

CHAPTER 11

ETHICS AND THE ENVIRONMENT

"To see the Earth as we now see it, small and blue and beautiful, in that eternal silence where it floats, is to see ourselves as riders on the Earth together . . . brothers who do not see they are truly brothers."

— **Archibald MacLeish**,
after man's first landing on the moon

"Man has lost the capacity to foresee and to forestall. He will end by destroying the Earth."

— **Albert Schweitzer**

TYPES OF ENVIRONMENTAL ETHICS

Environmental ethics is theory and practice about appropriate concern for, values in, and duties to the natural world. Environmental ethics as a separate field of study was unknown in Western philosophy until the mid-1970s. That was to change rapidly. Today, thousands of works have been published, by policymakers, lawyers, environmental professionals, foresters, conservation biologists, ecologists, philosophers, economists, sociologists, historians, developers, business persons, citizens — all with an ethical concern about human uses of and relations to the natural environment.

For example, if *global warming* is occurring, then sea level is likely to continue to rise, and changes in weather patterns are also likely to occur. Many scientists think that global change has already occurred due to anthropogenic forces. While it is not arguable that humans can exert global-scale influence on the planet, it is not known whether changes induced by humans are equal to or greater than (or complementary to) natural changes. Scientific research must continue in order to address these questions.

Change is a key component of climate. It has been shown that human migrations due to climate change are not unprecedented in the Earth's history. But are the changes that have been induced by

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KEY CONCEPTS

- **Sustainable development** — Human habitation and activity that meets the needs of the present without compromising the ability of future generations to meet their own needs; according to J. Ronald Engel, “the kind of human activity that nourishes and perpetuates the historical fulfillment of the whole community of life on Earth.”
- **Environmental ethics** — Theory and practice about appropriate concern for, values in, and duties to the natural world.
- **Naturalistic ethics** — An ethic in which humans are concerned about appropriate respect and duty toward those who are other than human (Cf. humanistic ethics).
- **Humanistic ethics** — An ethic in which humans care about the environment because of the impact it has on human beings rather than out of intrinsic respect for nature (Cf. naturalistic ethics).
- **Biocentrism** — An ethic that respects life, with the focus on any and all living beings.
- **Deep ecology** — An ethic that holds that humans, like all other species, are what they are only in their connections with their natural environment, that there is no division in reality between the human and the non-human realms.
- **Axiological environmental ethics** — An ethic that focuses on questions of what is intrinsically valuable in nature and how these elements can be sustained and increased.
- **Bioregionalism** — A view that emphasizes living on regional landscapes. The most workable ethic is one in which persons identify with their geography.
- **Ecofeminism** — According to Karen Warren, “the position that there are important connections — historical, experiential, symbolic, theoretical — between the domination of women and the domination of nature, an understanding of which is crucial to both feminism and environmental ethics.”

humans causing such rapid changes that humans cannot adapt? Will the depletion of the ozone layer cause death to many species and disease for humans? Will desertification render large areas of arable land useless? The answers to these questions are controversial and probably lie somewhere between the extreme positions. The seriousness of the problems has not been quantified. Some think it unwise to institute expensive changes when the problems and consequences are uncertain. Alternatively, the wait-and-see approach can have disastrous consequences. Tougher laws seem necessary.

Because the actions of humanity may have far-reaching effects, many environmental problems must be considered global in scope. The actions of people residing in mid-latitude areas of the Earth may affect people living in high latitudes and vice versa. Solutions to major problems (e.g., ozone-layer depletion) cannot be devised without attention to global concerns. People must work together on both a global and an individual level in order to solve many of the Earth's myriad environmental problems. The proposed solution to the ozone-layer depletion problem is an excellent example of an international effort to solve a global-scale problem.

Human power to affect nature has dramatically escalated, for example, with species loss or global warming. Industrialization, advanced technologies, global capitalism, consumerism, and exploding populations raise the profound question: **Are humans in a sustainable relationship with their environment?** Have they distributed the

benefits derived from natural re-sources equitably? Have they been sensitive enough to the values present in and the welfare of the myriads of other species that inhabit the same biosphere?

Philosophers have thought about nature for millennia, since ancient Greece and Asia. There is an ethic implicit in many of these worldviews, but it was hardly developed as an environmental ethics. Following the Enlightenment and the scientific revolution, nature in Western philosophy came to be regarded as a value-free realm, governed by causal forces. Scientists like Isaac Newton and philosophers like René Descartes

held that two fundamentally different metaphysical entities existed, mind and matter. Values in nature arose only with the interests and preferences of con-

scious minds. Animal bodies and plant organisms were more or less biological machines. So for four centuries, Western philosophy was dominantly humanistic or, to use a more recent term, anthropocentric (human-centered). People were what counted and all that counted in ethics.

Vigorous interest in nature and human responsibilities toward it is one of the unexpected changes of perspective in philosophy in recent centuries. Somewhat ironically, in the century 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, just when they were more and more rebuilding their environments, the natural world emerges as a focus of ethical concern. Such environmental ethics is still novel, and developing. There are 12 primary areas.

CHIEF LEARNING OUTCOME

I recognize the kinds and nature of environmental issues and can apply approaches to moral reasoning to those problems.

1. HUMANISTIC AND NATURALISTIC ETHICS

That there ought to be some ethic concerning the environment can be doubted only by those who believe in no ethics at all. Humans are evidently helped or hurt by the condition of their environment. Environmental quality is necessary, though not sufficient, for quality of human life. Humans dramatically rebuild their environments; still, their lives, filled with artifacts, are lived in a natural ecology where resources — soil, air, water, photosynthesis, climate — are matters of life and death. All that we have and are was grown, dug, and gath-

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ered out of nature. 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. That requires an *anthropocentric* or *humanistic ethics*. Many, such as Bryan Norton, maintain that environmental ethics must be largely, if not entirely, of this kind. Holders of this ethic are concerned about the environment because they believe it will serve human ends.

THE HUMANISTIC ETHIC

That there ought be this deeper ethic will be doubted by those entrenched in the prevailing anthropocentric, personalistic ethics. According to holders of the humanistic perspective, humans can have no duties to rocks, rivers, or ecosystems, and almost none to birds or bears; humans have serious duties only to each other, with nature often instrumental in such duties; the environment is the wrong kind of primary target for an ethic; nature is a means, not an end in itself; nothing there counts morally; and nature has no intrinsic value. A naturalistic environmental ethics has been steadily challenging precisely those claims.

