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## Environmental Ethics

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*Environmental ethics is theory and practice about appropriate concern for, values in, and duties regarding the natural world. By classical accounts, ethics is people relating to people in justice and love. Environmental ethics starts with human concerns for a quality environment, and some think this shapes the ethic from start to finish. Others hold that, beyond inter-human concerns, values are at stake when humans relate to animals, plants, species and ecosystems. According to their vision, humans ought to find nature sometimes morally considerable in itself, and this turns ethics in new directions.*

### 1 The Environmental Turn

Humans are the only self-reflective, deliberative moral agents. Ethics is for people. But are humans the only valuable, valuing agents in an otherwise value-free world? Humans co-inhabit Earth with five to ten million species. Nature has equipped *Homo sapiens*, the wise species, with a conscience. Perhaps conscience is less wisely used than it ought to be when, as in classical Enlightenment ethics, it excludes the global community of life from consideration, with the resulting paradox that the self-consciously moral species acts only in its collective self-interest toward all the rest. Environmental ethics claims that we humans are not so 'enlightened' as once supposed, not until we reach a more considerate ethic.

If someone had been attempting to foresee the future of philosophy at the middle of the twentieth century, one of the most surprising developments would have been the rise of environmental philosophy. Environmental ethics remained unknown until the mid-1970s. That was to change rapidly. Philosophers have published dozens of anthologies and systematic works in the field, and courses are taught in several hundred universities and colleges on many continents. There are four professional journals. The International Society for Environmental Ethics (ISEE) has 400 members in 20 countries. The World Congress of Philosophy (1998) devoted four sections to environmental philosophy, with dozens of other related papers.

The website bibliography of the ISEE contains 8,000 articles and books not only by philosophers, ethicists and theologians, but also by policy-makers, lawyers, environmental professionals, foresters, conservation and wildlife biologists, ecologists,

economists, sociologists, historians, developers and business persons—all with an ethical concern about human uses of the natural environment. Although the first edition of this book contained no chapter on environmental ethics, this second edition includes this ethical revising.

Philosophers have thought about nature for millennia. Although there is an ethic implicit in many of these world views, this was never much developed in the West. Following the Enlightenment and the scientific revolution, in secular philosophies nature came to be regarded as a valueless realm, governed by mechanistic causal forces. Values arose only with the interests and preferences of humans. In the prevailing Judeo-Christian theologies, God created a good Earth with myriads of creatures, and subjected these to human dominion. For four centuries, Western philosophy and THEOLOGY (chapter 15) were both dominantly humanistic, or, in current vocabulary, anthropocentric.

Environmental ethics applies ethics to the environment, analogously to ethics applied to BUSINESS (chapter 19), MEDICINE (chapter 17), engineering, LAW (chapter 13) and technology. Such humanist applications may be challenging: limiting population growth or development, questioning consumerism and the distribution of wealth, advocating the inclusion of women or aboriginal peoples, or fearing global warming.

Environmental quality is necessary for quality of human life. Humans dramatically rebuild their environments; still, their lives, filled with artefacts, are lived in a natural ecology where resources—soil, air, water, photosynthesis, climate—are matters of life and death. Culture and nature have entwined destinies, similar to (and related to) the way minds are inseparable from bodies. So ethics needs to be applied to the environment.

At depth, however, environmental ethics is more radical in 'applying ethics' (so many advocates claim) outside the sector of human interests. Contemporary ethics has been concerned to be inclusive: the poor as well as the rich, women as well as men, future generations as well as the present. Environmental ethics is even more inclusive. Whales slaughtered, wolves extirpated, whooping cranes and their habitats disrupted, ancient forests cut, Earth threatened by global warming—these are ethical questions intrinsically, owing to values destroyed in nature, as well as also instrumentally, owing to human resources jeopardized. Humans need to include nature in their ethics; humans need to include themselves in nature.

Somewhat ironically, just when humans, with their increasing industry and technology, seemed further and further from nature, having more knowledge about natural processes and more power to manage them, the natural world has emerged as a focus of ethical concern. Human power to affect nature has dramatically escalated, as with species loss or global warming. Exploding populations raise concerns that humans are not in a sustainable relationship with their environment. Nor have they distributed the benefits derived from natural resources equitably. Nor have they been sensitive enough to the welfare of the myriads of other species.

