Environmental Studies and Utilitarian Ethics

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Abstract: Environmental ethicists have focused much attention on the limits of utilitarianism and have generally defined "environmental ethics" in a manner that treats utilitarian environmental ethics as an oxymoron. This is unfortunate because utilitarian ethics can support strong environmental policies, and environmental ethicists have not yet produced a contemporary environmental ethic with such broad appeal. I believe educators should define environmental ethics more broadly and teach utilitarian ethics in a non-pejorative fashion so that graduates of environmental studies and policy programs understand the merits of utilitarian arguments and can comfortably participate in the policymaking arena, where utilitarian ethics continue to play a dominant role.

Keywords: Environmental Education, Environmental Studies, Environmental Ethics, Utilitarianism, Utilitarian Ethics

Introduction

The current generation of college students is expected to witness a dramatic decline in biodiversity, the continued depletion of marine fisheries, water shortages, extensive eutrophication of freshwater and marine ecosystems, a dramatic decline in tropical forest cover, and significant climatic warming (Jenkins 2003, Pauly et al. 2002, Jackson et al. 2001, Tilman et al. 2001, Adedire 2002, Karl & Trenberth 2003). The ethical implications of these anthropogenic ecological changes are clearly evident and have generated a tremendous interest in environmental ethics - a subject that has justifiably entered the environmental biology classroom.

The teaching of environmental ethics in environmental science courses has been heavily influenced by recent philosophical debates and many educators have followed environmental ethicists in rejecting the ethics of utilitarianism. Environmental science textbooks commonly exemplify this trend by associating utilitarianism with discredited "worldviews."

Despite the deprecatory treatment by environmental ethicists, utilitarianism continues to be widely accepted by professionals in other fields and utilitarian ethics still dominate the public policy arena. The derisive treatment of utilitarian ethics in environmental science courses may, consequently, have unfortunate consequences. Many graduates of environmental science courses are likely to be called upon to implement and defend policies they are ill prepared to understand or fully accept without a basic appreciation for the merits of utilitarian ethics. Environmental science graduates may also find themselves isolated from economists and other professionals if they fail to develop an appreciation for the limitations of competing theories and develop an antipathy for utilitarian ethics. To prepare graduates of environmental science courses for participation in the policy process, it is important that environmental biologists teach the strengths, as well as the weaknesses, of utilitarian ethics in a non-pejorative fashion, and the limitations, as well as the strengths, of competing theories.

It must be appreciated that the training given most biologists seldom includes rigorous courses in philosophy. Consequently, environmental science instructors are likely to lack knowledge of, or an appreciation for, the relative merits of competing theories. I hope my treatment of this subject serves, in part, to address this issue by exposing biology instructors to several important philosophical debates, and by raising awareness of the unsettled nature of environmental ethics.

The Changing Status of Utilitarianism in Environmental Ethics

Utilitarianism, in its most traditional form, is both a theory of the good and a theory of the right. It holds that the greatest good is happiness and freedom from pain and suffering. Acts that promote the greatest good (i.e., have the greatest utility) are morally right. Acts that reduce overall happiness and/or promote pain are morally wrong.

Some advocates of utilitarianism have redefined the greatest good to be the satisfaction of personal desires or preferences. Preference utilitarianism is, of course, integrally associated with a host of contemporary economic theories, which commonly hold or assume that individuals are best served when they are able to pursue and satisfy their preferences within a free market.

No one familiar with the environmental movement in the United States can doubt or deny the important role utilitarianism has played as a justification for protecting wilderness, ecosystems, and species. Modern environmental ethicists have, however, criticized utilitarianism on various grounds and have distanced themselves and the field of environmental ethics from traditional theories of morality, including utilitarian ethics, by rejecting anthropocentrism, denying the importance of sentience, embracing intrinsic value theories, and affirming holistic ethics.

In the 1970s, several environmental ethicists and animal rights proponents challenged the inferior moral standing of other species and anthropocentrism (i.e., "speciesism" and "human chauvinism"). They persuasively argued that value and morality cannot be reduced to matters of interest or concern to human beings alone, and that there are no justifiable reasons for excluding the interests of other species from moral consideration (Singer 1975, Fox 1978, Regan 1979, Routley & Routley 1979). Anthropocentrism was also attacked and rejected for failing to recognize the intrinsic value of non-human life forms and for justifying many of the environmentally destructive practices environmentalists oppose (e.g., Naess 1973, Devall & Sessions 1985).

The rejection of anthropocentrism did not necessitate a refutation of utilitarian ethics. However, a non-anthropocentric utilitarian approach to environmental ethics only broadens the set of morally relevant organisms to include, in addition to humans, elephants, cetaceans, great apes, and a handful of other sentient organisms. Utilitarianism has, therefore, been roundly criticized by those ethicists that reject sentientism and believe a legitimate environmental ethic must go further and assign moral standing to such insentient entities as plants, species and/or ecosystems. (e.g., Goodpaster 1978, Callicott 1980, Sagoff 1984).

