Enu. Ethics 29,3 Fall 2007

Nature Naturalized: A Darwinian Defense of the Nature/Culture Distinction

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Philosophical naturalists deny the existence of anything supernatural, such as God, souls, demons, ghosts, angels, witchcraft, miracles, etc. They believe that human beings are animals whose existence is entirely governed by the same laws which govern the rest of the natural world. However, some environmentalists value nature intrinsically and aesthetically, and in doing so conceive of nature as that which is distinguished from the products of human culture. Some philosophical naturalists have claimed that any attempt to distinguish nature from the products of human culture in this way stems from a pre-Darwinian world view in which humans are conceived as being separate from and superior to the natural world. They suggest that this distinction involves an implicit denial of philosophical naturalism. Furthermore, J. Baird Callicott and others have argued that it contributes to environmental destruction by espousing human superiority over the natural world. To the contrary, the nature/culture distinction is not the cause of either of these offenses. It is consistent with philosophical naturalism, fundamental to our ordinary conception of nature, and useful in promoting environmental protection.

INTRODUCTION

When Bertrand Russell says, "Man is a part of nature, not something contrasted with nature. His thoughts and his bodily movements follow the same laws that describe the motions of stars and atoms," I am inclined to agree. Russell is expressing the doctrine of philosophical naturalism—the view that nothing supernatural exists. Thus, Russell is expressing his disagreement with those who would hold that humans incorporate elements of the natural and the supernatural (body by nature, rational soul by God). I am a philosophical naturalist and am entirely in agreement with Russell on this issue. However, when Robert Elliot says, "I shall take it that 'natural' means something like

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¹ Bertrand Russell, "What I Believe," in Why I Am Not a Christian and Other Essays on Religion and Related Subjects (New York: Simon and Schuster, 1976), p. 48. This essay was originally published in 1925.

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O Video presentations of the conference papers for "Space Science, Environmental Ethics, and Policy," held 11 to 14 April 2007 at the NASA-Ames Research Center are available for free download at http://www.cep.unt.edu/ames/video.html. The conference was funded by the National Science Foundation and sponsored by the Center for Environmental Philosophy, the UNT Department of Philosophy and Religion Studies, the SWRI Center for Space Exploration Policy Research. and the National Space Society.



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'unmodified by human activity,'"² I am also inclined to agree. Elliot is both defining what nature is and identifying what (at least some) environmentalists value in the natural world. He identifies it as that which is unmodified by human culture and technology. Elliot is identifying what it is that environmentalists commonly refer to when we talk about nature, but this definition is certainly not limited to environmentalists. It is, I believe, the most common use of the term nature in the English language today. The question then is whether this conception of nature as that which is not a product of human culture and technology is compatible with philosophical naturalism. I argue that despite their apparent incompatibility, they are indeed compatible.

When I first considered this question, I was inclined to believe that any apparent conflict between philosophical naturalism and the common understanding of nature was due to a failure to distinguish between different meanings of the term *nature*. However, I have come to the conclusion that the difficulty cannot be cleared up this easily. Some who are clearly aware of the different meanings of *nature* continue to insist that humans are a part of nature and that any attempt to define *nature* in opposition to human culture and technology is misguided.³

I have considered the possibility that those who make this claim are guilty of a version of the genetic fallacy—because the human species is a product of nature (i.e., evolution by natural selection), everything that humans do is natural. This is what it seemed to me might be going on when Callicott says, "If man is a natural, a wild, an evolving species, not essentially different in this respect from all others . . . then the works of man, however precocious, are as natural as those of beavers, or termites, or any other species that dramatically modify their habitats." If by nature we mean "that which is not a product of human culture and technology," then Callicott's argument is logically equivalent to the following: the species Homo sapiens is not a product of human culture and technology; therefore, the works of humans are not products of human culture and technology. This is clearly a fallacious argument. However, once again, I have come to the conclusion that the difficulty cannot be resolved this easily.

While Callicott is aware that the natural can be distinguished from either the supernatural or the cultural, he seems to believe that the distinction between the natural and the cultural is dependent upon, or derived from, the distinction

between the natural and the supernatural.⁵ The reasoning goes something like this: if the possession of a rational soul, or some such thing, is supposed to place us on the supernatural side of the natural/supernatural divide, and if human culture is an expression of that rational soul, then the distinction between the natural and the cultural is really just another version of the distinction between the natural and the supernatural. Once we recognize that humans possess nothing supernatural, we ought to reject the nature/culture distinction. This is the challenge presented by Callicott and others who claim that humans are a part of nature and that everything we do is natural. I respond to this challenge by showing that a philosophical naturalist need not reject the nature/culture distinction.

A HISTORY OF CONFUSION AND DISAGREEMENT

In his essay, "On Nature," published in 1874, John Stuart Mill said of the terms nature and natural.

... it is unfortunate that a set of terms which play so great a part in moral and metaphysical speculation should have acquired many meanings different from the primary one, yet sufficiently allied to it to admit of confusion. The words have thus become entangled in so many foreign associations, mostly of a very powerful and tenacious character, that they have come to excite, and to be the symbols of, feelings which their original meaning will by no means justify, and which have made them one of the most copious sources of false taste, false philosophy. false morality, and even bad law.⁶

Mill identifies two significant meanings of the term *nature*. In the first sense, *nature* (N1) is everything that ever has existed or ever will exist in the physical world. In this sense of the term, the natural is contrasted with the supernatural. The claim that humans are a part of nature in this sense is driven by the realization that humans evolved through the same process that produced all

² Robert Elliot, Faking Nature: The Ethics of Environmental Restoration (New York: Routledge, 1997), p. 82.

³ J. Baird Callicott, "The Wilderness Idea Revisited: The Sustainable Development Alternative," in *The Great New Wilderness Debate*, ed. J. Baird Callicott and Michael P. Nelson (Athens: University of Georgia Press, 1998), pp. 337-66. See also Frederick Turner, "The Invented Landscape," in *Beyond Preservation: Restoring and Inventing Landscapes*, ed. A. Dwight Baldwin, Jr., Judith DeLuce, and Carl Pletsch (Minneapolis: University of Minnesota Press, 1994), pp. 35-66. See the following section of this paper for a summary of their views.