The plan here is to outline six levels of concern: humans, animals, organisms, species, ecosystems, Earth. These will be criss-crossed with over a dozen differing approaches to environmental ethics: humanistic ethics, animal welfare ethics, biocentrism, deep ecology, land ethics, theological environmental ethics, ethics

of ecojustice, communitarian ethics with circles of concern, environmental virtue ethics, axiological environmental ethics, political ecology, sustainable development ethics, bioregionalism, ecofeminism, postmodern environmental ethics, and an ethics of place.

## 2 Humans: People and their World

Humans are helped or hurt by the condition of their environment, and that there ought to be some ethic concerning the environment can be doubted only by those who believe in no ethics at all. Ethics will have a concern for what humans have at stake there—benefits, costs, and their just distribution, risks, pollution levels, rights and torts, environmental sustainability and quality, the interests of future generations. An anthropocentric ethics claims that people are both the subject and the object of ethics. Humans can have no duties to rocks, rivers, nor to wildflowers or ecosystems, and almost none to birds or bears. Humans have serious duties only to each other. Anthropocentrists may wish to save these things for the benefits they bring. But the environment is the wrong kind of primary target for an ethic. Nature is a means, not an end in itself. Man is the measure of things, said Protagoras, an ancient Greek philosopher, setting the tone of philosophy since.

Humans deliberately and extensively rebuild the spontaneous natural environment and make the rural and urban environments in which they reside. We care about the quality of life in these hybrids of nature and culture. Ethics arises to protect various goods within our cultures; this, historically, has been its principal arena. As philosophers frequently model this, ethics is a feature of the human SOCIAL CONTRACT (pp. 622-7). People arrange a society where they and the others with whom they live do not (or ought not) lie, steal, kill. This is right, and one reason it is right is that people must co-operate to survive; and the more they reliably co-operate the more they flourish. One way of envisioning this is the so-called ORIGINAL POSITION (p. 261), where one enters into contract, figuring out what is best for a person on average, oblivious to the specific circumstances of one's time and place. This is where a sense of universality, or at least pan-culturalism, in morality has a plausible rational basis.

A great deal of the work of environmental ethics can be done from within the social contract. Most of environmental policy is of this kind. Humans need to be healthy. Health, however, is not simply a matter of biology from the skin-in. Environmental health, from the skin-out, is equally as important. It is hard to have a healthy culture on a sick environment. More than that, humans desire a quality environment, enjoying the amenities of nature—wildlife and wildflowers, scenic views, places of solitude—as well as the commodities—timber, water, soil, natural resources. Supporting environmental health and a quality environment can certainly be counted as duties within a social contract.

Environmental ethics, by this account, is founded on what we can call a human right to nature. The World Commission on Environment and Development claims: All human beings have the fundamental right to an environment adequate for their health and well-being' (1987b: 9). This includes the basic natural givens: air, soil, water, functioning ecosystems, hydrologic cycles and so on. These could previously be taken for

granted. But now the right must be made explicit and defended. Note that is not any claim against or for nature itself; rather it is a claim made against other humans who might deprive us of such nature.

The four most critical issues that humans currently face are peace, population, development and environment. All are interrelated. Human desires for maximum development drive population increases, escalate exploitation of the environment and fuel the forces of war. Those who exploit persons will typically exploit nature as readily—animals, plants, species, ecosystems and the Earth itself. Ecofeminists have found this to be especially true where both women and nature are together exploited. The interests of environmental ethics done from perspectives of political ecology, sustainable development, bioregionalism, ecojustice, from an ethics of stewardship, or human virtues in caring, or a sense of place—all these tend to be humanistic and to recognise that nature and culture have entwined destinies, Bryan G. Norton (1991) claims that fully enlightened anthropocentrists and more naturalistic environmentalists will almost entirely agree on environmental policy, what he calls a 'convergence hypothesis'.

