

Chapter Title: Fouling Our Nest: Is (Environmental) Ethics Impotent against (Bad) Economics?

Chapter Author(s): Heidi M. Hurd

Book Title: Value and Values

Book Subtitle: Economics and Justice in an Age of Global Interdependence

Book Editor(s): Roger T. Ames, Peter D. Hershock

Published by: University of Hawai'i Press. (2015)

Stable URL: <http://www.jstor.org/stable/j.ctt13x1k8c.8>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <http://about.jstor.org/terms>



JSTOR

University of Hawai'i Press is collaborating with JSTOR to digitize, preserve and extend access to *Value and Values*

Fouling Our Nest

4

IS (ENVIRONMENTAL) ETHICS IMPOTENT AGAINST
(BAD) ECONOMICS?

Heidi M. Hurd

I worry that our best ethics are not up to the task of protecting the global environment from our worst economics. This is not a practical claim; it is a philosophical one. My concern is that moral philosophy lacks the ability to explain or account for the moral significance of the planet upon which we live and the natural resources upon which we depend. It is hard to find a natural resource on the Earth that is not being exploited or that is not an object of commercial greed. Today, more than 60 percent of vital ecosystem goods and services are being used unsustainably; this means, by definition, that we are threatening today the ability of those tomorrow to meet basic needs and simple wants. We are depleting groundwater supplies, degrading agricultural soils, overfishing the oceans, cutting forests faster than they can regrow, leveling mountains for non-renewable sources of energy, and filling in coastal and wetland areas in ways that exacerbate the devastating effects of floods and hurricanes. Our dependence on fossil fuels has motivated ecologically destructive drilling and mining methods, caused air and water pollution hazardous to the health of humans and that of other life forms, and blanketed the globe with greenhouse gases that are affecting global temperatures and threatening catastrophic changes in the Earth's climate patterns. Our conversion of forests, grasslands, and wetlands to agriculture and urban development has increased the species extinction rate by as much as one thousand times background rates, and we are currently threatening the precipitous extinction of one-third of the mammal, bird, amphibian, and wild plant populations on the globe. And as we ravenously consume the Earth's natural resources, we grow in number. The world's population has doubled in the past forty years to 7 billion and is presently growing by 80 million people a year, making the projected population in 2050 9.3 billion. Inasmuch as those who have less are understandably seeking to catch up to those who have more, one has to wonder how our increasingly stressed planet will be able to support an additional 2.3 billion people.

How is it possible that we have so fouled our Earthly nest? And why are we seemingly unable to make changes that will reverse the devastating effects of

our own actions on the ecological health of the planet? In this essay, I want to outline two answers: (1) failed economics and (2) impotent ethics. Inasmuch as I am not an economist, my primary goal is to explore how our failure, as philosophers, to construct a robust account of environmental ethics is aiding, rather than arresting, the efforts of those who are inflicting long-term environmental damage in the name of short-term economic gains. I shall begin with a reminder of the lessons of Econ 101 in order to provide an appreciation of why our present environmental practices appear “uneconomical” by the measure of economics itself—why, that is, market mechanisms appear unable to ensure that our environmental practices in fact reflect our environmental preferences. As I shall outline, numerous present practices are not Pareto efficient because they are a product of market failures—externalities, open-access resources, nonrival and nonexcludable public goods, and information asymmetries (to name only a few). As such, we have cause to believe that economists themselves should be disappointed in the market’s environmental performance, for its inefficiencies suggest that the market is failing to realize the utilitarian agenda to which economics is a handmaiden.

One answer is to fix our failed economics, to correct the market failures that presently make our environmental practices wasteful. This is, of course, the calling of environmental economists, who seek to eliminate “dirty subsidies” that encourage, rather than discourage, environmentally wasteful practices and who variously propose the use of command-and-control regulations, pollution quotas, taxes and tariffs, and better defined property rights as means of correcting market imperfections. One cannot help but wonder, however, whether there are not some environmental entities that ought not to be valued by the market at all. Perhaps some environmental entities ought not to be for sale; perhaps their moral worth ought not to be judged by their commercial value, however accurately that value can be assessed through pricing mechanisms. In the second part of this essay, I shall turn to the ways in which our environmentally destructive market practices may be a product of our philosophical failure to settle the ethical significance of natural entities. As I shall discuss, our leading forms of ethical reasoning and our leading schools of ethical thought are anthropocentric. As such, it takes a good deal of fancy philosophical footwork to avoid the conclusion that such theories, at least in principle, license the exploitation of natural entities so long as that exploitation does not violate the individual rights, majoritarian preferences, or personal interests by which leading utilitarian and rights theories specify the conditions of justice.

It is tempting to try to cure the anthropocentrism of the leading ethical theories by, for example, expanding their reach to environmental entities so as to argue that such entities command moral respect in their own right. If successful, we could then demand on behalf of Mother Nature the same concern that we demand for ourselves and that we accord to others. As I shall demonstrate,

however, efforts to accord moral considerability to natural entities, conceived of either individually or collectively (as individual plants and animals, species, forests, mountains, coral reefs, wetlands, ecosystems, or biomes), invite credible philosophical complaints. However much one can stretch the domain of those who count, utilitarian theories are likely to fall short of ensuring the protection of all of the environmental entities that seemingly require protection. While some nonhuman entities may be thought to experience pain and pleasure and to have simple preferences (e.g., individual animals), many of these do not appear capable of experiencing the sort of happiness that utilitarians from Mill onward have demanded of those whose utility must be weighed equally in a utilitarian calculus. And many nonhuman entities (e.g., soils, mangroves, and rivers) do not have subjective experiences of any sort and so cannot be thought to possess welfare at all—at least so long as welfare is judged subjectively. One might stretch utilitarianism by suggesting that such entities have objective welfare interests, but one will run the risk of stretching it to the breaking point, for the notion that a fjord can have an interest at all surely strains the notion of welfare beyond practical recognition.

It is also hard to argue that such entities possess the essential capacities required of rights holders under the “will theory” of rights. And even under the more permissive “interest theory” of rights, many environmental entities will fall short of having interests that credibly support claims of right (notwithstanding Bolivia’s enduring insistence that the United Nations accord Mother Earth the same rights as are accorded human beings). What’s more, those who think that the recognition of environmental rights will prohibit environmental exploitation will surely find themselves surprised not just by the practical obstacles to rights enforcement, but also by the philosophical obstacles. For even deontologists recognize and themselves exploit multiple means of narrowing the scope of categorical duties so as to permit consequentially justified trade-offs.

As I canvass these traditional schools of thought, I will try to chart possible means of overcoming the obstacles to employing them in the name of environmental entities. But at the end of the day, while utilitarian and rights theories may require us to value and protect natural entities, there is little doubt that they do so most readily only by doing so instrumentally. They give us solid grounds to conserve environmental entities if (but only if) so doing is for the sake of persons; they do not readily give us grounds to value and protect individual nonhuman creatures, species, ecosystems, and biomes for their own sakes. And as such, they fail to arm us with means by which to dispute environmentally destructive practices that will be of net benefit to *persons* (as judged best, perhaps, by their market practices).

In employing a broad brush to paint the difficulties that must be overcome in order to apply traditional ethical concepts to environmental entities, my goal

is to be neither a critic nor a naysayer. On the contrary, it is to examine why environmental ethics has lacked teeth when we have most needed its bite within corporate boardrooms, legislative chambers, and courtrooms. My hope is that this brush-clearing exercise will reveal the promise of alternative arguments (both new and old) that will give philosophical muscle to deeply held intuitions concerning the ethical impermissibility of allowing consumer preferences to be the sole measure of the Earth's value and the sole source of our Earthly obligations. This contribution will close with one such candidate—the possibility that on our best aretaic theory we ought to cultivate virtues of character that are inconsistent with actions that treat the environment as a means to our ends.