⁴ Callicott, "The Wilderness Idea Revisited," p. 350,

⁵ After hearing Callicott say that nature is not something separate from the works of humans because "humans are just big apes," I asked him why we couldn't just say that humans are a part of nature in the sense that we are not supernatural and that we are separate from nature in the sense that the works of humans are products of culture. In fact, Callicott suggests this line of reasoning when he says, "In one important respect we are different from other species. . . . the cultural component in human behavior is so greatly developed as to have become more a difference in kind than a difference in degree. To suggest that the works of man are not natural is not to suggest that they are supernatural, but that they are products of culture" ("The Wilderness Idea Revisited," p. 351). I asked him, "Are you afraid that the distinction between the natural and the cultural collapses into the distinction between the natural and the supernatural?" and he said "Yes."

⁶ John Stuart Mill, "On Nature," in *Nature, The Utility of Religion and Theism* (London: The Rationalist Press, 1904), p. 7. Originally published in 1874 as the first of three essays in a single volume, the 1904 edition, reprinted by Watts and Co. for the Rationalist Press, is reproduced electronically by the Lancaster University Department of Philosophy at www.lancs.ac.uk/users/philosophy/texts/mill_on.htm.

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other species on Earth. In the second sense of the term, nature (N2) is understood in contrast to art, and the natural is understood in contrast to the artifactual or the artificial. In this sense of the term, nature can be understood in contrast to the products of human culture. Automobiles and desktop computers are products of human culture and hence are not a part of nature. Redwood trees and the Grand Canyon are not products of human culture; hence, they are natural (i.e., a part of nature).

While much has been written about the meaning of the terms nature and natural since Mill's essay, the confusion of which he spoke persists and is still a source of bad philosophy and sometimes bad law. While there are other meanings of nature and natural that could be mentioned, I focus on these two meanings that Mill identified.

THE ATTACK ON THE NATURE/CULTURE DISTINCTION

Many environmental philosophers and environmental activists speak of nature as something separate from human culture—something to be valued, respected, cared for, liberated, etc. 8 I already mentioned Elliot's definition of natural as an example of this view. Elliot later says, "it is our use, driven by cultural and economic norms, of science and technology to transform the environment that makes what we do non-natural.... We leave nature through our culture and technology, so to speak, and re-enter it as an alien species,"9 Robert Goodin says, "The products of a purely natural process are ones that are, by definition, not the product of deliberate human design." ¹⁰ These authors are clearly conceiving of nature in Mill's second sense (N2), as distinguished from culture. However, the seemingly simple distinction between nature and culture has recently come under attack from two directions.

Some people have suggested that humans are a part of nature and that human culture is a product of nature and hence everything we do is natural. Callicott has suggested, for example, that we have no basis for saying that beaver dams

are natural and human dams are not. 11 According to this line of argument, the nature/culture distinction is a false one because human culture is a part of nature. Furthermore, some environmentalists argue that it is important to realize that humans are a part of nature in order to overcome the anthropocentric tradition which identifies nature as something separate from humans and over which humans are given dominion. 12 Thus, we have some environmentalists emphasizing the value of nature as that which is in some way separate from humans, some environmentalists saying that nature should not be conceived as separate from humans, and some seeming to do both at the same time while speaking out of different sides of their mouths. 13 We can find this tension in the positions of environmental philosophers, environmental activists, and the general public.

A second attack on the nature/culture distinction has come out of the postmodern tradition. According to this second line of argument, the concept of nature is a cultural construction. Thus, the nature/culture dichotomy is a false one because nature is really a construct of human culture. 14 The first attack subsumes culture under nature, and the second subsumes nature under culture. In this paper, I direct my arguments to the first line of attack.

Another common sense of the term *natural* is one that indicates that something is normal or statistically common. For example, one might say, "His natural position is third base, but he is playing in left field today." There may be other senses of the term as well, but I am focusing on the two identified by Mill because they are particularly relevant to the question, "Are humans a part of nature?"

⁸ See, for example, John Passmore, Man's Responsibility for Nature: Ecological Problems and the Western Traditions (New York: Charles Scribner's Sons, 1974); Kate Soper, What is Nature? (Oxford: Blackwell, 1995): Robert Elliot, Faking Nature; Val Plumwood, "Nature, Self, and Gender: Feminism, Environmental Philosophy, and the Critique of Rationalism," Hypatia 6, no. 1 (1991): 3-27; Val Plumwood, Feminism and the Mastery of Nature (New York: Routledge, 1993); Holmes Rolston, III, Conserving Natural Value (New York: Columbia, 1994); and Robert Goodin, Green Political Theory (Cambridge, Mass.: Polity Press, 1992).

⁹ Elliot, Faking Nature, p. 122.

¹⁰ Goodin, Green Political Theory, p. 38.

¹¹ Callicott, "The Wilderness Idea Revisited."

¹² See for example, Roderick Nash, The Rights of Nature: A History of Environmental Ethics (Madison: University of Wisconsin Press, 1989); Warwick Fox, "Deep Ecology: A New Philosophy of Our Time?" Ecologist 14 (1984): 194-200; and John Seed, Joanna Macy, Pat Fleming, and Arne Naess, Thinking Like a Mountain: Toward a Council of All Beings (Philadelphia: New Society Publishers, 1988), p. 36.

¹³ William R. Jordan III, "Sunflower Forest: Ecological Restoration as the Basis for a New Environmental Paradigm," in Beyond Preservation: Restoring and Inventing Landscapes, ed. A. Dwight Baldwin, Jr., Judith DeLuce, and Carl Pletsch (Minneapolis: University of Minnesota Press, 1994), pp. 17-34, speaks sometimes of developing a healthy relationship between nature and culture. At other times he talks about the "proper relationship between humans and the rest of nature" (emphasis added). He says that humans "have always—at least since the development of language—distinguished between nature and culture and have felt a measure of tension between themselves and the rest of nature" (p. 30). By sliding back and forth between talk of the relation between nature and culture, and the relation between humans and the rest of nature. Jordan seems to be claiming that humans and human culture are and are not a part of nature. This view would not necessarily be a problem if Jordan were to explain how it can be so-by distinguishing between different senses of nature, for example. He does so only briefly, when he says, "Though ourselves the products of nature, and in this sense natural, we do differ in certain fundamental ways from the rest of nature, notably with respect to our level of self-awareness" (p. 30). He further suggests that science and technology have widened the gap between nature and culture and that restoration provides a way for humans to reenter nature (p. 29).

