

ESSAYS

WILDERNESS AND CULTURE

BY

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The term wilderness is one of the more mischievous, elusive, and conflict-laden words in the English language. The ways we think and talk about wilderness are well embedded in modern culture and the debates surrounding it have as much to do with meaning, values, and human perception as they have to do with the ever-changing physical world. This Essay explores the complex ways that wilderness and contemporary culture are linked. Its central claim is that the cultural clashes surrounding wilderness arise out of, and reflect, not just larger cultural currents, but fundamental confusions or deficiencies in the ways we comprehend the world and our place in it. They reflect deficiencies in the ways we think about ourselves as distinct beings, in our understandings of normative values and their origins and legitimacy, and in the limits nature imposes on our modes of living. These intellectual shortcomings play key causal roles in our ongoing patterns of misusing the natural order. They also help explain why we struggle so much to see the errors in our ways and to improve them, even when we have the facts and technology to do better. Once we see wilderness clearly, separating the physically real from the human-constructed, we can gain a better sense of our ecological plight. We can also see better how wilderness areas can benefit us, not just by supporting the health of landscapes, but by providing places and opportunities to stimulate much needed cultural change.

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I. INTRODUCTION

The term “wilderness” is one of the more mischievous, elusive, and conflict-laden words in the English language. For many people, wilderness shines as a yearned-for garden and a spiritual retreat. For others, it lingers on as a foe to oppose and dominate. In one view, wilderness is an embodiment of nature’s time-tested ecological wisdom, worthy of respect and study. In another, it is a warehouse of resources that only the well-fed and misanthropic would forswear. Do wilderness areas really exist, or is wilderness merely a socially constructed ideal? This question is a much-discussed issue for academics. Do wilderness reserves reflect a mistaken view that humans exist apart from nature or are they, instead, a prudent form of survival insurance: places where we might, post collapse, begin the search for a more enduring way to live?

If not wilderness in the material sense, certainly the ways we think and talk about wilderness, are embedded in modern culture. And the debates that surround it have more to do with meaning, values, and human perception than they do with the ever-changing physical world itself. It is useful to take time to bring sense to the questions that surround wilderness—or to try to; it is useful to explore the complex ways that wilderness and contemporary culture are linked. The cultural clashes surrounding wilderness have much to reveal about how we comprehend the world and our place in it. They reflect how we think about ourselves as distinct beings, our understanding of normative values and their origins and legitimacy, and how we interpret the limits nature imposes on us. These cultural and cognitive elements of our culture are important ones, and we

have reason to conclude that they play key causal roles in our ongoing patterns of misusing the natural order.¹

More than we commonly recognize, our ecological crisis is a crisis in modern culture. Wilderness is drawn into that expanding crisis, both as a tangible place and as an ideal of human absence. For us to think clearly about wilderness, we need to reconsider the fundamental building blocks of our place within the planet's integrated web of life and how we go about understanding and making sense of that place. Or to reverse this intellectual task: If we can learn to think clearly and sensibly about wilderness—as a place and as an ideal—then we might become better able to diagnose and improve our larger cultural ills. We might recognize better the important cultural changes required if we are to succeed at what wilderness advocate Aldo Leopold once termed the “oldest task in human history: to live on a piece of land without spoiling it.”²

This Essay explores several of the complex links between wilderness and contemporary culture. Its chief message—to look ahead—is that the cultural clashes surrounding wilderness arise out of, and reflect, not just larger cultural currents, but fundamental confusions or deficiencies in the ways that we comprehend the world and our place in it. They reflect deficiencies in the ways we think about ourselves as distinct beings, in our understandings of normative values and their origins and legitimacy, and in the limits nature imposes on our modes of living. These intellectual shortcomings play key causal roles in our ongoing patterns of misusing the natural order. They also help explain why we struggle so much to see the errors in our ways and to improve them, even when we have the facts and technology to do better.

The Essay's first two Parts introduce the normative distinction between the legitimate use of nature and the abuse of it, a fundamental distinction that we vaguely sense but do not talk about with the clarity it requires.³ These opening Parts also present, in skeletal form, the basic difficulties we have in gaining a solid intellectual ground for normative values. In the public realm we are too committed to objectivity; in both private and public spheres we give undue weight to liberal individualism and human exceptionalism. The short, third Part of the Essay presents more fully the claim that our ecological crisis stems in important part from cultural deficiencies, and it shows how these deficiencies play out in wilderness.⁴ The final two Parts sketch and then build upon a reformed cultural foundation, one that pushes us to act more humbly and to accept greater responsibility for our language and chosen values.⁵ The Essay concludes with mixed comments on a hope that Leopold embraced at the end of his

¹ The ideas and lines of thought presented here will appear more fully in my forthcoming book, *THE USE AND ABUSE OF NATURE: MAKING SENSE OF OUR OLDEST TASK* (forthcoming 2016).

² Aldo Leopold, *Engineering and Conservation*, in *THE RIVER OF THE MOTHER OF GOD AND OTHER ESSAYS BY ALDO LEOPOLD* 249, 254 (Susan L. Flader & J. Baird Callicott eds., 1991) (1938).

³ See *infra* Part II.

⁴ See *infra* Part IV.

⁵ See *infra* Parts V, VI.

life, that wildness and the shared work of protecting it could help stimulate our moral imaginations and nurture a healthier, more enduring social order.⁶

II. THE USE AND ABUSE OF NATURE

A sensible place to begin is with the basics of our earthly plight. Like all living creatures, humans need to interact with the surrounding natural world in order to live. As we go about doing this, we inevitably change the natural order around us, just as other species do. It is thus not inherently wrong for us to change the physical world; we cannot do otherwise. What is wrong—what is imprudent or immoral—is to use nature in ways that seem foolish or bad.

More so than other species, people have the capacity to make nature better from their perspective—to improve upon it. This is most plainly true when it comes to gaining food and protection from harsh elements. Nature itself, of course, constrains this kind of ameliorative work. Oftentimes we successfully relax these constraints. But in important ways the Earth operates as it does, and it is our evolutionary charge and challenge to find ways of living that respect the planet's ways and means. For the most part, we need to dwell on Earth in ways that respect the planet's integrity and functioning.

When we think clearly, we realize that the kinds of physical conditions on the planet that we refer to as environmental problems are, at bottom, unwanted conditions that people have caused. Nature's dynamic processes alter the world around us, sometimes in ways we find favorable, sometimes not. Nature itself causes problems for us—its storms, tidal waves, volcanoes, droughts, and so on. An environmental problem, though, is something else—something other than nature acting or changing on its own. An environmental problem is a physical change caused by human conduct that we evaluate, in some sense, as wrongful or stupid. It is a condition that stems, not from our legitimate use of nature, but from our misuse of it. And the problem is, when we get to the root of it, not the changed natural condition—like the polluted air or the eroded soil—so much as it is the human behavior that causes it.

This definition of an environmental problem—as human activity that degrades nature—is a useful one, even though, and in part because, it is so plainly incomplete. When we define an environmental problem in terms of human conduct, we draw attention to the conduct that is involved, if not to the particular people engaged in it. The definition helps also by highlighting our essential need to distinguish between the legitimate use of nature and the abuse of it, which is to say it emphasizes our need to draw a line between fair use and misuse. Without such a line how can we know which of the changes we make to nature are acceptable or good, and which are not? More generally, how can we know whether we are inhabiting the planet sensibly, in ways that can endure?

⁶ See *infra* Part VII.

We have long had trouble drawing this essential line between legitimate use and abuse, and, indeed, trouble even in appreciating the need for the line and the complexity of generating it. Decades into the environmental era, we still have no clear sense about all of the factors and elements that would likely seem pertinent to this line drawing—pertinent, that is, to an all-things-considered normative assessment of how we ought to live in relation to nature. Instead, we throw around the vague term “sustainability,” which lacks much meaning even when bolstered by the adjective “ecological.”⁷ Sustainability is fine enough, but what are we sustaining in a world where nature itself changes and human numbers and needs change, as well?

We can expose this intellectual murkiness by imagining a drive around an expansive farm landscape in central Illinois. Are the people here making good use of this naturally fertile place? Are they engaged only in the legitimate use of nature, or have they in some respects crossed the line to misuse it? Simply by driving around we would not gather nearly enough factual data to answer this question; there would be too much to learn, and the ecological effects would be challenging if not impossible to trace. But we would stumble on this question also because we do not have, in hand, a sound normative standard to use in evaluating these rural Illinois land use practices. In truth, we lack anything like a clear overall standard for separating legitimate use from abuse at large scales. Of course we need food to eat, as farmland defenders point out, and farms provide it. But we need much more than that. A fully developed vision of good land use would reflect many relevant needs, values, and hopes, in addition to our basic need for something to eat.