Bad Economics, Bad Environmental Practices

Consider our relationship to coal, from which half of America's electricity is generated. Coal is both less expensive per Btu and more abundant than natural gas or oil. Right now, we know about, we have mapped, and we can immediately access two hundred years' worth of reserves, and estimates suggest there may be 10 trillion metric tons of coal beneath the planet's surface. But to price coal by its ample supply and comparatively inexpensive Btus is to grossly misrepresent its true costs.

Coal fires in underground mines are expected to burn for centuries and currently contribute as much CO₂ to the atmosphere as do all American vehicles. Such climatic costs *are not included in the price of coal*. Fatalities are common, and black lung disease severely compromises the quality and duration of many miners' lives. The premature deaths of one thousand miners per year *are not included in the price of coal*.

While 30 percent of coal is still mined underground, companies can obtain two and a half times more coal per worker per hour through "mountaintop removal and valley fill." A mountain is first clear-cut, its lumber sold, and slash burned. The loss of its forest habitat and migratory resting places, the annihilation of its animal inhabitants, the ensuing landslides and floods, and the atmospheric emissions caused by the massive mining equipment *are not included in the price of coal*. To remove the layers of topsoil and shale that overburden the coal seams below, twenty-five hundred tons of explosives are detonated each day in the Appalachian region alone. The damage caused to local home foundations and wells and the increased local rates of lung cancer and chronic heart, lung, and kidney disease caused by the fog of silica dust in which local citizens are forced to live *are not included in the price of coal*.

To expose the veins of coal, 8-million-pound, twenty-story-high machines with gymnasium-sized bases unburden coal companies of the "overburden" by

dumping it into adjacent valleys. To date, more than twelve hundred miles of Appalachian headwater streams have been buried in highly acidic mining waste. The costs of transforming incomparably beautiful, environmentally essential mountain ecosystems into biologically dead moonscapes *are not included in the price of coal*. Runoff pollutes downstream waters with silt high in iron and sulfur, the costs of which *are not included in the price of coal*. “Coal washing” produces thousands of gallons of sludge thick in carcinogenic chemicals and heavy metals, floods of which have killed or injured thousands and caused hundreds of millions of dollars of damage. Declared “acts of God,” these costs *are not included in the price of coal*.

The two-lane roads required to support the enormous trucks that haul the coal from mining sites to “loadouts” and on to market destinations cost \$500,000 per mile, as compared to four-lane highways, which cost \$100,000 per mile. And the service life of coal-haul roads is between two and four years, rather than the standard twenty. These industry-specific infrastructure costs *are not included in the price of coal*. And when these ancient organic remains of the peat bogs of the Carboniferous Period reach the coal-fired power plants that convert 88 percent of the world’s coal into electricity, they become the principal source of human-caused CO₂ emissions and thus the principal source of global warming. And the potentially catastrophic costs of global climate change *are not included in the price of coal*.

Were all the costs of coal reflected in its price—and in the price of electricity and other goods and services that depend upon it—we would clamor for clean energy, the price of which would seem a bargain by comparison. Classical economics promises us that well-functioning markets price things so as to allow us to make informed consumer choices, choices that cumulatively result in an allocation of resources that is Pareto efficient (such that no redistribution could make someone better off without making someone else worse off). Markets are supposed to reveal and satisfy our preferences by allowing us to vote with our dollars. We are supposed to be able to rely on their ability to put resources to their most valued uses so as to achieve the greatest good for the greatest number. But if coal (and the electricity that it produces) is not priced to include its true costs, consumers are not making fully informed choices when they turn on their lights. They are thus likely “voting” for more injuries to persons and property and more irreversible ecological destruction than they would if the true costs of coal were revealed in its price.

The question is: Why are these costs not included in the price of coal? And the short answer is: market failures. The real market underprices coal because it does not satisfy the conditions under which perfect markets would indeed match prices to preferences. Consider four such market failures, all of which suggest that if we are justifying our use of coal by pointing to its market price, we are guilty of bad economics.

Market Failures

Externalities. Most obviously the ecological and human costs I have described constitute negative externalities, or “transaction spillovers.” Externalities are nonconsensual third-party effects of others’ transactions. They can be positive, as when, for example, the values of homes in a neighborhood increase because a local school makes significant improvements in its educational resources. And they can be negative, as in the textbook example of air pollution, which is borne by many who do not reciprocally reap the benefits of the industries that cause it.

As a result of positive externalities, the market underproduces valuable goods, because producers and buyers do not take into account the full benefits associated with their transactions (e.g., the ways in which good schools increase the attractiveness of neighborhoods, elevating home prices and the profitability of local businesses). Negative externalities inversely result in the overproduction of harmful products, because producers do not have to pay for, or price their goods to include, injuries sustained by third parties. Thus, while the lease prices paid by coal companies to mountaintop landowners may compensate those landowners for the diminishment in aesthetic pleasure *the owners* take from their devastated lands, the increased risks to *their* health from the ensuing air and water pollution, the destruction of plant and animal species *they* may value, and the effects of climate change on *their* welfare, such lease prices do not include the value of these losses to those in the larger community to whom such costs spill over, or the value of these losses to nonhuman species whose moral concern may be the concern of no one. The result is cheap coal at others’ expense. Bad economics.

Open-access resources. When it is impossible or very difficult to restrict access to an environmental resource—such as the atmosphere, fishing grounds, and regional watersheds—there are grounds to fear that that resource will be overused in ways that will result in what Garrett Hardin famously described as “a tragedy of the commons.” The central insight is that even when a resource has been degraded by overuse in ways that threaten the interests of all users, any given user has an incentive to further deplete the resource, for he receives the immediate benefit of what is taken, while he shares the cost of the resource’s depletion with all others. Inasmuch as he can predict that others will do the same, he would seem a fool not to seize what benefits he may while there are benefits left to seize, for he is surely bearing the costs of others doing the same.

Were the user of the resource able to exclude others’ use, of course, the costs of depleting the resource would be entirely his, and he would, thereby, have incentives to conserve the resource so as to guarantee its long-term profitability. But the coal-mining industry does not own and cannot exclude others

from all the environmental goods and services that it uses, and to that degree it does not have the conservation incentives that would guarantee the long-term stewardship of those resources. As such, the price of coal does not reflect the costs of depleting those goods and services. As the industry pollutes rivers with sulfuric acid and dissolved iron, it takes what it does not pay for—namely, the ability of downstream users to access clean water. As it levels mountains and fills valleys, it takes what it does not pay for—namely, the aesthetic and cultural enjoyment of those in the larger region who link their Appalachian identity to the rugged mountains of the area; the species in the region that depend for their survival on delicate ecosystems that are buried by surface-mining methods; and the coal itself, which, by virtue of being nonrenewable, is a resource that can be measured only by its opportunity costs, for each use today costs those who will not be able to use it tomorrow. The result, again, is cheap coal at others' expense. Bad economics.

Nonrival and nonexcludable public goods. A third and related reason for the market's failure to properly price environmental resources derives from the fact that, in many instances, such resources are public goods, the provision of which is both nonrival and nonexcludable. For example, climate stability and healthy air quality are not zero-sum goods; they are nonrival, in the sense that to achieve these goods in one place is not to diminish them in another. And these goods are nonexcludable, for efforts to prevent climate change and improve air quality accrue to the benefit of us all. Knowing this, each person has an incentive to deny or conceal his interest in these benefits so as to free ride on the carbon abatement and pollution-reduction efforts of others, the benefits of which will be as much his as theirs.

Inasmuch as the advantages of public goods extend beyond those who work to create or sustain them, the market prices of such goods tend not to reflect their true benefits. Others underinvest in such goods because they calculate that they will be able to enjoy such goods by free riding on the efforts of those who will produce or preserve them. As a result, the prices of public goods are not accurately reflected in the costs of activities that depend on them or adversely affect them. The price of coal thus fails to reflect the effects that coal mining has on the air quality, water quality, soil quality, and recreational and aesthetic values of local lands, for these are free for the taking, and coal companies can hope that those who have a passion for their revival will shoulder the burdens of restoration. The result: cheap coal at others' expense. Bad economics.

