

Our Place in the World:

A New Relationship for Environmental Ethics and Law

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Forty years ago, at the birth of environmental law, both legal and philosophical luminaries assumed that the new field would be closely connected with environmental ethics. Instead, the two grew dramatically apart. This article diagnoses that divorce and proposes a rapprochement. Environmental law has always grown through changes in public values: for this and other reasons, it cannot do without ethics. Law and ethics are most relevant to each other when there are large open questions in environmental politics: lawmakers act only when some ethical clarity arises; but law can itself assist in that ethical development. This is true now in a set of emerging issues: the law of food systems, animal rights, and climate change. This article draws on philosophy, history, and neuroscience to develop an account of the ethical changes that might emerge from each of these issues, and proposes legal reforms to foster that ethical development.

INTRODUCTION

- I. "THE NATURAL ORDER AND OUR PLACE IN IT": LAW AND ETHICS IN AN OPEN MOMENT
- II. THE DIVORCE OF ENVIRONMENTAL LAW AND ETHICS
 - A. So Much for Metaphysics
 - B. The Turn to Cost-Benefit Analysis
- III. A NEW RELATIONSHIP BETWEEN LAW AND ETHICS
 - A. The Importance of Change in Environmental Ethics
 - B. Ways of Understanding Change in Environmental Ethics
 1. Nature and Social Ethics: harm and solidarity
 2. Personal Ethics and Environmental Value
 3. Ethical and Aesthetic Response
 4. Virtue Ethics: Acting, Being, and Seeing
- IV. AN ENVIRONMENTAL LAW OF ETHICAL CHANGE: THREE APPLICATIONS AND THE CASE FOR ETHICAL CHANGE, REVISITED
 - A. Food, Agriculture, and the Value of Work
 - B. Animals and the Ethics of Encounters Across Species
 - C. Climate Change, Rationality, and Vision
 - D. Convergent Reasons for Law to Support Ethical Innovation

CONCLUSION: ONE RELATION BETWEEN ENVIRONMENTAL LAW AND ENVIRONMENTAL ETHICS

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Toward the end of *A Theory of Justice*, John Rawls turns briefly to the topic of “right conduct in regard to animals and the rest of nature.”¹ His remarks are not part of the general argument that the book advances, but rather an instance of important moral questions that fall, Rawls says, outside the scope of a theory of justice. These remarks are most interesting for their claim about what is necessary in reasoning about environmental ethics. Rawls asserts that “a correct conception of our relations to animals and to nature” will depend on “metaphysics”: “a theory of the natural order and our place in it.”²

A towering figure in political philosophy, Rawls had a gift for seeing to the heart of an issue. Yet his claim – that environmental ethics needs metaphysics – seems surprising, if not just off the mark, in the legal academy today. There has been a lot of normative work in environmental law in the four decades since *A Theory of Justice* first appeared, but very little of it has much to do with “a theory of the natural world and our place in it.”

From this, one might reach several conclusions. Maybe normative work in environmental law doesn’t require environmental ethics. Maybe environmental ethics doesn’t need metaphysics. Or maybe Rawls was right, in which case the relative absence from environmental law of “a theory of the natural order and our place in it” imposes some limits on the work we can accomplish in the field.

My answer has a few parts. First, when Rawls wrote, his claim captured the state of the most ambitious work on environmental law. It would also have seemed true beyond the legal academy. In Congress and on the opinion pages of major newspapers, from philosophy departments to popular books to social movements, conversations about nature *circa* 1971 supposed that Americans were revisiting their ideas of the planet and their place on it. In these conversations, it was ordinary to assume that this reflection would produce a new, “ecological” view of the human role in the world, which would have definite practical implications. This was a time of enormous plasticity in environmental law and ideas, and in which the perception of plasticity considerably outstripped even this reality.

Second, the decades that followed saw a parting of ways between environmental law and environmental ethics. On the one hand, the new field of environmental ethics moved boldly into the questions that environmental law and politics had put on the agenda: what kind of value the natural world presents and how humans should understand our relation to it. On the other hand, normative work in environmental law came to revolve around a much narrower band of questions, albeit ones with immediate practical meaning: the appropriate use and limits of cost-benefit analysis in assessing environmental law and, closely related, of market-based mechanisms in implementing it. After joining in early calls for an

¹ JOHN RAWLS, *A THEORY OF JUSTICE* 448 (2nd ed., 1999).

² *Id.*

ambitious ethical agenda, environmental lawyers largely turned their backs on the questions that philosophers were pursuing.

This might seem to invite the first interpretation proffered above, that environmental law can get along fine without environmental ethics. Even if that were true, it would not be the lesson of these events. Rather, cost-benefit analysis is a version of an ethical theory, welfarism, itself a version of consequentialism.³ The question, then, is not how environmental law got free of ethics, but how it got so heavily invested in one mode of ethics. Part of the answer is that, as new environmental legislation dried up and environmental law became embedded in the administrative state, the practical questions that presented themselves to decision-makers were no longer explicit choices of governing values, but instead problems of balancing and maximization among established values.⁴ Consequentialism is especially suited to this kind of decision, and soon both administrators and scholars were engaged in versions of it.

Cost-benefit analysis also aspires to neutrality in the face of clashing substantive values. In the twentieth century, this has arguably been a major part of its importance. The late 1960s and early 1970s brought a peculiar cultural moment, when many people saw “environmental values” as both radical on the one hand and, on the other hand, self-evidently important and even as objects of consensus. This moment did not last long. The next decade brought, and in some cases renewed, divisions over nature’s value and our place in it. This both impeded new legislation and motivated the search for neutral standards in administering existing laws.

But the story has another part. While environmental law turned away from environmental ethics, philosophers were addressing themselves to the same issues that the earlier episode of plasticity had seemed to invite. These questions, involving the nature of value and obligation, proved dramatically unhelpful in addressing practical problems. Indeed, they tended to lead to paradoxes that all but disabled decision-making. Because ethics, so formulated, was little help to environmental lawyers, these developments invited the conclusion that law not only could get by without ethics, but had to, since it would not get usable guidance from

³ Consequentialism holds that acts and policies are good or bad by virtue of their consequences. Welfarism takes well-being as the consequence that is relevant for ethical assessment. In the version that cost-benefit analysis represents, consequences are assessed by the total social wealth produced under alternative policies, measured by various techniques for attaching prices to valued and disvalued outcomes.

⁴ For a particularly sophisticated and anti-totalizing consequentialist argument developed explicitly from within the state of post-1970s environmental law, *see* DANIEL A. FARBER, *ECO-PRAGMATISM*(1999).

philosophers. We might say that ethics ascended to a metaphysics that law could not use.⁵

I draw several claims out of this story. First, developments in both ethics and law need to be understood in context, as responses to the constellation of the moment. These fields act in light of what seems obvious or unthinkable, urgent or trivial, up for grabs or closed to change, at the time a given question is formulated. The near-divorce of environmental law and ethics in the last few decades says less about what either field essentially is than about the demands and promise of the times.

Second and more basically, environmental law and ethics should renew their relationship. Even the recent impression that environmental law could go it alone depended on the situation I described above: a mainly administrative law in search of neutrality in implementing mostly stable statutory goals. Today, however, a new set of issues is rising, which law will be able to navigate only by reference to substantive commitments that have still to be worked out.⁶ These commitments will involve “a theory of nature and our place in it.” The three issues I will consider are climate change, agriculture and food systems, and the ethical status of animals.

Third, for each of these issues, there is a way for ethics to proceed helpfully that is rather different from the path it took during its great separation from environmental law, but nonetheless takes seriously change and conflict in values. Instead of seeking to answer ultimate questions of uncertain or paradoxical practical importance, environmental ethics can help by offering precise or rich expression to values already emerging but still inchoate in experience or not fully articulate as ideas. Ethics would then proceed as it tends in practice to begin: as a collaborator with the larger cultural and political development of values.

⁵ See, e.g., Bryan Norton, *Which Morals Matter? Freeing Moral Reasoning from Ideology*, 37 U.C. DAVIS L. REV. 81 (2003) (metaphysical questions are effectively irresolvable and, in recent decades, have distracted attention from opportunities to deal with more tractable issues in a pluralist and pragmatic way); but see Christopher Stone, *Do Morals Matter? The Influence of Ethics on Courts and Congress in Shaping U.S. Environmental Policies*, 37 U.C. DAVIS L. REV. 13 (2003) (environmental ethics should redouble its efforts to achieve a coherent view of basic issues in value theory).

⁶ See, e.g., Holly Doremus, *Constitutive Law and Environmental Policy*, 22 STAN. ENVTL. L. J. 295 (2003) (on the unavoidable feedback effects among legal goals, policy instruments, and personal and social values, and the need to keep all of these in view at once).

I. “The Natural Order and Our Place in it”: Law and Ethics in an Open Moment

Laurence Tribe’s classic 1974 *Yale Law Journal* article, “Ways Not to Think about Plastic Trees,” has an exotic savor today.⁷ Tribe engaged the “metaphysical” themes that Rawls had called for three years earlier. He asked how legal actors should conceive of the value of nature, gave an answer that rested in a theory of human freedom, and drew a policy recommendation from this argument: law should protect natural entities by assigning them rights and procedural status (such as standing) rather than treat them as inert resources to be disposed of through cost-benefit analysis.

Tribe asked whether cost-benefit analysis can capture the full range of values relevant to environmental policy, anchoring on this problem: if plastic trees bring human viewers as much satisfaction as natural ones, can cost-benefit analysis (CBA) distinguish between living wood and dead plastic? If not, what does that reveal about the technique?⁸

Tribe’s basic objection to CBA in environmental law is that CBA treats human satisfactions as the source and sum of reasons to act. CBA could accommodate all kinds of values, but only as human satisfactions.⁹ According to Tribe, this premise inhibited people from expressing in legal and policy debates what they really felt: that natural entities deserved care or respect for their own sake. Using the language of CBA turned “obligation into self-interest.”¹⁰ This change distorted moral experience, because the point of obligation, sympathy, or respect is not the satisfaction one takes in acknowledging them, but the quality in the other that evokes them.¹¹

When Tribe embraced “rights” for natural entities, then, the real stakes lay in human consciousness: “we should be capable of perceiving intrinsic significance – sanctity, if you will – in the very principles ... according to which we orchestrate our relationships with ... the physical world of which we are a part.”¹² Legal and moral concepts such as rights assumed the importance of things independent of any satisfaction of human preferences. They therefore set in motion a process of moral

⁷ Laurence H. Tribe, *Ways Not to Think about Plastic Trees: New Foundations for Environmental Law*, 83 *YALE L.J.* 1315 (1974).

⁸ *See id.* at 1315-17.

⁹ *See id.* at 1325-26.

¹⁰ *Id.* at 1331.

¹¹ *See id.* at 1329-31.

¹² *Id.* at 1339.

reflection on the importance of those things: they kept the mind open to the value of nature.

This mattered to Tribe because of a theory of human freedom. People, he argued, are always taking two very different attitudes toward value. On the one hand, we *decide* what we value: we make choices and commitments. We vote, pass laws, and adopt and amend constitutions.¹³ On the other hand, we do not believe these choices are arbitrary: we *acknowledge* value, in other people, institutions, and nature, and our choices are part of this acknowledgement. If we had no choice, we wouldn't be free; but if we ever "just decided," we would no longer be acknowledging value.¹⁴ Tribe argued that CBA treats our valuing of nature as "just deciding," and that treating nature as having rights or standing would keep alive both sides of the relationship – acknowledging and choosing, in a reciprocal dance. In this way, free human beings could identify, adopt, and revise ways of respecting a morally valuable world.¹⁵

I have spent some time on Tribe's argument because, besides being a founding classic in the field, it comports beautifully with what Rawls had recently proposed. It is also dramatically different from most of what we expect today in environmental law scholarship. Tribe's argument was higher-flown than the more lawyerly concerns of many other environmental law scholars, but his concerns were hardly alien to the field. In another landmark argument, Christopher Stone proposed that natural entities should have standing (via court-recognized trustees), less for "legal-operational"¹⁶ reasons than because it might contribute to "a radical new theory or myth – felt as well as intellectualized – of man's relationships to the rest of nature [in which] we may come to regard the Earth ... as one organism, of which Mankind is a functional part."¹⁷ Lynton Caldwell, the policy scientist whose proposal for a national environmental-planning regime formed the basis of the National Environmental Policy Act, presented the stakes of this (today) pre-eminently formal statute in similar substantive terms. He argued in 1970 that "two major ways of looking at the world have characterized man's attitude ... the first

¹³ See *id.* at 1332-38.

¹⁴ The language of "acknowledging" and "deciding" is mine, not Tribe's, although it tracks his argument precisely and, I think, in somewhat clearer fashion than his formulations.

¹⁵ See *id.* at 1341-45.

¹⁶ See Christopher Stone, *Should Trees Have Standing? – Toward Legal Rights for Natural Objects*, 45 S. CAL. L. REV. 450, 480 (1972). Holly Doremus also picks out Stone's article as an emblem of a moment of plasticity in environmental values. See Holly Doremus, *Symposium Introduction*, 37 U.C. DAVIS L. REV. 1, 1-7 (2003).

¹⁷ Stone, *supra* n. __ at 498-99.

may be termed *economic*, the second *ecological*.”¹⁸ The first he described as embracing a simple ethic: “to make nature serve man’s material needs.”¹⁹ Ecology, by contrast, adjusted human purposes and values in recognition of the continuity and interdependence of life.²⁰ As Caldwell envisioned it, NEPA would help to put an ecological way of thinking at the heart of US law.

These remarkable proposals in legal scholarship found support from all directions: the courts, allied academic fields, national politics, media, and social movements. The seminal environmental-standing case, *Sierra Club v. Morton*, is most famous for Justice Douglas’s animist-toned dissent: “The river as plaintiff speaks for the ecological unit of life that is part of it... The voice of the inanimate object, therefore, should not be stilled.”²¹ Less well remembered, because less colorful, is Justice Blackmun’s dissent, which also called for “an imaginative expansion of our traditional concepts of standing” in light of the urgency of environmental problems and the “sincere, dedicated, and established status” of the Sierra Club with respect to conservation.²² As Justice Blackmun noted, a number of federal appeals courts had recently found organizational standing where the plaintiff groups were committed to the substance of the statutory goals they sought to enforce and acted, in the courts’ language, as agents of the public interest.²³ These opinions were possible, even though the line of argument did not ultimately succeed, in good part because of the perception that there was, in fact, a clear, definite public interest in environmental protection. This was very different from the view of the area as a constellation of clashing interest groups with various enforcement and anti-enforcement agendas that would come to dominate standing doctrine from the mid-1980s forward.²⁴

¹⁸ LYNTON K. CALDWELL, ENVIRONMENT: A CHALLENGE FOR MODERN SOCIETY 237 (1970) (emphasis original).

¹⁹ *Id.*

²⁰ *See id.* at 238.

²¹ 405 U.S. 727, 743, 749 (1972).

²² *Id.* at 758.

²³ *Id.* at 760 (citing ...)

²⁴ *See Lujan v. Defenders of Wildlife*, 504 U.S. 555, 561-62 (1992) (distinguishing between the unproblematic case in which plaintiff is “himself” the object of regulation and the much more vexed case where plaintiff complains of government’s failure to regulate a third party); Antonin Scalia, *The Doctrine of Standing as an Essential Element of the Separation of Powers*, 17 SUFFOLK U. L. REV. 881 (1983) (arguing that the central judicial responsibility is to protect the rights of individuals against government, with assertion of property rights against regulation being paradigmatic).