¹⁴ See Neil Evernden, The Social Creation of Nature (Baltimore: Johns Hopkins, 1992); Steven Vogel, Against Nature (Albany: State University of New York Press. 1996); and P. D. Dwyer, "The Invention of Nature," in Redefining Nature: Ecology, Culture and Domestication, ed. Roy Ellen and Katsuyoshi Fukui (Oxford: Berg, 1996), pp. 157-86. For responses to this line of attack, see Michael Soulé in M. E. Soulé and G. Lease, eds., Reinventing Nature? Responses to Postmodern Deconstruction (Washington, D.C.: Island Press, 1995), pp. 137-70, and Holmes Rolston, III, "Nature for Real: Is Nature a Social Construct?" in The Philosophy of the Environment, ed. T. D. J. Chappell (Edinburgh: Edinburgh University Press, 1997), pp.38-64...

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To illustrate the extent and character of the attack, it may be useful to cite several examples. Warwick Fox says, "We can make no firm ontological divide

in the field of existence.... there is no bifurcation in reality between the human and the non-human realms... to the extent that we perceive boundaries, we fall short of deep ecological consciousness." 15 Mary E. Clark says, "Apparent conflicts between human jobs and welfare and the interests of wildlife can frequently be resolved if man is perceived as part of Nature rather than in opposition to it." 16 Frederick Turner says that one of the unspoken principles of the ecological religion holds that "Humans are different and separate from, and subordinate to, a transcendent Nature. Here the environmentalist religion

ignores the central scientific principle of evolution, which treats humans as a part of nature." He continues, ". . . the distinction [the environmentalist religion] draws between the human and the natural is patently false," and "We are descended in a direct evolutionary line from natural animal species, and are

ourselves a natural species."18

The critiques of the nature/culture distinction offered by Callicott, Jordan, Fox, Clark, and Turner suggest that this distinction is inherently anti-Darwinian. Callicott explicitly makes this point when he says,

The [wilderness] concept perpetuates the pre-Darwinian metaphysical dichotomy between "man" and nature, albeit with an opposite spin.... In the Judeo-Christian religious tradition, man alone among all the other creatures is created in the image of God. In the Greco-Roman philosophical tradition, among all other animals, man is uniquely rational.... Since Darwin's Origin of Species and Descent of Man, however, we have known that man is a part of nature. 19

This attack on the nature/culture distinction is based on two key claims. The first claim is both biological and metaphysical. It is the claim that the distinction is false because humans are a part of nature and a product of evolution by natural selection. The second claim is the ethical claim that the distinction is misguided and morally suspect because it rests on or creates a dualism, a value hierarchy that places humans above nature in the order of creation and fails to recognize our ecological connectedness with "the rest of nature." Thus, this attack suggests, on metaphysical and moral grounds, that a distinction between nature and culture cannot and/or should not be made.

INITIAL RESPONSE

The first point that is worth noting about these attacks is that if the idea of nature is to be meaningful at all, it must be distinguished from something. If everything that exists and everything that could possibly exist is "natural," then the term has no useful meaning. Those who suggest that humans are a part of nature, and thus everything we do is natural, have seemingly stripped the word of any meaning that it might have. We must ask of those who say that the Glen Canyon Dam and the skyscrapers of Manhattan are natural, "What do you mean by natural?" If a Manhattan skyscraper is natural, then what is not natural? If the terms nature and natural are to mean anything, there must be something that is not natural.

More to the point, this attack fails to recognize the different meanings of the terms nature and natural. The claim that humans are a part of nature is based on Mill's first meaning of nature (N1). It is the claim that we are animals and nothing more. The realization (facilitated by Darwin) that humans are products of nature does not provide grounds for eliminating the nature/culture distinction that rests on Mill's second meaning of nature (N2). In this sense, humans are products of nature insofar as we were produced by natural rather than by cultural processes. However, it does not follow from the fact that the human species was produced by natural processes that everything we do is natural. As long as we keep clear about the different senses of nature, it would seem that we could, without difficulty, claim that humans are part of nature (N1) in the sense that we are products of evolution and that we do not have eternal souls while continuing to define nature (N2) and natural things in contrast to the products of human culture. We are simply using the term nature in two different senses.

This initial response may be enough to show the weakness in Turner's simplistic claim that the distinction between the human and the natural is "patently false." However, there is, I believe, a more sophisticated argument that cannot be so easily dismissed. This argument, which I address in the next section, is based on the fact that N1 and N2 are not simple homonyms. They are not two different words with entirely separate meanings that happen to be spelled the same way. As Mill said, these different meanings of nature are "sufficiently allied to admit of confusion." There are connections between the meanings of N1 and N2, and these connections have led some philosophical naturalists²⁰ to reject the claim that nature can or should be conceived in any sense as something separate from humans.

¹⁵ Cited in Plumwood, Feminism and the Mastery of Nature, p. 176.

¹⁶ Mary E. Clark, "Tasks for Future Ecologists," *Environmental Values* 1 (1992): 35-46 (emphasis in the original).

¹⁷ Frederick Turner, "The Invented Landscape," in *Beyond Preservation: Restoring and Inventing Landscapes*, ed. A. Dwight Baldwin, Jr., Judith DeLuce, and Carl Pletsch (Minneapolis: University of Minnesota Press, 1994), pp. 35-66; p. 39.

¹⁸ Ibid, p. 43.

¹⁹ Callicott, "The Wilderness Idea Revisited," pp. 348-50.