Information asymmetries. When parties to a transaction do not possess matching information about relevant costs and benefits, the transaction can produce results that fail to reflect the true preferences of the parties. Thus, for example, a purchaser of a used automobile might be sold a lemon by a dealer

who well appreciates, but does not disclose, the car's accident history or hidden defects. And a buyer of insurance might succeed in purchasing a policy from an insurance agent who would not sell that policy if she knew of the buyer's well-concealed risk conditions.

One suspects that in many instances, the prices of products fail to reflect their environmental costs because consumers are ignorant of those costs and thus do not perceive that in purchasing such products they are complicit in contributing to environmental degradation. If consumers did not suffer from informational disadvantages, they would view such products as "moral lemons," because they would appreciate that such products fail to honor their own values and are thereby "morally defective." If those values were given expression, the prices of products would rise as their means of production were modified to honor morally responsive consumer preferences. Products would go "green" both in quality and in price as consumers learned of the advantages to themselves, to others, and to the planet of ensuring that products are made sustainably.

Of course, in many instances consumer ignorance appears willful, and, as such, one suspects that it does not disserve subjective consumer preferences. Those who do not want to know about the relationship between carbon emissions and climate instability precisely because they want to continue driving their SUVs and turning up their air conditioning without guilt can hardly be thought to be victimized by industries that sell them cheap fuel. But when consumer ignorance is a function of the invisibility of an industry's environmental degradation (as is clearly the case with regard to coal, the costs of which are visited on isolated regions and absorbed invisibly into the planet's atmosphere) or is a product of active efforts on the part of an industry to prevent the leakage of information (as is the case with the commercial meat industry, which anxiously excludes curious customers, journalists, and activists from the grisly conditions of factory farms and slaughterhouses), there is more reason to think that consumers are not making informed choices and that, if they could, the costs of products would increase as a reflection of consumer preferences for "greener" practices. The bottom line: our ignorance makes our markets an untrustworthy means of meeting our own preferences. Once again, bad economics.

Means of Fixing Market Failures

It is tempting to think that the sorts of market failures I have outlined might be cured through a combination of economic and political strategies. And in fact there is no question that we have at our disposal practical ways of better pricing nature's products within markets that already treat them as fungible commodities. We could fix quotas on forms of environmental degradation that could be enforced through tradable degradation permits (e.g., tradable emission permits, pollution permits, habitat-reduction permits). Such permit systems could

be predicted to incentivize entrepreneurial efforts to reduce environmental degradation, for permit holders who adopted more sustainable practices could then trade unused permits to less innovative market players for a profit. We could revoke “dirty subsidies” that externalize the environmental costs of activities to taxpayers in ways that conceal the true costs of many goods and services. We could levy taxes on activities that capture some fraction of the value of the environmental services those activities use or degrade so that the prices of goods and services would better reflect not just their labor and materials costs but their environmental costs as well. And finally, we could continue to experiment with methods of privatizing nature’s bounty in the hopes that, by giving identifiable parties clear property rights in environmental services, they would have incentives to protect and conserve those resources for long-term profit, and they would make market trades that would, over time, direct environmental goods to their highest and best (or at least more preferred) uses.

Given the extraordinary political clout possessed by the many industries whose product prices we might want to perfect, there are reasons to predict that implementing any of these market-fixing mechanisms would require more political will than our democratically elected leaders have ever managed to muster. But my interests here are not practical; they are philosophical. We have cause to wring our hands over the failure of government to derive means of keeping markets honest only when, and only if, markets would properly manage Earth’s resources if they functioned without significant structural failures. But why would this be so? Not only does such a claim presuppose that markets can be cured of their imperfections so as to direct resources to those who most prefer them; it presupposes that people’s preferences dictate the highest and best uses to which those resources can and should be put. That is, it presupposes that our collective preferences concerning the distribution and use of the planet’s natural resources are dispositive of the question of how those resources ought to be managed. If markets can be perfected so as to ensure that their results are a fair reflection of consumer preferences, then on this account, the results of market transactions are moral by definition. But such a claim rests on the assumption that the value of the planet’s resources—the value of individual animals, species, ecosystems, and biomes—is entirely derivative of the value we subjectively place on them (as measured by our behavior in the marketplace and the voting booth).

While there are surely many who are convinced that Earth’s provisions are valuable only if, and only to the extent that, they are valuable to us, there are also many who are convinced otherwise but cannot say why. And lacking a credible account of the moral considerability of natural entities, such persons are left wondering how to dispute those who can credibly assign measurable human value to the destruction of things with natural value. If we believe that Mother Nature ought to be treated as an independent market player, whose re-

sources ought to be priced within market transactions so as to reflect a value that is separate from the value we place on them, or if we believe that at least some of nature's goods ought to be treated as priceless—that is, as noncommodifiable, nontradable, inalienable *by us*—then we must probe the basis of these judgments. We must get straight about the philosophical promise of notions that nonhuman entities have moral considerability. We must ask what's wrong with cutting down a two-thousand-year-old sequoia (that can be predicted to live for thirty-two-hundred years!) just to hear it fall? What explains the common revulsion that people experience when they see, first person, enormous machines rapidly leveling mountains in Appalachia that were created 480 million years ago when plate collisions first formed the earliest foundations of the North American continent? Why do we morally wince at the thought of driving West African black rhinos and eastern gorillas to extinction for the sake of securing questionable aphrodisiacs? And why might it be morally illegitimate to use the Grand Canyon as a giant landfill if it could be proved that this would be in the best long-term interests of humankind? It is to these questions that I want to turn. If we can explain why nature matters enough that we cannot destroy it for no reason, or for a bad reason, perhaps we can then make progress in understanding what reasons (if any) entitle us to cut down forests, fill in wetlands, level mountains, pollute rivers, subject animals to painful treatment, and add greenhouse gases to the atmosphere.

The Moral Considerability of Nonhuman Entities

Can Nonhuman Entities Be Said to Have Welfare?

Suppose markets worked perfectly. Would that exhaust the questions of environmental ethics? That depends on the viability and the completeness of the normative theory underlying modern welfare economics. That theory is conventionally taken to be utilitarian in character. The classical utilitarian theory of the nineteenth century (advanced by Jeremy Bentham and John Stuart Mill) has two components.

The first component of utilitarianism is its theory of what is intrinsically good. Utilitarianism is a monistic theory, taking there to be one thing and one thing only that has intrinsic value or goodness. While many other things may be instrumentally good—good because they contribute to what is intrinsically good—a monistic theory isolates but one thing that is intrinsically good. For utilitarianism, that thing is welfare. This notion of welfare has competing definitions within the utilitarian tradition. Bentham's hedonic calculus equated welfare with the presence of pleasure and the absence of pain. Mill substituted the more general notions of happiness for pleasure and unhappiness for pain in his interpretation of welfare. Twentieth-century utilitarians (including welfare

economists) usually substitute preference satisfaction for happiness and preference frustration for unhappiness. Such economists also usually follow Pareto in eschewing interpersonal comparisons of welfare on the basis that intensities of preferences cannot be measured cardinally; they can only be compared ordinally. In this sense of welfare, stable trade points in costless markets are then taken as constitutive of welfare-maximizing distributions. Lastly, welfare has sometimes been given an objective interpretation. On this interpretation, something may be good for someone, even if she does not prefer it and even if the thing does not make her happy or give her pleasure.

