

DISCUSSION PAPERS

A Refutation of Environmental Ethics

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An environmental ethic holds that some entities in nature or in natural states of affairs are intrinsically valuable. I argue that proposals for an environmental ethic either fail to satisfy requirements which any ethical system must satisfy to be an ethic or they fail to give us reason to suppose that the values they promote are intrinsic values. If my arguments are correct, then environmental ethics is not properly ethics at all.

In "The Shallow and the Deep, Long Range Ecology Movement" Arne Naess distinguishes between two responses to ecological degradation. The shallow response recommends that we be nice to nature so that nature will be nice for us. The deep ecological response, on the other hand, insists that a proper appreciation of nature leads to a recognition that "the equal right to live and blossom is an intuitively clear and obvious value axiom".¹

Following Naess, a considerable number of philosophers and others have chosen the deep ecology path, and they have understood this to require the development of an ethic which values things in nature for their own sake. John Rodman expresses a common motivation for having such an ethic:

I need only to stand in the midst of a clearcut forest, a stripmined hillside, a defoliated jungle, or a dammed canyon to feel uneasy with assumptions that could yield the conclusion that no human action can make any difference to the welfare of anything but sentient animals.²

Val and Richard Routley in "Human Chauvinism and Environmental Ethics" argue that only a truly environmental ethic which regards natural systems or their properties as valuable in themselves can adequately express the standpoint of those who want to preserve wilderness and who abhor strip-mined hillsides and

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¹ Arne Naess, "The Shallow and the Deep, Long Range Ecology Movement: A Summary," *Inquiry* 16 (1973): 96.

² John Rodman, "Liberation of Nature," *Inquiry* 20 (1977): 89.

defoliated jungles.³ More recently Holmes Rolston, III in *Environmental Ethics*⁴ and Paul W. Taylor in *Respect for Nature*⁵ have both argued for an ethic which recognizes value in nature.

An environmental ethic, as I understand it, is an ethic which holds that natural entities and/or states of affairs are intrinsically valuable, and thus deserve to be the object of our moral concern. What exactly it means to say that something is intrinsically valuable depends on the account given of what values are and where they come from.⁶ At a minimum, however, those who find intrinsic value in nature are claiming two things: first, that things and states which are of value are valuable for what they are in themselves and not because of their relations to us (and in particular, not because they provide us with pleasure and satisfaction). Second, the intrinsic value which these states of nature have is objective in the sense that its existence is not a matter of individual taste or personal preference. Any rational, morally sensitive person ought to be able to recognize that it is there. This means, of course, that those who claim that intrinsic value exists in nature must provide some criteria for identifying what is of value and some reasons for believing that the things and states in question are valuable.

In general, an ethic is supposed to tell us two things: (1) what states of affairs, things, and properties are intrinsically desirable or valuable (as opposed to what is valuable as a means to an end); and (2) what we should do or not do in order to promote, protect, or bring into existence that which is of intrinsic value. Given that an ethic is supposed to tell us these things, it must satisfy the following formal requirements in order to count as an ethic at all:

(1) *The Requirement of Consistency.* If a thing or state of affairs is thought to be intrinsically valuable, then all things that are like it in relevant respects must also be judged to have intrinsic value. On the other hand, if something is thought not to have intrinsic value, then all things that are like that thing in relevant respects must be regarded as not having intrinsic value. Supporters of animal

³ Val and Richard Routley, "Human Chauvinism and Environmental Ethics," in *Environmental Philosophy*, ed. Don Mannison, Michael McRobbie, and Richard Routley, Monograph Series 2, Department of Philosophy, Research School of Social Sciences (Canberra: Australian National University, 1980). See also Val and Richard Routley, "Against the Inevitability of Human Chauvinism," in Kenneth Goodpaster and Kenneth Sayre, eds., *Ethics and the Problems of the 21st Century* (Notre Dame: University of Notre Dame Press, 1987).

⁴ Holmes Rolston III, *Environmental Ethics* (Philadelphia: Temple University Press, 1988). See also *Philosophy Gone Wild: Essays in Environmental Ethics* (Buffalo: Prometheus Books, 1986).