THE NATURALISTIC ETHIC

Nevertheless, others insist, environmental ethics goes further than an ethics of prudential resource use, human benefits and costs, and their just distribution, further than concern about risks, pollution levels, rights and torts, needs of future generations, and so on, although these figure large within it. A *naturalistic ethics* is one in which humans are concerned about appropriate respect and duty toward those who are other than human. Environmental ethics does require that ethics be applied to the environment, analogously to business, medicine, engineering, law, and technology. Yet it is more radical than such humanist application; it revises traditional ideas about what is of moral concern to include animals, plants, endangered species, ecosystems, and even Earth as a whole — at least occasionally. For a proponent of naturalistic ethics, whales slaughtered, ancient forests cut, Earth disrupted by global warming — these also count morally and directly. Such environmental ethics is unique in moving outside the sector of human interests.

Once the mark of an educated person could be summed up as *civitas*, the privileges, rights, responsibilities of **citizenship**. People ought to be good citizens, 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. But the mark of an educated person today, increasingly, is something

more. It is not enough to be a good "citizen," for that is only half the truth about who we are; we are "residents" dwelling on landscapes. Our responsibilities to Earth, to ecosystems, species, animals and plants, might be thought vague beside our concrete responsibilities to our children or next door neighbors. But not so. A century ago, a call for community was typically phrased as the brotherhood of man and the fatherhood of God. Now such a call must be more ecological, less paternalistic, a call for appropriate respect for the non-human species with which we co-inhabit this planet.

Nature has equipped *homo sapiens*, the wise species, with a conscience to direct the fearful power of the brain and hand. Only the human species contains moral agents, but perhaps conscience is less wisely used than it ought to be when, in an anthropocentric ethics, it exempts the global community of life from consideration, with the resulting paradox that the sole moral species acts only in its collective self-interest toward all the rest. We ought to develop an environmental ethics that optimizes values in nature, complementary to human values. In this sense, these more radical ethicists insist that being a naturalist is more important than being a humanist. This is the biology of ultimate concern.

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homo sapiens, the wise
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2. HUMANS, ANIMALS, AND A LAND ETHIC

J. Baird Callicott finds a three-way division. On one corner of a triangle is **ethical humanism**, with its anthropocentric focus. But now the naturalists divide two ways. On a second corner is **animal welfare or rights**, a humane moralism that extends ethical consideration to the higher animals (See Chapter 12). Jeremy Bentham, a classical utilitarian philosopher, asked famously, "The question is not, Can they *reason*? nor, Can they *talk*? but, Can they *suffer*?" Perhaps people can use animals for their legitimate needs, but they ought to be humane about it, caring for their domestic animals. Decent hunters track wounded deer; humane trappers check their lines daily. The rancher who lets his horses starve is prosecuted in court. An ox in the ditch is to be rescued, even on the sabbath. "A righteous man has regard for the life of his beast" (Proverbs 12.10).

Many of these humane moralists have misgivings, however, about ways in which humans regularly do use animals. Peter Singer and Tom Regan have been especially vocal. Is it right to hunt recreationally, even if one is a humane hunter? Eating domestic food animals, cows and chickens, might not be justified, since humans (at least those in modern societies) can be quite adequately nourished on a vegetarian diet. Using animals for medical experiments will have to be justified; using them for testing cosmetics is not justified at all. (These issues are explored in more depth in Chapter 12.)

Endnote 3

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Endnote 6

Ecclesiastes 3:19–21

"Man's fate is like that of the animals; the same fate awaits them both: As one dies, so dies the other. All have the same breath; man has no advantage over the animal. Everything is meaningless.

All go to the same place; all come from dust, and to dust all return.

Who knows if the spirit of man rises upward and if the spirit of the animal goes down into the earth?"

—Solomon

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Endnote 6

A wolf caged in a zoo really isn't a wolf anymore. It used to be a wolf, but is now torn from the ecological matrix in which it could behave like a wolf.

On a third corner of the triangle is a "*land ethic*," advocated by Aldo Leopold, a forester-ecologist and one of the prophets of environmental ethics. "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's ethic is more than mutually recognized obligations within the human community. Animal rights moralists want also to extend morality, but only as far as animals. Leopold claims that *ecosystems* can count morally.

Wild animals are *what* they are only *where* they are, adapted creatures fitting in niches in ecosystems. They ought be respected for what they are in themselves, but such an ethic has also to enlarge to consider the ecology of animal life. A wolf caged in a zoo really isn't a wolf anymore. It used to be a wolf, but is now torn from the ecological matrix in which it could behave like a wolf. In the whole picture, in a holistic ethic, this ecosystemic level in which all organisms are embedded is what really 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 ecosystem is as wonderful as anything it contains.

We want to love "the land," as Leopold terms it, "the natural processes by which the land and the living things upon it have achieved their characteristic form and by which they maintain their existence," that is, evolution and ecology. The appropriate unit for moral concern, according to a proponent of the "land ethic," is the fundamental unit of development and survival.

One might first think there will be no conflict between these two types of naturalistic ethic: humane concern for animal welfare and ecological concern for biotic community. Doubtless this is often so, but it is clearly not always so. Animal moralists may forbid hunting or recommend rescuing injured wild animals; a proponent of a land ethic may recommend culling to control populations or letting nature take its course. Land ethic advocates killed tens of thousands of feral goats on San Clemente Island, off the California coast, to protect endangered species of plants and preserve biotic communities.

3. BIOCENTRISM AND RESPECT FOR LIFE

Biocentrism respects life, with the focus on any and all living beings. The question is not, "Can it suffer?" but "Is it alive?" Albert Schweitzer said: "A man is truly ethical only when he obeys the compulsion to help all life which he is able to assist, and shrinks from injuring anything that lives. . . . Life as such is sacred to him. He tears

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no leaf from a tree, plucks no flower, and takes care to crush no insect." More recently, Paul Taylor argues: "The relevant characteristic for having the status of a moral patient is not the capacity for pleasure or suffering but the fact that the being has a good of its own which can be furthered or damaged by moral agents."

Endnote 8

Peter Singer objects, claiming that ethical concern stops "somewhere between a shrimp and an oyster"; after that "there is nothing to be taken into account." Below sufficient neural capacity to suffer pains or enjoy pleasures, ethics is over. In fact, however, most of the biological world has yet to be taken into account: lower animals, insects, microbes, plants, species. Animals with developed nervous systems are only a fraction of the described species. Over 96% of species are invertebrates or plants, only a tiny fraction of individual organisms are sentient animals. An animal-based ethics can value everything else only instrumentally. This is little better than humans valuing everything, higher animals included, as their own resources. A deeper respect for life must value directly all living things.