The second component of utilitarianism is its consequentialist principle. Some action or institution is right if and only if it maximizes welfare. The animating intuition is that if welfare is good, more of it is better, and the best is then achieved when acts or institutions produce the most welfare possible. So construed, welfare economics is rightly seen as a branch of utilitarian ethics. To the classical utilitarianism of Bentham one adds: (1) the substitution of preference satisfaction for happiness or pleasure as the measure of welfare; (2) the Paretian skepticism about cardinal measures of preference intensity; (3) the substitution of ordinal measures of preference maximization, namely, Pareto optimality and Pareto superiority; (4) the behavioral measure of the ordinal criteria in terms of stable trade points in hypothetically costless markets; and (5) the assumption that real markets can sometimes induce those idealized, stable trade points, and when they cannot (because of market failures), regulatory guesses at hypothetical market behavior can supply such stable trade points.

The problem for welfare economics does not lie in the failures of actual markets to deliver evidence of what would maximally satisfy human preferences. The problem lies in taking such maximally satisfied preferences to be the sole criterion of what is valuable. For notoriously, people can and do have evil preferences. With respect to the environment, for example, people demonstrably do not yet care enough not to foul their Earthly nest. And even maximally satisfied good, or allowable, preferences can fail to do justice to individuals. The deeper problem with markets, then, is not that they only imperfectly realize our preferences; the problem is that they perfectly realize our preferences as much as they do!

The deeper problem with the utilitarian standard of value is that it makes *human* preferences the touchstone of valuation. The domain of those whose welfare counts for a utilitarian unsurprisingly leads to a standard that overvalues the interests of those who count and undervalues the interests of those who do not. With regard to environmental issues, utilitarianism is thus about as plausible as it was about slavery when the preferences, pains, or welfare of slaves were not counted.

This suggests the plausibility of a utilitarian theory that enlarges the domain of those whose welfare counts. Could we expand the utilitarian calculus so that

nonhuman welfare counted in computations of how to maximize welfare? If welfare were translated classically as pleasure and pain, this would at least expand the domain to include animals that are sentient. If welfare were construed as happiness, perhaps the same limited expansion could be justified, so long as happiness were treated as a mood or other psychological state. The same is true if welfare were taken to concern itself with preferences, for animals are plausibly thought to have at least simple desires. And, of course, if the domain of those whose welfare counts were extended to include members of future generations of humans and animals, then our welfare calculations might well dictate actions that protect and preserve species, ecosystems, and biomes that themselves may have no capacities for pleasure, happiness, or preference satisfaction.

Yet however expansive the domain of utilitarian concern, it remains clear that any brand of utilitarianism that correlates moral action with subjective satisfaction cannot vest intrinsic value in entities that do not have subjective experiences. As such, their fate is properly at the whim of those of us who can have preferences about them. The only means of answering this perceived shortcoming consistent with the commitments of utilitarianism would be to adopt an objective theory of welfare, a theory that uncouples welfare from subjective well-being. If one can think of something as good for another even if that other does not now think it good for himself and never will think it good, one might be able to insist that utilitarianism demands the maximization of all things that are good for entities that can have a good, including ones that cannot appreciate that they have a good because they have no subjective experiences at all. On such an account, to maximize welfare is to do what is good for all things that can have “goods”—bacteria, fungi, plants, trees, grasslands, coral reefs, for example.

I do not propose to explore this possibility further at this point, because it will turn on whether we can give an account of what it means for an entity to have a good. This will be akin to pursuing the question of when entities can be said to have interests, and I propose to explore that question when I take up the dominant theory of rights—namely, the “interest theory”—in the next section. Suffice it to say here that, if we can make sense of the notion that (some) entities that are not sentient might nevertheless have interests, then we will have the ability either to pursue the question of whether such entities have interest-based rights or to return to the promise of a utilitarian theory that seeks to maximize objective welfare in the hopes of extracting an account of why we must treat as valuable a great deal more than we, ourselves, value.

Can Nonhuman Entities Be Said to Possess Rights?

Bolivia made recent history with its announcement of legislation granting to all of nature rights equal to those possessed by humans. The Law of Mother Earth

will establish eleven new rights for nature, including the right to life and to exist, the right to continue vital cycles and processes free from human alteration, the right to pure water and clean air, the right to balance, the right to not be polluted, the right to not have cellular structure modified or genetically altered, and the right “to not be affected by mega-infrastructure and development projects that affect the balance of ecosystems and the local inhabitant communities.” Bolivia intends to establish a Ministry of Mother Earth and to appoint an ombudsman whose charge it is to speak for Pachamama, the Earth deity whose independent legal standing has now been established.

One can appreciate that rights rhetoric might have powerful instrumental advantages. Bolivia is struggling to cope with rising temperatures, melting glaciers, and more extreme weather events, including more frequent floods, droughts, frosts, and mudslides. As global temperatures rise and Bolivia’s vast glaciers melt, Bolivian glaciologists anticipate that Bolivia will confront devastating water shortages and may be little more than a vast desert within a century. But while it may be rhetorically useful to claim that Mother Nature has rights, the question is, Does she? Or must we think that talking about the rights of nature is simply a sensationalist device to draw attention to environmental strategies that would be advantageous to humans?

There are two species of rights theories, and it must be admitted that neither makes obvious room for the rights of nonhuman entities. On versions of the “will theory,” rights are means by which one may assert dominion over others’ actions. Their possession provides one with sovereignty over the scope of others’ duties. They are instruments of autonomy because they enable one to exercise authority or moral control over others in ways that expand one’s opportunities of self-authorship. To have a right is (by definition, according to the will theory) to be able to waive it, to manipulate it, to dictate the terms of its satisfaction. Thus, to have a promissory right is to “own” the promised action; it is to be able to waive or annul or suspend the promisor’s duty to honor the promise.

On the will theory of rights, there can be no nonwaivable rights. And there can be no rights holders who are not able to waive rights. The will theory thus disqualifies from the category of rights holders those who cannot make the kinds of choices that are at the core of exercising sovereignty. Those incapable of autonomy are incapable of having rights. And so, fetuses, infants, the senile, the insane, and the comatose are without rights. And it follows, *a fortiori*, that animals, plants, species, ecosystems, and biomes cannot be accorded rights, except metaphorically. On the will theory of rights, Bolivia’s talk about Mother Nature having rights is just that: it cannot make it so, and it cannot be thought to reflect any discovery of what *is* so.

On the second theory of rights—the “interest theory”—rights reflect powerful interests, and they trigger obligations on the part of others because those whose interests they reflect are made (substantially) better off by the satisfac-

tion of those interests. A right, on such a view, is what one has when one's interests in a matter become substantial enough that one's life will go appreciably better if those interests are served in an obligatory way. As Jeremy Waldron characterizes the interest theory (which he assigns to Joseph Raz): "A person may be said to have a right if and only if some aspect of his well-being (some interest of his) is sufficiently important in itself to justify holding some other person or persons to be under a duty."¹

On this theory, only beings capable of having interests are capable of having rights; but one may have interests even if one is not an autonomous agent capable of exercising choice about others' actions. The question, of course, is whether nonhuman entities can have interests, and, if so, on what basis. To answer such a question is to advance a theory of interests—which is not something the interest theory of rights itself does.

It would seem philosophically feasible to advance the claim that animals have interests, and those who write about the moral status of animals have certainly provided ample vindication of this claim. Creatures that are sentient—creatures that have subjective perceptual experiences, or "qualia"—are capable of feeling pain and pleasure, and as such they are capable of living lives that are subjectively better or worse *for them*. If the avoidance of pain (beyond a *de minimis* threshold) is a significant interest—if it is, in Waldron's formulation, a sufficiently important aspect of well-being—then the interest theory of rights may demand the recognition that animals have rights, rights, at least, against those who are capable of modifying their behavior so as to avoid the causing of pain to such creatures. And so such theorists as Tom Regan and Gary Francione have argued.

