CHAPTER 14

ENVIRONMENTAL AND OTHER ETHICS

14.1 A turn toward values

Philosophers and social scientists (including economists) commonly distinguish value judgments from judgments of fact. It is a factual matter whether something happens or not, apart from any value attached to its happening. Value judgments, on the other hand, assign values to facts, and are not limited to facts that actually happen.

For example, it is a fact that the U.S. attacked Iraq in 2003, quite apart from whether that action is judged to be a good or bad thing. On the other hand, a pacifist might hold all acts of aggression to be wrong, including the attack in 2003 and any others that might or might not occur. To assess a thing as good or bad, right or wrong, proper or improper (and the like), is to make a value judgment.

Philosophers and social scientists also debate whether any field of study can be entirely free from value judgments. Hair-splitting aside, it seems correct to say that the first three chapters of this study deal with topics minimally involved with value considerations. Thermodynamics and biology, that is to say, are largely value neutral.

Chapters 4 and 5 deal primarily with matters of ecology. While ecology has ramifications that are heavily value-lade, the discipline itself is a branch of biology and hence relatively free of value considerations. Chapter 6, in turn, is primarily historical. As far as history is concerned, whereas values are involved in the choice of material, the events covered either happened or not regardless of any merit attached to their happening.

Concern for values begins to quicken in Part Two of the study. Chapter 7 treats the interaction between economies and the environment, a topic some economists evaluate as simply wrong-headed. Chapters 8 and 9 criticize common views about how the environmental crisis should be handled. And criticism of any sort involves evaluative discrimination between right and wrong.

Value considerations become increasingly prominent when we turn to the topic of economic growth. The discussion of Chapter 10 is motivated by the fact that most mainstream economists consider growth to be a good thing, which conflicts with the finding in Chapter 7 that growth exacerbates environmental damage. Chapter 11 takes up several reasons why mainstream economists think growth is a good thing and subjects these rationales to detailed criticism. And Chapter 12 is concerned mainly with ecological economics, a discipline quite open in its treatment of value considerations.

Part Three is occupied with values from start to finish. Desire for wealth, the central topic of Chapter 13, is basically a matter of assigning a high value to possessions and to means of obtaining them. For reasons examined in Chapter 13, this value attached to wealth is a primary source of our environmental crisis. Other values contributing to the crisis will be examined in subsequent chapters. The underlying theme to be developed in these remaining chapters is that the crisis cannot be resolved until certain values now operating in industrial society are replaced with others more conducive to environmental health.

Additional resources are needed for this final phase of the study. One reason is that the ecological problems we have been examining bring up issues of an explicitly ethical nature. Moral philosophy is a discipline that specializes in such issues. As we turn to the role of values in our environmental crisis, it is appropriate to consider what help moral philosophy might have to offer.

14.2 Moral quandaries

At this point in the study we have good reason to believe that the biosphere is losing its ability to support human society, and that human society itself is largely responsible for this impending breakdown. There is nothing novel in this assessment, but lack of novelty does not make it any less disturbing. There seems to be something deeply wrong about a course of human activity that threatens the demise of the very society that pursues it. Human self-destruction of any sort seems morally problematic.

Moral problems of another sort arise with statistics regarding distribution of wealth like those quoted previously (section 11.4). Approximately one-quarter of the world's population accounts for about four-fifths of its total energy consumption. The privileged one-quarter (mostly in industrialized nations) thus use about 12 times more energy per capita than people in poorer countries. Since energy consumption correlates directly with GNP (section 7.2), and since GNP is commonly taken as a measure of a country's overall standard of living, the implication is that people in industrialized countries enjoy standards of living many times higher than those in poorer areas.

The disparity is even greater between particular countries at opposite ends of the scale. The per capita GNP of the U.S. at the turn of the century, for instance, was more than $36,000, in contrast with $1,000 or less for 24 poorer countries (*CIA World Factbook,* 2001). Given per capita GNP as a relevant measure, the standard of living in the U.S. is an astounding 60 times greater than that of Ethiopia. Within this broad pattern there is a tendency for most of the world's wealth to become concentrated in the hands of a few individuals. In 1998, assets of the world's wealthiest 200 people (over a trillion U.S. dollars) added up to more than the incomes of the poorest 40% combined (BBC News, July 13, 1999). In 2006, the richest 2% owned more than 50% of the world's household wealth, while the poorest 50% of the world's total population owned barely 1% (BBC World Service, December 6, 2006)

This situation, to put it mildly, appears morally unjust. Our sense of moral injustice is aggravated by our emerging awareness that the economic practices responsible for making a few people exceedingly wealthy are bringing humanity's ecological support system to the point of imminent collapse. This all adds up to a picture of the world's human population sharply divided into rich and poor as the result of industrial and economic processes that have brought humanity itself to a point of imminent decline. In addition to being unjust, this boarders on stupidity.

