5
Biocentrism

Obligations have no meaning without conscience and the problem we face is the extension of the social conscience from people to land.

—*Aldo Leopold*

We are searching for an ethics that appropriately "follows nature."

—*Holmes Rolston III*

Conformity to nature, has no connection whatever with right and wrong.

—*John Stuart Mill*

Kirkpatrick Sale begins his *Dwellers in the Land* with the observation that the ancient Greeks viewed the "earth mother," or Gaia, as an almost living, purposeful organism.[1] Like many other environmental writers and activists, Sale finds this image of a live earth to have profound moral implications. If the earth is an organism, or a superorganism, it must command our moral respect in a much more powerful and compelling way than if it is inert material. In the former case, the earth has the moral status not only of a living being, but perhaps of the most significant living being—the mother earth who contains within her life the lives of all other creatures. In the latter case, the earth has only instrumental value for the forms of life found upon it. The "Gaia thesis" has become an important shorthand in popular environmental literature for the superior moral status of the earth as a whole over all particular forms of life, our own included. David Oats exaggerates only slightly when he refers to the idea of the earth as a superorganism as the "major myth" of ecologism.[2]

For environmentalists like Sale, what actually transforms this myth into empirical description is the development of the Gaia thesis by scientists such as J. E. Lovelock and Lewis Thomas. As Thomas writes, "Viewed from the distance of the moon, the astonishing thing about

the earth, catching the breath, is that it is alive. . . . It has the organized, self-contained look of a live creature."[3] Lovelock has attempted to give the metaphor scientific substance by developing the hypothesis that the earth is, in fact, an autonomous system that can literally be considered alive: "The entire range of living matter on Earth, from whales to viruses, and from oaks to algae, could be regarded as constituting a single living entity, capable of manipulating the Earth's atmosphere to suit its overall needs and endowed with facilities and powers far beyond those of its constituent parts."[4] For Lovelock, the "biosphere is a self-regulating entity with the capacity to keep our planet healthy by controlling the chemical and physical environment."[5] Rather than being a delicate and static balance of natural relationships, the biosphere is actually a very "tough, robust, and adaptable entity" that is constantly evolving and adjusting to new conditions within the overall system.[6]

Sale sees Lovelock's scientific work as a reinforcement for the ancient appreciation of the earth as a living being—a confirmation of a deep environmentalist morality. In light of Lovelock's and Thomas's work, Sale concludes his book by arguing that "we must learn to make the idea of the goddess Gaea an intimate part of—no, I want to say, in some sense *the whole of*—our lives, so that there is no moment of our passage, no point in our decisions, when we are not conscious of her imperatives, her needs, her treasures."[7] In Sale's view, Lovelock's Gaia thesis suggests that there is an intrinsic value and moral integrity to the natural world that we have too frequently ignored, but that can now be rediscovered to inform a new and progressive environmentalist lifestyle, commitment, and social order.

Unfortunately, it is not at all clear that Sale has drawn the correct moral lesson from Lovelock's postulate. In fact, Sale's argument is startlingly at odds with the ecological views of Lovelock himself. Lovelock not unreasonably concludes that his own ideas suggest that human degradation of the environment is not an especially serious threat to the overall health of the living earth. If Gaia is a resilient living system, "the evidence for accepting that industrial activities either at their present level or in the immediate future may endanger the life of Gaia as a whole, is very weak indeed."[8] The earth, quite simply, is capable of taking care of itself. Lovelock argues that the concept of pollution is "anthropocentric and may even be irrelevant in the Gaian

context."[9] The environmental disturbances of the biosphere produced by modern civilization merely cause the earth to readjust to accommodate them. This does not mean that we may not harm ourselves by damaging our current niche within the ecosystem, but this is very different from viewing our activities as a threat to the "life" of the earth. Lovelock is actually quite skeptical about environmentalists (he refers to environmental politics as a "lush new pasture for demagogues"[10]), and he is confident that industrial society is capable of recognizing environmental problems and correcting them: "When urban industrial man does something ecologically bad he notices it and tends to put things right again."[11] In short, the primary scientific exponent of the Gaia thesis draws environmental conclusions that are much less disturbing for contemporary society than those drawn by environmentalists like Sale.

The lesson, of course, is that even if Lovelock's hypothesis is correct (which is by no means clear[12]), the moral inferences are far from self-evident. If the earth is a resilient superorganism, it may suggest the need for a profound humility and a strong commitment to preservationism out of respect for the natural environment—or it may point to a much more complacent conclusion about the ability of this superorganism to protect itself regardless of our actions. Either view appears to be consistent with the Gaia thesis, though neither appears to be demanded by it.

The problem that Sale is trying to solve has become central to contemporary environmental ethics: What, if any, intrinsic value can be found in the natural world? For those who wish to break with the progressive conservation tradition, it is essential to locate values in nature that are of greater moral significance than the instrumental or utilitarian ones emphasized by Pinchot and his heirs. If nature can be reasonably thought of as the bearer of intrinsic value, not as deriving all of its worth from human utility, then the case for respecting and preserving nature becomes much stronger.

A number of different approaches have emerged to demonstrate the inherent value of nature. We have already examined the goal of deep ecologists to develop an understanding of the moral status of nature that breaks qualitatively with the view found in the progressive conservation tradition—as they see it, to replace anthropocentrism with biocentrism. Although the core of their project is to discover a deeper, noninstrumental value in nature, the attempt is marred by its apparent primary interest in human self-realization and by its ultimate appeal not to reason or argument but to the incommunicable experience of nature. Both of these problems, it should be remembered, arose when deep ecology secularized and modernized Muir's essentially religious worship of the natural world.

Although deep ecology gets sidetracked in its effort to discover the intrinsic value of nature and the philosophical structure of a biocentric worldview, these questions have been investigated much more rigorously by other environmental philosophers. Recently, for example, Eugene Hargrove has suggested that the intrinsic value of nature is to be found in its aesthetic qualities: "The duty to promote and preserve beauty arises out of the recognition that beauty, whether experienced or not, is a good."[13] Hargrove's argument is that contemporary attitudes toward wilderness preservation have evolved from the aesthetic sensibilities of nineteenth-century scientists,[14] and this intellectual heritage provides the foundation for a satisfactory environmental ethic. If we regard natural objects similar to the way we regard works of art, we will avoid the crudely utilitarian understanding of nature found in the progressive conservation tradition. "If natural objects are once again treated like art objects, as intrinsically valuable entities, the dilemma of whether or not to consume natural beauty disappears."[15]

Hargrove's substantive project is twofold. First, he wishes to demonstrate that our intuitions about the importance of preserving natural objects are part of a long and respectable intellectual tradition. Second, he hopes to provide at least a preliminary philosophical justification for these aesthetically based sentiments. For the purposes of this study, however, it is sufficient to note that even if Hargrove's theory is persuasive, it is quite limited in its applications. It has the most potential when addressing concerns about unique and spectacular natural objects—the Grand Canyon, for example. It is much less useful when applied to the common and mundane in the natural world. Although Hargrove makes an unconvincing attempt to demonstrate that there are no negative aesthetic qualities in nature,[16] and thus that all natural objects fall under the aegis of his environmental ethics, he also concedes that there are qualitative aesthetic differences between various natural objects, leading to qualitatively different moral obliga-

tions toward them.[17] Hargrove's solutions are an outgrowth of his own experience in trying to protect an unusual natural object—Onondaga Cave in Missouri[18]—and his theory holds promise for defending the preservation of only the very rare and the very beautiful in the natural world.

For those environmental theorists who wish to develop an understanding of the intrinsic value of nature that has broader relevance, there are two major options in the contemporary literature. They can either, like Sale, base a theory of intrinsic value and an environmental ethic on the modern science of ecology, or they can establish an environmental ethic on deontological moral principles. Holmes Rolston III and J. Baird Callicott have followed the first route, and they confront a difficulty similar to that faced by Sale: how to generate moral principles from supposed scientific facts. Paul Taylor's *Respect for Nature* is the most sophisticated example of the second approach; his obstacle is adequately justifying the foundations of the moral principles he defends. For all of these theorists, the task is first to locate what they take to be intrinsic values in nature, and then to build their environmental ethic on these values. All can be seen as seeking to provide philosophical rigor to the pastoral tradition of Thoreau and Muir, which is committed to the view that nature's value and moral significance are greater than its commercial or instrumental value.

Holmes Rolston claims, in his *Environmental Ethics*, that "no education is complete until one has a concept of nature, and no ethics is complete until one has an appropriate respect for fauna, flora, landscapes, and ecosystems."[19] Rolston thus maintains that even the greatest figure in Western philosophy, Socrates, could learn a good deal from John Muir's studies in the "University of the Wilderness."[20] J. Baird Callicott, too, in his collection of essays, *In Defense of the Land Ethic*, believes that conventional Western philosophy must begin to focus on the "broad human ethical responsibility to the nonhuman natural world"; this "radical proposal may be found latently present in some of the essays of John Muir, but Muir neither fully articulated nor fully grounded it, as Leopold did, in a supporting matrix of ideas."[21] Both of these theorists believe that environmental ethics, as it is emerging from the ideas of Muir and Leopold, constitutes a necessary and radical challenge to our philosophical inheritance. Rolston writes that environmental ethics "is both radical and revolutionary,"[22] and Callicott argues that environmental philosophers are engaged in "nothing less than a sweeping philosophical overhaul—not just of ethics, but of the whole Western world view." Their goal "is to build, from the ground up, new ethical (and metaphysical) paradigms."[23] The task is to give a reasoned, philosophical account of the biocentric views presented in essentially religious terms by Muir (and more recently by the deep ecologists).

The authors' first concern is to defend the notion of the intrinsic value of nature. Callicott and Rolston are both hostile to the extension of liberal protections (such as rights) to the natural world, and they are equally suspicious of sentimental appeals for the humane treatment of nonhuman life.[24] Rather than attributing human value to nature, these theorists argue that the issue is, in Callicott's words, to "discover . . . the metaphysical foundations for the intrinsic value of other species."[25] Rolston likewise asserts that he will derive his notions of duty toward nature from the discovery of the values in nature.[26] It is of supreme importance for both writers to locate and corroborate the grounds on which the natural world is to be seen as valuable in its own right, apart from its usefulness to people and without anthropomorphizing it.