Endnote 9

Fishermen in Atlantic coastal bays toss beer bottles overboard, to dispose of trash. Small crabs, attracted by the residual beer, make their way inside the bottles and become trapped, unable to get enough foothold on the slick glass neck to work their way out. They starve slowly. Then one dead crab becomes bait for the next victim, an indefinitely resetting trap! Are those bottle traps of ethical concern? Or is the whole thing out of sight, out of mind, with crabs too mindless to care about? Biocentrists argue that crabs count morally, because they are alive and put in jeopardy by human carelessness, regardless of whether they can suffer much. True, one crab may not count very much, but, according to the biocentrist, it is a mistake to say it does not count at all.

Considering plants makes the biocentrist's differences with an animal rights ethic even clearer. A plant is a spontaneous life system, self-maintaining with a controlling program (though with no controlling center, no brain). Plants do not have ends-in-view. They are not subjects of a life, 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. An acorn becomes an oak; the oak stands on its own.

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 biocentrist asks, why should I take no account of that form of caring because it is not my form of caring? 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.



Figure 1. Giant sequoia. Archive Photos.

In the 1880s a tunnel was cut through a giant sequoia in what is now Yosemite National Park. Driving through the Wawona tree amused millions. The tree was perhaps the most photographed in the world. The giant blew over in snowstorms in 1968–69, weakened by the tunnel. Some proposed that the Park Service cut another. The rangers refused, because this is an indignity to a majestic sequoia. The comedy of drive-through sequoias perverts the best in persons, who ought to be elevated to a richer experience of the sequoias. But there is a deeper conviction. Using trees for serious human needs is justified, but not this. *Sequoia sempervirens*, the species line, has been around several million years, with each of its individual sequoia trees defending a good of its kind. This tree ought to be respected for what it is in itself.

Ordinary trees can count, especially when aggregated. Newspapers are a good thing, up to a point; but, since the Sunday paper is mostly ads and much of it is only glanced at, one might argue that Americans having their Sunday papers does not warrant sacrificing half a million trees a week, as it does. Imposing a return tax so that half

the papers are recycled would save a quarter of a million trees a week.

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. We would not say that the needless destruction of a plant species was cruel, but we might say that it was callous. We would not be concerned about what the plants did feel, but about what the destroyers did not feel. We would not be valuing sensitivity in plants, but censuring insensitivity in persons. Still that does not end the question, because we at once ask what are the properties in plants to which a person should be sensitive. Biocentrists claim that environmental ethics is not merely an affair of psychology, but of biology. Man is the only measurer of things (an often quoted claim of Protagoras, a Greek philosopher), but man does not have to make himself the only measure he uses. Life is a better measure.

4. DEEP ECOLOGY

Deep ecologists argue that ecology, deeply understood, teaches that humans, like all other species, are what they are only in their connections with their natural environment. The human "self" is not something just found from the skin-in, an atomistic individual set over against other individuals and the rest of nature. Rather the "self" is what it is with its connections; the self takes up its identity in these interrelationships with the biotic community, which is true self-realization. So argue Arne Naess, George Sessions, Bill Devall, Freya Mathews, and Warwick Fox. An animal ethic, biocentrism, and a land ethic must figure in a comprehensive world view that contrasts with the shallow, humanistic ethics, resulting from the Western legacy of a dualism between humans and the natural world.

Deep ecology emphasizes the ways in which humans, although individual selves, can and ought to extend such selves through a web-work of connections, taking a model from ecology. On this view, 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.

In human society one's personal identity is bound up with human relationships; one is a father, a mother, a brother, a sister, also a citizen of a community, a state, a nation, perhaps a member of a church or synagogue, a club or interest group, an owner or employee in a business, a teacher, or a physician. A person is educated into a heritage, critically interiorizes it, invests his or her life in this civic community. But personal identity is just as much bound up with nature, the air we breathe, the sunshine and the rain, the food we eat, the landscapes on which we reside. **Environmental health is as necessary as bodily health.**

Ecology dissolves any firm boundary between humans and the natural world. Ecology does not know an encapsulated ego over or against his or her environment. Ecological thinking is a kind of vision across boundaries. The skin is like a pond surface or a forest soil, life is making connections across boundaries, constant interpenetration. So the self is ennobled and extended, rather than threatened by nature, because the beauty and complexity of nature are continuous with ourselves. The human vascular system includes arteries, veins, rivers, oceans, air currents. Cleaning a dump is not that different from filling a tooth. The self metabolically, and so metaphorically, interpenetrates the ecosystem. Paul Shepard puts it forcefully: "We must affirm that the world is . . . a part of our own body." Human life is always incarnate spirit in flesh and blood intricately linked with the environment in which one lives, moves, and has one's being.

Endnote 11

Endnote 12

Endnote 13

"When we try to pick
out anything by itself,
we find it hitched to
everything else in the
universe."

—John Muir,
American Naturalist

Warwick Fox puts it this way: "The *central* intuition of deep ecology . . . is the idea that there is no firm ontological divide in the field of existence. In other words, the world simply is not divided up into independently existing subjects and objects, nor is there any bifurcation in reality between the human and the non-human realms. . . . To the extent that we perceive boundaries, we fall short of deep ecological consciousness." J. Baird Callicott says, "Nature is one and continuous with the self. . . . Nature is the self fully extended and diffused."

With that conviction, one is oriented to act. Here is the **deep ecology platform**:

1. The well-being and flourishing of human and nonhuman life on Earth have value in themselves (synonyms: intrinsic value, inherent value). These values are independent of the usefulness of the nonhuman world for human purposes.
2. Richness and diversity of life forms contribute to the realization of these values and are also value in themselves.
3. Humans have no right to reduce this richness and diversity except to satisfy *vital* needs.
4. The flourishing of human life and cultures is compatible with a substantial decrease of the human population. The flourishing of human life requires such a decrease.
5. Present human interference with the nonhuman world is excessive, and the situation is rapidly worsening.
6. Policies must therefore be changed. These policies affect basic economic, technological, and ideological structures. The resulting state of affairs will be deeply different from the present.
7. The ideological change is mainly that of appreciating *life quality* (dwelling in situations of inherent value) rather than adhering to an increasingly higher standard of living. There will be a profound awareness of the difference between big and great.
8. Those who subscribe to the foregoing points have an obligation directly or indirectly to try to implement the necessary changes.

Deep ecologists are thus radical environmentalists, leaving many at once stimulated and puzzled by these claims, which lift ecology into a metaphysics, almost like a religion, also wondering whether people — many of them at least — can or must go this "deep" for an adequate environmental ethics.