⁵ Paul W. Taylor, *Respect for Nature: A Theory of Environmental Ethics* (Princeton: Princeton University Press, 1986).

⁶ The Routleys ("Human Chauvinism and Environmental Ethics") hold that there are no values without valuers, but that valuers can and should value things which are not instrumental to their needs and purposes (p. 152). Rolston (*Environmental Ethics*) argues that values are as much in the world as objects like trees (see chap. 3); see also Holmes Rolston, III, "Are Values in Nature Subjective or Objective?" in Robert Elliot and Arran Gare, eds., *Environmental Philosophy* (University Park: Pennsylvania University Press, 1983). Although these accounts of values are metaphysically diverse, they nevertheless satisfy what I call the minimum conditions for being intrinsic values.

liberation and environmental ethics have made heavy use of the consistency requirement in their condemnations of "human chauvinism." They argue, for example, that if human beings are regarded as being intrinsically valuable, and if some animals are like human beings in all respects that seem relevant, then a consistent ethic must regard these animals as valuable. If animals are not regarded as being valuable, then those human beings that are like animals in relevant respects (babies, children, the mentally retarded) must be judged by a consistent ethic not to have intrinsic value.⁷

The requirement of consistency presupposes that the ethic in question has provided us with an account of what differences and similarities are relevant and why. If that ethic is to have any claim to being objective, then that account must not seem arbitrary. In other words, if something is thought to be of value and another thing is not, then there must be reason for believing that the differences between them justify making that judgment, and if two things are regarded to be of equal value then the similarities they have must be such so that this judgment can reasonably be made.

(2) *The Requirement of Non-Vacuity.* The criteria for determining what things or states of affairs are intrinsically valuable must not be such so that it turns out that every thing and every state of affairs counts as equally valuable. The reason why this requirement must be satisfied should be clear. An ethic is supposed to tell us what we ought or ought not to do; however, it cannot do so if it turns out that all things and states of affairs are equally valuable, for if they are, then there is no reason to do one thing rather than another, to bring about one state of affairs rather than another.

(3) *The Decidability Requirement.* The criteria of value which an ethic offers must be such that in most cases it is possible to determine what counts as valuable and what does not. Probably all ethical systems will have problems with borderline cases. For example, an ethic which regards sentient creatures as objects of moral concern and their well-being as something that we should promote may have difficulties determining what counts as a sentient creature and what the well-being of a particular creature consists of. Nevertheless, in general it is usually clear what satisfies the criteria and what does not. A more serious difficulty arises if the criteria leave us in doubt in most cases. If this happens, then we do not simply have a problem within an ethic, but a problem regarding something as an ethic in the first place.⁸ The reason for having a decidability

⁷ See for example the Routleys' arguments against human chauvinism in "Against the Inevitability of Human Chauvinism."

⁸ One might distinguish between being decidable in principle and being decidable in practice. For example, hedonistic utilitarianism might satisfy "in principle" decidability because it gives us a formula for determining what we should do (in terms of the net balance of pleasure and pain). However, in practice it may be impossible to apply this formula, and if this is so, then hedonistic utilitarianism gives us no way in practice of determining what we ought to do. It is undecidability in practice with which I am concerned here.

requirement is much the same as the reason for requiring non-vacuity. If an ethic is to make prescriptions, then we have to have a good idea of what we are supposed to be promoting and avoiding. If an ethic can't tell us this, if it leaves us uncertain in too many cases about what things or states of affairs are valuable and which are more valuable than others, then its claim to be an ethic is brought into question.

My claim is that proposals for an environmental ethic either fail to satisfy one or more of these formal criteria or fail to give us reason to suppose that the values they promote are intrinsic values. It should be noted that my objection to environmental ethics is not that its ideas about what is valuable are implausible, or that rational, morally sensitive people should not value what environmental ethicists tell them to value. Rather, if my arguments are correct, what is called environmental ethics is not properly ethics at all.