### 3 Animals: Beasts in Flesh and Blood

Ethics is for people, but is ethics only about people? Wild animals do not make man the measure of things at all. There is no better evidence of non-human values and valuers than spontaneous wild life, born free and on its own. Animals hunt and howl, find shelter, seek out their habitats and mates, care for their young, and flee from threats. They suffer injury and lick their wounds. Animals maintain a valued self-identity as they cope through the world. They defend their own lives because they have a good of their own. There is somebody there behind the fur or feathers.

An animal values its own life for what it is in itself, without further contributory reference, although of course it inhabits an ecosystem on which its life-support depends. Animals are value-able, able to value things in their world, their own lives intrinsically and their resources instrumentally. So there can and ought to be an animal welfare ethic; or, some prefer to say, an animal rights ethic.

Such ethicists may still say that value exists only where a subject has an object of interest, only now recognizing that the pleasures and pains of non-human subjects must be considered. At least some of what counts in ethics is generic to our kinship with animals, not just specific to our species. Common sense first and science later teaches that we human animals have many similarities with non-human animals. No one doubts that animals grow hungry, thirsty, hot, tired, excited, sleepy. The protein coding sequences of DNA for structural genes in chimpanzees and humans are more than 99 per cent identical.

Confronted with such facts, we have to philosophise over them. The conclusion seems to follow that, whatever our unique differences as *Homo sapiens*, there is also a kinship with others. By parity of reasoning, it seems that what humans value in themselves, if they find this elsewhere, they ought also to value in non-human others. We value what does not stand directly in our lineage but is enough like ourselves that we are drawn by spillover to shared phenomena manifest in others. The principle of

universalizability demands that an ethicist recognize corresponding values in fellow persons. Growth in ethical sensitivity, or virtue, has often required enlarging the circle of neighbours to include other races and cultures. But these widening circles do not end with reciprocating moral agents. A communitarian ethics finds enlarging concentric circles around the moral self: family, local community, nation, humankind, and—in a surrounding though more remote circle—animals.

A moose does not suffer the winter cold, as we might (humans having evolved in the tropics). Perhaps the warbler is not glad when it sings. But one must not commit the humanistic fallacy of supposing no natural analogues to what humans plainly value. We have every logical, biological and psychological reason to value positive degrees of kinship. There will arise conflicts of interest. There might even be bad kinds (rattlesnakes?), but *prima facie*, at least, these kindred lives count. They are good adapted fits in their places, co-evolved with others. Presumptively, animal life is an EVOLUTIONARY SUCCESS (pp. 320-30) and a good thing.

Some may think it logically or psychologically impossible to value kinds of experience that we cannot share (those of the snakes). True, animal lives do not coincide with our own, and there are realms of experience that we cannot reach and which are difficult to evaluate. But neither should we underestimate the human genius for thoughtful appreciation and considerable respect for alien forms. Meanwhile, the claims of kindred animals ought to count in environmental ethics.

#### 4 Organisms: Respect for Life

A biocentric ethics asks about appropriate respect toward all living things, not only the wildlife and farm animals, but now the butterflies and the sequoia trees. Otherwise, most of the biological world has yet to be taken into account: lower animals, insects, microbes, plants. Over 96 per cent of species are invertebrates or plants; only a tiny fraction of individual organisms are sentient animals. Considering plants makes the differences between biocentrism and an animal rights ethic clear.

A plant is a spontaneous life system, self-maintaining with a controlling genetic programme (though with no controlling centre, no brain). A plant is not a subject, but neither is it an inanimate object, like a stone. Plants, quite alive, are unified entities of the botanical although not of the zoological kind; that is, they are not unitary organisms highly integrated with centred neural control, but they are modular organisms, with a meristem that can repeatedly and indefinitely produce new vegetative modules, additional stem nodes and leaves when there is available space and resources, as well as new reproductive modules, fruits and seeds.

Plants do not have ends-in-view, and in that familiar sense they do not have goals. Yet the plant grows, reproduces, repairs its wounds and resists death, maintaining a botanical identity. All this, from one perspective, is just biochemistry—the whir and buzz of organic molecules, enzymes, proteins—as humans are too, from one perspective. But from an equally valid—and objective—perspective, the morphology and metabolism that the organism projects is a valued state. *Vital* is a more ample word now than *biological*. We could even argue that the genetic set is a *normative set*, it distinguishes between what is and what *ought to be*—not of course in any moral or

conscious sense—but in the sense that the organism is an axiological system. The genome is a set of conservation molecules. A life is spontaneously defended for what it is itself.