5. THEOLOGY AND THE ENVIRONMENT

STEWARDSHIP, CARING FOR CREATION AND NATURE SPIRITUALITY

A **theological environmental ethics** sees the natural world as God's creation, pronounced "very good" in the opening chapters of

Genesis. Humans are and ought to be trustees or stewards of this creation. The aboriginal human couple is invited to "have dominion over," to "till and keep," or, better, to "till and serve" this creation. "Conquering nature" although widespread in Christianity, perverts this stewardship. Respect for life, sought by the biocentrists, leads to something deeper, reverence for life.

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The brooding Spirit of God animates the Earth, and Earth gives birth. "The earth was without form and void, and darkness was upon the face of the deep; and the Spirit of God was moving over the face of the waters. And God said, 'Let there be . . .'" "Let the earth put forth vegetation." "Let the earth bring forth living things according to their kinds." "Let the waters bring forth swarms of living creatures" (Genesis 1). "Swarms" is the prescientific word for biodiversity. Earth speciates, teeming with life. The creation is a series of divine imperatives that empower Earth with vitality.

What is required for an ethic that can genuinely motivate people, however, is not just an admiration of creation. There must be disciplining, reformation of human life. The creation can be enjoyed and preserved only if there is justice and love in the land. How *nature* works is the province of physics, geology, biology. How *human nature* works and ought to work requires also theology, philosophy, and ethics. What it means to be blessed and what it means to be wicked are theological questions. Humans must repair their broken wills, curb innate self-interest, and reform corrupt social forces. One is not going to get much help here from ecology. There really is no scientific guidance of life. After four centuries during which science has progressively illuminated us about the facts of nature, the value questions are as sharp and as painful as ever.

The Hebrews long ago knew enough to trust that there is in every seed and root a promise. Sowers sow, the seed grows secretly, and sowers return to reap their harvests. God sends rain on the just and unjust, and this is cause enough for praise. But, take care. The supporting ecology is not enough. There must be obedience to commandments (*Torah*, Instruction) by which people can flourish in the land. Lands do not flow with milk and honey for all unless and until justice rolls down like waters. That is human ecology with a focus on ethics, not science. A theological environmental ethics insists that justice, love, and caring for creation are necessary parts of the answer. Monotheistic religions, such as Christianity, Judaism, and Islam, urge the *stewardship of creation*; or they may prefer to speak of *caring* or *reverence* for a sacred creation. A *creation spirituality* has a strong sense of the divine presence in nature.

Others argue that Eastern religions have something to offer, such as the *yang* and *yin* of Taoism in harmonious balance, or the *ahimsa*, non-injury and respect for life traditions in Hinduism and Buddhism. Native Americans and indigenous peoples in Africa, Australia, and South America have claimed that their traditions respect the natural world better than either traditional monotheism or the modern West. These views, however, are not easy to import into the secular West.

Endnote 15



What they have to say can perhaps be recovered by the monotheist's listening to them, using them to correct their own tendencies to anthropocentrism and to forge a better ethic.

Biology and theology are not always easy disciplines to join. One conviction they do share is that the ecosystemic Earth is prolific. Biology and religion have increasingly joined in recent years in admiration for this marvelous planet. No other species can be either responsible for or religious toward the creation, but *Homo sapiens* is given a responsibility to oversee the creativity within the natural system humans inherit.

For monotheists, such as Christians and Jews, this experience of creation, detects God, the Creator, in, with, and under the spectacular natural history. But for others, less sure about the monotheism, there can still be a kind of "ecological spirituality," one which, though unwilling to venture the language of creation-Creator, finds the natural history on Earth evoking a sense of the numinous. Perhaps there is no *supernatural*; but, then again, the natural is *super*, superb. One

can doubt whether there is any God, Ground of all Being. But one can hardly doubt that there is nature, the fundamental ground in which we live and move and have our being. Encountering this Nature, one detects something sublime in the awe-inspiring sense because there is something sublime in the etymological sense of that word, something that takes us to the limits of our understanding, and mysteriously beyond.

Viewing Earthrise from the moon, the astronaut Edgar Mitchell, was entranced: "Suddenly from behind the rim of the moon, in long, slow-motion moments of immense majesty, there emerges a sparkling blue and white jewel, a light, delicate sky-blue sphere laced with slowly swirling veils of white, rising gradually like a small pearl in a thick sea of black mystery. It takes more than a moment to fully realize this is Earth . . . home." Mitchell continued, "My view of our planet was a glimpse of divinity." If there is any holy ground, any land of promise, this promising Earth is it. One needs, by this argument, to go at least that deep for an adequate ethics.

6. EXPANDING COMMUNITIES

By another account, environmental ethics involves a series of *expanding communities*. Peter Wenz calls this "**the concentric circle theory.**" Richard Sylvan and Val Plumwood use a tree-ring analogy:

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Endnote 17

"What emerges is an *annular picture* of types of objects of moral relevance . . . with nested zones of moral obligation." J. Baird Callicott uses a "tree ring" model with "inner social circles," then animal, plants, and a "land ethic" in circles further out. "The charmed circle of moral considerability expands to take in more and more beings." Ethics has a "ballooning circumference," following "the image of annual tree rings in which social structures and their correlative ethics are nested in a graded, differential system." Environmental ethics finds "the newly discovered existence of a global biotic community and its land ethic," with the "land ethic" the most comprehensive circle.

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Endnote 20

Lawrence Johnson calls this "a morally deep world." Not just humans and animals, but also plants, and species, a hive of bees, wildernesses, and ecosystems can have interests or well-being that we ought to consider. "Man sees the circle of his responsibilities widening;" we gain "a wider moral awareness and sense of values." "Thereby we may better live deep and worthwhile lives in a deep and valuable world."

Endnote 21

In the moral self's most immediate circle are duties to one's family and nearby neighbors. After that come duties to one's local community, to one's nation, heritage, or religious communities, to those with whom one shares values and commitments. More globally, one has duties to humans transnationally, to persons whom we affect by our business or foreign policies, the broad duties of human rights. Here duties of non-maleficence are stronger than duties of beneficence. We ought not to harm the Mexicans by exploiting their poverty for cheap labor. But we also have duties to help the starving Ethiopians.

Another circle includes claims made by future generations. "People are thought of as existing in concentric circles around me. Generally speaking relatively few people exist in the closest circle, more people in the next circle, and so forth. My obligations toward a person increase with the proximity to me of the circle on which the person exists." So far this is inter-human ethics.