²⁰ A "philosophical naturalist" is someone who denies the existence of anything supernatural and includes such philosophers as Spinoza, Nietzsche, and Bertrand Russell.

A NEW ARGUMENT AGAINST THE NATURE/CULTURE DISTINCTION

Philosophical naturalism is the denial of the existence of anything supernatural. When philosophers "naturalize" a concept, such as *mind*, they characterize it or analyze it without reference to anything supernatural, such as a rational, immaterial, and eternal soul. In the wake of the Darwinian revolution, a number of us think of ourselves as philosophical naturalists. Callicott has said that as a naturalist he believes that we are just big monkeys and that humans are not separate from nature.²¹ In claiming that everything that exists is natural rather than supernatural, philosophical naturalism employs Mill's first meaning of *nature* (N1).

On the other hand, people such as E. O. Wilson, Aldo Leopold, Rachel Carson, John Muir, David Thoreau, Jane Goodall, Theodore Roosevelt, etc. are often described as being "naturalists" because they study nature, write about it, advocate for its protection, etc. In addition, there are many amateur naturalists who can tell you the names of every bird and plant you see while walking through the woods with them. When these people are referred to as naturalists, it is clearly not meant to suggest that they deny the existence of the supernatural, though that may well be the case for some of them. A naturalist in this sense of the word is someone who loves and/or studies nature (N2). Nature in this context is generally understood in contrast with the products of human culture.

Among those who value nature intrinsically and aesthetically, or who want to develop attitudes of respect or caring for nature (N2), or who in any way conceive of nature as something that is distinguished from the products of human culture, some are philosophical naturalists and some are not. If the claim that nature (N2) can be understood in contrast to the products of human culture ultimately depends on the notion that humans are separate from nature (N1), perhaps because our culture is taken to be indicative of our possession of a rational soul or some other feature that places us higher in the Great Chain of Being than nature, then one who makes this claim may be inadvertently relying on a belief system that involves the denial of philosophical naturalism.

UNIVOCAL, EQUIVOCAL, AND ANALOGICAL PREDICATION²²

Consider the following claims which predicate naturalness (N) of various subjects:

- (1) N(h): Humans are a part of nature. We are just big apes who were created by the process of natural selection.
- (2) N(i): This ice cream is all natural. It has no artificial ingredients.
- (3) N(m): The Manhattan skyline is a part of nature. It was built by humans who are a part of nature, and it was built from raw materials found in nature.
- (4) N(b): This is a natural bridge. This rock formation was created by erosion as this river wore down the rock.
- (5) N(t): Thunder is a natural phenomenon.
- (6) $\forall x(B(x) \rightarrow N(x))$ All bridges are natural.

Let us assume that the claim that something is a "part of nature" is equivalent to the claim that it is "natural." Let us then ask whether the same property is being predicated of humans, ice cream, the Manhattan skyline, the rock formation, thunder, and all bridges. If two things are univocally natural, then they are natural in the same sense, and they possess the same property. We may define univocity as follows:

a and b are univocally N iff (i) a is N; (ii) b is N; and (iii) the accounts of N-ness in "a is N" and "b is N" are the same.

The Manhattan skyline and the Golden Gate Bridge are univocally natural because in both cases the account of naturalness is the same. Both are part of the natural (N1) world, and were not created by miracle or any other supernatural act.

The natural bridge and the Manhattan skyline are also both a part of N1. However, when one claims that this bridge is a *natural* bridge, one presumably does not mean to claim that it was created without divine intervention. One means to suggest that it is not an artifact. The natural bridge and the Manhattan skyline are not univocally natural in this sense. The natural bridge is a part of N2, but the Manhattan skyline is not.

One might be inclined to suggest that *nature* (N1) and *nature* (N2) are homonyms—that they are two different words that happen to be spelled the same. If this were the correct account, then the predicate "is-a-part-of-nature" or "natural" would be used *equivocally* in examples three and four above. Equivocal predication may be defined as follows:

a and b are equivocally N iff (i) a is N; (ii) b is N; and (iii) the accounts of N-ness in "a is N" and "b is N" are different and unrelated.

There is, however, a third possibility. Perhaps the Manhattan skyline and the natural bridge are not univocally natural and are not equivocally natural. If the

²¹He made this comment to me in a private conversation, and he has said similar things in print.

²² I borrow my accounts of univocal, equivocal, and analogical predication from Christopher Shields (unpublished) and St. Thomas Aquinas, *Summa Contra Gentiles*, trans. Anton C. Pegis (Notre Dame: University of Notre Dame Press, 1975), bk. 1, chaps. 32–34.

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accounts of naturalness in N1 and N2 are not the same and not completely unrelated (they are "sufficiently allied to admit of confusion"), then we might say that naturalness is being predicated analogously of the Manhattan skyline and of the natural bridge.

ENVIRONMENTAL ETHICS

Aquinas says that there are two modes in which we might predicate a term of different subjects analogously. Let us call the first of these modes source dependent analogical predication. In this mode, a particular property is predicated analogically of two subjects by virtue of a property held by some third subject to which both make reference. Source dependent analogical predication of some property, N, for two subjects a and b may be defined as follows:

a and b are analogically N in a source dependent way iff (i) a is N; (ii) b is N; and (iii) there is some c such that the accounts of N-ness in "a is N" and "b is N" necessarily make reference to the account of N-ness in "c is N" in an asymmetrical way.

Continuing to follow Aquinas, let us call the second mode of analogical predication ordered analogical predication. According to this mode of predication, there exists an order, or priority, between the two subjects of which a property is analogically predicated. Ordered analogical predication may be defined as follows:

a and b are analogically N in an ordered way iff (i) a is N; (ii) "b is N"; and (iii) the account of N-ness in "b is N" necessarily makes reference to the account of N-ness in "a is N" in an asymmetrical way.

Thus, in saying "a is part of nature" (N1), and "b is natural" (N2), one might claim that the account of naturalness in "b is N" necessarily makes reference to the account of naturalness in "a is N." This claim would be the case, for example, if one supposed that the distinction between the natural and the cultural necessarily made reference to the distinction between the supernatural and the natural by placing human culture in the realm of the supernatural.