The situation is aggravated by the fact that no nation or group of people has what might be called a "natural right" to more of the earth's resources than any other group. Beyond access based on force, there is no exclusive "ownership" of the resources we appropriate and convert into wealth. Apart from military power securing its possession, the earth is not ours to buy and sell. A deep moral quandary of our era is what ought to be done when a few people commandeer massive amounts of the earth's nonrenewable resources in support of lifestyles from which the rest are excluded, and in the process cause such damage to the biosphere that human society as we know it becomes endangered. For purpose of discussion, this will be designated moral quandary (1).

The inequities noted above concern the distribution of wealth among currently living people. Moral issues of a different sort arise when the range of people involved is extended to include future generations of human beings. It is one thing to question whether it is morally right for rich people to consume far more of the earth's resources than their poorer contemporaries. It is quite another thing to ask whether our great-grandchildren (rich and poor alike) have a just claim to a stock of resources no less extensive than that available to present human enterprise. Is there some kind of moral injustice in our pursuing lives of luxury by using up resources our descendents might need just to stay alive? Is it morally right for us to leave behind toxic wastes (such as spent nuclear fuel) in forms that might well prove lethal to future human beings? These and similar questions constitute moral quandary (2).

Yet another type of moral concern emerges when we begin to think about our current treatment of non-human species. Do we have a morally defensible right to wipe out entire species of living organisms as an indirect consequence of our economic profusion? Or do our moral duties include a mandate to treat other living things compassionately, in keeping with the compassion we often feel toward the individual sentient creatures we keep as pets? In considering the consequences of our economic and social practices, does the welfare of other species count along with our own? Such questions are typical of moral quandary (3).

These quandaries provide common ground for our subsequent discussion of alternative ethical theories.

14.3 Ethical theories

Questions of moral rights and duties fall within an area of moral philosophy known as *normative ethics*. Other areas of moral philosophy are *metaethics*, which deals with the meaning of moral discourse and the grounds of moral principles, and *descriptive ethics* dealing with moral values in effect within actual societies. Roughly speaking, descriptive ethics tells us about the moral practices of particular societies, metaethics explains (or attempts to explain) why moral principles have normative status, and normative ethics identifies (or attempts to identify) principles possessing that status.

Put another way, the task of normative ethics is generally understood as one of developing and refining rational systems of morality by which people are said to be bound as rational agents. One purpose of such systems is to provide criticism of moral practices in effect within particular societies, and when these are found wanting to show how they should be corrected. Rational systems of this sort are usually referred to as *ethical theories*.[1]

By standard accounts, ethical theory traces back to the time of Aristotle, and many varieties have developed during the subsequent 25 centuries. Ethical systems that have proved influential in the Western tradition can be classified in various ways, but any useful categorization will distinguish theories of at least four basic types. One type focuses on principles of obligation, such as Immanuel Kant's "categorical imperative" to the effect that one should act on a principle one wills to be universally binding on all rational agents. Another basic type focuses on the consequences of action, as in the case of J.S. Mill's maxim that one should act so as to bring about the most overall utility (happiness, pleasure, satisfaction). These two types are usually classified as *deontological* and *utilitarian* theories respectively. Utilitarianism will be more thoroughly discussed later in this chapter.

A different type of ethical theory that has recently become prominent is exemplified by John Rawl's *A Theory of Justice*, focusing on ways of reaching consensus regarding the equitable distribution of goods. Yet another is so-called "*virtue ethics*" which goes back to the ancient Greeks, but which recently has enjoyed a resurgence of interest. This theory focuses on traits of character that make for worthy membership in a well-ordered society.

Another general classification of ethical theories takes into account special fields of human endeavor to which they apply. Thus we can distinguish social ethics, political ethics, religious ethics, medical ethics, business ethics, and environmental ethics, along with various others. These two classificatory schemes are interactive. Someone interested in political or social issues, for example, might work primarily with theories of justice, while someone concerned with religious ethics might find deontological theories especially relevant. And as we shall see momentarily, there are historical as well as theoretical ties between environmental ethics and utilitarianism in particular.