Intrinsic value or inherent worth is what makes trees, species, and ecosystems the subjects of direct moral concern in the minds of many environmental ethicists, so its importance to the field can hardly be overstated. Because utilitarians recognize only the intrinsic value of pleasure or desire satisfaction, the commitment to intrinsic value in environmental ethics has also driven a rather deep wedge between environmental ethics and the ethics of utilitarianism.

In addition to rejecting anthropocentrism, sentientism, and utilitarian limits on intrinsic value, a number of environmental ethicists argue that an adequate environmental ethic must be holistic, as opposed to individualistic, and make ecosystems and species the subjects of direct moral concern. Such "holists" do not deny that we have duties to individuals, but they contend that our duty to preserve wild places, species, biotic communities, and ecosystems can trump the interests or rights of individuals. Following in the footsteps of Aldo Leopold, Callicott (1980) claims, in particular, that the *summum bonum* (i.e., greatest good) is the "land" and that an environmental ethic must provide environmentalists and conservationists with grounds for managing exotic, over-abundant, and problematic species - even when this involves killing, and otherwise harming, individuals.

While one can imagine a non-anthropocentric utilitarian environmental ethic, there can be no such thing as a holistic utilitarian environmental ethic. Utilitarianism is necessarily individualistic because only individuals can experience pleasure and pain or satisfy their interests. Environmental and utilitarian ethics have, therefore, become antithetical in proportion to the degree to which environmental ethics has embraced holism.

In Defense of a Utilitarian Environmental Ethic

Human beings and other sentient organisms depend on the ecological services natural environments and wild organisms provide. Natural systems and wild organisms regulate climate and biogeochemical cycles, are an important source of food, produce and protect fertile soils, pollinate crops, produce pharmacologically active compounds, control pests, and increasingly serve as a source of unique genetic material. The estimated economic value of all these and other ecological services easily exceeds the world's economic output (Myers 1996, Costanza et al. 1997) and, because many natural services and products are non-substitutable, the instrumental value of wild organisms and natural areas is, for all practical purposes, infinite. Given the dependence of all sentient life on the ecological services natural environments and wild organisms provide, an ecologically-informed utilitarian ethic must, in some sense, be an environmental ethic. To be taken seriously, however, proponents of utilitarianism must respond to a handful of claims environmental ethicists have made regarding the nature of utilitarian ethics. In particular, proponents of utilitarianism must address claims that utilitarian ethics:

- Are inherently anthropocentric and/or sentientist,

- Ignore the rights and/or intrinsic value of other species and biological entities, and
- Justify environmentally destructive policies by making sentient individuals, rather than species and ecosystems, the locus of moral concern.

The claim that utilitarian ethics are anthropocentric constitutes a valid criticism of the way utilitarian ethics have generally been applied, but a utilitarian ethic that recognizes the pain and suffering of *all* sentient organisms does not arbitrarily favor humankind. Utilitarians were, in fact, ahead of their time in recognizing the moral standing of other animals (Bentham 1823), and have denounced anthropocentrism (i.e., "speciesism") (Singer 1974, 1975).

It is certainly true that utilitarian ethics ignore the rights and intrinsic value some ethicists believe insentient life forms possess, but this might well be considered a virtue of utilitarianism rather than a liability. Utilitarians can, of course, recognize legal rights and value species, ecosystems, etc., intrinsically - in the sense of valuing these entities for what they are and "as is." Ethicists that wish to go further and appeal to "natural rights" or "intrinsic value" in order to establish the moral standing of insentient entities have the burden of proving that such rights and/or values actually exist, are identifiable, and are of a very special kind. Insentient entities must be shown, that is, to have the same kind of rights and/or value that other entities with moral standing have (e.g., human beings). Demonstrating the existence of such rights and/or value has proven to be a difficult problem for environmental ethicists and they have largely failed to convince policymakers that trees, microorganisms, and communities have rights, or the kind of value that makes them legitimate objects of direct moral concern. Furthermore, no proof of such rights and/or value seems possible.

The assertion that utilitarianism can justify policies that environmentalists disapprove of has been made by ethicists claiming, in particular, that a utilitarian interest in individual welfare conflicts with bioengineering, law, and economics. In all of these fields, utilitarianism has its proponents and utilitarian arguments are common.

Contemporary Environmental Ethics as a Problematic Alternative to Utilitarianism

Environmental ethicists have encouraged a vigorous and healthy debate regarding the attributes of a satisfactory environmental ethic, but no consensus has been reached concerning the specific nature of such an ethic and no single theory is widely accepted, even within the discipline.