To offer this intellectual criticism is to point to a rather distinct failing in the environmental movement. The movement has had decades to compose a standard for evaluating modes of living and has come up with only vague ideals, except in the case of particular pollutants covered by precise limits.⁸ Sustainability as a normative goal—plenty vague, as often noted—becomes even more blurred when the ecological part is folded into a larger overall goal, one that also includes economic development and social justice aspects.⁹ This intellectual failure is a prominent one, and distinctly

⁷ I develop my criticisms in ERIC T. FREYFOGLE, *Back to Sustainability*, in WHY CONSERVATION IS FAILING AND HOW IT CAN REGAIN GROUND 113 (2006), drawing upon environmental historian Donald Worster’s thoughtful comments in DONALD WORSTER, *The Shaky Ground of Sustainable Development*, in THE WEALTH OF NATURE: ENVIRONMENTAL HISTORY AND THE ECOLOGICAL IMAGINATION 142 (1993). An unusually solid version of sustainability appears in J. BAIRD CALLICOTT, *Ecological Sustainability as a Conservation Concept*, in BEYOND THE LAND ETHIC: MORE ESSAYS IN ENVIRONMENTAL PHILOSOPHY 365, 366 (1999) (proposing that we sustain, in working landscapes, a version of Aldo Leopold’s normative goal of land health).

⁸ See, e.g., Clean Air Act, 42 U.S.C. §§ 7401–7671q (2012); Federal Water Pollution Control Act, 33 U.S.C. §§ 1251–1387 (2012).

⁹ See, e.g., Thomas D. Sisk, *Seeding Sustainability in the West*, 31 UTAH ENVTL. L. REV. 79, 79 (2011) (comparing and contrasting different understandings of the term “sustainability,” and noting that the increasingly common use of the term has led many to “re-examine the still unfocused frame through which we view [the American West’s] rapidly changing cultural, economic and environmental history”); Alexander J. Black, *Environmental Impact Assessment*

revealing. Our continued stumbling at this work says much about who we are, why we misuse nature, and why our efforts toward reform are now mostly stalled.

III. OBJECTIVITY AND THE MURKINESS OF VALUES

A big reason why we have difficulty distinguishing legitimate use from abuse is what might be termed our collective cult of objectivity, borne out of the eighteenth-century Enlightenment and strengthened over the generations by the rise of positivist science and liberal individualism.¹⁰

When it comes to matters of public business—far more than in private matters—we are prone to turn to verifiable facts and reason. We want arguments supported by factual evidence and we test claims based on their logic, or at least we purport to. What gets pushed aside when we stick to facts and logic are claims based largely on emotion or claims that simply reflect a person's subjective view; a perspective rooted in contestable values, aesthetic preferences, and other variable beliefs. In the current view, one can act on subjective perspectives when making personal decisions, especially as a market consumer.¹¹ But when it comes to public policy, we expect advocates to rise above their idiosyncrasies and stick to matters they can prove and argue rationally. Objective proof can come inductively, based on empirical data that support factual claims. In addition, it can come more deductively, through reasoning that starts with established facts and that makes use in logical ways of some combination of fundamental liberal principles—e.g., equality, liberty, and fair process—and agreed-upon national goals such as economic growth, national defense, and public safety.¹²

The use of such liberal principles and shared goals in public discourse seems to take place without much overt recognition that these principles and goals are themselves not really objective, at least not in the sense that they can be proven using facts and logic alone. We take these particular principles and goals as obvious givens. We treat them as truths embedded

and *Energy Experts*, 16 LOY. L.A. INT'L & COMP. L. REV. 799, 803 (1994) ("The meaning of 'sustainable development,' however, is vague.").

¹⁰ See generally Beverly Horsburgh, *Decent and Indecent Proposals in the Law: Reflections on Opening the Contracts Discourse to Include Outsiders*, 1 WM. & MARY J. WOMEN & L. 57, 84 (1995) (explaining that a student who has been drawn into a "Cult of Objectivity" wants to "remain a member in good standing of the dominant social group" and thus "resist[s] discovering that outsiders are excluded from the discourse, not realizing that the processing of traditional analysis has immunized them from recognizing the bias in the doctrine").

¹¹ Personal preferences can include voting, and political candidates in their campaigns routinely appeal to basic emotions. My comment has to do with public discourse, where objectivity is expected to rise to the top.

¹² For a classic critique of "Enlightenment" as a concept and its associated liberal principles, see generally MAX HORKHEIMER & THEODOR W. ADORNO, *DIALECTIC OF ENLIGHTENMENT* 3 (John Cumming Trans., Continuum Publishing Company 1998) (1944). For a spirited conservative critique of liberalism, see generally JOHN GRAY, *ENLIGHTENMENT'S WAKE: POLITICS AND CULTURE AT THE CLOSE OF THE MODERN AGE* (1995).

somehow in the order of things, just as we assume as a fundamental truth that humans have moral value that differs in kind from any value that might attach to other creatures. We speak about human rights—“inalienable rights,” as Thomas Jefferson termed them—not really knowing where such rights might come from and why we, among all species, happen to possess them.¹³

There is much to say about the origins or sources of morality and related normative values.¹⁴ What needs emphasizing is that we have no real collective sense about where normative values come from and why some of them are legitimate and binding—for instance, the claim that humans have moral value—while other normative values are viewed as simply subjective, personal choices, which people can embrace if they choose but cannot force others to honor.¹⁵ Facts can be put to empirical tests and verified to reasonably high confidence levels within the limits of our senses, testing equipment, and mental processes. But what about a claim that humans have the right to free speech, or that killing a person is morally wrong? These are normative claims, not factual ones; these claims cannot be supported simply with empirical data. They also cannot be supported by pure reason since reason, powerful though it can be, needs raw material with which to work. Reason operates on facts or normative claims and then proceeds to manipulate and elaborate upon them to reach logical conclusions. Reason alone—reason detached from facts or axioms—literally cannot get started. Ultimately, no combination of facts and reason can generate the normative claim, for instance, that it is somehow wrong to kick a dog out of sheer malice. To draw that conclusion the reasoning needs to have as a starting point at least one normative value; for instance, that pain is bad and needlessly causing pain is morally wrong.

The public realm today does make continuous use of normative axioms, some framed in terms of morality and rights, others framed as public policy. Yet we show little awareness why the ones we use are legitimate. Why are they acceptable if not binding communal norms, rather than mere personal preferences that are ill-suited to guide public decision making, particularly

¹³ Jefferson's well-known answer in the Declaration of Independence was that the rights of men came from “their Creator.” THE DECLARATION OF INDEPENDENCE para. 1 (U.S. 1776).

¹⁴ See generally RICHARD JOYCE, THE EVOLUTION OF MORALITY (2006) (discussing whether the origins of morality are biological results of natural selection or generated by cultural and psychological processes); ALLAN GIBBARD, WISE CHOICES, APT FEELINGS: A THEORY OF NORMATIVE JUDGMENT (Harvard Univ. Press 1992) (1990) (using the notion of “rationality” to examine complex moral and other normative issues); Michael Tomasello & Amrisha Vaish, *Origins of Human Cooperation and Morality*, 64 ANN. REV. PSYCHOL. 231 (2013) (arguing that morality is a consequence of natural evolutionary mechanisms promoting cooperation).

¹⁵ A longstanding practice of those opposed to environmental protections has been to push environmental values into the personal sphere, at times even comparing it to a religious choice manifestly ill-suited to ground public policy. See, e.g., Andrew P. Morriss & Benjamin D. Cramer, *Disestablishing Environmentalism*, 39 ENVTL. L. 309, 312–13 (2009). In a much-noted incident, then-Vice President Cheney made use of the tactic when proposing an oil-dependent national energy policy, ignoring options for energy conservation. Conservation, Cheney asserted, was properly a “personal virtue,” not the basis for public policy. Joseph Kahn, *Cheney Promotes Increasing Supply as Energy Policy*, N.Y. TIMES, May 1, 2001, at A1, A20.

laws that constrain individual liberty? At root, the question is one of metaphysics, and it arises out of a long-continuing conversation among philosophers about, on one side, the alleged reality—i.e., objective existence—of certain norms and, on the other, the claim that all such norms are nothing more than social creations.

The literature on this basic issue in philosophy is too rich to review here. The most common secular stance on this issue—dominant now for decades, if not generations—is the materialist one: the view that the natural world includes only physical objects and processes and that intangible norms and values—all of them, even the alleged moral value attached to humans—are grounded only in social convention.¹⁶ In this view, humans are morally worthy creatures at root only because we say we are.¹⁷ All of our fundamental rights exist as axioms that guide our thinking and acting because, and only because, we have in some way decided collectively to embrace and enforce them against one another.¹⁸ Murder is wrong because we have determined to make it so, not because the world at the Big Bang included an intangible moral norm against killing humans. Philosophically, the norm against killing has no objective existence except insofar as it has been created by people and remains supported by them.¹⁹

As for where our human-created values originally come from—not just our rules of morality, as commonly termed, but all of our standards of good versus bad or better versus worse—they have complex origins or points of beginning within individuals and among peoples. Again, the literature is vast and rapidly growing, featuring, in recent years, important contributions on the origins of moral judgment from evolutionary biology and psychology.²⁰

¹⁶ For more on this view, see JOSEPH WOOD KRUTCH, *THE MODERN TEMPER: A STUDY AND A CONFESSION* 6 (1957), providing a best-selling expression of this perspective, which seemed to unsettle inherited culture; MARY MIDGLEY, *CAN'T WE MAKE MORAL JUDGMENTS?* 4 (1991), providing a useful survey and critique of the decline of public moral talk. For dissenting views, see ROBERT NOZICK, *ANARCHY, STATE, AND UTOPIA* 10–11 (1974), a highly visible work arguing that humans possessed natural rights in a state of nature, though without explaining the origin of such rights. This view continues to enjoy favor among some, largely outside the field of philosophy. See also C. S. LEWIS, *THE ABOLITION OF MAN* 49–50 (1947); ALASDAIR MACINTYRE, *AFTER VIRTUE* 2 (3d ed. 1984); IRIS MURDOCH, *THE SOVEREIGNTY OF GOOD* 102–03 (1970) (providing a more philosophically nuanced dissent).