An objector can say, 'The plants don't care, so why should I?' But plants do care—using botanical standards, the only form of caring available to them. The plant life *per se* is defended—an intrinsic value. Though things do not matter *to* trees, a great deal matters *for* them. We ask, 'What's the matter *with* that tree?' If it is lacking sunshine and soil nutrients, we arrange for these, and the tree goes to work and recovers its health. Such organisms do 'take account' of themselves; and we should take account of them.

For classical ethicists, all this seems odd. Plants are not valuers with preferences that can be satisfied or frustrated. It seems curious to say that wildflowers have rights, or moral standing, or need our sympathy, or that we should consider their point of view. But biocentrists claim that environmental ethics is not merely an affair of psychology, but of biology. The concentric circles keep expanding. Every organism has a *good-of-its-kind*; it defends its own kind as a *good kind*. Perhaps man is the only deliberative measurer of things, but man does not have to make himself the only measure he uses. Life is a better measure.

### **Adaptive Fits and Inclusive Ethics**

Ethics and biology have had uncertain relations over recent centuries. An often-heard argument forbids moving from what *is* the case (a description of biological facts) to what *ought to be* (a prescription of duty); any who do so commit the NATURALISTIC FALLACY (pp. 805-6). On the other hand, if spontaneous natural lives are of value in themselves, and if humans encounter and jeopardize such value, it would seem that humans ought not to destroy values in nature, not at least without overriding justification producing greater value. Perhaps some of these plant kinds are bad kinds (poison oak?), but again, as with the animals, in their place they are adapted, they are presumptively well suited for life in their niches. The counter-risk is a fallacy of mislocated value, a humanistic mistake taking value to lie exclusively in the satisfaction of our human preferences. The problem is that, despite the excellence of our increasingly scientific accounts in biology, nature has been mapped philosophically as a moral blank space, as value-free in and of itself. Theologically, we forgot God's good creation.

Ethics is significantly a matter of respecting others for what they are in themselves, apart from my self-interests, That is altruism. But a humanistic ethic is not really yet 'altruistic' toward any non-human others; even an animal rights ethic finds value only in our animal cousins. Environmental ethics, the most altruistic of ethics, takes accounts of all other living organisms. This nowhere denies trade-offs and degrees of significance and value. Given our own biological needs, humans too have to make a way through the world, and this requires defending ourselves (against poison oak) and capturing values present in plants and animals, for food and shelter. Humans do so not only as biological agents but as moral agents. We have, if you like, a right to eat; we also have a responsibility to respect the vitalities of the fauna and flora around us. A full ethics is inclusive of every living organism.

## 5 Species and Biodiversity: Lifelines in Jeopardy

At the species level, responsibilities increase. So does the intellectual challenge of defending duties to species. What are species? The question is scientific, one to be answered by biologists. Have humans duties to them? The question is ethical, to be answered by philosophers. On a biological level, species are historical lineages, *Ursus arctos* (the grizzly bear) is a dynamic ongoing bear-bear-bear sequence, a specific form of life historically maintained over generations for thousands of years. The sow devotes her life to her cubs. The individual represents (re-presents) a species in each new generation. It is a token of a type, and the type is more important than the token.

### Moral Concern for Species Lines

As with plants, classical ethicists will find species often (though not always) to be useful natural resources. But they find species obscure objects of direct moral concern. Species, though they can be endangered, cannot 'care'—so returns the objection we heard before. They just come and go. Around 98 per cent of the species that have inhabited Earth are extinct. Most ethicists say that one ought not needlessly to destroy endangered species; virtuous persons are not vandals. But many will give humanistic reasons, and think this enough.