Educators should recognize that environmental ethicists encounter both practical and philosophical problems when they attempt to make insentient beings the subjects of direct moral concern. As a practical matter, it is difficult to demonstrate that the moral standing of trees, insects, and bacteria can be established in time to prevent a significant worsening of the current environmental crises, given that the vast majority of Americans hold views that have been shaped by Christian theology and the an environmental interest in species and ecosystems. Callicott (1980), for example, argues that the holistic ethic he endorses is superior to the sentientist ethics of utilitarianism because the practitioners of the latter ethic would be prohibited from culling deer to protect sensitive ecosystems. A utilitarian environmental ethic would not, however, prohibit culling when the intended purpose is to promote the aggregate welfare of the population in question and/or to protect the ecosystem upon which the welfare of sentient beings depends. Wildlife managers would only be required to minimize suffering by employing the most humane methods at their disposal. The land ethic Callicott favors places no such demands on wildlife managers, but it is difficult to see how this difference might be construed as commendable.

The above-mentioned claim takes many other forms and it is also argued, for example, that those interested in the pain and suffering of individuals would have to abstain from hunting, condemn "merciless" predators, guard the lives of wild animals, and liberate domesticated animals (Callicott 1980, Sagoff 1984). Such claims ignore the instrumental value of healthy environments, however, and can only be derived from a superficial characterization of utilitarian ethics (This point is convincingly made by Varner, 1995). Critics of utilitarian ethics are not confined to the ranks of environmental ethicists and some educators may object to teaching utilitarianism on the grounds that it is flawed in ways that have little or nothing to do with environmental issues. A thoroughgoing defense of utilitarian ethics is beyond the scope of this paper, but it should be pointed out to the critics of utilitarianism that utilitarian ethics continue to be applied to a diverse array of 21st Century problems, including ethical problems encountered in public education, medicine,

anthropocentric ethics of Locke, Mill, Kant, and Descartes. As a philosophical matter, it is hard to argue that the interests of humans are no more important or of no greater moral concern than the similar interests of a tree or bacterium, but when moral standing comes in different colors or degrees, its meaning becomes vacuous and problematic. Does it mean anything to say, for example, that a tree has moral standing if it can justifiably be cut down to eliminate a threat to human life or to provide a family with firewood?

The only way to prevent a hierarchy of moral standing from developing and trivializing what it means to have standing is to treat the interests of all organisms, including human pathogens, equally. No ethicist is prepared to treat the "interests" all organisms have in living, etc., equally, and environmental ethicists have been forced to acknowledge that certain human interests must outweigh the interests of other life forms, including their interest in survival (e.g., Callicott 2003, Eckersley 1998).

The commitment to holistic entities in environmental ethics (e.g., species and ecosystems) also introduces what appear to be intractable practical and philosophical problems. Although holists acknowledge that we have duties to humans that can trump our duties to species and communities, the implications of a holistic approach to ethics cannot be escaped. All holistic ethics place the good of the whole (i.e., community, state, etc.) ahead of the welfare of individuals. In this respect, they resemble classically fascist doctrines that emerged in the mid-20th Century. Not surprisingly, environmental holism has in fact been dubbed "environmental fascism" (Regan, 1983).

Holistic ethics represent a radical departure from the normative ethics of human rights and concern for the welfare of individuals, and convincing the public that such a radical departure is ethically mandated presents enormous practical difficulties. There are also no holistic principles or rules for establishing the relative worth of different ecosystems is committed to an ethical position the validity of which cannot be objectively demonstrated. Unless all parties are willing to accept that such value exists, as a matter of faith or intuition, staunch advocates of intrinsic value theories can only presume to hold a superior moral position. Furthermore, even if it is agreed that species, etc. possess some form of intrinsic value, it must be demonstrated that such value is morally relevant or should be preserved. As noted previously, this has proven to be difficult.

Assuming insentient organisms, species, etc. are intrinsically valuable, there is still no logical way to define the nature of intrinsic value so that the concept is not eviscerated, at least as a practical matter, by the development of a hierarchical value system. Assuming all organisms have intrinsic value, the eradication of pathogenic organisms can only be condoned if certain human interests and values are placed ahead of the "interests" and intrinsic value of other species. As Regan (1992) has pointed out, such a hierarchical concept of intrinsic value is indistinguishable from the concept of instrumental value. Any hierarchical value system is also necessarily anthropocentric because humans must, by

species or ecosystems, but to argue that a one-acre pond on "the back 40" is as morally important as a similarly-sized hot spring in Yellowstone would strike most Americans as absurd. To argue otherwise reintroduces a host of problems that are encountered when moral standing comes in differing degrees or is only recognized under certain conditions.

