

The Ethics of Respect for Nature

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I present the foundational structure for a life-centered theory of environmental ethics. The structure consists of three interrelated components. First is the adopting of a certain ultimate moral attitude toward nature, which I call "respect for nature." Second is a belief system that constitutes a way of conceiving of the natural world and of our place in it. This belief system underlies and supports the attitude in a way that makes it an appropriate attitude to take toward the Earth's natural ecosystems and their life communities. Third is a system of moral rules and standards for guiding our treatment of those ecosystems and life communities, a set of normative principles which give concrete embodiment or expression to the attitude of respect for nature. The theory set forth and defended here is, I hold, structurally symmetrical with a theory of human ethics based on the principle of respect for persons.

I. HUMAN-CENTERED AND LIFE-CENTERED SYSTEMS OF ENVIRONMENTAL ETHICS

In this paper I show how the taking of a certain ultimate moral attitude toward nature, which I call "respect for nature," has a central place in the foundations of a life-centered system of environmental ethics. I hold that a set of moral norms (both standards of character and rules of conduct) governing human treatment of the natural world is a rationally grounded set if and only if, first, commitment to those norms is a practical entailment of adopting the attitude of respect for nature as an ultimate moral attitude, and second, the adopting of that attitude on the part of all rational agents can itself be justified. When the basic characteristics of the attitude of respect for nature are made clear, it will be seen that a life-centered system of environmental ethics need not be holistic or organicist in its conception of the kinds of entities that are deemed the appropriate objects of moral concern and consideration. Nor does such a system require that the concepts of ecological homeostasis, equilibrium, and integrity provide us with normative principles from which could be derived (with the addition of factual knowledge) our obligations with regard

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to natural ecosystems. The "balance of nature" is not itself a moral norm, however important may be the role it plays in our general outlook on the natural world that underlies the attitude of respect for nature. I argue that finally it is the good (well-being, welfare) of individual organisms, considered as entities having inherent worth, that determines our moral relations with the Earth's wild communities of life.

In designating the theory to be set forth as life-centered, I intend to contrast it with all anthropocentric views. According to the latter, human actions affecting the natural environment and its nonhuman inhabitants are right (or wrong) by either of two criteria: they have consequences which are favorable (or unfavorable) to human well-being, or they are consistent (or inconsistent) with the system of norms that protect and implement human rights. From this human-centered standpoint it is to humans and only to humans that all duties are ultimately owed. We may have responsibilities *with regard to* the natural ecosystems and biotic communities of our planet, but these responsibilities are in every case based on the contingent fact that our treatment of those ecosystems and communities of life can further the realization of human values and/or human rights. We have no obligation to promote or protect the good of nonhuman living things, independently of this contingent fact.

A life-centered system of environmental ethics is opposed to human-centered ones precisely on this point. From the perspective of a life-centered theory, we have *prima facie* moral obligations that are owed to wild plants and animals themselves as members of the Earth's biotic community. We are morally bound (other things being equal) to protect or promote their good for *their* sake. Our duties to respect the integrity of natural ecosystems, to preserve endangered species, and to avoid environmental pollution stem from the fact that these are ways in which we can help make it possible for wild species populations to achieve and maintain a healthy existence in a natural state. Such obligations are due those living things out of recognition of their inherent worth. They are entirely additional to and independent of the obligations we owe to our fellow humans. Although many of the actions that fulfill one set of obligations will also fulfill the other, two different grounds of obligation are involved. Their well-being, as well as human well-being, is something to be realized *as an end in itself*.

If we were to accept a life-centered theory of environmental ethics, a profound reordering of our moral universe would take place. We would begin to look at the whole of the Earth's biosphere in a new light. Our duties with respect to the "world" of nature would be seen as making *prima facie* claims upon us to be balanced against our duties with respect to the "world" of human civilization. We could no longer simply take the human point of view and consider the effects of our actions exclusively from the perspective of our own good.

II. THE GOOD OF A BEING AND THE CONCEPT OF INHERENT WORTH

What would justify acceptance of a life-centered system of ethical principles? In order to answer this it is first necessary to make clear the fundamental moral attitude that underlies and makes intelligible the commitment to live by such a system. It is then necessary to examine the considerations that would justify any rational agent's adopting that moral attitude.

Two concepts are essential to the taking of a moral attitude of the sort in question. A being which does not "have" these concepts, that is, which is unable to grasp their meaning and conditions of applicability, cannot be said to have the attitude as part of its moral outlook. These concepts are, first, that of the good (well-being, welfare) of a living thing, and second, the idea of an entity possessing inherent worth. I examine each concept in turn.

(1) Every organism, species population, and community of life has a good of its own which moral agents can intentionally further or damage by their actions. To say that an entity has a good of its own is simply to say that, without reference to any *other* entity, it can be benefited or harmed. One can act in its overall interest or contrary to its overall interest, and environmental conditions can be good for it (advantageous to it) or bad for it (disadvantageous to it). What is good for an entity is what "does it good" in the sense of enhancing or preserving its life and well-being. What is bad for an entity is something that is detrimental to its life and well-being.¹

We can think of the good of an individual nonhuman organism as consisting in the full development of its biological powers. Its good is realized to the extent that it is strong and healthy. It possesses whatever capacities it needs for successfully coping with its environment and so preserving its existence throughout the various stages of the normal life cycle of its species. The good of a population or community of such individuals consists in the population or community maintaining itself from generation to generation as a coherent system of genetically and ecologically related organisms whose average good is at an optimum level for the given environment. (Here *average good* means that the degree of realization of the good of *individual organisms* in the population or community is, on average, greater than would be the case under any other ecologically functioning order of interrelations among those species populations in the given ecosystem.)

The idea of a being having a good of its own, as I understand it, does not entail that the being must have interests or take an interest in what affects its life for better or for worse. We can act in a being's interest or contrary to its

¹ The conceptual links between an entity *having* a good, something being good *for* it, and events doing good *to* it are examined by G. H. Von Wright in *The Varieties of Goodness* (New York: Humanities Press, 1963), chaps. 3 and 5.

interest without its being interested in what we are doing to it in the sense of wanting or not wanting us to do it. It may, indeed, be wholly unaware that favorable and unfavorable events are taking place in its life. I take it that trees, for example, have no knowledge or desires or feelings. Yet it is undoubtedly the case that trees can be harmed or benefited by our actions. We can crush their roots by running a bulldozer too close to them. We can see to it that they get adequate nourishment and moisture by fertilizing and watering the soil around them. Thus we can help or hinder them in the realization of their good. It is the good of trees themselves that is thereby affected. We can similarly act so as to further the good of an entire tree population of a certain species (say, all the redwood trees in a California valley) or the good of a whole community of plant life in a given wilderness area, just as we can do harm to such a population or community.