14.4 Environmental Ethics

Despite theoretical affinities like those just noted, moral problems pertaining to the environment might be pursued in the context of any of the four basic types of ethical theory. Someone with Kantian leanings, for example, might try to come up with a "categorical imperative" to the effect that it is wrong to inflict distress on humans yet unborn. Or someone interested in virtue ethics might try to show that even-handedness is a virtue to be exercised with respect not only to humans but to other sentient creatures as well. And so forth for other types of ethical theory one might be inclined to pursue.

Given the broad range of interests involved in environmental issues, however, some moral philosophers think that environmental ethics requires its own special kind of theory. One example is a set of views known as *deep ecology*. According to its advocates, deep ecology is distinct from what they call "shallow ecology," which focuses on issues like air pollution and resource depletion. Whereas shallow ecology is concerned primarily with human well-being, and hence is anthropocentric (human centered), deep ecology stresses the importance of an ecocentric perspective. This latter perspective is a view according to which all life on earth is interrelated, and all living things have value on their own apart from their usefulness to human beings.

Deep ecology proposes essential changes both in the way we think of ourselves and in the way we think of the rest of nature. Instead of conceiving ourselves as isolated individuals, we should think of ourselves as integral parts of the ecosystems in which we are rooted. A consequence would be that we stop thinking of the rest of nature as a source of resources to be exploited for human purposes, and start thinking of it as a web of life in which we are inextricably connected. Thinking of the biosphere in this way, we would be no less concerned to maintain the health of environment than to preserve our own individual health.

Deep ecologists have been put on the defensive by violent forms of political activism (tree spiking, arson) aimed at protecting natural systems from human destruction. Some critics worry that deep ecology might lead to "eco-fascism" in the form of a centralized world government that would suppress individual freedom as a means of preserving the integrity of the biosphere at large. But these fears seem misplaced. To the extent that deep ecology has a political agenda at all, it calls for a decentralization of the excessive power presently exercised in environmental matters by international corporations and heavy industry.

Another movement in moral philosophy inspired directly by ecological issues is known as *ecofeminism*. In its earliest version at least, feminism was a school of thought devoted to analyzing the oppression of women and to devising strategies for women's liberation. Ecofeminism in particular is premised on the perception that men dominate women in much the manner that humanity dominates nature, which suggests that the best strategy on both fronts is to attack these forms of dominance together. Ecofeminists are divided, however, on the extent to which these two forms of subjugation are causally related. Some maintain that male dominance is the cultural source of our environmental problems, while others think that the two forms of dominance are separate in origin. A result is that some ecofeminists are concerned more with gender than with ecological abuses, while others are involved with environmental issues independently of their bearing on matters of gender.

These are only some of the forms environmental ethics has taken since it emerged as an academic discipline in the 1970s. What all versions have in common is a rejection of an exclusively anthropocentric view of nature and a propensity to think of nonhuman forms of life as having value in themselves.

14.5 The link between utilitarianism and moral issues of economic origin

Each in its own way, the quandaries identified in section 14.2 invite formulation in economic terms. Quandary (1) concerns the inequitable distribution of economic goods. Quandary (2) centers on the diminished availability of resources needed by future generations for their economic well-being. And quandary (3) pertains to the damaging effects on the biosphere of our current economic practices. Given this common bearing, we may tend to think that utilitarianism, among the various ethical theories reviewed previously, has most to offer toward the resolution of these economically based quandaries. This is so for at least three distinct reasons.

One reason is that John Stuart Mill, a founding father (with Jeremy Bentham) of utilitarianism, was also an important contributor to early economic thought. Mill's *Principles of Political Economics*, published in 1848, was the leading textbook in economics for the remainder of that century (section 10.4).

Another is the close link between cost-benefit analysis as practiced by economists and the so-called "hedonic calculus" integral to utilitarian theory. While cost-benefit analysis can take many forms in economic decision-making, it boils down to a matter of assessing the costs of one good thing (the benefit) in terms of other good things that must be given up to obtain it. As we shall see presently, a very similar procedure of weighing costs (disutilities) against benefits (utilities) is required to comply with the utilitarian maxim that all action should be aimed at bringing about the greatest overall utility.

A third reason is the prima facie connection between the view, advanced by some utilitarians, that people naturally act to maximize their own pleasures, and Adam Smith's famous "Invisible Hand" by which the market supposedly channels the self-interested behavior of individual participants to serve the best interest of society overall (section 10.3). The view that people naturally act for their own greatest pleasure was put forward at the beginning of Jeremy Bentham's Introduction to the *Principles of Morals and Legislation* (1789). To someone who agrees with Bentham that the overall interest of a community is identical to the sum of its individual interests, Smith's "Invisible Hand" is nothing more than the summating process by which individual benefits are combined in the generalized form of the community's best interest. This reductionist interpretation of the common interest, found in the Introduction of Bentham's *Principles,* was also held by his friend, James Mill, father of John Stuart.

