environmentally friendly worldview, he implied, would have to be nonanthropocentric. But, he argued, traditional European and North American ethical theory is anthropocentric, requiring an effort at building a new ethical theory. In the 1973 essay "Is There a Need for a New, an Environmental Ethic?" Richard Routley constructed the now-famous "Last Man" thought experiment, in which the last human being "lays about him" destroying everything within reach. Routley correctly expected that most of his readers would judge the last man's behavior to be morally reprehensible, but standard European and North American ethical theory could not support such an intuition. The Last Man thought experiment claims to demonstrate that the foundations of environmental ethics must be nonanthropocentric.

This interest in theory marks environmental ethics and philosophy as distinct from the more immediate practical work of ecological restoration, the development of sustainable technologies, or the institution of ecologically informed environmental policy. In addition to the implementation of environmentally sound practices, environmental ethicists and philosophers focus on fundamental questions concerning the types of values attributed to nature, what it would mean to actually restore a landscape, what it means to engage in a sustainable technology, or what constitutes an ecologically informed policy. Underlying and motivating all of these more practical environmental aims are implicit theoretical, environmental, ethical, and philosophical assumptions about the value of the environment itself. Theoretical environmental philosophy exposes and critically engages such assumptions.

Theorists in environmental ethics and philosophy have historically been interested in both normative and metaethical theoretical questions. Metaethics addresses questions about ethics, whereas normative ethics focuses on questions within ethics. Metaethicists are interested, for example, in whether or not environmental ethical claims can be true or false, whereas normative ethicists work to formulate and defend particular systems or theories of environmental ethics.

NORMATIVE ETHICAL THEORY IN ENVIRONMENTAL ETHICS AND PHILOSOPHY

An ethical theory is an attempt to determine which entities are worthy of direct moral standing, which are worthy of only indirect moral standing, and which do not matter morally. Consider, as an illustration, a circle. If something lies within this circle of moral concern (or within the moral community), it possesses direct moral standing. Things with direct moral standing count, period. If something lies outside of the moral community, it might count,

THEORY

One of the principal tasks of environmental ethics and philosophy is to posit and defend an adequate normative ethical theory. This agenda was set by two seminal essays: In "Historical Roots of Our Ecologic Crisis" (1967), Lynn White Jr. blamed the environmental crisis on the Judeo-Christian worldview, claiming that Christianity was the most anthropocentric of world religions. An

but only indirectly at best. That is, something outside of the moral community might be tethered to (i.e., somehow important for or to) something within the moral community. It might also be the case that those things outside of the moral community possess no moral standing at all if it can be demonstrated that they serve no end for things within the moral community. So, for example, if our moral community included only human beings, then, although we would not necessarily be concerned with the loss of tropical plant species per se, we might still be concerned with them if their well-being somehow served a human end (e.g., provided chemical extracts that could treat a human illness). If, however, our moral community included all living things, then, in addition to being important as a source of medicine for humans, plants would also count directly.

Moral standing—whether direct or indirect—depends largely on what a given theory presupposes as the key to this inclusion. Typically the key to moral standing is a quality that entities possess or fail to possess. Because an entire moral-community structure depends on an established key to moral standing, normative environmental ethical theory has focused a great deal of energy on determining the nature of this key.

Although some environmental scholars downplay or dismiss the value of environmental-ethical theorizing, others point out the advantages to such theory building. First, they note that all actions and polices presuppose a theoretical foundation. Absent coercion, we are usually willing to perform only those actions that are consistent with our value assumptions. Hence, to engage in environmental ethical theory building is to engage at the same time in environmental policy making (albeit indirectly). Furthermore, given the inescapability and force of environmental ethical theory, it seems wiser to attend to such theory building than to ignore it. Second, the theoretical foundations provided by environmental ethical theory might be empowering. As opposed to environmental discourse that appears ungrounded, or environmental decision-making that happens only as the result of political maneuvering and power struggle, environmental ethical theorizing allows us to create a solid foundation from which to judge and defend a certain course of action and to understand the roots of other courses of action. Hence, even those without political power can participate in environmental discourse and possibly even in environmental decision-making. Third, environmental ethical theory provides us with at least a rough idea—but not the specific details—about how we ought to live. The application of theory, as opposed to concrete rules or policies, requires us to think for ourselves, allows us to adjust to novel situations and to consider how a given theory might manifest itself in different ways under different conditions. Finally, the establishment of an environmental ethical theory, and its

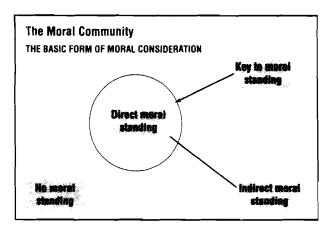


Figure 1. Environmental ethical theories vary with regard to who or what possess direct, indirect, or no moral standing. For example, for some theories species and ecosystems might be members of the moral community directly, for others they might matter only because they support that which does count directly (i.e., they might merit only indirect moral standing), and for still others they might not matter at all. Different theories propose different relevant qualities (or keys) or moral consideration which then determines which things count (or do not count) and in what way. CENGAGE LEARNING, GALE.

corresponding notions of direct and indirect moral standing, establishes a powerful and important burden of proof. Given that those with direct moral standing would be "innocent until proven guilty," whereas those without direct moral standing would be "guilty until proven innocent," and given that the establishment of burden of proof is no small matter to those entities whose fate is thus decided, environmental ethical theory building takes on enormous importance.