Even in Congress, the language of changing ethical consciousness waxed bold as major environmental statutes passed by overwhelming margins between 1969 and 1973.²⁵ Speaking in support of the Clean Water Act, Senator John Sherman Cooper insisted that the bill “asserts the primacy of the natural order, on which all, including man, depends.”²⁶ Senator Jennings Randolph of West Virginia voiced this moral view of the anti-pollution statutes when he praised the Clean Air Act’s sponsor, Edmund Muskie of Maine, for “emphasiz[ing] the personal obligation ... a rebirth, I should say, of responsibility on the part of the individual citizen of this country,” which Muskie hastened to confirm: “There has to be a commitment to it by every citizen, not only with respect to the activities of others, but with respect to each citizen himself.”²⁷ It was out of the confidence that “the whole intent” of such statutes was “to make a national commitment”²⁸ that Senator Muskie optimistically announced of the Clean Air Act, “This bill is going to require that the American motorist change his habits, his tastes, and his driving appetites.... The consumer must also make sacrifices[.]”²⁹ These statutes, in short, were not to be understood simply as technical measures, though they were also that: in the minds of some of their most important supporters, they represented adoption of new shared principles, which would have to take effect both in institutions and in the values and habits of individuals.

Popular conversation was still further-reaching. The editors of *Time* asserted that modern economic life rested on a view of “technological man as the personification of Faust, endlessly pursuing the unattainable”³⁰ and traced “the environment crisis” to the “deeply ingrained assumptions” that “nature exists primarily for man to conquer ... [and] is endlessly bountiful.”³¹ Speaking for a rising (if ephemeral) consensus among liberal elites, columnist Flora Lewis wrote of ecology, “The ideas ... are so fundamentally new, so drastically opposed to the heritage of many centuries, they are painful to absorb.... Environmental harmony

²⁵ See RICHARD M. LAZARUS, *THE MAKING OF ENVIRONMENTAL LAW* 69 (2004) (“The average vote in favor of major environmental legislation during the 1970s was 76 to 5 in the Senate and 331 to 30 in the House”).

²⁶ 117 CONG. REC. 38,819 (1971) (statement of Sen. Cooper).

²⁷ 116 CONG. REC. 42,392 (1970) (statements of Sens. Randolph & Muskie).

²⁸ 118 CONG. REC. 36,874 (1972) (statement of Sen. Muskie).

²⁹ 116 CONG. REC. 33,906 (1970) (statement of Sen. Muskie). The previous two quotes address different legislation, the Clean Water Act and Clean Air Act respectively. The discussion of the two is remarkably similar in tone.

³⁰ *Fighting to Save the Earth from Man*, TIME, Feb. 2, 1970, at 56, 62.

³¹ *Id.* at 62-63.

requires a much deeper review of western thought, now challenged on almost every level.”³²

Social movements and popular authors sounded the same notes. Environmentalists increasingly asserted that “ecology [which yesterday] was a science ... had better become something like a religion,”³³ and called for a “cultural transformation” marked by “personal commitment to a new philosophy and poetry of ecology.”³⁴ Paul Shepard wrote in *The Subversive Science*, a 1969 treatment of the political and ethical meaning of ecology, that “we must ... affirm [nature’s] metabolism as our own – or, rather, our own as part of it. To do so means ... a wider perception of the landscape as a creative, harmonious being.... [W]e must affirm that the world is a being, a part of our own body.”³⁵ In the same spirit, Buddhist popularizer Alan Watts argued that continuity among all things, joined with the role of perception in creating experience, meant that, “Our whole knowledge of the world is, in one sense, self-knowledge,” a conclusion he claimed should be deeply reassuring.³⁶ In a work of synthetic history and moral advocacy, Roderick Nash, author of the lastingly important *Wilderness and the American Mind*, argued that the evolution of moral and legal consciousness over centuries should now culminate in recognizing the moral importance of natural entities, living and otherwise, for their own sake.³⁷

All of this is unmistakably in the spirit of Tribe and Stone’s recommendations for the co-development and law and ethical consciousness. The question of “the order of nature and our place in it” seemed to be on the national agenda, not just available but unavoidable, and open to all kinds of new answers. This was true in law, politics, and the broader run of culture. The task seemed to be to rethink traditional fields of thought and practice in light of ecological principles and the environmental crisis. In this moment, environmental ethics and law stood back-to-back, then strode rapidly in opposite directions.

³² Flora Lewis, *Instant Mass-Movement*, L.A. TIMES, Apr. 29, 1970, at B7.

³³ Elizabeth Rogers, *Protest!* SIERRA CLUB BULLETIN, Dec. 1969, at 11, 20.

³⁴ Connie Flatboe, *Environmental Teach-in*, SIERRA CLUB BULLETIN, Mar. 1970, at 14, 15.

³⁵ Paul Shepard, *Ecology and Man – A Viewpoint*, in *THE SUBVERSIVE SCIENCE* (1969), reprinted in *THE ECOLOGICAL CONSCIENCE* at 56, 59 (Robert Disch ed., 1970).

³⁶ Alan Watts, “The World Is Your Body,” in *THE ECOLOGICAL CONSCIENCE*, at 181, 188.

³⁷ See RODERICK F. NASH, *WILDERNESS AND THE AMERICAN MIND* (1967); NASH, *THE RIGHTS OF NATURE: A HISTORY OF ENVIRONMENTAL ETHICS* (1989).

II. The Divorce of Environmental Law and Ethics

A. So Much for Metaphysics

Professional ethicists soon took up the invitation to illuminate the environmental values that others were announcing and engaging. If there was a “natural order of things” that deserved moral respect, if nature had value that was not based on serving human interests, if a moral point of view should be assigned to the natural world, how should people make sense of all this? These questions were natural, even unavoidable, in light of the turn that the broader conversation had taken. One might have imagined these ethical inquiries working hand in hand with the new perspective on nature that innovators in legal scholarship sought. Instead, the result was a parting of the ways between environmental ethics and legal scholarship.

This article does not give an encyclopedic account of forty years of work in environmental ethics. Instead it sets out a few major, exemplary developments and their relation (or lack of relation) to environmental law. The first is value theory, the issue of what matters and why. Some philosophers argued that a new account of the bases of ethics was necessary because the inherited conceptual vocabularies of human interests (in consequentialism) and rights (in deontological and contract theories) referred solely to the claims of human beings, a perspective that these ethicists now deemed too parochial to capture the value of nature.³⁸ A motivating example in this line of argument envisioned a solitary human being, perhaps the last man in the world, or perhaps Robinson Crusoe about to be rescued from an island to which no one would ever return.³⁹ Why should this person, unbound by considerations rooted in other persons’ rights or interests, not despoil nature, kill the last pod of blue whales, and so forth? Surely, the argument went, a view of ethics that was inarticulate about this question needed adjustment. When adjusted to account for nature’s value, it could provide better guidance for our non-Crusoe circumstances, in which human rights and interests are mixed up with whatever natural value should stay Crusoe’s hand.

This issue gave rise to a set of arguments about whether nature has “intrinsic value,” and, if so, what that value means for human judgment and action. Some argued that “anthropocentric” accounts of value must yield to a “biocentric” view locating value in life itself (and other aspects of self-organizing nature such as species, ecosystems, and even the planet). At the opposite pole was the resolutely anthropocentric position that the concept of value makes no sense independent of

³⁸ See, e.g., Richard Sylvan (Routley), *Is There a Need for a New, an Environmental, Ethic?* In ENVIRONMENTAL ETHICS 47, 47-52 (Andrew Light & Holmes Ralston III, ed.) (Henceforward Light & Ralston) (2003).

³⁹ See *id.* at 49-50.

human beings *for whom* the value matters. As with any philosophical debate, there were all manner of intervening variations, bristling with distinctions.⁴⁰

This inquiry faced two basic limitations, the first concerned with its internal conceptual development, the second with its possible contribution to environmental law. Conceptually, the issue of intrinsic versus non-intrinsic value rapidly reaches a dilemma. On the one hand, to speak of a value is to imagine it in the mind of some person, where it presents itself as a reason for action or esteem.⁴¹ In this respect, the anthropocentric perspective has an unbreakable grip on the issue: even in envisioning the denuded world left after the last human being has wreaked his destruction, we are importing into that world our own mind, which imaginatively sees and responds to it.

On the other hand, we often experience value non-instrumentally, that is, without reference to its serving any human interest, not even the pleasurable

⁴⁰ See Holmes Ralston III, *Value in Nature and the Nature of Value*, in Light & Ralston 143, 143-53 (arguing that every level of living organization, from plants through species and ecosystems, has a kind of moral perspective from which it may be said to value its own continuation and flourishing); Kenneth E. Goodpaster, *On Being Morally Considerable*, 75 J. PHIL. 308, 308-25 (1978) (arguing that accepting the value of life in all its forms provides the only non-arbitrary account of value, and that this implies an ethic of respect for life in all its forms); John O'Neill, *The Varieties of Intrinsic Value*, in Light & Ralston, 131, 131-42 (arguing that although the natural world has intrinsic value, this fact does not create normative obligation for human beings, because natural value is a fact, and the fact-value distinction forbids direct inference of obligation, unless one takes the virtue-ethics view that respect for such value is part of a flourishing life); Thomas E. Hill, Jr., *Ideals of Human Excellence and Preserving Natural Environments*, 5 ENV'L ETHICS 211, 211-24 (arguing similarly to O'Neill, but with far greater focus on developing the virtue-ethics perspective); Eugene Hargrove, *Weak Anthropocentric Intrinsic Value*, in Light & Ralston 175, 175-90 (although the human perspective is inseparable from the perception of value, we value things for themselves rather than instrumentally in relation to our interests, and a too-strong anthropocentric account of value obscures this fact, which can be styled an accurate human perception of intrinsic natural value); A. Myrick Freeman, *The Ethical Basis of the Economic View of the Environment*, in THE ENVIRONMENTAL ETHICS & POLICY BOOK 318, 318-26 (Van de Veer & Pierce, ed.) (XXXX) (welfare-economic analysis of Pareto or Kaldor-Hicks form appropriately restricts normative weight to those features of the natural world actually valued by human beings, and does so in a way that is maximally attentive to the interests of all persons).

⁴¹ See Eugene Hargrove, *Weak Anthropocentric Intrinsic Value*, in Light & Ralston 175, 175-87 (so arguing); CHARLES TAYLOR, SOURCE OF THE SELF 25-52 (arguing that perception of value and distinctions therein are intrinsic to human consciousness and agency).

mental state of perceiving something valuable. Therefore an account that presents the value of nature exclusively in terms of its satisfying effect on the human mind seems to get the relation backward: in fact, we tend to experience our valuation of, say, an intact ecosystem or a mountain vista, as a *response to* value, not a *conferral* of value based on our preferences, in contrast, say, to our satisfaction at finding a turnip patch just in time to avoid starving.⁴²

The search for a theory of value therefore arrives at a dilemma. On the one hand, any claim about the *value* of nature must be intelligible as an account of something human can regard as values, that is, which they can imagine themselves as pursuing and respecting.⁴³ On the other hand, this class of values manifestly contains many that people do not experience as depending on us for their status. Thus, this inquiry runs into real limits to its capacity to advance understanding beyond a pair of fairly commonsensical but mutually inconvenient conclusions.

The second kind of limitation is that value theory fails to guide action. Although it seems to address just the sort of question that Rawls recommended for environmental ethics, it has no power to answer the question Rawls had in mind: “What should we do?” It consists essentially in a set of competing characterizations of the experience of value, even as the substantive content of the value remains the same. Any value can be redescribed from intrinsic to anthropocentric and back again without any change in the course of action that it recommends. Thus, while there is a highly simplified sense in which it might seem, for instance, that the Endangered Species Act adopts a view that species matter intrinsically because it gives their survival importance independent of any other human interest, the ESA’s requirements can be equally well described as expressing a human preference for species’ survival, without this account’s making a difference in the operation of the Act. The foray into value theory may be of interest to philosophers – whatever the limitations on its progress; but it does not make a difference in formulating or implementing environmental law. It thus seems to support the thought that environmental law has no need of environmental ethics, at least in this connection.

A second line of inquiry also comes up pragmatically dry on account of its paradoxes. This is the inquiry into *holism* and *individualism* in environmental value. Here the choice between the alternatives does have relevance to action, but each option is deeply unsatisfactory, in a symmetrical way.

A holistic conception locates value in self-organizing systems such as ecosystems, species, or “nature” itself, and in this respect seems to capture

⁴² See BERNARD WILLIAMS, *Must Concern for the Environment Be Centred on Human Beings*, in MAKING SENSE OF HUMANITY 233, 234-36 (1995) (making a similar set of observations, with the observation that, whatever kinds of answers we give to the issue of value, they “must be human answers” (234).

⁴³ *Id.* at 234.

something genuine about the experience of environmental value.⁴⁴ Holism, though, encounters a pair of serious difficulties. First, it seems to undermine the aim of assessing human action by its effect on the rest of the world. Human beings are also part of nature and the ecosystems that they affect: indeed, this is one of the central premises of post-1960s ecological thinking.⁴⁵ This point, however, seems to dissolve the distinction between human and non-human that one needs to assess “our effect” on “the natural world.”⁴⁶ Why should a human-induced extinction or climate change be an affront to holistic value, rather than another instance of the operation of natural systems, which we know, after all, to be unstable and take diverse forms over time? By dissolving the human-nature contrast, holism denies environmental ethics the grounds on which to ask “What should we (humans) do with respect to nature (which is relevantly distinct from us)?” Precisely because a consistent holism includes humans in nature, the answer that holist value theory invites, “Act so as to preserve the value of nature” is no answer at all.

The second difficulty with holism is that it fails to take account of the value of individuals, or other sub-systemic entities, such as species. If natural systems and the processes that compose and maintain them are good, then illness and death are also good, as subsets of these. Indeed, even extinction, presumably bad from the point of view of a species, might have to count as good from that of an ecosystem or planet (all of this assuming, of course, that “point of view” is a cogent metaphor to attach to a locus of holistic value). This, however, seems to obliterate widely held concern for the interests of animals in not suffering, or species in continuing to exist.⁴⁷

A symmetrical difficulty arises for ethical individualism, which locates value in the interests, points of view, or, perhaps, existence of individuals. Just as locating value in whole systems effaces concern for individuals, so locating value in

⁴⁴ See Elliott Sober, *Philosophical Problems for Environmentalism*, in ENVIRONMENTAL ETHICS 145, 145-56 (ed. David Schmidtz & Elizabeth Willott) (defining and exploring problems in the holistic perspective) (2002).

⁴⁵ See, e.g., Jedediah Purdy, *American Natures: The Shape of Conflict in Environmental Law* (setting out the contributions of the ecological perspective on nature and lawmaking) (forthcoming, HARV. ENV'L L. REV.).

⁴⁶ See Sober, *supra* n. __ at 148-52); WILLIAMS, *supra* n. __ at __ (making this observation); Mark Sagoff, *Genetic Engineering and the Concept of the Natural*, 21 PHIL. & PUB. POL'Y Q. 2/3 (Spring/Summer 2001) 2 (on the uselessness of an all-encompassing account of the natural).

⁴⁷ See Mark Sagoff, *Animal Liberation and Environmental Ethics: Bad Marriage, Quick Divorce*, in Schmidtz & Willott at 38, 38-44 (arguing this point); Eric Katz, *Is There a Place for Animals in the Moral Consideration of Nature?* in Light & Ralston at 85, 85-93 (exploring this difficulty and arguing for a “balanced” approach).

individuals seems to efface concern for systems.⁴⁸ So, for instance, a consistent commitment to avoiding the suffering of sentient beings would seem to imply exterminating predators, even genetically engineering wild species so that the survival of some no longer requires the suffering of others – creating, that is, a world either without foxes and grizzlies or with herbivorous versions of them.⁴⁹ While such a perspective has much to recommend it on grounds of avoiding the suffering of individuals, its blank indifference to the existence of species or persistence of natural systems writes out of consideration a basic and pervasive aspect of modern environmental consciousness.

As alternatives in value theory, then, both individualism and holism seem blind to considerations that belong in any account of environmental ethics that takes seriously strong and pervasive existing judgments. Here again, value theory runs into paradoxes. Trying to get to the root of “the order of nature and our place in it” produces monolithic accounts that are implausible, and impractical, because they seize on one aspect of environmental value and exclude competing considerations in the service of theoretical consistency. This development reinforces the impression that environmental law had better try to get along without environmental ethics.