What is more philosophically challenging is to make a claim that nonsentient entities might have interests that would support a Bolivian-style recognition of rights in the biosphere itself (the global ecological system that integrates all living beings with one another and with the elements of the lithosphere, hydrosphere, and atmosphere, metaphorically called "Mother Nature") or in individual nonsentient entities (particular trees, plants, fungi) or groupings of entities, such as species, ecosystems, or biomes (wetlands, tropical forests, tundra). Some have argued that, while things cannot matter *to* individual plants or *to* collectivities such as coral reefs, they can matter *for* them. As one theorist has put it, "Matters can be better or worse for the tree, and this amounts to saying that the tree on its own has its goods and harms."² What attributes must entities have in order for us to say of them that some things are good for them, and some things are bad? In von Wright's view, any being that "can meaningfully be said to be well or ill, to thrive, [or] to flourish" is a being of whose good it is meaningful to talk. Thus, as he maintains, "the question 'What kinds or species of being have a good?' is . . . broadly identical with the question 'What kinds or species of being have a life?'"³ Von Wright's view is echoed by numerous environmental

thinkers who are anxious to extend the class of beings who have interests beyond the class of beings who can suffer. In common to all such accounts is the notion that interests are possessed by entities that have teleological ends or are “goal directed.”⁴ Paul Taylor, for example, accords plants interests on the basis that they are “teleological centers of life”;⁵ Kenneth Goodpaster maintains that plants exhibit “self-sustaining organization and integration” worthy of moral concern;⁶ Jay Kantor vests interests in plants by virtue of their “self-regulating and homeostatic functions”;⁷ and James Mish’alani derives the interests of living things from their possession of “self-ameliorative competence,” that is, the “capacity of a living thing to adjust to its circumstances in a manner to enhance its survival and natural growth.”⁸ But these claims must answer several criticisms, two of which I shall flesh out here. First, by their terms, it would appear that these accounts vest interests in individual living creatures, not in collective entities, and certainly not in nonliving entities such as rivers, lakes, or mountains. Such an account thus falls short of promising to vindicate anything like the Bolivian effort to extend rights to ecosystems, biomes, or the biosphere as a whole. One might dispute this claim by arguing that it is perfectly intelligible to talk about goods for collective entities without such talk reducing to claims about goods for individual members of those groups. The good of a population of deer, for example, may require the death of a great many of its members, and the continued life of none in particular. But if collectivities can have interests, they will have to rest on claims other than the ones just canvassed. For while collectivities have tendencies, there is a good deal of consensus among scientists of evolution that species or populations are not “goal directed.” In Elliott Sober’s terms, “Darwinism rejects the idea that species, communities, and ecosystems have adaptations that exist for their own benefit. These higher-level entities are not conceptualized as goal-directed systems; what properties of organization they possess are viewed as artifacts of processes operating at lower levels of organization.”⁹ In short, claims about the interests of species or ecosystems can be nothing more than shorthand for claims about the interests of each of their members.

Second, while there may be things that are good for an entity, this does not mean that the entity is itself good or that it possesses a good. While there are conditions that enable a virus to do well—to thrive or to flourish—this does not, by itself, suggest that the virus has interests that are of a sort that properly commands the moral attention or concern of humans. Put differently, that things can be instrumentally good for an entity is not sufficient to infuse that entity with goodness and to thereby make its goods into interests that might cumulate to the point of constituting rights. One must not confuse what Holmes Rolston describes as an entity that is “value-able” (able to use things in the service of its own good)¹⁰ with the notion that it is valuable. Or as John O’Neill puts the point:

That Y is a good of X does not entail that Y should be realised unless we have a prior reason for believing that X is the sort of thing whose good ought to be promoted. While there is not a logical gap between facts and values, in that some value statements are factual, there is a logical gap between facts and “oughts.” “Y is good” does not entail “Y ought to be realised.”¹¹

This hasty bit of hand waving should be sufficient to prove the philosophical complexities of employing the interest theory to vindicate the claim that nonhuman entities can be accorded rights. Perhaps we can assess the wisdom of further dwelling on such complexities by inquiring into the implications of recognizing nonhuman entities as rights holders. What would be the normative implications of concluding that individual living things, or collectivities of such things, have rights? Would we be stopped from peeling back Appalachian mountains in order to extract their seams of coal? From bulldozing tracts of forest for crop lands, grazing lands, or lumber? From damming rivers for hydroelectric power? From filling in wetlands for commercial developments? From using factory-farm techniques to produce meat? From culling populations of density-independent animals?

It might seem, at first blush at least, that the virility of rights turns on whether they create categorical obligations (under a deontological account) or can be sacrificed in the name of other rights (under a rights-consequentialist theory). For rights consequentialists, rights are normatively significant because they define the borders of legitimate utilitarian (or social welfare-based) justifications. Rights bar the ability of others to use the object of a right—one’s life, liberty, or property, for example—as a resource for the advancement of their utility or welfare. For deontologists, in contrast, rights patrol the borders of legitimate consequentialist justifications. Not only can rights not be traded for increases in utility or social welfare, but they also cannot be traded to protect an even greater number of other (equally significant or more weighty) rights. Thus, for example, if I have a right not to be tortured, then others have a duty not to torture me, even if, by so doing, they could prevent many others from being tortured and many others from suffering other equal or greater rights violations.

Those who argue that animals have rights have never been crystal clear about whether they are rights consequentialists or deontologists. Tom Regan, for example, insists that inasmuch as animals are “subjects of a life,” they each have an inherent worth that is the equal of that possessed by any human, and as such, they have rights “not to be treated as mere means to human ends.”¹² Regan thus criticizes those who believe “that we are *sometimes* justified in causing nonhuman animals significant pain, in pursuit of institutionalised human interests,” insisting that “animal rightists deny that we are ever justified in doing this.”¹³ As such, he maintains that animals may not be used for food, cosmetic testing, military research, sport hunting, fur and leather products, or recreation

(rodeos, circuses, etc.). Yet he rather clearly leaves open the possibility of justifying the use of animals for life-saving medical research, and he famously insists that if four humans and a dog find themselves in a lifeboat that can hold only four, the humans are justified in casting the dog overboard.¹⁴ He thus appears to stop short of suggesting that animals' lives cannot be traded for the lives of humans, and, as a result, one might plausibly believe that at the end of the day he is a rights consequentialist, not a deontologist.

Those who find it philosophically incredible to attribute rights to animals (and to other nonhuman entities, as well) will no doubt be relieved to recognize that rights consequentialism at least permits the sacrifice of such rights in the name of other, more weighty (human!) rights. For almost no one believes that plants cannot be harvested for food and that trees cannot be cut for necessary shelter or warmth; very few believe that species of harmful viruses, bacteria, and disease-carrying pests cannot be altogether eradicated; and the great majority (who eat meat, wear leather, and clamor for cheap electricity) clearly believe that animals can be killed and mountains can be leveled for relatively trivial human comforts. Those who might hope that an attribution of rights to nonhuman entities would put a stop to the use of such entities for (non-necessary) human purposes might thus conclude that rights consequentialism is a practical oxymoron. It allows humans to continue to insist that their rights justify the exploitation of natural entities (even if those entities are themselves assigned rights). Champions of environmental rights might thus insist that the rights of nature are of a deontological pedigree: they create categorical duties on the part of humans that cannot be violated in the name of other human rights (let alone increased human welfare).

It would be wrong, however, to believe that deontology does not permit a fair bit of moral wiggle room for those anxious to maximize good consequences at the expense of nature's bounty. While deontological duties may categorically prohibit the intentional causing of harm (to entities that can be harmed), and while some deontological duties may affirmatively require the prevention of harm or provision of benefits in special circumstances, there are reasons to think that the notions of intentionality, causation, action, and omission that define the content of such rights have built-in limitations that ultimately make these categorical duties less expansive and less onerous than they might first appear.