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Environmental ethics adds circles of duty to the natural world, first to domestic animals, such as livestock or pets, to animals used in medical research, or kept in zoos. Beyond, there are duties to wild animals. If one hunts, hunt humanely. If one develops natural areas, one has a duty to minimize and mitigate the loss of habitat to wildlife. "From the concentric circle perspective, nonhuman subjects-of-a-life 'exist,' for the most part on one or more of the concentric circles outside those 'inhabited' by human beings. Expanding the circle of our moral concern to include these animals is equivalent to acknowledging their 'presence' on such concentric circles."

Endnote 22

In a still outer circle, one passes to the flora, to the sequoia trees for example, as claimed earlier, or to the old growth forests. Another circle is that of endangered species, with duties not so much to individuals as to species lines, as when we recently returned wolves to

the Greater Yellowstone Ecosystem. The next to outermost circle is the land ethic — urging land health on the modified rural landscapes, and ecological integrity in remnant wild lands, setting aside wilderness areas, where these remain. This requires restoring degraded areas, such as cleaning up rivers and riparian ecosystems, or restoring tall-grass prairies.

The outermost circle is a planetary ethic, an Earth ethics with a concern for the whole system of life. "Ecocentric Holism can be integrated within the theory by thinking of evolutionary processes as 'inhabiting' a relatively remote circle of moral concern." But this circle is rapidly growing less remote. Previously, persons did not have much power to affect planetary processes, but now we do, as with global warming. In this circle we operate with the "principle of process-harm," which forbids us to harm evolutionary and ecosystemic processes.

Endnote 22

The individual self is at the center of the series of circles. Others of moral concern are located on radiating circles by their closeness to the moral agent at the focus. However, critics may ask, does such closeness really follow these concentric circles all that well? For instance, the outmost human-inhabited circle is that of future generations, and yet I might feel stronger ties to grandchildren yet unborn than to persons now living on the other side of the world. Within the animals circle, there is little guidance for what animals get located where. If fish are less intensively subjects-of-a-life than are seals, fishing might be recommended over seal hunting.

The strengths of obligations within the human circles is determined by biographical details; one has stronger obligations to a brother than he does to a distant Ethiopian. Is there any analogue with animals? Does one have more obligations to endangered grizzlies in one's home state than to elephants in Kenya? Rarity might make more difference in an environmental ethic than closeness. We might prefer plants at the species level to sentient animals at the individual level, as when we shot the San Clemente goats.

Since my Self is at the center of my concentric circles, her Self at her center, and his Self at his, and since we have different careers, locations in the world, and family ties, the strengths of pull will differ. Each carries about a personal set of concentric circles. My judgments will not be your judgments. Could this mean that at the same event in Earth history, intersected differently by our concentric frameworks, I operate pulled by strong obligations while you feel no such pull but operate with weak obligations. To some extent our personal ethical obligations, though perhaps not our ethical criteria, differ with our biographies. But when the concentric circles are simultaneously biographically and biologically formed, some boundaries determined by natural kinds, some boundaries determined by personal histories, the result is no clear decision rules for persons jointly making contested decisions, and rather much muddling through.

7. AXIOLOGICAL ENVIRONMENTAL ETHICS

Intrinsic, Instrumental, and Ecosystemic Values: An **axiological environmental ethics** identifies multiple values in nature. (Axiology is value theory, from the Greek *axios*, “worthy,” “valuable,” also in “axiom,” “axle” or “axis,” the pivot about which everything turns.) A better approach than concentric circles, or biocentrism, or animal rights, or a land ethic, is to locate domains of value. Though my son is close to me, provided he is reasonably well off, I might devote my energies to saving a whale species on the brink of extinction. Although the land ethic is an outermost circle, I might have more obligation to keep ecosystems healthy, or preserve wilderness or old growth forests, than I do to care for my pets or zoo animals, in closer circles. One ought critically to assess values at stake, sometimes in culture, sometimes in nature, appraise outcomes, and act to optimize value.

According to this view, value is present on Earth at multiple, interwoven levels — “intrinsic, instrumental, and systemic.” Humans value nature as their life-support system (economically, recreationally, scientifically, aesthetically) as a repository for genetic diversity, as cultural symbols, and so on. Such values may be assigned to natural things by humans or they may come into existence in human interactions with nature.

Endnote 23

Defenders of this position hold that beyond and before this placing of value by humans, many intrinsically valuable things are found in nature that are present independently of human valuations. Such values are discovered, not placed, not generated in interaction. Examples of such intrinsically valued goods are seen in certain facts of nature. Plants and animals alike defend their own lives; they are members of species lineages perpetuated over millennia. Ecosystems are the sources and systems of life, having generated myriads of species over evolutionary time. An adequate ethics will need to optimize all of these relevant values, humanistic and naturalistic. Moral concern needs to focus on the relevant survival unit, not always the individual, often the species, the ecosystem, and ultimately the planet Earth.

Do not humans sometimes value Earth’s life-supporting systems because they are intrinsically valuable, and not always simply because they are useful to humans? When Astronaut Mitchell marveled over the Earth, is the value he sees just a matter of late-coming human interests? Or is Earth not historically a remarkable and valuable place whose intrinsic qualities provide bases for the wise human uses of it? It seems parochial to say that our part alone in the drama establishes all its worth. The production of value over the millennia of natural history is not something subjective that goes on in the human mind. The creativity within the natural system we

ety set in its ecosystems, developing an environmental ethics in the primary sense. It is not simply 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.

Environmental ethics, one can say, leaves ethics among humans and moves to other concentric circles; it must evaluate nonhuman levels of value. Still, what is really going to make the difference is the legislation we can get passed. Though there is a long tradition about rights and restrictions of access to public goods such as water, grazing, and timber, as well as a history of regulation in the public interest and of multiple uses of public lands, "ecological values" had little history in policy until about 1960. In the last quarter century, however, there has been steady enactment of environmentally oriented legislation. This includes over a hundred acts of the U.S. Congress. States, counties, and municipalities have passed hundreds more.

The U. S. Environmental Protection Agency, the Forest Service, the Bureau of Land Management, the Fish and Wildlife Service, and other agencies promulgate various environmental standards. The tone of these acts and regulations differs from earlier ones. They are now phrased as a concern about environmental quality and values, endangered species, biotic diversity, wilderness, unimpaired productivity or diversity of the land, retaining a natural or primeval character of wildlands, or preservation as well as conservation.