B. The Turn to Cost-Benefit Analysis

Instead of value theory, the main interaction between environmental law and ethics for the last thirty-plus years has been around welfarism, the philosophical approach of which CBA is an instance. Welfarism assesses states of affairs by reference to the well-being they produce. Unavoidable questions for welfarism include how to measure well-being, whether a given metric can accommodate diverse values, and whether concentrating on overall well-being implies insensitivity to individuality and the value of each life. This focus on welfare fits the situation in which environmental law has found itself since the late 1970s.

Welfarism in its eighteenth- and nineteenth-century British ur-form, utilitarianism (still often used colloquially to refer to all kinds of welfarism and, indeed, all kinds of consequentialism), arose as a doctrine of social administration, whether literally, as in British governance of India, or via legislation, for domestic

⁴⁸ See, e.g., Harley Cahen, *Against the Moral Considerability of Ecosystems*, in Light & Ralston at 114, 114-23 (setting out the case that on even modestly individualistic premises, it is very difficult to ascribe moral importance to a “whole” such as an ecosystem); Gary E. Varner, *Can Animal Rights Activists Be Environmentalists? in Light & Ralston at 95, 95-104 (setting out this basic tension).*

⁴⁹ See, e.g., Sagoff, *Animal Liberation*, *supra* n. __ at 42 (making this argument); GREGG EASTERBROOK, *A MOMENT ON THE EARTH: THE COMING AGE OF ENVIRONMENTAL OPTIMISM* (1996) (arguing for just such manipulations).

reformers. It remains suited to those tasks. Its concern is essentially aggregative. Whether it aims at simple maximization of some desideratum or adopts distributive considerations, its concern is with the sum (and maybe also the shape) of the whole.⁵⁰ Much of the normative-theoretical engagement with CBA in environmental law scholarship responds to issues that this characteristic unavoidably raises.

Nothing in the aggregative method prevents disregarding or sacrificing inconveniently situated individuals or sloughing over values that some people treasure.⁵¹ Indeed, when the inquiry is trained in a certain direction, for instance, to the question of how much risk of preventable disease to tolerate next year, or how much to permit greenhouse-gas concentrations to increase over one hundred years, it is in the nature of the method to embrace such sacrifices, even though the people so sacrificed cannot be identified in advance.⁵² At a certain level of abstraction, this simply means that no maximizing strategy (even one also concerned with distribution) genuinely approximates the individualistic Pareto criterion, with its requirement that changes make no one worse off. Maximizing strategies generate distributive decisions, which, for practical purposes, always disadvantage some individuals relative to plausible alternatives. When the thing being distributed is risk of preventable death, casting the disadvantaging as a sacrifice of some for the benefit of others illuminates part of the logic of the reasoning. These issues have drawn much of the normative energy in environmental law.

These issues arise predictably in a setting that is dominated by welfarist reasoning. It takes nothing away from their importance to say that they are symptoms of the same conditions that have made welfarism the leading normative

⁵⁰ Of course any theory can build in side-constraints, and for purposes of implementation it is natural to do so. For a wide-ranging consideration of the alternatives within welfarism, *see generally* MATTHEW D. ADLER, *WELL-BEING AND FAIR DISTRIBUTION: BEYOND COST-BENEFIT ANALYSIS* (2012).

⁵¹ *See* JOHN RAWLS, *A THEORY OF JUSTICE* 24 (Rev. ed. 1999) (“Utilitarianism does not take seriously the distinction among persons.”).

⁵² *See* Lisa Heinzerling, *Knowing Killing and Environmental Law*, 14 N.Y.U. ENVTL. L.J. 521 (2006) (decisions guided by cost-benefit analysis result in knowing decisions to kill persons in violation of a norm against knowing killing); Frank Ackerman & Lisa Heinzerling, *Pricing the Priceless: Cost-Benefit Analysis of Environmental Protection*, 150 U. PA. L. REV. 1553 (2002) (cost-benefit analysis pervasively distorts the values it claims to organize and disregards the value of individual life); *cf.* Daniel A. Farber, *Rethinking the Role of Cost-Benefit Analysis* (reviewing RICHARD L. REVESZ & MICHAEL A. LIVERMORE, *RETAKING RATIONALITY: HOW COST-BENEFIT ANALYSIS CAN BETTER PROTECT THE ENVIRONMENTAL AND OUR HEALTH*), 76 U. CHI. L. REV. 1355 (2009) (some version of cost-benefit analysis is indispensable for rational resource allocation, but in the face of uncertainty and basic value conflict it cannot replace more flexible, imaginative, and democratic procedures).

technique of the last three decades. Any version of welfarism works best when (1) the values meant to guide decisions are specified, so that ethical inquiry can focus on application; (2) there is a workable metric for these values, and (3) there is enough knowledge of the likely consequences of alternatives to support measurement that is more than speculation. Moreover, welfarism is especially attractive where decision-makers seek neutrality among competing values.⁵³ Consider, for instance, the neutrality as between the utility of elites and that of ordinary people that animated British utilitarian reformers, or the neutrality among competing substantive values or conceptions of the good life that wealth maximization seems to offer today as a polestar for social policy.

These conditions describe the situation of the American state around environmental values from the end of the 1970s until recently. The spate of environmental legislation that opened the 1970s adopted a variety of values as national policy: human health and environmental cleanliness in the anti-pollution statutes,⁵⁴ conservation of biodiversity in the Endangered Species Act,⁵⁵ and a (mainly ignored) set of substantive stewardship values in the National Environmental Policy Act.⁵⁶ With the values broadly specified, the issues lay in the quintessentially administrative business of forecast and assessment. Cost-benefit analysis provided the dominant metric, as we might expect in these circumstances.

Cost-benefit analysis also achieved a certain kind of neutrality by rendering competing values into a single currency at a time when neutrality's value was on the rise.⁵⁷ For a few years at the end of the 1960s and the beginning of the 1970s, it seemed to many legal and political elites that popular embrace of environmentalism represented a new consensus. Overwhelming Congressional majorities for the new

⁵³ See MICHAEL SANDEL, *DEMOCRACY'S DISCONTENT* ___ (1996) (wealth-maximization as a twentieth-century social policy served to achieve a kind of neutrality while evading and ultimately hollowing out more substantive debates).

⁵⁴ See 33 U.S.C. sec. 1251(a)(1)-(2) (2006) (All U.S. waterways should be clean enough for swimming by 1983, and by 1985 all water pollution should have come to an end); 42 U.S.C. sec. 7408(a)(1)(A) (directing identification of regulated air pollutants and level of permitted air pollution to the standard of "public health").

⁵⁵ See 16 U.S.C. secs. 1532(6) & (20) (defining endangered and threatened species, the objects of the Endangered Species Act's regulation).

⁵⁶ See 42 U.S.C. secs. 4331(a) & (b)(1) (2009) (National Environmental Policy Act aims at producing "conditions under which man and nature can exist in productive harmony" and enshrines the "responsibilities of each generation as trustee of the environment for succeeding generations").

⁵⁷ Neutrality was always as much wished-for as achieved. For a balanced and incisive account of the theoretical disputes that raged around cost-benefit analysis, see DANIEL A. FARBER, *ECO-PRAGMATISM* 35-69 (1999).

statutes, bipartisan competition for the environmental mantle, and adoption of what appeared to be sweeping substantive commitments all pointed this way. So did the ease with which media elites assumed that one set of governing ideas about nature was passing, another rising. As discussed earlier, judges expressed this perception when they argued for granting standing to conservation groups on the theory that they represented the public's interest in environmental protection – that is, that the versions of environmental values that groups such as the Sierra Club represented had special status above and apart from the various interests in the political hurly-burly.⁵⁸

The impression of consensus proved ephemeral. Part of the rupture came from political economy: the new environmental statutes came just before, and helped to spur, a change in the political attitude of the US business community, which adopted increasingly aggressive resistance to regulation. An anti-regulatory perspective thus became increasingly prominent, from lobbying and campaign contributions to litigation and think-tanks, making the impression of a pro-conservation consensus impossible to maintain.⁵⁹

Another challenge to the would-be consensus came from the interplay of political economy with cultural attitudes that turned out not to have changed as quickly or completely as many imagined. There was a long-standing, culturally influential constituency for economically productive use of natural resources. Public rhetoric had long invited resource users – first pioneers, then farmers, miners, and so forth – to identify themselves as the economic and moral linchpin of the nation. More pragmatically, these groups enjoyed favorable access to public lands for mining, grazing, and timbering, and virtually unlimited liberty to do as they liked on private land, other than the traditional requirements of mutual accommodation in property law.⁶⁰ Traditional resource-using groups rallied against public-lands reforms as early as the first restrictions on timbering federal acreage,

⁵⁸ See text *supra* at __.

⁵⁹ See THOMAS O. MCGARITY & WENDY WAGNER, *BENDING SCIENCE: HOW SPECIAL INTERESTS CORRUPT PUBLIC HEALTH RESEARCH* (2008) (describing political economy in which cost-benefit analysis has come to the fore); STEVEN TELES, *THE RISE OF THE CONSERVATIVE LEGAL MOVEMENT* 90-134 (on the development of law-and-economics as a prominent legal-scholarly method, with its skepticism of regulation and of any non-welfarist idea of public good).

⁶⁰ See 30 U.S.C. § 22 (2006) (“[A]ll valuable mineral deposits in lands belonging to the United States, both surveyed and unsurveyed, shall be free and open to exploration and purchase, and the lands in which they are found to occupation and purchase, by citizens of the United States”); 43 U.S.C. § 932 (2006) (providing “That the right of way for the construction of highways over public lands, not reserved for public uses, is hereby granted”) (repealed in 1976 with the passage of the Federal Lands Policy and Management Act).

and they responded to the new requirements of environmental law with the first anti-environmental movement, the Sagebrush Rebellion of the late 1970s and 1980s.⁶¹ This vehicle of anti-regulation, pro-resource-use sentiment put the country on notice that other views of the proper use of nature preceded the new laws and were not going away. Indeed, many of the same ideas animated the Counties Movement that churned western states in the 1990s and are present in strands of the Tea Party today.⁶² All are reminders of the persistent and basic division over environmental values in the United States.

In light of all this, the pressing question seemed not to be how to get advocacy groups representing the “public interest” in nature into the courtroom, as Justices Douglas and Blackmun supposed, nor how to cultivate and expand new ideas, as Tribe and Stone urged. For those charged with administering new laws, the challenge was instead to maintain a kind of legitimacy by seeking a mode of decision-making that could transcend and integrate these divided values, rather than simply take sides. The turn to welfarism, then, is like the early period of high plasticity and calls for “metaphysics” in the following respect: each of these very different ways of connecting environmental law with ethics reflects the practical problems, institutional arrangements, and cultural landscape of its time, rather than revealing any timeless truth about environmental ethics and law.

Today there is reason to think that relationship may be shifting as new problems arise and new attitudes begin to form in response. This is also an occasion to rethink the general relation between environmental law and ethics in a way that can recapture a larger sense of openness and possibility.

⁶¹ See R. MCGREGGOR CAWLEY, *FEDERAL LAND, WESTERN ANGER: THE SAGEBRUSH REBELLION AND ENVIRONMENTAL POLITICS*, 71-91 (1993) (outlining sources and formulations of Western objections to federal policy around the Sagebrush Rebellion);

⁶² See Tom Kenworthy, *Blazing Utah Trails to Block a Washington Monument*, WASH. POST, Nov. 30, 1996, at A1 (describing Western members of County Movement engaged in efforts to assert local control over federal land); See Diane Roberts, *The EPA: the Tea Party's next target*, THE GUARDIAN Aug. 3, 2011 (available at <http://www.guardian.co.uk/commentisfree/cifamerica/2011/aug/03/epa-republicans-tea-party>); *Montana House Votes to Nullify Endangered Species Act*, BOZEMAN DAILY CHRONICLE, Feb. 19, 2011 (Tea Party legislators regard ESA as invalid) (Associated Press) (available at http://www.bozemandailychronicle.com/news/article_85f9f742-3c64-11e0-a5ec-001cc4c002e0.html) Ben McGrath, *The Movement: The Rise of Tea Party Activism*, THE NEW YORKER, Feb. 1, 2010 at 40.

III. A NEW RELATIONSHIP BETWEEN LAW AND ETHICS

Now is time to recover something from those forty-year-old calls to reorient environmental law toward change in the moral and environmental imagination. This is not the same as simply returning to those ambitions. A renewed emphasis on imaginative change at the intersection of environmental law and ethics must consider why earlier attention to these issues faded and try to avoid the same outcome. It can benefit from a richer and more nuanced picture of the role moral and environmental imagination have played in the historical development of environmental law; a humbler view of the authority of ethics, which would present it as a participant in the development of pluralistic and often clashing values, rather than a razor or Mosaic tablet distinguishing right from wrong thought; and, at the same time, a paradoxically more ambitious understanding of ethics, informed by recent progress in understanding the neural correlates and conceptual structure of the human experience of value. A reformed understanding of the relation between environmental law and ethics can help to make them productive for each other.

This would be very much to the good. Environmental law needs ethics, though it needs an ethics that is sensitive to the sources and activity of law.

A. The Importance of Change in Environmental Ethics

Environmental law needs ethics because it is blind without values. This is an elementary point: action-oriented decision is impossible without distinctions between better and worse, fine and terrible, admirable and horrid, that help in sorting among possible acts, consequences, and states of affairs.⁶³ The neutrality-seeking procedures of CBA, or any other consequentialism, can proceed only on the basis of a prior judgment about what counts as good and bad.⁶⁴ Typically, that judgment is crystallized in an underlying statute, which establishes some substantive value along with a process for pursuing it. When CBA follows a pure revealed preference-tracking model and seeks to maximize social benefit measured

⁶³ See TAYLOR, *supra* n. __ at 25-52 (so arguing); CHRISTINE M. KORSGAARD, SELF-CONSTITUTION: AGENCY, IDENTITY, AND INTEGRITY 1-26 (so arguing).

⁶⁴ See DOUGLAS A. KYSAR, REGULATING FROM NOWHERE: ENVIRONMENTAL LAW & THE SEARCH FOR OBJECTIVITY 46-67 (discussing cost-benefit analysis as a specific and debatable formulation and application of welfarist theory); Jedediah Purdy, *The Politics of Nature: Climate Change, Environmental Law, and Democracy*, 119 YALE L.J. 1122, 1180-90 (2010) (showing how the substantive debates over the goals of anti-pollution statutes set the terms for later application of cost-benefit analysis); Alyson Flournoy, *Building an Environmental Ethic from the Ground up*, 37 U.C. DAVIS L. REV. 53 (2003) (environmental law contains implicit ethical commitments which require interpretation and excavation); Lee Talbot, *Does Public Policy Reflect Environmental Ethics? If So, How Does It Happen?*, 37 U.C. DAVIS L. REV. 269 (ethical commitments pervade the policy-making process, although they are often not explicit). *But see*

by a price metric, it is a conduit for individual judgments of value. Without those substantive judgments, the decisions that generated the prices would have been impossible. Decision requires orienting value, whether it is taken at the personal, legislative, or administrative level. A relatively mechanical, seemingly neutral decision procedure is possible only because it takes its normative substance from decisions made at other levels.