More radical environmental ethicists claim that one ought to respect these life lines. Biological identity need not attach solely to the individual centred or modular organism, an animal or a plant. Biological identity can be reasserted genetically over generations, persisting as a discrete, vital pattern over time. The life that the individual has is something passing through the individual as much as something it intrinsically possesses, and a comprehensive respect for life finds it appropriate to attach duty dynamically to the specific forms of life. The value resides in the dynamic form: the individual inherits this, exemplifies it and passes it on.

The appropriate survival unit is the appropriate location of persistent valuing, where the defence of life goes on in regeneration, as individual members of a species are given over to survival of their kind. Plants and animals not only defend their own lives; they defend their kinds. Such kinds are the dynamism of life. A shutdown of the life stream on Earth is the most destructive event possible. In threatening Earth's biodiversity, the wrong that humans are doing is stopping the historical vitality of life. Every extinction is an incremental decay in this stopping life. 'Ought species x to exist?' is a distributive increment in the collective question, 'Ought life on Earth to exist?' Since life on Earth is an aggregate of many species, when humans jeopardize species, the burden of proof lies with those who wish deliberately to extinguish a species and simultaneously to care for life on Earth.

Few past philosophers have even raised the question of duties to species, much less answered it. Now such duty is becoming clearer. If it makes any sense to claim that one ought not to kill individuals without justification, it makes more sense to claim that one ought not to extinguish species lines, without extraordinary justification. This is a kind of super-killing.

## 6 Ecosystems: The Land Ethic

Aldo Leopold, a forester-ecologist and prophet of environmental ethics, claimed, famously: 'A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise.' 'That land is a community is the basic concept of ecology, but that land is to be loved and respected is an extension of ethics' (Leopold 1969:224-5, viii-ix). In a holistic ethic, this ecosystemic level in which all organisms are embedded also counts morally—in some respects more than any of the component organisms, because the systemic processes have generated, continue to support, and integrate tens of thousands of member organisms. The appropriate unit for moral concern is the fundamental unit of development and survival. That, we were just saying, is species lines. But a species is what it is where it is, encircled by an ecology.

In an axiological ethics, here is systemic value, as well as instrumental and intrinsic value. Value lies in processes as well as in products. To value individuals among the fauna and flora and not the evolutionary and ecological processes is like valuing the eggs that the golden goose produces more than the goose able to produce them. It would be a mistake to value the goose only instrumentally. A goose that lays golden eggs is systemically valuable. How much more so is an ecosystem that generates myriads of species, or even, as we soon see, an Earth that produces billions of species, ourselves included,

A land ethic might seem a naturalistic ethic, but people are living on this land, and so nature and culture soon mix. Trying to map the human environments, we are valuing three main territories: the urban, the rural and the wild—all three of which are necessary if we are to be three-dimensional persons. Nature is much present in the hybrid habitats of rural landscapes; we need an ethic for agro-ecosystems. Wildlife can extensively remain on landscapes put to multiple use; and so we need an ethic of wildlife management. We need an ethic for forests and farmlands, for the countryside. Nature is present in, and a support of, our cities as well.

### People on Landscapes Environmental Policy and Managing Nature

Environmental ethics has to be directed to human dominated, managed, disturbed (and often degraded) landscapes. Such a land ethic must be informed about ecosystem health, but more focused on human ecology, on political ecology. Government and business are large influences in our lives; both have vast amounts of power to affect the environment for good or ill. Social systems make humans behave as they do toward their environment, and any effective reformation will have to be worked out in reformed, more environmentally sensitive social institutions. Environmental ethics cannot be an ecosystem ethic pure and simple; there is only an ethic about humans relating to their ecosystems, in the economies in which they live.

Environmental ethics must be corporate; action must be taken in concert: green politics, green business. The natural environment is crucially a 'commons', a public good. Policies will need to relate such a commons to capitalism, ownership of the means of production, market forces, the concerns of labour, real estate development policies, property rights of individuals, population control, equitable distribution of the products made from natural resources. There is no 'invisible hand' that guarantees an optimal harmony between a people and their landscape, or that the right things are done in encounter with fauna, flora, species, ecosystems, or regarding future generations.