If any ethical theory holds promise of helping us come to grips with the moral quandaries identified above, utilitarianism thus appears—at least initially—to be the most likely candidate.

14.6 Utilitarian theory

For the rest of this chapter, it will be useful to characterize a given ethical theory under discussion with respect to: (i) a characteristic maxim or moral imperative, (ii) its understanding of the good to be promoted by morally correct action, (iii) its recommended manner of determining what actions are morally correct, and (iv) the range of interests it takes into account in determining morally correct action. Following is a characterization of utilitarianism with respect to these points.

(i) The characteristic maxim of utilitarianism is well known. A standard formulation is that an action is right when it results in the greatest overall utility or least overall disutility—alternatively, when it results in the greatest ratio of utility over disutility. In this context, the term 'utility' means roughly what is beneficial or satisfying. The moral imperative of utilitarianism, accordingly, is that one ought to act so as to bring about the greatest overall benefit or satisfaction.

(ii) Utilitarians differ on what types of satisfaction ought to be taken into account. Bentham's theory centered on the maximization of pleasure and the minimization of pain, which he thought to be the two feelings primarily responsible for shaping human behavior (section 14.5). While not excluding satisfactions of this more hedonic sort, Mill extended the class of morally relevant benefits to include affections like contentment and aesthetic enjoyment as well. In any case, the good to be promoted by moral action boils down to happiness in the form of satisfying experiences.

(iii) A distinctive feature of utilitarian theory is the so-called “hedonic” or “utilitarian calculus” needed to tally up satisfactions and dissatisfactions resulting from (or likely to result from) a given course of action. In contemplating the relevant consequences of possible future actions, the morally responsible agent would have to arrive at specific ratios (total utility/disutility) by which alternative courses of action could be compared. The agent’s moral duty, of course, would be to undertake courses of action yielding the highest possible hedonic ratio. And in evaluating the degree to which actions already taken comply with the principle, one would have to compare their hedonic ratios with those of other courses of action that might have been pursued instead.[2]

It is this purported use of the hedonic calculus, as already noted, that anticipates contemporary use of cost-benefit analysis in economic decision-making. In lieu of comparing potential costs and benefits in monetary terms, however, utilitarianism theorists would have us compare courses of action in terms of their consequent satisfactions and dissatisfactions.

(iv) The fourth feature of utilitarianism to be considered is the range of individual interests that count in determining what actions are morally correct—that is, in calculating overall satisfaction and dissatisfaction resulting from a given course of action. In standard utilitarianism, this boils down to the interests of sentient creatures whose affective states count in applying the hedonic calculus. Early versions of the theory seem to have taken for granted that the class of individuals whose interests count (i.e., who have moral standing), was limited to human beings with whom the agent has political, social, or business dealings (often including slaves).

In more recent utilitarianism literature, however, the range of moral standing has been extended by some authors[3] to include other species as well. At one extreme, moral standing might be limited to the individual agent, which would amount to a form of egoistic hedonism. At the other, it might be stretched to include all sentient creatures without regard to species. The task then becomes one of determining which creatures are sentient, a daunting version of the so-called “problem of other minds.” (Dolphins, dogs and cats, almost certainly; sparrows and mice, probably; worms and insects, probably not; but who can be sure where to draw the line?)

14.7 Utilitarianism’s response to the quandaries

Thus conceived, utilitarianism appears to be especially well suited as a context for working through the moral quandaries described above. In addressing the question whether it is morally unjust for people in the U.S. to enjoy a per capita income as much as 60 times greater than people in impoverished countries, for example, one’s first step as a utilitarian would be to make sure that the range of morally qualified individuals includes all of the populations involved. The next step would be to prepare figures showing overall ratios of satisfaction over dissatisfaction accompanying various levels of difference in distribution of wealth. In the likely event that a 60-fold difference does not provide the greatest overall ratio, the upshot would be that this difference in distribution is immoral. The very substantial question remaining would be what action should be taken to achieve the maximum ratio, and thus to remedy the injustice.

In dealing with the issue whether it is morally acceptable for wealthy people now living to use up resources that might be sorely needed by future generations, similarly, the utilitarian’s tactic would be first to determine (presumably by theoretical argument) whether future people have the requisite moral standing. If indeed they do, the next step wold be to figure out some way of representing them in the hedonic calculus. What corrective action is called for would depend upon the results.