The National Environmental Policy Act requires for major federal projects a detailed statement of expected environmental impacts and of alternatives to the proposed action. There has been greatly increased environmental regulation and litigation and much controversy over agency decisions about public land use. People are increasingly persuaded that the national treasures include natural givens, both amenities and necessities, which are not always merely commodities.

Some ethical choices are made by individuals, but in other cases we must choose together. Government and business are large influences in our lives; both have vast amounts of power to affect the environment for good or ill. In setting policy, we can by "mutual coercion, mutually agreed upon," do in concert what no individual, interest group, or business can successfully do alone. We sometimes "legislate morality," at least in common denominator areas. There must be a management ethic for soil, air, water, pollution, the ozone layer, mutagens, wildlife, the eagle as a national symbol, endangered species, and future generations. This ethic will be voluntary in the sense that it is an enlightened, democratically achieved consensus. No laws can be enforced without the widespread voluntary compliance of citizens. Still, compliance cannot be entirely voluntary. Even if 99 percent of citizens are glad to behave in a certain way, provided that all others do, one percent of the citizens will persist in freeloading, and this will trigger bad faith. One rotten apple spoils a bushel.

Endnote 25

Endnote 26

This does not mean that large-scale social institutions can have moral commitments in the robust way in which individuals and small groups can. Still, a nation needs collective choices producing a public land ethic. Michel Serres argues that "the old social contract ought to be joined by a natural contract."

Endnote 27

9. SUSTAINABLE DEVELOPMENT AND SUSTAINABLE BIOSPHERE

At the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro, June 1992, the norm of **sustainable development** was crucial. Environmental ethics 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." Sustainable development has proved an umbrella idea, permitting various interpretations.

Endnote 28

The U.N. 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." The idea was first applied to agriculture, also forestry, but later to water use, allowable pollution levels, industry, urbanization, and national policies and strategies.

Endnote 29

The terms "sustainable" coupled with "development" conveys continued growth but not such as degrades opportunities and environments for the future. Within ecological limits, we still retain the optimistic idea of progress. The Commission continues, "All human beings have the fundamental right to an environment adequate for their health and well-being."

Endnote 30

The Commission pleads that we must have development because most people do not have anywhere near enough resources to sustain life. Not enough is produced; what is produced is not equitably shared. Five to tenfold development is needed to fulfill human needs in generations to come. "Humanity has the ability to make development sustainable. . . . Meeting essential needs requires not only a new era of economic growth for nations in which the majority are poor, but an assurance that those poor get their fair share of the resources required to sustain that growth."

Endnote 31

Now it seems that "sustainable" also means "fair" or "just," an ethics of **ecojustice**. There are two major blocs of nations, the developed Group of 7 (the industrial nations of North America, Europe, and Japan), and the underdeveloped G-77 nations, once 77 but now including some 128 nations, often south of the industrial North. The G-7 nations hold about one-fifth of the world's five-billion persons, and they produce and consume about four-fifths of all goods and serv-

Endnote 32

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.

ices. The G-77 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. The result is poverty and environmental degradation in a feedback loop. Meanwhile, the five-million new people in the industrial countries will put as much strain on the environment as the 85 million new poor.

Development in the West has been based on the Enlightenment myth of endless growth, bringing several hundred years of explosive development. But across the United States, whether one considers agricultural land developed, forests cut, rivers dammed and diverted for water, ranges fenced, minerals extracted, or highways and subdivisions built, the next hundred years cannot be like the last hundred. Americans have not yet settled into a sustainable culture on their landscape.

"Sustainable development" has become a key term both in international treaties and covenants and in domestic planning. The overconsumption problem in the G-7 nations is linked with the underconsumption problem in the G-77 nations, and this results in increasing environmental degradation in the G-77 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 could not go on escalating on a finite Earth. There are three problems: overpopulation, overconsumption, and maldistribution.

Such an ethic is humane and appealing, but critics ask whether there is enough concern for the integrity of ecosystems, for biodiversity? According to the political ecology view, the Earth is regarded as a natural resource; what really counts is meeting people's needs. The goal is to sustain things humans value: GNP or GDP, profits, trade opportunities, natural or manmade capital, substitutable resources, per capita income, and adequate food. Nature is not ultimately important, but is (in the literal sense) provisionally important. Any condition of nature that supplies such opportunities will be acceptable.

Is there a way of defining sustainability that gives nature a more central place? "Sustainable development," J. Ronald Engel tells us, "may be defined as *the kind of human activity that nourishes and perpetuates the historical fulfillment of the whole community of life on Earth.*" That puts human and biotic communities together comprehensively, a more promising outlook. But the problem is that everything cannot equally flourish; some things have to be sacrificed for other things. When Iowa is plowed to plant corn, it can hardly be said that the grasslands of Iowa reach their historical fulfillment. The most we can say is that Iowans can and ought to sustain their agriculture within the hydrology, soil chemistries, nutrient recycling processes, and so on, that operate on the Iowa landscape. Humans

should build sustainable cultures that fit in with the ecological carrying capacities. The bottom line, transcultural and non-negotiable, is a sustainable biosphere, and, at least in one sense, this makes environmental ethics prior after all.

10. BIOREGIONALISM

Living on regional landscapes is emphasis of **bioregionalism**. The most workable ethic is one in which persons identify with their geography. A planetary ethic is remote; the Earth is too big. Concern for sustainable development in the Amazon, though a laudable goal, is less likely to motivate someone than what that person has at stake on his or her home landscape. Redistributing first and third world resources more equitably, though desirable, is not politically possible. True, one ought to have concern for endangered species, vanishing wildlife, intrinsic natural values, or wilderness conservation; but that too is not what orients day-to-day behavior. 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."

Endnote 34

Myriads of peoples live on thousands of kinds of landscapes. Communities need to define sustainable development and environmental ethics for themselves. In the United States, persons can identify with the Everglades, the Adirondacks, the Appalachians, the Rocky Mountains, the Desert Southwest, the Pacific Northwest, or the Chesapeake Bay. People who live in the Greater Yellowstone Ecosystem have as much at stake in the condition of their forests and rivers as they do in whether their towns are prospering. Similarly for those on the prairies, or in the Ozarks, the Sierra Nevadas, the Great Lakes, along the Mississippi River, or on the Georgia or Florida coasts. Africa contains environments from the Sahara to rain forests; Australia has its eastern rain forests and desert interiors; England its moors, Scotland its highlands, Russia its steppes.

A bioregion, says Kirkpatrick Sale, 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.