Humans are mostly moved to act in their self-interest; and they will do so to the degradation of the environment—unless environmental policy gives them incentive otherwise. Short-term self-interest will get out of hand, especially when coupled with social power. Thus, to respect ecosystems and keep them healthy, to ensure environmental quality even in a humanistic ethics, there is a need for laws to regulate private and business use; these regulations are imposed in the longer-range public interest by the forces of democracy.

What about spontaneous wild nature? Wilderness areas and nature reserves are part of our global environment, and yet not our human habitat. The wild is an environment that humans need and ought to respect; they may like to visit there. But the wild is not an environment in which we can reside and still be human. 'Man is by nature a political animal', said Aristotle—the animal who builds and inhabits a *polis*, a town. That is why, some say, ethics arises to govern conduct in the *polis*, with its social contract, orienting behaviour to protect the goods of human nature and culture. Hence, they say, ethics does not belong in the wild. It is for people, in urban or rural environments.

But, again, a more radical environmental ethics, resolving to be quite inclusive and comprehensive, holds that humans can and ought to set aside wild areas for what they are in themselves, areas which we try to manage as little as possible, or to manage human uses of them so as to let nature take its course, as far as we can. Virtuous persons ought to respect the integrity, the freedom of life in all its wildness. True, humans are the dominant species on the landscape, which they must manage. But humans are also a moral species, who can and ought to respect evolutionary ecosystems—at least on representative parts of the landscape.

An 'ethics of place' has a tendency to see values largely as those that human inhabitants 'place' on nature. The English love their countryside. But ought this ethic not also be sensitive to values that are already 'in place' before we humans arrive to dwell there (warblers defending the good of their kind)? Part of the needed ethic does demand a constructed sense of place; a person needs an embodied sense of residence. Another part respects nature as it is found to be in itself, oblivious to the specific circumstances of a person's particular time and place. The personal view must be complemented by a regional view, indeed a global view.

Bioregionalism emphasizes living on regional landscapes. The most workable ethic is where persons identify with their geography. People are likely to be most motivated by what they have at stake on their at-home landscapes. True, one ought to have concern for endangered species, vanishing wildlife, intrinsic natural values or wilderness conservation; but that is not what orients day-to-day behaviour. What is politically possible is concern about the countryside of everyday experience. After all, ecology is about living at home (Greek: *oikos*, 'house'). That is where the land ethic really operates. That is where people can act, where they vote and pay taxes. They need to be 'natives', as much as 'citizens', Michel Serres (1995: 20) argues that 'the old social contract ought to be joined by a natural contract'.

A bioregion, says Kirkpatrick Sale (1985: 43), is 'a place defined by its life forms, its topography, and its biota, rather than by human dictates; a region governed by nature, not legislature'. A focus on bioregions permits 'ecosystem management', a much lauded goal. Bioregionalism appeals to geographers, landscape architects, developers, state legislators, county commissioners—all those charged with decisions about a

quality environment. Humans need to learn to 'reinhabit' their landscapes. This is environmental ethics on a human scale.

Aldo Leopold concludes with a land ethic that he recommends universally. It is no accident, however; rather, it is essential that the earlier pages of his *Sand County (Wisconsin) Almanac* remember a January thaw, the spring flowering of *Draba*, the April mating dance of the woodcock. Leopold's biographical residence is the personal backing to his ethic. An environmental ethic needs roots in locality.

Taking a model from ecology, the deep ecology movement emphasizes the ways in which humans, although individual selves, can and ought to extend such selves through a webwork of connections. The human 'self' is not something found from the skin-in, an atomistic individual set over against other individuals and the rest of nature. Ecology dissolves any firm boundary between humans and the natural world. Ecology does not know encapsulated egos over against their environment. Ecological thinking is a kind of vision across boundaries. Humans have such entwined destinies with the natural world that their richest quality of life involves a larger identification with these communities. Such transformation of the personal self will result in an appropriate care for the environment.

Ecofeminists may add that women are better suited for such caring than men—at least men too much dominated by the 'dominion' view, too much inclined to be managers.

