, 174; Taylor, 1995:127).

According to this argument, the mere fact of being alive entails that an entity has interests, and as such these interests should be morally respected. This of course expands the sphere of moral considerability to include trees and plants, besides non-human animals. Paul Taylor, one of the prominent exponents of this bio-centric position¹⁰, uses these tenets to reject the notion of human superiority and argue that the inherent worth of a human being is not higher than that of a non-human animal. From a moral point of view, he claims, we are all akin, as fellow members of the earth's community of life. Taylor (1995:131, 138) calls this species impartiality: all species have the same inherent worth and no species is higher or lower than another. To acknowledge this and to act accordingly is what he conceives of as respect for nature. Respect for nature, he argues, is made possible by a denial of human superiority.

Two possible criticisms of this position, among many, are that it focuses on individual organisms only and as such is still too narrow to be an adequate environmental ethics. What is neglected in Taylor's biocentrism are entities larger than individuals, as well as the relationships and interactions that make individual life possible in the first place. This would include species and ecosystems, as well as the inorganic, non-living components of it, like land, water, air and minerals. The most widely known articulation of such a (holistic) ecosystem ethics can be found in the work of Aldo Leopold (1991, [1949]), as well as in that of Baird Callicott (1987; 1989) who is the main interpreter of Leopold. Another prominent exponent is Holmes Rolston III (1988) who expands the sphere of moral considerability beyond species and ecosystems to include earth systems (e.g. the weather, water cycles and carbon cycles). James Lovelock (1979) went one step further by suggesting that the earth as a whole is an integrated living being, named Gaia; and that she too may have interests and thus is morally considerable (Callicott, 1995:681). Alan Drengson arrived at the same conclusion, using the image of the planet as a person¹¹.

The ethics informed by an ecological sensibility, however, is captured in arguably one of the most quoted lines of Leopold's *A Sand County Almanac* (1991:262) where he states: "A thing is right when it tends to preserve the integrity, stability and beau-

ty of the biotic community. It is wrong when it tends otherwise".¹² The term 'biotic community' here is revealing, because it expands ethical boundaries beyond the scope of humans alone. In fact, Leopold argues that ethics not only has to do with our relationship to other individual humans, or to communities of humans. Our notion of community should be expanded to include soils, waters, plants, and animals or collectively: the land (Leopold, 1991:239). This Land Ethic acknowledges that our instincts will prompt us to compete for a place in the biotic community but, at the same time, that reason requires us to co-operate. The Land Ethic therefore changes the role of humans from conquerors to ordinary members and citizens of the land-community. It implies a respect for our fellow-members within the biotic community, but also respect for the community itself (Leopold, 1991:240).

When this ethic is translated into practical policy and management terms, ecological realities such as dynamic interaction, complexity, hierarchies, and the flow of energy and information are considered. These factors, functioning together, contribute to the health¹³ of the biotic community. Anything that will compromise this is considered to be morally unsupportable and rejected or resisted. According to Callicott, this position was taken up by Leopold in order to protect the land from the onslaughts of mechanised man (1995:161).

A problem that many philosophers have with ecosystem ethics (and also with ecosphere ethics such as that formulated by James Lovelock), is the suggestion that it is ethically permissible to sacrifice individual entities for the good of the whole. Consequently, this approach has been branded as dangerous nonsense or even as environmental fascism. Fox (1995:177-178) however argues that this is a misunderstanding of ecosystem or ecosphere ethics. Ecosystem ethics tries to show that not only individual organisms are worthy of moral consideration in and of themselves, but also larger organisational units such as ecological and earth systems. These should be seen as enabling spaces in which individual organisms are free to follow their diverse ways of life and their evolutionary paths. When they step outside of the bounds of the ecosystem, the conditions sustaining their ways of life and their evolutionary paths falls away. So the accusation of fascism is facile as individual organisms are not downtrodden as members of an ecosystem but instead function as members of a community of life. As Fox summarises it: no enti-

ty is above ecology (Fox, 1995:179).

