The Move from *Good* to *Ought* in Environmental Ethics

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The move from *good* to *ought*, a premise form found in many justifications of environmental ethics, is itself in need of justification. Of the potential moves from *good* to *ought* surveyed, some have considerable promise and others less or none. Those without much promise include extrapolations of obligations based on human goods to nonsentient natural entities, appeals to educated judgment, precautionary arguments, humanistic consequentialist arguments, and justifications that assert that our obligations to natural entities are neither directly to those entities nor derived from our obligations to humans. Some arguments that extrapolate obligations based on goods involving sentience from humans to sentient animals are promising, but whether they are sufficient is controversial. Gandhian and Aristotlian arguments are also promising, provided we can justify their *ought* premises.

INTRODUCTION: WHAT IS A MOVE FROM GOOD TO OUGHT?

In the following passage of his seminal work *Environmental Ethics: Duties to and Values in the Natural World*, Holmes Rolston, III discusses a form of inference that he employs repeatedly in arguing for duties to various sorts of natural entities:

. . . what counts as value in nature is not just brought to and imposed on the ecosystem; it is discovered there.

This evaluation is not scientific description; hence not ecology per se but metaecology. No amount of research can verify that the right is the optimum biotic community. Yet ecological description generates this valuing of nature, endorsing the systemic rightness. The transition from is to good and thence to ought occurs here; we leave science to enter the domain of evaluation, from which an ethic follows.¹

This notion of a "transition from is to good and thence to ought" fits many specific inferences Rolston endorses. Here are three examples:

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¹ Holmes Rolston, III, *Environmental Ethics: Duties to and Values in the Natural World* (Philadelphia: Temple University Press, 1988), pp. 230–31.

- (1) Organisms are evaluative systems that seek a valued state.
- (2) Moral agents ought to consider the consequences of their actions for such evaluative systems.
- (3) So: Moral agents ought to consider the consequences of their actions for organisms.²
- (1) Species defend particular forms of life, pursue pathways through the world, resist extinction, regenerate, exhibit creative resilience and maintain a normative identity over time.
- (2) Moral concern is appropriate to entities that engage in such processes of value.
- (3) So: Moral concern is appropriate to species.³
- (1) Nature as a whole has positive creativity.
- (2) We ought to protect whatever has positive creativity.
- (3) So: We ought to protect nature.⁴

All these arguments have the form:

- (1) All F has G.
- (2) Agents ought to V whatever has G
- (3) So: Agents ought to V whatever has F,

² This summary is culled from Rolston. Ibid., pp. 98–100: "The genetic set is thus really a propositional set—to choose a deliberately provocative term—recalling how the Latin propositum is an assertion, a set task, a theme, a plan, a proposal, a project, as well as a cognitive statement. ... Even stronger still, the genetic set is a normative set; it distinguishes between what is and what ought to be. This does not mean that the organism is a moral system, for there are no moral agents in nature apart from persons, but that the organism is an axiological system, an evaluative system. ... We can say that the physical state the organism seeks, idealized in its programmatic form, is a valued state. Value is present in this achievement. . . . a moral agent in deciding his or her behavior ought to take account of the consequences for other evaluative systems."

³ A species for Rolston is "a living historical form ... propagated in individual organisms, that flows dynamically over generations" (ibid., p. 135). "Genetically, though not neurally, a species over generations 'learns' (discovers) pathways previously unknown. ... There is a specific groping for a valued *ought-to-be* beyond what now *is* in any individual. Though species are not moral agents, a biological identity — a kind of value — is here defended" (ibid., p. 143). "[P]rocesses of value found first in an organic individual reappear at the specific level: defending a particular form of life, pursuing a pathway through the world, resisting death (extinction), regeneration maintaining a normative identity over time, storied achievements, creative resilience learning survival skills. If, at the specific level, these processes are just as evident or even more so, what prevents duties from arising at that level? The appropriate survival unit is the appropriate level of moral concern" (ibid., p. 151).

^{4&}quot;[S]ystemic nature is valuable intrinsically for its capacity to throw forward (pro-ject) all the storied natural history" (ibid., p. 198). "There is value wherever there is positive creativity" (ibid., p. 199). "[O]ne ought to protect values—life, creativity, community—wherever these are found" (ibid., p. 231).

where F is some descriptive property of natural entities, G is a characteristic that is alleged to define a good or valued state for the F's, and the variable V is to be replaced by a transitive verb specifying a moral action (e.g., "protect," "promote," "respect," "consider the consequences of our actions for"). The form is logically valid. It occurs not only in Rolston's work but widely throughout the literature on environmental and animal ethics. Here are three additional examples:

- (1) All living things will to live.
- (2) We ought to practice reverence toward all that wills to live.
- (3) So: We ought to practice reverence toward all living things.

This is Albert Schweitzer's reasoning in *Civilization and Ethics*.⁶ Here F is "living things," G is the "will to live," and V is "practice reverence toward."

- (1) All living things have a good of their own.
- (2) We ought to respect whatever has a good of its own.
- (3) So: We ought to respect all living things.

This is Paul Taylor's central argument in *Respect for Nature*.⁷ In this case F, once again, is "living things," G is "a good of their own," and V is "respect."

- (1) All sentient beings have interests.
- (2) We ought to grant equal consideration for equal interests to all beings that have interests.
- (3) So: We ought to grant equal consideration for equal interests to all sentient beings.

⁵ We may ignore the deontic elements, for it is in essence a categorical syllogism of the form: All F has G, All G is such that we ought to V it, So all F is such that we ought to V it—Or, more simply still: All S is M, all M is P, so all S is P.