When construed in this way, the concept of a being's good is not coextensive with sentience or the capacity for feeling pain. William Frankena has argued for a general theory of environmental ethics in which the ground of a creature's being worthy of moral consideration is its sentience. I have offered some criticisms of this view elsewhere, but the full refutation of such a position, it seems to me, finally depends on the positive reasons for accepting a life-centered theory of the kind I am defending in this essay.²

It should be noted further that I am leaving open the question of whether machines—in particular, those which are not only goal-directed, but also self-regulating—can properly be said to have a good of their own.³ Since I am concerned only with human treatment of wild organisms, species populations, and communities of life as they occur in our planet's natural ecosystems, it is to those entities alone that the concept "having a good of its own" will here be applied. I am not denying that other living things, whose genetic origin and environmental conditions have been produced, controlled, and manipulated by humans for human ends, do have a good of their own in the same sense as do wild plants and animals. It is not my purpose in this essay, however, to set out or defend the principles that should guide our conduct with regard to their good. It is only insofar as their production and use by humans have good or ill effects upon natural ecosystems and their wild inhabitants that the ethics of respect for nature comes into play.

(2) The second concept essential to the moral attitude of respect for nature is the idea of inherent worth. We take that attitude toward wild living things

² See W. K. Frankena, "Ethics and the Environment," in K.E. Goodpaster and K.M. Sayre, eds., *Ethics and Problems of the 21st Century* (Notre Dame, University of Notre Dame Press, 1979), pp. 3–20. I critically examine Frankena's views in "Frankena on Environmental Ethics," *Monist*, forthcoming.

³ In the light of considerations set forth in Daniel Dennett's *Brainstorms: Philosophical Essays on Mind and Psychology* (Montgomery, Vermont: Bradford Books, 1978), it is advisable to leave this question unsettled at this time. When machines are developed that function in the way our brains do, we may well come to deem them proper subjects of moral consideration.

(individuals, species populations, or whole biotic communities) when and only when we regard them as entities possessing inherent worth. Indeed, it is only because they are conceived in this way that moral agents can think of themselves as having validly binding duties, obligations, and responsibilities that are *owed* to them as their *due*. I am not at this juncture arguing why they *should* be so regarded; I consider it at length below. But so regarding them is a presupposition of our taking the attitude of respect toward them and accordingly understanding ourselves as bearing certain moral relations to them. This can be shown as follows:

What does it mean to regard an entity that has a good of its own as possessing inherent worth? Two general principles are involved: the principle of moral consideration and the principle of intrinsic value.

According to the principle of moral consideration, wild living things are deserving of the concern and consideration of all moral agents simply in virtue of their being members of the Earth's community of life. From the moral point of view their good must be taken into account whenever it is affected for better or worse by the conduct of rational agents. This holds no matter what species the creature belongs to. The good of each is to be accorded some value and so acknowledged as having some weight in the deliberations of all rational agents. Of course, it may be necessary for such agents to act in ways contrary to the good of this or that particular organism or group of organisms in order to further the good of others, including the good of humans. But the principle of moral consideration prescribes that, with respect to each being an entity having its own good, every individual is deserving of consideration.

The principle of intrinsic value states that, regardless of what kind of entity it is in other respects, if it is a member of the Earth's community of life, the realization of its good is something *intrinsically* valuable. This means that its good is *prima facie* worthy of being preserved or promoted as an end in itself and for the sake of the entity whose good it is. Insofar as we regard any organism, species population, or life community as an entity having inherent worth, we believe that it must never be treated as if it were a mere object or thing whose entire value lies in being instrumental to the good of some other entity. The well-being of each is judged to have value in and of itself.

Combining these two principles, we can now define what it means for a living thing or group of living things to possess inherent worth. To say that it possesses inherent worth is to say that its good is deserving of the concern and consideration of all moral agents, and that the realization of its good has intrinsic value, to be pursued as an end in itself and for the sake of the entity whose good it is.

The duties owed to wild organisms, species populations, and communities of life in the Earth's natural ecosystems are grounded on their inherent worth. When rational, autonomous agents regard such entities as possessing inherent worth, they place intrinsic value on the realization of their good and so hold

themselves responsible for performing actions that will have this effect and for refraining from actions having the contrary effect.

III. THE ATTITUDE OF RESPECT FOR NATURE

Why should moral agents regard wild living things in the natural world as possessing inherent worth? To answer this question we must first take into account the fact that, when rational, autonomous agents subscribe to the principles of moral consideration and intrinsic value and so conceive of wild living things as having that kind of worth, such agents are *adopting a certain ultimate moral attitude toward the natural world*. This is the attitude I call "respect for nature." It parallels the attitude of respect for persons in human ethics. When we adopt the attitude of respect for persons as the proper (fitting, appropriate) attitude to take toward all persons as persons, we consider the fulfillment of the basic interests of each individual to have intrinsic value. We thereby make a moral commitment to live a certain kind of life in relation to other persons. We place ourselves under the direction of a system of standards and rules that we consider validly binding on all moral agents as such.⁴

Similarly, when we adopt the attitude of respect for nature as an ultimate moral attitude we make a commitment to live by certain normative principles. These principles constitute the rules of conduct and standards of character that are to govern our treatment of the natural world. This is, first, an *ultimate* commitment because it is not derived from any higher norm. The attitude of respect for nature is not grounded on some other, more general, or more fundamental attitude. It sets the total framework for our responsibilities toward the natural world. It can be justified, as I show below, but its justification cannot consist in referring to a more general attitude or a more basic normative principle.