Another criticism that is often raised against ecosystem ethics in its variety of forms, is that it lacks a strong social theory and critique and, because of the emphasis placed on the ecological context and dimensions of environmental problems, the human origin of these problems are neglected. These origins can be identified and overcome, it is argued, if we concentrate on the notions of identity and self-realisation that inform our choices and actions, investigate the fundamental thought patterns underlying our strategies of decision-making and policy formulation and scrutinise the alienating power relations embedded in the structures and institutions of our global economic system. The broad environmental ethics position, within which these points are articulated, is that of radical environmentalism.

Radical Environmental Ethics

Like the previous position, radical environmental ethics encompasses a number of different positions; the most prominent of which are deep ecology, ecofeminism, social ecology and bioregionalism. What they all have in common is a politics of transformation. Although these positions may differ on what is to be transformed, they all agree that transformation should address the root causes of our environmental problems, and be incisive, definitive and fundamental.

Deep ecology argues that the narrow, egotistic and individualistic notion of self-realisation should be overcome before we could hope to resolve environmental problems. Deep ecology rejects the social atomism, materialism, and consumerism prevalent in modern society as a basis for self-realisation, and opts instead for a spiritual notion of self-realisation, which entails a broadening of the self through a strong identification with the whole of the universe. Deep ecology assumes an egalitarian position in which everything everything in the universe is fundamentally one and therefore is equally valuable as part of the whole. Identification is therefore the strategy through which the intrinsic value of nature is unlocked, but also accepted. In practical terms, this entails an intuitive experience of the harmony and wholeness of nature. This intuitive and immediate identification with nature, inspired by phenomenology, Vedantic Hinduism, the science of ecology and the philosophy of Spinoza, moves us beyond class, gender and species divisions in order to be in full

harmony with nature (Naess, 1979; 1989). The practical implications of deep ecology have been captured in terms of an ethical platform comprising eight principles, which each individual can realise in her own particular situation (Devall & Sessions, 1985). In these principles the supreme values of abundance and biodiversity are emphasised, as well as a reduction of the human population, and a radical change in our consumption patterns. With its motto 'simple in means, rich in ends', deep ecology challenges us to tread lighter on the earth and to explore alternative notions of well-being.

Similarly, ecofeminism focuses on the dualist and hierarchical thought patterns of patriarchy that simultaneously inform the domination of women and the domination of nature.¹⁴ The main focus of ecofeminist thinking and contribution to environmental ethics is in tracing, describing and critiquing the trajectory of these thought patterns through history; the manner in which they have been institutionalised, consolidated and perpetuated in contemporary society; the domination and the exploitation following from this in practice; and ways to deconstruct and move beyond these patterns. In addition to incisive critiques of the identification of women and nature in the history of patriarchy ecofeminists have also generated a substantive body of writing devoted not only to alternative ways in which the female and/or feminine self can be re-conceptualised, but also to ways in which this reconstruction of the self can help us to forge ecological sensibilities that can serve as a basis to overcome our current environmental problems. In some instances this reconstruction has led to a disappointing inversion of patriarchy, leaving us with an essentialism and a reductionism in which women are seen as occupying a privileged position vis-à-vis nature. Accordingly certain 'essentially' feminine traits or values are isolated as the sole basis for an answer to our environmental problems. In other more productive instances though, ecofeminism has led to radical reconceptualisations of male-female, human-nature and human-machine relationship.

The social ecology of Murray Bookchin (1980) and his followers also focuses on the reality of domination in contemporary society, but instead of linking its driving force to patriarchy, it rather identifies hierarchical thinking in general as the source of our societal as well as our environmental problems. Social ecology further insists that there is no such thing as a purely natural environment,

because humans have already remade the natural world. The challenge is therefore to get this process under socially progressive and politically inclusive control (Weston, 1996:153). In order to achieve this, social ecology argues that hierarchies should be overcome since they entail systems of obedience and command that manifest themselves in cultural, traditional or psychological terms, as well as in the domination of nature. As such, hierarchies are internalised states of consciousness or social conditions that result in situations where some people are leading lives of toil, guilt or sacrifice while others enjoy lives of pleasure and satisfaction. Hierarchical structures and practices, but also hierarchical states of mind, should therefore be replaced by the opposite. In practical terms this means that small-scale, self-sufficient, self-governing communities with fully participatory democratic structures and institutions should replace the existing massive-scale economic and political structures of contemporary society. Bookchin (1989) therefore pleads for an organic vision of society as well as for libertarian anarchism, which he gives a highly positive meaning. His argument is that humans will only be able to live in harmony with nature and ecological systems if they adopt and engage in fully conscious, self-determining activity: the primary social and ethical value.