^{6 &}quot;I am life which wills to live, and I exist in the midst of life which wills to live.... Just as in my own will-to-live there is a yearning for more life... so the same obtains in all the will-to-live around me... Ethics consists... in this, that I experience the necessity of practicing the same reverence for life toward all will-to-live as toward my own.... A man is really ethical only when he obeys the constraint laid on him to help all the life which he is able to succor, and when he goes out of his way to avoid injuring any living thing.... Ethics is in its unqualified form extended responsibility to everything that has life." From Albert Schweitzer, Civilization and Ethics (1923), excerpted in Louis P. Pojman, Environmental Ethics: Readings in Theory and Application (London: Jones and Bartlett, 1994), p. 66.

⁷ Taylor articulates and defends the first premise of this argument in Paul Taylor, *Respect for Nature: A Theory of Environmental Ethics* (Princeton: Princeton University Press, 1986), chap. 2, sec. 2, pp. 60–71. The second premise of my summary combines Taylor's claims that what has a good of its own has inherent worth and that what has inherent worth is worthy of respect (ibid., p. 72). I discuss this second premise and its justification in more detail below.

This is the core of Peter Singer's argument for animal liberation.⁸ Here F is "sentient beings," G is "interests," and V is "grant them equal consideration for equal interests."

In each case, the first premise expresses what Rolston calls the transition from is to good—that is, a transition from fact to value. It claims that for anything that satisfies descriptive criterion F, characteristic G determines a good—that is, a range of valued states. The second expresses what Rolston calls a transition from good to ought. It prescribes the behavior of moral agents toward things that have that kind of good. The conclusion spans the gap from is to ought, prescribing the behavior of agents toward whatever satisfies the factual criterion, and hence is a proffered solution to Hume's is-ought problem.

Both kinds of premises are typically controversial, but discussions of the move from is to good—that is, from fact to value—are legion. Their upshot is a modest consensus: the sharp fact/value distinction that Hume and his intellectual heirs wanted to draw is untenable. The best-known reason is that there is no such thing as value-free description; our assertions do not divide themselves up neatly into statements of fact and statements of value. But there is a more specific reason, one more relevant here: in living organisms and systems, fact is inextricable from value. It is a fact, for example, that starvation is harmful to animals. It is a fact that adequate moisture, regular sunlight, and fertile soil are good for trees. It is a fact that many ecosystems have suffered damage. Likewise, the first premise of each of the sample arguments above can be claimed to express a fact that involves a value.

But such moves from *is* to *good*, though in many instances plausible, are not the subject of this paper. My aim is to examine the less discussed moves from *good* to *ought*.

MOVES FROM GOOD TO OUGHT AS SUBSTANTIVE MORAL POSTULATES

Rolston characterizes his moves from *good* to *ought* as simple and uncontroversial exhortations to protect value:

There is here . . . [an] assumption that one ought to protect values—life, creativity, community—wherever these are found. But like the injunction that one ought to promote the good or that one ought to keep promises, the obligation to

⁸ "The capacity for suffering and enjoyment [i.e., sentience] is . . . sufficient for us to say that a being has interests—at an absolute minimum, an interest in not suffering." Singer, Peter, *Animal Liberation*, rev. ed. (New York: Avon Books, 1990), p. 8. "[T]he interests of every being affected by an action are to be taken into account and given the same weight as like interests of any other being" (ibid., p. 5). The conclusion is implicit, but Singer plainly endorses it.

⁹ See, for example, Hilary Putnam, *Reason, Truth and History* (Cambridge: Cambridge University Press, 1981), chap. 6, "Fact and Value," and chap. 9, "Values, Facts and Cognition."

protect value is so high-level as to be, if not definitional or analytic, so general as to be virtually unarguable and therefore without any real theoretical content.¹⁰

But here Rolston is mistaken. Such moves from *good* to *ought* as "Moral agents ought consider the consequences of their actions for evaluative systems that seek a valued state," "Moral concern is appropriate to entities that pursue pathways through the world, resist extinction, regenerate, exhibit creative resilience and maintain a normative identity over time," and "We ought to protect whatever has positive creativity" are nowhere close to being definitional, analytic, unarguable, or without theoretical content. On the contrary, each is heavy with implications and eminently controversial.

Certainly there can be no general injunction to promote *all* natural goods, since promoting some is incompatible with promoting others. To inhabit the human gut is good for tapeworms, but their good is inconsistent with the good of their host. Although one can perhaps consistently maintain that we ought to *maximize* goodness for the totality of natural entities, any conception of maximal goodness is substantive and debatable.

The case of the tapeworms brings up another crucial point: each good that we find in nature is a good *for* some natural entities. Adequate sunlight is a good *for* photosynthetic plants; preference-satisfaction may be good *for* a sentient being that has desires; reproductive success is (up to a certain point) good *for* a species. Some natural goods, such as ecosystem health, are, as Rolston points out, systemic, i.e., beneficial to many different kinds of things. ¹¹ (It can also be argued that ecosystem health is good for ecosystems, but whether there is an intelligible notion of the good of an ecosystem need not be decided here.) No known natural goods, however, are good *simpliciter*—that is, good not *for* any natural entity but in some absolute sense. Maybe God or the Kantian good will are good *simpliciter*, but the only goods that we know of in nature are goods *for*. Even pleasure, or life itself, assuming they are goods, are good *for* the entities that have them.

Since all known natural goods are goods-for and since arguments relying on premises that are not known to be true prove nothing, any successful move from is to good in environmental ethics must take us from a natural is to a good-for. Hence, in inferences such as we are contemplating, the good of the move from good to ought must also be a good-for, on pain of equivocation.

Given that all known natural goods are goods *for* some natural entity or entities, the question arises: why should the goods of those entities obligate *us*? John O'Neill thinks they don't:

¹⁰ Ibid., p. 231.

¹¹ Ibid., pp. 216–30.

. . . while it is the case that natural entities have intrinsic value in the strongest sense of the term, i.e., in the sense of value that exists independently of human valuations, such value does not as such entail any obligations on the part of human beings. 12

O'Neill thus augments Hume's *is-ought* skepticism with a *good-ought* skepticism, the gist of which is that you can't get an *ought* conclusion, even from assumptions about what is *good* (for some natural entity), unless you also assume an *ought* premise.¹³

O'Neill is certainly right to this extent: no substantive prescriptive conclusions follow *logically* from the fact that some things have genetic goals, the will to live, goods of their own, or the like. But do they follow in some weaker sense?