Second, the commitment is a *moral* one because it is understood to be a disinterested matter of principle. It is this feature that distinguishes the attitude of respect for nature from the set of feelings and dispositions that comprise the love of nature. The latter stems from one's personal interest in and response to the natural world. Like the affectionate feelings we have toward certain individual human beings, one's love of nature is nothing more than the particular way one feels about the natural environment and its wild inhabitants. And just as our love for an individual person differs from our respect for all persons as such (whether we happen to love them or not), so love of nature differs from respect for nature. Respect for nature is an attitude we

⁴ I have analyzed the nature of this commitment of human ethics in "On Taking the Moral Point of View," *Midwest Studies in Philosophy*, vol. 3, *Studies in Ethical Theory* (1978), pp. 35–61.

believe all moral agents ought to have simply as moral agents, regardless of whether or not they also love nature. Indeed, we have not truly taken the attitude of respect for nature ourselves unless we believe this. To put it in a Kantian way, to adopt the attitude of respect for nature is to take a stance that one wills it to be a universal law for all rational beings. It is to hold that stance categorically, as being validly applicable to every moral agent without exception, irrespective of whatever personal feelings toward nature such an agent might have or might lack.

Although the attitude of respect for nature is in this sense a disinterested and universalizable attitude, anyone who does adopt it has certain steady, more or less permanent dispositions. These dispositions, which are themselves to be considered disinterested and universalizable, comprise three interlocking sets: dispositions to seek certain ends, dispositions to carry on one's practical reasoning and deliberation in a certain way, and dispositions to have certain feelings. We may accordingly analyze the attitude of respect for nature into the following components. (a) The disposition to aim at, and to take steps to bring about, as final and disinterested ends, the promoting and protecting of the good of organisms, species populations, and life communities in natural ecosystems. (These ends are "final" in not being pursued as means to further ends. They are "disinterested" in being independent of the self-interest of the agent.) (b) The disposition to consider actions that tend to realize those ends to be *prima facie* obligatory *because* they have that tendency. (c) The disposition to experience positive and negative feelings toward states of affairs in the world *because* they are favorable or unfavorable to the good of organisms, species populations, and life communities in natural ecosystems.

The logical connection between the attitude of respect for nature and the duties of a life-centered system of environmental ethics can now be made clear. Insofar as one sincerely takes that attitude and so has the three sets of dispositions, one will at the same time be disposed to comply with certain rules of duty (such as nonmaleficence and noninterference) and with standards of character (such as fairness and benevolence) that determine the obligations and virtues of moral agents with regard to the Earth's wild living things. We can say that the actions one performs and the character traits one develops in fulfilling these moral requirements are the way one *expresses* or *embodies* the attitude in one's conduct and character. In his famous essay, "Justice as Fairness," John Rawls describes the rules of the duties of human morality (such as fidelity, gratitude, honesty, and justice) as "forms of conduct in which recognition of others as persons is manifested."⁵ I hold that the rules of duty governing our treatment of the natural world and its inhabitants are forms of conduct in which the attitude of respect for nature is manifested.

⁵ John Rawls, "Justice As Fairness," *Philosophical Review* 67 (1958): 183.

IV. THE JUSTIFIABILITY OF THE ATTITUDE OF RESPECT FOR NATURE

I return to the question posed earlier, which has not yet been answered: why *should* moral agents regard wild living things as possessing inherent worth? I now argue that the only way we can answer this question is by showing how adopting the attitude of respect for nature is justified for all moral agents. Let us suppose that we were able to establish that there are good reasons for adopting the attitude, reasons which are intersubjectively valid for every rational agent. If there are such reasons, they would justify anyone's having the three sets of dispositions mentioned above as constituting what it means to have the attitude. Since these include the disposition to promote or protect the good of wild living things as a disinterested and ultimate end, as well as the disposition to perform actions for the reason that they tend to realize that end, we see that such dispositions commit a person to the principles of moral consideration and intrinsic value. To be disposed to further, as an end in itself, the good of any entity in nature just because it is that kind of entity, is to be disposed to give consideration to *every* such entity and to place intrinsic value on the realization of its good. Insofar as we subscribe to these two principles we regard living things as possessing inherent worth. Subscribing to the principles is what it *means* to so regard them. To justify the attitude of respect for nature, then, is to justify commitment to these principles and thereby to justify regarding wild creatures as possessing inherent worth.

We must keep in mind that inherent worth is not some mysterious sort of objective property belonging to living things that can be discovered by empirical observation or scientific investigation. To ascribe inherent worth to an entity is not to describe it by citing some feature discernible by sense perception or inferable by inductive reasoning. Nor is there a logically necessary connection between the concept of a being having a good of its own and the concept of inherent worth. We do not contradict ourselves by asserting that an entity that has a good of its own lacks inherent worth. In order to show that such an entity "has" inherent worth we must give good reasons for ascribing that kind of value to it (placing that kind of value upon it, conceiving of it to be valuable in that way). Although it is humans (persons, valuers) who must do the valuing, for the ethics of respect for nature, the value so ascribed is not a human value. That is to say, it is not a value derived from considerations regarding human well-being or human rights. It is a value that is ascribed to nonhuman animals and plants themselves, independently of their relationship to what humans judge to be conducive to their own good.

Whatever reasons, then, justify our taking the attitude of respect for nature as defined above are also reasons that show why we *should* regard the living things of the natural world as possessing inherent worth. We saw earlier that, since the attitude is an ultimate one, it cannot be derived from a more funda-

mental attitude nor shown to be a special case of a more general one. On what sort of grounds, then, can it be established?

The attitude we take toward living things in the natural world depends on the way we look at them, on what kind of beings we conceive them to be, and on how we understand the relations we bear to them. Underlying and supporting our attitude is a certain *belief system* that constitutes a particular world view or outlook on nature and the place of human life in it. To give good reasons for adopting the attitude of respect for nature, then, we must first articulate the belief system which underlies and supports that attitude. If it appears that the belief system is internally coherent and well-ordered, and if, as far as we can now tell, it is consistent with all known scientific truths relevant to our knowledge of the object of the attitude (which in this case includes the whole set of the Earth's natural ecosystems and their communities of life), then there remains the task of indicating why scientifically informed and rational thinkers with a developed capacity of reality awareness can find it acceptable as a way of conceiving of the natural world and our place in it. To the extent we can do this we provide at least a reasonable argument for accepting the belief system and the ultimate moral attitude it supports.