In practical terms this principle of fully conscious, self-determining activity translates into decentralised and diversified decision-making mechanisms where the people most affected can participate directly. Bookchin argues that this will enable communities to cater for the needs and goals of all its members, and at the same time create the space for co-operation. This will also create diversified, balanced and harmonious communities that approximate ecosystems. The texture of social ecology, however, only emerges fully when it is understood as a plea to first address social problems before we address ecological problems: people first, not earth first.

Bioregionalism¹⁵ also calls for small-scale, self-sufficient and self-governing communities, but the focus here falls on remembering and learning how to live in place in a manner that is sustainable over time. As we are alienated from sustainable lifestyles and confronted with disrupted ecosystems we have to learn again from the natives who have lived on the land, how to re-inhabit¹⁶ it and live within its limits. We have to relocate ourselves by adapting our technologies and lifestyles to the land and learning to appreciate its particular

gifts. In practical terms, this calls for a rejection of capitalism, destructive technology, industrialisation, international trade and consumerism, and an acceptance of communalism, appropriate scale, participatory decision-making and subsistence living, including recycling and permaculture. Taking ecological relationships that are web-like rather than hierarchical as point of departure, bioregionalism furthermore encourages social and biological diversity since it ensures social and ecological sustainability. It also emphasises poetic living, which is associated with inspirational experience. Bioregional living is therefore mystical, visionary and spiritual in character; it calls for a literary, poetic mode of expression.

TOWARDS AN EVALUATION OF DIVERSITY IN ENVIRONMENTAL ETHICS

From the previous section it is evident that the past three decades of environmental ethics did not produce a value theory that is profound enough to support the practical task of the conservation of life on earth (Rolston, 1991:92). It also does not seem likely that such a theory will be developed within the near future - at least not in the format of a complete, unified, and coherent theoretical doctrine, uniting all environmentalists under one umbrella¹⁷. The existing diversity of value theories means that environmental ethics has no shared vision, no unified voice and no common language to communicate effectively with the public, environmentalists or decision-makers and policy formulators (Norton, 1994:9).

Environmental ethics is furthermore characterised by a stark dichotomy between anthropocentric and ecocentric value theories with a third split evident in the number of radical, transformational positions questioning the sense of making the anthropocentric-ecocentric division at all (Weston, 1991). The disturbing fact about this three-way division is that the debates between the proponents of the respective theoretical positions are highly confrontational and adversarial, and also inconclusive, since they quickly degenerate into ideological stalemates. To a large extent their arguments "ricochet back and forth between ... apparently exclusive world views and sets of value assumptions" (Norton, 1994:9).

Anthropocentric environmental ethics, for instance, rejects the idea of animal rights, and the notion of the inherent value of nature. Since human subjects do all possible valuing, any non-

anthropocentric environmental ethics would be an oxymoron (Callicott, 1995:676). Non-anthropocentrists, however, claim that no human-centred ethics can ever adequately consider nature in its own terms and that anthropocentrism will always fall into the trap of instrumental value theory, achieving nothing more than a 'management ethics' for the use of the environment (Regan, 1981). Similarly, where proponents of deep ecology will claim that wilderness is the only real world (Devall, 1987), social ecologists will claim that a purely natural environment is nothing but a romantic myth. Radical approaches also tend to dismiss all non-radical positions in environmental ethics since the latter adopt reformist positions that at the most only address the symptoms of our environmental problems and not root causes. Deep ecology, on the other hand, is also rejected because of its crude eco-brutalism (Bookchin, 1987) and stoicism (Cheney, 1989), while notions of biocentric egalitarianism has been branded as 'dangerous nonsense'. From another angle, animal rights advocate, Regan has characterised Leopold's Land Ethic as 'environmental fascism' because the latter believes that the individual (animal) can be sacrificed for the sake of the whole of the land community. Deep ecologist Warwick Fox (1989) has rejected ecofeminism as too self-serving, simplistic and facile to be taken seriously as a remedy for environmental problems (Callicott, 1995:683). Since Leopold endorsed hunting, historically a predominantly male activity, Marti Kheel (1990) castigates his Land Ethic as epitomising male bias (Callicott, 1995:683). Feminism in turn criticises deep ecology since its notion of self-realisation through identification with the whole of nature moves us beyond race, class and gender, rendering obsolete the widely differentiated experiences of women as a dominated and exploited 'other'.