## 7 Earth: Ethics on the Home Planet

Views of Earth from space are the most impressive photographs ever taken. They are the most widely distributed ever, having been seen by well over half the persons on Earth. Few are not moved to a moment of truth, at least in their pensive moods. The whole Earth is aesthetically stimulating, philosophically challenging and ethically disturbing. 'I remember so vividly', said Michael Collins, 'what I saw when I looked back at my fragile home—a glistening, inviting beacon, delicate blue and white, a tiny outpost suspended in the black infinity. Earth is to be treasured and nurtured, something precious that *must* endure' (Collins 1980: 6). There is a vision of an Earth ethic in what he sees.

But, reply the anthropocentrists, that this is 'our home planet' reveals the real focus of ethical concern: humans and their sustainable future. Humans can and ought to be held responsible for what they are doing to their Earth, which is their life-support system. But—so this argument goes—these are duties owed by people to other people; caring for the planet is a means to this end.

Environmental ethics on global and regional scales is inextricably coupled with development ethics. The Rio Declaration begins: 'Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature'. The United Nations World Commission on Environment and Development declares: 'Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs'. That applies to agriculture, forestry, water use, pollution levels, industry, resource extraction, urbanization, national policies and strategies. 'Sustainable'

coupled with 'development' expects continued growth, but not such as degrades opportunities and environments for the future.

Ethics—this argument claims—ought not to confuse people and their Earth. Earth is a big rockpile like the moon, only one on which the rocks are watered and illuminated in such a way that they support life. Earth is no doubt precious as a means of life support, but it is not precious in itself. There is nobody there in a planet. There is not even the objective vitality of an organism, or the genetic transmission of a species line. Earth is not even an ecosystem, strictly speaking; it is a loose collection of myriads of ecosystems. So any ethicist must be talking loosely, perhaps poetically or romantically, of valuing Earth. Earth is a mere thing, a big thing, a special thing for those who happen to live on it, but still a thing, and not appropriate as an object of intrinsic or systemic valuation. We do not have duties to rocks, air, ocean, dirt or Earth; we have duties to people, or sentient things. We must not confuse duties to the home with duties to the inhabitants. Nature, not ultimately important, is (in the literal sense) provisionally important. Any condition of nature that supplies and sustains such opportunities will be acceptable.

The radical environmental ethic finds, however, that this humanistic account fails to recognize the globally relevant survival unit: Earth and its biosphere. The bottom line, trans-cultural and non-negotiable, is a sustainable biosphere. That is the ultimate expanding circle: the full Earth. The us-and-our-sustainable-resources view is not a systemic analysis of what is taking place. The planet is a self-organizing biosphere, which has produced and continues to support all the Earthbound values. Earth is the source of value, and therefore value-able, able to produce value itself. This generativity is the most fundamental meaning of the term 'nature', 'to give birth'. Do not humans sometimes value Earth's life-supporting systems because they are valuable, and not always the other way round?

True, humans are the only evaluators who can reflect about what is going on in animals, plants, species lines, over evolutionary history, or at global scales, or who can deliberate about what they ought to do conserving it. When humans do this, they must set up the scales; and humans are the measurers of things. Animals, organisms, species, ecosystems, Earth, cannot teach us how to do this evaluating. But they can display what it is that is to be valued. The axiological scales we construct do not constitute the value, any more than the scientific scales we erect create what we thereby measure. Humans are not so much lighting up value in a merely potentially valuable world, as they are psychologically joining ongoing planetary natural history in which there is value wherever there is positive creativity. An axiological ethics ought to optimize the value levels and diversity on Earth, both natural and cultural. To put this theologically, humans are trustees, as well as stewards with dominion.

At depth, such an Earth ethics asks whether the European Enlightenment is compatible with the emerging ecological movement, both theoretically and practically. Science, technology, industry, democracy, human rights, freedom, preference satisfaction, maximizing benefits over costs, consumerism—all these 'management ethics' are outcomes of the Enlightenment world view. And they are all seriously implicated as causes of the environmental crisis. Much of the enthusiastic humanism that the Enlightenment stood for has been a good thing in modern times; but today, with an environmental turn, it needs to be ecologically chastened. Ethics needs to become postmodern.