I do not hold that such a belief system can be *proven* to be true, either inductively or deductively. As we shall see, not all of its components can be stated in the form of empirically verifiable propositions. Nor is its internal order governed by purely logical relationships. But the system as a whole, I contend, constitutes a coherent, unified, and rationally acceptable "picture" or "map" of a total world. By examining each of its main components and seeing how they fit together, we obtain a scientifically informed and well-ordered conception of nature and the place of humans in it.

This belief system underlying the attitude of respect for nature I call (for want of a better name) "the biocentric outlook on nature." Since it is not wholly analyzable into empirically confirmable assertions, it should not be thought of as simply a compendium of the biological sciences concerning our planet's ecosystems. It might best be described as a philosophical world view, to distinguish it from a scientific theory or explanatory system. However, one of its major tenets is the great lesson we have learned from the science of ecology: the interdependence of all living things in an organically unified order whose balance and stability are necessary conditions for the realization of the good of its constituent biotic communities.

Before turning to an account of the main components of the biocentric outlook, it is convenient here to set forth the overall structure of my theory of environmental ethics as it has now emerged. The ethics of respect for nature is made up of three basic elements: a belief system, an ultimate moral attitude, and a set of rules of duty and standards of character. These elements are connected with each other in the following manner. The belief system provides a certain outlook on nature which supports and makes intelligible an auto-

mous agent's adopting, as an ultimate moral attitude, the attitude of respect for nature. It supports and makes intelligible the attitude in the sense that, when an autonomous agent understands its moral relations to the natural world in terms of this outlook, it recognizes the attitude of respect to be the only *suitable* or *fitting* attitude to take toward all wild forms of life in the Earth's biosphere. Living things are now viewed as *the appropriate objects of the attitude of respect* and are accordingly regarded as entities possessing inherent worth. One then places intrinsic value on the promotion and protection of their good. As a consequence of this, one makes a moral commitment to abide by a set of rules of duty and to fulfill (as far as one can by one's own efforts) certain standards of good character. Given one's adoption of the attitude of respect, one makes that moral commitment because one considers those rules and standards to be validly binding on all moral agents. They are seen as embodying forms of conduct and character structures in which the attitude of respect for nature is manifested.

This three-part complex which internally orders the ethics of respect for nature is symmetrical with a theory of human ethics grounded on respect for persons. Such a theory includes, first, a conception of oneself and others as persons, that is, as centers of autonomous choice. Second, there is the attitude of respect for persons as persons. When this is adopted as an ultimate moral attitude it involves the disposition to treat every person as having inherent worth or "human dignity." Every human being, just in virtue of her or his humanity, is understood to be worthy of moral consideration, and intrinsic value is placed on the autonomy and well-being of each. This is what Kant meant by conceiving of persons as ends in themselves. Third, there is an ethical system of duties which are acknowledged to be owed by everyone to everyone. These duties are forms of conduct in which public recognition is given to each individual's inherent worth as a person.

This structural framework for a theory of human ethics is meant to leave open the issue of consequentialism (utilitarianism) versus nonconsequentialism (deontology). That issue concerns the particular kind of system of rules defining the duties of moral agents toward persons. Similarly, I am leaving open in this paper the question of what particular kind of system of rules defines our duties with respect to the natural world.

V. THE BIOCENTRIC OUTLOOK ON NATURE

The biocentric outlook on nature has four main components. (1) Humans are thought of as members of the Earth's community of life, holding that membership on the same terms as apply to all the nonhuman members. (2) The Earth's natural ecosystems as a totality are seen as a complex web of interconnected elements, with the sound biological functioning of each being dependent on the sound biological functioning of the others. (This is the component referred to above as the great lesson that the science of ecology has taught us).

(3) Each individual organism is conceived of as a teleological center of life, pursuing its own good in its own way. (4) Whether we are concerned with standards of merit or with the concept of inherent worth, the claim that humans by their very nature are superior to other species is a groundless claim and, in the light of elements (1), (2), and (3) above, must be rejected as nothing more than an irrational bias in our own favor.

The conjunction of these four ideas constitutes the biocentric outlook on nature. In the remainder of this paper I give a brief account of the first three components, followed by a more detailed analysis of the fourth. I then conclude by indicating how this outlook provides a way of justifying the attitude of respect for nature.

VI. HUMANS AS MEMBERS OF THE EARTH'S COMMUNITY OF LIFE

We share with other species a common relationship to the Earth. In accepting the biocentric outlook we take the fact of our being an animal species to be a fundamental feature of our existence. We consider it an essential aspect of "the human condition." We do not deny the differences between ourselves and other species, but we keep in the forefront of our consciousness the fact that in relation to our planet's natural ecosystems we are but one species population among many. Thus we acknowledge our origin in the very same evolutionary process that gave rise to all other species and we recognize ourselves to be confronted with similar environmental challenges to those that confront them. The laws of genetics, of natural selection, and of adaptation apply equally to all of us as biological creatures. In this light we consider ourselves as one with them, not set apart from them. We, as well as they, must face certain basic conditions of existence that impose requirements on us for our survival and well-being. Each animal and plant is like us in having a good of its own. Although our human good (what is of true value in human life, including the exercise of individual autonomy in choosing our own particular value systems) is not like the good of a nonhuman animal or plant, it can no more be realized than their good can without the biological necessities for survival and physical health.

When we look at ourselves from the evolutionary point of view, we see that not only are we very recent arrivals on Earth, but that our emergence as a new species on the planet was originally an event of no particular importance to the entire scheme of things. The Earth was teeming with life long before we appeared. Putting the point metaphorically, we are relative newcomers, entering a home that has been the residence of others for hundreds of millions of years, a home that must now be shared by all of us together.

The comparative brevity of human life on Earth may be vividly depicted by imagining the geological time scale in spatial terms. Suppose we start with algae, which have been around for at least 600 million years. (The earliest

protozoa actually predated this by several *billion* years.) If the time that algae have been here were represented by the length of a football field (300 feet), then the period during which sharks have been swimming in the world's oceans and spiders have been spinning their webs would occupy three quarters of the length of the field; reptiles would show up at about the center of the field; mammals would cover the last third of the field; hominids (mammals of the family *Hominidae*) the last two feet; and the species *Homo sapiens* the last six inches.