The fierce in-fighting between the different positions within environmental ethics can partly be explained by the fact that many of these positions are characterised by ethical monism: the adoption of a single principle or a set of closely related principles on the basis of which a comprehensive ethical theory is built¹⁸. The philosophical advantages of a monistic approach include that of logical consistency and internal coherence, while its practical advantage is certainty as well as the ability to generate uniquely correct moral judgements in every situation. Within this kind of approach, however, little or no concern exists about irresolvable conflicts between competing and equally worthy moral claims (Norton, 1996:105). It enables its

exponents to dogmatically state what is right in its own ethics, and what is wrong with all other approaches. Ethical monism in environmental ethics is highly problematic when it comes to the formulation of practical policy proposals. The proposals of a monistic position are theoretically coherent and internally consistent but, being single factor solutions, unable to address the complexity of the problem to which they are applied.

Closely linked to the latter problem is that of metaphysical bias (Warren & Cheney, 1993). In one sense this entails an adoption of questionable metaphysical commitments, some of which are truly mystical in the sense of going beyond empirical data (Norton, 1984). The rights of nature, the liberation of animals, the intrinsic value of nature, seeing the land as a community, referring to the planet as a person, or identifying oneself with the whole of nature could all be quoted as examples in this regard, and amongst policy formulators and environmental decision-makers legitimate questions arise as to the need to take such notions into account when conceptualising our environmental problems, or formulating and justifying our responses.

In another sense, the metaphysical bias of many positions within environmental ethics often leads to an over-emphasis on theory and an under-emphasis of practice. Philosophers working in the field of environmental ethics have tended, with some exceptions, to devote their energy to highly technical, theoretical, internal debates about the grounds and the meaning of our environmental concern without giving much attention to making their insights accessible and useful to environmental policy formulators at least. It is no wonder then that many environmental practitioners are sceptical about the use value of environmental ethics in the real world of environmental policy and management. Their insights might eventually trickle down to us, the sceptic practitioner will say, but this is still a long way off in the future.

So, how do I as a philosopher working in the field of environmental ethics respond to this scenario? Is it reason enough for despair? Should I pack up my books, resign my teaching job and spend the rest of my days on the beach or in bars playing pool? My answer to these questions would be no, and my reasons for this are inspired by a position in environmental ethics, as yet unmentioned, namely environmental pragmatism.

Within environmental pragmatism concrete environmental problems are always placed within a particular context, and that context is then linked with wider contexts within which it is embedded. In this regard, theory only plays a secondary role: providing tools in order to conceptualise problems and formulate proposals about addressing them. There are no final framework or indubitable truth from which environmental problems could be approached. There are only a variety of conceptual tools that we can make use of, and some of these may prove to be more useful than others (Parker, 1996:21). From this point of view, environmental ethics can be seen as a large toolkit developed over the past three decades that we can use when we need it. Through engagement with practical problems, we can also shape new tools for this kit, adding to it or refining it as we go along. As such, environmental pragmatism opens up a valuable practical and historical perspective on the diversity of positions within environmental ethics.