First, those who embrace the doctrine of double effect insist that the duty correlative of, say, the right to life precludes one from acting with the purpose of taking a life, but it does not prohibit one from doing an act that one simply knows will cause death. So long as a rights infringement is simply a known side consequence of an act done for a different purpose, that infringement is not a rights violation, and if it produces more good consequences than bad, it is not a wrong. If the distinction between purpose and knowledge can bear the moral weight assigned to it by the doctrine of double effect, one can imagine that it

might permit a good deal of environmental damage, for that damage is often not intended; it is simply known to follow from various human activities. Thus, for example, the doctrine of double effect might permit the eradication of the Delhi Sands flower-loving fly, if its extinction is not intended, but is a known side consequence of converting the coastal sage scrub ecosystem of the Colton Dunes within the Los Angeles basin into shopping centers, golf courses, and housing developments, the collective benefits of which might be thought to outweigh the elimination of this species of fly. Second, some maintain, in a somewhat similar vein, that one can often permissibly risk what one cannot knowingly cause. Thus, when the balance of consequences speaks in its favor, one can risk another's death or injury (e.g., by driving to work, by raising children near a lake, by taking a friend skydiving) even as one could not justify doing the same act if one knew it would cause death. And even this claim requires modification, for we regularly take people to be justified in pursuing activities (building skyscrapers, blasting tunnels, and mining coal) that they know, as a statistical matter, will cause others' deaths when they do not know the specific identity of those on whom such harms will fall (so as to make them mere riskers vis-à-vis each possible victim). If rights protect their holders from being caused harm but not from being risked, then many activities that risk harm to natural entities, but do not knowingly cause such harm, may remain permissible. And this is particularly so if the rights possessed by natural entities are possessed by individuals, rather than groups, for it must be a frequent phenomenon for persons to know statistically that they will cause harm to classes of environmental entities (through water pollution, air pollution, toxic waste dumping, etc.) without knowing, and without being able to know, which individual entities, in particular, will be harmed. All this is to say that the precautionary principle (which holds that, in instances of doubt, persons must err on the side of caution and must thus refrain from pursuing activities whose environmental implications are unclear) may not follow from according environmental entities categorical rights—for caution (the avoidance of risks) is not, itself, morally obligatory and can thus be cast to the wind when a net gain in good consequences can be anticipated.

Third, it is a common intuition that, when the consequential balance favors it, one can permissibly accelerate a harm to a rights holder that is imminent and nonpreventable, even as one could not have knowingly set in motion the chain of events that put the rights holder in peril. At the root of this intuition is the judgment that one is not a full cause when one simply speeds up, but does not instigate, an inevitable harm. One who accelerates the death of someone who is "already dead" is not a killer in the full sense of the term. Thus, a climber can cut a rope that is connecting him to a down-rope climber whose fall is inevitable, and whose weight will otherwise eventually drag the up-rope climber off the mountain as well. Or in the textbook case of *Dudley and Stephens*, the men

stranded on the lifeboat were thought to do no wrong when they ultimately used their last strength to kill and eat the languishing cabin boy, Richard Parker, who was sure to die before any rescue effort could save him.

If there is moral merit in this notion that good consequences can make deontologically permissible the acceleration of imminent and nonpreventable harms, then a number of implications may follow within the environmental context. For example, one might think that certain active efforts to control or stabilize population growth within a species might then be permissible. If in actively culling a population (of deer, elk, feral pigs, etc.), one is targeting animals that are themselves facing imminent death (through starvation brought on by overgrazing, for example), one may not, on this account, be violating any rights, even if rights are possessed by individual animals. More surprisingly (and more troublingly), if rights vest in species, rather than individuals, then perversely it may be permissible to accelerate the extinction of a critically endangered species, if so doing achieves a net gain in good consequences, for a critically endangered species might be thought to be “already dead.” (Ironically, if rights vest in individual members of a species, and not in the species as a whole, the opposite might follow, for each individual member of a critically endangered species may still have ahead of it a full life and may not, itself, be in peril.)

Fourth, deontologists frequently place weight on the act-omission distinction, arguing that one can consequentially justify omissions to render life-saving aid when one could not so justify an active killing. One can thus fail to throw a rope to a drowning man in order to use that rope to save two others who are also drowning. But one could not forcibly drown the man, even if, by so doing, one could thereby save two others (who might then be able to use his life jacket for flotation). In the environmental context, this distinction proves its worth in answering the argument that anyone who would vest rights in animals, for example, must be committed to preventing their deaths by natural means. If one can morally defend the distinction between causing harm and omitting to prevent harm, one can explain why we need not affirmatively prevent natural predation even as we must avoid actions that cause the death of nonhuman entities through habitat loss, pollution, and global warming.

More troubling, however, is the thought that this distinction may allow many to take moral refuge in their environmental inaction. While it might be said that consumer behavior drives corporate behavior (and corporate behavior drives political behavior!), so that the environmental devastation caused by coal companies, oil companies, large-scale agricultural operations, and so forth, is, in fact, caused by the consumer choices we each individually make, such a claim founders on the fact that there are a great many intervening causes between a consumer’s act of buying a product and an industry’s responsive production of more such goods. On what I take to be the most promising theory of proximate causation (the so-called direct theory), “free, informed, voluntary actions”

sever causal chains that would otherwise reach back to the actions of others, making those prior actions causally nonproximate. If those who operate the enormous machines that access veins of coal by clear cutting trees, shaving layers off mountains, and burying streambeds in “overburden” are sufficiently free and informed to count as responsible agents (as they surely are), then our best theories of proximate causation will declare them intervening causers. Those whose prior choices may have motivated their actions (consumers, politicians, family members, etc.) are thereby made nonproximate to the ensuing harm. If such prior actors are to be thought responsible for the harms they have inspired but not caused, it must be by virtue of our thinking that they are blameworthy for omitting to prevent that harm. But if, as a general matter, one violates no rights when one omits to enforce those rights, then our sense of blame will have to derive from some source other than the claim that environmental inaction is deontologically wrong.

Fifth, a somewhat different distinction would be needed to justify the active management of plant and animal populations through indirect means—say, by the (re)introduction of predator species into ecosystems that are unstable without them. To reintroduce wolves into a habitat overpopulated by deer is affirmatively to act in a manner that will cause the deaths of individual deer. To introduce biological controls (pathogens, parasitoids, predators, and weed feeders) so as to check the spread of pests or invasive plant species is to act in a manner that will eradicate those species from the habitat. If such an action is not a rights violation, it must be by virtue of finding moral merit in what theorists have called “nonomissive allowings.” A nonomissive allowing is an act (not an omission) that allows nature to take its course. There are several kinds of nonomissive allowings, and I will not sketch here the various ways in which all of them might be employed by those who seek to employ consequential justifications in defense of actions that tread very close to violating categorical obligations toward natural entities.

Consider just one category, however—that of being an enabler of another’s action. Many believe that one can consequentially justify an act that enables another to do a deed that one could not do oneself. Thus, for example, it is axiomatic for deontologists to insist that one is prohibited from killing an innocent person, even if so doing will motivate a killer to spare the lives of twenty others. But when asked whether one can simply hand the gun to the killer, who himself will pull the trigger, if by so enabling him to kill the one, twenty others will be saved, many agree that such an enabling would not constitute a violation of the rights of the one who is then executed by the killer (even as his execution at the hands of the killer is surely a rights violation by the killer). This intuition that one can enable what one cannot cause is surely at the root of America’s willingness to outsource torture through the method of extraordinary rendition so as to gain intelligence through the efforts of others (e.g., Egyptian interrogators) that

it could not itself extract. By so doing, we exploit the notion that those who perform the interrogations are themselves “free, informed, voluntary actors” who break the causal chain extending back to our extradition, making our actions nonproximate to the rights violations that ensue. If one does not violate another’s rights unless one does so proximately, the distinction between enabling and causing creates room for consequentially justified enabling just as the distinction between omitting and causing creates room for consequentially justified inaction.