The worry of people such as Callicott is that the distinction between nature and human culture was originally based on the idea that humans were created in the image of God, with rational souls, and that humans are to nature as God is to humans. They worry that the account of naturalness (N2) in the proposition N(b) "This is a natural bridge" necessarily makes reference to the account of naturalness (N1) in the proposition N(t) "Thunder is a natural phenomenon." Thunder is a natural phenomenon in the sense that it is not the work of supernatural forces. If the identification of the bridge as a natural bridge is meant to distinguish it from the "supernatural" bridges which are produced by the godlike forces of human culture, then it would appear that the thunder and the bridge are analogically natural in an ordered way. Callicott is worried that

any attempt to draw a distinction between nature and human culture is ultimately dependent upon the mistaken belief that human culture is evidence of our godliness. He is thus worried that any attempt to draw a distinction between nature and human culture entails the denial of philosophical naturalism.

"The New Argument against the Nature/Culture Distinction" goes something like this:

- (1) Philosophical naturalism is correct.
- (2) The nature/culture distinction depends on the denial of philosophical naturalism because N1 and N2 are analogically related. That is, N1 and N2 are analogs such that the account of naturalness in "b is N2" necessarily makes reference to the account of naturalness in "a is N1."
- (3) Thus, the nature/culture distinction is incorrect.
- (4) Furthermore, the nature/culture distinction covertly imports theological baggage.
- (5) Therefore, the nature/culture distinction should be rejected.

Callicott worries that one cannot consistently be a philosophical naturalist who denies the existence of anything supernatural while simultaneously drawing a distinction between nature and human culture. I argue that these two positions are logically consistent—that it is possible to give an account of nature (N2) in entirely naturalistic (N1) terms—that nature can be naturalized.

NATURE NATURALIZED

J. T. Bonner defines culture as "the transfer of information by behavioral" means, most particularly by the process of teaching and learning. It is used in a sense that contrasts with the transmission of genetic information passed by the direct inheritance of genes from one generation to the next."²³ Rolston says, "Information acquired during an organism's lifetime is not transmitted genetically; the essence of culture is acquired information transmitted to the next generation."24 Such an analysis, it seems to me, allows us to define culture in a way that is entirely consistent with Callicott's (and my own) philosophical naturalism. This definition of culture as information transmitted non-genetically (or as the transfer of information by non-genetic means) does not in any way place culture in the realm of the supernatural. If we define nature negatively, as that which is not a product of human culture, then we can have an entirely naturalistic analysis of nature (N2). This account does not depend on an account

²³ J. T. Bonner, The Evolution of Culture in Animals (Princeton: Princeton University Press, 1980), p. 10,

²⁴ Rolston, Conserving Natural Value, p. 2.

of the natural as distinguished from the supernatural. The account of culture as information transmitted non-genetically certainly does not entail that the information is transmitted supernaturally or that the ability to transmit cultural information exempts human beings from the laws of nature. The analysis of culture can be cashed out in entirely naturalistic terms. Since the analysis of nature is derived from the naturalistic analysis of culture plus the logical operator of negation, it involves no denial of philosophical naturalism. Thus, premise (2) of the "New Argument against the Nature/Culture Distinction" is false.

The account of naturalness (N2) in the proposition N(b) "This is a natural bridge" does not necessarily make reference to the account of naturalness (N1) in the proposition N(t) "Thunder is a natural phenomenon." The distinction between natural bridges and artifactual bridges need not involve any suggestion that the artifactual bridges are in any way supernatural or that human culture is a godlike phenomenon. There are good reasons for distinguishing between those things that are products of information transmitted non-genetically (i.e., culture) and those things that are not. Our ability to use spoken and written language to accumulate information and pass it on non-genetically allows us to create technologies and modify our environments and to produce things that are qualitatively different from those things which have been produced by nature (N2).

The nature that is of particular interest to environmentalists who care about such things as wilderness is N2. It is worth pointing out that naturalness (N2) allows for degrees. The question "Is this natural (N2)?" will not necessarily receive a yes or no answer. I contend that naturalness is a matter of degree and that something can be more or less natural. We may say, for example, that dairy and beef cows are less natural than bison and more natural than vacuum cleaners. We may do so because a cow is partly, but not entirely, a product of human culture. Humans have selectively bred cows to have certain characteristics in order to suit human needs. However, humans have not designed every part of the cow from scratch.

Again, something can be more or less natural; the judgment about how natural it is turns out to be a judgment of the extent to which it is a product of human culture. Breyers ice cream claims to be "all natural." How can we understand this claim? Surely ice cream is a product of human culture. However, Breyers seems to be making a claim about the ingredients it uses in its ice cream. While some ice cream manufacturers use synthetic chemicals (chemicals which exist in the world only as a result of human culture and engineering), Breyers uses ingredients such as sugar, milk, and vanilla. Of course, the sugar that exists in nature is not the refined sugar that Breyers uses, so I am not inclined to accept Breyers' claim that it is "all natural." Still, I understand what they mean when they say that their ice cream is more natural than those that use synthetic chemicals.

WHY ONLY HUMAN CULTURE?

It should be clear from my definition of *culture* that nonhuman animals can have cultures. Wolves, elephants, monkeys, and many other animals pass on information to their offspring non-genetically. In fact, Bonner (from whom I borrowed this definition of *culture*) was writing specifically about the evolution of culture in animals. Why then, you might ask, did I choose to define *nature* as that which is not the product of *human* culture? Human culture is unique in terms of the amount and kind of information we are able to accumulate and pass on from generation to generation and in the ways we are able to use that information to restructure our environment. As human culture evolved and we were able to subdue nature more effectively and manipulate it to serve our purposes, we needed to distinguish between those parts of the world that we had brought under our control and those that we had not. Concepts such as *nature* and *wilderness* evolved as ways of making that distinction.