¹⁷ See KRUTCH, *supra* note 16, at 9–10.

¹⁸ *Id.*

¹⁹ *Id.* at 9 (“Custom has furnished the only basis which ethics have ever had, and there is no conceivable human action which custom has not at one time justified and at another condemned.”). When such a norm is embraced by a people, we can say that it has real existence as a social norm but its existence is contingent upon continued social support.

²⁰ See, e.g., Kristin Prehn & Hauke R. Heekeren, *Moral Judgment and the Brain: A Functional Approach to the Question of Emotion and Cognition in Moral Judgment Integrating Psychology, Neuroscience and Evolutionary Biology*, in *THE MORAL BRAIN: ESSAYS ON THE EVOLUTIONARY AND NEUROSCIENTIFIC ASPECTS OF MORALITY* 129–55 (Jan Verplaetse et al. eds., 2009) (discussing various theories that have been advocated from numerous fields seeking to explain moral judgment and offering a theory synthesizing multiple fields); Jonathan Haidt, *The Emotional Dog and Its Rational Tail: A Social Intuitionist Approach to Moral Judgment*, 108 PSYCHOL. REV. 814, 814–34 (2001) (summarizing various theories for moral judgment and

To some extent our normative leanings are influenced by genetic factors brought out by social conditions.²¹ They are influenced also by emotions or sentiments. Indeed, emotion seems to be the root base of most of our moral judgments, as David Hume urged in the eighteenth century.²² Yet, even at the earliest stages of emergence, our normative impulses are also influenced and given shape by other factors, beyond simple emotion. They are influenced by the facts of our material existence—ecological and social—and are guided by our powers of reason. Put very simply, emotions, empirical facts, reason, and genetic influences somehow, in ways not well understood, combine within us and among us to give rise to senses of good and bad and right and wrong.²³ They give rise in this murky way to social orders and cultures that, once in place and operating, exert great power over the thinking, feeling, and valuing of the people subject to them.²⁴

Four related points can be taken from all of this. First, the values and moral ideals that we embrace together are grounded in nothing more or less than social convention, albeit conventions often with distinguished pedigrees. Second, we have real trouble recognizing this as true. We are prone instead, not just to take the values and ideals for granted, but to assume that they have some other, nonhuman origin in the world—to assume that they are embedded in nature in some way and available for our use—maybe even binding on us—without any human involvement in the process. Third, not seeing this, not seeing that our values have no real or objective existence apart from us, we recognize only vaguely that these normative values are ones that we could change. People created them and people can revise them. Finally, failing to appreciate our agency, our power over these values, we do not take real responsibility for them. We do not really recognize (as we urgently need to do) that we have every right to reform our shared values in ways that make them better. And the revised values we might produce today can, through consensus and shared embrace,

offering an analytical framework that draws from psychology, evolutionary biology, and other fields).

²¹ See, e.g., EDWARD O. WILSON, *THE SOCIAL CONQUEST OF EARTH* 20 (2012) (discussing the interplay between social characteristics and evolution in the formation of the human condition).

²² RICHARD NORMAN, *THE MORAL PHILOSOPHERS: AN INTRODUCTION TO ETHICS* 71–93 (1998).

²³ See, e.g., J. BAIRD CALLICOTT, *Hume's Is/Ought Dichotomy and the Relation of Ecology to Leopold's Land Ethic*, in *IN DEFENSE OF THE LAND ETHIC: ESSAYS IN ENVIRONMENTAL PHILOSOPHY* 117, 117–19 (David Edward Shaner ed., 1989) (discussing how “value” is often derived from “fact,” particularly in the land ethic context); J. BAIRD CALLICOTT, *Just the Facts, Ma'am*, in *BEYOND THE LAND ETHIC: MORE ESSAYS IN ENVIRONMENTAL PHILOSOPHY* 79, 83–91 (David Edward Shaner ed., 1999) (discussing the philosophical, evolutionary, and social explanations for the concept of morality as it is presently understood); J. BAIRD CALLICOTT, *Can a Theory of Moral Sentiments Support a Genuinely Normative Environmental Ethic*, in *BEYOND THE LAND ETHIC: MORE ESSAYS IN ENVIRONMENTAL PHILOSOPHY*, *supra* at 99, 101–15 (same).

²⁴ Normative values, like all ideas, can travel among peoples and at any given time people within a culture ascribe their values to religious texts or other sources of revealed knowledge. See MILTON ROKEACH, *THE NATURE OF HUMAN VALUES* 13 (1973).

become every bit as binding on us collectively as the values we have long held most sacred.²⁵

We can illustrate these points, highlighting some of their consequence and costs, by considering claims made by animal welfare advocates that certain high-functioning animals ought to have moral value of some type.²⁶ Such claims are summarily rejected by many people who view the claims simply as matters of personal choice.²⁷ Such claims are based on subjective preferences, critics assert, not on accepted morality. As such, they are perfectly fine for individuals to embrace if they choose, but not appropriate to impose on others. Critics of the animal welfare view also insist that welfare advocates *prove* their positions, using empirical data and logic.²⁸ Animal defenders often attempt to do just that by pointing to the specific ways that certain animal species resemble humans physically; for instance, in their ability to feel pain and to act intentionally.²⁹ The common, pro-animal argument goes like this: human moral value necessarily rests on some specific trait that humans possess (a factual claim); that being so, moral value should extend beyond humans to all species possessed of the specific trait, as a matter of logic and by application of the accepted norm of equality.³⁰ The details of such pro-animal claims vary, but the format is pretty

²⁵ Our prevailing values do, of course, change over time. One can think of prevailing attitudes based on race and gender, for instance, as ones that have changed. But even in such instances, rhetoric promoting change has commonly claimed that older values are simply wrong in some sort of factual sense, or that they are logically inconsistent with other values (liberty and equality, most often). Reform rhetoric also typically reflects and strengthens the public cult of objectivity. *See id.* at 262.

²⁶ JOSEPH R. DESJARDINS, ENVIRONMENTAL ETHICS: AN INTRODUCTION TO ENVIRONMENTAL PHILOSOPHY 123–26 (1993).

²⁷ *See, e.g.*, Brian Bishop, *in* PEOPLE PROMOTING AND PEOPLE OPPOSING ANIMAL RIGHTS: IN THEIR OWN WORDS 56–57 (John Kistler ed., 2002) [hereinafter IN THEIR OWN WORDS] (asserting that ecological and animal rights legislation invalidates the social compact); Milton M.R. Freeman, *in* IN THEIR OWN WORDS, *supra*, at 114 (“For some people, raising their children close to nature is a conscious choice . . . Yet, if denied an opportunity to earn a living from the local resources, then the right to exercise that choice is denied.”).

²⁸ For an illustrative critical response, see generally Richard A. Posner, *Animal Rights*, 110 YALE L.J. 527 (2000) (reviewing STEVEN M. WISE, RATTLING THE CAGE: TOWARD LEGAL RIGHTS FOR ANIMALS (2000)) (concluding that the argument of seeking to extend the moral worth of humans is logically inconclusive, and urging that animal welfare be enhanced instead by means of expanded property rights in animals—that is, greater commoditization—and a broader ban on cruelty to animals).

²⁹ *See, e.g.*, Priscilla Cohn, *in* IN THEIR OWN WORDS, *supra* note 27, at 74 (describing animals as “living, sentient being[s]” that experience pain and suffering); Sherrill Durbin, *in* IN THEIR OWN WORDS, *supra* note 27, at 100–01 (“[E]very dog and cat [has] its own unique, wonderful personality, much like humans. . . . [All] animals feel pain, mentally, emotionally, and physically, similar to humans.”).