Although the details of their theories differ, Callicott and Rolston agree that the basis for a theory of the intrinsic value of nature must be the contemporary science of ecology. "The philosophical context of the land ethic and its conceptual foundation," states Callicott, "is clearly the body of empirical experience and theory which is summed up in the term *ecology*."[27] Likewise, Rolston explains the method of his study by arguing that "we move from believed facts to believed evaluations and thence to believed duties."[28] Rolston and Callicott concur that any satisfactory environmental ethic must be constructed on a generally recognized body of scientific knowledge, because, as Rolston puts it, they are searching for an ethic that "appropriately 'follows nature.'"[29] If these theories are to succeed, they will have to demonstrate that the values of nature can actually be deduced from the facts of nature as we understand them.

Although Callicott seeks to establish a metaphysical foundation for the intrinsic value of other living things, his theory is actually more

sociobiological. His stated goal is to give a theoretical account of Leopold's "land ethic," and to this end he draws on and combines three distinct elements. First, he defends what he understands to be David Hume's moral theory, which is rooted less in reason than in the moral sentiments. If reason is the slave of the passions, then it is essential to ground morality in these passions (or sentiments) in order for morality to have any relevance for human life. Second, Callicott links this Humean view of the nature of ethics to a Darwinian conception of social evolution. For Callicott, ethical life is prerational and evolutionary: "Reason appears to be a delicate, variable, and recently emerged faculty. It cannot, under any circumstances, be supposed to have evolved in the absence of complex linguistic capabilities which depend, in turn, for their evolution upon a highly developed social matrix. But we cannot have become social beings unless we assumed limitations on freedom of action in the struggle for existence. Hence we must have become ethical before we became rational."[30] In Callicott's view, the evolution of ethical sentiments is tied to the recognition of shared interests within communities. To the degree that individuals recognize common ground with others, they will develop moral sentiments toward them. The sociological community thus becomes the ethical community.

Callicott completes his land ethic by introducing the third essential ingredient: ecological knowledge. When he writes that "the key to the emergence of a land ethic is, simply, universal ecological literacy,"[31] he is claiming that the primary message of contemporary ecology is the mutual interdependence of all the elements of the biosphere. Given this interdependence, "The simplest reason, to paraphrase Darwin, should . . . tell each individual that he or she ought to extend his or her social instincts and sympathies to all the members of the biotic community."[32] If, as Callicott believes, the most important scientific lesson of ecology is the community of shared interests among all living things and their life-support systems in the water, air, and soils, then we can assume, on Darwinian logic, that it will be "natural" for human moral sympathies to embrace not only other creatures but the biosphere as a whole. The solution to the problem of environmental ethics thus lies less with the refinement of moral argument than with the spread of ecological information.

Rolston's theory is not as explicit as Callicott's about the connection between the development of environmental ethics and ecological science, but it has roughly the same character. Rolston, like Callicott, attempts to derive ethical principles from ecological knowledge. For example, he believes that based on our knowledge of the character of nature, it is wrong to believe that humans must refrain from inflicting any innocent suffering on nonhuman life. Such a humane ethic is actually "contrary to nature." He asserts (without really arguing the point) that what we do learn from nature is that "culture ought not to amplify the cruelty in nature, certainly not without showing that greater goods come of doing so."[33] For Rolston, environmental ethics requires that we live in harmony with ecological principles. "Ecology, not charity or justice, provides the benchmark or, at least, the floor" for such an ethic.[34]

The necessary assumption on which Rolston constructs this view is that what is found in nature is not only empirically real but also morally good. Rolston argues that the intrinsic value of living things is demonstrated by the fact that there is an objective good for all organisms. Although they may lack a subjective recognition of this good, this does not mean that the good is without value. For Rolston, the very fact that any living thing has an intrinsic good suggests that it also has an objective intrinsic value. And again, although he offers no real argument to support this claim, his rhetorical question appeals to his own (and, he hopes, our own) intuition on the matter: "Such organisms have no envisaged goals, but why should we restrict value to mentally guided behavior when much behavior is guided by genes and instincts—and we do value this kind of behavior even in ourselves. Is there no reason to count this ethically, unless and until it is accompanied by sentience? Is not objective life too among the archetypes on which the world is built?"[35]

For Rolston, it makes perfectly good sense to say that trees are "valuable in themselves, able to value themselves; they stand on their own."[36] Although he does not state precisely what it would mean for a tree to value itself, he presumably has in mind the tree's objective pursuit of life and health. This indicates, for Rolston, both the goodness of spontaneous life and its inherent value.

Rolston clearly believes that the more we learn about nature, the more we will recognize it as a good in itself. Although Rolston's environmental ethic is more specifically aimed at living things than Calli-

cott's holistic land ethic, both locate intrinsic value in the general process, rather than the individual expressions, of life. As Rolston observes, "What humans ought to respect are dynamic life forms preserved in historical lines, vital informational processes that persist genetically over millions of years, overleaping short-lived individuals. It is not *form* (species) as mere morphology, but the *formative* (speciating) process that humans ought to preserve, although the process cannot be preserved without its products."[37] It is through experiencing and learning about the natural and wild world that we come to morally respect the environment.

This process of moral education, however, is very impressionistically and imprecisely explained. Rolston writes that ecologists discover that "ecosystems *objectively* are *satisfactory communities* in the sense that, though not all organismic needs are gratified, enough are for species long to survive." In turn, the "critical ethicist finds (in a *subjective* judgement matching the *objective* process) that such ecosystems are . . . *satisfactory communities* to which to attach duty."[38] In the end, Rolston admits that the conceptual leap from description to prescription—from "is" to "ought"—does not lend itself to a fully rational defense. In fact, "an *ought* is not so much *derived* from an *is* as discovered simultaneously with it."[39] Although he is confident that such an ethical discovery will take place, he acknowledges that it relies more on intuition than on rational or logical demonstration. Rolston realizes that "resolute subjectivists" (those who find intrinsic value only in subjective life) will not be convinced by his arguments. He believes nonetheless that "the conversion to our view seems truer to world experience and more logically compelling."[40]

In light of this review of each theorist, it is clear that neither Callicott nor Rolston provides the philosophical defense of a biocentric or ecocentric ethic that they set out to develop. Although they each offer some explanation of why we should respect the natural world and recognize moral obligations toward it, their theories do not have the philosophical grounding that would distinguish them from Muir's religious intuition or the deep ecologist's equally nonrational appeal. Rolston concedes as much in the passages quoted above, and one reviewer of his work correctly notes that philosophers will be "frustrated . . . by Rolston's failure to complete an argument."[41]

In addition, not only does Rolston fail to argue the principles he advocates, but he does not consistently apply them. Consider again Rolston's claim that we are under no ethical obligation to eliminate all innocent suffering for nonhumans, though we are obliged to not multiply the amount of suffering that naturally occurs. He therefore justifies eating meat on what he regards as ecological grounds. Yet he then argues that Jews who insist on slaughtering animals according to kosher laws are inflicting greater pain on animals than is required by modern methods of slaughter. In this case, Rolston holds that because this is simply "pain inflicted for culture-based reasons," it is morally unacceptable.[42] Jews should instead "reach reformed religious convictions" that would allow them to kill animals more humanely.[43] This conclusion, however, is specious. First, there is the obvious inconsistency that non-Jewish eating habits are just as "culture-based" as Jewish religious practices. More important, Rolston does not claim that conventional Jewish methods of slaughter increase the amount of pain or suffering that would occur spontaneously in nature; thus his own lack of sympathy with these procedures appears to violate the "ecologically" derived principles he has previously defended. In short, since Rolston appeals more to intuition than to reasoned argument throughout his work, the environmental ethic he defends displays a noticeably arbitrary character.

While Rolston neglects a strong philosophical defense for his attempt to wed scientific knowledge to an environmental ethic, Callicott's work is even more striking for its apparently self-conscious rejection of philosophical argument altogether. Callicott claims that value judgments are neither true nor false, philosophically understood. Rather, "there does exist a functional equivalent in what I have . . . called a 'consensus of feeling.'"[44] Morality is thus reduced for Callicott to psychology. "The alleged evil of an action is, as it were, a projection of the quality of that subjective feeling which originates within us when we witness or imagine murder. And so similarly with other moral judgments, for example, that charity is good, that injustice is bad, and so on: feeling, not reason (in the sense of dispassionate observation), is their ultimate foundation."[45] The degree to which this view commits Callicott to the rejection of rational argument is nicely illustrated by one of his own examples. What, he asks, should parents do to persuade their teenage daughter not to smoke cigarettes? Argue as follows: First, smoking is a threat to one's health. Sec-

ond, your health is something toward which you have a positive moral sentiment. Third, we can conclude that you should not smoke cigarettes. Callicott apparently believes that this appeal to medical knowledge is sufficient to close any debate. If the teenager rejects the factual premise, we have recourse to the testimony of experts. If she rejects the second, Callicott suggests that "psychological counseling could be prescribed."[46] Callicott's recommendation of counseling, of course, entirely skirts the very serious philosophical issues at stake—why, for example, should personal health be preferred over other values? In this particular case he may be right, but he certainly has not demonstrated why this is so. Instead of reasoned discussion, Callicott proposes that parents enforce a dogmatically asserted model of "natural sentiments" or mental health.

Callicott seems to believe that even the ecological education he describes as the foundation of an environmental ethic is best thought of as an education in sentiment rather than in scientific knowledge. He notes with approval, for example, the tactics of abortion protesters who show graphic pictures of aborted fetuses, and he implies that the environmental movement must use similar strategies in promoting its cause—the point being that this appeal to sentiment is more promising and appropriate than a reasonably defended view on the matter.[47] Contrary to his initial claim that the way to develop an environmental ethic is by promoting universal ecological literacy, he later admits that not all environmental scientists are in fact environmentalists.[48] Reason and knowledge alone do not apparently go as far in fostering environmental ethics as Callicott first maintains. Rather, the promotion of environmental ethics is reduced, in his theory, to the cultivation of particular emotions and passions. Although he describes his theory as both deontological and prudential, it contains no obvious deontological component.[49] Callicott thus does not furnish convincing philosophical arguments for his land ethic; in fact, he actually appears to be extremely skeptical about philosophical activity. We are left with only his psychological and sociobiological descriptions of the evolution of ethical life and his speculations about how this may increase our awareness of and concern for the natural environment. The attempt to rationally defend this ethical life is rejected out of hand.