The amazing quantity of information that we are able to accumulate and pass on is primarily a function of spoken and written human language. Imagine how little information we would be able to pass on to our offspring if we lacked language and printing. In fact, I contend that without these means of communication, we would have no need to distinguish between nature and culture. Hence, it makes sense that we distinguish nature from human culture, but not from lion culture. However, this claim is not central to my argument; nor is it of great importance to me. If someone would prefer to define *nature* (N2) in opposition to all culture (human and nonhuman), I have no objection.

ARE HUMANS A PART OF NATURE?

This issue brings us back to one of the questions we started out with—are humans a part of nature? If the question is whether humans are a part of N1, the answer may depend upon whether one believes that humans were created in the image of God and given eternal souls. It is now the position of the Catholic church, for example, that it is all right to believe in evolution as an account of the origin of the human body, as long as one also believes that each person is given an eternal soul that is created by God. One who holds this position might claim that the human body is a part of N1, but that the soul is not. Philosophical naturalists, and 1 include myself in this category, believe that humans (like everything else) can be fully explained in naturalistic terms, without reference to anything supernatural.

If the question is whether humans are a part of N2, the answer, of course, is "yes" and "no." The question may be rephrased as follows: to what extent are we products of our cultures? In many ways I am a product of my culture. As is customary in my culture, I get my hair cut every few months. I wear clothes (and a certain kind of clothes at that). In my everyday life I am surrounded by

products of my culture (television, books, CDs, people talking to each other, etc.). What I eat and how I think are heavily influenced by my culture. As I drive in my heated car listening to the radio, I am fairly disconnected from nature. Still, I am not entirely a product of my culture. My heart and the rest of my circulatory system, for example, are not primarily products of my culture, though someone's heart disease may be. I may have certain behavioral patterns which have been ingrained in me by evolution. So, I am a part of nature in some ways and not in others.

AN ARGUMENT FROM AUTHORITY

It is said that an argument from authority is an informal fallacy. However, when I am accused of holding a pre-Darwinian position, I cannot resist appealing to the authority of Charles Darwin. Not only did Darwin make free use of the distinction between nature and culture—or between the natural and the artificial—it played a central role in his theory. In developing his theory of evolution by natural selection, Darwin makes his case by comparing natural selection to the artificial selection carried out by people who breed plants and animals for human purposes. He says, for example,

I have called this principle, by which each slight variation, if useful, is preserved, by the term of Natural Selection, in order to mark its relation to man's power of selection. We have seen that man by selection can certainly produce great results, and can adapt organic beings to his own uses, through the accumulation of slight but useful variations, given to him by the hand of Nature. But Natural Selection, as we shall hereafter see, is a power incessantly ready for action, and is as immeasurably superior to man's feeble efforts, as the works of Nature are to those of Art.²⁵

Callicott et al. might argue that Darwin simply failed to realize the implications of his theory as it applies to the nature/culture distinction. However, I find this possibility implausible given that his use of the nature/culture distinction occurs not as an incidental or offhanded remark, but right in the central concept of his theory of evolution. While anyone who regards the human ability to reason as evidence of the possession of an immortal and rational soul of supernatural origin is indeed operating within a pre-Darwinian world view, I contend that there is nothing at all pre-Darwinian about the distinction between nature and culture.

IS IT BAD TO BE "UNNATURAL"?

In making the distinction between *nature* and *culture*, or *natural* and *unnatural*. I do not mean to suggest that anything that is natural is good and anything that is unnatural is bad. Clothing, eyeglasses, and jazz are all unnatural (i.e., they are products of human culture), but I would not wish to do away with any of them. I do hope that we will see some value in those parts of the world that exist in a relatively natural state and try to preserve some of them. However, doing so does not imply that anything that is unnatural must be bad. Naturalness is often, as Elliot puts it, a value adding property.²⁶

WHY WE NEED A NATURE/CULTURE DISTINCTION

- (1) The nature/culture distinction as I have described it is a metaphysically viable distinction. It is possible to make such a distinction between that which is to a large extent a product of human culture (understood as information passed from generation to generation non-genetically) and that which is not. Such a distinction can be made even though there is in fact a spectrum of entities in the world with varying degrees of naturalness. When we describe something as being natural (N2), we are claiming that it falls near one end of the spectrum. This is an empirical claim about its causal origins.
- (2) This distinction captures the most common usage of the terms *nature* and *natural* in ordinary language. Nobody who was planning a weekend in Manhattan would describe it as a weekend of "getting back to nature," unless they were speaking in jest. If such a distinction can be made, and it captures the ordinary understanding of the concept of *nature* and use of the term, then the burden of proof falls heavily on those who argue that the distinction should be jettisoned.
- (3) This distinction can be made without reference to a distinction between the natural (N1) and the supernatural, or the suggestion that humans fall between the natural (N1) and supernatural realms. One who recognizes that humans are

²⁵ Charles Darwin, *The Origin of Species* (1859), in *Darwin: A Norton Critical Edition*, 3rd ed., ed. Philip Appleman (New York: W. W. Norton and Co., 2001), p. 108. Darwin repeatedly makes such statements throughout the *Origin of Species* and the *Descent of Man*.

than others, according to the degree to which they have been shaped by human activity. Indeed most rural landscapes will, on this view, count as non-natural to a very high degree. . . . So the distinction between natural and non-natural is not a sharp distinction: rather the contrasting concepts mark out opposite ends of a continuum. What is certainly true is that an area of wilderness in which there has been some impact by humans, for example through weed removal or the eradication of feral animals, is overwhelmingly natural, in contrast to even a leafy suburban precinct. Nor do I intend the natural/non-natural distinction to parallel exactly some dependent moral evaluations: that is, I do not want to be taken here as claiming that what is natural is good and what if non-natural is not, or that the natural is always better than the non-natural. The distinction between natural and non-natural connects with valuation in subtler ways than that (Elliot, Faking Nature, p. 82).

products of evolution by natural (N2) selection and who rejects the notion that humans are in any way of supernatural origin is not thereby committed to saying that everything humans do is natural (N2). In fact, Darwin's use of the term natural selection was meant to distinguish it from artificial selection. Thus, a Darwinian naturalist implicitly makes use of the nature/culture distinction. The denial of the nature/culture distinction is the truly anti-Darwinian position because it fails to understand the meaning of natural selection. Just as philosophical naturalists (N1) give accounts of mind in naturalistic terms without reference to an eternal soul, so too we can give an account of culture in naturalistic terms as information passed from generation to generation, or individual to individual, non-genetically. We may then describe something as being natural (N2) to the extent that it is not a product of such information. Such an account does not in any way depend upon the N1 account of nature and does not suggest that humans or human culture are in any sense supernatural. Nor does it entail a nature/culture dualism that places human culture hierarchically above nature.