In response to moral problems regarding our treatment of other species, in turn, one would first consider what might be done to assure that they have moral standing. Whether or not certain aspects of this treatment (e.g., killing animals for meat) are morally correct would hang upon the results of subsequent hedonic calculations.

14.8 Why the utilitarian response is unhelpful

Tidy as this may appear at first, there are several respects in which utilitarianism's response to these quandaries is unsatisfactory. One is its notorious inability to deal satisfactorily with problems of justice. A stark example is its response to a hypothetical situation such as a small group of people being subjected to lives of unalleviated misery as a condition of extensive benefits enjoyed by the rest of society. By hypothesis, the overall ratio of pleasure over pain resulting from this arrangement exceeds that of any other situation in which the "sacrificial" group are allowed relief from their constant suffering. It thus becomes a moral duty to maintain this arrangement, despite the glaring injustice inflicted on the unfortunate few.

Our current situation of economic disparity among nations admits a comparably sadistic twist. Imagine that hedonic calculations have shown (not unexpectedly) that the current distribution of goods among rich and poor yields a relatively low ratio of overall utility to disutility, due to hardships borne by large populations in underdeveloped countries. Other calculations show that the ratio would peak if disutilities of the poor did not have to be taken into account. Since disutilities of dead people don't figure in calculations determining moral correctness of future actions, peak ratios could be achieved if all poor people were eliminated. The course of action to which more affluent people are morally bound, accordingly, is to aid and abet the (least painful) demise of these impoverished populations. Given this scenario, the developed world would enter a golden age of utilitarian morality without poor people around to depress the ratio.

Another type of problem besets any attempt to apply the hedonic calculus to future generations. By definition, pleasures and pains that might be experienced by people in the future do not yet exist. These experiences have no duration, no degree of intensity, and no other features by which pleasures and pains are supposed to be compared in calculating hedonic ratios. But since the hedonic values of such experiences cannot be assessed, they cannot be taken into account by the hedonic calculus.

It is of course possible to make speculative estimates ("educated guesses") about pleasures and pains future people are likely to experience. Suppose estimates were made assigning specific values to the hedonic experiences of 9 billion people (another guess) that might occupy the Earth when our great-grandchildren take over. A further problem then arises regarding how many further generations should be taken into account.

As far as anyone knows, human beings in some form will be around indefinitely (even if society as we know it collapses), and will continue to have experiences of pain and pleasure not unlike our own. In calculating the hedonic interest of any given future generation, it would be arbitrary to assume that this is the last generation worthy of moral consideration. A consequence is that, for purposes of hedonic calculations, there is no final generation to be considered, and hence no limit to the accumulation of hedonic values on either side of the ratio. Both numerator (representing pleasures) and denominator (representing pains) "go on to infinity," rendering the ratio mathematically meaningless.

Problems like these add up when one tries to factor the interests of other species into the calculus. First the issue has to be settled of which species have moral standing. Then comes the problem of characterizing the (actual) experiences of the qualifying creatures in terms enabling comparison with our own. Having solved this, one would face the further question of how to factor the (currently unfelt) experiences of future animals into account. And then the problem would arise of how many generations of future animals deserve moral consideration. Generations beyond number would seem to qualify, threatening to render the calculation of hedonic ratios useless for moral decision-making generally.

As anyone acquainted with moral philosophy knows full well, utilitarians are a resourceful lot; and there is no doubt that responses to problems like these can be and have been devised. Nonetheless, the existence of such problems shows that utilitarianism is less helpful than at first appears in resolving quandaries like those above. We turn now to a more general problem in this regard, one affecting not just utilitarianism but other systems of normative theory as well.

14.9 Limitations of normative ethics in solving practical moral problems

A distinction has already been made between descriptive ethics and normative ethical theory (section 14.3). Descriptive ethics deals with moral values in force within actual societies. Given that incest is prohibited among the Trobriand Islanders, for example, this is a fact to be included in a description of the moral values operating in that society.

Normative ethics, by contrast, is concerned primarily with theories enjoining norms and principles to which moral agents ought to be held accountable. In arriving at these injunctions, the theorist typically pays little attention to moral values actually functioning in specific social contexts. In arguing for the maxim enjoining action bringing about the greatest good for the greatest number, for example, utilitarian theorists do not undertake surveys of socially immanent norms and values. Ethical theorists are not involved in descriptive ethics.