This is a mainly conceptual point. It would not have much force if the substance of environmental values were stable and agreed-on. In fact, however, the history of environmental lawmaking, and of the cultural and political ferment behind it, reveals perennial change and contest over values. To speak sweepingly, the ideas of good and bad in relation to nature that many Americans held in 1789, 1848, 1917, and 1960 were sharply different from time to time and often hotly contested in the moment.⁶⁵ Our wilderness system, now about 107 million acres permanently closed to all development, would have been anathema to those who cleared the continent as a republican “empire of liberty,” or, further south, an empire of slavery, and who saw national mission and character in bringing wild land under the rule of axe and plough.⁶⁶ Some of those settlers burnt vast tracts of woods in the upper Midwest, a labor-saving device but also a kind of festival of clearance, something not likely to be celebrated today, even where forest is abundant.⁶⁷ The ESA’s solicitude for large predators would thoroughly alienate people who waged a war of extermination against wolves and saw their very presence on the land as an affront to settlement and civilization.⁶⁸ The ideal of clean-flowing waterways with abundant natural life that the Clean Water Act adopted, and the Act’s rejection of the thought that waterways should serve as waste-disposal systems, would have been mysterious to Americans who, well into the twentieth century, saw rivers as the workhorses of industrial and municipal effluent processing.⁶⁹ (We congratulate ourselves today on our enlightened appreciation of “ecosystem services,” but earlier generations got the point: they just had a different idea of optimal service levels.)⁷⁰ This last point illuminates why, although a conventional story treats the CWA as a response to the burning of the Cuyahoga River – and it was – earlier infernos on the

⁶⁵ See Purdy, *supra* n. __ (spelling out this claim in considerably more detail).

⁶⁶ See *id.* at __.

⁶⁷ See *id.* at __.

⁶⁸ See BARRY HOLSTUN LOPEZ, *OF WOLVES AND MEN* 137-99 (1978) (detailing campaigns of extermination against wolves and the cultural environment in which these took place).

⁶⁹ See *supra* n. __ (substantive commitments of Clean Water Act).

⁷⁰ See, e.g., James Salzman, Barton H. Thompson, & Gretchen Daily, *Protecting Ecosystem Services: Science, Economics, Law*, 20 *STAN. ENVTL. L.J.* 309 (2001).

same waterway had not struck observers as proof of an environmental crisis.⁷¹ Other values had to change for fires to mark problems rather than Promethean progress, for wolves to be inspiring rather than abhorrent, and for wilderness areas to be secular cathedrals rather than banners reading, “National mission not accomplished.”⁷²

To repeat, one reason that commentators in the early 1970s proposed a major role for environmental law in engaging environmental values was that such values seemed extremely plastic then. History reveals that the plasticity of that time was not new, although as the quieter decades since suggest it was unusual in its intensity and the sweep of lawmaking it inspired. History also illuminates one reason that the brief confidence that environmental values formed a new consensus proved ill-placed. The constituencies that opposed the new regulatory regimes were deeply established. Both their material interests and their ethical commitment to economically productive resource use were interwoven with law and culture. The post-1960s environmental era did not wash away its predecessors and bring a new consensus. Instead, it added a layer to a palimpsest of ethical views of American nature and legal claims on the American landscape. A productive view of environmental law’s relation to ethics must take account of this deep and abiding disagreement about its core subject matter.

History also highlights that changing values lie at the very heart of changes in the environmental-law regime. The perception that the last few decades have invited, that environmental law gets along well enough without engaging basic questions of environmental value, is much less plausible when one appreciates how thoroughly intertwined they are, both conceptually and historically.

The argument so far is that the kind of decision-making that environmental law does cannot proceed without reference to the kinds of values that environmental ethics engages, either conceptually or in its actual historical development. This does not yet amount to a defense of a specific relation between the two inquiries. The further aim here is to advance the idea that environmental law can be generative for the development of environmental ethics as Tribe and Stone once proposed and others in Congress and the courts briefly believed. Law can and should contribute to the development of environmental values.

Such a proposal, of course, presupposes an ethics that can respond productively to the openings that law provides – an ethics that is flexible and contextual. This article doesn’t attempt a defense of this view of ethics, but simply tries to specify what it is. As Bernard Williams observed in a similar connection,

⁷¹ See Jedediah Purdy, *Climate Change and the Limits of the Possible*, 18 DUKE ENVTL. L. & POL’Y FORUM 299 and works cited therein (so observing).

⁷² See *id.* at 298-305. This is also the burden of the argument of Purdy, *The Politics of Nature*, *supra* n. __ and *American Natures*, *supra* n. __.

“There is no special way in which philosophical considerations join the political discussion. They join it, rather, in various of the ways in which other forms of writing or talking may do: ways that include not only marshalling arguments, but also changing people’s perceptions a little, or catching their imagination.”⁷³ This is the way of reflecting on value that Stone and Tribe hoped law could assist: articulating changes in perception, offering conceptual structure for new aspects of imagination.⁷⁴

This version of environmental ethics is very different from environmental philosophers’ inquiries into value theory. Whatever their virtues in conceptual clarification, those call to mind Williams’s remark that, “Too often, philosophers’ contributions to these questions seem designed only to reduce the number of thoughts that people can have, by suggesting that they have no right to some conceptions that they have or think that they have.”⁷⁵ That is quite different from an ethics that begins from experience and perception and tries to lend some clarity to their developments while setting them in productive relation to other ideas.

This latter style of ethics might develop a productive relation to environmental law for two reasons. First, changes in experience and perception, and efforts to articulate these, have been central to the development of American environmental values, including the values that have motivated political and legal action. Second, the most important role of law in the development of environmental values may well be in shaping experience itself. Law quite unavoidably does an enormous amount to produce the encounters with the natural world that people can have, delimit the uses they can make of it, and define the ideals of human-nature interaction that they can live out.

With this in mind, we can hope to broaden the scope of law’s possible relation to ethical development beyond what the visionary reformers of the 1970s proposed, in a way that may be at once more realistic and more ambitious. That generation of scholarship proposed to embed dynamic environmental values *within*

⁷³ Williams, *supra* n. __ at 233.

⁷⁴ This is also how Douglas Kysar conceives of environmental ethics: as a product of imaginative and perceptual leaps that often precede conceptualization and may even defy the aim of taming the perception into a set of orderly concepts. See DOUGLAS A. KYSAR, *REGULATING FROM NOWHERE* 97-98, 194-99, 242-45 (2010) (on the need for radical openness to new ethical insight). Daniel Farber has criticized what he sees as a tendency to irrationalism in parts of this work and generously associated me with a more balanced view: for the moment I’ll neither express a judgment nor say whether I think I deserve the compliment. See Daniel A. Farber, *Taking Responsibility for the Planet*, 89 TEX. L. REV. 147, 173 (2010) (reviewing Kysar, *Regulating from Nowhere*).

⁷⁵ Williams, *supra* n. __ at 233.

legal process, by innovations in standing doctrine and rights.⁷⁶ That these proposals have not borne fruit need not mean that law cannot be productive for environmental ethics. Instead, that ambition can move outside law's internal processes. An alternative starting point begins with the recognition that environmental law creates a geography of possible experience.⁷⁷ Through law, people turn ideas of their place in the natural world into material realities, shaping landscapes of wilderness, enshrined sublimity, industrial agriculture, and suburban pastoral. Interacting with these landscapes, they come to new ways of living with and thinking about nature, which in turn inspire other law-shaped landscapes.

Spelling out the first point, about change in perception and experience, requires some compressed narration. The first 100 years of United States law respecting the natural world aimed relentlessly at making Americans into economically productive settlers of the continent.⁷⁸ The Homestead Acts and other land-disposal statutes are archetypal here, as they aimed to make citizens and immigrants into forest-clearers and farmers and, cumulatively, forests and grasslands into farms. Other statutes had the same logic, notably the 1872 Mining Law, with its Homestead-style policy for minerals on public lands, and laws governing irrigation development (tellingly called "reclamation"), which took as official policy the maintenance of mid-sized farms and independent farmers on what had been desert.⁷⁹ As these examples suggest, at least two ideas were involved here, one about the natural world, the other about people. The first was that nature existed to serve human needs richly, but would not do so gratuitously: it had first to be filled up and made fertile by the labor of settlers.⁸⁰ Second was that labor on the

⁷⁶ See KYSAR, *supra* n. __ at 248-54.

⁷⁷ Holly Doremus provides a terrific discussion of environmental policy through the lens of enabling personal encounters with nature that contribute to the development of individual values and, cumulatively and through debate, shared values. See Holly Doremus, *Shaping the Future: The Dialectic of Law and Environmental Values*, 37 U.C. DAVIS L. REV. 233, 252-67 (2003); Doremus, *Constitutive Law*, *supra* n. __; see also Flournoy, *supra* n. __ at 68-80 (proposing "stepping-stone" values that could move public discussion in the direction of new ethical concepts and practices).

⁷⁸ See generally PAUL W. GATES, HISTORY OF PUBLIC LAND LAW DEVELOPMENT (1968) (comprehensive history of the role of law in the westward development of the United States).

⁷⁹ See, e.g., WILLARD HURST, LAW AND THE CONDITIONS OF FREEDOM IN THE NINETEENTH-CENTURY UNITED STATES (1956) (arguing that the federal design of settlement carried out a policy of unleashing human energy and initiative).

⁸⁰ I set out this idea with historical detail in Jedediah Purdy, *American Natures*, *supra* n. __ at __ (Part I.A).

land was dignifying: productive work was a basis for self-respect and the esteem of others.⁸¹

Pro-development laws promoted a way of engaging nature that enabled people to experience at first hand the sense of the world as conditionally bountiful (the condition being labor) and to live out an ideal of the admirable personality. The Jeffersonian grid and disposal statutes produced a geography where this was the dominant human relation to nature. The mission of making the continent productive was so emphatic that the legal geography, the settlement grid, swept over literal terrain that could not support its ideal of productive labor, such as the semi-desert of the Great Plains west of the Hundredth Meridian. The result was waves of failed settlers, probably the first ecological refugees in Anglo-American history.⁸²

The second great moral vocabulary of nature in American life, the Romantic one, was also rooted in a mode of experience and perception that was thoroughly entangled with law. From this perspective, encounters with nature's most extreme and dramatic places inspire epiphany: flashes of insight into the order of things and one's place in it.⁸³ The thought that one encounters divinity and one's own self amid mountain peaks and deep crevasses is conventional in Romantic writing at least from Wordsworth forward, and its most effective American popularizer, Sierra Club founder John Muir, modeled his literary persona on both Wordsworth and the

⁸¹ See ERIC FONER, *FREE SOIL, FREE LABOR, FREE MEN: THE IDEOLOGY OF THE REPUBLICAN PARTY BEFORE THE CIVIL WAR* 9-38 (1970) (describing the interlaced premises of free-labor thought and the program of frontier settlement). See also Gordon S. WOOD, *EMPIRE OF LIBERTY* 357-99 (on the Jeffersonian program of western settlement); DREW R. MCCOY, *THE ELUSIVE REPUBLIC: POLITICAL ECONOMY IN JEFFERSONIAN AMERICA* 48-100, 185-208 (1980) (describing "republican" conception of proprietor-based freedom and virtue, and the role of frontier settlement in promoting it).

⁸² See WALLACE STEGNER, *CROSSING THE HUNDREDTH MERIDIAN* XXX-XXX (XXXX) (describing initial settlement of the Great Plains and its failure).

⁸³ See JOHN MUIR, *MY FIRST SUMMER IN THE SIERRA* 129 ("South Dome . . . seems full of thought, clothed with living light, no sense of dead stone about it, all spiritualized, neither heavy looking nor light, steadfast in serene strength like a god."); *id.* at 169-70 (droplets of water passing from "form to form, beauty to beauty, ever changing, never resting, all are speeding on with love's enthusiasm, singing with the stars the eternal song of creation."); *id.* at 124 ("The whole landscape glows like a human face in a glory of enthusiasm, and the blue sky, pale around the horizon, bends peacefully down over all like one vast flower.").

Transcendentalists Emerson and Thoreau, who urged self-knowledge through attention to nature.⁸⁴

What distinguished Muir and his followers, and made them a lasting presence in political life, is that they developed from these literary refinements a concrete mode of encountering nature. Their vocabulary of aesthetic and moral response was keyed to specific features of the Sierra Nevada and their other favorite landscapes, and they built a sub-culture and social movement around those places and the feelings associated with them.⁸⁵ The heart of their political program was to secure an American geography for this experience. They worked to ensure that American law dedicated large tracts of ground, such as Yosemite Valley, to the encounters that they saw as forming the highest human relation to nature.⁸⁶ Their success was practical, in helping to drive the massive reservations of public land for recreation from the end of the nineteenth century through the twentieth (and beyond). It was also ideological, or, perhaps better, imaginative: although many of the national parks were originally created on the non-Romantic theory that they would be good for public health and civic spirit, by the 1920s the standard account of their purpose was that they were secular temples that restored the spirit by enshrining nature's finest aesthetic qualities.⁸⁷ They existed, that is, to make the Romantic way of meeting nature into real and widespread experience.

This success set in motion a further development in values, which also depended on the dedication of public lands to Romantic experience. From the 1920s forward, a set of Romantic recreationists built a movement dedicated to preserving wilderness, which they defined as land in which a solitary individual could encounter nature as it would have developed without human exploitation or development. Such solitude, they insisted, was quite a different thing from the scenery and recreation that more mainstream Romantics prized. The psychic experience that it prompted had less to do with ecstasy and revelation, more with reflection on one's own smallness and lack of power before a vast and ancient natural world. Wilderness advocates valued the natural world less for its extreme and dramatic qualities than for its extent, integrity, and essential mystery: they went into the wild not so much to rediscover the divine in themselves as to be strangers, and learn by that experience.⁸⁸

⁸⁴ See Purdy, *The Politics of Nature*, *supra* n. __ at 1145-49 (setting out these developments). On Muir's cultivated debt to literary romanticism, see DONALD WORSTER, *A PASSION FOR NATURE: THE LIFE OF JOHN MUIR* 160-61, 336-37 (2008).

⁸⁵ See Purdy, *The Politics of Nature*, *supra* n. __ at 1149-51 (so arguing).

⁸⁶ See Purdy, *American Natures*, *supra* n. __ at __ (Part III.C).

⁸⁷ See *id.*

⁸⁸ See Purdy, *The Politics of Nature*, *supra* n. __ at 1160-73 (setting out and analyzing this development).

The 1964 Wilderness Act, which followed eight years of focused advocacy after its first introduction in 1956, set in motion the process that has preserved more than 107 million acres as statutory wilderness.⁸⁹ The rhetorical and conceptual innovation behind it may have been just as consequential. In developing a language to defend wilderness, advocates found words for their own experience and in turn made that experience the more fully available to others. All this depended on the existence of undeveloped land where the encounters they valued were possible. The geography that Romantic preservationists created by reforming public-land law both sustained the Sierra Club's high-country pilgrimages and created a setting for further experiments in experience and its interpretation.

These examples are meant to fill out the thought that environmental law contributes most to the development of environmental ethics as a shaper of experience – of the encounters with nature that form much of the material for shifts in perception and imagination. When law precludes certain encounters with nature, it also precludes – or at least inhibits – the growth of value and forms of identity that treat those encounters as paradigmatic. This is why wilderness advocates, for example, understood the push for the 1964 Act as about the survival of a mode of experience, so that Senator Frank Church of Idaho could say on the Senate floor that, without wilderness, the country would become a cage.⁹⁰ It is also why a symmetrical tone of urgency enters the language of traditional resource users, followers in the settler ideal, who see environmental regulation as a threat to their cultural survival.⁹¹

B. Ways of Understanding Change in Environmental Ethics

In thinking about change in environmental values, it helps to be able to say what it is that remains the same while something else changes. Otherwise the story is not much more than William James's "blooming, buzzing confusion."⁹² On my best interpretation, the values that get formulated as environmental ethics do have certain qualities in common besides the bare fact that they address the human relation to the natural world. It is, to be candid, tricky to find the right word for the formal characteristics that unite certain environmental values across changes in

⁸⁹ See 16 U.S.C. sec. 1131, et seq.; JAMES RASBAND, JAMES SALZMAN, & MARK SQUILLACE, *NATURAL RESOURCES LAW & POLICY* 636-49 (2nd ed. 2009).

⁹⁰ 1961 CONG. REC. 18,365 (Statement of Sen. Church).

⁹¹ See, e.g., A. Dan Tarlock, *Can Cowboys Become Indians? Protecting Western Communities as Endangered Cultural Remnants*, 31 ARIZ. ST. L.J. 539 (1999) (on cultural conflict over resource use in Western communities).