(4) Such an account is not antithetical to environmental values, as some have suggested, because it does not import any theological notion of human dominion over nature. Furthermore, it is conducive to environmental values to the extent that it helps us to identify those things which environmentalists value and want to protect. Those who deny any distinction between nature and culture find themselves committed to the ridiculous claim that nuclear waste is as much a part of nature as moose droppings are. If humans are a part of nature and everything we do is natural, then there is the danger that people will justify environmental destruction on the grounds that it is "all a part of nature." As Val Plumwood puts it,

It is unclear how such a solution to removing human/nature dualism, by obliterating any human/nature distinction and dissolving self boundaries, is supposed to provide the basis for any environmental ethic. The analysis of humans as metaphysically unified with the cosmic whole will be equally true whatever relation humans stand in with nature—the situation of exploitation of nature exemplifies such metaphysical unity equally well as a conserver situation, and the human self is just as indistinguishable from the bulldozer and Coca Cola bottle as the rocks or the rainforest. What John Seed seems to have in mind here is that once one has realised that one is indistinguishable from the rainforest, its needs will become one's own. But there is nothing to guarantee this—one could equally well take one's own needs for its.²⁷

CALLICOTT REVISTED

Callicott claims that the belief that human beings are set apart from the rest of nature—either that we are created in the image of God and given dominion over the Earth or that we are uniquely endowed with self-consciousness and

reason—inspired us to seek mastery over nature and to bend it to our will. When, on the other hand, we come to believe that we human beings are only fellow voyagers with other living beings in the odyssey of evolution, then we might well, as Aldo Leopold suggested, acquire "a sense of kinship with other creatures; a wish to live and let live; [and] a sense of wonder over the magnitude and duration of the biotic enterprise." He goes on to say, "When we—we the people, not just we environmentalists—come to see nature as a systemic whole and ourselves as thoroughly embedded in it, a part of nature, not set apart from it, then what is called the 'political will' necessary for mutual coercion mutually agreed upon may materialize." Seeing ourselves as a part of nature and not something separate from it is, according to Callicott, a necessary step in the development of an environmental ethic.

Callicott assumes that this sense in which humans are a part of nature will lead us to feel greater concern for the interests of other living beings and for nature as a systemic whole. Plumwood's critique of deep ecology is applicable to Callicott's assumption. If we come to see ourselves as a part of nature, then we may just as well decide that what is good for us is good for nature.

While Callicott has been highly critical of the concept of wilderness which identifies those parts of nature which are relatively free from human impact and domination, he says that he "certainly [does] not propose that every nook and cranny of the biosphere be humanly inhabited and exploited, provided that such inhabitation and exploitation be ecologically sustainable." In fact, Callicott endorses "the establishment of biodiversity reserves (the bigger and more numerous the better), understood as areas from which human habitation and economic activities are largely if not completely excluded in order to provide habitat for viable populations of other species." Callicott's endorsement of these "biodiversity reserves" is based on the claim that some species are particularly sensitive to the effects of human habitation and economic activity. Thus, Callicott attempts to create something which is the functional equivalent of designated wilderness areas while eschewing the concept of wilderness.

He proposes that norm for these biodiversity reserves should be *ecological integrity* (or *biological integrity*, as he seems to use these two terms interchangeably). For ecosystems which are inhabited and used by humans, on the other hand, Callicott proposes that our use of these areas should be governed by a principle of *ecological sustainability*. He defines *ecological sustainability* as "the maintenance, in the same place at the same time of two interactive

²⁷ Plumwood, Feminism and the Mastery of Nature, pp. 177-78.

²⁸ J. Baird Callicott, "How Environmental Ethical Theory May Be Put into Practice," in *Beyond the Land Ethic: More Essays in Environmental Philosophy* (Albany: State University of New York Press, 1999), pp. 45–58; p. 50.

²⁹ J. Baird Callicott, "Ecological Sustainability as a Conservation Concept," in *Beyond the Land Ethic*, pp. 365-80; p. 367.

³⁰ Ibid.

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'things': culturally selected human economic activities and ecosystem health."³¹ Ecosystem health, as he understands it, requires that the ecosystem remain biologically productive, even as some species are added and others are removed or driven out. Ecological integrity, however, requires that the species which compose the biotic community remain unaltered.

Because Callicott proposes the establishment of biodiversity reserves which are more-or-less functionally equivalent to designated wilderness areas from which human habitation and economic activity are excluded, and since the purpose of these biodiversity reserves is to protect the integrity of these ecosystems, it is unclear what his attitude is toward non-anthropogenic changes in the composition of the biotic communities in these biodiversity reserves. Since he insists that humans are a "part of nature," he would presumably favor human intervention to prevent non-anthropogenic loss of biodiversity if and only if it could be accomplished in a way that did not threaten the existence of those species which are particularly sensitive to human activity.

Callicott's unnecessary rejection of the nature/culture distinction is one of the factors which leads him to attempt feats of philosophical contortionism in the effort to preserve wilderness areas while abandoning the concept of wilderness. These contortions have become even more grotesque in recent years as he has become uncomfortable with the concept of ecological integrity. Noting that the spatial boundaries between biotic communities are "vague and porous," and that "boundaries between successional series are vague," and that natural³² disturbances such as fire, flood, and wind are normal parts of ecosystems, Callicott has recently concluded that "there is little 'integrity' or 'stability' associated with biotic communities to be preserved."33 It appears to me that Callicott is finding it increasingly difficult to develop a non-anthropocentric environmental ethic without appealing to the nature/culture distinction. The following example illustrates the possible environmental implications of the denial of any distinction between nature and culture. In this example, Janet Ferguson appeals to the claim that humans are a part of nature to justify the presence of humans on Cumberland Island and to support the building of a road through the wilderness area in order to bring more humans.