Endnote 35

We do live on one Earth, with some planetary concerns, like global warming. But the modern world is becoming a global monoculture, with international markets, free trade, World Bank loans, transna-

tional corporations, electronic communications, satellite TV, websites and e-mail, jet planes, and people living in giant cities. The average bite of food eaten in the United States has traveled 1,200 miles. Watching Western advertising, people want the same thing everywhere — not just blue jeans and Coca-Cola, but refrigerators and automobiles. When people become captive to these global forces, they lose their independence. This reduces local color and diversity, the distinctive cultural patterns worked out in response to the particulars of landscapes.

People lose control over their resident environments. Nebraska wheat is no longer grown on family farms, where four generations have loved the land. That has been replaced by big agriculture, owned by absentee investors; the way in which wheat is now raised is dictated by world markets. Environmental ethics requires a feeling of identity with local place, and globalization corrupts this.

On closer analysis, however, one needs to ask to what extent the regional landscape processes do constrain policy, which would seem to require ecological science. By contrast, to what extent are there numerous options available on any landscape, which would seem to require policy and social decision? American Indians and Europeans have both lived in Colorado, with very different lifestyles. Twentieth-century Coloradoans have different lifestyles from nineteenth-century Coloradoans. Can one really say that the Rocky Mountain bioregion does or ought to constrain the lifestyle of Coloradoans for the twenty-first century? Geography is no longer the principal determinant of human society. Global connections are here to stay, they are the wave of the future.

Bioregions vary widely and are not all that easy to identify. Does one look for watersheds, mountain ranges, rainfall, grasslands, forests, or what? Are political boundaries of any significance, such as the U.S.-Canadian border in the Great Lakes region? Are there bioregions nested within larger bioregions? The Pacific Northwest has rain forests, but also, not that far away, semi-arid deserts. How big is a bioregion? The Great Lakes region is larger than Great Britain and France combined. Are the British Isles one bioregion or many? Doesn't a U.S. citizen living in Virginia need a continental sense of place. Does that person need to be concerned about the wolves in Yellowstone or preserving what wilderness remains in Montana? Doesn't the Grand Canyon belong to Pennsylvanians?

Despite these puzzles, bioregionalism does recognize that life is incarnate in place. The passage of consciousness through nature in time takes narrative form, a "storied residence." Henry David Thoreau's views were those of Walden Pond; and John Muir loved the high Sierras. John James Audubon saw birds and Rachel Carson the sea. Wendell Berry loves Kentucky and Barry Lopez the arctic. Leopold concludes with a land ethic that he recommends around the world. 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 biographi-

Nebraska wheat is no longer grown on family farms, where four generations have loved the land. That has been replaced by big agriculture, owned by absentee investors; the way in which wheat is now raised is dictated by world markets.

cal residence is the personal backing to his ethic. An environmental ethic needs roots in locality.

11. ECOFEMINISM

An **ecofeminist ethics** finds a caring for nature present among women, contrasting with an attitude of dominion among men. Such dominion is doubly expressed in an alliance between the forces that exploit nature and those that exploit women. This patriarchal bias has been present in many societies, but has especially characterized the modern West. Karen Warren explains: "Ecological feminism is the position that there are important connections — historical, experiential, symbolic, theoretical — between the domination of women and the domination of nature, an understanding of which is crucial to both feminism and environmental ethics."

Endnote 37

The environmental crisis arises, significantly, from a male-gender bias that elevates human reason, resulting in a neglect of the complementary feminine virtues. Reason is thought to be impartial, objective, analytic, abstract, and universalizable. It seeks understanding, control, and dominion. The complementary feminine virtues that are thereby neglected include individual, person, and particular concern, involving participation, sharing, and nurturing. Women have often been supposed less rational, more emotional, closer to nature, devoting more time to giving birth, nursing, feeding and taking care of children, subject to and inferior to men. Women need domestication by the dominant sex, their men ruling the family and the farm, running the business, and confronting the outside world. This male-gender bias is dualistic: man/woman; mind/body, reason/emotion, culture/nature, self/other, where the first in the pair is hierarchically superior to the second.

When men think ethically they prescribe duties, claim rights, distribute justice, and optimize utility, and do these from a humanistic perspective that leaves them disinclined to be appropriately concerned for animals, much less plants, endangered species, or ecosystems. Men want to be stewards, trustees, managers, always in control. They may argue about their effectiveness here; but none of this really addresses the question of male privilege.

In fact, claim the ecofeminists, in many cultures women have been the primary managers of households. As gatherers of food women were more important than the hunting men. As growers of food, gatherers of fuel, or carriers of water, women are both more important providers than men, and more sensitive to the human/nature interconnections. Men build grand theories and dream of universal knowledge and the power it brings; but women live narrative stories in their particular communities, times, and places.

Endnote 38

Nature is often thought of as “Mother Nature.” The etymological root of “nature” is “giving birth.” Ecofeminists are of mixed minds as to whether to develop this imagery or to set it aside as too problematic in its historical associations. They more likely agree that ecofeminism offers a corrective perspective, not gender-biased, that can enable the development of a better environmental ethics complementary with a development policy. Marti Kheel says, “It is the androcentric worldview that deserves primary blame.”

Endnote 39

The androcentric (male-centered) view is quite as problematic as any anthropocentric (human-centered) view. Male values must yield to empowered women, who can correct this bias, a prerequisite for solving environmental problems. Warren concludes: “Ecofeminism provides the framework for a distinctively feminist and environmental ethics. It is a feminism that critiques male bias wherever it occurs in ethics (including environmental ethics) and aims at providing an ethic (including environmental ethics) which is not male-biased — and it does so in a way that satisfies the preliminary boundary conditions of a feminist ethic.”

Critics worry that ecofeminism has become too much a single-issue ethics. Endangered species policy, biodiversity conservation, pollution levels in streams, wilderness conservation, global warming, North-South inequities, or sustainable development are not especially feminist issues. Women are as apt to be willing consumers as men, whether of feathers for hats, timber for their houses, or of gasoline in their automobiles. They generate waste just as quickly as men. Women are quite capable of being anthropocentric. Previous promises that the influence of women would redeem society (as were made when women gained the vote) have failed to be fulfilled. Logical argument about equity, rights, duties, optimizing benefits, and minimizing costs are as relevant for women as for men.

Tendencies to exploit and oppress are a problem in human nature, not just male nature. The critics of exaggerated human dominion have as readily been men (Aldo Leopold, John Muir, Paul Taylor) as women (Rachel Carson, Carolyn Merchant). Humans in their cultures are, indeed, radically different from animals and plants in wild nature, and one does need to be discriminating (if not dualistic) about this, before any adequate environmental ethic can be formed — although this may also require storied residence, bioregional identity, social ecology, ecosystem management, and stewardship.