Another serious problem with these theories is their tendency to undermine the central commitment to discovering intrinsic value in

nature. Rolston notices this trend in Callicott's views but fails to see that it reappears in his own work. Rolston claims that his theory respects the intrinsic value of nature more than Callicott's because it is more biocentric—that is, it acknowledges that there are independent values in nature, whether or not they are recognized by humans. He thus contends that he has developed a stronger and more attractive ethic than Callicott. While value in nature is just a matter of human psychology for Callicott, in Rolston's view it is something actually located in nature, distinct from our subjective cognizance of it.[50]

The difficulty for Callicott is that his theory shifts its ground. While it initially undertakes to elucidate the intrinsic value of nature, it instead becomes an argument about the interests shared by all members of the community of living things and their ecological support systems. Callicott's entire theory is based on the claim that the science of ecology teaches the unity of all the components of the biosphere. "As one moves, in imagination, outwardly from the core of one's organism, it is impossible to find a clear demarcation between oneself and one's environment."[51] This is why Callicott believes that ecological education will promote the development of environmentalist sentiments or, in Leopold's phrase, the land ethic. As evidence, Callicott recalls standing on the banks of the Mississippi and experiencing a personal hurt at seeing the pollution of the river. His ecological study had taught him the degree to which his own fate was tied to the fate of the river and the environment generally. He concludes by observing that "ecology thus gives new meaning as well as a new substance to the phrase 'enlightened self-interest.' "[52] The lessons of ecology reveal the community of all living things and give rise to environmental ethics. This community of self-interest is designed such that a harm to any member is a harm to all. Consequently, Callicott's theory is less about the intrinsic value of nature than the true nature of human interests.

Rolston makes similar claims—and he is thus also guilty of realigning his theory from "intrinsic value" to "community of life" arguments. He writes that "duties arise in encounter with the system that projects and protects, regenerates and reforms all these member components in biotic community."[53] Or again, "We start out valuing nature like land appraisers figuring out what it is worth to us, only to discover that we are part and parcel of this nature we appraise."[54] The point is the same as the one Callicott has defended: Our ethical rela-

tionship with the environment is grounded in the fact that we have deeply shared interests with nature. Nature creates us, and our fates are thus intricately intertwined with it. Rolston, no less than Callicott, falls back on claims about "enlightened self-interest" in promoting environmental ethics. In Callicott's words, "To those who are ecologically well-informed, nonhuman natural entities are inherently valuable—as putative members of one extended family or society. And nature as a whole is inherently valuable—as the one great family or society to which we belong as members or citizens."[55]

There are two important responses to this assertion. First, it is not always demonstrable that human interests and the interests of natural objects are even related, let alone compatible. Rolston at least partially recognizes this when he observes that an argument for species preservation cannot be based simply on shared interests: "Let's be frank. A substantial number of endangered species have no resource value."[56] The point could be pushed further: The fates of many endangered species and other natural objects have little or no relationship with human well-being at all (to say nothing of negative relationships), which is the reason why intrinsic value arguments are so important in the first place. Rolston also notes that humans probably have more disvalue than instrumental value for nature.[57] If this is true, then there is cause to question the usefulness of appealing to shared interests between people and the rest of living nature as a foundation for environmental ethics.

The second and more important point is that the recourse to a community of interests suggests a lack of confidence in intrinsic value arguments and so undermines the credibility of the overall project. The stated purpose of these theories is to provide an ethical defense, based on the scientific understanding of nature, of the independent moral status of the natural world. This endeavor is inspired by the belief that conventional utilitarian and liberal conceptions of nature are in practice unsatisfactory protectors of the environment. What Callicott and Rolston ultimately achieve, however, is more an expansion or revision of the progressive conservation tradition than its replacement. Although they are not as crudely utilitarian as Pinchot, they are nonetheless suggesting that human welfare is intimately tied to the health of the biosphere as a whole—a point with which Pinchot would doubtless agree. But this message threatens to obscure the distinctions between human interests and the moral status of nature that prompted Callicott and Rolston's search for the inherent and independent value of nature in the first instance. Both authors, in the final analysis, are theorizing about our status and obligations within the biotic community, not about the intrinsic value of nature, and thus, they avoid rather than resolve what they both take to be the fundamental problem of environmental ethics.

This theoretical retreat from their initial goal can be seen in the attitude toward nature that both writers advocate. Both contend that by basing their views on scientific knowledge, they will avoid the sentimentalism or condescension toward nature typical of other environmentalist writings. Callicott's early works are highly critical of the animal rights literature, and Rolston defends hunting on ecological grounds; both are unsympathetic to vegetarianism. Each aims to foster an almost hard-boiled understanding of the "facts of nature." Nonetheless, Rolston concludes that the sensibility we need to cultivate is "a sense of aristocratic responsibility for the natural world,"[58] and Callicott's own theory is of an "ethics grounded in altruistic feelings."[59] These sensibilities seem a far cry from the biocentric respect for the independent integrity of nature, or from the rejection of a sentimental attitude toward the environment. Their views have not moved as far as they suppose from the caretaker or "stewardship" image found in more conventional conservationism.

There are other significant issues raised by the way Callicott and Rolston attempt to construct their theories. For example, assuming that moral principles *can* be derived from scientific facts, theories generated in this manner are subject to continual and potentially radical alteration in the face of scientific developments. Callicott and Rolston write about the science of ecology as if it were at least in rough outline a theoretically complete science. In reality there is no reason to think that it will be less subject to transformations, and perhaps rather frequent transformations, than other fields of scientific inquiry. Even if they have correctly interpreted the findings and theory of contemporary ecology, they have not provided independent grounds for their ethical theories to keep them from becoming irrelevant in the face of inevitable scientific developments.

In sum, these two major attempts to base a radical pastoral environmental ethic on the findings of contemporary ecology have been no

more successful than Sale's appeal to the Gaia thesis as a guide for a new ecological perspective. Although Rolston and Callicott have been leaders in the promotion of this approach, their own work fails to persuasively explain how the intrinsic value of nature can be derived from scientific knowledge. Their failure at this task leaves them with little more than a secondary claim about how ecology demonstrates a general community of interest between humans and the rest of nature. This claim is not only unconvincing in certain crucial respects, but it is also significantly less ambitious and unique than the moral theory they initially promised.

The most sophisticated philosophical defense of a radical biocentric environmental ethic has been presented by Paul Taylor in his *Respect for Nature*. Taylor's theory differs from Rolston's and Callicott's in a number of key respects—for example, he emphasizes the moral importance of individual organisms, as opposed to species or natural processes—but none is more significant than his overt rejection of the use of scientific facts for building an ethical argument.

> We can no longer simply appeal to the notion that the natural world has itself provided us with a guide to follow: preserve "the balance of nature" and so live in accordance with the design built into the very nature of things. . . . [W]e humans as moral agents must search for our own principles to guide us when we try to determine how to live in right relation to the natural world. This requires us to engage in ethical inquiry and not simply "read off" moral norms from a certain way of conceiving of the order of living things.[60]

Taylor thus denies that it is possible to move from the facts of contemporary ecology to a set of compelling moral principles. Ethics is "autonomous" from biological description, and there is no logical connection between such descriptions and moral principles.[61] Although, as we have seen, Rolston and Callicott end up admitting that a formal connection between ecology and ethics cannot be demonstrated, Taylor intends to maintain a greater distance between the two and to avoid relying too heavily on science as the foundation of an environmental ethic.

It is apparent, however, that Taylor does not believe ecology is irrelevant to the overall task of devising such an ethic. His theory is divided into four general components, and the first two draw quite heavily on biological theory and information. Described as the "attitude of respect for nature" and the "biocentric outlook on nature," these parts constitute the general ethical basis on which Taylor will construct the third component: a set of moral principles to guide the human relationship with nature. The fourth major element of the theory is another set of principles to mediate conflicts between human ethics and environmental ethics.

Taylor's "attitude of respect for nature" is premised on the claim that moral respect is owed to any object that has a good of its own and an inherent worth. (Taylor prefers to speak of the inherent worth of an object, rather than its intrinsic value, since he believes inherent worth is a less anthropocentric concept.[62]) An object has a good of its own if it is possible to say, "truly or falsely, that something is good for an entity or bad for it without reference to any *other* entity."[63] This holds true for all individual plants and animals in a manner that distinguishes them from inanimate objects. "Since piles of sand, stones, puddles of water, and the like do not pursue ends, they have no interests. Not having any interests, they cannot be benefited by having their interests furthered, nor harmed by having their interests frustrated. Nothing gives them either satisfaction or dissatisfaction."[64]

To determine whether an object has a good of its own, we must be able to take the "standpoint" of this object in our imagination, using the biological information available to us. "Unless we learn how the organism develops, grows, and sustains its life according to the laws of its species-specific nature, we cannot fully understand what promotes the realization of its good or what is detrimental to its good."[65] Since we have access to scientific descriptions about the vast majority of living things, it is reasonable to conclude that we can make "factually informed" and "objective" judgments concerning the well-being of these organisms from their own perspective.[66] It is crucial for Taylor that each living thing has its own individual good. Populations or species have no goods of their own, other than the statistical aggregation of individual goods.[67]

A host of questions are raised by these preliminary assertions. For example, what does it mean for nonsentient creatures and plants to be

given "satisfaction" or "dissatisfaction"—concepts that seem to require sentience? Likewise, in taking the imaginative standpoint of such organisms, how can we be confident that we are actually experiencing their good rather than transferring to them our own conceptions of good? Taylor imagines, for example, a butterfly who manages to live what a biologist would consider a normal, healthy span. "From the perspective of the butterfly's world, it has had a good life."[68] Although Taylor wishes to avoid anthropomorphizing nature in his theory, the very language demanded by this exercise appears to make it inevitable.[69]

More important, it is essential to note that Taylor has based his thesis concerning the goods of living entities on certain scientific criteria. We are unable, he believes, to fully grasp the goods of other living things until we have at least a minimal level of species-specific biological information about them. It is not enough to say, "It is alive, and life is good." Rather, we must understand the particular goods relevant to that specific form of life before we can truly appreciate the goods of that life. Thus, scientific knowledge plays a central role in our awareness and appreciation of goods embodied in any living object.