Whether this newcomer is able to survive as long as other species remains to be seen. But there is surely something presumptuous about the way humans look down on the "lower" animals, especially those that have become extinct. We consider the dinosaurs, for example, to be biological failures, though they existed on our planet for 65 million years. One writer has made the point with beautiful simplicity:

We sometimes speak of the dinosaurs as failures; there will be time enough for that judgment when we have lasted even for one tenth as long. . . .⁶

The possibility of the extinction of the human species, a possibility which starkly confronts us in the contemporary world, makes us aware of another respect in which we should not consider ourselves privileged beings in relation to other species. This is the fact that the well-being of humans is dependent upon the ecological soundness and health of many plant and animal communities, while their soundness and health does not in the least depend upon human well-being. Indeed, from their standpoint the very existence of humans is quite unnecessary. Every last man, woman, and child could disappear from the face of the Earth without any significant detrimental consequence for the good of wild animals and plants. On the contrary, many of them would be greatly benefited. The destruction of their habitats by human "developments" would cease. The poisoning and polluting of their environment would come to an end. The Earth's land, air, and water would no longer be subject to the degradation they are now undergoing as the result of large-scale technology and uncontrolled population growth. Life communities in natural ecosystems would gradually return to their former healthy state. Tropical forests, for example, would again be able to make their full contribution to a life-sustaining atmosphere for the whole planet. The rivers, lakes, and oceans of the world would (perhaps) eventually become clean again. Spilled oil, plastic trash, and even radioactive waste might finally, after many centuries, cease doing their terrible work. Ecosystems would return to their proper balance, suffering only the disruptions of natural events such as volcanic eruptions and glaciation. From these the community of life could recover, as it has so often done in the past.

⁶ Stephen R.L. Clark, *The Moral Status of Animals* (Oxford: Clarendon Press, 1977), p. 112.

But the ecological disasters now perpetrated on it by humans—disasters from which it might never recover—these it would no longer have to endure.

If, then, the total, final, absolute extermination of our species (by our own hands?) should take place and if we should not carry all the others with us into oblivion, not only would the Earth's community of life continue to exist, but in all probability its well-being would be enhanced. Our presence, in short, is not needed. If we were to take the standpoint of the community and give voice to its true interest, the ending of our six-inch epoch would most likely be greeted with a hearty "Good riddance!"

VII. THE NATURAL WORLD AS AN ORGANIC SYSTEM

To accept the biocentric outlook and regard ourselves and our place in the world from its perspective is to see the whole natural order of the Earth's biosphere as a complex but unified web of interconnected organisms, objects, and events. The ecological relationships between any community of living things and their environment form an organic whole of functionally interdependent parts. Each ecosystem is a small universe itself in which the interactions of its various species populations comprise an intricately woven network of cause-effect relations. Such dynamic but at the same time relatively stable structures as food chains, predator-prey relations, and plant succession in a forest are self-regulating, energy-recycling mechanisms that preserve the equilibrium of the whole.

As far as the well-being of wild animals and plants is concerned, this ecological equilibrium must not be destroyed. The same holds true of the well-being of humans. When one views the realm of nature from the perspective of the biocentric outlook, one never forgets that in the long run the integrity of the entire biosphere of our planet is essential to the realization of the good of its constituent communities of life, both human and nonhuman.

Although the importance of this idea cannot be overemphasized, it is by now so familiar and so widely acknowledged that I shall not further elaborate on it here. However, I do wish to point out that this "holistic" view of the Earth's ecological systems does not itself constitute a moral norm. It is a factual aspect of biological reality, to be understood as a set of causal connections in ordinary empirical terms. Its significance for humans is the same as its significance for nonhumans, namely, in setting basic conditions for the realization of the good of living things. Its ethical implications for our treatment of the natural environment lie entirely in the fact that our *knowledge* of these causal connections is an essential *means* to fulfilling the aims we set for ourselves in adopting the attitude of respect for nature. In addition, its theoretical implications for the ethics of respect for nature lie in the fact that it (along with the other elements of the biocentric outlook) makes the adopting of that attitude a rational and intelligible thing to do.

VIII. INDIVIDUAL ORGANISMS AS TELEOLOGICAL CENTERS OF LIFE

As our knowledge of living things increases, as we come to a deeper understanding of their life cycles, their interactions with other organisms, and the manifold ways in which they adjust to the environment, we become more fully aware of how each of them is carrying out its biological functions according to the laws of its species-specific nature. But besides this, our increasing knowledge and understanding also develop in us a sharpened awareness of the uniqueness of each individual organism. Scientists who have made careful studies of particular plants and animals, whether in the field or in laboratories, have often acquired a knowledge of their subjects as identifiable individuals. Close observation over extended periods of time has led them to an appreciation of the unique "personalities" of their subjects. Sometimes a scientist may come to take a special interest in a particular animal or plant, all the while remaining strictly objective in the gathering and recording of data. Nonscientists may likewise experience this development of interest when, as amateur naturalists, they make accurate observations over sustained periods of close acquaintance with an individual organism. As one becomes more and more familiar with the organism and its behavior, one becomes fully sensitive to the particular way it is living out its life cycle. One may become fascinated by it and even experience some involvement with its good and bad fortunes (that is, with the occurrence of environmental conditions favorable or unfavorable to the realization of its good). The organism comes to mean something to one as a unique, irreplaceable individual. The final culmination of this process is the achievement of a genuine understanding of its point of view and, with that understanding, an ability to "take" that point of view. *Conceiving of it as a center of life, one is able to look at the world from its perspective.*

This development from objective knowledge to the recognition of individuality, and from the recognition of individuality to full awareness of an organism's standpoint, is a process of heightening our consciousness of what it means to be an individual living thing. We grasp the particularity of the organism as a teleological center of life, striving to preserve itself and to realize its own good in its own unique way.

It is to be noted that we need not be falsely anthropomorphizing when we conceive of individual plants and animals in this manner. Understanding them as teleological centers of life does not necessitate "reading into" them human characteristics. We need not, for example, consider them to have consciousness. Some of them may be aware of the world around them and others may not. Nor need we deny that different kinds and levels of awareness are exemplified when consciousness in some form is present. But conscious or not, all are equally teleological centers of life in the sense that each is a unified system of goal-oriented activities directed toward their preservation and well-being.