12. PLURALISM, POSTMODERNISM, AND A SENSE OF PLACE

A **postmodern environmental ethics** doubts whether humans can know nature independently of the cultural schemes we use to inter-

pret nature. A worldview is a social construction, more than it is a realist account of nature in itself. These views can be judged better or worse by their sustainability, equitable distribution of resources, or quality of life as understood from within that culture; and that is all that is needed. We do not have to have absolute, final, or even true accounts of what nonhuman nature is like to form *an ethics of place*. Ecology, once again, is a logic of one's home place. Our "environment" is as much of nature as comes within our horizon. Such ethics may differ with various peoples, a **pluralist environmental ethics**.

Endnote 40

Educated persons in the West tend to think that the "modern" view is the right one. This comes out of the Enlightenment philosophy coupled with the sciences. This outlook is quite successful in enabling humans to be literate and free, and to pursue their happiness, make progress, learn more about nature and how to use it resourcefully, and gain higher standards of living. More than this — so we think — this modern view is so successful because it is the true one; other views are outmoded. In culture, democracy and human rights are the best form of government. Totalitarian kings and slavery are wrong because they are social institutions based on a false view of humans, their nature, and their possibilities. In nature, Darwin discovered natural selection and evolutionary natural history. The fixity of species and the six-day creation were wrong. Indigenous peoples populated nature with spirits; but these do not exist. The enlightened, scientific view is the correct one.

Endnote 41

Postmodernism argues that this is arrogant and naive. We need to be post-enlightened! Even in the West, we know nature only provisionally, operationally or pragmatically, and such knowledge is much more limited than we realize — not much more than a sketch or a cartoon of nature. Don Cupitt puts this bluntly:

Science is at no point privileged. It is itself just another cultural activity. Interpretation reaches all the way down, and we have no 'pure' and extra-historical access to Nature. We have no basis for distinguishing between Nature itself and our own changing historically-produced representations of nature. . . . Nature is a cultural product.

Endnote 42

Australian aborigines, who live in intimate contact with their arid landscape, drawing their living from it, may in fact know more about nature there than Western ecologists, who get their groceries at the supermarket.

"Nature" is a loaded word, as is revealed by the metaphors used to describe it: the creation of God, the Great Chain of Being, a clockwork machine, chaos, an evolutionary ecosystem, Mother Nature, Gaia, a cosmic egg, *maya* (appearance, illusion) spun over *Brahman*, or *samsara* (a flow, a turning) which is also *sunyata*, the great Emptiness, or *yang* and *yin* ever recomposing the *Tao*. Neil Evernden concludes, "What we know as nature is what we have *constituted* as nature;" that is we only have access to "the social creation of nature."

Endnote 43

Endnote 44

These pictures of nature have to be recognized as power struggles between different social forces. The environmentalists returning wolves to Yellowstone talk a lot about the integrity of the ecosystem



Figure 2. A coyote in Yellowstone National Park in Wyoming. Animals/Earth Scenes.

or the wolf as a majestic animal. What really drives them is their sense that the social forces that, earlier in this century, eliminated the wolf were mistaken and that we now ought to choose for Yellowstone to be a different kind of place. Ranchers who oppose the wolf's reintroduction have a different vision of what they want northwest Wyoming to be. They paint the wolf in a different light. At stake is not so much what the wolf really is, but two social groups choosing different futures. The whole future of Earth is always a contest of social forces, constructing first in ideal and then in reality what kind of nature we wish to have.

Endnote 45

But, the critics reply, we humans are not on Earth alone, and we must be mindful of what and who else is here. We have to know this much to know what else counts in forming our ethics. We do need to know about intrinsic values in nature, if such there are, as we decide what to make of this place we inhabit, what relationship to take up toward these places. On Earth, nature is natural history, and no one has any doubt that there are trees and tigers, mountains and rivers. Any knowing of the various things in nature will be relational. We cannot think about anything without language, but this does not mean that we cannot think with words about the world. This does not mean that that we must avoid claiming these thoughts are right or wrong, or less and more true to what really exists in the external world.

Endnote 46

Environmental ethics is lived on a geographical landscape. So why not accept that in such encounter, nature always wears a human face? Why all this insistence on otherness out there? Because the appropriate behavior for humans, faced with ethical decisions, often involves knowing what good is there in other lives and remains there when humans face in other directions. Environmental ethics is about being native to a place, so why not think of it as choosing our human story? Because there is more story to consider, solidarity with larger biotic communities with whom we share this planet, about whom we must gain truth enough to know something of their places before we can rightly choose ours.

FINAL COMMENTS

Environmental ethics, as we have seen, come in many different forms. There are important differences among the types of environmental ethics we have traced. Nevertheless, variously constructed kinds of environmental ethics need to join as all humans see themselves as Earthlings, with their home planet as a responsibility.

FOR FURTHER INQUIRY

REVIEW QUESTIONS

1. Which of the types of environmental ethics appeals to you most? Which least?
2. Are all the types compatible with each other? Or are there irreconcilable differences among them?
3. Can you think of further types of environmental ethics not sketched here?
4. Are there so many different types of environmental ethics that a person is left confused and hesitant about what he or she ought to think or do?
5. Environmental ethics is sometimes thought to be marginal, less important than medical, business, or development ethics, than concerns for peace or justice, learning the ten commandments or the golden rule? What do you think?

SUGGESTED READINGS

Journals

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Anthologies

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- * Wenz, Peter S., *Environmental Justice*. Albany: State University of New York Press, 1988.

FILM

- * *Free Willy* (PG), 1993. Troubled young boy helps an endangered killer whale.
- * *Watership Down* (PG), 1978. "Serious" animated film about a colony of rabbits whose home territory is threatened by development.

INTERNET RESOURCES

- * **International Society for Environmental Ethics**
Contains an extensive website bibliography, which can be searched. This site also includes the *International Society for Environmental Ethics Newsletter*, with issues in the news, conferences and events of interest, and a quarterly updating of the current bibliographic literature.
<http://www.cep.unt.edu/ISEE.html>

ENDNOTES

1. Lists on the ISEE website bibliography, under "Anthologies" and "Systematic Works." See also under "Introductory Articles."
2. Bryan Norton, *Toward Unity Among Environmentalists*. (New York: Oxford University Press, 1991).
3. J. Baird Callicott, "Animal Liberation: A Triangular Affair," *Environmental Ethics* 2(1980): 311–338.
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