Environmental pragmatism would suggest that we place the diversity of positions within environmental ethics within a historical framework. One of the first things to notice from this point of view, is that environmental ethics is still in its originary stages and should be evaluated as such (Weston, 1995:463; 1996:147). In fact the rapid emergence of environmental ethics in the past three decades could be seen as a revolutionary historical event: it could be seen as a paradigm shift in the Kuhnian sense, taking place in ethics. As such, environmental ethics is a response to an experience of crisis, namely the inability of conventional (ethical) positions to adequately conceptualise and respond to environmental problems as they currently face us. In revolutionary times like these, much intellectual exploration and experimentation is to be expected, and this is to be welcomed. In the process, novel experiences are worked through, new ethical metaphors are coined, new principles are put on the table, and unexpected conclusions are reached as we follow the arguments where they lead us: into uncharted territories. So, in the originary stages of any ethics, a certain measure of resistance can also be expected from the more conventional positions. The latter may contend that we do not need a new, an environmental, ethics, and that concepts with well-established meanings are positively misused within it (Weston, 1995:463). Another feature of an emerging ethics is that it is seldom established in a smooth and orderly fashion. Similar to a political revolution a variety of different and often incompatible outlines, coupled

with a wide range of protopractices and even social experiments, are tried out. Some of these will prevail, and they will then rewrite the history of their emergence, smoothing over and even obscuring rival positions that were left behind (Weston, 1995:464, 466).

It might be too early, therefore, to expect of environmental ethics to have reached a consensus, a finality and a sense of direction, that will find outright and general approval amongst environmentalists, the broad public, decision-makers and policy formulators. It might be too early to discard environmental ethics because it is tentative, provisional, fragmented and in many instances supporting notions that on face value appear to be wild¹⁹, strange, forced and truncated. The human ethics which recognises the rights and dignity of persons, and which we accept as self-evident today, went through the same phase about 200 years ago, and it only gradually evolved to become generally accepted and interwoven with the very fabric of our constantly evolving institutions, experiences and practices (Weston, 1995:463).

In the light of these observations, the originary stages of environmental ethics should be recognised as such, but also taken seriously lest we miss the very fertile gestation taking place. Indeed, the current state of affairs in environmental ethics should remind us of the power that we as humans have to shape new values, but also of the necessity to establish transformed practices, institutions and experiences that can nourish and sustain them (Weston, 1995:464). Many of the strange and wild ideas of environmental ethics (animal rights, the land as a community, the planet as a person), therefore, should rather be seen as genuine efforts to articulate new values and transform existing practices, institutions, and experiences. They do not fulfil a descriptive function within an already established framework of values and practices. They serve rather as rhetorical devices: opened challenges to that which already exists. They serve to open up questions, not to settle them. As such, environmental ethics emerges as nothing but a partner in a wider and ongoing, creative and prospective human endeavour (Weston, 1995:465). On one level it is part of our hesitant, incomplete efforts to resolve real life challenges. On another level it actively participates in our contingent and historical efforts to sort out the meaning of our experience and what is happening - not only to us as humans, but to life on earth in general. After all, our concepts and our values "emerge in the ongo-

ing transactions between humans and environments" (Parker, 1996:21).

CONCLUSION

Within the framework of a non-dogmatic, non-metaphysical, pluralistic and pragmatic approach to environmental ethics I do not think we should settle for one conclusion only. One possibility is to speak with Anthony Weston (1995:466) and state that environmental ethics:

might well be viewed as another kind of ethical experiment or proposal; rather like, for example, the work of the utopian socialists. However unrealistic, they may nonetheless play a historical and transitional role: highlighting new possibilities, inspiring reconstructive experiments, even perhaps eventually provoking environmental ethics equivalent to Marx.

But this may sound too tentative to be of any practical use, so here I can invoke Eugene Hargrove (Hargrove, 1989:8) who has observed the following:

Although it is commonly believed that environmental ethics will ultimately produce a tight, rationally ordered set of rules that can automatically be applied with great precision, I think that the likelihood that such an environmental ethic will ever be produced is zero, or very close to it.

Hargrove does not see this as a failure but a reflection of the fact that an environmental ethics in the format of a system of rules is not needed. Given the manner in which the human mind actually makes decisions this would probably not be useful even if it existed:

Whatever environmental ethics in the future will be, it will consist of a collection of independent ethical generalisations, norms or principles, that are only loosely related and can be used on a practical policy level to guide our decisions and management practices (*ibid*).