Unlike most theories in the physical science, an ethical theory has neither explanatory nor predictive powers. It cannot explain the presence of moral norms found in particular social circumstances, nor anticipate how those norms might change as circumstances vary. Someone seeking to understand why ritual suicide is morally approved in some societies but condemned in others, for example, might look to sociology or anthropology for help but probably not to theoretical ethics.

By the same token, an ethical theory is neither verified nor disconfirmed by empirical data like those reported in descriptive ethics. To the extent that a given theory is reliant on empirical data at all, these data are likely to be drawn from the "moral intuitions" of the theorists involved. An ethical theory might be attacked by bringing to bear intuitively plausible counter-examples it has difficulty accounting for. And it might be defended by showing how seeming counter-examples can be accommodated in a coherent manner. But in arguments for or against the theory, facts recorded by descriptive ethics are largely irrelevant.

In short, normative ethics is not a factually-engaged discipline. Accordingly, normative ethical theories are powerless to alter moral norms and values that happen to be operating in particular social contexts. To be sure, advocates of this or that ethical theory might be rhetorically effective in persuading a segment of the general public to take their views seriously. A case in point is the growing influence of the animal-rights movement. But any change in social values will be due to the rhetoric, rather than to any inherent power of the theory itself to legislate values that are socially in place.

A consequence of this lack of factual engagement is that ethical theory has little to offer by way of resolving moral quandaries like those laid out previously. Inequities in distribution of wealth might be alleviated if there were effective values operating in the business community prohibiting profit made to the detriment of others. And hardships caused to future generations might be reduced if people in industrialized societies valued the interests of their more distant descendents no less than those of their children and grandchildren. Whatever the moral anomaly in question, it seems safe to say that values and norms of action could be specified which would mitigate the anomaly if they were effectively in place. The point is that ethical theory in itself cannot provide norms and values with the standing necessary to be practically effective.

To drive the point home, let us suppose that the quandaries above would be resolved if there were a moral principle in force prohibiting anyone from consuming more natural resources than needed to lead a moderately comfortable life. Let us suppose further that all major ethical theories had converged on this principle, with the result that the entire profession of theoretical ethics is ready to affirm that it is morally wrong to consume more resources than needed for a comfortable existence. As far as moral norms actually in place are concerned, however, nothing changes when the ethical theorists arrive at their agreement. There was no such principle in effect before this result, and nothing changes in this regard when the agreement is reached. Ethical theory has no competence to bring moral values and norms of action into practical effect.

When our imaginary theorists proclaim that it is morally wrong to consume more than the necessary resources, this pronouncement lacks descriptive force. It is not a description of what is actually the case. A less misleading way of putting the pronouncement would be to the effect that the moral principle in question *ought* to be in effect. Theoretical deliberations ("moral intuitions," counter-examples, and all) have indicated that the principle would have good results if actually in force. The pronouncement couched in terms of what is "morally right" or "wrong" is basically a recommendation about what *should* or *should not* be the case.

Along with competing ethical theories, utilitarianism offers advice about moral principles (e.g., the utilitarian maxim) and procedures (e.g., the hedonic calculus) its advocates think *should* be operative in actual society. Given the amount of time and rational effort these thinkers have devoted (and continue to devote) to such issues, their advice certainly should be taken seriously. In view of the general disinterest among ethical theorists in the social values that have led to our moral quandaries in the first place, however, it is unclear how helpful this advice might be in resolving these anomalies. More useful advice might be forthcoming from a moral perspective more directly in touch with the actual moral values involved. The rest of the chapter is occupied with such a perspective.

14.10 Leopold's Land Ethic

Although its author was not a professional moral philosopher, Aldo Leopold's *A Sand County Almanac* is probably the most-cited work of the 20th Century in the burgeoning field of environmental ethics. Of particular relevance is a relatively brief section entitled "The Land Ethic." As befits Leopold's actual profession of wildlife conservation, this writing is concerned with the proper relation between the human race and other species in the biosphere.

The characteristic maxim of the Land Ethic is succinctly stated in the following much-quoted passage:[4]

> 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.

Each phrase in this maxim calls for careful consideration. In the process, we will have occasion to discuss other features of the Land Ethic, continuing in the format adopted for utilitarianism above: specifically, (ii) its understanding of the good promoted by morally correct action, (iii) its recipe for determining what actions are morally right in particular circumstances, and (iv) the range of interests it considers relevant in making this determination.

The phrase 'tends to preserve' stands at the center of Leopold's maxim. Whether a thing is right or wrong depends on the consequences it tends to produce. To qualify as right, a thing does not have to produce the relevant consequences invariably; it is enough if it *tends* to produce them—that is, produce them on most relevant occasions. In this respect, the Land Ethic is similar to rule-utilitarianism,[5] which prescribes acting in ways that as a rule produce the most useful consequences.