We might attempt to bridge the *good-ought* gap by some clever ordinary language philosophizing. Perhaps we can show that typical uses of the term *good* bring with them certain "oughts" and so establish conceptual, if not strictly logical, links from *good* to *ought*. But at best this strategy merely reminds us of current linguistic habit. Even if we do tend to infer *ought* from *good*, there is an easy rejoinder: habit proves nothing; maybe this is a *bad* habit, one that ought to be extinguished.

Yet surely some moves from *good* to *ought* are legitimate. There is near universal agreement, for example, that humans or some aspect of human existence has value (i.e., is a good) and that morality obliges us to respect this value. The fact that humans are, say, rational or sensitive creatures does not, however, *logically* imply that we are worthy of such respect. Rather, claims to the effect that human *goods* engender certain *oughts* are postulates of moral theory. The question, then, is: are similar postulates regarding the goods of nonhuman entities—substantive postulates, such as are expressed in the second premises of our six sample arguments—justifiable in environmental ethics?

A TYPOLOGY OF MOVES FROM GOOD TO OUGHT

A typical move from *good* to *ought*, has, once again, the form:

Agents ought to V whatever has G,

¹² John O'Neill, "The Varieties of Intrinsic Value," *Monist* 75 (1992): 110–37; reprinted in Andrew Light and Holmes Rolston, III, eds., *Environmental Ethics: An Anthology* (Oxford: Blackwell, 2003), pp. 131–42. This quotation is from p. 131.

¹³ On some plausible forms of deontic logic this is false, but not interestingly false. A typical and wholly trivial exception is the form Ga, $a=b \vdash Oa=b$ (where G is a one-place predicate meaning "is good," O is the deontic operator "it ought to be the case that") in systems where variables are rigid designators. Here the premise Ga is superfluous; the conclusion follows from a=b alone. See Gerhard Schurz, *The Is-Ought Problem: An Investigation in Philosophical Logic* (Dordrecht: Kluwer Academic Publishers, 1997), pp. 185–92.

where V is to be replaced by a verb expressing moral action (e.g., "respect," "have moral consideration for," "protect") and G is a characteristic that is taken to define a good or valued state. (Typical instances of G are seeking a valued state, having interests, having a good of one's own, having positive creativity, etc.) We may divide moves from *good* to *ought* into three exhaustive categories, depending upon to whom (or what) the obligation is owed. The obligation to V whatever has G must be either (1) a direct obligation to natural entities that have G, or (2) an obligation entailed by our obligations to humans, or (3) an obligation that is neither directly to natural entities that have G nor entailed by obligations to humans. Let's now consider each of these categories in turn.

CATEGORY I: DIRECT OBLIGATIONS TO NATURAL ENTITIES

An obvious strategy for justifying a claim that we have direct obligations to natural entities is to extrapolate from our own case: we hold that a certain good-making characteristic of ours entails that moral agents have such-and-such obligations to us and conclude by a principle of fairness or parity (like cases should be treated alike) that this same characteristic entails similar obligations toward anything for which it defines similar goods. Such reasoning has long been used in liberalizing expansions of moral consideration among humans. Beginning with some group of people (e.g., Europeans, men, Christians) whose moral worth is already recognized (by themselves, at least) as founded on certain characteristics (rationality, humanity, autonomy, intelligence, sentience, possession of an immortal soul, or the like) it is shown that members of another group (e.g., Native Americans, women, Muslims) have the relevant characteristics and hence are worthy of the same moral consideration.¹⁴

This strategy has also been used to justify moves from natural *goods* to human *oughts* in order to expand moral consideration beyond the human species. Schweitzer's defense of his doctrine of reverence for life, for example, extrapolates via shared characteristics in just this way. His move from *good* to *ought* is the postulate that I *ought* to practice reverence toward anything that wills to live. He explains this postulate as follows:

True philosophy must commence with the most immediate and comprehensive facts of consciousness. And this may be formulated as follows: "I am life which wills to live in the midst of life which wills to live." . . .

Just as in my own will-to-live there is a yearning for more life ... so the same obtains in all the will-to-live around me, equally whether it can express itself to my comprehension or whether it remains unvoiced.

Ethics consists in this, that I experience the necessity of practicing the same reverence for life toward all will-to-live as toward my own.¹⁵

¹⁴ This sort of extrapolation is the central theme of Nash, Roderick Frazier, *The Rights of Nature: A History of Environmental Ethics* (Madison: University of Wisconsin Press, 1989). (Nash calls it "ethical extension.")

¹⁵ Ibid., p. 61.

The reasoning is something like this:

- (1) We (rightly) practice reverence for the will-to-live within ourselves.
- (2) Like cases should be treated alike (principle of parity).
- (3) So: We ought to practice reverence toward all that wills to live.

The conclusion here is the second premise (that is, the move from *good* to *ought*) of Schweitzer's argument above. Abstracting, we obtain the following form for justifying moves from *good* to *ought*:

- (1) Agents ought to V us (solely) on account of our possession of G.
- (2) Like cases should be treated alike (principle of parity).
- (3) So: Agents ought to V whatever has G.

The first premise of this inference is supposed to be obvious—something we know intimately from our own case. The second premise, i.e., the principle of parity, licenses extrapolation to relevantly similar cases. The conclusion is the move from *good* to *ought*. Together with the move from *is* to *good*—that is, the premise, "All F is G"—the move from *good* to *ought* then justifies extending to the class of F's the obligation to V.