³⁰ *See, e.g.*, TOM REGAN, THE CASE FOR ANIMAL RIGHTS 329 (2d ed. 2004) (proposing that certain animals have rights); PETER SINGER, ANIMAL LIBERATION: THE DEFINITIVE CLASSIC OF THE ANIMAL MOVEMENT 5–7 (rev. ed. 2009) [hereinafter ANIMAL LIBERATION] (proposing that utilitarian calculations include consideration of the utility of certain animals); PETER SINGER, THE EXPANDING CIRCLE: ETHICS, EVOLUTION, AND MORAL PROGRESS 120–21 (rev. ed. 2011) [hereinafter EXPANDING CIRCLE] (proposing a fuller, influential argument for the continued extension of the category of morally worthy creatures).

much the same: facts and logic are mixed with the accepted moral value of humans and with the principle of equality to forge an argument in favor of moral value for other creatures, all without drawing upon a new (subjective) moral principle or even changing the moral principles that already exist (the moral value of humans and the principle of equality).³¹

The flaw with this approach is this: humans have moral value, not because of any particular trait that we possess, but simply because we say that we have value.³²

In the past, it was commonly thought only certain humans had moral value, typically, people who belonged to some tribe, religion, race, nationality or the like.³³ Today, we commonly think these distinctions are unimportant and that all humans are morally worthy. However the line is drawn, moral value is embraced as a normative axiom. It provides a starting point for moral reasoning that then proceeds to consider the implications of this moral value. The claim that we have moral value because of some specific trait that we possess—for instance, because we experience pain, as Jeremy Bentham argued two centuries ago—could also be embraced as a moral axiom.³⁴ If we did embrace it, then the animal welfare line of reasoning would work perfectly well. But there is little evidence that we have ever embraced Bentham's claim or any similar claim linking morality to a specific human trait—to consciousness or self-consciousness, to mention two other possibilities. To the contrary, the record suggests that our moral axiom is more direct: We recognize moral value in humans, instead, simply because they are humans.³⁵ It is for this reason that we extend rights to all humans, without testing them to see whether they do or do not possess any particular value-creating attribute. We treat the comatose as morally worthy, even though they are not conscious and feel no pain. For many, moral value extends to the human zygote at the moment of conception.

If we recognized this reality about the origins of morality in social convention it would be clearer to us that animal welfare advocates need not undertake their elusive search for the special element or trait of humans that generates moral value. They would not need it. They need only say—and legitimately could say—that we should revise our shared understandings of moral value to recognize value in a few, many, or all, nonhuman animals, perhaps with that newly recognized moral value varying based on physical differences among them.

Such a claim by animal welfare advocates would be, of course, a call to alter a core social convention. Properly made, the call would be presented as a proposal to revise our core criteria of moral value. That is, it would not be a factual claim that certain nonhuman animals *do* have moral value; that

³¹ ERIC T. FREYFOGLE, JUSTICE AND THE EARTH: IMAGES FOR OUR PLANETARY SURVIVAL 71–76 (1993) (summarizing the literature and considering the possibility of multiple moral categories, not just two categories of morally worthy and morally empty).

³² See KRUTCH, *supra* note 16, at 9–10.

³³ EXPANDING CIRCLE, *supra* note 30, at 120.

³⁴ ANIMAL LIBERATION, *supra* note 30, at 7–8.

³⁵ See KRUTCH, *supra* note 16, at 12–13.

would be a false statement because at the moment we humans have not given rise to such value. It would be instead a call for us collectively to *expand* the category of morally worthy creatures. As for the side opposing such a moral claim, it cannot rightly respond simply with the factual statement that nonhuman animals lack moral value. That claim, as just noted, is true enough. But it is not responsive because it avoids the moral argument being made: that we should begin recognizing (that is, create) moral value in other animals. A proper response in opposition would argue why we should keep the moral line where it is—why we should continue reserving moral value for humans alone, and not expand the circle to include other creatures within it. And to reiterate, it is also not a rightful response to animal welfare advocates to say they have not proven their case using only verifiable facts and logic.³⁶ Facts and logic will no doubt enter into the argument, but the core of the welfare claim is based on normative values that go beyond facts and logic.

This animal welfare example could be multiplied with countless others. Whenever we pass judgment on the rightness or wrongness, or on the wisdom or folly, of some action or condition, we draw upon normative values. In the public realm, these are shared values; in the private realm, our values can be more eccentric. In all instances, though, normative values inform the judgment, and values ultimately are based on human choice. Why is it right or wise to produce crops in ways that keep soils fertile? Why is it wise to keep drinking water supplies potable and continuous? Why is it morally right to take steps to protect rare species, even when they provide no known benefit to us? The answer to all such questions is that acts are right or wrong in light of normative standards that we have collectively come to accept as binding and that we employ when evaluating particular conduct.

Our difficulty coming to terms with the true origins of normative values is exacerbated by our prevailing ontological thought and by the ways we think about ourselves as living beings. In the common view, a human being is best understood as a distinct, autonomous individual possessed of significant rights.³⁷ Chief among these is the right to liberty, mostly understood in negative, individual terms. Liberty means the right to live as one chooses, free of restraints, except those needed to maintain peace and promote basic public welfare.³⁸ The emphasis in such thought is on the separateness and uniqueness of the individual, a being who just happens, in our moral scheme, to stand above all other species because of the presumed superiority of human life. We humans are moral subjects; the rest of the material world is a collection of morally empty objects. Humans are free to interact with nature as they like so long as they respect the rights of other

³⁶ *Contra* POSNER, *supra* note 28, at 533–34, 539.

³⁷ John Christman, *Autonomy in Moral and Political Philosophy*, STANFORD ENCYCLOPEDIA OF PHILOSOPHY, <http://plato.stanford.edu/entries/autonomy-moral/#IdeConSel> (last visited Nov. 22, 2014).

³⁸ *See* DARREN W. DAVIS, *NEGATIVE LIBERTY: PUBLIC OPINION AND THE TERRORIST ATTACKS ON AMERICA* 5 (2007).

humans and avoid causing them harm. And humans are best understood as distinct, individual beings.

This cultural understanding of our earthly existence, emphasizing as it does individual autonomy and moral uniqueness, clashes sharply with the reality of the natural order. As Darwin showed and we profess to know, we emerged out of the same evolutionary processes that gave rise to other life forms.³⁹ We are unique neither in origin nor in the physical materials that compose our bodies. Even with our considerable prowess, we remain every bit as dependent on the rest of nature for survival and sustenance as are other animal species. Our acts of daily living take place within ecological systems with which we continuously interact. Our bodies, in turn, are inhabited by some hundreds or thousands of microscopic species, some of them dangerous to us, far more of them benign, and no small number of them useful, if not essential.⁴⁰ As philosopher J. Baird Callicott explains, we might best understand our individual bodies not as single beings but as ecosystems, given the variety of life forms that exist on and within them—in the digestive tract, above all—and given the high level of interdependence of the parts.⁴¹

Culturally we are all liberal individuals and, save for the most committed animal rights advocates, we all embrace the idea, *contra* Darwin, that humans are special life forms. In fact, humans are embedded into ecological systems and are dependent in the long run on the continued functioning and biological productivity of the ecosystem. Given this interdependence, it is misleading—if not simply false—to claim that we are chiefly autonomous beings, rather than elements embedded in larger natural orders and largely defined by the countless ways we are linked to given landscapes. Viewed ecologically, as they should be, landscapes are integrated communities of life and they can be more or less healthy in terms of their sustained productivity. Productivity, in turn, is linked to the diversity of species and their population sizes, among other factors. Understood fairly, in short, we are far more dependent than we are independent. To be sure, we can and do move about, even hopping from continent to continent, and many of our ecological links are to places far away rather than near. But interdependence nonetheless is the prevailing reality. Our cultural values—liberal individualism above all—make interdependence much harder to see. In doing so, our values make it harder for us, much harder, to come to terms with our environmental plight, harder to see problems, harder to accept responsibility for them, and harder to change our ways of living.

³⁹ Nelson Brigford, *Darwin's Theory of Evolution*, YOUNG SCIENTISTS J., Nov. 2009, at 48, 48.

⁴⁰ Gina Kolata, *In Good Health? Thank Your 100 Trillion Bacteria*, N.Y. TIMES, June 14, 2012, at A0.

⁴¹ J. Baird Callicott, *Ecology and Moral Ontology*, in THE STRUCTURAL LINKS BETWEEN ECOLOGY, EVOLUTION AND ETHICS: THE VIRTUOUS EPISTEMIC CIRCLE 101, 101 (B. STUD. IN THE PHILOSOPHY OF SCI. 2013) (noting similarities with earlier process-philosophy and process-theology approaches); see Scott F. Gilbert et al., *A Symbiotic View of Life: We Have Never Been Individuals*, 87 Q. REV. BIOLOGY 325, 326–27 (2012).

These ontological assumptions show up clearly in disputes over alleged land use harms. Landowners commonly want the right to act as they see fit absent clear evidence they are harming some other person. Embedded in this normative stance is the idea that land parcels and landowners are largely separate.⁴² Harm arises when it appears, based on empirical data, that actions on one land parcel cross a human-drawn boundary line and either interfere with what another individual is doing or degrade property owned by that person. The ideal, by implication, would be a landscape in which land use activities have no crossover effects. As for any crossover effects, the burden is on the party alleging harm to prove them, and they are readily ignored so long as they are unknown; ignorance gives a green light to charge ahead.

When we unpack this land use scene, the chief elements of modern culture are readily apparent. Humans are in charge and nature is our servant. Humans are autonomous agents, free to act as they see fit. Their autonomy spills over to their land parcels, which are, particularly when privately owned, extensions of the autonomous owner and thus largely autonomous places themselves. Interconnections are overlooked except when a person claiming harm presents evidence of them. The interdependence of land parcels, particularly in ecological terms, is largely ignored, as are the ways that biological productivity depends on ecological functioning that transcends human-drawn property lines. At bottom, we have little sense that nature is an integrated, independent whole; we have little sense of a land community in which humans are embedded nearly as much as other living creatures.