⁹² WILLIAM JAMES, *THE PRINCIPLES OF PSYCHOLOGY* 462 (Harvard University Press ed., 1981) (1890).

substance. One can think of the formal characteristics as templates, as a grammar, or as participating in a “family resemblance”: the vagueness here is intentional because I don’t want to take on board too much methodological commitment in this attempt to organize an interpretation.⁹³

Major themes in environmental value have emerged around clusters of ethical issues that they share with other, non-environmental questions. Broadly speaking, there are three such clusters. First is *social or interpersonal ethics* (although “personal” is sometimes a misnomer in the environmental setting).⁹⁴ A major theme here is the resistance to harming another entity that is recognized as having moral value. This *aversion to doing harm* has organized much of the extension of moral concern to animals, plants, and less obvious entities such as species and ecosystems. Such extended moral concern recognizably shares a basic logic with the impulse not to slap another person across the face. That impulse is “formal” in the sense that its meaning depends intensely on changing content: which entities count as morally important others? A second theme is social *solidarity*: views of nature’s importance and proper use have played an important part in defining ideals of national purpose and citizenship.

The second major cluster of issues is *personal ethics*, concerned less with right behavior toward others than with self-regard founded in the kind of person one is. In this register, changes in environmental values have been connected with ways of pursuing *dignity* and *authenticity*, two cardinal values of personal ethics. Again, environmental values here take some of their energy from the fact that ideas of nature are, so to speak, recruited to help people engage deeply felt problems about how to live. More than one set of substantive environmental values can be understood as addressed to this issue.

⁹³ See John Mikhail, *Universal Moral Grammar: Theory, Evidence, and the Future*, 11 TRENDS IN COGNITIVE SCIENCES (No. 4) 143 (2007) (setting out theory of a “universal moral grammar”); Jonathan Haidt & Selin Kesebir, *Morality*, in HANDBOOK OF SOCIAL PSYCHOLOGY 797, 797-832 (ed. S. Fiske, D. Gilbert & G. Lindzey) (5th ed. 2010) (giving a functionalist account of a repertoire of evaluative emotional responses argued to structure moral attitudes and provide the premises of moral reasoning); Joshua Greene, *Cognitive Neuroscience and the Structure of the Moral Mind* (forthcoming in 1 INNATENESS AND THE STRUCTURE OF THE MIND (ed. S. Laurence, P. Carruthers, & S. Stich) (arguing for a constellation of “innate factors” that organize moral response). The term “family resemblance” is associated with Ludwig Wittgenstein’s rejection of seeking necessary and sufficient conditions for the application of words and concepts, in favor of a looser-knit standard of competent use, recognition of similarities and analogies, etc. See LUDWIG WITTGENSTEIN, PHILOSOPHICAL INVESTIGATIONS 65-66 (G.E.M. Anscombe, trans., 1953).

⁹⁴ Because I address each of these in turn in the discussion that follows, I do not provide citations to the literature in this introductory summary.

A third set of issues can be called *aesthetic*, though this is for lack of a better word. The substance here is less obviously ethical: nature's aesthetic value does not really speak to how to act (social ethics) or how to live (personal ethics). Instead, the substance here is the state of mind induced by encountering or contemplating the natural world. Encounters with *beauty*, *sublimity*, and *uncanniness* have been central to discerning and articulating the values at work in the natural world. They seem, respectively, to capture three emotional and moral attitudes toward nature: a restful gratitude and at-homeness, a stimulating but potentially overwhelming sense of nature as vast and alien, and an awed bafflement in the face of a world full of consciousness that is both like and unlike our own.

To a certain extent, these three sets of issues are integrated in *virtue ethics*, an approach that understands (1) social practices and forms of community as resting on (2) personal habits or qualities of character that (3) involve how one perceives situations, the values one takes to be present in them. Although I do not make a case for virtue ethics as a superior account of morality in general, I do argue that it captures important features of some environmental values, especially in emerging issues such as food and agriculture and climate change.

This modestly formal approach to organizing ethical experience has much in common with the picture of moral reasoning that experimental psychologists have been developing. In this picture, a basic repertoire of moral responses structures much of the intuition, or perception of value, that anchors moral judgment. The elements of this repertoire may be broadly described as formal: they encompass *kinds* of evaluative response, such as the aversion to doing harm.⁹⁵ This work is highly stimulating, and I borrow some formulations from one of its leading practitioners, Jonathan Haidt, in my discussion of social ethics.

Because of its origins in experimental psychology, this approach is involved in debates over both moral reasoning and neuroscience; but, for present purposes, there is no need to make any commitment within those. Instead, I use this approach to structure reflection on moral phenomena that display different content in different settings but nonetheless have consistent, defining features that can be called formal. This approach helps to (1) integrate reflection on environmental ethics with thinking about ethical responses more generally, in cases where both are involved in the same kinds of judgments, such as whether it is acceptable to harm certain entities, or even whether certain acts count as harm; (2) identify aspects of environmental ethics that are distinct from traditional interpersonal ethics and pick out the logic of the motivating environmental values in these cases; and (3) in both cases, organize a picture of past change and possible future development by assuming that past, present, and possible future versions of environmental value all share certain formal distinctions or kinds of judgment.

1. Nature and social ethics: harm and solidarity

⁹⁵ See, e.g., sources gathered in *supra* n. __ (excluding Wittgenstein).

Jonathan Haidt proposes as one of the “hypothesized foundations” of moral psychology – basically templates in a formal repertoire of moral response – a “harm/care” pairing involved in “concern for the sufferings of others.”⁹⁶ This formulation picks up the strong aversion to inflicting direct harm on another that experimental psychologists find at work in certain hypothetical ethical quandaries, often centering on the decision whether to take one life violently – strangle a child, throw a man from a bridge – in order to save a larger number of others. Although its experimental formulation has been lodged in certain difficulties within the deontological-consequentialist debate in moral philosophy, the response is fairly seen as expressing an experience that underlies both approaches to ethics: a strongly felt and motivationally effective respect for other individuals.⁹⁷

The signal fact about this “foundation” is that its meaning depends thoroughly on who, or what, inspires the respect or sympathy that stays the hand. The great event behind both classical utilitarianism (the ur-version of modern consequentialism) and all types of rights-based theories is the rise of universalism in ethics, that is, the embrace of the equal status of all persons as a starting-point for reasoning. This is not just a theoretical breakthrough, but a development in social and moral imagination, in which sympathy for others and respect for their humanity burst – however imperfectly – familiar bonds of religion, race, and nation.⁹⁸ One can see much of the politics of slavery, to take one example, as a cultural, political, and legal contest over *who counts morally*, in which appeals to rights, religion, and humanitarian sympathy revolved around that focal point.⁹⁹

This harm/care “foundation” has been important in environmental ethics, particularly in the humane and animal-rights movements, with their focus on the suffering of individuals. It is telling that the modern humane movement arose in close connection with anti-slavery abolitionism, and with much the same suite of appeals.¹⁰⁰ The same harm-focused moral logic seem to be at work in efforts to “personalize” natural phenomena other than animals, such as trees, rivers and mountains, species, and ecosystems. Although Justice Douglas’s “the river as

⁹⁶ Haidt, *supra* n. __ at 822.

⁹⁷ See Greene, *Innateness*, *supra* n. __ at 10-14 (describing these experiments). In these cases, the difference appears to be that *applying* a consequentialist theory requires conscious calculation over remote lives, while applying a certain kind of deontology simply requires not harming a person imagined to be standing in front of the decision-maker, or, in the case of the infant, cradled in his arms.

⁹⁸ See TAYLOR, *SOURCES OF THE SELF*, *supra* n. __ at 393-401 (sketching aspects of this development).

⁹⁹ See generally DAVID BRION DAVIS, *THE PROBLEM OF SLAVERY IN WESTERN CULTURE* (1969).

¹⁰⁰ [Source to come.]

plaintiff speaks” passage still strikes lawyerly readers as willfully eccentric, it nonetheless highlights that, in our culture, it is intelligible to describe such entities as having moral points of view, open to description in terms of rights and interests.¹⁰¹ Therefore certain acts – emitting pollution from a factory waste-pipe, blasting open a mountaintop with dynamite, or degrading the habitat of a species in danger of extinction – can register as *harming* those entities. The same perception seems to be at work in hearing a call to “save” a place – Mineral King Valley, Dinosaur Monument, Hetch Hetchy – as a moral imperative to avoid a devastating harm.¹⁰²

Environmental ethics has also tapped another of Haidt’s “foundations,” what he calls “ingroup/loyalty,” and I would call solidarity: the sense of obligation in group membership, including self-sacrifice and vigilance against betrayal of the group.¹⁰³ Here again, it is pivotal that the formal category covers widely varying content. The relevant groups, often nations, are always partly imagined communities, formed out of “mystic chords of memory” as much as out of institutional, linguistic, and geographic facts.¹⁰⁴ The rise of conservation politics at the turn of the last century, which centered on public administration of parks, forests, and other natural resources, was essentially intertwined with Theodore Roosevelt and other Progressives’ recasting of American civic identity.¹⁰⁵ They proffered robust nationalism for a time that they regarded as requiring a strong and extensive state. Natural resources exemplified why regulation was necessary: without it, private greed would waste the national patrimony.¹⁰⁶ Natural resources

¹⁰¹ *Sierra Club v. Morton*, *supra* n. __ at 743 (Douglas, J., dissenting).

¹⁰² See RODERICK NASH, *WILDERNESS AND THE AMERICAN MIND* __-__ (3rd ed. 2001) (describing these conflicts and their significance in the development of US environmental politics).

¹⁰³ See Haidt & Kesebir, *supra* n. __ at 822.

¹⁰⁴ See *generally* BENEDICT ANDERSON, *IMAGINED COMMUNITIES: REFLECTIONS ON THE ORIGIN AND SPREAD OF NATIONALISM* (Rev’d ed. 2006). The quoted phrase, of course, comes from Abraham Lincoln, *First Inaugural Address* (Washington, DC, March 4, 1861).

¹⁰⁵ See Theodore Roosevelt, *The New Nationalism*, Speech at Osawatomie (Aug. 31, 1910), *reprinted in* Theodore Roosevelt, *THE NEW NATIONALISM* 22 (1910) (linking national identity, regulation, and conservation).

¹⁰⁶ See GIFFORD PINCHOT, *THE FIGHT FOR CONSERVATION* 48-49 (1910) (“The conservation idea covers a wider range than the field of natural resources alone. Conservation means the greatest good to the greatest number for the longest time. . . . Conservation advocates the use of foresight, thrift, and intelligence in dealing with public matters. . . . It proclaims the right and duty of the people to act for the benefit of the people. Conservation demands the application of common-sense to the common problems for the common good.”).

also provided a paradigm for the technique of public management: expert administration for the benefit of the whole country across generations.¹⁰⁷

At the same time, public recreational areas and, especially, parks, became symbols of national identity. Roosevelt and others invited Americans to identify with emblems on the landscape that marked the continent as belonging to a self-aware nation. Roosevelt's face on Mount Rushmore, begun well after his death, does with clanging literalness what a generation of parks advocates did more subtly and just as effectively: make public lands a touchstone of American civic identity.

Efforts to mobilize solidarity since the conservation developments of the Progressive era have been more indifferent in their results. Appeals to solidarity outside the nation (to a "planetarian" identity) or the species (to Aldo Leopold's "land community") are better described as aspirational sketches than achievements.¹⁰⁸ Because solidarity has been so important in earlier environmental developments, both lending itself to conservation and taking energy from images of nature, it is nonetheless worth keeping well in view.

2. Personal ethics and environmental value

The development of environmental ethics has been closely involved with two other basic values that are less prominent in empirical psychology but central to the aspirations that define modern individual identity. These are *dignity* and *authenticity*.¹⁰⁹

Dignity encompasses qualities that command the respect of others and the sense of oneself as commanding that respect.¹¹⁰ It was a centerpiece of the U.S. settler identity: the pioneer, a free man who freely labored on free land, qualified as

¹⁰⁷ See IRVING FISHER, REPORT ON NATIONAL VITALITY: ITS WASTES AND CONSERVATION 2 (1909) ("The problem of conserving our natural resources is part of another and greater problem -- that of national efficiency [which] depends not only on physical environment, but on social environment, and most of all on human vitality.")

¹⁰⁸ See Sarah A. Krakoff, *Planetarian Identity Formation and the Relocalization of Environmental Law*, 64 FLA. L. REV. 87 (2012) (on local efforts to put into practice moral identification with the planet).

¹⁰⁹ For an extremely valuable discussion of these ideas and their place in modern moral culture, see CHARLES TAYLOR, *The Politics of Recognition*, in PHILOSOPHICAL ARGUMENTS 225, 225-33 (1995).

¹¹⁰ See *id.* at 226-27.

a member of a republican community of equals.¹¹¹ The source of dignity for ordinary people was a fraught and urgent matter in a time when an inheritance of social hierarchy came under pressure from expanding democracy. Using land and other resources productively became a touchstone of American dignity, particularly in its masculine versions. The landscape of environmental value ever since has been marked by the investment many Americans continue to have in being productive users of land and resources, not mere contemplative tourists or spiritual idlers.¹¹²

Authenticity is being oneself, not someone else's image or a congeries of borrowed habits and styles.¹¹³ Depending as it does on a distinction between true and false versions of something as elusive as the self, it has long been under severe theoretical pressure. Nonetheless, it has been at the heart of what many in the Romantic strain of environmental imagination have pursued: the sanctified high country has long been thought to bring clarity about who one is, a liberation from the unreflective attitudes and habits of the lowlands. In a different version, some of the psychic and spiritual hopes attached to the age of ecology aim at re-integrating the self and the natural setting, recognizing that one is "really" continuous with a living world, not a monad cut off from it by the walls of body and mind. In each case, the experience of value in nature has been inseparable from the sense that nature puts one in touch with a clearer experience of oneself, a usable form of self-knowledge.

3. Ethical and Aesthetic Response

A third type of moral experience is especially connected to aesthetic responses to nature. Aesthetic response differs from the other formal templates in that it is not, basically, a mode of relation to others or to the self. It is more directly a way of experiencing nature's importance and one's place in it than it is a way of enlisting nature in developing or grounding a value that works mainly within or among humans. Aesthetic response involves qualities in objects, landscapes, and natural systems, but also the qualities of mind and emotion called forth in response to these.

The two aesthetic modes that have been most important here are *beauty* and *sublimity*, are nicely (and respectively) captured in a passage from Bernard Williams: "Human beings have two basic kinds of emotional relations to nature:

¹¹¹ See FONER, *FREE LABOR*, *supra* n. __; WOOD, *supra* n. __ (on civic ideology of free soil and free labor).

¹¹² See, e.g., Richard White "Are You an Environmentalist or Do You Work for a Living?": *Work and Nature*, in *UNCOMMON GROUND: TOWARD REINVENTING NATURE* (ed. William Cronon, 1995) (describing work-based anti-environmentalist populism).

¹¹³ See TAYLOR, *Politics of Recognition*, *supra* n. __ at 228-29.

gratitude and a sense of peace, on the one hand, terror and stimulation on the other.”¹¹⁴ Beauty, a major preoccupation of early-modern aesthetic and psychological theory, refers to regularity, gradual transitions, soft lines, and evidence of the mildness and fertility of a terrain that could support human life richly in answer to a modicum of work.¹¹⁵ Adam Smith, a perceptive moral psychologist and not the most poetic of souls, went so far as to identify beauty with mechanical design that lent itself to practical use.¹¹⁶ Despite the hint of inadvertent self-caricature in this example, beauty was never far from usefulness: it describes harmony and fruitfulness, a sense of being at home in a place made for one’s well-being.