CUMBERLAND ISLAND: A CASE STUDY

Cumberland Island is Georgia's largest sea island, and much of the island is relatively undeveloped. Before it became a national park in 1973, much of the land on the island was owned by the Carnegie family. There are several historic

structures on the island, including Plum Orchard, a thirty-room mansion on the edge of the 8,800 acre Cumberland wilderness. Water and decay are damaging this mansion, along with several of the historic structures on the island. The National Park Service lacks the funds to preserve these sites. One proposal was to turn the mansion into an artists' colony. Environmentalists objected when the park service appeared ready to accept this proposal without a detailed study of the effects that it would have on the nearby wilderness. A recent bill known as the Cumberland Island Preservation Act proposed to help preserve these historic sites by opening up greater access for visitors. This bill has upset environmentalists who are worried about the effects that it would have on Cumberland's wild areas. This bill would give visitors access to Plum Orchard and other historical sites via a road from the boat landing area through the wilderness area. It would remove a portion of the wilderness area from wilderness protection in order to do so.

Janet "Gogo" Ferguson, the great, great granddaughter of Thomas and Lucy Carnegie, is one of the island's thirty permanent residents. She insists that plans for the island should not exclude human history. She says,

This push for a sort of utopian wilderness—and I consider myself one of the biggest environmentalists there is—it's wiping out human presence. And I don't know where we extracted humans from nature. We're a part of it. We coexist. We always have. We all love Cumberland Island. We just want to make sure that it's preserved whole, not just protecting, or creating, this so-called wilderness.³⁴

Ferguson's statement illustrates the confusion over the different senses of *nature* that Mill spoke of in his essay, and it illustrates the danger of insisting on the claim the "humans are a part of nature" while denying any distinction between nature and culture.

Some people seem to think that in separating humans (or human culture) from nature, we are being anthropocentric. We are saying that we are special; we are somehow different from the rest of the world. The separation of humans from nature sounds to these critics suspiciously like the claim found in much Christian thinking that humans were created in God's image, and the rest of the world was given to us to use as we see fit. Many people see this view as a primary source of our current ecological crisis and suggest that if we are to find a solution, we must recognize that humans are a part of nature. We are a product of evolution, just like all of the other animals that we see.

While I firmly believe that humans are a product of evolutionary processes and nothing more, I have argued that we must distinguish nature from something if we are to understand what it is. Those who see humans as a part of nature run the risk of saying that anything humans do is natural, and hence

³¹ Ibid., p. 368.

³² Note that Callicott uses the term natural here in precisely the sense which he wants to deny.
33 J. Baird Callicott "Back to the Farth Ethic Booking I.

³³ J. Baird Callicott, "Back to the Earth Ethic: Reading Leopold in Reverse," Joint ISEE/IAEP Conference, Highlands Center, Allenspark, Colorado, 30 May 2006.

³⁴ Janet "Gogo" Ferguson, National Public Radio, 1998.

okay. I argue that if we truly care about saving nature, we must distinguish it from human culture. If the Glen Canyon Dam and the skyscrapers of Manhattan are a part of nature, then we have no reason to worry about saving the great expanses of wilderness in Utah or Alaska. We could turn them into parking lots without making them any less natural. Surely something has gone wrong when we say that anything humans do is natural. Furthermore, the grizzly bear catching a salmon in Alaska is not a construct of human culture. Even if we grant (as I think we should) that our ways of thinking about nature are influenced by our culture, we should not conclude that everything that exists in nature is nothing more than a social construct. But that is a subject for a different paper.

As a summary of a vast field it is unsurpassed, as a stimulous to further consideration of the nature and role of environmental aesthetics it is provocative. It should be read by those who are interested in aesthetics but also by those practising planning and conservation.

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Communicative Ethics and Moral Considerability

Richard J. Evanoff*

Although nonhuman entities are indeed incapable of entering into contractual relations with humans or of participating in social dialogue on ethical norms, they can nonetheless become the objects of moral consideration on the part of humans. Moral consideration need not be extended universally to all nonnatural entities, but only to those entities with which humans interact. Rather than regard some or all of the natural world as having "intrinsic value," considered judgments must be made regarding which parts of nature can be legitimately used for human purposes and which should be left alone. What needs to be justified are not attempts to preserve nature but rather any human interventions which infringe on the autonomy of nature.

THE PROBLEM OF NATURE IN COMMUNICATIVE ETHICS

It is frequently claimed that communicative approaches to ethics provide a inadequate framework for environmental ethics. Rawls' position has been criticized on the grounds that humans obviously do not enter into contractural agreements with natural beings. Habermas's discourse ethics has similar been criticized on the grounds that "nature cannot enter into discourse." argue that a communicative approach can nonetheless be developed white effectively addresses human-nature interactions. Rawls himself specifical states that moral consideration can be extended to "animals and the rest nature" and contends that a theory of justice "is but one part of a moral view. Habermas similarly claims that while moral justification concerns itself primarily with establishing the principles intended to govern relations between

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¹ John Rawls, A Theory of Justice (Cambridge: Belknap Press, 1971).

² See Peter Wenz, Environmental Justice (Albany: State University of New York Press, 198 chap. 5; Daniel P. Thero, "Rawls and Environmental Ethics: A Critical Examination of Literature," Environmental Ethics 17 (1995): 93–106.

³ Jürgen Habermas, Moral Consciousness and Communicative Action, trans. Christian Lenha and Shierry Weber Nicholsen (Cambridge: Polity Press, 1989); Jürgen Habermas. Justificati and Application, trans. Ciaran Cronin (Cambridge: MIT Press, 1993).

⁴ Angelika Krebs, "Discourse Ethics and Nature," Environmental Values 6 (1997): 269.

⁵ Rawls, Theory of Justice, p. 512.