What can go wrong with environmental ethics is illustrated by an argument presented by Paul Taylor in *Respect for Nature*. The argument is meant to establish that there is no good reason for thinking that sentient creatures alone have intrinsic value (*inherent worth*), indeed, that there is no reason to deny that nonsentient creatures—plants, lower animals—have less intrinsic value than sentient creatures. Human beings, Taylor admits, have properties that many living things do not have—e.g., intelligence—and some philosophers, most notoriously Descartes, have believed that human beings are distinguished from all other creatures by the possession of mind. Apart from the question of whether other creatures do not have minds, however, there is no reason in nature why we should regard the qualities that human beings happen to have as making them more valuable than living creatures that do not have these qualities—no reason why creatures who can think or feel should be regarded as more valuable than plants and other nonsentient creatures.⁹

A natural response to this argument is to ask, "Why stop here?" Why should we regard rocks, rivers, volcanoes, molecules as being of less value simply because they happen to lack the properties associated with life? Why indeed should we say that anything is more valuable than any other thing? The argument Taylor uses to overthrow human chauvinism seems to undermine the very possibility of an ethic. We might conclude that if we leave it up to nature to tell us what we should or should not value, that we get no answer—that we can only find nature to be valuable insofar as natural states of affairs are related to us: to our interests and concerns, or more generally the interests and concerns of sentient creatures. This is in fact the position I hold, but to establish it requires much more argument, for environmental ethicists do think that they can give us criteria for discovering objective value in nature, criteria which

⁹ Taylor, *Respect for Nature*, p. 129.

do not set us on the slippery slope into inconsistency, vacuity, or undecided-ability.

There are two ways in which environmental ethicists have tried to establish their thesis that there are intrinsic values in nature. The first is to argue by analogy. Taylor (and sometimes Rolston) does this. Let us assume that human individuals are intrinsically valuable and that it is desirable that their well-being be promoted. The reason we think that this is so (the argument goes) is that human individuals have interests, preferences, purposes—a good that can be frustrated or furthered. But if this is our criterion for having value, then in all consistency we must recognize that since some animals also have interests, preferences, and purposes, they too should count as having intrinsic value. Plants, nonsentient creatures, may not have interests in a true sense, but they do have a good (unlike a rock). “Once we come to understand the life cycle of a butterfly,” Taylor says, “and know the environmental conditions it needs to survive in a healthy state, we have no difficulty speaking about what is beneficial to it and what might be harmful to it.”¹⁰ The same can be said about bacteria or plants. Furthermore, the good that a butterfly and a blue gum have is a good of their own. Unlike machines, the good of which is determined by human purposes, we can say what is good for a natural organism without reference to any other entity. Thus, we can understand how nonsentient organisms can be candidates for having intrinsic value, and once we come to appreciate their nature and the role that they play in environmental systems, we will be inclined to say that they do have intrinsic value.¹¹

The second approach to environmental ethics is not to argue by analogy but simply to try to persuade us as valuers that there are certain things or states of affairs in nature that we as rational, morally sensitive people ought to regard as having a value independent of our needs and interests and that there are other states of affairs (like defoliated jungles or exotic pine plantations) that we ought to regard as having a disvalue. We simply have to come to recognize that these values or disvalues are there, and the job of the proponent of environmental ethics is to encourage us to do this by persuading us to appreciate certain aspects of nature and by trying to show us that an ethic which does not acknowledge these values cannot satisfy our intuitive understanding of what is bad or good, right or wrong. The Routleys take this approach, and so do Rodman and sometimes Rolston.

¹⁰ Ibid., p. 66.

¹¹ Taylor's strategy is, first, to persuade us that nonsentient organisms have a good of their own, and thus are plausible candidates for having what he calls an *inherent worth*, and, second, to argue that if we adopt a biocentric outlook (which includes accepting the argument against the superiority of human beings and sentient creatures criticized above), we will then believe that they do indeed have inherent worth.

The Routleys argue in "Human Chauvinism and Environmental Ethics" that environmental systems are to be valued according to their possession of a mix of factors: diversity, naturalness, integrity, stability, and harmony,¹² and that people who appreciate wilderness, who are reluctant to destroy natural systems even if the destruction does not harm sentient creatures, should accept this criterion of value. Rolston maintains that not only organisms as self-maintaining systems deserve to be valued, but also species as entities with a history and an essence and ecosystems as "integrated cybernetic systems." He argues that only if we are prepared to value these things for themselves do we have an ethical basis for preserving and protecting what many sensitive people want to preserve and protect.