A departure from utilitarianism is that right action, according to the Land Ethic, is aimed not at bringing about a desired state of affairs (such as the greatest good for the greatest number) but rather at *preserving* something already present. The sense is that the biotic community is able to maintain its "integrity, stability, and beauty" quite well when left to itself, and that our duty as humans is to interfere with that process as little as possible. (Leopold, after all, was a wildlife conservationist, and conservation is a matter of leaving things as they are.)

Of particular interest is the state we are exhorted to preserve. Integrity, stability, and beauty enter into the maxim as three conditions that stand or fall together. There is no hint that right action might favor stability over beauty on one occasion, and beauty over integrity on another. The three rather are manifestations of a healthy land-community that are mutually enhancing. What is right, fundamentally, is what keeps the land healthy.

According to the Land Ethic, in brief, (ii) the good promoted by morally right action is ecological health, as manifested in the "integrity, stability, and beauty" of the biotic community at large. In contrast with utilitarianism, the consequences that render a thing right or wrong have little to do with the satisfaction of individual people. Like deep ecology, the Land Ethic is nonanthropocentric. While individual humans might tend to find some amount of satisfaction in their roles within the biotic community, such satisfaction is not a goal with which the Land Ethic is primarily concerned.

This brings us to the topic (iii) of how morally correct action is to be determined on particular occasions. Instead of a comparative tally of competing utilities and disutilities, the Land Ethic's recipe for discerning what is morally right involves the perceptual skills of ecology. As Leopold says explicitly, ecological perception “does not necessarily originate in [academic] courses bearing ecological labels; it is quite as likely to be labeled geography, botany, agronomy, history, or economics” (262). However labeled, ecology for Leopold is “the perception of the natural processes by which the land and the living things upon it…maintain their existence” (290). At its best, ecological science works “a change in the mental eye” (291); and it is the mental eye thus transformed that discerns what is right and wrong in particular circumstances.

A further contrast with utilitarianism concerns (iv) the range of interests relevant in determining right action. Whereas the utilitarian maxim prescribes the greatest overall total of individual satisfactions, the maxim of the Land Ethic is aimed at the well-being of a collective entity. Thus while the utilitarian theorist must take a stand on the range of individuals whose interests count in hedonic calculations, the range of interests relevant to the Land Ethic is built into it from the beginning. In determining what is morally right, we are called upon to protect the interests of the land-community as a whole.

We should note finally that Leopold’s conception of moral correctness applies not just to human actions or to rules directing them, as does that of utilitarianism, but rather to anything that might affect the health of the biosphere overall. A thing is right, the maxim says, when it tends to maintain and to support land-health; and this might apply to legal systems, social institutions, and corporate policies, as well as to individual actions and practices. It might even apply to actions withheld, as when one fails to take steps that ought to be taken to preserve the health of the biosphere humanity shares with many other species.

14.11 The Land Ethic’s response to the moral quandaries

By way of reminder, the three moral quandaries described at the beginning of the chapter are: (1) whether it is morally acceptable for a few people to maintain lifestyles unavailable to the rest by taking over a lion's share of the earth's resources at enormous cost to the biosphere, (2) whether we are morally accountable for the wasteful use of resources that might be vital to future generations, and (3) whether our extensive destruction of other species can be morally justified. We turn now to consider what the Land Ethic can contribute to our attempt to think through these quandaries.

One thing to note immediately is that this ethic has nothing to say explicitly about the justice (or lack thereof) involved in the enormous disparities of wealth among economic systems. Not only is it silent on matters of social justice generally, but it is similarly uninformative about moral relations among individual persons. To Leopold, such observations would not count as criticisms. The Land Ethic he called for is not a comprehensive ethical theory. Put in his words (238, 239), it should be conceived instead as "a mode of guidance" for dealing with problematic ecological situations, to be added to moral guidelines already in place dealing with "the relation between individuals" (the Mosaic Decalogue is mentioned as an example) and "the relation between the individual and society" (e.g., the principles of democracy). The Land Ethic was to be an extension of these previous guidelines "to land and to the animals and plants which grow upon it."

Despite its lack of an explicit response to quandary (1), however, the Land Ethic's verdict on massive economic disparity is loud and clear. Without systematic exploitation of the biosphere for human gain, large-scale economic inequities of this sort would be unlikely to occur. Judged by the Land Ethic, this exploitation is a basic moral transgression itself, in view of the ecological damage that inevitably results. By extension, economic and social inequities resulting from such exploitation are morally blameworthy in turn, and should be eliminated along with their causes. If the exploitative practices of large industrial powers were curbed, as the Land Ethic prescribes, economic disparities among nations would tend to disappear as well.