This pattern of reasoning is common to the liberalizing extrapolations mentioned above, provided that these are understood from the point of view of those already included in the moral community. That is the relevant viewpoint in environmental ethics, since we are considering expansions of obligation from the in-group (humans) to natural entities. On at least one reasonable interpretation, this form is valid. Whether in any particular instance it is sound depends, then, on the truth of the premises. My possession of the good-making characteristic G must be the thing that creates moral obligations toward me (first premise) and possession of that characteristic must likewise create obligations toward anything that has G (second premise). This second premise, the principle of parity, is what justifies extrapolation from my own case to the cases of all those who possess the same kind of good.

Such extrapolating justifications are often plausible for human or animal ethics, but they fare poorly, I think, in a broad biocentric ethic such as Schweitzer's—and in environmental ethics generally. To test the truth of a principle of parity in any given case, we must imagine ourselves (or our group) as having G, vary all other characteristics that we currently possess (including even those essential to our identity), and judge whether the obligations remain. When I

¹⁶ It may be formalized as: Hmg & Oamg, $\forall x \forall y ((Hxg \& Hyg) \rightarrow \forall z (Ozxg \leftrightarrow Ozyg)) | \forall x (Hxg \rightarrow Oaxg)$, where Hxz is a two-place predicate meaning "x has good z," Oxyz is a three-place predicate meaning "Agents ought to do action x to y (solely) on account of y's possession of good z," the name a stands for an action, and the name m stands for me or us, and the name g stands for some particular good.

perform this *Gedankenexperiment*, I find the reasoning compelling only when the good-making characteristic G involves sentience. Where G is, for example, having interests (in Singer's sense, which entails sentience), I find it easy to see how having G engenders moral obligations on the part of agents to me (the obligation, for example, not to cause me to suffer pointlessly). But where G is something like will-to-live (in Schweitzer's sense), having positive creativity, having a good of its own, or having a telos, all of which are values that something unconscious can possess, it is far less plausible that my possession of these things *and that alone* morally obligates agents toward me. If, for example, I think of my body in a persistent vegetative (i.e., non-sentient) state but still capable of performing various goal-oriented biological functions (even such remarkably creative acts as mitosis), I am no longer confident that anything remains there that in itself demands moral reverence or respect.¹⁷ This conclusion may be due to the weakness of my imagination, but if so it is a weakness widely shared.

While human goods (preference satisfaction, pleasure, autonomy, rationality, and the like) thus typically entail sentience, the goods (realization of telos, ecosystem health, species good, and the like) of the natural entities to which many environmental ethicists want to extend moral consideration do not. To extrapolate from our goods to theirs, we need to find a good-making property that we share with them that engenders the same sorts of obligations toward them as toward us. But no clear and theoretically plausible conception of such an overarching property seems to be available. Schweitzer's candidate, the will-to-live, is a notoriously obscure, even mystical, conception. Concepts such as Taylor's having a good of one's own are clearer, but because the goods of different natural entities vary widely in character, it is difficult to extrapolate obligations convincingly from one sort to others. Environmental ethics, then, insofar as it seeks to respect goods beyond those of sentient animals, cannot readily rely on extrapolation from our own case in justifying moves from good to ought. To employ the principle of parity—that like cases should be treated alike—we need like cases.

But maybe respect for the goods of sentient animals alone is sufficient for environmental ethics; for to protect sentient animals we must preserve their habitats, and nearly every ecosystem is vital to some sentient animal.¹⁸ I do not

¹⁷ Of course, one still owes this organism respect as something significant to those who cared about the person of whom it is the remains, but that is to respect it for what it means to others, not for what it is in and of itself. Similarly, one might owe it respect for what it once was, but again that is not to respect it for any characteristic that it possesses now.

¹⁸ Many thinkers whose primary concern is animal ethics hold this view. See, for example, Bernard Rollin, "Environmental Ethics and International Justice," in Steven Luper-Foy, ed., *Problems of International Justice* (Boulder: Westview Press, 1988), pp. 124–43 (the title is a bit misleading) or Peter Singer, "Not for Humans Only: The Place of Nonhumans in Environmental Issues" in K. E. Goodpaster and K. M. Sayre, eds., *Ethics and Problems of the Twenty-First Century* (Notre Dame: University of Notre Dame Press, 1979), pp. 191–206.

attempt to assess this optimistic idea here, since my aim is not to evaluate whole systems of environmental ethics, but only to examine various moves from *good* to *ought*. The upshot of this examination so far is that such moves are likely to be justifiable by extrapolation from our own case only when they involve sentience.

But extrapolation based on characteristics shared by humans and natural entities is not the only possible way to argue for direct obligations to the latter. Paul Taylor's case for his move from *good* to *ought* runs as follows:

If the fact that an entity has a good of its own does not logically entail that moral agents ought or ought not to treat it in a certain way, the problem arises: What relationship holds (if any) between an entity's having a good and the claim its good makes upon moral agents? I shall argue that, if a moral agent is to recognize or acknowledge such a claim, the entity in question must not only be thought of as having a good of its own; it must also be regarded as having inherent worth. When so regarded, the entity is considered to be *worthy of respect* on the part of all moral agents. The attitude of respect is itself then seen to be the only suitable, appropriate, or fitting attitude to take toward the entity.¹⁹

In summary:

- (1) Whatever has a good of its own has inherent worth.
- (2) We ought to respect whatever has inherent worth.
- (3) So: We ought to respect whatever has a good of its own.

The conclusion is Taylor's move from *good* to *ought*. This inference is valid, but the second premise is analytic for Taylor, since he *defines* having inherent worth as (among other things) being owed respect.²⁰ Thus, the conclusion merely states an analytic implication of the first premise and it is this first premise alone that bears the weight of the argument.

Taylor bases the justifiability of the first premise on the claim that it is evident to anyone who adopts the "biocentric outlook" —that is, on an appeal to educated judgment. But O'Neill, whose judgment is certainly educated, would deny that whatever has a good of its own has inherent worth in Taylor's sense. 22 Thus, in general, appeals to judgment, no matter how well educated, do not settle the matter.

¹⁹ Taylor, Respect for Nature, p. 72.