When Taylor moves to a discussion of inherent worth, he becomes even more dependent on empirical ecological and biological evidence. According to Taylor, "the fundamental value presupposition of the attitude of respect" for nature is the recognition that all entities with goods of their own are also entities possessing inherent worth.[70] Taylor believes that recognizing this will commit us to an understanding of the equal moral status of all individual organisms. "Whatever its species may be, none is thought to be superior to another and all are held to be deserving of equal consideration."[71] This postulate, however, can only be justified by reference to the second major component of Taylor's theory—the underlying biocentric outlook. In order to vindicate claims about the inherent worth and equality of all organisms, Taylor must turn to a defense of the biocentric worldview. "We can establish the truth of the claim by showing that *only this way of regarding them is coherent with how we must understand them when we accept the belief-system of the biocentric outlook on nature.*"[72]

Taylor admits that the biocentric outlook cannot be proved in any formal sense,[73] but he argues that each of its four essential components is reasonable and that together they constitute a coherent worldview. The four beliefs are: first, "that humans are members of

the Earth's Community of Life in the same sense and on the same terms in which other living things are members of that Community"; second, that all living things are interdependent; third, that all living organisms are "teleological centers of life in the sense that each is a unique individual pursuing its own good in its own way"; and fourth, that humans are not morally superior to other living things.[74] Taylor's defenses of the first three beliefs are based entirely on observations about the biological nature of life and the ecological interconnectedness of humans with the rest of the living world.[75] The final tenet is defended by criticizing conventional claims about human superiority as "an irrational bias in our own favor,"[76] an "unfounded dogma of our culture."[77] But even this belief ultimately rests on a judgment about empirical reality: "The similarity between ourselves and other animals cannot be denied. Although there are differences, they appear to be a matter of degree, not of kind."[78]

Since for Taylor the first element of his theory (the attitude of respect for nature generally, and the recognition of the inherent worth of each living thing in particular) cannot be fully maintained without reference to the second (the biocentric outlook), it is clear that the foundation on which Taylor intends to build his moral principles is not nearly as independent from biological description as he presumes. In fact, Taylor's method does not seem to differ fundamentally from Callicott and Rolston's attempt to derive moral principles from ecological facts. Taylor explicitly acknowledges that these two preliminary points cannot be formally proved, but so also do Callicott and Rolston ultimately concede that there is no logical link between ecological facts and environmental ethics. Although Taylor's theory is significantly more rigorous and systematic than the other authors', his initial premises are not as radically different from theirs as he would have us believe. As such, he does not escape the obstacles confronting all such attempts to build ethical principles on empirical facts.

There is a noticeable tension in Taylor's theory that is revealed when he begins to describe the biocentric worldview. This underlying biocentric outlook demands, for Taylor, that "we see human life as *an integral part of the natural order of the Earth's biosphere*."[79] Humans are to be thought of as equal, valued, and important members of the community of life. It is our status as an integral element in nature that suggests to Taylor the reasonableness of asserting our membership in the

earth's community, with all that this implies about mutual interdependence, equality, and shared interest. This perspective clearly presupposes minimal conflicts of interest between people and other organisms, as well as a positive role for humans within this community.

However, Taylor quickly retreats from his initial position. Although he begins by observing that "our dependence on the general integrity of the whole realm of life is absolute,"[80] he then explains that our relationship with the rest of the living community is not in the least bit mutual: "Our demise would be no loss to other species, nor would it adversely affect the natural environment. On the contrary, other living things would be much benefitted. . . . It seems quite clear that in the contemporary world the extinction of the species *Homo sapiens* would be beneficial to the Earth's Community of Life as a whole."[81] In fact, if our species were to disappear, "the ending of the human epoch on Earth would most likely be greeted with a hearty 'Good riddance!'"[82] Taylor's final view is not that we are equal and valuable members of "Earth's Community of Life," but rather that we are dangerous, probably unwelcome, intruders upon that community. If this is true, the biocentric outlook teaches less our shared interests with and equal status in the ecological world than our alienation from it—perhaps even our complete moral illegitimacy from a biocentric viewpoint.

The biocentric outlook, in short, leads in a very different direction than we would expect, given Taylor's expressed theoretical concerns. Taylor initially promises to avoid two stumbling blocks found in other theories of environmental ethics: the appeal to an "organic" community, and the appeal to moral intuition as the foundation of ethical principles. Taylor is careful to distinguish his conception of the community of life from any "holistic" claims about the earth as a superorganism along the lines of the Gaia thesis.[83] Likewise, he states that invoking intuition is a danger for ethical thought. "Such an appeal has no relevance to the truth or falsity of what is felt and believed so deeply. Indeed, the search for truth in these matters is *seriously hindered* by the tendency to rely on our intuitive judgments."[84] On both of these points, however, the biocentric outlook appears to lead in the opposite direction.

First, although Taylor does not depict the earth as a "superorganism," his biocentric perspective has significant similarities to moral

theories built on such a claim—most notably, it too obscures the moral issues at stake in the human relationship with the environment by appealing to generally shared interests. As we will see, the ethical principles Taylor defends in the last two components of his theory presume that environmental ethics must concentrate on the clarification and mediation of conflicts between humans and the natural world. The biocentric outlook, in contrast, threatens to make such conflicts increasingly difficult to identify. After all, if we are an integral and equal member of the community of life, on what grounds are we to criticize our "natural" species behavior within that community? Just as with Rolston's and Callicott's theories, Taylor's biocentric worldview may actually undermine the original purpose of the theory: defining ethical boundaries for human behavior, through the recognition of the inherent moral worth of other organisms. The danger of the biocentric perspective is that it blurs the distinction between ourselves and other living things so crucial for locating such boundaries.

Second, it should be clear by now that Taylor's use of the biocentric outlook as the foundation of his moral theory has much in common with an appeal to intuition. Although he desires to build a set of moral principles on firmer ground than this, he admits that the biocentric outlook cannot be formally proved and that the moral significance of certain biological and ecological realities must be accepted intuitively. It is difficult to see how Taylor can consider his own biocentric outlook to be radically different from the intuitive appeals found elsewhere. At the very least, Taylor's biocentric outlook is in obvious tension with his professed rejection of ethical theories built on intuition.

Once he has explained the attitude of respect for nature and the biocentric outlook on which this rests, Taylor is in a position to derive his two sets of moral principles. The first of these directly addresses environmental ethics, and the second is designed to mediate potential conflicts between environmental ethics and human ethics. Both sets of principles are constructed to reflect a radical biocentric egalitarianism and "species impartiality." Upon examination, however, these principles call into question Taylor's commitment to the biocentrism he advocates. For example, the "rule of restitutive justice," the fourth and final of Taylor's environmental ethical principles, holds that when harm is done to certain individual organisms or groups of organisms,

we should do everything in our power to "make amends to the moral subject by some form of compensation or reparation."[85] This rule raises no serious problems if an organism that has been harmed can be meaningfully compensated. If, however, the organism has been killed, Taylor suggests that "the agent owes some form of compensation to the species-population and/or the like community of which the organism was a member. This would be a natural extension of respect from the individual to its genetic relatives and ecological associates."[86] Yet Taylor earlier stressed the individualistic character of his theory: Respect is owed to each living organism in light of its individual inherent worth, which does not lie in the organism's relationship with a species or any other ecological community. Thus, restitution to other organisms, on Taylor's own terms, would appear to be morally irrelevant from the perspective of the wronged individual. As Peter Wenz writes, "Taylor's biocentrism cannot, with consistency, endorse the kinds of restitutive measures that are needed."[87]

This problem becomes even more damaging when we turn to Taylor's discussion of the principles governing variances between human and environmental ethics. Taylor correctly observes that "conflicts between humans and nonhumans are real,"[88] and he proposes five "priority principles" for resolving them—self-defense, proportionality, minimum wrong, distributive justice, and restitutive justice. When basic human interests clash with basic interests of other organisms, Taylor can consistently hold that the former take priority on the grounds, for example, of self-defense—a biocentric principle in the sense that all organisms are equally allowed to prefer their own basic needs and interests over the needs and interests of other living things. However, Taylor claims that certain nonbasic human interests, such as a highly developed cultural life, are so extraordinarily important in "their contribution to human civilization seen from a broad historical perspective" that they too should supersede the basic interests of other living things.[89] Building a museum, for instance, requires the destruction of many organisms and their habitat. This would be acceptable for Taylor, as long as we minimize the wrong and perhaps provide restitution in the form of habitat protection elsewhere.

At this point, Taylor has violated the conditions of his own biocentric egalitarianism. As Peter Wenz observes,

> Strict adherence to Taylor's Biocentric Individualism is inconsistent with actions designed to promote any nonbasic human interests, including those of *haute culture*. This goes against the grain, to say the least. Taylor does not seem to like it any more than I do, so he gives us the Principle of Minimal Wrong. It permits what his Biocentric Individualism, taken seriously, forbids. Thus, biocentric egalitarianism is so confining that even Taylor, its foremost proponent, refuses to apply it consistently.[90]

Apparently Taylor finds his own principles too radical to be acceptable. This seriously weakens the credibility of his conclusion that "the moral shift from anthropocentricity to biocentricity is not psychologically impossible for human moral agents to accomplish."[91] Taylor's own inconsistency suggests both the moral and psychological difficulty of fully accepting his biocentric theory.

The rejection of the progressive conservation tradition by contemporary radical environmental philosophers has created the need to find new moral ground for respecting, protecting, and valuing the nonhuman natural environment. The results of the search for a convincing biocentric or ecocentric theory, however, have been disappointing. At some point, all of these theories end up appealing to human interests by connecting our interests to the ecological community of which we are a part, thus undermining the strict biocentrism of the project. At some point, the biocentrism that is to be defended either loses its radical force or is inconsistently applied by the theorist, as a result of its obviously and unacceptably misanthropic implications and conclusions.