When considered from an ethical point of view, a teleological center of life is an entity whose "world" can be viewed from the perspective of *its* life. In looking at the world from that perspective we recognize objects and events occurring in its life as being beneficent, maleficent, or indifferent. The first are occurrences which increase its powers to preserve its existence and realize its good. The second decrease or destroy those powers. The third have neither of these effects on the entity. With regard to our human role as moral agents, we can conceive of a teleological center of life as a being whose standpoint we can take in making judgments about what events in the world are good or evil, desirable or undesirable. In making those judgments it is what promotes or protects the being's own good, not what benefits moral agents themselves, that sets the standard of evaluation. Such judgments can be made about anything that happens to the entity which is favorable or unfavorable in relation to its good. As was pointed out earlier, the entity itself need not have any (conscious) *interest* in what is happening to it for such judgments to be meaningful and true.

It is precisely judgments of this sort that we are disposed to make when we take the attitude of respect for nature. In adopting that attitude those judgments are given weight as reasons for action in our practical deliberation. They become morally relevant facts in the guidance of our conduct.

IX. THE DENIAL OF HUMAN SUPERIORITY

This fourth component of the biocentric outlook on nature is the single most important idea in establishing the justifiability of the attitude of respect for nature. Its central role is due to the special relationship it bears to the first three components of the outlook. This relationship will be brought out after the concept of human superiority is examined and analyzed.⁷

In what sense are humans alleged to be superior to other animals? We are different from them in having certain capacities that they lack. But why should these capacities be a mark of superiority? From what point of view are they judged to be signs of superiority and what sense of superiority is meant? After all, various nonhuman species have capacities that humans lack. There is the speed of a cheetah, the vision of an eagle, the agility of a monkey. Why should not these be taken as signs of *their* superiority over humans?

One answer that comes immediately to mind is that these capacities are not as *valuable* as the human capacities that are claimed to make us superior. Such uniquely human characteristics as rational thought, aesthetic creativity, auton-

⁷ My criticisms of the dogma of human superiority gain independent support from a carefully reasoned essay by R. and V. Routley showing the many logical weaknesses in arguments for human-centered theories of environmental ethics. R. and V. Routley, "Against the Inevitability of Human Chauvinism," in K. E. Goodpaster and K. M. Sayre, eds., *Ethics and Problems of the 21st Century* (Notre Dame: University of Notre Dame Press, 1979), pp. 36-59.

omy and self-determination, and moral freedom, it might be held, have a higher value than the capacities found in other species. Yet we must ask: valuable to whom, and on what grounds?

The human characteristics mentioned are all valuable to humans. They are essential to the preservation and enrichment of our civilization and culture. Clearly it is from the human standpoint that they are being judged to be desirable and good. It is not difficult here to recognize a begging of the question. Humans are claiming human superiority from a strictly human point of view, that is, from a point of view in which the good of humans is taken as the standard of judgment. All we need to do is to look at the capacities of nonhuman animals (or plants, for that matter) from the standpoint of *their* good to find a contrary judgment of superiority. The speed of the cheetah, for example, is a sign of its superiority to humans when considered from the standpoint of the good of its species. If it were as slow a runner as a human, it would not be able to survive. And so for all the other abilities of nonhumans which further their good but which are lacking in humans. In each case the claim to human superiority would be rejected from a nonhuman standpoint.

When superiority assertions are interpreted in this way, they are based on judgments of *merit*. To judge the merits of a person or an organism one must apply grading or ranking standards to it. (As I show below, this distinguishes judgments of merit from judgments of inherent worth.) Empirical investigation then determines whether it has the "good-making properties" (merits) in virtue of which it fulfills the standards being applied. In the case of humans, merits may be either moral or nonmoral. We can judge one person to be better than (superior to) another from the moral point of view by applying certain standards to their character and conduct. Similarly, we can appeal to nonmoral criteria in judging someone to be an excellent piano player, a fair cook, a poor tennis player, and so on. Different social purposes and roles are implicit in the making of such judgments, providing the frame of reference for the choice of standards by which the nonmoral merits of people are determined. Ultimately such purposes and roles stem from a society's way of life as a whole. Now a society's way of life may be thought of as the cultural form given to the realization of human values. Whether moral or nonmoral standards are being applied, then, all judgments of people's merits finally depend on human values. All are made from an exclusively human standpoint.

The question that naturally arises at this juncture is: why should standards that are based on human values be assumed to be the only valid criteria of merit and hence the only true signs of superiority? This question is especially pressing when humans are being judged superior in merit to nonhumans. It is true that a human being may be a better mathematician than a monkey, but the monkey may be a better tree climber than a human being. If we humans value mathematics more than tree climbing, that is because our conception of civilized life makes the development of mathematical ability more desirable than the ability to climb trees. But is it not unreasonable to judge nonhumans by

the values of human civilization, rather than by values connected with what it is for a member of *that* species to live a good life? If all living things have a good of their own, it at least makes sense to judge the merits of nonhumans by standards derived from *their* good. To use only standards based on human values is already to commit oneself to holding that humans are superior to nonhumans, which is the point in question.

A further logical flaw arises in connection with the widely held conviction that humans are *morally* superior beings because they possess, while others lack, the capacities of a moral agent (free will, accountability, deliberation, judgment, practical reason). This view rests on a conceptual confusion. As far as moral standards are concerned, only beings that have the capacities of a moral agent can properly be judged to be *either* moral (morally good) *or* immoral (morally deficient). Moral standards are simply not applicable to beings that lack such capacities. Animals and plants cannot therefore be said to be morally inferior in merit to humans. Since the only beings that can have moral merits *or be deficient in such merits* are moral agents, it is conceptually incoherent to judge humans as superior to nonhumans on the ground that humans have moral capacities while nonhumans don't.

Up to this point I have been interpreting the claim that humans are superior to other living things as a grading or ranking judgment regarding their comparative merits. There is, however, another way of understanding the idea of human superiority. According to this interpretation, humans are superior to nonhumans not as regards their merits but as regards their inherent worth. Thus the claim of human superiority is to be understood as asserting that all humans, simply in virtue of their humanity, have *a greater inherent worth* than other living things.