IV. A CRISIS OF CULTURE

Our ecological crisis today—showing up in climate change, expanding dead zones, ocean acidification, soil declines, and species losses⁴³—is at root a crisis of modern culture. It is our culture that is on trial, and it is plainly wanting. This is not to deny that other material factors are also at work. Our global population plays a role; environmental ills would be more tractable if we had one-half or one-tenth as many people. Our technology is also critical. Again, it is easier to degrade a landscape with a bulldozer than with a stick; DDT was not a problem until modern chemistry created it.⁴⁴ Our harnessing of fossil fuels is worth singling out for special attention given how it has

⁴² See Eric T. Freyfogle, *Property and Liberty*, 34 HARV. L. REV. 75, 79–84 (2010) (discussing a property owner's rights with regard to his or her property and the interaction with neighboring property owner's rights).

⁴³ FRED MAGDOFF & JOHN BELLAMY FOSTER, *The Planetary Environmental Crisis, in WHAT EVERY ENVIRONMENTALIST NEEDS TO KNOW ABOUT CAPITALISM: A CITIZEN'S GUIDE TO CAPITALISM AND THE ENVIRONMENT* 11 (2011) (setting forth a concise summary of ills); John Rockström et al., *A Safe Operating Space for Humanity*, 461 NATURE 472, 472–75 (2009) (considering natural limits).

⁴⁴ See generally DDT, SILENT SPRING, AND THE RISE OF ENVIRONMENTALISM: CLASSIC TEXTS (Thomas R. Dunlap ed., 2008) (discussing the history and environmental problems connected to DDT).

transformed landscapes. Our use has led not just to greenhouse gas emissions, but to much larger houses, urban sprawl, highways and airports, and long-distance transport as well as to fertilizers and countless other polluting chemicals.

But even when these material factors are all lumped together, they do not account for our misuses of nature and, in particular, for our tendency to deny problems and to refuse to use even proven technology to address them. To a large extent our technology is us: It reflects who we are, how we live, and what we want, all of which has cultural roots. Yes, new technology stimulates cultural change even as it reflects culture. Culture, though, is a primary and independent cause of degradation. Our human exceptionalism, our embrace of autonomy, our short-term attitudes, our cult of objectivity, our tendency to charge ahead with little concern for unknown harms—these and other cultural elements play key causal roles. We will not make major progress mitigating degradation so long as these cultural elements remain dominant.

How, then, does wilderness fit into all of this? How is our thought and action about wilderness influenced by these cultural traits?

A. Wilderness as Word, Idea, and Place

We can start with the meaning of wilderness—what it is and whether it really exists. If we could understand more clearly that intangibles such as words, ideas, and values have no timeless existence to them, if we could see that they are all contingent human social creations, then we could put to rest much of the confusion surrounding wilderness. We would no longer worry about what wilderness really means. We would no longer argue about whether wilderness really exists or whether it is, instead, a human social creation. And we might see, better than we do now, that the reasons for preserving wilderness are ones that we can and should generate ourselves. With our chosen reasons in hand we could then define wilderness, identify it, and set sensible rules governing its management and use.⁴⁵

Wilderness is, as an initial matter, simply a *word*. Like all words, it is a human creation and has arisen over time and with varied meanings through social convention.⁴⁶ As a word it is artificial in that we humans could have come up with some other word or words and could define them differently. Taken simply as a word, as a sign, wilderness does indeed exist. But it exists within and among speaking humans and is inextricably linked to other

⁴⁵ For an especially rich collection of writings, many debating whether wilderness has real existence or whether it is a social construction (and much more), see generally *THE GREAT NEW WILDERNESS DEBATE* (J. Baird Callicott & Michael P. Nelson, eds., 1998); *THE WILDERNESS DEBATE RAGES ON: CONTINUING THE GREAT NEW WILDERNESS DEBATE* (Michael P. Nelson & J. Baird Callicott eds., 2008).

⁴⁶ Two useful surveys are RODERICK FRAZIER NASH, *WILDERNESS AND THE AMERICAN MIND* (4th ed. 2001); MAX OELSCHLAEGER, *THE IDEA OF WILDERNESS: FROM PREHISTORY TO THE AGE OF ECOLOGY* (1991).

words or signs. It will no longer exist when the word disappears from usage and memory.

Much the same can be said about wilderness as an *idea* or an ideal, apart from the words used to label it. All ideas and ideals are human creations, putting to one side what goes on in the minds of other creatures. As with words, our ideas and ideals are human creations and artificial in the sense that we could have other ideas and other ideals. Given this social origin it makes no sense to argue what wilderness *really* means or whether the planet includes any places that qualify as true wilderness. Like all ideas, the one we term “wilderness” means whatever we collectively want it to mean.

As for wilderness as an actual, physical *place*, and whether it really exists, the answer depends entirely on our chosen definition. We could define wilderness so that hundreds of millions of acres of land (and waters) satisfy the definition; in which case, wilderness does exist as an actual place. Or we could define the term in such a way that no place on earth fits the definition. We could define it, for instance, as an area completely unaffected by humans, directly or indirectly. In that case there would be no physical place that qualifies as wilderness.

B. The Values of Wilderness

As for the values associated with wilderness, they are, for the reasons already noted, also among the categories of intangible things that people create. Are wilderness areas worth protecting? At one level, the answer is simple: They are if we say they are, and they are not if we say they are not.

The concept of value means valuable to a sentient creature that is capable of attributing value.⁴⁷ There is no value without someone to create it.⁴⁸ The value-, or norm-creating, process, as already noted, is a murky one that in some way draws upon facts and reason, as well as sentiments and genetic influences. Thus, the natural world plays critical, indirect roles in the value-creating process. But ultimately it is up to humans to grab hold of the facts of nature and mix them with sentiments and inbred leanings to formulate normative standards, including standards used to evaluate landscapes. Through careful study we can discover new facts about wilderness-type places, and these facts, in turn, might influence our

⁴⁷ See Hicham-Stéphane Afeissa, *Intrinsic and Instrumental Value*, in 1 *ENCYCLOPEDIA OF ENVIRONMENTAL ETHICS AND PHILOSOPHY* 528, 530 (J. Baird Callicott & Robert Frodeman eds., 2009) (arguing that something has value “only if it is valued by a conscious being capable of intentionality”).

⁴⁸ Even those few who contend that some value adheres in nature and has real existence, apart from the creative efforts of any sentient being, are likely to admit that a sentient being is needed to recognize the value. For the purposes here, the labor of creating value and the labor of recognizing value that independently exists can be lumped together. Both require human involvement and decision making. *See id.* (explaining that humans have the capacity to assign value “not only to themselves but also to other entities”).

normative judgments about the places. But our normative judgments in the end are up to us to assemble and embrace as we see fit.

The human origins of values are easier to see when we talk about *instrumental* values—that is, when we talk about ways that wilderness areas and other components of nature are valuable because they promote human welfare. Yet human origins also underlie what is termed “intrinsic” or “inherent” value. While intrinsic value exists (by definition) independently of any direct contribution to human welfare, it remains every bit as dependent as instrumental value on a human to create the value. Intrinsic value simply means value that humans recognize for reasons that are not directly linked to the promotion of human welfare.⁴⁹ We can say that a gorilla has intrinsic value apart from any benefit we might get from it. But the gorilla nonetheless has such intrinsic value in our value scheme—the only scheme that we can know—entirely because we have created it.

C. Creating Value for Wilderness

When thinking about wilderness in normative terms, and figuring out how to value it, we could begin with the question: How might we best define wilderness as a guiding land use ideal? It is a fair enough phrasing and might promote good thought. But the word wilderness is not a necessary component of this question and it is diverting to frame the question in this way, as chiefly definitional. A better approach—one that puts the norm-setting work front and center—is to ask instead: What would be the best way for us collectively to make use of this particular landscape? How should we live in this particular place over the long term? Or perhaps better still: How, in this landscape, should we draw the line between legitimately using nature and abusing it?

The benefit of these latter questions is that they present the fundamental challenge in terms that are clearly normative, and they imply, rightly, that the answers are ones that require us to make choices. These questions are plainly not ones of fact, which we might answer by gathering and synthesizing data. They are also, it should be evident, not ones that we can resolve using reason alone, detached from any normative values. Further, these latter questions usefully imply that our answers should be based on all-things-considered assessments of the normative factors we deem relevant. Of course we need food to eat, to return to our farmland example. But we misuse land when we devote all of it to food production, leaving no parts of nature to address our many other needs and to satisfy our other, non-instrumental normative values.

When we head down this path of identifying possible values for wilderness, what we are likely to come up with are normative reasons to value and protect wilderness that roughly fall into two categories. We have

⁴⁹ See generally Thomas Hurka, *Intrinsic Value*, in 4 *ENCYCLOPEDIA OF PHILOSOPHY* 719, 719 (Donald M. Borchert ed., 2d ed. 2006) (discussing intrinsic value as the value that a thing has in itself rather than the value of what the thing may produce).

reasons that relate directly to the wilderness places themselves—reasons why wilderness might be directly valuable to us or why we might on other grounds value it as a distinct place. And we have, in the other category, reasons to care about wilderness areas when considered as parts of larger landscapes, which we in turn might value based on different, perhaps broader norms. A full assessment would consider the normative claims in both categories.