Although these theorists share with Thoreau and the other major figures in the pastoral tradition the belief that nature has generally unrecognized and yet profound moral importance, contemporary pastoralism has been unable to maintain the severely critical perspective it seeks to defend. As we have seen, both Callicott and Rolston believe that their theories offer an appropriate account of the ethical relationship between humans and the natural environment and that radical environmental ethics throws down a challenge to conventional ethics generally. Writing very much in the tradition of Thoreau, they argue

that a proper understanding of nature is the key to a radical critique not only of philosophy, but of contemporary intellectual and social life as a whole—with Rolston contending that environmental ethics is truly revolutionary, and Callicott stating that his "goal is to build, from the ground up, new ethical (and metaphysical) paradigms."

In Callicott's early work, this radical promise was fulfilled, but in a way that was ultimately unacceptable not only to others but to himself as well. In his "Animal Liberation: A Triangular Affair," initially published in 1980, he suggests that the "extent of misanthropy in modern environmentalism . . . may be taken as a measure of the degree to which it is biocentric."[92] His first defense of biocentrism, in short, was a defense of an ethic that privileged nature over human interests—and in this sense it could rightly be considered a complete rejection of conventional ethics. Predictably, Callicott was attacked for this overt misanthropy, and he later revised his views.[93] In the process, however, he lost the holistic quality of his theory. Discussing the relationship between the land ethic and interhuman ethics, Callicott writes:

> The land ethic, happily, implies neither inhumane nor inhuman consequences. . . . From the biosocial evolutionary analysis of ethics upon which Leopold builds the land ethic, it (the land ethic) neither replaces nor overrides previous accretions. Prior moral sensibilities and obligations attendant upon and correlative to prior strata of social involvement remain operative and preemptive. . . . The biosocial development of morality does not grow in extent like an expanding balloon, leaving no trace of its previous boundaries, so much as like the circumference of a tree. Each emergent, and larger, social unit is layered over the more primitive, and intimate, ones.[94]

Callicott clearly wants to unite all these different layers of ethics within the context of some overarching sociobiological claims about the general nature of ethics. But the relationship between interhuman and environmental ethics nonetheless remains extremely undeveloped—beyond the metaphor of rings in a tree. He does claim that the closer the social connection between individuals, the stronger the ethical obligations between them. Thus, family obligations come before national ones, humanitarian obligations before environmental duties.[95] But this does very little to illuminate ethical obligations as they apply to conflicts *between* different realms. One is tempted to conclude that the more intimate obligations always take priority over less intimate ones, but this would clearly subordinate Callicott's land ethic within the ethical world. At any rate, Callicott's land ethic never seriously alters our prior moral obligations, much less our conventional ethical understandings.

Although Callicott has consistently criticized "extensionists" in environmental ethics (those who would simply extend conventional ethical categories to include nature), his own theory appears remarkably "extensionist" itself. At the very least, it fails to offer the radical ethical reorientation that he promises and that the entire tradition of pastoral environmentalism, beginning with Thoreau, has promoted. In the final analysis, Callicott does not have much to say about the relationship of nature to the rest of ethical life. Rolston, too, concludes that nature "gives no ethical guidance in our interhuman affairs."[96] What began for both as a significant challenge to our philosophical inheritance—in Rolston's terms, the promotion of Muir and the demotion of Socrates as the central philosophical figure—ends instead with a retreat from Thoreau's use of nature as the springboard for a radical criticism of contemporary society and values.[97]

Taylor's claims about the significance of a biocentric environmental ethic are not as sweeping as those of Callicott and Rolston. He is very careful to state at the outset that the moral principles involved in environmental ethics are "fundamentally separate and distinct" from human ethics.[98] Although he proposes a less grand revision of conventional ethics than these other authors, there is a fundamental assumption in his work that "it makes a practical difference in the way we treat the natural environment whether we accept an anthropocentric or a biocentric system of ethics."[99] On the most basic level, there is something compelling about this assertion: It would seem intuitively obvious that biocentrism requires a much greater respect for the natural world than does an anthropocentric view. Indeed, when Taylor is at his most consistent, his theory contains an obvious, and most people would consider outrageous, radicalism. Gene Spitler, for example, has charged Taylor with moral obtuseness in not being able to make some of the most elementary moral distinctions. "Taken literally, Taylor would find that shooting his neighbor was no more morally reprehensible than swatting a fly or stepping on a wild flower."[100]

In response, Taylor bravely admits that this is in fact his view: "The killing of a wildflower, then, when taken in and of itself, is just as much a wrong, other-things-being-equal, as the killing of a human. . . . *As* acts of killing, both are equally wrong."[101] If this is actually the position being defended, then biocentrism clearly leads to moral principles contrary to and more radical than those reached by other ethical perspectives.

But, as we have seen, Taylor is unwilling to hold consistently to his own biocentrism, in particular when he discusses the mediation of conflicts between nonessential but arguably important human needs and the essential needs of other organisms. In addition, at the end of his study we find these concluding comments: "Our aim is to make it possible for wild animals and plants to carry on their natural existence side by side with human cultures."[102] And, "The most apt phrase for describing this 'best possible world' in its simplest terms is: *a world order on our planet where human civilization is brought into harmony with nature.*"[103] Although such sentiments display ecological sensitivity and a moral interest and concern for other living things, these moral values could be (and in fact are) held by biocentrists and anthropocentrists alike. In no way has Taylor demonstrated that his own biocentrism is required for the defense and justification of such values.

While Callicott and Rolston come up short in their attempt to provide a contemporary philosophical account of the pastoral environmentalist position, Taylor has completely abandoned a core component of the project. In order to present a sufficiently rigorous account of environmental ethics, he has self-consciously limited the focus of his efforts to exclude any account of how nature can function as an educator in human affairs. On this issue, he rejects in principle (although, as we have seen, not in practice) the appeal to nature as the foundation of moral thinking. Likewise, he denies that our relationship with nature can provide a perspective for a radical criticism of social and political relationships. In his work, the concern for defining and defending the inherent worth of nature has produced a biocentrism divorced from fundamental concerns about human ethics and justice—a view that is radically apolitical. Although Callicott is unable to demonstrate how environmental ethics can transform the whole of human ethics and social life, he remains committed to the attempt. Taylor, however, has shelved this project from the start; for him, the environment is a separate ethical sphere from social life, requiring an independent ethical system.

The pastoral tradition, as it has evolved from Thoreau to Taylor, has thus shifted in focus. Nature for contemporary biocentric theorists has lost its politically inspirational character, so clear in Thoreau, and instead has become an object to protect and perhaps to love. But it is certainly no longer capable of providing the type of moral guidance Thoreau and Muir believed they could acquire from it. It is not surprising that philosophers have been unable to capture the religious quality in nature experienced by Muir, since it is essentially mystical and beyond secular philosophical demonstration. It is perhaps also not surprising that these modern philosophers have overlooked the political component of Thoreau's pastoralism. Thoreau retreated to nature as a result of his dissatisfaction with the social and political world; in nature he would find an appropriate vantage point from which to criticize and potentially reform the human order. Contemporary biocentric philosophy, on the other hand, turns to the defense of nature out of an environmentalist alarm about its destruction at the hands of contemporary civilization. Biocentrism's foremost concern is the protection and preservation of nature, not the reform of society.

The danger of this perspective, however, is that it seriously handicaps these theorists when they try to address issues concerning human society. Although "community" is discussed a great deal in these works, the term is very loosely employed and remains largely unexamined as a normative concept. It may be appealing, and even true in some sense, to speak, as Taylor does, of "Earth's Community of Life," or, as Callicott does, of the earth as "one humming community,"[104] but it is not useful as a full definition of our relationship with other living things. It simply cannot describe, for example, the extension of the moral and affective mutuality that is usually thought to be included in the notion of human community. Not only have these theorists failed to provide a convincing account of their own biocentrism, but they have not adequately attended to the importance of this biocentrism for the primary communities to which we belong—our social and political communities. At best they can suggest limitations on the behavior of these communities in their relationship with nature. The biocentric perspective they have adopted prevents them from being able to describe and defend a radical alternative social and political life in-

formed and guided by their own environmental ethics, as Thoreau would demand. Instead they vacillate between overt hostility toward the human community in general and a vague appeal to the extension of the human community to the broader natural world.

6
Restoring Political Vision

The American impulse—in fact, it can be called our imperative—to reform the New World landscape.

—*Cecelia Tichi*

Ecologists strain at the bounds of ordinary political discourse, and in doing so extend it.

—*Anna Bramwell*

The challenge for us is to discover a new humility, a recognition that the overwhelming complexity of nature will never be fully comprehended or controlled.

—*Anita Gordon and David Suzuki*

The progressive and pastoral traditions continue to shape philosophical and political environmental theory. Although these debates have evolved significantly since Thoreau's and Pinchot's lifetimes, they clearly share significant characteristics with the earlier theories. Pinchot's progressive conservationism is distinctive for its commitment to liberal conceptions of equality and justice, its utilitarianism, and its faith in the bureaucratic and scientific control of the environment. Contemporary progressive conservationists can be divided, as I have done, into two camps: those who believe that it is no longer possible to maintain a commitment to liberal equality but who nonetheless place their faith in a generally technocratic approach toward environmental problems; and those who attempt to reformulate a liberal approach to environmental issues. The neo-Malthusians have lost Pinchot's optimism about the compatibility of natural resource conservation with a democratic political order, but they retain his faith in the possibility of scientific and bureaucratic protection and wise use of these resources. Others, rejecting the alarmism of the neo-Malthu-

sians, still follow Pinchot by framing environmental issues in terms that reenforce, rather than challenge, liberal democratic politics and principles. This requires, for Nash, a simple extension of liberal rights to all of nature, in order to "round out the American Revolution"; for Stone, a pluralism of liberal values; and for Sagoff, a commitment to a pragmatic and democratic politics. Although they reject Pinchot's utilitarianism, these theorists nonetheless think about the environment as "insiders," from within the liberal democratic order. In fact, Nash and Sagoff claim that proper appreciation and treatment of nature are central to the fulfillment of the promise of traditional American politics. This is also true for the neo-Malthusians, if we recognize that for them the promise has been reduced to its barest essentials. Having turned from the liberalism of Locke to that of Hobbes, they are concerned almost solely with survival and safety in the face of what they see as potentially catastrophic resource constraints.