Development in the West has been based on the Enlightenment myth of endless growth. But in the United States and Europe, whether one considers agricultural development, forests cut, rivers dammed and diverted for water, lands fenced, minerals extracted, or highways and subdivisions built, the next hundred years cannot be like the last hundred years. None of the developed nations have yet settled into a sustainable culture on their landscapes.

On these scales 'sustainable' also means 'fair' or 'just', an ethics of eco-justice. On Earth, the developed nations hold about one-fifth of the world's 5 billion persons, and they produce and consume about four-fifths of all goods and services. The underdeveloped nations, with four-fifths of the world's people, produce and consume one-fifth. Of the 90 million new people on Earth each year, 85 million appear in the Third World, the countries least able to support them, and the result is poverty and environmental degradation in a feedback loop. Meanwhile, the 5 million new people in the industrial countries will put as much strain on the environment as the 85 million new poor.

The over-consumption problem in the developed nations is linked with the under-consumption problem in the developing nations, and this results in increasing environmental degradation in both sets of nations. Sustainable development must close the gap between the rich and the poor, between and also within nations. Even if there were an equitable distribution of wealth, the human population cannot go on escalating without people becoming more and more poor, because the pie has to be constantly divided into smaller pieces. Even if there were no future population growth, consumption patterns cannot go on escalating on a finite Earth. There are three problems: over-population, over-consumption, and under-distribution.

Once the mark of an educated and ethical person could be summed up as *civitas*, the privileges, rights and responsibilities of citizenship. People ought to be upright and moral, productive in their communities, leaders in business, the professions, government, church, education. That was the responsibility that went with one's rights. The mark of a virtuous person today, increasingly, is something more—so environmental ethicists claim. It is not enough to be a good 'citizen', for that is only half the truth; we are 'residents' dwelling on landscapes. A century ago, a call for community was typically phrased as the brotherhood of man and the fatherhood of God. For most of the twentieth century the call was phrased as justice and human rights. In this century such a call must be more ecological and less paternalistic, less humanistic and more global. We are expanding ethics: it is not just what a society does to its slaves, women, blacks, minorities, handicapped, children or future generations, but what it does to its fauna, flora, species, ecosystems and landscapes that reveals the character of that society. We humans are Earthlings and care for the Earth is a developing and an ultimate human virtue.

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## Discussion Questions

- 1 Are humans the only valuable, valuing agents in an otherwise value-free world?
- 2 Do philosophers have a special role in the development of environmental ethics?
- 3 Do values arise only with the interests and preferences of humans?
- 4 Is humanistic philosophy necessarily anthropocentric?
- 5 How similar is the inseparability of culture and nature to the inseparability of minds and bodies?
- 6 Do humans need to include nature in their ethics and need to include themselves in nature?
- 7 Do humans have serious duties only to each other?
- 8 Are there ethical concerns that go beyond the scope of a social contract?
- 9 Is the health of the environment of ethical importance as well as the health of human beings within the environment?
- 10 What weight should environmental ethics give to the values of animals? Who should represent these concerns?
- 11 What distinguishes an animal rights ethic from an animal welfare ethic?
- 12 Does kinship to humans give animals moral standing?
- 13 How can we determine whether the widening circles of ethical concern end with reciprocating moral agents?
- 14 Does evolutionary success make animal life a good thing?
- 15 Can we value kinds of experience that we cannot share?
- 16 What justifies giving moral value to non-sentient living things?
- 17 Is the biological identity of individuals or species enough to justify moral concern?
- 18 Plants can thrive or fall ill, and they function to preserve their life or their species. Does this give them moral standing?

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- 19 Are spontaneous natural lives of value in themselves?
- 20 Do we have duties to species?
- 21 If the type is more important than the token for animal and plant species, is the same true for the human species? What would be the social and political consequences of this view?
- 22 Is the fundamental unit of development and survival the appropriate unit for moral concern?
- 23 How would greater moral sensitivity to the environment affect human social, political and economic systems?
- 24 Who would be parties to a 'natural contract' that might supplement a social contract?
- 25 Is an ecological ethic a matter of argument or vision?
- 26 If Enlightenment values are incompatible with the ecological movement, which should be supported?
- 27 How might justice and sustainable development be related?

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