²⁰ Thus, Taylor writes: "The assertion that a living thing has inherent worth is here to be understood as entailing two moral judgments: (1) that the entity is deserving of moral concern and consideration . . . and (2) that all moral agents have a prima facie duty to promote or preserve the entity's good as an end in itself Suppose, now, that we do conceive of a wild animal or plant as having inherent worth. Then . . . we acknowledge the claim-to-be-respected which its existence makes upon us" (ibid., pp. 75–76).

²¹ Ibid., chap. 3, esp. pp. 167–68.

²² Juxtaposing O'Neill's and Taylor's technical vocabularies risks some confusion. O'Neill,

Let's turn, then, to a third strategy for moving from natural goods to direct obligations to natural entities—one for which I had high hopes when I first conceived this paper. I call it, for reasons that will soon emerge, the *precautionary approach*. On the precautionary approach the obligation is not to consider, respect, or protect the goods of natural entities, but to *understand* them. The particular form that the move from *good* to *ought* takes on this approach is as follows:

For each natural entity we may knowingly and needlessly harm that has a good of its own, we have an obligation to try to understand the nature and implications of that good.

This principle follows from two further considerations: (1) if a natural entity has a good of its own, it can be harmed and (2) we ought to try to understand the nature and implications of any needless harm that we knowingly do.

Premise (1) rests on what I take to be a definition—that to harm a thing is to diminish (or eliminate) one or more of its goods—together with the empirical fact that everything in nature is corruptible; that is, any natural good can be diminished or eliminated.

Premise (2) makes a concession to unavoidable harms. It is permissible, for example, to kill tapeworms without first trying to understand their goods. So qualified, (2) seems plausible, for often in history our failure to understand the goods of others has bred evils. A couple of centuries ago, for example, it was common among many Europeans to underestimate the goods of the people whom they called "savages." Some felt justified in harming or killing "savages" without even trying to understand the experiences, cultures, and lives they destroyed. Had those goods been morally negligible, to destroy them would not have been a moral wrong. Had the Europeans made careful inquiry and concluded that all the evidence available to them pointed to the conclusion that those goods were morally negligible, they would, perhaps, have been morally blameless, though intellectually inept. Had it never even occurred to them that there might be any goods other than the goods of Europeans to be inquired into, they still might be innocent, though intellectually infantile. But if (as was the case) many among them voiced suspicions that the "savages" had goods of their own and that these goods were morally considerable, and if nevertheless the Europeans had persisted in destroying these goods unnecessarily, without effort to understand them, then that would have been morally wrong. Hindsight enables us see this vividly, for we now acknowledge the moral considerability of "savages."

as I noted above, concedes that "natural entities have intrinsic value in the strongest sense of the term," but what he means by this claim is closer to what Taylor means by asserting that they have a good of their own. In contrast to Taylor's notion of inherent worth, O'Neill's notion of intrinsic value implies no obligation on the part of agents to respect them—indeed, nothing about obligations at all.

But what if it had turned out that the "savages" were *not* morally considerable? Or, since we can hardly make sense of that, replace the "savages" in the example with life forms that we come upon in voyaging to other planets—aliens so different from us that at first we have no idea of the moral value of them or their goods. Suppose that, later, after exhaustive inquiry, we learn that harm to them is morally negligible. I contend that it would still have been wrong of us before completing that inquiry to harm them needlessly.

Since the aliens, unlike the "savages," are *ex hypothesi* morally negligible, what is wrong is not the harm to them, but our recklessness—or, more precisely, the morally significant harm that such behavior will in general inflict on morally considerable beings. To behave in this way—to do unnecessary harm without attempting to understand its nature or implications—does generally (as our past experience confirms) produce avoidable wrong. At a minimum, then, we should attempt to avoid such wrongs by understanding the goods of other beings that might be morally considerable and acting in accord with that understanding. This is a direct obligation to those morally considerable entities that could be harmed by our actions. European treatment of the "savages" was wrong, for example, because it violated their human rights (obligations owed by all agents to them), though that was not generally recognized at the time. Heedless harm is wrong in general because of its potential to violate other as yet unrecognized obligations.

It might be objected, however, that the obligation to understand the unnecessary harms we do has no implications in environmental ethics—or at least none beyond what we can already derive from animal ethics, for we know already that the goods of non-sentient entities are morally negligible and hence may be left out of our moral deliberations without further inquiry. Didn't I, after all, reject moves from *good* to *ought* that generalize from our own case where sentience is not involved?

I did. But I rejected such moves for two reasons, neither of which implies that only sentient entities are morally considerable: (1) the only morally considerable goods we can readily discover by examining our own case are those that presuppose sentience, and (2) any natural goods of non-sentient entities that might be morally considerable are very different from these. These considerations provide no reason to rule out obligations to non-sentient natural entities. Perhaps other considerations do, but to show that would require an argument based on a clear understanding of the moral status of the goods of those non-sentient entities. Understanding their goods is thus required in any case.

The move from *good* to *ought* that I have just sketched is, of course, in one sense quite minimal. The *ought* doesn't tell us not to harm, but merely to understand before we harm. But other principles may apply once we have understood. Moreover, even mere precautionary principles have *some* bite. The National Environmental Policy Act, which requires completion of environmental impact

statements before large federally funded projects can begin, mandates a somewhat analogous precautionary principle (though not one explicitly predicated on the goods of natural entities) to considerable practical effect.

Still, the sort of argument I have given for the precautionary principle, though the best I can offer at the moment, is not very strong. Many instances of premise (2), in particular, may be doubted. It isn't obviously wrong, for example, needlessly and knowingly to harm a bacterium without trying to understand the nature and implications of its goods, for it seems unlikely to begin with that a bacterium can have much moral importance. The argument would be stronger, in any event, if we had a *prior* reason to believe that we at least *might* have significant moral obligations to bacteria.