Because both approaches claim to be laying the foundations of an environmental ethic, it is presupposed that they can satisfy the formal requirements of an ethic. Indeed, it seems that they do satisfy these requirements. Each claims to have the virtue of consistency—unlike ethics which are described as being "human chauvinist." Each tells us that some things or states of affairs are valuable and some are not; and each presents criteria that we are supposed to be able to use to decide what is valuable and to what extent.

But what exactly is valuable? On this matter environmental ethicists do not speak with one voice. Taylor insists that it is individual organisms that have intrinsic value and not environmental systems or species. The Routleys regard environmental systems as holders of value. Rolston thinks that individual organisms, species, and ecosystems all have value, though perhaps to different degrees. Is this disagreement about what in nature has value a little problem that environmental ethicists should be able to solve among themselves, or is it a symptom of a larger difficulty? To answer this question let us look more closely at each of the two approaches.

Once again I take Taylor's argument as illustrating what goes wrong with the analogical approach. Taylor argues that if a thing has a good of its own, then it is a candidate for having intrinsic value. He assumes that it is individual living organisms and only individual living organisms that can have this value. But there is nothing in the criterion, or the mode of argument used to support it, that requires this limitation. It is not difficult to use Taylor's way of determining what is of value to insist that other kinds of things must also have the same intrinsic value if we are to be true to the consistency requirement.

Why can't we say, for example, that hearts, lungs, livers, and kidneys have intrinsic value and thus deserve in themselves to be objects of our moral concern? Once we come to appreciate how a kidney or some other internal organ develops within the embryo, how it functions and maintains itself, what makes it flourish

¹² Routley and Routley, "Human Chauvinism and Environmental Ethics," p. 170.

manifested if it had been healthy. Why should we regard it as a worse thing for it if it has these properties? The answer might be that if the ability of a plant to survive and reproduce is threatened, then this is not to its good. However, if this is our criterion of what is bad for natural things, why should we say that it is bad for the plant's sake that it dies of disease rather than that this is bad for its genes or bad for the species? Moreover, why should it be bad for the plant's sake to live a short time rather than a longer time? One reason why we find it so natural to suppose that it is better for an organism's sake that it be healthy and have a long, productive life is because this is what we want for ourselves and what we want for the plants we grow. Nevertheless, plants don't want anything. Thus, as this discussion shows, determining what a nonsentient organism's own good is is not as straightforward as it sometimes appears and this difficulty throws into question the analogy between sentient creatures and nonsentient organisms upon which Taylor's approach to environmental ethics depends.

Other attempts to argue by analogy have not been any more successful. Rolston suggests that what living creatures from the most complex to the simplest have in common is that they are self-contained systems and that it is this which makes them deserving of respect. Nevertheless, virtually anything can be regarded as a self-contained system in the same sense, be it a liver, a molecule, or a solar system. Moreover, Rolston, like Taylor, faces the problem of determining in a nonarbitrary way what states of a system count as good.

Because of these problems, I conclude that neither Taylor nor Rolston succeed in providing the foundations for an environmental ethic. The criteria they use to determine what is of value not only fail to rule out many things that they would probably wish to exclude (e.g., lungs and livers), but also fail to satisfy the formal requirements of an ethic. First, their proposals probably fail to satisfy the requirement of non-vacuity, for if we push the analogies that they depend upon to their logical conclusion, then we end up regarding virtually everything as valuable. Second, even if we can somehow resist this result, it is clear that the proposals won't satisfy the decidability requirement, for the criteria leave us radically uncertain about what counts as an object of moral concern and what states of affairs should be regarded as good.