The inherent worth of an entity does not depend on its merits.⁸ To consider something as possessing inherent worth, we have seen, is to place intrinsic value on the realization of its good. This is done regardless of whatever particular merits it might have or might lack, as judged by a set of grading or ranking standards. In human affairs, we are all familiar with the principle that one's worth as a person does not vary with one's merits or lack of merits. The same can hold true of animals and plants. To regard such entities as possessing inherent worth entails disregarding their merits and deficiencies, whether they are being judged from a human standpoint or from the standpoint of their own species.

The idea of one entity having more merit than another, and so being superior to it in merit, makes perfectly good sense. Merit is a grading or ranking concept, and judgments of comparative merit are based on the different degrees to which things satisfy a given standard. But what can it mean to talk about one thing being superior to another in inherent worth? In order to get at what

⁸ For this way of distinguishing between merit and inherent worth, I am indebted to Gregory Vlastos, "Justice and Equality," in R. Brandt, ed., *Social Justice* (Englewood Cliffs, N. J.: Prentice-Hall, 1962), pp. 31-72.

is being asserted in such a claim it is helpful first to look at the social origin of the concept of degrees of inherent worth.

The idea that humans can possess different degrees of inherent worth originated in societies having rigid class structures. Before the rise of modern democracies with their egalitarian outlook, one's membership in a hereditary class determined one's social status. People in the upper classes were looked up to, while those in the lower classes were looked down upon. In such a society one's social superiors and social inferiors were clearly defined and easily recognized.

Two aspects of these class-structured societies are especially relevant to the idea of degrees of inherent worth. First, those born into the upper classes were deemed more worthy of respect than those born into the lower orders. Second, the superior worth of upper class people had nothing to do with their merits nor did the inferior worth of those in the lower classes rest on their lack of merits. One's superiority or inferiority entirely derived from a social position one was born into. The modern concept of a meritocracy simply did not apply. One could not advance into a higher class by any sort of moral or nonmoral achievement. Similarly, an aristocrat held his title and all the privileges that went with it just because he was the eldest son of a titled nobleman. Unlike the bestowing of knighthood in contemporary Great Britain, one did not earn membership in the nobility by meritorious conduct.

We who live in modern democracies no longer believe in such hereditary social distinctions. Indeed, we would wholeheartedly condemn them on moral grounds as being fundamentally unjust. We have come to think of class systems as a paradigm of social injustice, it being a central principle of the democratic way of life that among humans there are no superiors and no inferiors. Thus we have rejected the whole conceptual framework in which people are judged to have different degrees of inherent worth. That idea is incompatible with our notion of human equality based on the doctrine that all humans, simply in virtue of their humanity, have the same inherent worth. (The belief in universal human rights is one form that this egalitarianism takes.)

The vast majority of people in modern democracies, however, do not maintain an egalitarian outlook when it comes to comparing human beings with other living things. Most people consider our own species to be superior to all other species and this superiority is understood to be a matter of inherent worth, not merit. There may exist thoroughly vicious and depraved humans who lack all merit. Yet because they are human they are thought to belong to a higher class of entities than any plant or animal. That one is born into the species *Homo sapiens* entitles one to have lordship over those who are one's inferiors, namely, those born into other species. The parallel with hereditary social classes is very close. Implicit in this view is a hierarchical conception of nature according to which an organism has a position of superiority or inferiority in the Earth's community of life simply on the basis of its genetic

background. The "lower" orders of life are looked down upon and it is considered perfectly proper that they serve the interests of those belonging to the highest order, namely humans. The intrinsic value we place on the well-being of our fellow humans reflects our recognition of their rightful position as our equals. No such intrinsic value is to be placed on the good of other animals, unless we choose to do so out of fondness or affection for them. But their well-being imposes no moral requirement on us. In this respect there is an absolute difference in moral status between ourselves and them.

This is the structure of concepts and beliefs that people are committed to insofar as they regard humans to be superior in inherent worth to all other species. I now wish to argue that this structure of concepts and beliefs is completely groundless. If we accept the first three components of the biocentric outlook and from that perspective look at the major philosophical traditions which have supported that structure, we find it to be at bottom nothing more than the expression of an irrational bias in our own favor. The philosophical traditions themselves rest on very questionable assumptions or else simply beg the question. I briefly consider three of the main traditions to substantiate the point. These are classical Greek humanism, Cartesian dualism, and the Judeo-Christian concept of the Great Chain of Being.

The inherent superiority of humans over other species was implicit in the Greek definition of man as a rational animal. Our animal nature was identified with "brute" desires that need the order and restraint of reason to rule them (just as reason is the special virtue of those who rule in the ideal state). Rationality was then seen to be the key to our superiority over animals. It enables us to live on a higher plane and endows us with a nobility and worth that other creatures lack. This familiar way of comparing humans with other species is deeply ingrained in our Western philosophical outlook. The point to consider here is that this view does not actually provide an argument *for* human superiority but rather makes explicit the framework of thought that is implicitly used by those who think of humans as inherently superior to nonhumans. The Greeks who held that humans, in virtue of their rational capacities, have a kind of worth greater than that of any nonrational being, never looked at rationality as but one capacity of living things among many others. But when we consider rationality from the standpoint of the first three elements of the ecological outlook, we see that its value lies in its importance for *human* life. Other creatures achieve their species-specific good without the need of rationality, although they often make use of capacities that humans lack. So the humanistic outlook of classical Greek thought does not give us a neutral (nonquestion-begging) ground on which to construct a scale of degrees of inherent worth possessed by different species of living things.

The second tradition, centering on the Cartesian dualism of soul and body, also fails to justify the claim to human superiority. That superiority is supposed to derive from the fact that we have souls while animals do not. Animals are

mere automata and lack the divine element that makes us spiritual beings. I won't go into the now familiar criticisms of this two-substance view. I only add the point that, even if humans are composed of an immaterial, unextended soul and a material, extended body, this in itself is not a reason to deem them of greater worth than entities that are only bodies. Why is a soul substance a thing that adds value to its possessor? Unless some theological reasoning is offered here (which many, including myself, would find unacceptable on epistemological grounds), no logical connection is evident. An immaterial something which thinks is better than a material something which does not think only if thinking itself has value, either intrinsically or instrumentally. Now it is intrinsically valuable to humans alone, who value it as an end in itself, and it is instrumentally valuable to those who benefit from it, namely humans.