Historically, beauty in nature has belonged to two rather different settings: the well-worked pastoral landscape, on the one hand,¹¹⁷ and, on the other, the whole metaphoric house of Creation, viewed as a system made for the flourishing of every creature within it.¹¹⁸ The former describes, in its most optimistic terms (often repeated in the cadences of Manifest Destiny) the settler project of making North America a garden, though the settlers were called to bring forth beauty, not to enjoy a beauty already existing. The latter finds strong expression in what one might call the ecological pastoral: the image of a whole and harmonious earth, whose many systems interweave to sustain species and ecological communities. This aesthetic is a keystone of Rachel Carson’s narrative of environmental apocalypse, Aldo Leopold’s green-pastoral “land community,” and every image of ecological balance and health in the environmental politics of the last forty years.

The second touchstone aesthetic mode, sublimity, involves a very different experience: not being at home, but instead being thrown into a world of alien character and overwhelming dimensions, a world potentially hostile, but, more basically, indifferent and – past a point – incomprehensible.¹¹⁹ Sublimity has been

¹¹⁴ Williams, *supra* n. __ at 238.

¹¹⁵ See EDMUND BURKE, A PHILOSOPHICAL INQUIRY INTO THE ORIGIN OF OUR IDEAS OF THE SUBLIME AND BEAUTIFUL 112-18 (J.T. Boulton, ed., Notre Dame Press 1968) (1757); IMMANUEL KANT, THE CRITIQUE OF JUDGMENT 42-89 (James Creed Meredith, trans., Oxford, Clarendon Press 1952) (1790).

¹¹⁶ See ADAM SMITH, THE THEORY OF MORAL SENTIMENTS 257-68 (Prometheus Books, 2000) (1759).

¹¹⁷ See RAYMOND WILLIAMS, THE COUNTRY AND THE CITY 13-45 (on the aesthetics and ideology of the pastoral).

¹¹⁸ See DONALD WORSTER, NATURE’S ECONOMY: A HISTORY OF ECOLOGICAL IDEAS 3-55 (2nd ed. 1977)(on the love of reassuring order in the theological and scientific theories of nature that preceded modern ecology).

¹¹⁹ See BURKE, A PHILOSOPHICAL INQUIRY INTO THE ORIGIN OF OUR IDEAS OF THE SUBLIME AND BEAUTIFUL *supra* n. __ at 39-70; KANT, THE CRITIQUE OF JUDGMENT, *supra* n. __ at 109-14.

associated with vast, uninhabitable settings that display nature's morally indifferent and physically threatening power: the ocean, sheer cliffs and great gorges, scree fields and ranges of alpine peaks, cataracts and whitewater rapids. Various interpreters have associated it with enlivening terror, a purifying reminder of the free will that can overcome involuntary fear, and inspiring awe at the power of a world (and, often, a divinity behind it) entirely beyond the scope of everyday humanity.¹²⁰ To put it in Biblical terms, if beauty bespeaks the God and Creation of Psalm 23, sublimity finds its alienating home in Job. Sublimity was central to the Romantic strain in American environmental thought, with particular emphasis on its uplifting, rather than alienating, effect.¹²¹

The third point where ethics and aesthetics intersect with respect to nature is *uncanniness*. It is less canonical than the other two but just as distinctive and, potentially, as important. Famously associated with Sigmund Freud's discussion of the peculiar charm of certain science fiction and fairy tales, uncanniness refers to the bewildering experience of uncertainty about whether something is alive, conscious, another intelligence looking back at the watching person.¹²² Freud's examples were golem-like robots, doppelgangers, and ghosts.¹²³ He argued that stories of such things, or imagined encounters with them, represented the return of magical thinking, which was set aside but never quite abandoned when infants grew up and animist cultures matured into a scientific worldview.¹²⁴

Freed from its debt to a universalist and evolutionary view of society and a highly specific theory of mind, the idea of uncanniness captures a real and persistent experience. This is the disorientation that can arise from knowing, on the one hand, that we live in a world full of non-human points of view, experience, and consciousness, and, on the other, that those are necessarily opaque to us, permanent mysteries. Their mystery, however, does not free us from making decisions that affect them, massively and often mortally. What blinks out of existence when an animal is slaughtered, what is the meaning of a gaze that looks back at us, of sounds we hear as expressing satisfaction or pain? That we do not know enough to answer

¹²⁰ See sources gathered in immediately preceding note.

¹²¹ See, e.g., MUIR, MY FIRST SUMMER IN THE SIERRA, *supra* n. __ (gathering passages to this effect).

¹²² See SIGMUND FREUD, *The Uncanny*, in 17 THE STANDARD EDITION OF THE COMPLETE PSYCHOLOGICAL WORKS OF SIGMUND FREUD 218, 218-52 (ed. & trans. James Strachey).

¹²³ See *id.* at __.

¹²⁴ See *id.* at __.

these questions is the basis of uncanniness. That we have to act as if we did know is part of its ethical relevance.¹²⁵

The experience of the uncanny involves a sort of respect, but more complicated than the sort that is involved in the aversion to doing harm.¹²⁶ It is a pause in judgment arising from a limit in perception and understanding: we know something is there, but we cannot say quite what it is. Our pause expresses the thought that we owe these other points of view some acknowledgement and consideration, even though we have no reliable way of calibrating that response.¹²⁷

Uncanniness, like beauty and sublimity, describes both a way of responding to an exemplary aspect of the natural world – an animal, a pastoral scene, a vast, fierce, and threatening terrain – and a possible attitude toward the natural world as a whole. As mentioned earlier, beauty has been the dominant attitude for certain contemplative theological schools, and also for practical programs of remaking wild nature in the model of a universal garden. Sublimity has been, for a certain strand of Romantic thinking, the aspect of nature that matters most, the subsisting and powerful world that lies behind or beneath all that is settled and civilized, contradicting and saving us from a world made by hands and machines. Uncanniness, in turn, describes its own way of seeing the world, one perhaps especially well suited to the age of ecology. Nature, seen in this way, presents an order that, on the one hand, we can follow intellectually through its vast complexity, and, on the other, always recedes beyond our understanding, into the depths of time and distance, into scales too small for us, and, above all, into complexity that outruns our minds. If we owe it respect, which is one of the basic thoughts of environmental ethics, this is in part because we can admire and see how we depend on its order. At the same time, this thought also involves us in the limits of our understanding and the basic difficulty in making sense of our experience of nature's importance. This importance seems at once to reside *in it* and to be importance *for us*, in our eyes: to resolve it into either side of that opposition seems to cost us half its meaning. But the middle path is an obscure one. It implies confessing that we cannot say just what this importance is, as we cannot say what kind of respect we owe the experience of an animal whose mind we cannot know

4. Virtue Ethics: Acting, Being, and Seeing

¹²⁵ See KYSAR, *supra* n. __ at 176-202 (not using the term “uncanny” but relying on the concept in ethical relations to other forms of life); TIMOTHY MORTON, THE ECOLOGICAL THOUGHT 52-54 (2010) (on the ethical relevance of uncanniness).

¹²⁶ See MORTON, *supra* n. __ at 52-54 (so characterizing the experience of uncanniness).

¹²⁷ See MORTON, *supra* n. __ at 24 (“Give us nowhere to stand, and we shall care for the Earth.”).

Virtue ethics asks whether an act is the *kind* that contributes to certain systemic values, rather than whether the act in itself does prohibited harm or is detrimental on balance.¹²⁸ The concern is with the *quality* of the action rather than its effect. That assessment is essentially related to the quality of character of the person who would do it. Virtues are defined as the qualities of character that tend to produce actions of a certain kind.¹²⁹ Those actions help to constitute *practices*, forms of activity that contain standards of excellence, ways of assessing one's participation as fine or shoddy.¹³⁰ Practices, in turn, help to make up forms of life, shared understandings of what constitutes a good existence – in a phrase, shared orientations that make a culture a resource for those who are trying to judge how to live.¹³¹ It makes sense to envision virtues as basic elements in an emergent order, combining to constitute more complex practices and forms of life, and, in turn, taking some of their definition from the higher-level orders that they help to compose.

Although virtue ethics is concerned with character, the motivation it imagines is not self-concerned in the way that commitment to one's dignity or authenticity can be. It is characteristic of virtuous conduct that one is not motivated to it by an ambition to *be* virtuous, but by the perception that courage, reflectiveness, or another quality of conduct fits the situation.¹³² The aspiration to be a virtuous person would be, in Bernard Williams's phrase (making a different but related point) one thought too many in a situation that called for courage.¹³³ The motivation is to respond appropriately to the circumstances in which one finds oneself.

¹²⁸ See ALASDAIR MACINTYRE, *AFTER VIRTUE* 181-204 (2nd ed. 1984) (on the nature of the virtues).

¹²⁹ See *id.* at 187-91.

¹³⁰ See *id.* at 191.

¹³¹ See *id.* at 187-92. This may sound abstract and fancy, but in fact it describes a good deal of human conduct: we want to be good at things we consider worth doing and being, and we understand that if we become good at these things we acquire qualities that are not only technical, whether reflectiveness in writing, courage in argument, constancy in institutional and intellectual commitments, or a different set of virtues keyed to a less academic life than the one this sentence imagines.

¹³² See BERNARD WILLIAMS, *Acting as the Virtuous Person Acts*, in *THE SENSE OF THE PAST* 189, 189-97 (ed. Myles Burnyeat, 2006) (making this point and observing some of its difficulties for a theory of "moral realism" – not an issue in this discussion, which does not engage meta-ethical questions).

¹³³ See BERNARD WILLIAMS, *Persons, Character, and Morality*, in *MORAL LUCK* 1, 18 (1981) (arguing that moral explanation should speak to what makes life meaningful for the person, not to abstract canons of moral obligation).

Virtue is therefore connected with perception: the tendency to act in certain ways is integrally connected with seeing in certain ways.¹³⁴ It is because one experiences situations as containing certain values, and because those values are motivating, that one acts appropriately. In this mode of ethics, then, one might say that the fact-value gap is bridged psychologically by the habit of seeing certain patterns of facts as having distinct ethical meaning. That meaning is felt not as the product of inference but as the fruit of perception.

The relevance of this version of ethics to environmental problems is twofold. First, the link to perception fits the intensely aesthetic register in which environmental values have emerged and found voice. Virtue ethics links seeing and action. Second, as I argue in the next Part, virtue ethics is particularly apt in two of the areas where environmental values are changing most dramatically: food systems and climate change. In these areas, the connection between ways of seeing and ways of acting is particularly important. Moreover, the questions these issues raise go to forms of life, practices, and habitual behavior at least as much as to concepts of harm, social solidarity, or personal ethics.

It may be that part of the reason environmental ethics has not had much to do with such virtue concepts in the past is that the activity in which environmental values are expressed tends to be exceptional rather than ordinary: the high-country trek, the vacation to a national park. The only way of seeing the natural world that Americans have thoroughly put into effect as a way of life is the agrarian settler vision that swept across the continent in the nineteenth century. Dissents from that ideal have powered essential innovations in value, but those values have not found the same sort of expression in daily lived life as the settler view. Although writers such as Henry Thoreau and Aldo Leopold arguably wrote in a virtue-ethics vein that aimed at cultivating perception and conduct together, the fruit of their contributions has been literary and imaginative more than practical and embodied. This may yet change.

IV. An Environmental Law of Ethical Change: Three Applications and the Case for Ethical Change, Revisited

In at least three areas of environmental politics today, the kind of ethical plasticity that I have been discussing is present. These areas find people uncertain what to make of key encounters with the natural world, and in important ways the issues arise from that uncertainty. Their contribution might prove to be a change in ethical vocabulary.

¹³⁴ See MARTHA C. NUSSBAUM, *THE FRAGILITY OF GOODNESS* 305 (1986) (“Practical insight is like perceiving in the sense that it is non-inferential, non-deductive; it is, centrally, the ability to recognize, acknowledge, respond to, pick out certain salient features of a complex situation.”).

The question for law in respect to these areas is not just which values to adopt. These issues are also an opportunity to reflect on the context that the law creates for the development of value.

A. Food, Agriculture, and the Value of Work

What is sometimes called the food movement is diverse in its ideas and has no center, organizational, institutional, or otherwise. It has grown up around a set of perceptions strong enough to motivate choices about how to live.¹³⁵ In no particular order and with no claim to exhaustiveness, these include the following. Some physical work, including cooking, raising, and gathering food, is not a necessary evil but an affirmative source of satisfaction.¹³⁶ One of its satisfactions is *knowledge* of the ecological, chemical, and other processes that make the work a successful engagement with the natural world: work done with this informed appreciation is qualitatively better than work that is equally effective, perhaps more efficient in quantitative terms, but less informed and comprehending.¹³⁷

A second satisfaction is knowing that the work preserves, even enhances, the natural processes that it engages, rather than tending to exhaust them.¹³⁸ A paradigmatic contrast is between “integrated agriculture” that returns crop and animal waste to the soil as fertilizer and farming that, on the one hand, makes animal waste a pollutant that taxes the processing capacity of waterways and, on the other, draws soil fertility from chemical fertilizers that must be extracted and processed elsewhere in the system and, in some cases, literally mined (and also run off into waterways).¹³⁹ The term “sustainability” often gets at this contrast, rather than a more technical concept of indefinite viability by whatever technological means. Similar satisfaction holds for food one uses but does not grow – by far the more common experience. In these cases, knowledge, particularly of the food’s source, is often integral to the value of the experience.

This is a novel development in environmental value. Although American history has seen intermittent back-to-nature movements, the shapers of environmental imagination tended to see the farmer as a figure of plodding utilitarian labor. Thoreau portrayed New England’s farmers as slaves to their land,

¹³⁵ See generally WENDELL BERRY, *THE UNSETTLING OF AMERICA: CULTURE AND AGRICULTURE* (1977). This book has been a touchstone for two-plus generations of innovators around farming and food.

¹³⁶ See *id.* at 136-40 (on seeing labor to produce food as a positive good).

¹³⁷ See *id.* at 87, 137 (ecological knowledge structures the experience of work).

¹³⁸ See *id.* at 85 (on the value of agriculture that returns its sources of energy and fertility to the soil that first produced them).

¹³⁹ See *id.* at 136 (industrial agriculture “turns fertility into pollution”).

labors, and conventional conduct, and Emerson remarked that the poet's satisfaction in landscape was ruined by the sight of farmers working on it.¹⁴⁰ When Thoreau famously described hoeing weeds in his bean-field at Walden Pond, he concluded that his next harvest should be left entirely for the birds, and, as for eating, he wrote the most ascetic and self-revolted passages of *Walden* on the repugnance of the body's need for nutriment.¹⁴¹ John Muir took as a foil a dirty shepherd who was resolutely obtuse to the wonder of the Sierra Nevada.¹⁴² It is a telling fact about statutory wilderness that its dedicated use centers on scenery and strenuous recreation – admiring the landscape and powering one's own way across it – to the exclusion of procuring food. The wilderness culture that produced this iconic mode of preservation sought to preserve conditions for the most elemental human transactions with nature, but left eating from nature out of that picture. Wilderness is a place where there is much life but nothing to eat.

The great departure from all this came with Aldo Leopold, author of *A Sand County Almanac* and such touchstone essays as “The Land Ethic” and “Round River.” Leopold was a seminal wilderness advocate, an equally important formulator of an ecological ethic, and deeply interested, as both a practical and a literary matter, in restoring worn-out farmland through responsible labor. Leopold united these themes in a preoccupation with how people could *participate* in the natural world with full awareness of its processes and the aim of improving what he called its “beauty, stability, integrity.”¹⁴³ Writing in the same vein almost three decades after Leopold's untimely death, Wendell Berry, a muse for the food movement, took up the same themes more elaborately. Berry argued in 1977 that “the ecological crisis” was also “a crisis of agriculture,” because the move from integrated to extractive farming, and from producing food to consuming it, marked a larger divorce from

¹⁴⁰ See HENRY DAVID THOREAU, WALDEN 4-11 (ed. Brooks Atkinson, ___) (___); RALPH WALDO EMERSON, *Nature*, in THE ESSENTIAL WRITINGS OF RALPH WALDO EMERSON, __, 33-34 (ed. Brooks Atkinson, __) (farming “may show us what discord is between man and nature, for you cannot freely admire a noble landscape if laborers are digging in the field hard by”).