The Land Ethic's response to the other quandaries is more direct. As far as future generations of humans are concerned, we can be quite certain that they would benefit from a healthy biosphere and would find living in an unhealthy biosphere harmful. Thus our general duty to preserve the health of the biosphere is in effect a duty to act in ways that serve the interests of future generations. In the context of the Land Ethic, we are morally accountable for profligate consumption of resources other people might need, either now or in the future, because profligate use of resources is morally wrong given the ecological damage it usually produces.

As far as our treatment of other species is concerned, we are morally obligated under the Land Ethic to deal with other members of the biotic community in ways conducive to its overall health. According to recent estimates (section 5.9), human industry is responsible for an ongoing annihilation of biological species at thousands of times greater than the normal background rate. This massive destruction of species is a major factor in the dangerous erosion of ecological stability now underway. From the standpoint of the Land Ethic, the practices responsible for this destruction are morally unjustifiable and should be eliminated.

14.12 The practical significance of this response

As already suggested, Leopold's Land Ethic is not a comprehensive ethical theory, on a par with Kant's rationalistic deontology or the utilitarianism of Bentham or Mill. If it were, it would remain largely disengaged from our current environmental predicament. It would provide little insight into how this predicament arose, and it would have little advice to offer regarding appropriate responses. This is because our current environmental plight was brought about in large part by values currently operating in industrial societies, a matter with which ethical theory is not typically concerned.

Moral philosophers relegate the study of values operating in actual societies to the field of descriptive ethics, which they are usually content to leave to anthropology and sociology. Leopold's Land Ethic fits in somewhere between normative ethics and descriptive ethics. It is not normative because it does not constitute an ethical theory. Its orientation is empirical rather than deductively systematic. And it is not descriptive because the values it is concerned with are not typical of current societies. Whereas descriptive ethics is occupied with values playing active roles in actual societies, the Land Ethic is concerned with values that should be playing active roles but at present are not.

The Land Ethic, in short, is an assortment of ecologically oriented values that are being recommended as replacements of various environmentally damaging values currently operating in industrial society. Reasons recommending this replacement are based upon an empirical understanding of how ecosystems function rather than on abstract principles of ethical theory.

In a memorable sentence at the end of his book, Leopold characterizes human history as a series "of successive excursions from a single starting-point, to which man returns again and again to organize yet another search for a durable scale of values" (279). The "starting point" to which he refers is a stage in human affairs (unfortunately recurrent) where humankind begins haltingly to put together a viable civilization. As scholars of social history know all to well, many such attempts have foundered because of environmental degradation (e.g., the Inca civilization, and that of the Easter Islanders). The "durable scale of values" to which Leopold refers is one which curtails human actions that are environmentally destructive. His Land Ethic was intended to have that effect.

What would it be for values of this sort to be socially in place? And how might such values work to protect the environment? The discussion continues in the following chapters by addressing these questions.

Notes

1. Unlike scientific theories, ethical theories are not held accountable to experimental (or other empirical) data. They are neither confirmed by disconfirmed by empirical circumstances. This is one reason why ethical theorists are generally disinterested in the findings of descriptive ethics. Ethical theories make no predictions about empirical states of affairs on the basis of which the theories could be established as warranted or otherwise. Whether a given ethical theory is right or wrong is established primarily by rational argument, often supported by "moral intuitions" brought to bear by individual theorists. The "moral intuitions" exercised by ethical theorists are comparable to what economists, following Schumpeter, sometimes call "preanalytic visions" (section 12.4).

2. An obvious assumption here is that affective states like pleasure and pain are subject to quantitative comparison. Bentham thought that affective states could be compared with respect to such features as intensity, purity, and duration, as well as to relational properties such as likelihood of being followed by similar affections. Features such as these can be scaled in terms of more and less, if not compared directly by numerical measures.

3. For example, Peter Singer in his *Animal Liberation*: *A New Ethics for our Treatment of Animals* (Random House, New York, 1975).

4. *A Sand County Almanac* has sold well over a million copies in many editions. The quotation is from p. 262 of the 26th printing by Ballantine Books in 1989. Other page numbers cited in the following text are from the same edition.

5. In contrast with act-utilitarianism, which applies the maxim of greatest utility to individual acts, rule-utilitarianism applies the maxim to general rules of action, which are then used to determine what ought to be done in particular circumstances.