V. EXERCISING OUR POWERS TO DEFINE AND VALUE

A point implicitly made in the last Part is that our thinking about wilderness—our trouble in getting clear on what it means, whether it really exists, and so on—is a manifestation of deficiencies in culture. We would think more clearly about it, and understand our necessary roles in clarifying the idea, defining the term, and assessing value, if we did not suffer from these cultural deficiencies.

Modern culture also makes it difficult to engage in the essential work of generating normative values and then applying them to the world around us. In particular, we have trouble seeing clearly the foundational task when it comes to environmental policy—the task of distinguishing between the legitimate use of nature and the abuse of it. To the extent we do see it, it is then too easy to think of it as basically a task for science to resolve—that is, a task that calls simply for facts and reason. We have trouble seeing the contrary truth, that this line-drawing is work that calls us to put on our norm-creating hats and to generate standards to use in evaluating the wisdom and folly of alternative ways of living on land.

A. Putting Science in Its Place

Particularly when it comes to environmental issues, we are prone to draw upon our cult of objectivity and to turn to scientists as our exemplars of objectivity. We turn to them; we insist that decisions be based on science, even when the fundamental issue is a normative one on which science really has nothing to say. Science can tell us, for instance, whether our actions are having the effect of changing the climate and, if so, how that will play out in physical terms. But it cannot tell us whether the resulting effects are normatively good or bad, not without going outside science to borrow normative values to put to use. Our every mode of living changes nature; some changes we know are good, or at worst, neutral. So when it comes to climate change, where should we draw the line between legitimate use and abuse? To answer that, to reiterate, we first need to generate a normative standard to guide the line drawing. And that work calls for labors quite different from the work of science.⁵⁰

⁵⁰ The Clean Air Act prominently misuses science when it instructs EPA to issue ambient air quality standards to protect human health based solely on science. As commonly understood, the statutory provision excludes factors based on economics. But the governing

Particularly when a policy issue is contentious—as in many environmental settings—we are prone to embrace even more vigorously our cult of objectivity, with the effect that we do even less well raising and engaging the fundamental normative issues. With scientists put on center stage, we have even greater trouble drawing the line between the use of nature and abuse of it. Stumbling at the work, we are prone to fall back to more simplistic normative values that avoid the difficult line-drawing work, with consequences that are rarely good. On one political or cultural side, we are inclined to insist that humans are conquerors of nature, and that individuals, especially businesses, can freely use it as they see fit so long as they avoid causing measurable, direct harm to the person or property of other individuals. On the opposing side—the more liberal side, it is misleadingly termed—there is a different tendency to honor nature and its beauties and to presume that human change is all abusive, or at least suspect. This latter approach is rarely stated overtly. But it appears more often than we might think, whenever criticism is leveled against nature-changing activities—e.g., strip-mining—and the evidence of harm to nature is the same as the evidence of change.⁵¹

Both of these approaches are defective. The liberty-based perspective ignores numerous normative factors that should enter into any all-things-considered assessment. This perspective values nature only instrumentally; it presumes ecological disconnection; and it ignores claims that other life forms and future generations should carry moral weight. The latter, left-leaning approach is equally simplistic in that, by equating all or nearly all human-caused change with degradation, it views the human presence on Earth as inherently bad: Other species, as they go about living, can rightly

standard: “requisite to protect the public health” with “an adequate margin of safety” is one that can be clarified and applied only through normative reasoning. 42 U.S.C. § 7409(b)(1) (2012); see also Thomas O. McGarity, *The Clean Air Act at a Crossroads: Statutory Interpretation and Longstanding Administrative Practice in the Shadow of the Delegation Doctrine*, 9 N.Y.U. ENVTL. L.J. 1, 24 (2000) (explaining that Congress did not include economic factors in the criteria that the EPA must consider when adopting National Ambient Air Quality Standards). When is a margin of safety adequate? What does it mean to “protect” public health, given that any air pollution would have some effect on humans? A more subtle misuse of science arises under the Endangered Species Act in the instruction for listing agencies to determine the suitability of a species for listing based only on science and purely factual data. 16 U.S.C. § 1533(b)(1)(A) (2012). The problem again is that the standards being applied require clarification using normative standards. At what point is a species “in danger of extinction”? How does that translate into percentage chances of disappearance over a given number of years? As for the particular factors pushing a species toward the edge, how is a scientist to decide whether regulatory protections are adequate and whether the species is being not just used but overused? As Professor Holly Doremus has explained, this science-based process cannot be carried out with any real predictability unless we get clear on why we are protecting species, which is to say, the normative values need to be set first before the science is brought in. See generally Holly Doremus, *Listing Decisions Under the Endangered Species Act: Why Better Science Isn’t Always Better Policy*, 75 WASH. U. L.Q. 1029 (1997).

⁵¹ See William Cronon, *The Trouble with Wilderness; or, Getting Back to the Wrong Nature*, in UNCOMMON GROUND: TOWARD REINVENTING NATURE 69, 81–83 (1995) (presenting the controversial claim that the environmental movement was too influenced by an ideal of untouched nature).

alter their home ecosystems; humans, in this view, are not allowed to do the same.

In fact, the environmental movement has rarely used unaltered nature as its benchmark of acceptable land use, and environmental laws—the Wilderness Act excepted—give no special place to unaltered nature.⁵² The Clean Water Act does propose the lofty goal of reducing pollution discharges to zero, but neither its water quality-based approach to pollution nor its technology-based standards pay any real attention to this nonbinding prefatory vision.⁵³ Most often, environmental laws and policies are expressly written to reduce harm to people and their activities.⁵⁴

Still, even though the all-change-as-abusive approach has made little appearance in statutes—and is rarely pushed by environmental advocates—it remains quite easy for defenders of nature to avoid the tough normative line drawing. It remains easy to slip into language that treats all change as bad or that measures the degree of harm starting with unaltered nature as the baseline. On the other side, politically, it is equally easy for defenders of intensive land uses—for instance, defenders of industrial-style agriculture—to insist that farm lands are well used simply because they produce food that humans need to eat, as if a responsible normative evaluation could be based on just a single relevant factor.

B. The Many Possible Definitions

When it comes to wilderness, the impulse of many is to assume that we should leave it untouched and perhaps never intervene in it, not even to slow or reverse changes that take place in wilderness areas due to human activities occurring elsewhere.⁵⁵ But we have good reason to go slowly on

⁵² The work of the historian Samuel Hays is perhaps the best guide to the policy stances of the environmental movement over the past sixty years. See SAMUEL P. HAYS, A HISTORY OF ENVIRONMENTAL POLITICS SINCE 1945, at 26–28, 51, 200 (2000); see also SAMUEL P. HAYS, BEAUTY, HEALTH, AND PERMANENCE: ENVIRONMENTAL POLITICS IN THE UNITED STATES 1955–1985, at 52–56, 123–30 (1987).

⁵³ 33 U.S.C. § 1251(a) (2012). The other law that arguably has a similar strict standard is the food safety rule known as the Delaney Amendment, setting a zero tolerance for carcinogens in food for human consumption. Food Additives Transitional Provisions Amendment of 1961, 21 U.S.C. § 348(c)(3)(A) (2012). This is not a land use rule, however, and the food itself can be highly unnatural in the sense that it reflects artificial breeding, production, and processing.

⁵⁴ The Endangered Species Act protects rare species, investing them with intrinsic value, but it is not nearly the powerful tool that it is so often termed, based on a misunderstanding of the narrow application of *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 172, 195 (1978). *Tenn. Valley Auth. v. Hill* involved an exceedingly rare if not unique dispute in which a single proposed federal project would have eliminated the only known population of a species. In that factual setting, the statute blocked the project, giving the statute the aura of strength. The typical project merely nudges a species a bit closer to extinction. In such settings the statute is far less powerful; habitat loss and even direct takes of protected species can and do occur consistent with the statute's flexible provisions. The statute's qualified protections are surveyed in ERIC T. FREYFOGLE & DALE D. GOBLE, WILDLIFE LAW: A PRIMER 257–71 (2009).

⁵⁵ See Cronon, *supra* note 51, at 69, 81–83 (discussing the paradox by which human management of wilderness is necessary for wilderness protection); see also JOSEPH R. DESJARDINS, ENVIRONMENTAL ETHICS: AN INTRODUCTION TO ENVIRONMENTAL PHILOSOPHY 159–60

this issue. This alluring, do-not-touch approach is easily reached with just a premise and simple syllogism: 1) define wilderness as an area unaltered by humans; 2) designate a particular place as wilderness; and then, 3) decide that this place should be left untouched. The logic is sound enough. But where along the way do we stop to give thought to the full range of normative factors that are relevant in deciding how to live in particular places? Where do we stop to ask directly: Why are we valuing particular places that we are prone to call wilderness? If we could answer that question fairly and successfully we would likely find that many related tasks—like defining wilderness and setting management standards—become much easier.