If enabling can be consequentially justified, then those who believe that nonhuman entities have rights may nevertheless be able to justify the positive introduction (or reintroduction) of predators and other biological controls in order to check, indirectly, the expansion of populations of plants and animals that themselves, either individually or collectively, have rights to life. Such methods reflect nonomissive allowings, for they involve actions that then allow nature to take its course. Of course, we do not normally think of animals, let alone insects or bacteria, as “free, informed, voluntary actors” who break causal chains, so it would surely take some innovative theorizing to adapt this deontological modification to justify the environmental analogue of extraordinary renditions. Still, I think that this notion that we can actively use nature to control nature, even as more direct methods of control may be impermissible, captures common intuitions among those who take natural entities to be properly protected by categorical rights.

This nonexhaustive outline of the various ways by which deontologists themselves blunt the protections afforded by rights suggests that those who look to environmental rights as trumps may find themselves disappointed by the enduring moral license that humans will have to trump nature even if nature is vested with deontological rights. They thus might conclude that the benefits of rights are not worth the costs of vindicating the contentious claim that nonhuman entities have rights, that is, that nonhuman entities have interests to begin with of a type and weight that generates obligations on our part. And even if nonhuman entities can be shown to satisfy the criteria of the interest theory of rights, and even if the strategies I’ve discussed to circumscribe the force of those rights can themselves be circumscribed, at the end of the day rights will not provide a promising means of arguing that nonliving entities that cannot be thought to have interests—mountains, rivers, canyons, and oceans—themselves possess moral considerability. One must thus confess that, while one might do wrong to humans or other living entities, one would do no wrong to Death Valley by trucking in loads of soil to raise its elevation above sea level; one would do no wrong to Mount Everest by removing its peak (so as to make K2 the highest mountain on Earth); one would do no wrong to the Grand Canyon by filling it with human garbage; one would do no wrong to the Moon by mining it; and we now do no wrong to the Appalachian mountains by doing

in days what natural processes could do only in millennia. If we are to make sense of the common but philosophically uncomfortable notion that (at least some) nonliving environmental entities deserve protection for their own sake, then we will have to look beyond claims of right. But to what?

Can Nonhuman Entities Be Said to Be Objects of Our Virtue?

I have canvassed various means by which natural entities might be said to possess moral considerability on nonanthropocentric grounds, that is, by virtue of being valuable in themselves and not by virtue of our valuing them. And I have sought to reveal how the traditional schools of moral thought are systematically anthropocentric, and thus provide surprisingly limited means by which to give expression to deep-seated intuitions about the independent moral standing of natural entities. I want to close by examining the moral promise of a theory that explicitly concedes that “it’s all about us,” a theory that derives our obligations to prevent environmental degradation from considerations about *us*, but that does so in a manner that suggests that if we serve ourselves as morality demands, we will protect nonhuman entities for their own sake.

The theory I have in mind is an aretaic one, one that takes the morality of our relationships with the natural world to derive from our satisfaction of aretaic duties to cultivate virtuous character traits and suppress vicious ones. This account draws on the view that morality consists of both deontic and aretaic duties. Deontic duties (whatever the theory that underlies them, be it a rights-based or a utilitarian theory) concern actions that are, in particular circumstances, prohibited or required, while aretaic duties concern dispositions that must be cultivated or suppressed over the course of one’s life in order to be thought a person of good character. The objects of deontic duties are commissions or omissions at razor points in time, while the objects of aretaic duties are traits of character, tendencies of thought and action that cumulatively define what sort of person a person is. A man does his deontic duty if he sustains his children in a material state that meets their essential physical and psychological needs, but he does not do his aretaic duty as a father unless he loves them, that is, unless he possesses that complex package of dispositional attitudes toward them that includes affection, empathy, identification, concern, pride, and so on. A woman does her deontic duty if she refrains from taking the property of others, but she cannot be thought to be an honest person if the only thing that keeps her from taking others’ property is a fear of detection and punishment.

There is a significant literature on the question of whether aretaic duties can be collapsed into deontic duties or vice versa. Is one virtuous when, and only because, one does right actions? Or are one’s actions right when, and only because, they are virtuous? I have argued in some detail that both of these hypotheses are wrong and that right action and virtuous character are quite independent

of each other. After all, one can both be scrupulous in doing the right thing without being a person of good character (think of Javert in *Les Misérables*), and one can be a person of quite laudable character who at least sometimes, and perhaps often, fails to act rightly (think of the judge who indulges mercy too frequently and who thus fails to give offenders their just deserts or to treat like cases alike). It is, therefore, open to us to say that persons *aretaically ought* to cultivate certain character traits that will (by their nature) motivate actions that are not *deontically required* and as to which others have no *deontic rights*.

Indeed, inasmuch as virtuous character traits are psychological dispositions, they will often bleed over into circumstances in which they are not, on moral grounds, required. Character traits are habits of thought and action. They incline one toward beliefs, judgments, and decisions before reason has even had its say. They function as default responses, as first instincts. They define our essential selves because they assert themselves in moments of crisis, trauma, or excitement when our powers to think and act strategically have been suspended or impaired. They are responsible for the moral intuitions that we then use reason to articulate and rationalize, and, in that sense, they are at the core of our moral perceptions, beliefs, and judgments. For all of these reasons, character traits tend to be “overinclusive”; they tend to creep into circumstances in which reason would rightly exclude them. And so, deeply honest people tend to be honest to a fault; genuinely courageous people tend to be foolhardy about their own safety; generous people tend to be enablers of those who would fare better with a little tough love; and, in reverse, those who lie to protect their interests tend to lie even when it does not do so; those who indulge their appetites tend to overindulge them; those who enjoy the limelight tend toward narcissism; and so forth. I would even hazard that a person’s character is often best revealed in circumstances in which his dispositions are in tension with his deontic rights and duties—when he reveals generosity toward one who is selfish (think of the benevolent Monsieur Myriel, the bishop of Digne, who gives Jean Valjean the candlesticks in order to cover for his theft in the opening scenes of *Les Misérables*), or when he desires to win an argument, even when nothing turns on it. To be a good person is to exhibit attributes of admirable character (kindness, generosity of judgment, courage, moderation, honesty, self-sacrifice, etc.) even toward those who cannot make a claim to deserving it.

One might plausibly think, then, that to be a virtuous person, one must possess a set of character traits that collectively motivates one to treat the environment *as if* it possessed intrinsic value, as if it possessed the independent moral considerability that one might be able to defend were one’s philosophical tools less devotedly anthropocentric. What are these personal traits from which we can extract such a valuation of nature?

Put most broadly, it seems to me that to be virtuous is “to know one’s place in the universe.” It is to recognize that we are newcomers to a place long occu-

pied by others. ("If you take the history of life as the length of your arm, then one stroke of a nail file erases human history.") It is thus to have a sense that we must make a place for ourselves among those whose physical stake in the planet far supersedes ours (even if we cannot force fit the notion that they have antecedently existing moral claims into our self-regarding moral theories). This notion that virtue resides, in part, in "knowing one's place in the universe" is surely not an easy one to unpack. It connotes a number of different judgments and attitudes, many of which smuggle back in notions of rights and interests that we have already found wanting. But, of course, as I have just argued, a virtuous person does just that: she brings, as psychological baggage, her respect for others' rights and her fear of shirking her own duties to arenas in which such concerns may be morally invalid. She thus feels (nonmoral) guilt, for example, even when she has done no moral wrong. And she resists praise (without it being a product of false modesty) even when she has done something genuinely supererogatory. So it should be no surprise that as we unpack the attitudes that a virtuous person has toward those whose claims to the planet's resources predate our own, we should talk in terms of "claims," when to do so is to do so loosely, or only metaphorically (if I was right in the previous sections).