Like many disciplines, environmental ethics has its own vocabulary. Two key terms in environmental ethics are instrumental value and intrinsic value. Something is said to have instrumental value if it is a means to some other end (e.g., a child can have instrumental value if she can mow the lawn). Something is said to have intrinsic value when it possesses value that transcends its instrumental value (e.g., a child, even if she will not or cannot mow the lawn). The views of environmental ethicists differ most markedly in their attribution of either instrumental or intrinsic value to various nonhuman things in the world. These differences produce profound differences in how and to what extent one sees and likewise how one feels we ought to work to solve environmental "problems."

KEY PERSPECTIVES IN ENVIRONMENTAL ETHICS

The key perspectives in environmental ethics are the following:

- 1. Anthropocentrism is the position that all humans—and only humans—possess intrinsic value and direct moral standing. In this view, nonhumans have only instrumental value to the extent that human well-being may in some way depend on them. For the anthropocentrist, environmental ethics and policies are motivated and justified solely on the basis of their effect on humans, without regard for the nonhuman world. An anthropocentrist, for example, would be concerned about rapid global climate change only insofar as it affects the welfare of human beings. Anthropocentrists argue variously that it is either unintelligible or unnecessary to extend direct moral standing to the nonhuman world. The philosopher John Passmore (1974) represents the anthropocentric camp.
- 2. Nonanthropocentrism attributes intrinsic value to humans and to at least some nonhuman entities. Nonanthropocentrists vary in how inclusively they view the moral community. The U.S. Endangered Species Act (1973), as an example, is nonanthropocentric to the extent that it dissociates the value of a species from its economic and narrowly human-centered value. Each of the perspectives described below are types of nonanthropocentrism (except that extensionism is more general than nonanthropocentrism):
 - a. Extensionism is exemplified by zoocentrism and biocentrism (see below). These perspectives vary according to the extent to which they argue moral consideration ought to be attributed to various kinds of other individuals. Extensionism attempts to extend traditional moral theories (such as utilitarianism or rights theory) to entities that have not traditionally been considered worthy of direct moral standing.
 - b. Zoocentrism attributes intrinsic value only to humans and certain nonhuman animals, although adherents to this view differ about which animals possess direct moral standing and intrinsic value. A zoocentrist could, for example, be concerned about the loss of biodiversity insofar as it harms humans and nonhuman animals that possess clear indications of self-consciousness (e.g., primates). Peter Singer (1975) and Tom Regan (1983) are major proponents of zoocentric philosophy.
 - c. Biocentrism attributes intrinsic value and direct moral standing to all individual living creatures. It takes "being alive" as the key to moral inclusion. Nonliving things (e.g., lakes or rocks) and collectives (e.g., species and ecosystems) possess only instrumental value or no value at all. Biocentrists would care, for example, about biodiversity loss because of its effect on all individual

- living things. The philosopher Paul W. Taylor (1986) defends this position, as do Kenneth Goodpaster, Robin Attfield, and James Sterba.
- d. Universal consideration is a position that attributes intrinsic value and moral standing to everything (living or not). Hence, from this perspective, biodiversity loss would be decried not only for its potential harm to all living things, but also for its negative impact on even nonliving things such as mountains, rivers, or rocks. The philosopher Thomas Birch (1993) has championed this position.
- e. Ecocentrism is a reaction against the atomism or individualism represented by extensionism. Adopting Charles Darwin's analysis of ethics as generated by community membership and inspired by principles of ecological science, ecocentrism reflects the social-like connectedness among individuals in nature. Emergent properties of biological wholes—such as species, biotic communities, and ecosystems-transcend the properties of the individuals that compose such collectives. Ecological collectives, ecocentrists argue, merit moral standing because of their emergent properties and connectedness. Ecocentrism thus focuses moral concern on the maintenance of biotic communities, species, and ecosystems and less on the welfare of animals and other organisms. Aldo Leopold represents ecocentrism, especially when he writes, "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." (Leopold 1949, pp. 224-225). The philosopher J. Baird Callicott (1989, 1999) is the most noted defender of Leopold's land ethic. The philosopher Arne Naess (1989) is the originator and noted defender of the ecocentric environmental ethic known as Deep Ecology, which is based on a mystical sense of self intimately connected with all of nature. Some argue that ecocentrism, taken to its logical conclusion, is equivalent to James Lovelock's Gaia hypothesis (1979), in which the entire Earth merits moral consideration.
- f. Environmental virtue theory began to emerge in the early part of the twenty-first century. Harking back to Aristotle's approach to ethical reasoning, environmental virtue ethicists suggest that we should focus our energies on the creation of virtuous people, or people of appropriate character, instead of on working to determine the proper key to moral consideration and membership in

the moral community. Traits such as respect, humility, caring, and attentiveness are often advanced as the key virtues. The philosophers Phil Cafaro (2001) and Ron Sandler (2007) represent this trend in environmental ethics.