Of course, the fact that a few proponents of environmental ethics have failed to establish that there can be such an ethic is not conclusive. Is there a way of improving the argument from analogy and/or sharpening up the criteria of value so that they satisfy the requirements? It might be suggested that environmental ethicists should simply declare that what is of intrinsic value are living creatures, or wilderness, or ecological systems. The obvious problem with this idea, however, is that in making this declaration they would be committing the same sin of arbitrariness which they accuse human chauvinists of committing. If they claim to be uncovering intrinsic values in nature, then we are entitled to get an answer to the question "What is it about living creatures or wilderness that is

and what harms it, then surely as in the case of the butterfly or the bacteria we have to recognize that it has a good of its own.

But isn't the good of a kidney defined in terms of the good of the organism that has the kidney? It is true that my own good and the good of my kidneys are intimately related. We depend upon each other (though modern technology has made it possible for me to get on without my kidneys and my kidneys to continue to exist without me). But my purposes and goals do not define what is good for a kidney. This can be determined independently to the same extent that the good of a wood-boring insect can be determined independently of the good of the tree it feeds on or that the good of intestinal bacteria can be defined independently of the good of the intestine or the good of the creature who has the intestine. Kidneys, like insects and bacteria, need certain kinds of nourishment; they are healthy under some conditions and are caused harm by others. These conditions can be specified without mentioning the organism in which the organs reside.

So using the same kind of argument which Taylor uses to persuade us that organisms have a good of their own, we have to conclude that internal organs have such a good too. For the same reason, it seems that we also ought to say that individual leaves, buds, and bits of bark have a good of their own and are equally candidates for having intrinsic value. And what will stop us from saying that a piece of skin, a bodily cell, or a DNA molecule has a good of its own?

Why discriminate against rocks? Once we appreciate how crystals form according to a pattern determined by molecular structure, what conditions make it possible for this pattern to form in a characteristic way, what maintains its structural integrity, and what conditions cause it to be deformed or to break up, then surely we will want to say that in an extended sense of the phrase a crystal has a "good of its own." It is true that it sounds odd to say this. But why should we be any more impressed by the fact that crystals, strictly speaking, do not have a good of their own than Taylor is impressed by the fact that nonsentient creatures, strictly speaking, do not have interests? Surely it is the relevant similarities between bacteria, cells, and crystals that should be crucial for our ethical reasoning, just as it is the relevant similarities between sentient creatures and nonsentient creatures that are crucial for Taylor. The same thing that is said about crystals can be said about any natural entity, whether a rock, a molecule, an atom, or a solar system. Each has an integrity of its own which it can maintain under certain conditions, but which will be destroyed under others.

It is time to reassess the status of machines. Although it is true that we think that the purpose of a machine is to serve a human need, the matter is really not so simple, for machines, because of their structure, have a potential, a way of doing things, of their own, and in order to accomplish their purposes people often have to conform to the ways of the machine. In fact, it is frequently the case that people have to redefine their goals or are caused to discover new ones as a consequence of realizing the potential of a machine or in the course of adapting

valuable?" and when the answer is given, in attempting to satisfy the consistency requirement for the ethic, they are likely once again to encounter the problems I have already discussed above.

Maybe the environmental ethicist can give a better answer than the ones so far considered. What distinguishes living things from nonliving things is their complexity. They are not only self-contained systems, but also systems with parts that are related in a complex way, systems which carry out complex processes. Perhaps we should say that something is intrinsically valuable if it has a certain degree of complexity, or that things are valuable according to their degree of complexity. The latter is sometimes suggested by Rolston.

If we adopt the complexity criterion, we might be able to satisfy the requirement of non-vacuity. However, accusations of arbitrariness can still be made. Why should the cutoff point that determines what is of value or what degree of value something has be in one place rather than another? Why should a slightly lesser degree of complexity be regarded as a relevant difference? In addition, it is doubtful whether the criterion can satisfy the decidability requirement. How is complexity to be defined in general and how are we to compare the complexity of different kinds of things? Is an individual less complex than the ecological system or social institution to which he/she/it belongs? Is a heart or liver or brain less complex than the creature it belongs to? Moreover, it is not clear what systems we are talking about. Virtually anything, as I have pointed out, can be regarded as a system: an individual animal or plant, the relationship between several animals and plants, an ecological system, the planet Earth, a heart or kidney, a molecule, an interacting system of molecules, etc. Until we know what we are comparing and how, it is not going to be possible to answer the question, "What should be the object of our moral concern?" Finally, even if we can determine what systems we ought to be concerned with, there remains the difficulty of how we should determine, in a nonarbitrary way, what states of these systems count as good.