Finally the issue is not only one of thinking but also of doing, i.e. practising environmental ethics as a contribution towards, and an active participant in, concrete and real life decision making. We conclude with a shift in focus, or rather a new set of issues and challenges. As Christopher Stone (1988:154) suggests: "the main question now is this: what model of decision process provides the best prospect for constructing the best

answers reason can furnish?"

The challenge to environmental ethics is to focus on contributions that can help establish practices, structures, institutions and spaces in which new or stronger environmental values can emerge, be fostered and allowed to flourish. Weston (1995:466) refers to this as enabling environmental practice. The discussion of this challenge, however, lies beyond the scope of this paper²⁰. It identifies, however, a rich area of interaction and learning in which environmentalists, environmental educators, philosophers and policymakers can grow and act together in future.

NOTES

1. This article is a reworked and drastically shortened version of parts of the paper that was delivered at the 1999 EEASA Conference in Grahamstown under the title: Are we there yet? Taking stock of three decades of environmental ethics. The full text of that paper was published in *Growing Together. Proceedings of the Annual Conference and Workshops of the Environmental Education Association of Southern Africa*, 7-10 September 1999: Rhodes University, Grahamstown, South Africa: 50-78.
2. The phrase "finding creativity in diversity" was used by Bryan Norton to make this kind of point at a CSIR workshop held in Stellenbosch on September 6th, 1999.
3. See a brief history of the origins of environmental ethics: The Centre for Environmental Philosophy at the University of North Texas
<<http://www.cep.unt.edu/novice.html>>
4. Exponents of deep ecology include George Sessions, Bill Devall, Warwick Fox and Max Oelschlaeger.
5. *Ethics and Animals* which was followed by *Between the Species*.
6. See the Twenty-Year Index (1979-1998) of *Environmental Ethics* in Volume 20, 449-479, also available at
<<http://www.cep.unt.edu/index17.html>>.
7. These authors have followed a process philosophy approach in accordance with the philosophy of organism of Alfred North Whitehead.
8. Norton also published *Towards Unity amongst Environmentalists* in 1991 in which the position of environmental pragmatism is made accessible to decision-makers and policy formulators.
9. William Baxter (1995:382-383) captures this version of anthropocentrism well in his plea for optimal pollution levels. Rejecting the idea of a standard norm for clean air and water, he suggests that we rather opt for optimum levels of pollution. He is also (in)famous for the statement that "Damage to penguins, or sugar pines, or geological marvels is, without more, simply irrelevant. Penguins are (only?) important because people enjoy seeing them walk about rocks" (1995:382).
10. Others include Albert Schweitzer (1969) and

Kenneth Goodpaster (1978).

11. Drengson draws here on Roszak's book *Planet/Person* (1978). A person-planetary paradigm, Drengson argues, will enable us to approach the earth as a whole with respectfulness and humility.

12. James Heffernan felt that this principle reflected too much anthropocentric bias, so he reformulated it in more ecological terms as follows: A thing is right when it tends to preserve the characteristic diversity and stability of an ecosystem (or biosphere). It is wrong when it tends otherwise (Fox, 1995:177).

13. The exact meaning of the term 'health' is hotly debated amongst ecologists and environmentalists. One interpretation takes it as 'stability'. Another rather understands it as 'resilience'.

14. Marincowitz (1998) for a thorough introduction to the different positions within ecofeminism.

15. See the work of Berg & Dasmann (1978) and Kirkpatrick Sale (1985).

16. On re-inhabitation see Peter Berg (1991) and Dave Foreman (1987).

17. This is the ideal that Baird Callicott (1990) has set for environmental ethics. Anthony Weston (1995:466) and Bryan Norton (1996:105), amongst others, are highly critical of this effort to create a 'univocal' environmental ethics.

18. See the articles by Wenz (1993) and Stone (1988) on this topic.

19. Rolston's book *Philosophy Gone Wild* also alludes to this meaning of the word, and not only to an ethics emphasising the value of wilderness. See also Weston (1996:143).

20. In his notion of 'contextual management', also referred to as 'adaptive management', Bryan Norton (1984; 1994; 1996) has already made very valuable contributions in this regard.

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