¹⁴¹ See THOREAU, WALDEN *supra* n. __ at 146-57 (on raising beans as a reflective experience, not a source of nutriment or income); 203-07 (deploring sensuality in eating as in other appetites and calling for self-purification);

¹⁴² See JOHN MUIR, MY FIRST SUMMER IN THE SIERRA, *supra* n. __ at 129-31 (contrasting the divinity-infused landscape of the Sierra Nevada with the filthy and uncomprehending shepherd who accompanies him there).

¹⁴³ See ALDO LEOPOLD, *The Round River* 188, 188-99 in A SAND COUNTY ALMANAC WITH ESSAYS ON CONSERVATION FROM ROUND RIVER (___) (arguing for an ecological view of agriculture, focused on the sustainable health of the land over generations, which would “harmonize the wild and the tame,” in contrast to “clean farming ... aimed solely at economic profit and purged of all non-conforming links”).

sustainable interaction with the natural world, in which an extractive and quantifying attitude replaced a preservative and qualitative one.¹⁴⁴ Although Berry's argument was vulnerable to charges of nostalgia if assessed as history, it set up a key set of normative contrasts that cast different approaches to farming and food as emblems of different ways of living on earth.

All of this offered a solution to a puzzle that was implicit in post-1970 environmental thought and, as Leopold's writing implied, in any effort to think ecologically. An environmental ethic that people can live by seems to need one of two features. On the one hand, it can meld its values to practices or commitments already in place. This is roughly what the conservation politics of Theodore Roosevelt and his chief forester and conservation theorist, Gifford Pinchot, accomplished at the turn of the last century.¹⁴⁵ They made patriotic concern for the long-term well-being of the whole country into an ally of public-lands conservation by arguing that, without such conservation, the United States would exhaust critical resources.¹⁴⁶ On the other hand, an environmental ethic can offer a new practice and identity, a way of interaction with the natural world and of conceiving of one's self in that encounter, that its adherents can follow. As I argued earlier, this was the achievement of the settler ethic on the one hand, and, on the other, of the high-country pilgrimages of the Sierra Club and its successors in the wilderness movement.¹⁴⁷

To a certain extent, the post-1970 wave of environmental ideas and lawmaking did the first of these by presenting industrial pollution as a public-health crisis and threat from runaway technology – hazards that the country knew how to fear and, in some measure, how to manage. The more affirmative values that we earlier saw all kinds of commentators invoking, though, were elusively abstract. As a synoptic way of thinking and seeing, ecological consciousness stands to change everything and nothing.

The new environmental laws did little to secure new modes of practice. Precisely by working at the scale of the industrial economy – industrial emissions, automobile efficiency standards, pre-use review of toxins, and ambient pollution standards – these laws made their changes invisibly, at least from the point of view of someone not in a regulated industry. As we have seen, there was considerable appetite for adopting new, “ecological” values; but the laws they inspired hardly helped to make that adoption concrete.

¹⁴⁴ See BERRY, *THE UNSETTLING OF AMERICA*, *supra* n. __ at 43-48 (agricultural practice and cultural value are indissolubly linked) and *supra* nn. __ - __ (describing ideal of ecological agriculture as an expression of cultural value).

¹⁴⁵ See discussion *supra* at __ - __.

¹⁴⁶ See *id.*

¹⁴⁷ See *supra* discussion at __ - __.

The ideal of knowledgeable and sustainable participation in ecological processes seems as concrete a response to this problem as we are likely to see. It seems plausible that this ideal is attractive partly because it creates a lived way to make an abstract set of values one's own, a way to participate in an ecological view of the human place in the natural world.

This ideal of ecological participation marks a departure from the leading ways of seeing food and agriculture, not just in environmental imagination, but also in the dominant normative language of public policy. There is, to be sure, a clear and often-heard case for changing farm policy that sounds in cost-benefit analysis and environmental economics. It concentrates on the pollution externalities of fertilizer, pesticide, and fossil-fuel use, and the ways that federal subsidy, particularly of corn and soybean crops, shapes the agricultural landscape and national diet, with cascading health costs that keep pace with environmental harms. These familiar normative rubrics, though, are far from exhausting the food movement's claims. In the qualitative ideal that I have been describing, ecological participation is a freestanding reason to endorse a food economy that makes such activity possible.

What meaning does this perspective have for the law? Law's role in shaping the food economy is widely recognized, and I have already referred to the federal subsidies that promote production of corn, soybeans, and other commodity crops. A large share of subsidy goes to very large producers, reflecting that there is no priority on encouraging the relatively small scale of production that makes personal, physical engagement viable and can reward integrated, multi-crop operations over single-crop farming.¹⁴⁸ Relatively lax implementation of anti-pollution laws in agriculture gives an effective advantage to large operations whose concentration of animals produces lagoons of semi-liquid, off-gassing waste.¹⁴⁹ Regulations permit regimes of "sub-therapeutic" antibiotics in concentrated animal-feeding operations.¹⁵⁰ This is necessary for concentrated populations to survive without

¹⁴⁸ See Doug O'Brien, *Policy Approaches to Address Problems Associated with Consolidation and Vertical Integration in Agriculture*, 9 DRAKE J. AGRIC. L. 33 (2004); Neil Hamilton, *Reaping What We Have Sown: Public Policy Consequences of Agricultural Industrialization and the Legal Implications of a Changing Production System*, 45 DRAKE L. REV. 289 (1997)

¹⁴⁹ See Sam Kalen, *Agriculture, Food, and Environmental Policy*, 26 Nat. Res. & Env't 1 (2011); Kate Celender, *The Impact of Feedlot Waste on Water Pollution Under the National Pollutant Discharge Elimination System (NPDES)*, 33 Wm. & Mary Env't'l L & Policy Rev. 947 (2009); Erin M. Tegtmeier and Michael D. Duffy, *External Costs of Agricultural Production in the United States*, 2 Int'l J. of Ag. Sustainability 1 (2004).

¹⁵⁰ See, e.g., JONATHAN SAFRAN FOER, *EATING ANIMALS* 123-43 (2009) (describing disease threats associated with confined agriculture); MICHAEL POLLAN, *THE OMNIVORE'S DILEMMA* 173-83 (on the use of antibiotics as a keystone of confined animal feeding operations).

epidemics, even though the practice risks breeding antibiotic-resistant strains of animal diseases and, perhaps, bugs that also sicken people. Small producers face interlinked logistical and regulatory bottlenecks: slaughtering facilities are often far from producers, adding travel cost, fuel consumption, and animal stress at the last stage of raising meat.¹⁵¹ This shortage is difficult to overcome in part because of the small number of federal health-and-safety inspectors, itself a government accommodation of industry consolidation that was expected to be irreversible.

These considerations are sometimes marshaled as arguments against the current state of the law, but, of course, on standard CBA analysis, whether that follows depends on the bottom line. Various defenses of industrial-scale agriculture vindicate one aspect or another as less resource-intensive than the smaller and more participatory farming that the food movement embraces – even, notoriously, in cases where the industrial produce in question travels halfway around the world. The argument for small-scale and labor-intensive production sometimes piggybacks on CBA and environmental economics, but it is far from being coextensive with those.

By contrast, if one starts with the qualitative ideal, then thinking of agriculture entirely in conventional cost-benefit terms comes to seem misplaced in much the same way that proposals to privatize and develop the entire continent seemed in light of the movement for national parks and other public recreational land. The older perspective lost force once many Americans accepted that the Romantic mode of engagement with the natural world was worth promoting through federal policy. On the view that farming offers its own kind of experiential value, the case for policies that reverse regulatory biases toward large, specialized production stands on its own, rather than resting on derivative grounds. That does not mean that the case must prevail, of course; but its grounds are its own. On this view, agricultural policy is, in a serious sense, cultural policy, like establishing national parks. Parks policy is an investment in an experience of nature that generates thinking about nature, humanity, and the relation between the two. Similarly, agricultural policy that supported small-scale and participatory food-raising would be an investment in the conditions of developing environmental ethics.

I do not think I have put myself in a position to argue decisively for these policies, but I hope I have set out what such policies would be and what reasons might support them. Understanding their contours and place in the ferment of environmental ethics is essential to preparing for any future debate on particulars.

¹⁵¹ For discussions of regulatory and infrastructure bottlenecks that impede small and unconventional farmers, and of possible reforms, see Neil D. Hamilton, *Moving Toward Food Democracy: Better Food, New Farmers, and the Myth of Feeding the World*, 16 *DRAKE J. AGRIC. L.* 117 (2011); Michael Pollan, *An Open Letter to the Next Farmer-in-Chief*, *NY TIMES*, Oct. 12, 2008.

B. Animals and the Ethics of Encounters Across Species

As noted earlier, it did not take long for environmental ethicists to identify a paradox in thinking about the moral status of animals. If it is as individuals that animals are valuable, then their interests seem to invite, even demand, dramatic departures from existing practices relations, which involve considerable animal suffering.¹⁵² If, instead, animals are valued as “part of nature,” then their suffering seems as natural as their existence.¹⁵³ So, indeed, might human exploitation of other species, which on a holistic perspective is arguably no less “natural” than other predators’ use of the creatures they eat.

All of this floats somewhat above more specific questions about how to show regard for animals. Whatever the conceptual force of the problem that suffering and exploitation are also “natural,” there is a core of situations, concerning domestic and, especially, agricultural species, in which humans exercise comprehensive control over the conditions of other species. These situations – we can take the factory farm as just one example – are thoroughly artificial: we made them.¹⁵⁴

At least in this core situation, it seems plausible to say that individual animals’ interests (or moral importance otherwise described) should figure prominently. In a direct way, we create and control their suffering, and that fact is the prompt for ethical reflection. The debate over the treatment of animals is deep and consequential.¹⁵⁵ If arguments against eating meat and factory farming win

¹⁵² See, e.g., Cahen, *Against the Moral Considerability of Ecosystems*, *supra* n. [46] at 114-23 (setting out the case that on even modestly individualistic premises, it is very difficult to ascribe moral importance to a “whole” such as an ecosystem); Varner, *Can Animal Rights Activists Be Environmentalists?* *supra* n. [46] at 95-104 (setting out this basic tension).

¹⁵³ See Sagoff *Animal Liberation and Environmental Ethics*, *supra* n. [45] at 38-44 (arguing this point); Katz, *Is There a Place for Animals in the Moral Consideration of Nature?* *supra* n. [45] at 85-93 (exploring this difficulty and arguing for a “balanced” approach).

¹⁵⁴ Artificiality should not be opposed categorically to nature: indeed, much of the reason for the troubled character of the distinction is that human nature is partly that of *homo faber*, the fabricator, or maker. Surely part of the point of any environmental ethics is to think through taking responsibility for this maker’s power, and so the thought that it would make sense to pass off any and every form of domination over other species as “natural” seems a sign that something has gone wrong.

¹⁵⁵ See PETER SINGER, *ANIMAL LIBERATION* 1-24 (setting out the argument for equality of moral concern based on suffering).

acceptance, they will imply that most Americans are now engaged in a massive violation of basic morality.¹⁵⁶ The food system stands alongside the prison system among (some) Americans' candidates for the great wrong of our time.

I want to put forward two approaches to this issue that have markedly different implications, then argue for a third that is not so much an alternate moral metric as a way to think about how law can contribute to ethical development in this area. The first view is broadly *abolitionist*, concluding that there is no moral defense for most of the present human use of animals.¹⁵⁷ The second approach is the *reformist* one that seeks to renovate human relations with animals while preserving extensive domestication and/or meat-eating.¹⁵⁸

The most visible recent reformist proposal comes not from a philosopher or a lawyer, but from the journalist Michael Pollan. In *The Omnivore's Dilemma*, Pollan argues for a version of animal husbandry in which animals enjoy extensive freedom to use their physical faculties, interact with non-industrial (classically pastoral) settings, and have, so to speak, lived (foreshortened versions of) the lives suitable to their species when they go to slaughter.¹⁵⁹ The basic structure of this quasi-Aristotelian argument is that domesticated species have no prospect of existence outside domestication, and so any interests assigned to an individual member of a domestic species must be compatible with a life lived within an ongoing system of domestication.¹⁶⁰ This standard excludes factory farming, which denies animals nearly all spontaneous activity, appears to traumatize any species capable of conscious experience, and reduces individuals to a caloric production-function.¹⁶¹ It embraces neo-traditional farming of the kind that Pollan, Whole Foods and similar enterprises, and the food movement have done much to publicize.¹⁶²

The problems with this approach are several. It presupposes a controversial relation between individual and species interests by limiting animals' interests to

¹⁵⁶ See *id.* at 95-158 (detailing farming practices as a massive violation of morality).

¹⁵⁷ See GARY L. FRANCIONE & ROBERT GARNER, *THE ANIMAL RIGHTS DEBATE: ABOLITION OR REGULATION?* 1-102 (2010) (setting out the case for abolition of human exploitation of non-human animals).

¹⁵⁸ See *id.* at 103-74 (setting out case for reform rather than abolition of human-animal exploitation).

¹⁵⁹ See MICHAEL POLLAN, *THE OMNIVORE'S DILEMMA* 304-33 (2006) (arguing for an Aristotelian approach to the treatment of domestic animals).

¹⁶⁰ See *id.* at 319-25.

¹⁶¹ See *id.* at 315-19.

¹⁶² See *id.* at 328-33.

those activities that will induce people to keep their species alive. In the same move, it implicitly prizes human convenience over ethical limits: Why else would the fact that we “made” these species and sustain them limit the obligations we might have to their individual members? Is it right that slaughter at a small fraction of its natural life span is compatible with an animal’s interest in a life appropriate to its species? The same point holds for the castration of most domesticated male mammals, a practice that forecloses certain characteristic activity even though it leaves individuals free to enjoy sunshine and mud. The obvious appeal of Pollan’s position is that it proposes to reconcile persistent and opposite impulses: to continue our basic relations to other animals and to check some of the palpable enormities of those relations. Whether it succeed is less clear.

Rather than adjudicate between reform and abolition, I would like to emphasize a commonality between the two and make the case for a third, complementary approach. Both approaches rest on a confident ascription to animals of a set of interests, or, more broadly, a version of moral significance. An abolitionist might find astonishing – to put it charitably – Pollan’s confident judgment about what it means to be a pig; but the abolitionist, too, has a definite view about the same issue, albeit one that displays polemical clarity rather than cloying sympathy. Each, then, depends on having concluded judgment on a question that – as the continuing dispute among thoughtful people is enough to show – has not been concluded in the larger ethical, political, and legal argument.¹⁶³

The continuing dispute reflects the difficulty of the problem: how to interpret animal consciousness, which we cannot know except through speculation and which likely is very different from ours. Genuinely difficult problems like this one can give rise to ethical development, which law might help or impede.

The ethical resource that has special promise in this area is uncanniness, the mixed ethical and aesthetic recognition of not knowing another’s consciousness. To experience uncanniness in the face of an animal is to be right up against a question – what does this other consciousness mean? – that will not resolve itself into one clear answer. That is a position in which we might hope to learn from our own acknowledged confusion.¹⁶⁴

Law might make this potentially generative problem more palpable. The public conversation around animals suggests that practices like factory farming have few open defenders. Instead, they benefit from concealment, an enforced invisibility that collaborates with the tendency to avoid what is unpleasant. Access

¹⁶³ For a finely expressed exploration of this continuing cultural irresolution on the question, *see generally* JONATHAN SAFRAN FOER, *EATING ANIMALS* (2009) (engaging with sympathetic imagination a range of perspectives on the book’s title topic).