For animals that neither enjoy thinking for its own sake nor need it for living the kind of life for which they are best adapted, it has no value. Even if "thinking" is broadened to include all forms of consciousness, there are still many living things that can do without it and yet live what is for their species a good life. The anthropocentricity underlying the claim to human superiority runs throughout Cartesian dualism.

A third major source of the idea of human superiority is the Judeo-Christian concept of the Great Chain of Being. Humans are superior to animals and plants because their Creator has given them a higher place on the chain. It begins with God at the top, and then moves to the angels, who are lower than God but higher than humans, then to humans, positioned between the angels and the beasts (partaking of the nature of both), and then on down to the lower levels occupied by nonhuman animals, plants, and finally inanimate objects. Humans, being "made in God's image," are inherently superior to animals and plants by virtue of their being closer (in their essential nature) to God.

The metaphysical and epistemological difficulties with this conception of a hierarchy of entities are, in my mind, insuperable. Without entering into this matter here, I only point out that if we are unwilling to accept the metaphysics of traditional Judaism and Christianity, we are again left without good reasons for holding to the claim of inherent human superiority.

The foregoing considerations (and others like them) leave us with but one ground for the assertion that a human being, regardless of merit, is a higher kind of entity than any other living thing. This is the mere fact of the genetic makeup of the species *Homo sapiens*. But this is surely irrational and arbitrary. Why should the arrangement of genes of a certain type be a mark of superior value, especially when this fact about an organism is taken by itself, unrelated to any other aspect of its life? We might just as well refer to any other genetic makeup as a ground of superior value. Clearly we are confronted here with a wholly arbitrary claim that can only be explained as an irrational bias in our own favor.

That the claim is nothing more than a deep-seated prejudice is brought home to us when we look at our relation to other species in the light of the first three

elements of the biocentric outlook. Those elements taken conjointly give us a certain overall view of the natural world and of the place of humans in it. When we take this view we come to understand other living things, their environmental conditions, and their ecological relationships in such a way as to awake in us a deep sense of our kinship with them as fellow members of the Earth's community of life. Humans and nonhumans alike are viewed together as integral parts of one unified whole in which all living things are functionally interrelated. Finally, when our awareness focuses on the individual lives of plants and animals, each is seen to share with us the characteristic of being a teleological center of life striving to realize its own good in its own unique way.

As this entire belief system becomes part of the conceptual framework through which we understand and perceive the world, we come to see ourselves as bearing a certain moral relation to nonhuman forms of life. Our ethical role in nature takes on a new significance. We begin to look at other species as we look at ourselves, seeing them as beings which have a good they are striving to realize just as we have a good we are striving to realize. We accordingly develop the disposition to view the world from the standpoint of their good as well as from the standpoint of our own good. Now if the groundlessness of the claim that humans are inherently superior to other species were brought clearly before our minds, we would not remain intellectually neutral toward that claim but would reject it as being fundamentally at variance with our total world outlook. In the absence of any good reasons for holding it, the assertion of human superiority would then appear simply as the expression of an irrational and self-serving prejudice that favors one particular species over several million others.

Rejecting the notion of human superiority entails its positive counterpart: the doctrine of species impartiality. One who accepts that doctrine regards all living things as possessing inherent worth—the *same* inherent worth, since no one species has been shown to be either “higher” or “lower” than any other. Now we saw earlier that, insofar as one thinks of a living thing as possessing inherent worth, one considers it to be the appropriate object of the attitude of respect and believes that attitude to be the only fitting or suitable one for all moral agents to take toward it.

Here, then, is the key to understanding how the attitude of respect is rooted in the biocentric outlook on nature. The basic connection is made through the denial of human superiority. Once we reject the claim that humans are superior either in merit or in worth to other living things, we are ready to adopt the attitude of respect. The denial of human superiority is itself the result of taking the perspective on nature built into the first three elements of the biocentric outlook.

Now the first three elements of the biocentric outlook, it seems clear, would be found acceptable to any rational and scientifically informed thinker who is fully “open” to the reality of the lives of nonhuman organisms. Without

denying our distinctively human characteristics, such a thinker can acknowledge the fundamental respects in which we are members of the Earth's community of life and in which the biological conditions necessary for the realization of our human values are inextricably linked with the whole system of nature. In addition, the conception of individual living things as teleological centers of life simply articulates how a scientifically informed thinker comes to understand them as the result of increasingly careful and detailed observations. Thus, the biocentric outlook recommends itself as an acceptable system of concepts and beliefs to anyone who is clear-minded, unbiased, and factually enlightened, and who has a developed capacity of reality awareness with regard to the lives of individual organisms. This, I submit, is as good a reason for making the moral commitment involved in adopting the attitude of respect for nature as any theory of environmental ethics could possibly have.

X. MORAL RIGHTS AND THE MATTER OF COMPETING CLAIMS

I have not asserted anywhere in the foregoing account that animals or plants have moral rights. This omission was deliberate. I do not think that the reference class of the concept, bearer of moral rights, should be extended to include nonhuman living things. My reasons for taking this position, however, go beyond the scope of this paper. I believe I have been able to accomplish many of the same ends which those who ascribe rights to animals or plants wish to accomplish. There is no reason, moreover, why plants and animals, including whole species populations and life communities, cannot be accorded *legal* rights under my theory. To grant them legal protection could be interpreted as giving them legal entitlement to be protected, and this, in fact, would be a means by which a society that subscribed to the ethics of respect for nature could give public recognition to their inherent worth.

There remains the problem of competing claims, even when wild plants and animals are not thought of as bearers of moral rights. If we accept the biocentric outlook and accordingly adopt the attitude of respect for nature as our ultimate moral attitude, how do we resolve conflicts that arise from our respect for persons in the domain of human ethics and our respect for nature in the domain of environmental ethics? This is a question that cannot adequately be dealt with here. My main purpose in this paper has been to try to establish a base point from which we can start working toward a solution to the problem. I have shown why we cannot just begin with an initial presumption in favor of the interests of our own species. It is after all within our power as moral beings to place limits on human population and technology with the deliberate intention of sharing the Earth's bounty with other species. That such sharing is an ideal difficult to realize even in an approximate way does not take away its claim to our deepest moral commitment.