Any ethic that emphasizes the "interests" of species, communities and ecosystems may also rest on a shaky foundation because these are incorporeal entities (i.e., they are scientific abstractions). Such entities have no natural or clearly defined boundaries in time or space, and terms like *species*, *community*, and *ecosystem* are difficult, if not impossible, to precisely define.

Even if it is agreed that species, communities and ecosystems exist in some real sense, it is entirely unclear what "interests," if any, they might possibly have. It is also unclear how the extinction of a species can be regarded as unethical when the killing of individuals is not, without appealing to human values and utility. The loss of a species represents the loss of a unique assemblage of genes, but this is also what is lost when individuals and populations are destroyed. The difference is one of scale.

The value of species to communities and ecosystems is certainly greater than the value of individuals, but appealing to the ecological importance of individual species is problematic. Not all species are likely to play a crucial role in the functioning of ecosystems and some species may be ecologically interchangeable. Even when a particular species plays a vital role in a community or ecosystem, it is impossible to say that its removal is good or bad without appealing to human values and/or ascribing to questionable beliefs concerning the nature of biological communities and ecosystems.

The recognition of intrinsic value in environmental ethics creates further difficulties. An environmental ethic based on the intrinsic value of insentient organisms, species, communities and/or

default, construct the hierarchy of intrinsic value or the rules allowing for dissimilar treatment.

Not all environmental ethicists believe that a valid environmental ethic must be non-anthropocentric, holistic, or embrace the concept of intrinsic value. These are dominant themes in environmental ethics, however, and the lack of consensus only highlights the fact that there is no widely-accepted alternative to a utilitarian environmental ethic.

Conclusions

The environmental challenges today's students will face are truly daunting, and a strong environmental ethic, capable of discouraging destructive environmental policies, is desperately needed. Unfortunately, environmental ethicists have not yet produced a widely-accepted "environmental ethic" policymakers can fruitfully apply to the variety of "real world" problems they face, and it is still unclear what the attributes of such an ethic should be.

The majority of environmental ethicists appear to believe that a *true* environmental ethic is one that makes other organisms and/or holistic entities, like species and ecosystems, subjects of direct moral concern. This definition has helped to establish and define the scope of environmental ethics as an academic discipline, but it is too narrow to serve the present and future needs of environmental advocates and policymakers. It is also alienating, and environmental biology programs that are dominated by such a view not only risk producing graduates that are ill-prepared to participate in public policy debates, they risk losing potential students and collaborators with an interest in law, economics, civil engineering, etc. As Soule and Press (1998) have pointed out, mainstream neoclassical economists, for example, are rare in environmental studies programs, and this is probably because they find their views and those of their peers and professors ideologically incompatible.

Environmental ethics should not be shaped by practical concerns alone, but arguments that appeal to the moral standing of trees, species and ecosystems have not proven themselves to be logically superior to their more traditional alternatives, and should not be taught as such.

Many environmental ethicists and educators unjustly equate anthropocentric ethics and utilitarianism, in particular, with destructive environmental policies and methods of valuation that lead to environmental degradation. This is extremely unfortunate because traditional utilitarian and rights-based ethics can be used to reject the very practices they are often blamed for endorsing, and resonate with most Americans. When anthropocentric arguments are used to defend destructive and unsustainable environmental policies, the benefits to humans are nearly always exaggerated and/or the costs of environmental degradation to present and future human beings are underestimated. This being the case, such policies can usually be shown to be unethical from a utilitarian perspective.

In many environmental studies and policy classrooms, utilitarian ethics are unquestionably discussed in a fair and unbiased manner, but the tendency to associate utilitarianism with environmental problems and "environmental ethics" with their solutions is too often readily apparent. In one otherwise well-written environmental studies textbook, for example, the "western worldview" is described as "human-centered and utilitarian. It mirrors the beliefs inherent in the 18th Century frontier attitude" and is associated with "a desire to conquer and exploit nature as quickly as possible." The same textbook goes on to describe the principles of deep ecology in panegyric terms. "Deep ecology stresses harmony with nature," and a "respect for life" (Raven & Berg 2004). Another popular text claims that the "ecocentric environmental worldview is the environmental wisdom worldview" and differs from the "planetary management worldview" in holding that some forms of economic growth are environmentally harmful and should not be encouraged; inaccurately implying that ecologically enlightened homocentric views fail to recognize this fact (Miller, 2003).

The field of environmental ethics is fecund, exciting, and unquestionably important, but it is also nascent, fluid, experimental, and apparently incapable of providing near-term solutions to the ethical dilemmas attendant to modern environmental problems. Its failure, as a practical discipline, is an admitted source of concern to many environmental ethicists and the direction the field has taken over the last 30 years is now being extensively reevaluated from within. Our academic institutions need to recognize that this process will take time and that a genuine environmental ethic should and must be defined, for now, in broad enough terms to include utilitarianism.

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