Given that there are so many problems with the analogical approach to environmental ethics, one might suppose that the second approach is bound to be preferable. I argue, however, that it encounters the same difficulties. Let us begin with the Routleys' multifactored criterion for evaluating natural systems: diversity, naturalness, integrity, stability, and harmony. The Routleys allow that there can be difficulties in determining how these different factors should be weighed, for example, whether and in what cases a greater diversity can make up for a lack of naturalness. They would also undoubtedly admit that there may be difficulties in determining what "stability" or "harmony" amount to in a dynamic system. But they do claim that this criterion gives us clear reasons for preferring a wilderness over a monoculture pine plantation and for condemning the defoliation of a jungle or the clear-cutting of a forest, and they argue that the judgments that we make using it correspond to our intuitions about what is of value in nature.

That the Routleys don't escape the problems we have already encountered becomes evident as soon as we ask the question: "What is it exactly that we are supposed to be evaluating?" Although they assume that their criterion applies primarily to large environmental systems, such as wilderness, why should we assume this? What prevents us from applying the criterion more widely?¹³ For example, compost and dung heaps are little environmental systems that can be evaluated according to the diversity of creatures or processes which they contain, their naturalness, integrity, stability, and harmony. Likewise, individual animals and plants can be regarded as environmental systems containing a greater or lesser diversity of parts and functions, parts that tend to maintain harmony and stability. And, of course, parts of these systems, e.g., livers and lungs, are also systems with a complexity of parts, with an integrity, harmony, etc. of their own. Finally, why should we suppose that the criterion must apply only to systems of living things? How about a solar system, a molecule, or an atom? Why can't a society be regarded as a diverse, stable, harmonious cybernetic system?

Once again we have a problem of determining and limiting the scope of the application of the value criterion. It won't do any good to insist that it is only to be applied to ecological systems. This is a mere piece of legislation. If other systems are like ecological systems in relevant respects, then they too should be judged as valuable. If we don't want to say that they are valuable, then we have to find a relevant respect in which they are different.

The difficulty involved in determining what should be the objects of our moral concern translates into a difficulty about what states of affairs we should be promoting. Is the diversity, integrity, naturalness, etc. contained in a compost heap or a tree less worthy of our concern than the diversity, integrity, naturalness, etc. of a forest? Is a monoculture pine plantation full of creatures, which in themselves have diversity, integrity, etc., necessarily of less worth than the wilderness that it replaced?

Even if we focus on ecological systems, it is difficult to determine what ought to be preserved and protected and why. If we degrade an environmental system, make it less diverse, natural, stable, etc., then we have rendered it less valuable according to our criterion. But in the future this system may recover, becoming as diverse and integrated as before (though perhaps with different species), or another system just as diverse, etc. may eventually replace it (perhaps in a thousand or a million years). If we have good reason to think that this will happen, then why should we be terribly concerned about what we now do to our environment? What counts as harm?

¹³ In Richard Sylvan, "Critique of Deep Ecology," *Radical Philosophy* no. 40 (1984): 2-12, and no. 41 (1985): 10-22, Richard Sylvan (Routley) does suggest that natural systems are not the only things which satisfy his criterion of value. However, he does not attempt to say exactly what satisfies it and what does not.

themselves to it. It seems as if the good of a machine is best defined in terms of the structures and capacities it has and what operations will realize its potential and which ones will tend to destroy it or not allow it to fulfill its potential. Moreover, if a machine has a good of its own, then so do the parts of a machine for the same reason that a liver or a heart have a good of its own.