The pastoral environmentalist literature, in contrast, continues to be a view from the outside—a censure of the character of modern society and its treatment of the natural world. As Leo Marx has observed, "In most American pastorals the movement toward nature also may be understood as a serious criticism, explicit or implied, of the established social order. It calls into question a society dominated by a mechanistic system of value, keyed to perfecting the routine means of existence, yet oblivious to its meaning and purpose."[1] This is as true for the radical environmentalism of deep ecology and biocentric ethics as it is for literary pastorals. Although contemporary pastoral environmentalism often fails to explicitly or convincingly articulate this social criticism, it still emulates Thoreau in trying to offer an alternative moral life, informed by a greater sensitivity to the natural world than is found in contemporary social and political sensibilities.

The continuity of these traditions should not, however, blur the crucial changes that have occurred within them. Contemporary progressive conservationism has broken with Pinchot's utilitarianism, perhaps most clearly in Sagoff's attack on cost benefit analysis. What is more significant is the loss of the originally strong connection between progressive conservationism and liberal justice. Again, Sagoff speaks to this point when he denies that preservation of the environment is directly related to distributive or social justice.[2] Stone's pluralism does not offer clear principles for mediating conflicts between environmental concerns and distributive justice, and Nash, too, has little to say about the relationship between the rights of nature and the rights of individuals in society. In all of this genre, the neat connection found in Pinchot's writings between conservation and the cultivation of democratic equality and justice has been severed. No longer is there an explicit argument about the intimate and necessary relationship between these goals. For some theorists, this is the result of their desire to promote an appreciation of nature apart from its utility for humans—as more than simply the source of materials that are an economic precondition for liberal democratic politics. For the more apocalyptic neo-Malthusians, the relationship between conservation and liberal justice is rejected altogether, on the grounds that extreme ecological limitation is incompatible with liberal political institutions. In the case of other theorists (such as Nash), a simple lack of attention to the political implications of their arguments about the moral status of nature has obscured the linkage between a proper respect for nature and political justice.

The most striking development in the pastoral tradition—as it has evolved from the writings of Thoreau, through Muir, to contemporary deep ecologists and biocentric philosophers—is how it too has lost its original political orientation. In the case of deep ecology, the concern with political criticism and reform has been replaced by the preoccupation with a quasi-religious and mystical experience of nature. Biocentric theorists focus primarily on the question of the independent moral status of nature and thus forfeit a well-developed perspective on the relationship between nature and general ethical concerns. For all of these contemporary pastoral theorists, nature is largely unpeopled, and the preservation of wilderness—defined as the natural world separated from and relatively untouched by human society—has all but replaced a vision of a pastoral nature, in which human society is realistically integrated into the natural order.[3] As a result, the pastoral vision is in danger of being supplanted by primitivism, which likewise threatens to lead pastoralism toward an increasingly overt misanthropy.

The original strength of both the pastoral and progressive traditions was rooted in their respective political visions and commitments. Pinchot's tremendous political success grew out of the connection he

made between the public management of natural resources and the values and needs of a liberal democratic society and economy. The power of Thoreau's pastoralism lay in the alternative social and political values he found in nature and in his successful use of these values to instruct a criticism of American society. Nature, for Thoreau, inspired a search for a better political community. Both the pastoral and progressive conservationist traditions, however, have been weakened in the contemporary debates because they have failed to maintain this clarity of political vision. Progressive conservationists have on the whole been unable to integrate the protection and preservation of nature into an overall liberal democratic program of justice and equality. Likewise, contemporary pastoralists have largely been unable to derive a coherent alternative politics and social vision from their deep respect for nature.

This development in both contemporary traditions has made modern environmentalism vulnerable to charges that it is politically naive and perhaps irrelevant, or, more dangerously, that it represents a wholesale retreat from considerations of social and political justice. Hans Magnus Enzenberger, for example, claims that "the social and political thinking of the ecologists is marred by blindness and naiveté."[4] Those who hold a conventional Pinchotian faith in natural resource management and economic growth argue that contemporary environmentalists of all stripes have abandoned a commitment to an expanding economy, which is the prerequisite of political and economic justice. As such, environmentalists have turned their backs on the politically and economically disadvantaged. "Put quite simply," writes William Tucker, "the birth of environmentalism represented a withdrawing of upper-middle-class attention from the interests of the poor and a turning in another direction."[5] In the same vein, Luke Popovitch portrays environmentalists as a privileged elite, determined to protect their own wealth and comforts from demands by the less advantaged: "With patrician surety, environmentalists declare that the party of economic progress is over long before most of the world's people have had their first drink."[6]

Much of this criticism of environmentalism is exaggerated, especially its characterization as an elitist movement with profoundly conservative, if not reactionary, political implications. It is significant, for example, that the group in Congress with the best overall voting record on environmental issues is the Congressional Black Caucus—not a group usually associated with the interests of the powerful and privileged.[7] Support for environmental issues is also found among a wide spectrum of the American populace and is no more class-biased than many other major political issues and movements.[8] It is true, nonetheless, that the critics of environmentalism have sensed the degree to which contemporary environmentalist theorists fail to persuasively integrate their views with democratic politics. The story of American environmental theory in the twentieth century is primarily the story of an increasingly obscured political vision.

This weakness has not gone unnoticed by all contemporary environmentalists. There are, in fact, theorists working in both traditions who hope to link their environmentalism to an overall political theory and program, although they are indeed minority voices at present. Perhaps the most important progressive conservationist to make this attempt is Barry Commoner, whose socialism can be reasonably viewed as a contemporary expression of Pinchot's progressive liberalism. His chief concern is to tie his environmentalism to a democratic program of political justice and economic equality. Although his formulation of this justice and equality is further to the left than Pinchot's liberalism, he is still aiming at similar goals for similar reasons. And, as with Pinchot, the central obstacles for Commoner are, first, justifying any independent moral value found in nature apart from its usefulness for an equitable human society, and, second, explaining the institutional means by which the scientific regulation of the environment can be made democratically accountable.

Among pastoralists, it is the Green movement that is attempting to develop a political theory to complement and guide their radical environmentalism. The Greens are still a very small and undeveloped organization in the United States, and their political theory is also not well formulated. There are some in the movement, however, such as Murray Bookchin, who are trying to unite their pastoral environmentalism with an alternative political vision for American society—a vision of decentralized and radically democratic communities. Whatever the problems with Bookchin's political theory, the relationship of the Greens with biocentrism and deep ecology is seriously undermining their ability to develop a consistent, coherent, and powerful political ideal.

For Barry Commoner, the primary source of contemporary environmental problems is our modern productive technologies. "The chief reason for the environmental crisis that has engulfed the United States in recent years is the sweeping transformation of productive technology since World War II."[9] The main culprit in this story is the chemical industry, whose processes and final products are inherently anti-ecological. But modern agriculture (especially to the extent that it has become an arm of the chemical industry), nuclear technology, and the energy industries are all subject to Commoner's technological critique. Generally stated, the defect in these technologies is that they have been developed without concern for environmental impact. More specifically, they introduce pollutants into the environment both at the point of production and, especially in the chemical industry, in the form of finished products. Because these pollutants are typically synthetic substances that do not occur spontaneously in nature (or at least not in these quantities), the ecosystem is ill equipped to cope with them. In short, either synthetic substances that are produced cannot be broken down and integrated into the environment, or improper quantities of naturally existing substances upset natural balances in the ecosystem. This problem is relatively unique to the postwar period because of the revolution that has taken place in the production of synthetic materials and the use of polluting substances in industrial and agricultural technologies since that time.[10]

The tragedy of this situation, for Commoner, is compounded by the fact that it is unnecessary. Although the immediate cause of environmental problems is our contemporary productive technologies, Commoner believes that technological solutions are widely available to us: "The technological basis for the transformation of the present systems of production to ecologically sound ones is largely in hand."[11] Most of the chemical industry's products are replacements of items previously generated from natural materials. Polluting agricultural practices can be discarded in favor of organic farming methods. Energy sources that are nonrenewable and polluting can eventually be superseded by renewable and nonpolluting sources such as solar and hydroelectric power. In fact, the vast majority of environmentally unsound technologies and products could at least in principle be replaced by technologies and products that are already developed and available or will no doubt be discovered in the future. "The problems of industrial and agricultural pollution, while exceedingly large, complex, and costly, are nevertheless capable of correction by the proper technological means."[12] What is lacking is the economic and political will to pursue these environmentally benign technologies.

Although the problems of pollution are largely caused by technology and are thus subject to technological solution, Commoner is by no means a simple environmental technocrat. It may be true, as one critic has written, that Commoner's "political program depends less on a simple commitment to partisan political change than on a deep belief in technological progress."[13] But this belief in technological progress is itself subordinate to a deeper political analysis. Commoner believes that the source of our technological mistakes is found in two related but distinct social problems: the corruption of contemporary science, and the profit motive in economic production.

The threat to the integrity of science is posed primarily by political pressures. In *Science and Survival*, Commoner notes with alarm that the potentially most environmentally disastrous technology ever known—nuclear weapons—has been developed under politically controlled and covert conditions. This secrecy prevents open discussion among scientists and also precludes any dialogue between the scientists and the citizenry at large. "There is, then, a clear connection between our recent technological mistakes and the erosion of the basic principles of scientific discourse."[14] The loss is twofold: open evaluation within the scientific community of the technical consequences of technological developments is retarded, and the equally important discussion between the scientific community and the democratic community as a whole concerning the moral and political consequences of these developments is also inhibited. Thus, for Commoner, the existence of nuclear weapons illustrates the need for the scientific community to "establish . . . some means of estimating and reporting on the expected benefits and hazards of proposed environmental interventions *in advance*."[15] In addition, a new relationship between scientist and citizen needs to be forged in which this information will be made available for democratic deliberation.[16] Both of these goals are possible only if "scientists . . . find new ways to protect science itself from the encroachment of political pressures."[17]

The second and even more significant factor in the creation of environmentally inappropriate technologies is the structure of capitalist

decision making. "Driven by an inherent tendency to maximize profits, modern private enterprise has seized upon those massive technological innovations that promise to gratify this need, usually unaware that these same innovations are often also instruments of environmental destruction."[18] Technology is not, in and of itself, an environmental problem. In a capitalist society, however, private industry is compelled to develop productive technologies and products that maximize short term profits. As a result, industry fails to add environmental costs into their calculations of profit and loss, since these costs can be passed on to third parties (in most cases, the community at large or future generations) as externalities. Therefore, private industry has little or no incentive to consider the environmental impacts of its technologies. In addition, since they are not held accountable for these external costs, highly polluting technologies tend to be economically most advantageous for industry. The proliferation of polluting enterprises in the postwar period has been the direct result of the private ownership of productive technologies and the drive to maximize profits. For Commoner, therefore, the environmental problems we face are for the most part the direct consequence of capitalist production. If this situation is to be successfully addressed, some form of public control of the productive process is required. "Hence an economic system which is fundamentally based on private transactions rather than social ones is no longer appropriate and increasingly ineffective in managing this vital social goal. The system is therefore in need of change."[19] The change that he recommends is toward democratic socialism.