Precautionary arguments such as this one therefore require completion by further arguments for the likelihood, at least, of human obligations to natural entities. But that means that we have come round *almost* in a complete circle, for it was human obligations to natural entities that we set out to establish. I say "almost," because precautionary arguments gain us a little ground. If we can establish the mere *likelihood* of such obligations, a precautionary argument might take us the rest of the way.

There are, no doubt, other ways, besides extrapolation from our own case, appeals to educated judgment, and precautionary arguments, to argue for *direct* obligations to natural entities based on their goods. I see no way to anticipate all the possibilities and so will not attempt a complete catalog here. In any case, argument is needed. We may not simply *assume* that an entity's having some sort of good entails that we have obligations to it.

Let us now turn to the second way of arguing—that is, to moves from natural *goods* to human *oughts* in which the *oughts* are obligations to humans, rather than to the natural entities themselves.

CATEGORY II: OBLIGATIONS TO NATURAL ENTITIES THAT FOLLOW FROM OBLIGATIONS TO HUMANS

I can think of three general ways to attempt such moves. (These are probably not exhaustive.) We may argue that obligations to particular natural entities follow from the fact that (A) what benefits or harms them *ipso facto* benefits or harms us, or (B) what benefits or harms them has good or bad consequences for us, or (C) taking on such obligations is itself beneficial to us. Let's consider each in turn.

(A) THE GANDHIAN APPROACH

Probably the most straightforward version of (A) is the strategy of Mahatma Gandhi: to identify with all living things—that is, to take their goods as one's

own goods.²³ Deep ecology's doctrine of Self-realization is an adaptation of Gandhi's view.²⁴ Thoreau expresses what I take to be a similar notion:

The gentle rain which waters my beans and keeps me in the house to-day is not drear and melancholy, but good for me too. Though it prevents my hoeing them, it is of far more worth than my hoeing. If it should continue so long as to cause the seeds to rot in the ground and destroy the potatoes in the low lands, it would still be good for the grass on the uplands, and, being good for the grass, it would be good for me.²⁵

Thoreau has no use for upland grass, except, perhaps as an object of contemplation. Its good is his good because his desires are not confined to benefits to his ego—because his sympathies roam free.

I call the approach Gandhian, nevertheless, because it is central to Gandhi's philosophy (in Thoreau it seems incidental), and because deep ecology, to which it is also central, borrowed it, as I just noted, from Gandhi. The Gandhian approach attempts to negotiate the move from *good* to *ought* by an elegant appeal to a peculiar form of self-interest: the self-interest of an "expanded" self that takes the goods of natural entities as its own. What harms or benefits other living things *ipso facto* harms or benefits me because the authentic aims of all living things are also my aims.

It is true, of course, that without such identification there is nothing other than me whose good is *ipso facto* my good, since for practically any other entity that has a good, it is always possible for something that benefits it to harm, or at least not to benefit, me. For those of us who do not identify with natural entities, in other words, claim (A) is generally false. The downpour that enlivens the upland grass might cause me (as an ordinary self) considerable trouble and no good at all. But if I identify with the grass, I get at least this much benefit: its flourishing fulfills a goal that I have endorsed and that matters to me. Although I and my bean and potato plants may at the same time suffer great loss—perhaps so great that the benefit to the grass does not compensate for it—nevertheless, the benefit to the grass is *ipso facto* a benefit to me.

²³ Perhaps the most notable statement of this goal of identification occurs in M. K. Gandhi, An Autobiography or The Story of My Experiments with Truth, trans. Mahadev Desai (Ahmedabad: Navajivan Publishing House, 1948), "Farewell," pp. 267–69. I am using the term identification here as a success verb; that is, I understand it in such a way that when one identifies with X, X's goods do in fact become one's own, in the way I explain below. It is possible, of course, to mistakenly believe that one has achieved identification, but that is not identification.

²⁴ At about the time that deep ecology's founder, Arne Naess, was making his first forays into deep ecology, he was also completing a scholarly study of Gandhi's thought. Arne Naess, *Gandhi and Group Conflict* (Oslo: Universitetsforlaget, 1974). His interpretation of Gandhi's views on identification and its justification parallels very closely the view he advocates in his work on deep ecology. See especially Arne Naess, "Identification as a Source of Deep Ecological Attitudes," in *Deep Ecology*, ed. Michael Tobias (San Diego: Avant Books, 1985).

²⁵ Henry David Thoreau, Walden and Other Writings (New York: Bantam Books, 1962), p. 202.

But it is so only if I take the goods of the grass as my own. A Gandhian case for the move from *good* to *ought* therefore depends crucially on that identification. If we could presume such an identification on the part of humans, then the case might go roughly as follows:

- (1) We ought not to harm humans without just cause.
- (2) A harm to any living thing is *ipso facto* a harm to humans.
- (3) So: We ought not to harm any living thing without just cause.

The first premise is plausible enough, but we can't presume the identification needed to establish the second premise, since few, if any, humans identify with all living things.

One can attempt to enforce this identification by a metaphysical argument to this effect: the self-conception attainable by identification is *true*, so that in reality any harm or benefit to any living thing is *ipso facto* a harm or benefit to me, even if I cannot appreciate this. But this argument seems heavy-handed. Suppose that I not only fail to identify with the upland grass but despise it. Then how could its good be my good? Its flourishing affects me only by making me apoplectic. One might well argue that if I were a better person, then its good would be my good, but to claim that its good is good for me even as I am is incredible. (Sometimes such a claim is said to follow from the ultimate oneness of all things, but no convincing argument can be made for such oneness—and, were it made, it could not be used to derive consistent and intelligible consequences.)

Can we make anything, then, of the claim that if I were a better person the grass's good would be my good? The assumption underlying this claim, presumably, is that we *ought* to identify with all living things. Granting that for the moment, and given that identification is taking the goods of the other as our own, we can infer that it ought to be the case that goods of other living things are *ipso facto* our goods. From that together with the relatively benign assumption that we ought not to harm humans without just cause, we can obtain the desired move from *good* to *ought*—that is, we ought not to harm living things without just cause.