What can be said about a machine might also be said about other constructed entities like social institutions and societies, for these also have a structure, a potential, a way of operating which the individuals in them don't necessarily appreciate. The same can be said of ecological systems. Taylor objects to regarding systems as being objects of respect, probably because he assumes that the good of a system is reducible to the goods of the individual animal and plant populations that make it up; however, ecological systems, like social systems, have a potential for change and development and a dynamic which may be compatible with the destruction of particular populations—as when a forest develops toward a climax state. So why not admit that ecological systems have a good of their own and are thus in themselves candidates for our moral concern? If ecological systems are entities with a good of their own, then why not parts of ecological systems—e.g., the relation between a predator population and a prey population? Why not a whole wilderness? Why not the relations between plants and animals on a continent? Why not nature as a whole?

One of the problems which this vigorous use of analogy brings out in the open is the problem of determining what should count as an individual for the purposes of environmental ethics. It is perhaps natural to think that particular plants and animals are the individuals that we need to be concerned with. But why shouldn't we count the parts of an animal or plant as individuals, their cells, organs, or molecules? Why not the complex consisting of an animal or a plant and its various parasites and bacteria? Why not the plant and the soil that nourishes it? Why not an interrelated system of animals and plants? There doesn't seem to be any good reason why one thing should be counted as an individual and others not. How we divide up the world depends upon context and convenience. But surely an environmental ethic which claims to discover intrinsic value in nature shouldn't depend upon the way we happen to look at things.

Once we do (somehow) pick out the individuals we are concerned with it is still a problem to decide what is good for them. So far, like Taylor, I have assumed that this is generally obvious. However, there is another way of viewing the matter. An individual plant or animal has a genetic potential to manifest a range of properties, but what properties it realizes depends on its environment. Why should we regard it to be for the good of a plant if it realizes one aspect of its potential rather than another? Once again it is natural to think that it is for the good of a plant to be raised in conditions which encourage it to be vigorous and healthy and that disease and poor nutrition are bad for a plant. Nevertheless, a diseased plant displays properties, realizes a potential, which it would not have

One answer might be that a state of affairs is worse if it is brought about by our tampering. What environmental ethics above all wants to condemn is unnecessary human interventions in nature. Its message is "Leave it alone." The Routleys, for example, place a lot of weight on "naturalness." Even if our interventions increase the diversity of a system and do not damage its stability and harmony, they can still be condemned because they make it less natural.

It is puzzling that an ethic which purports to find objective value in nature should be so concerned about what states of affairs human beings bring about. Although it is true that human actions do have a detrimental effect on environmental systems, so do storms, floods, volcanoes, and glaciers. Exotic species can be introduced into a system by winds or the migration of birds. Given these natural disturbances, how can environmental ethicists justify condemning a human action when it does not (in the long term, at least) make a system any less stable, diverse, harmonious, etc.? Moreover, why aren't they concerned to prevent (if possible) natural occurrences that threaten the stability, integrity, and diversity of an environmental system? The emphasis environmental ethicists place on limiting human interventions, on preserving and protecting the natural communities which we are in contact with, suggests that their real concern is to encourage a better relationship between humans and their environment. Their ideas about what we should value and why—that, for example, we should value the creatures and systems that now happen to exist—depend on a covert reference to the human point of view, to our interests and concerns.

Other recent attempts to develop a criterion for making value judgments have been no more successful than the Routleys' criterion. Rolston, for example, argues that species deserve to be respected because they are discrete entities with a history of their own. A species, he says, is a kind of an essence.¹⁴ But what history a species has, what turns out to be its essence, depends upon the environmental forces which act upon it. Why should one outcome be regarded as better than another? Why should existing species be regarded as better than others that could take their place (whether now or in several thousand or million years)? If a species is an essence, then why not say that any population with a distinct genetic character is an essence? Why not an individual, etc.?

Although I cannot rule out the possibility that someone might someday state a criterion of value which would include in its scope all and only those things and states that environmental ethicists want included and which would satisfy the formal requirements of ethics, it seems to me to be unlikely. The problem, as I have suggested, is that how we view the world, how we divide it up into individuals and systems, what we regard as good or bad for an individual or a system is too arbitrary—i.e., too dependent on point of view, interest, and convenience—to support an ethic that purports to be based on value in nature

¹⁴ Rolston, *Environmental Ethics*, chap. 7.

independent of our interests and concerns. Every criterion of environmental value seems to depend for its application on our taking a particular point of view, or on using a particular set of concepts, and there does not seem to be any nonarbitrary reason (as far as ethics is concerned) for taking up one point of view or using one set of concepts rather than another. As a result, the attempt to be objective and to avoid assuming an interest or a point of view risks vacuity or at the very least producing something too indeterminate in scope to be useful as an ethic.