The same analysis that leads Commoner from environmentalism to a more general political commitment to socialism has also led him to be highly critical of certain developments within the environmental movement. His conventional foes are the neo-Malthusians, with whom he has a number of serious grounds for disagreement. First, his own assessment of the cause of environmental problems suggests that it is grossly misleading to blame environmental deterioration on population growth: "The earth is polluted neither because man is some kind of especially dirty animal nor because there are too many of us. The fault lies with human society—with the ways in which society has elected to win, distribute, and use the wealth that has been extracted by human labor from the planet's resources."[20] Nor is economic growth per se a threat to the base of natural resources. The danger to resource supplies is caused by the particular form that economic expansion takes in a capitalist society, rather than by "growth" in a generic sense. Past shortages have been "brought about not by some abstract, mindless force called 'growth,' but by deliberate human actions, motivated by an *economic* factor—the desire to maximize profits."[21] Finally, Commoner is appalled by the politically repressive implications of neo-Malthusianism. Those theorists may be willing to sacrifice liberty and justice for the sake of preserving the earth from environmental disaster, but Commoner believes this is both unnecessary and politically irresponsible. "This, it seems to me, is the main lesson to be learned from both the environmental crisis and the population problem—that if we would survive and preserve both our natural heritage and our own humanity, we must at last discover how to solve, by social means, the social evils that threaten both."[22] The concern for political justice cannot, for Commoner, be separated either empirically or morally from environmental reform.

This view makes Commoner uncomfortable with other elements of contemporary environmentalism as well. Many of the defects in environmentalist politics, he believes, can be traced to an unsophisticated grasp of the economic and political forces responsible for our environmental problems. This failing induces environmentalists to regard environmental concerns as politically neutral. If it is true, as some think, that scientific principles of ecology can by themselves guide a program of environmental reform, then the temptation is to take the "soft" political path toward this reform. Thus, established environmental groups resort to conventional interest-group lobbying to promote environmental protection, in the hope that public policy can be shaped to be more sensitive to ecological imperatives. The flaw in this strategy is that it does not confront the actual source of environmental problems—our productive technologies and the economic system that promotes and benefits from them. Environmental groups end up proposing and supporting legislation that attempts to control the impact of pollution, rather than challenging the technologies that produce this pollution in the first place. This strategy is bound to fail, since it treats only the symptoms without curing the disease. "There is a basic flaw embedded in the U.S. environmental laws: they activate the reg-

ulatory system only after a pollutant has contaminated the environment—when it is too late."[23]

Likewise, radical environmental theorists such as Kirkpatrick Sale reflect this lack of political sophistication when they promote alternative visions of an environmentally sound lifestyle and social organization on what they consider neutral ecological grounds. In Commoner's opinion, this gives their views a politically naive (if not utopian) quality, since they do not develop a plan for countering the powerful groups whose interests are intimately tied to the proliferation of environmentally unsound institutions and practices.[24]

For Commoner, "Environmental protection is neither [politically] innocuous nor unrelated to basic questions of social justice."[25] In fact, there is "an unbreakable link between the environmental issue and all the other troublesome political issues."[26] Commoner's environmentalism thus grows out of and reinforces his broader political commitments, and it is here that Commoner's relationship to the progressive conservation tradition becomes clear. As we saw in the first chapter, conservation for Pinchot was necessary because of market failures: The promise of short-term profits tempted industry to use natural resources without regard for their long-term availability. In this way the economic system provided incentives for the systematic waste and possible destruction of its own resource base. Pinchot's goal was to preserve, through the scientific and public management of the nation's resources, the wealth of raw materials necessary to sustain an economic system premised on equality of opportunity and private property. His conservationism was therefore a vital ingredient of his overall liberal conception of distributive justice. Pinchot was optimistic that the public and scientific regulation of natural resources would serve to correct the failures of the market without undermining an essentially capitalist economic order, which in turn provided the material foundation of a liberal democratic order.

The problems Commoner identifies are more extreme, but not fundamentally different from those detected by Pinchot. Commoner's main concern is the exploitation of natural resources by private interests, but this problem is more pervasive, more deeply rooted in capitalist production, than Pinchot found in his own era. The nature of contemporary pollution, like the natural resource situation addressed by Pinchot, basically follows the pattern of the plunder of

"the commons." But today's private exploitation of nature is more concealed, pervasive, and threatening. "This time the world is being plundered in secret."[27] Because this plundering is systemic, tied to the core processes and technologies of capitalist production, the simple regulation of capitalism will no longer suffice. If productive technologies are to be altered to conform to environmental needs and natural processes, the means by which decisions about production and technology are made will themselves have to be changed. No longer can these be private choices, motivated by narrow economic interests. Rather, production decisions must become politicized, democratically informed, and publicly accountable. The bureaucratic regulation of capitalist society is no longer satisfactory. Rather, socialist planning must replace private ownership of productive processes. Only then will democratic control and protection of natural resources be assured. For Pinchot, private incentives could be combined with public management of natural resources to prevent the waste of these resources. For Commoner, nothing short of socialist control of the system of production can eliminate the structural incentives for pollution and the destruction of the natural world: "The remedy for our spectacular failure to clean up the environment is public participation in the until now private decisions about how goods and services are produced."[28]

No contemporary environmental theorist has been more intent than Commoner on maintaining the connection, originally found in Pinchot's work, between conservation and distributive justice. Like Pinchot, Commoner is committed to an expanding economy. Like Pinchot, he is confident that there are technical solutions to our resource problems, needing only a suitable political environment within which they can be developed and controlled. And finally, like Pinchot, Commoner believes that this political foundation must be committed to liberal equity and economic prosperity if it is to be successful and morally justifiable.

Of the numerous criticisms leveled at Commoner, two are especially illustrative of the problems raised by his progressive conservationism. Eugene Hargrove has criticized Commoner's "third law of ecology"—"nature knows best"[29]—as a form of "environmental therapeutic nihilism." For Hargrove, this "law" is doubly dangerous. First, it suggests that humans should refrain as much as possible from inter-

fering with natural processes, which, he argues, can lead to "a peculiar kind of callousness toward wild animals."[30] Second, "Therapeutic nihilism may sometimes allow environmental managers to avoid confronting their environmental values altogether."[31] Hargrove's premise, however, is entirely unfounded, because Commoner is not, by any means, an environmental nihilist. In fact, Charles Rubin is much closer to the truth when he writes that Commoner believes "that the world is man's to plan and mold according to his will."[32] Yet the truth that Hargrove stumbles on is that Commoner has very little to say about the intrinsic moral worth of the natural world. In all of Commoner's chronicles of environmental problems, his focus is consistently and clearly on human welfare. Hargrove is thus correct to suggest that Commoner's views do not force us to think of the possible independent moral value of nature; in fact, they might well be compatible with a lack of moral concern for the interests of other organisms insofar as they conflict with or are indifferent to the general human interest in maintaining a stable, healthy ecosystem. Because of his fundamentally humanist loyalties, Commoner, like Pinchot, will not satisfy contemporary environmental theorists looking to establish the intrinsic value of nature.

Commoner has also been accused (as was Pinchot) of having a technocratic attitude toward the environment. This is Rubin's point when he contends that Commoner offers us only "the promise of future technological development."[33] This claim is no more convincing than the "technocratic" reading of Pinchot. For both theorists, the technology (whether productive or administrative) of environmental management can only be successful in a particular political context that is informed by democratic values. Although both are optimistic about the technological possibilities of environmental control and "wise use," their commitments to distributive justice and democratic society precede their commitment to technology.

Rubin's stronger point is more subtle and applies to Pinchot as well as to Commoner: "It is ironic, given this [technological] optimism, that . . . [Commoner never] seriously addresses the basic political tension in a liberal regime between the populist benefits of the *dissemination* of technological growth and the centralizing, expert-driven tendencies of its *development*."[34] Commoner is a fervent advocate of democratic socialism, but the details of how to prevent the socialist

control of production from becoming a bureaucratic leviathan are not well-developed in his writings. This in fact holds true for many democratic socialists, who have yet to solve the problems of removing the capitalist market from the center of economic decision making and replacing it with a centralized state apparatus that maintains its democratic accountability.

All of this suggests that Commoner has inherited the virtues as well as the vices of the progressive conservation tradition. On the one hand, he stands out among contemporary environmentalists for attempting to forge a strong link between his environmentalist commitments and his more general commitments to democracy and justice. On the other hand, he is subject to the same blindness to the independent worth of natural objects, as well as to the potential political dangers of bureaucratic and technological control of the environment, that we find in Pinchot. The tensions between these virtues and vices of the progressive conservation tradition have yet to be resolved.

The current political expression of the American pastoral tradition is the small but ambitious Green movement. At present, this movement is only a loose affiliation of radical local environmental groups, but there are hopes for its future growth and an emerging literature that can be identified with this ambition. Largely inspired by the German Greens, many environmentalists in the United States have sought to learn from the German electoral success and perhaps reproduce it in this country. There are reasons to believe, however, that serious obstacles face the development of any American Green movement—obstacles that reflect the history of the American pastoral tradition.

Fritjof Capra and Charlene Spretnak, in *Green Politics*, their report on the German Green movement, argue that there are four "pillars" to Green politics: deep ecology, "social responsibility" (a basic commitment to equity and justice), decentralized participatory democracy, and nonviolence.[35] As Capra and Spretnak point out, this set of values has caused a number of problems within the German Green movement. For example, the second tenet includes a commitment to feminism that may potentially collide with the third, such as when a locality or independent nation chooses to not respect feminist values.[36] In the United States, the potential conflict between deep ecology

and the political values of democracy and social justice is already threatening to split the movement in its infancy.