But all this hinges on the assumption that we have an obligation to identify with all living things. To what or whom would that alleged obligation be owed? If it is an obligation to other living things, then we will first have to establish the existence of this obligation to living things before we can complete our argument—whose conclusion is that we have obligations to living things that are derived from obligations to humans. But that is, if not exactly circular (since the first sort of obligation to living things might differ from the second), unnecessarily convoluted. If we could establish an obligation to living things to take their goods as ours to begin with, then the rest of our reasoning would be superfluous.

The point of this section, however, is to consider arguments for obligations

to natural entities that are derived from obligations to humans. In this context, it makes good sense—and avoids the convolution—to suppose that if there is an obligation to identify with other living things, it is owed to humans—perhaps, in the end, to ourselves.

To summarize, a Gandhian approach to justifying moves from *good* to *ought* requires identification with natural living things. It is unlikely that such identification can be established by metaphysical arguments; however, one might reasonably argue for a moral obligation to identify, provided that that obligation were owed to humans. From that obligation we could derive the conclusion that it ought to be the case that the goods of natural entities are our goods. Given that we have obligations to benefit humans, or at least not to harm them, that would be sufficient to justify a move from *good* to *ought*. But all of this would depend upon there being some way in which we humans owe it to ourselves or to one another to take the goods of natural entities as our own. Whether we can be shown to have such an obligation to identify is beyond the scope of this paper, but I return to the question briefly at the end section (C) below.

I know of no means apart from identification by which it can be argued that the goods of natural entities are *ipso facto* goods of our own. But it is obvious in many cases that the harms or benefits to natural entities have good or bad consequences for us. The next section considers whether those consequences can be used to justify moves from *good* to *ought*.

(B) THE HUMANISTIC CONSEQUENTIALIST APPROACH

Humanistic consequentialism is the view that one ought to avoid bad consequences (and perhaps promote good consequences) to humans. Its strength is that, unlike the Gandhian approach, it relies on assumptions that are largely empirical. If harms or benefits to natural entities have harmful or beneficial consequences to us, then empirical investigation ought to show that. Yet, where the goods of natural entities do contribute to our goods, they do so on a humanistic consequentialist view only incidentally—and, in a sense, irrelevantly. Trees, for example, benefit humans by adding oxygen to the atmosphere, removing carbon dioxide, providing lumber and shade, and so on. These are the sorts of benefits that concern the humanistic consequentialist. The trees' own good (their health, for example) matters only insofar as it contributes to supplying us with such benefits. There is no point, then, in reasoning from the good of the trees to what we ought to do. The only goods that matter are our own, and our goods are not so tightly tied to natural goods that one can readily infer the former from the latter. Thus, the argument for human obligations would proceed more efficiently from our goods directly, uncomplicated by worries about the goods of trees. In general, then, humanistic consequentialist justifications of moves from natural goods to human oughts are pointless. This is not to say that humanistic consequentialist justifications of environmental ethics are pointless—on the contrary, there are many excellent consequentialist arguments for protecting various aspects of nature—but only that moves from natural *goods* to human *oughts* are generally pointless for humanistic consequentialists.

(C) THE ARISTOTELIAN APPROACH

Humanistic consequentialism is generally ineffective for justifying moves from natural *goods* to human *oughts* because human goods generally do not follow neatly or directly from natural goods themselves. But the approach I am about to consider assumes that there is such a direct connection between human goods and *the project of promoting or protecting natural goods*. If, for example, we can become more virtuous or excellent, have richer experiences, or lead more meaningful lives by promoting or protecting nature's values, then our obligations to ourselves to be virtuous or excellent, flourish, seek meaning, or the like (assuming there are such obligations) might entail obligations to those natural entities. This is the sort of approach I call "Aristotelian," because it is somewhat reminiscent of an Aristotelian virtue ethic. The name, however, is just a convenient label; I do not ascribe the approach to Aristotel himself.

The consequences to natural entities—our successes or failures in promoting natural goods—may matter little on an Aristotelian approach. But just as I am a better person if I promote, protect, or at least care about the goods of other people than if I do not (so that, in this sense, my care *benefits* me), so too I may be a better person if I promote, protect or care about nature than if I do not. Thus, the Aristotelian (in my idiosyncratic sense) would justify the move from *good* to *ought* by arguing that I ought to promote natural goods because it is good to be the sort of person who does such things. But *why* would it be good to be such a person?

An obvious answer is that it is good for people to promote natural goods because they have a duty to do so, and it is beneficial to us (perhaps in terms of character formation) to do our duty. But this answer would make the justification of moves from *good* to *ought* circular; for a duty to promote natural goods is precisely the sort of move from *good* to *ought* we are seeking to justify.

Aristotelian approaches can, however, be developed without circularity. As an example, I sketch a version that employs the concept of self-transcendence.

²⁶ O'Neill's view is of this type: "For a large number of, although not all, individual living things and biological collectives, we should recognize and promote their flourishing as an end in itself. Such care for the natural world is constitutive of a flourishing human life. The best human life is one that includes an awareness of and practical concern with the goods of entities in the non-human world" (O'Neill, "Varieties of Intrinsic Value," p. 139). There are many variants of this view. An early instance can be gleaned from the section entitled "The Psychic and Socio-Psychic Aspects" of Christopher Stone's essay "Should Trees Have Standing?" *Southern California Law Review* 45, no. 2 (1072): 450–501.

By self-transcendence, I mean simply caring about the good of something other than oneself. Self-transcendence is valuable because it is necessary to a life of scope and significance. Without self-transcendence, life is petty. Self-transcendence may be narrow (as when my circle of care is small, confined, say, to my family) or wide (as when I care about all of humanity or all of nature). Wider forms have at least this advantage: the more broadly I care, the less likely it is that all the goods I care about will be soon perish, reducing me to despair. We ought, if possible, to avoid despair. Hence, we ought to attain a fairly wide self-transcendence.