First, to suggest that virtue requires that one know one's place in the universe is to suggest that one should honor notions of fairness and considerations of equality even before, and probably even after, one can establish with philosophical exactitude the degree to which others are entitled (as a matter of right or as a matter of other defensible moral criteria) to such treatment. On pain of violating the "first come, first served" and "finder's keeper" maxims that even a child learns and finds intuitive at an early age, one should be dispositionally reluctant to displace anything that has already come to rely for its existence upon its present circumstances. As a newcomer, one's first instincts should be to learn and adapt to existing arrangements, rather than to force the rearrangement of those circumstances for private gain. We take it to be definitional of a spoiled child that he does not appreciate that he must leave toys alone until others have finished playing with them (regardless of whose toys they are), and we are similarly offended at adults who do not appreciate that their demands will thwart others' reliance on the continuation of the status quo.

Second, to know one's place in the universe is to exhibit environmental humility. It is to appreciate how short our individual lives are in comparison to other living things (the oldest living plant on Earth is more than five thousand years old!) and to the geological formations that form the contours of our world. One who would cut down a two-thousand-year-old sequoia in less than an hour for lumber, or level a mountain within days that has been formed over millennia, or drive a species to extinction in order to build a shopping center, lacks the sort of perspective that one considers constitutive of a virtuous person. While it may be hard to attribute rights or interests to trees, rocks, lakes,

and rivers, and while individual creatures and whole species may lack the attributes that demand sufficient moral consideration to compel their protection for their own sakes, it does not seem a stretch to suggest that we ought to conceive of ourselves as being connected to and dependent upon such entities so as to require that we act with humility when effecting the course that nature would otherwise dictate for them.

Third, a virtuous person is a generous person, one who bestows benefits on others even when they cannot be said to be entitled or deserving. Inasmuch as generosity crosses the boundaries of desert, one would also expect it to be indifferent to the boundaries between humans and animals, between animals and plants, and between species, ecosystems, and biospheres. One would expect that the virtuous person would take all things that could be made better to be worthy objects of generosity and to thus make sacrifices for the good of environmental entities in the same way (and for the same nonobligating reasons) that she makes sacrifices for other persons.

Finally, to be virtuous is not just to be morally modest; it is to be epistemically modest as well. It is to resist the arrogance of conquerors who destroy what is local before they even know its value. It is to take lessons from those of the past whose haughty haste to convert natural resources to human use deprived successive generations of remarkable species and altered the planet's terrain in irreparable ways. In the absence of full information about how our activities will impact upon delicate ecosystems, virtue would seem to require action in accordance with the precautionary principle, the principle that demands that we do not undertake risky ventures without real confidence that we can ensure the enduring health of those nonhuman entities with whom we share the planet.

Admittedly, all of these claims are vague and, in many ways, worrisome. There is much within these brief suggestions with which to find fault and much to be unpacked. Let me close with several examples that simply reveal the need for considerable further work. First, while our species is a relative newcomer to Earth as compared to other species, each individual living entity on Earth today is a comparative newcomer (although there is no question that we are each short-lived compared to individual members of many other species). Why are our virtues, as individuals, made relative to the longevity, history, and behavior of our species as a whole? As a general matter, we do not assign guilt to persons by virtue of their mere association with others who are guilty. So why would we think that the aretaic duties that persons have are properly responsive to the (short) history and past behavior of the species *Homo sapiens*?

Second, while one can appreciate, as an empirical matter, that virtue is sometimes (and maybe often) overinclusive relative to duty, so that virtues demon-

strate themselves when they are often not required, we require an account of why this *should* be so before we can derive from virtue any moral hope that the environment will be a beneficiary of its promotion. For it is tempting to say, with Aristotle, that virtue becomes vice when taken to an extreme, that it ceases to be virtue at all when it is extended to unworthy objects, that one is guilty of tilting at windmills when one behaves virtuously in contexts in which it is inappropriate. Thus, while our own imperfections may prevent us from ever cabin-ing virtue in its appropriate quarters, we should be wary of resting the fate of our environment on the promise that, if we cultivate virtue enough, we will cultivate it too much and only thereby ensure the protection of our planet. For while too much virtue is surely not a fear we need have anytime soon, we ought to be nervous about suggesting that we can protect our planet only if we effectively make a vice of virtue.

Finally, and most troublingly, I remain unconvinced that an aretaic theory of environmental care can properly explain the intuitions that many have concerning the moral standing of environmental entities. Such a theory is explicitly “all about us.” It makes the value of the environment a function of the value of our own virtue. While real virtue may require devoted stewardship of the planet and its many entities, I remain unconvinced that the reason we are bound to engage in such stewardship is that *we* will be aretaically worse off if we do not. I take the moral significance of the Pacific Ocean to be independent of (and far greater than) the significance to be attached to the relative virtue of those who have an effect upon it. While it may be that if we, as citizens of the lands that border that ocean, were as virtuous of character as we ought to be, we would act to ensure that its fish populations were restored, its coral reefs protected, its whales made safe, and its currents unaffected by global warming. But even if we were so virtuous, I would not think that its value as an ocean lay in the value of our exhibited virtue.

Conclusion

And thus I end where I began. I worry that our best ethics are not up to the task of protecting the global environment from our worst economics. If we, as philosophers, cannot devise the theoretical means by which to give voice to deep-seated intuitions about the moral status of the natural world on which we depend, we surely cannot blame market players for failing to reflect the value of the natural world in their economic computations, and we cannot blame our political leaders for failing to keep our markets honest and for failing to exempt from market practices those aspects of the natural world that ought not to be commodified at all.

NOTES

1. Jeremy Waldron, *Liberal Rights: Collected Papers, 1981–1991* (Cambridge: Cambridge University Press, 1993), 204.
2. Holmes Rolston III, “Intrinsic Values on Earth: Nature and Nations,” in *Environmental Ethics and International Policy*, ed. Henk A. M. J. ten Have (Paris: United Nations Educational, Scientific, and Cultural Organization, 2006), 54.
3. George Henrick von Wright, *The Varieties of Goodness*, The Gifford Lectures, 1958–1960 (London: Routledge and Kegan Paul, 1963). This is in answer to question 6, “What kinds or species of being have a good?” in chap. 3, “Utilitarian and Medical Goodness. The Beneficial and the Harmful. The Notions of Health and Illness.”
4. For an excellent discussion and critique of accounts that rely on the goal directedness of interest holders, including the ones outlined later in the chapter, see Harley Cahen, “Against the Moral Considerability of Ecosystems,” *Environmental Ethics* 10, no. 3 (1988), 195–216.
5. Paul Taylor, *Respect for Nature: A Theory of Environmental Ethics* (Princeton, NJ: Princeton University Press, 1986), 99.
6. Kenneth E. Goodpaster, “On Being Morally Considerable,” *Journal of Philosophy* 75, no. 6 (1978), 308–325.
7. Jay Kantor, “The Interests of Natural Objects,” *Environmental Ethics* 2 (1980), 169.
8. James K. Mish’alani, “The Limits of Moral Community and the Limits of Moral Thought,” *Journal of Value Inquiry* 16 (1982), 138.
9. Elliot Sober, “Philosophical Problems of Environmentalism,” in *The Preservation of Species*, ed. Bryan G. Norton (Princeton, NJ: Princeton University Press, 1986), 185. For more sustained criticism of the thesis that groups or species can have interests, see Cahen, “Against the Moral Considerability of Ecosystems.”
10. Holmes Rolston III, “Naturalizing Values: Organisms and Species,” in *Environmental Ethics: Readings in Theory and Application*, ed. Louis P. Pojman, 3rd ed. (Belmont, CA: Wadsworth Publishing/Thomson Learning, 2001), 78–89.
11. John O’Neill, “The Varieties of Intrinsic Value,” *Monist* 75, no. 2 (April 1992), 119.
12. Tom Regan, *The Case for Animal Rights* (Berkeley: University of California Press, 1983), 243.
13. Tom Regan, *Defending Animal Rights* (Champaign: University of Illinois Press, 2001), 35.
14. Regan, *Case for Animal Rights*, 324.