In the American Green movement, the most important theorist to attempt to locate his environmentalism within a broader political theory is Murray Bookchin. Like Commoner, Bookchin has argued throughout his career that environmental problems are the direct consequence of unjust social institutions. "Every ecological problem that we face today apart from those caused by nature itself has its roots in social problems."[37] But unlike Commoner, Bookchin contends that although these problems take especially severe form in capitalist society, their origin transcends the particular institutions of contemporary society. Bookchin's historical thesis is that environmental problems are the consequence of the ancient human attempt to dominate nature, rather than live in harmony with it. And this drive to dominate has been the immediate and ongoing result of inequitable relationships between human beings. "The notion that man must dominate nature emerges directly from the domination of man by man."[38]

Bookchin's environmentalism is thus fundamentally a social theory, which he calls "social ecology." A central premise is that there was a time in human evolution when communities were characterized by an absence of social hierarchy or social inequality, as well as by a more ecological and harmonious relationship with the natural world. These traditional tribal communities, or "organic societies," are social as well as environmental models, since they illustrate that in just human communities there is no division between human interests and ecological imperatives. The qualities of nature are reflected within them and provide the foundation for ethical social and ecological relationships. Through his anthropological study of these societies and his direct observation of nature, Bookchin wishes to "evoke nature for an objectively grounded ethics."[39] His claim is that organic societies, and the natural world from which they arise, are distinguished by nonhierarchy, spontaneity, and "unity in diversity." These moral qualities are the antithesis of those found in societies (such as our own) marked by social inequality and human domination—hierarchy, conformity, and unfreedom.

Bookchin therefore believes that at its core, the environmental problem is one of reintegrating human society into "natural evolution."[40] This would not require that humans refrain from altering the natural

world, but it would dictate a different kind of intervention and partnership with nature than is found in all hierarchical human communities. "What is warped about the human condition is not that people actively intervene in nature and alter it, but that they intervene actively to destroy it because humanity's *social* development has been warped."[41] In an "organic" or ecological society, nature and humans harmoniously interact, each constructively shaping the other. "Our reentry into natural evolution is no less a humanization of nature than a naturalization of humanity."[42] Bookchin's clearly pastoral vision is that human society becomes reintegrated into natural processes, not as a passive component of the ecosystem, but as an active participant in the molding of the natural world. This pastoral community stands in contrast to hierarchical communities in which nature, like much of humanity, is simply to be subdued, dominated, and exploited for personal gain. Bookchin's environmentalist social theory provides a fairly detailed picture of a just political community, deduced from the lessons of nature, as well as a theoretical perspective from which to criticize contemporary social and political institutions.

There are, however, serious objections that can be raised to social ecology. Empirically, Bookchin's anthropology significantly romanticizes traditional premodern communities, and his understanding of biological and ecological processes will appear remarkably benign to those with a more conventional Darwinian view. More important, however, is the philosophical problem that Bookchin shares with the deep ecologists and the biocentric theorists discussed in previous chapters: how to derive moral imperatives from empirical observations about nature or premodern "natural" human communities. Even if Bookchin's descriptions of nature and organic societies are accurate, it is difficult to understand how they can lead to "objective" moral principles for a modern industrial society. Bookchin, as noted before, claims that nature can provide the foundation for an "objectively grounded ethics." He then explains that he uses nature as a "matrix" for ethics, rather than as the direct source of ethics, thus greatly softening and obscuring the original claim.[43] As Robyn Eckersley rhetorically asks, "What is it about Bookchin's evolutionary path of mutuality, diversity, and 'advancing subjectivity' that makes it the good and true path as compared to, say, Herbert Spencer's strug-

From a historical perspective, Bookchin's dispute with deep ecologists and other potential allies in the Green movement illustrates a recurring problem within the tradition of American pastoral environmentalism. Ever since Muir shifted the focus of this tradition from radical political criticism to individual salvation, it has been difficult to revive Thoreau's original political project. Even the most politically oriented arm of contemporary pastoralism, the Green movement, has not been able to maintain its political footing. Instead, as Bookchin fears, it is tempted by the biocentrism, irrationalism, and appeal to personal lifestyles of deep ecology. To the degree that the movement succumbs to this temptation, the Greens will be checked, as Bookchin suggests, in their development as a viable political movement with a well-conceived critical political theory.

The environmentalist literature discussed in this book is still in its youth. There are many problems yet to be resolved, some of which I have attempted to explain and trace. Despite the criticisms I have offered, it is important to remember that the recent outpouring has been triggered by an environmental crisis of tremendous scope and severity. Only recently, and quite reluctantly, have we become aware of the extraordinary damage contemporary societies have inflicted on the nonhuman world. Only as this damage reaches what appear to be catastrophic proportions are we becoming sensitive to the fact that our relationship to our natural environment is fundamental to all other relations: The very preconditions for human (and other) life have become threatened by modern production and warfare. Although environmental thinkers are still struggling to understand the ethical and political implications of this crisis, they are forcing us to address issues of the greatest theoretical and practical importance.

The dramatic nature of contemporary environmental problems, and the theoretical writings they have generated, pose a question for American political theory: How does one account for and integrate an appropriate understanding of nature within a more general theory of politics? The urgency of this query has not even been acknowledged by most political theorists, yet it is a problem that we absolutely must confront, for it bears directly on the future of our liberal democratic political institutions. Perhaps the single most influential observation

in the contemporary environmentalist literature is Lynn White's claim in "The Historical Roots of Our Ecologic Crisis" that the anthropocentrism of traditional Christianity is largely responsible for our abuse of the environment and that this abuse will continue until we purge this viewpoint and replace it with a more environmentally acceptable religious perspective.[56] There is another comment in his essay, however, that has gone largely unnoticed even though it raises a political question of supreme importance: "Our ecologic crisis is the product of an emerging, entirely novel, democratic culture. The issue is whether a democratized world can survive its own implications."[57]

The responses given to this question by the two traditions of American environmental political thought are not as completely developed or satisfactory as we might desire. Nonetheless, the best of the progressive conservation tradition reminds us that any reform of our relations with the natural world must be in harmony with the greatest of our democratic values—equality and freedom. The best of the pastoral tradition teaches us that such a reform must challenge the human arrogance and crude materialism found in much of liberal society. Whether or not humility before nature can be integrated with a commitment to democratic life is the question that remains to be answered, and we cannot avoid it any longer.

gle of the fittest?"[44] Bookchin has yet to give a satisfactory answer to this question.

Despite these difficulties, Bookchin's significance as a pastoral environmental theorist lies in his consistent attempt to keep political theory at the center of his environmental theory. His fundamental concern with social issues, his contention that environmentalism cannot be separated from a critical analysis of the structure of contemporary society, and his belief that nature provides the guidance for such a radical political analysis, all make Bookchin the most important contemporary American environmentalist to retain Thoreau's original political focus.

Because of this philosophical grounding, Bookchin rejects all biocentric theories that place the moral status of nature above that of humans.[45] As a result, he has become involved in a rather vicious series of polemical exchanges with other radical environmentalists, primarily deep ecologists. Bookchin has no sympathy with those who would simply preserve wilderness, untouched by human intervention, or those whose love of nature leads to a misanthropic attitude. As a major voice within the Green movement in the United States, Bookchin is anxious to disassociate himself (and the Greens as a whole) from the radical biocentrism of deep ecology and such groups as Earth First! "If the U.S. Greens adopt deep ecology's biocentrism, its denigration of human worth, its mystical thrust, and its subordination of social issues to a notion that places 'wilderness' before society as a 'real world' . . . they will eventually become a cult rather than a movement."[46] Bookchin has only scorn for such biocentrism, and he has gone so far as to accuse certain advocates of these views, such as Earth First!'s Dave Foreman and Edward Abbey, of being fascists.[47] Bookchin fears, not without reason, the antihuman, irrationalist, and undemocratic tendencies within these elements of the radical environmental movement.[48] Robyn Eckersley, writing from a deep ecology perspective, has critically observed that Bookchin is more concerned with organic agriculture than with wilderness preservation.[49] This, in fact, is probably true and serves to highlight the different directions taken by deep ecology and Bookchin's social ecology.[50] From Bookchin's pastoral perspective, the problem is to ecologically integrate the human community into the natural world, not to segregate this world from human contact and development.

Within the Green movement, there has been a mixed response to Bookchin's attack on deep ecology. One group calling itself the North California Greens has angrily rejected Bookchin's critique.

> Mr. Bookchin's assertion in the alternative media that the American Green movement is at a crisis point, struggling with the decision to have concern for social justice (that is, follow Mr. Bookchin) or have no concern for social justice (that is, follow deep ecology) is an insulting fabrication. The thousands of GCofC [Green Committee of Correspondence] members have come into the movement because they care deeply about ecological wisdom *and* social justice *and* peace with real security.[51]

Although they do not explain how "ecological wisdom," by which they presumably mean the wisdom of deep ecology, can be reconciled with a strong commitment to social justice, they clearly reject Bookchin's claim that the two are incompatible. Other theorists have attempted a more conciliatory approach to the dispute, hoping to seal the rift between Bookchin and deep ecology and keep them both within the Green movement. Brian Tokar calls for a truce, since he is fearful that the "emerging Green movement in the United States threatens to pick itself to pieces before it even has a chance to seriously take on the powers that be."[52] Kirkpatrick Sale likewise suggests that "the questions here are ones of emphasis and priority, not of fundamental incompatibility."[53]

Until recently, however, Bookchin has not been interested in a reconciliation with deep ecology. In response to Sale's overture, Bookchin simply reiterated his claim that "deep ecology is becoming one of the most pernicious ideologies to invade the ecology movement in the United States."[54] His censure of deep ecology has exposed a serious fracture within the Green movement that will not easily mend, given the appeal that deep ecology holds for a significant proportion of its membership. In some recent exchanges with Dave Foreman, Bookchin has moderated his criticism of deep ecology—presumably because he wishes to minimize any political damage to the environmental movement that may result from such a bitter division over this issue. It is clear, however, that the armistice between himself and Foreman is an unstable and tenuous one at best.[55]