To see this is to revisit conclusions reached above: Wilderness is simply a human-constructed word and can have whatever meaning we give it. The idea of wilderness is also a human creation and similarly malleable. We should define the term so that it best serves our needs and hopes.

We could define wilderness as an area completely unaffected by humans, and do so even though no such places exist on the planet. There is nothing especially wrong with a word that refers to an unachievable ideal. We refer to the ideal of a circle even though, in physical terms, there is no perfect circle given the vagaries of molecules and atoms. Similarly, we speak of justice though we have yet to achieve it and do not expect to. On the other side, wilderness could be defined—as it long was—in ways that allowed for minimum human alteration. Aldo Leopold, an early advocate, believed that minor intrusions and structures were consistent with wilderness preservation.⁵⁶ For the lyrical wilderness advocate of the Northwoods, Sigurd Olson, wilderness was more a matter of aesthetics and emotional appeal.⁵⁷ He sensed that a primitive trapper's cabin added to the wilderness feel rather than the reverse, and that a few scattered resorts in the canoe country did not materially diminish wilderness values.⁵⁸

Whatever definition is chosen, it needs to flow from an all-things-considered assessment of how we ought to inhabit the planet and its many lands and waters. The work needs to be done thoughtfully. We need to take responsibility for our ideas and definitions and craft them in sound ways. And we need to do so as collective activities, giving rise to shared constructs that we all embrace and respect.

To say that wilderness can be defined in varied ways is by no means to say that individuals as such should be free to pick their own definitions. To allow individuals to define the term separately is to vest them with the power of making the foundational normative choices. It is to give in to the cultural ideal of liberal autonomy. It is to treat wilderness values, not as

(4th ed. 2006) ("The suggestion is that if we simply leave it alone, the wilderness will be preserved in all its natural, unspoiled wonder. . . . But this assumption has problems of its own. Few areas on earth are unaffected by human activity.").

⁵⁶ ALDO LEOPOLD, *Wilderness As a Form of Land Use*, in *THE RIVER OF THE MOTHER OF GOD*, *supra* note 2, at 136.

⁵⁷ SIGURD F. OLSON, *THE SINGING WILDERNESS* 199–200 (1956).

⁵⁸ *Id.* at 208.

shared normative axioms, but as mere subjective preferences. To the contrary, the normative work that needs doing is collective work, with the results incorporated into shared language, thought, and policy.

VI. WILDERNESS AND GOOD LAND USE

In what ways, then, might we collectively attribute value to wilderness areas as we exercise our powers as value creators? What values might we assign to such areas considered as isolated places? Similarly, how might we value them when considered as component parts of larger landscapes, which also include places where people live and work? To make such value determinations we need to come up with overall normative standards of good land use. We need standards to govern activities within the wilderness. We also need standards—much different ones—to guide land uses in the larger landscapes.

A. *Valuing Wilderness Areas in Isolation*

We have many reasons for deciding, collectively, to invest little-altered lands with intrinsic value and to respect them for what they are, aside from any identifiable benefit they provide to us today. We could value them so that future generations of humans might enjoy and benefit from them. We could recognize that wilderness-type places could well provide benefits in the future that we cannot now see and thus cannot value directly. Our moral thinking could incorporate senses and visions of virtue that we implement by showing restraint and humility in our alterations of nature. Wildlands protection, that is, could arise out of virtues that are best implemented by treating wild places as intrinsically valuable. More directly, we could respect the wild creatures that live in such places, and the unique biotic communities that they help compose, and treat them with moral reverence.

These reasons for recognizing intrinsic value are largely consistent with instrumental values for wild places that involve modest human uses of them. Wildlands provide special recreational opportunities. They provide, for many people places, for spiritual retreat. For scientists they provide places for ecological study; indeed, the first major push to protect wild places, aside from efforts within the U.S. Forest Service, was by Victor Shelford and other ecologists who sought to protect wild places for future study.⁵⁹

These limited, gentle uses of wild places—when added to the reasons for attributing intrinsic value—push in the direction of a definition of wilderness as a place largely unaltered by people or, more specifically, a place where future alteration is severely limited. But these various factors have flexibility to them and they hardly give reason to withhold protection from places that have been noticeably altered. We can benefit future generations—to return to the first rationale of intrinsic value—by preserving

⁵⁹ ROBERT A. CROKER, PIONEER ECOLOGIST: THE LIFE AND WORK OF VICTOR ERNEST SHELFORD 1877–1968, at 120–54 (1991) (surveying Shelford's nature preservation work).

the best examples of biotic communities, even when they do show noticeable human change. We can similarly protect prospects for discovering new instrumental uses of wild places and their biotic and abiotic components—another protection rationale—in places that show human change. Indeed, the entire list of preservation rationales given so far would seem to apply to landscapes that humans have certainly altered, particularly when such landscapes are the best we have available. That being so, we have ample reason to define wilderness so that it includes such valuable lands, despite their human change, and that sets management limits that reflect the reasons why we are protecting such lands.

B. The Landscape-Scale Benefits

Beyond these bases for intrinsic value, and these limited direct human uses, we have the various other instrumental reasons for protecting wilderness—those having to do with the ways wild lands promote the good use of surrounding lands that people inhabit and alter more significantly. Scattered patches of wilderness can help promote the ecological health and functioning of the larger landscapes of which they are a part. They can provide room for plant and animal species, enriching biodiversity and enhancing the functioning of larger landscapes. They can also help sustain the healthy functioning of hydrologic systems by maintaining good water flows and water quality, thereby protecting and building fertile soil and aiding a wide suite of life forms.⁶⁰

The more general point to be made with respect to these landscape-scale benefits of wilderness preservation is that wilderness-type places can help the humans who inhabit larger landscapes to ensure that they limit their actions so as to use nature but not abuse it. Well-chosen lands and waters, set aside with only very modest direct uses, can serve to promote the good functioning and biological composition of the larger landscapes where humans do live, the places from which they gain sustenance and resources. They can help people, in Leopold's memorable phrase, to succeed at the "oldest task in human history."⁶¹

C. A Normative Standard at the Landscape Scale

For this to happen—or at least for it to happen as well as it could—the normative work described above needs to be done. A sensible line needs to be drawn between the legitimate use of a landscape and the abuse of it, taking into account all relevant factors. The drawing of this line is never really finalized; the line remains subject to ongoing revision as facts change, learning advances, and values shift. But the basic elements of the line are

⁶⁰ See K. Lea Knutson & Virginia L. Naef, Management Recommendations For Washington's Priority Habitats: Riparian, at XI (1997) (describing the importance of riparian habitat to the survival of multiple species).

⁶¹ Leopold, *supra* note 2, at 2; see text accompanying note 2.

likely to remain sticky. Once the line is drawn, it then becomes possible to think and talk about the best mix of land uses in a landscape and how best to ensure that human actions overall keep to the good side of that line.

Without a reasonably clear sense of this line it is hard to know how wilderness preservation might help promote good land use at the larger scale. Within a wilderness area, as noted, the guiding land use standard might well be one that tolerates only very modest uses and changes. But such a standard—perhaps based on some definition of ecological integrity—is not well suited to apply to the larger landscape of which a wilderness area forms a part. We need to use many lands much more intensively than this, to live, grow food, and much more. For such occupied lands, we need a vision of good land use that allows for intensive change while also ensuring that the land's basic fertility and productivity is kept intact. The overall vision, going further, should take into account nature's own dynamism, our limited knowledge of nature's functioning, and the prudence of acting cautiously so that we avoid costly, irreparable surprises.⁶²

D. Two Land Use Goals

What this means is that when we think about wilderness—and, with similar reasoning, about wildlife refuges—we need to come up with two normative land use standards. We need one standard that guides our uses and management of the wild places themselves. And we need a much-different land use standard to guide uses of the larger landscapes that includes places where people live and work. The former standard for wild reserves has long been the subject of much thought and writing, and guiding standards are set forth in the Wilderness Act,⁶³ and in the case of national wildlife refuges, in the National Wildlife Refuge System Improvement Act of 1998.⁶⁴ Preservation advocates have pressed hard for statutory standards that minimize human alterations of these places, and with much success.⁶⁵ Far less attention has been paid to the second standard, as important if not more important—the standard that should guide the larger landscapes—although much good writing has been done on ecological functioning and on specific limits for pollutants.⁶⁶

⁶² See Eric T. Freyfogle, *What Is Good Land Use?*, in *WHY CONSERVATION IS FAILING AND HOW IT CAN REGAIN GROUND*, 144–77 (2006) (developing this point further).

⁶³ 16 U.S.C. § 1133 (2012).

⁶⁴ 16 U.S.C. § 668dd (2012); see also Eric T. Freyfogle, *The Wildlife Refuge and the Land Community*, 44 NAT. RESOURCES J. 1027, 1027 (2004) (discussing the wildlife refuge context, and developing the need for refuge advocates to explain how refuges benefit larger landscapes ecologically).

⁶⁵ Sean Kammer, *Coming to Terms with Wilderness: The Wilderness Act and the Problem of Wildlife Restoration*, 43 ENVTL. L. 83, 84–85 (2013).