If there is something so fundamentally wrong with environmental ethics, then two questions are critical. First, is any ethic possible at all? If environmental ethics is flawed, then what reason do we have for supposing that a nonenvironmental ethic is any less arbitrary or any more likely to satisfy formal requirements? Second, if environmental ethics is impossible, what we are going to say about those practices—our destruction of wilderness, species, environmental systems, creatures—which environmental ethicists believe that they need an environmental ethics to condemn?

To establish the possibility of ethics it is enough to give an example of a system of ethics which satisfies the formal criteria for an ethic and includes reference to intrinsic values. I believe that an ethic which takes individuals who have a point of view (i.e., that are centers of consciousness) as having intrinsic value—an ethic which supports the satisfaction of the interests, needs, and preferences of those individuals—is such an ethic. The fact that individuals have a point of view, and can therefore be caused anguish, frustration, pleasure, or joy as the result of what we do, is one good reason for valuing such individuals and requiring that their interests and preferences be a matter of moral concern to all rational, morally sensitive agents. Equally important, in satisfying the formal requirements of an ethic, is the fact that individuals with a point of view—with consciousness, desires, feelings, goals, etc.—are self-defining. What in the framework of the ethic counts as an individual is not an arbitrary matter, not a question of the valuer's point of view. That they have a point of view decides the matter. It is also not an arbitrary matter, not a question of the valuer's point of view, what counts as the good of such individuals. They themselves define their good by how they feel, what they say, by how they behave. Because we are able to use the value criteria of this ethic consistently, nonvacuously, and without any overwhelming problems of undecidability, it is clear that a nonarbitrary ethic is possible, though, of course, much more discussion is needed to determine what an ethic which values sentient beings requires of us.¹⁵

¹⁵ Peter Singer in *Expanding Circle* (Oxford: Clarendon Press, 1981) also insists that distinction between sentient and nonsentient creatures is not an arbitrary one from a moral point of view. He stresses the importance of creatures being capable of feeling pleasure or pain, whereas I emphasise the importance of their having a point of view. Whether this difference makes a difference to the content of an ethic is not something I can explore here.

If environmental ethics is nonviable, if we are stuck with a sentient-being-centered ethic, then what about the needs of the environment? What do we say about the intuitions and attitudes of those people who think that we ought to preserve wilderness, species, and nonsentient organisms even when these things have no instrumental value for human beings or other sentient creatures? Do we really need an environmental ethic in order to do justice to the standpoint of the environmentalist who abhors a defoliated jungle or a strip-mined hillside?

Perhaps the reason why so many people think we do is because they are operating within an unnecessarily narrow conception of what is instrumentally valuable. They think that within the framework of a human-centered or sentient-being-centered ethic we can only value natural things if they satisfy a well-defined need which we (or some other sentient creatures) have. Dissatisfied with this ethic, they mistakenly want to argue for the preservation of something that is not valuable in this sense and thus feel obliged to embark on the project of constructing an environmental ethic. Fortunately, there is another possibility. We might be able to argue that something is valuable and therefore ought to be preserved because our lives and our conception of ourselves will be enhanced—in a spiritual sense—if we learn to appreciate it for what it is and we learn how to live with it in harmony.¹⁶ Although such an approach does not pretend to go beyond the human point of view, beyond our concerns and interests, it is not confined to a concern with obvious and traditional material and psychological needs, for it permits us to define a new conception of what we are as individuals and what a good life is. My view is that those who want to develop a deep approach to environmental concerns have everything to gain and nothing to lose by following this approach. Environmental ethics is not only a dead end, but also an unnecessary diversion.

¹⁶ I argue in more detail for this position in "Preservation of Wilderness and the Good Life," in Elliot and Gare, *Environmental Philosophy*.