METAETHICAL THEORY IN ENVIRONMENTAL ETHICS AND PHILOSOPHY

Although many metaethical questions surround environmental ethics and philosophy, three of them have been at the center of particularly robust debates. Environmental ethics is often regarded as one among several types of "applied ethics," such as biomedical ethics, engineering ethics, and business ethics. Applied ethicists rely on the prevailing European and North American ethical theoriesvariations on utilitarianism and Kantian deontology to new ethical questions that the eighteenth- and nineteenthcentury authors of these theories could never have imagined or anticipated. Accordingly, some philosophers view environmental philosophy as work that takes traditional ethical theory and examines environmental concerns through the lens of these theories. These philosophers might therefore be concerned with what the prevailing European and North American ethical theories of utilitarianism or deontology might have to say about the rightness or wrongness of factory farming or sport hunting.

Other environmental philosophers, however, view the work of environmental philosophy and ethics as something quite beyond mere applied ethics—as work that explores new ideas about ethics and even metaphysics and that, although practical in its application, is also freshly theoretical. These philosophers might point to the unique nonanthropocentric ethical theories created by environmental philosophers or the work done in policy and philosophy or between various sciences (e.g., ecology, geography, geology, and biology) and philosophy as examples of uniquely theoretical environmental ethics. The work of Robert Frodeman has taken this approach (2003).

Second, there has been a debate between those who operate as if environmental ethicists, like classical European and North American ethical theorists, should pursue a unified ethical theory and those who recommend embracing several theories at once. The former favors ethical monism, the belief that there is only one proper ethical theory. Ethical pluralists, on the other hand, believe that there may be more than one legitimate ethical theory and a plurality of ethical truths. Pluralists worry about the homogenizing and totalizing effect of the pursuit of monism. Monists worry that pluralism is little more than ethical relativism. Pluralists deny this reduction to relativism and instead suggest that the stand-

ard of an acceptable ethic ought to shift from a focus on truth to a focus on reasonableness, pointing out that any number of ethical prescriptions can be reasonable. Are pluralists really suggesting that a number of incommensurable ethical theories can be coherently held at the same time, or are they suggesting that different persons implicitly or explicitly hold different ethical theories and that there is, therefore, no decisive way to declare that one or the other is the one true theory? Are monists really suggesting that there is only one true ethical theory or merely demanding that each person hold an internally consistent ethical point of view while allowing that there may be many self-consistent ethical theories? Synthesizing, in Hegelian fashion, monism and pluralism in environmental ethics, could a monistic theory be constructed that is sufficiently general to allow for a plurality of approaches and applications in the real world? Within the literature of environmental ethics, Christopher Stone (1987) advocates an extreme version of pluralism, whereas Peter Wenz (1993) advocates a more moderate pluralism. J. Baird Callicott (1999) has defended a moderate version of monism; Peter Singer (1990) represents a more extreme monism in his steadfast commitment to utilitarianism.

Third, there is a debate between those environmental philosophers who have focused primarily on the creation and defense of ethical theories (theories that defend the intrinsic value of nature) and environmental pragmatists who are motivated primarily by effecting environmental change in the "real world." Whereas the more theoretically motivated environmental philosophers contend that environmental philosophers should continue to create and defend abstract theories of values that underpin environmental attitudes and decision making, pragmatists contend that they should instead focus on variable and context-dependent accounts of value and truth (i.e., on solving real-world environmental problems). Pragmatists often assert that environmental ethical theorizing has had no real impact on environmental problems or policy formation and that we ought to make philosophy more practical. Although some pragmatists assert that environmental ethical theorizing is simply irrelevant or useless, some assert that it is actually counterproductive. Commonly taking a pluralist approach, some environmental pragmatists strive to marshal the values and ethical commitments of ordinary people to support of environmentfriendly policies; others recommend suppressing the often conflicting values and ethical commitments of ordinary people-because they can be divisive-and focus on more situation-dependent solutions that all sides can live with. Ethical theorists might, however, argue that any such solutions cryptically rest on implicit values and ethical commitments and that the very notion of an environmental problem presupposes the significance of environmental values and ethics. Finally, although ethical theorizing has not yet had the impact that environmental philosophers had originally hoped, it is also not clear why a pragmatist would necessarily care what ethical theorists do. It would seem that, as self-avowed pluralists, pragmatists would be content to let theorists theorize, while they, the pragmatists get on with their problem-oriented, situation-dependent solutions, What could be more unpragmatic—that is, impractical—than spending thousands of hours writing dozens of books and articles pointing out the unpragmatic product of the unpragmatic theoreticians?

SEE ALSO Callicott, J. Baird; Gaia Hypothesis; Last Man Arguments; Leopold, Aldo; Naess, Arne; Passmore, John Arthur; Pragmatism; Singer, Peter; Sylvan, Richard; White, Lynn, Jr..

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