The source of the widest self-transcendence for most people is religion. Religions, however, have a serious disadvantage: they may be largely false, in which case the self-transcendence they provide is largely illusory. The widest *verifiable* source of self-transcendence is nature. Hence, if we value both truth and wide self-transcendence, we ought to care about — maybe even promote or protect—the goods of nature. But this is a move from *good* to *ought*.

Here, as with the humanistic consequentialist justification, the obligation is based on consequences for humans. The good ultimately in view is human self-transcendence. However, it is not fulfillment of natural goods *per se* that produces this beneficial consequence, but rather the project of caring about these natural goods; yet, because the caring is directed toward the natural goods, they are essential, not just incidental, to the self-transcendence that results. Moreover, though there are other forms of self-transcendence, this one is of particular value, for it is the widest verifiable form—the one perhaps most consonant with a joint demand for breadth of concern and truth.

This brief outline of one possible Aristotelian move from *good* to *ought* is only a sketch. A thorough analysis would critique each step; however, for the purposes of this paper, the details matter less than the general idea. The point of the sketch is to indicate how one might develop a noncircular Aristotelian justification for a move from *good* to *ought*. There are many possible variants. One could, for example, replace the concept of self-transcendence with the ideas of human flourishing, human excellence, or the like. Moreover, even if we were to develop such an argument in full detail, much more would be needed to elaborate it into a complete environmental ethic. Still, enough has been said here, I think, to show that for moves from *good* to *ought*, Aristotelian justification is a live option.

In summary, although humanistic consequentialism is a nonstarter as a justification for moves from natural goods to human oughts, a Gandhian approach might succeed if we could establish an obligation to identify. An Aristotelian approach, too, might succeed, if we could make a convincing case that taking on obligations to protect natural entities is in itself beneficial for humans.

There is in fact a certain consilience between the Gandhian assumption of an obligation to identify with all living things and the assumption of an obligation

to wide and truthful self-transcendence that underlies my sample "Aristotelian" justification; for the widest and most truthful self-transcendence might just be identification with all living things. Given such an identity, both Gandhian and Aristotelian moves from good to ought might be made to rest ultimately on our obligations to ourselves to seek truth and avoid despair. Were I to develop my own category II justification for a move from good to ought, my thoughts would move in the direction of this consilience. But that is work for another occasion.

CATEGORY III OBLIGATIONS

There is yet a third category of justifications for moves from *good* to *ought*: those that assert that our obligations to natural entities are neither obligations directly to those entities themselves nor derived from our obligations to humans. One such view might be that we have obligations regarding natural entities but that these are not obligations *to* anything. However, I find it hard to make sense of this claim, and I know of no one who advocates it, so I pass it by. Thus, we are left with category III obligations of two other kinds: those that are owed to some natural entity or entities other than the ones that have G and those that are owed to something that is *not* natural—i.e., presumably, either artifactual or *super*natural.

Obligations to artifacts introduce no new considerations. If such obligations exist, it is difficult to conceive them as anything other than indirect obligations to the humans who value those artifacts. We have already considered them implicitly, then, under category II.

I think we can also rule out obligations to supernatural entities—except, perhaps, for obligations to God. God is the exception because He or She is the only possibly supernatural entity about whose existence there is wide (though far from universal) agreement. If the concept of God includes (at minimum) the properties of being a wise and benevolent creator, then given God's existence it may be easy to justify a move from natural *goods* to human *oughts*. Such a creator would, presumably, value the goods of entities that He or She has created, and that valuing could plausibly impose obligations on us. This approach would, I think, be the most appealing argument for the move from *good* to *ought*—if only we could establish the requisite theological assumptions. Our inability to do so is the main obstacle to the supernatural approach.

There is one more possibility in category III: perhaps our obligation to V whatever has G is an obligation neither to the natural entities that have G, nor to humans, nor yet to anything supernatural, but to some other sort of natural entity. This entity need not be an individual. It is conceivable, for example, that we have an obligation to promote the goods of certain species, but that this obligation is not to the species themselves but to, say, the evolutionary process.

This sort of move from *good* to *ought* is, however, parasitic on a prior obligation to a second natural entity—the evolutionary process, in the example just given—and this prior obligation would in turn require justification, perhaps via a further move from *good* to *ought*. This strategy, therefore, only pushes the problem back a step.

CONCLUSION

My aim has been to survey and evaluate various possible justifications of the move from *good* to *ought* in environmental ethics. This survey has not been exhaustive. There are, no doubt, ways of arguing for moves from *good* to *ought* other than those considered here. Moreover, not all arguments for human obligations to natural entities involve moves from *good* to *ought*, though, as I hope to have shown, many do. In these respects, the scope of this paper has been limited.

Among the potential moves from *good* to *ought* surveyed here, some hold considerable promise, others less or none. Among those without much promise are justifications that attempt to extrapolate obligations based on human goods to non-sentient natural entities, appeals to educated judgment, precautionary arguments (unless used merely to extend other arguments for obligations to natural entities), humanistic consequentialist arguments, and all category III arguments. Some arguments that extrapolate obligations based on goods involving sentience from humans to sentient animals can justify moves from *good* to *ought*; but whether these are sufficient for environmental ethics is controversial. Gandhian and Aristotelian arguments also seem promising, provided that we can justify their *ought* premises. Gandhian arguments assume, at minimum, an obligation to identify with natural entities; and Aristotelian arguments assume an obligation to engage in the project of caring about, promoting or protecting nature. O'Neill is right: you can't get an *ought* conclusion, no matter what you assume about natural goods, without an *ought* premise.

Moreover, the kinds of *ought* premises examined here, moves from *good* to *ought*, do not come cheap. *Contra* Rolston, they are far from being definitional, unarguable, analytic, or contentless. All are eminently substantive, and their justification remains one of the central open problems of environmental ethics.