⁶⁶ See, e.g., Marina Alberti, *The Effects of Urban Patterns on Ecosystem Function*, 28 INT'L REGIONAL SCI. REV. 168, 169 (2005); R.W. Howarth, *Human Acceleration of the Nitrogen Cycle: Drivers, Consequences, and Steps Toward Solutions*, 49 WATER SCI. & TECH. 7, 7–12 (2004); S.T.A. Pickett et al., *Urban Ecological Systems: Scientific Foundations and a Decade of Progress*, 92 J. ENVTL. MGMT. 331, 332–33 (2011).

If a clear standard were crafted to use in evaluating larger, human-occupied landscapes, it would help, not just in guiding uses of those landscapes, but also in our thinking about wildlands set aside from intensive uses. If we had a usable line, distinguishing use from abuse in the larger landscape, we could then study how the protection of wilderness and similar lands might help in the achievement of that larger-scale goal. Clear thinking on this topic could help greatly in the work of identifying lands to protect and in setting standards for their management and use. As importantly, clear thinking could better enable wilderness defenders and managers to explain much better the full range of instrumental values that wilderness provides. They could, when justifying the set-asides, point not just to the ways that wilderness areas are directly valuable to humans—as they do—but also to the ways that wildlands help promote the more encompassing goal of good land use at a larger spatial scale.⁶⁷ Who knows, these larger-scale benefits arising out of ecological interdependence and interconnection might well be more valuable than the benefits that come from using wilderness areas directly. Indeed, it might turn out that scattered wild places are essential if we are to come close to achieving all of the normative aspirations wrapped up in our vision of good land use.

As should be plain, we cannot sensibly identify and catalogue these landscape-scale benefits of wilderness, nor talk about them clearly, without first doing the hard work of drawing the use–abuse line, which is to say without recognizing our power to create normative value and exercising that power sensibly drawing together the relevant normative factors.

VII. WILDERNESS AND CULTURE

Particularly in Congress the reform effort to improve our uses of nature has largely run aground. More localized labors, and federal administrative initiatives, continue to move ahead, but on key problems—climate change, water overuses, spreading dead zones, biological declines—the pace of reform is much too slow. Delays and resistance are not due to lack of good science and technology, although better science and technology can always help. The resistance lies deeper. It lies in modern culture, in the ways we see and value the world and think about our place in it, in our confusion about values and our rush to positivism. A considerable cultural shift is needed, particularly in the United States, if environmental reform is to grow.

Having said this, the question arises: How might wilderness areas and preservation work help bring about this cultural change? Could wilderness areas be instrumentally valuable in this important respect as well—perhaps as a tool to help upgrade our culture by broadening our moral sensibilities and embedding us better in nature?

As a suggestive point of beginning, we can turn to Aldo Leopold's final writing on wilderness, the essay, simply entitled *Wilderness*, included in his

⁶⁷ See, e.g., ERIC. T. FREYFOGLE, *Life in the Enclaves*, in AGRARIANISM AND THE GOOD SOCIETY: LAND, CULTURE, CONFLICT, AND HOPE 9, 17, 22 (2007).

posthumous collection, *A Sand County Almanac and Sketches Here and There*.⁶⁸ Readers of that famous book know that it ends with the much-quoted essay, *The Land Ethic*, which, given its placement and breadth, is typically viewed as the culmination of his conservation message.⁶⁹ But it was only after Leopold died, during the editorial process, that *The Land Ethic* was moved to the end of the book.⁷⁰ In Leopold's manuscript, *Wilderness* brought the book to a close, a rather different end than in the published version.⁷¹

Leopold's *The Land Ethic* wound down with a quiet, reflective passage. Our land-development technology had many good uses, Leopold observed in the final paragraph, and we were not about to give it up entirely. But we were in need "of gentler and more objective criteria for its successful use."⁷² Had *Wilderness* remained where Leopold placed it, the book would have left readers in a more somber mood. In the essay's concluding sentences Leopold lamented the sad plight of "the shallow-minded modern" who had "lost his rootage in the land."⁷³ Big-scale human history was a saga of overlapping, failed efforts to find ways of living in nature that sustained the land's fertility. When failure came, as it had in many civilizations, people had to regroup and set out again to resettle the land, organizing "yet another search for a durable scale of values."⁷⁴ "Raw wilderness," Leopold urged, could supply "definition and meaning" to that search.⁷⁵ To protect wilderness was thus to protect the option for second chances, to protect the chance to attempt again to craft ways of living consistent with the cycles and means of nature.

By durable values Leopold surely meant better ways of understanding our ecological plight in the natural order.⁷⁶ He meant valuing the elements and processes of nature that kept the land fertile and productive, thereby sustaining civilization.⁷⁷ How might wilderness do that? How might the work of identifying wild places and wild components—not just big tracts, but smaller pieces—help us learn and grow?⁷⁸

Given where the environmental movement finds itself today, given also the powerful resistance it faces, few questions would seem more vital. How does our culture need to shift, in terms of the ways we see and value nature

⁶⁸ See ALDO LEOPOLD, *Wilderness*, in *A SAND COUNTY ALMANAC AND SKETCHES HERE AND THERE* 188, 188 (1949).

⁶⁹ See, e.g., Curt Meine, *Building the "Land Ethic,"* in *COMPANION TO A SAND COUNTY ALMANAC* 172, 183 (J. Baird Callicott ed., 1987).

⁷⁰ Dennis Ribbens, *The Making of A Sand County Almanac*, in *COMPANION TO A SAND COUNTY ALMANAC* 91, 107 (J. Baird Callicott ed., 1987).

⁷¹ See Aldo Leopold, *Sand County Almanac Manuscript* (1948), in *THE ALDO LEOPOLD ARCHIVES* 461, 721, available at <http://digital.library.wisc.edu/1711.dl/AldoLeopold.ALSandCounty>.

⁷² Leopold, *supra* note 71, at 201, 226.

⁷³ *Id.* at 200.

⁷⁴ *Id.*

⁷⁵ *Id.* at 200–01.

⁷⁶ See LEOPOLD, *supra* note 71, at 188–201; FREYFOGLE, *supra* note 67, at 25–45.

⁷⁷ FREYFOGLE, *supra* note 67, at 25–45.

⁷⁸ *Id.*

and understand our place within it? And how might wilderness, and wilderness preservation, help bring such change about?

It should be easy to see that, to answer these questions, we need to do better than we have been in diagnosing our cultural ills. What elements in our worldviews lead us to alter nature in ways that sap its fertility and unravel its linkages? To what extent are we misdirected by our arrogant sense of human exceptionalism? To what extent do the principles of liberty and equality, so valuable and still needed in some settings, limit our ability to spot bad land uses? To what extent, more generally, do the political and social ideals that help so much in ordering our interpersonal dealings cause decidedly bad consequences when it comes to our dealings with nature? Surely ill effects come from our tendency to view nature through the lens of the market and to treat its fragmented parts as commodities, in the process dulling our ability to appreciate interconnections and giving legitimacy to any land-cover change that makes money.

Environmental progress is not likely to occur, not as it needs to take place, absent substantial cultural shifts. Even without a fine-tuned vision of good land use we can see that degradation is widespread. We can still see that much of what we do in nature crosses the line into land abuse. We need to probe these cultural deficiencies and imagine ways to reform them. We need to seek out ways to appreciate our membership in and dependence on the land community that surrounds and includes us.

As wilderness advocate Howard Zahniser put a half-century ago, we need to sense that we are “dependent members of an interdependent community of living creatures,”⁷⁹ members whose knowledge of the world is interspersed with a great deal of ignorance and whose deepest yearnings—our inbred normative hopes—are to live in ways that sustain life for generations.⁸⁰ Few places exhibit interconnection and interdependence more vividly than wilderness areas. Few actions show more humility and a greater awareness of ignorance than the work of setting wild places aside. Few acts proclaim a new normative value more vividly than a shared effort to respect and defend what we once treated as an object of conquest.

In the end, this cultural reform component might well be the most important connection between wilderness and culture. Wilderness is not really needed to learn basic scientific lessons of ecological functioning; those we know, and we can learn more about them elsewhere. Our greater need is to stimulate our moral imaginations. It is to reframe our understandings of ourselves as living creatures. Interconnection is the guiding norm, not autonomy. In our interdependence we are on an even plane with other creatures, not some special life form. The Earth’s crust and lower atmosphere form a community of life of which we are members, a community that can be more or less healthy in its functioning and fertility.

⁷⁹ Howard Zahniser, *The Need for Wilderness Areas*, 59 *THE LIVING WILDERNESS* 37, 38 (1956). I thank Peter Landres of the Aldo Leopold Wilderness Research Institute for drawing my attention to this writing.

⁸⁰ See generally *id.* at 38–43 (advocating for a sustainable society connected with wilderness).

These are the basic facts, and they need to shape our cognition, consciousness, and moral choices.

We can use wild places of many types—more than just those that now qualify for legal protection—to illustrate and help instill these vital cultural understandings and values. We can use them, in sum, as mechanisms to help stimulate and guide cultural reform. But to do that, much else must also be done, and must be done much better than we have yet done it. When we see the kind of cultural change needed, and have a normative vision of good land use, wilderness and its protection could well help get us there.