¹⁶⁴ *See* KYSAR, *supra* n. __ at 176-202; MORTON, *supra* n. __ at 52-54 (on the ethics of the uncanny in encounters with animals).

to confined feeding operations and slaughterhouses is notoriously restricted, and the reports of those who seek it (including me) suggest that access policies are more confining in action than on the books.¹⁶⁵ There is every self-interested reason for livestock operations to take this stance. Today as when Upton Sinclair wrote *The Jungle*, debates about meat tend to arise from triumphs of muckraking.¹⁶⁶ Even Peter Singer's touchstone philosophical argument, *Animal Liberation*, makes extensive use of vivid description to convey its case for the ethical importance of animal suffering.¹⁶⁷ Reflection in this area seems to arise more from being confronted with what we have managed to avoid than from thinking through the conceptual consistency of our attitudes. Whoever favors ethical stasis thus has a strong interest in maintaining a culture of avoidance.

A culture of avoidance has a legal infrastructure: the concealment of industrial feeding and slaughter operations rests on the property right of exclusion. The most straightforward way to invite more engaged reflection on our use of animals would be by statutory creation of a "right to know" the sources of one's food, implemented by a public right of access, under controlled conditions, to industrial food operations. Depending on considerations of safety and convenience, physical access could be supplemented, and in some cases replaced outright, by video technology. Slaughterhouses might be required to admit independent film crews producing publicly available documentaries (one thinks optimistically of the use Werner Herzog made of strictly limited access to the Chauvet caves), or simply to install web cameras. Labeling requirements could include the slaughterhouse where meat was processed and the web address where buyers could observe that facility. The public benefit (which is probably too blandly upbeat a word) would be the opportunity to observe, vividly and often in real time, the human-animal relations that produce most meat in the US.

One way to understand such a public-access right would be as a version of a disclosure requirement. Elsewhere in environmental law, the Toxic Release Inventory, which requires regulated facilities to disclose their toxic emissions, has been generally celebrated and associated with emission reductions under the

¹⁶⁵ See FOER, *supra* n. __ at 81-94 (on thwarted attempts to visit factory farms by permission, followed by a clandestine trespass into one); ERIC SCHLOSSER, FAST FOOD NATION 169-70 (2001) (describing an illicit visit to a slaughterhouse). I, too, have visited an industrial slaughterhouse, also smuggled in, after being denied official permission.

¹⁶⁶ See SCHLOSSER, *supra* n. __ at 169-78 (describing a slaughterhouse); UPTON SINCLAIR, THE JUNGLE (1906) (portraying the lives of immigrant laborers in the meat industry).

¹⁶⁷ See Peter Singer, ANIMAL LIBERATION 95-158 (2002) (describing practices on factory farms).

pressure of public disapproval.¹⁶⁸ Disclosure requirements in financial regulation and corporate governance are a standard way to improve actual markets' approximation to the ideal of perfect information.

The basic difference is that here the information is not just instrumentally valuable to pursuing established goals, such as profit or a certain level of clean air. Instead, the information that comes from visiting a slaughterhouse feeds into the formulation of goals, or, put differently, the development of values. This is another instance of the way law establishes the framework of experience in which ethical change happens. A public-access right, then, would represent a kind of cultural subsidy, a regulatory thumb on the scale for informed ethical judgment.

This proposal aims at industrial operations, but there are other ways to encourage exposure to the use of animals that is in ethical question here. For instance, agricultural policies to promote smaller-scale and integrated farming, described a bit earlier, increase opportunities to observe slaughter, castration, and other aspects of animal husbandry at close range. Outside the industrial setting, such observations would test by experience's Pollan's argument that the relation between people and animals in such operations is ethically desirable.¹⁶⁹ Participation in policies that assist small-scale operations might be conditioned on providing certain rights of public access on the same right-to-know theory that I have just imagined applying to industrial operations.

These proposals are connected with the uncanny because they aim to make concrete the enigma of another animal's experience, suffering, and death. Meeting that enigma first-hand is one way of enriching the basis for judgments about how to treat members of other species, and, closely related, what sense we can make of their experience. Much as encounters with nature's most dramatic and severe settings once struck members of the Sierra Club and Wilderness Society as essential to developing a sense of the sublime in nature, now encounters with everyday violence might be invaluable in learning to assess the things we already do but tend not to see. The question of nature's value here is an ongoing one, whose development law can help or impede.

C. Climate Change, Rationality, and Vision

Climate change is widely recognized as a uniquely confounding challenge on standard accounts of instrumental rationality and the collective-action problems that stylized rational agents encounter.¹⁷⁰ It involves spatial and temporal

¹⁶⁸ See 42 U.S.C. sec. 116, *et seq.* (establishing mandatory public disclosure of toxic releases).

¹⁶⁹ See POLLAN, *THE OMNIVORE'S DILEMMA*, *supra* n. __ at 333 (noting the desirability of public knowledge of slaughtering practices).

¹⁷⁰ For a fine introduction to these issues, see RICHARD TUCK, *FREE RIDING* (2008).

externalities large enough to swamp internalized effects and make it the collective-action problem that ate the planet.¹⁷¹ My interest here is different: whether climate change also confounds standard ethical concepts, and, if so, what sort of innovation could make ethical sense of its challenges. The bottom line: the ethical novelty of climate change presents real difficulties for established ethical frameworks. Engaging these productively would mean treating environmental ethics as a field of considerable plasticity.

A good deal of the climate debate has concerned questions of justice and responsibility among individuals and nations: assuming extensive harm from climate change, who bears responsibility for this harm, to whom is the responsibility owed, what kind of recompense is appropriate, and what is the baseline from which harm is to be measured? Some argue that the dispersed character of causal contributions to climate change and ambiguous status of any baseline confound ethical judgment on these issues.¹⁷² Others respond that the questions are tractable – though they do not agree on the answers.¹⁷³

The question for environmental ethics has different content but some of the same structure. What kind of specifically environmental value is implicated in climate change, and does climate change affect that value in ways that call into question the adequacy of established ways of proceeding in this area?

An overlapping set of issues applies to the questions of justice mentioned above and the environmental-ethics problems connected with climate change. As sketched in the earlier discussion of harm aversion, students of moral psychology argue that perceptions of wrong and harm are connected with palpable A → B transactions such as hitting another person or pushing someone from a bridge into harm's way.¹⁷⁴ Perceptions of harm weaken as the effect of one's action becomes less direct and corporeal, even at the modest threshold of throwing a switch to cause harm "indirectly" rather than touching another's body, and complex causal

¹⁷¹ See Purdy, *The Politics of Nature*, *supra* n. __ at 1132-34 (setting this out).

¹⁷² See DALE JAMIESON, CLIMATE ETHICS (so arguing) (forthcoming, on file with author); Steven M. Gardiner, *A Perfect Moral Storm: Climate Change, Intergenerational Ethics, and the Problem of Corruption*, 15 ENVIRONMENTAL VALUES 397 (2006).

¹⁷³ See Eric Posner & Cass Sunstein, *Climate Justice*, 96 GEO. L.J. 1565 (2008) (concepts of distributive and corrective justice fit climate change poorly); PETER SINGER, ONE WORLD: THE ETHICS OF GLOBALIZATION 14-50 (2002) (arguing for equal global per capita claims on the atmosphere, which would imply significant redistribution on imagined greenhouse-gas markets); *but see* Posner & Sunstein, *Should Greenhouse Gas Permits Be Allocated on a Per Capita Basis?* 97 CAL. L. REV. 51 (2009) (arguing against this proposal on both welfare and fairness grounds).

¹⁷⁴ See Haidt & Kesebir, *Morality*, *supra* n. __ at 822.

relations soon lose much of their power to move the mind.¹⁷⁵ In what seems to be a closely related phenomenon, moral response to identifiable individual victims of harm is much stronger than response to numerous, less richly specified victims: large numbers and impersonal representation seem to still moral response altogether, spelling out the psychological reality behind Stalin's grim quip that one death is a murder, a million deaths a statistic.¹⁷⁶ Our moral responses avert murders better than they assess statistics.

Going by this distinction, climate change is all statistics. Greenhouse-gas emissions (at quite various levels) by billions of individuals across the last several centuries produce a globally dispersed, systemic change that intensifies certain atmospheric processes in a terrifically complex global phenomenon, all against a naturally unstable baseline. That said, however, massive complexity marks many of the other problems that concern environmental ethics, such as air and water pollution and the effects of toxins. Is climate change really different?

There is a fair case that it is. Begin with the ethical intuition of harm behind much of modern environmental law, that "pollution" introduces a harmful, alien agent to an otherwise healthy system, and this agent fairly directly sickens individual animals and people.¹⁷⁷ This is the narrative that recurs throughout Rachel Carson's *Silent Spring*, taproot of the environmental imagination in the age of anti-pollution statutes, and it fairly captures the tone of most of the public discussion around those statutes: human effluents were seen as filling up a clean world, making it unhealthful and unsafe for those who had evolved to thrive in it.¹⁷⁸

¹⁷⁵ See Greene, *Innateness*, *supra* n. __; Joshua D. Greene et al., *An fMRI Investigation of Emotional Engagement in Moral Judgment*, 293 *SCIENCE* 2105, 2106-07 (2001)

¹⁷⁶ See Paul Slovic, "If I Look at the Mass I Will Never Act," *Psychic Numbing and Genocide*, 2 *JUDGMENT AND DECISION MAKING* (no. 2) 79-95 (2007).

¹⁷⁷ This description smacks of a "foundation" of environmental ethics is that Jonathan Haidt calls "purity/sanctity," a motive that encompasses "[c]oncerns about physical and spiritual contagion, including virtues of chastity, wholesomeness, and control of desires." Haidt & Kesebir, *Morality*, *supra* n. __ at 822. As Mary Douglas argued decades ago, the idea of pollution that powers the modern environmental imagination is not only prudential: it has strong tones of desecration, of "pollution" in the religious and ritual sense of the taboo, the untouchable, the urgent barrier between the sacred and the profane. See MARY DOUGLAS, *PURITY AND DANGER* (1966); John Copeland Nagle, *The Idea of Pollution*, 43 *U.C. DAVIS L. REV.* 1 (2009) (arguing for value of a broad idea of pollution that participates in the purity/sanctity divide). Nonetheless, the concept of harm seems more useful to me here.

¹⁷⁸ See generally RACHEL CARSON, *SILENT SPRING* (1962); see also *The Age of Effluence*, *TIME*, May 10, 1968, at 52

Many of the pollutants that shaped this generation of problems are synthetic or, at least, novel when industrial processes introduce them into ecosystems in large amounts. Moreover, they are generally toxic, or at least harmful, when individuals are exposed to them. Traditional pollution always had something of the statistic about it, but it also had elements of a more familiar harm: a marked violation of a desirable baseline (non-violence, non-pollution) and harm to individuals that seemed to follow relatively directly from this violation.

The difference from climate change is twofold. First, the major greenhouse gases, notably carbon, are already pervasive in the atmosphere, and their processing is part of global cycles integral to life as we know it.¹⁷⁹ They do not, by themselves, harm individuals by exposure in concentrations remotely resembling their atmospheric levels. Even if exposure to a toxin at sub-acute levels increases only the probability of illness, an abstract and statistical harm, it does so in a more direct way, traceable to a more marked departure from a clearer baseline, than climate change.

It also seems important motivationally, though maybe not conceptually, that consumption of fossil fuels and, perforce, emission of greenhouse gases is as thoroughly entwined with our way of life as anything is, as essential to our present social existence as sexuality is to our biological being. There is a higher psychological hurdle in seeing these thoroughly quotidian emissions as a harmful departure from an appropriate baseline than in the case of specific toxins that we can as well imagine doing without.

Another major class of appeal for modern environmental law is that of the charismatic individual, species, or place. Appeals to sublimity and epiphany in the Romantic tradition of American preservation relied heavily on the sanctification of certain landscapes and peaks as pilgrimage sites. John Muir even wrote of seeing the “face of God” in the sun-washed granite fields of the Sierra Nevada, linking the grandeur of the place to a divinity that was at once personal and pantheistic.¹⁸⁰ Again and again, calls for preservation of large natural areas and systems were anchored on touchstone places, whether Yosemite Valley, the neighboring (now inundated) Hetch Hetchy, or Dinosaur Monument, the site of the Sierra Club’s defining post-World War Two preservation fight and occasion of a great increase in

¹⁷⁹ See MICHAEL SHELLENBERGER & TED NORDHAUS, *BREAK THROUGH! FROM THE DEATH OF ENVIRONMENTALISM TO THE POLITICS OF POSSIBILITY* 105-29 (2007) (climate change breaks the “pollution paradigm”); *but see* Carl Pope, *There Is Something Different about Global Warming* (responding to the above with an argument that the “pollution paradigm” largely holds for greenhouse gases), *available at* <http://grist.org/politics/pope-reprint/> (Jan. 14, 2005).

¹⁸⁰ See MUIR, *MY FIRST SUMMER IN THE SIERRA*, *supra* n. __ (quotes showing this divinization of landscape).

the club's membership and national attention to its agenda.¹⁸¹ The same logic held in passage of the Endangered Species Act, which by its terms makes biodiversity a defining national priority, but overwhelmingly passed Congress on enthusiasm for the eagles, bears, and wolves that environmentalists have learned to call, with eyebrow arched, charismatic megafauna.¹⁸²

The point is that the developments that seem to introduce a more “ecological” ethic into the law – one concerned with the operation of systems of indirect, complicatedly mediated effects – seem on closer inspection to rely on traditional conceptions of harm and morally compelling “victims” – sometimes including spectacular places – in ways that do not work for appeals about climate change. Attempts to anchor a climate politics on the projected fate of individual species, notably the polar bear, are also a desperate attempt at a heroic synecdoche.¹⁸³ If a polar bear cub can stand in for the global atmosphere, that might make climate change's effects morally compelling. Though it is surely too early to draw conclusions from the fact that this tactic seems not to have worked, that fact is at least consistent with the suggestion I am advancing here: that climate change ties deed and result together by threads that are too many, long, tortuous, and obscure to fit the familiar ideas of victim, harm, and responsibility that have remained central to the “ecological” era of environmental lawmaking.¹⁸⁴

These difficulties invite the question whether there is a way of finding motivation in the very sort of ecological complexity that seems to confound familiar kinds of moral psychology. There is a way of responding to this complexity that has much in common with the traditional aesthetic register of beauty: appreciation of the elaborate interdependence of living and non-living systems. Aldo Leopold, among others, argued that the cultural challenge for ecological thinking was to

¹⁸¹ See RODERICK NASH, *WILDERNESS AND THE AMERICAN MIND*, *supra* n. __ (passages discussion this history).

¹⁸² See Shannon Peterson, *Congress and Charismatic Megafauna: A Legislative History of the Endangered Species Act*, 29 ENVTL. L. REV. 463 (1999) (describing species invoked in Congress during the debate over the ESA).

¹⁸³ See, e.g., TIM FOREMAN, *THE LAST LITTLE POLAR BEAR: A GLOBAL CHANGE ADVENTURE STORY* (2007) (using polar-bear narrative to inspire concern about climate change).

¹⁸⁴ See Elisabeth Rosenthal, *Where Did Global Warming Go?* N.Y. TIMES, Oct. 15, 2011 (documenting decline in public concern about the issue and in political leaders' engagement with it); Frederick W. Mayer, *Stories of Climate Change: Competing Narratives, the Media, and U.S. Public Opinion 2001-2010* (Dec. 14, 2011) (documenting the fragmentation of US climate discussion into competing “narratives”) (unpublished paper, on file with author).

cultivate this response.¹⁸⁵ Leopold proposed to assess actions and human institutions by whether they tended to support or erode the processes that sustain complex ecological systems. Thus he argued that “a thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise.”¹⁸⁶ These old sentences repay careful attention. A *thing* is broader than a personal action or a set of laws, though it may be either: it also may refer to cultural habits, personal propensities to act a certain way, or anything else that invites assessment. Leopold’s formulation sets aside the confounding task of tracking the effects of any specific action or other “thing,” in favor of attention to the *tendency* to affect natural systems in one way or another. In characterizing those tendencies, Leopold also set aside reliance on a fixed baseline, such as the condition of undisturbed “natural” systems, in favor of more dynamic goals for actively governing how we inhabit and inevitably shape the natural world. The touchstone here is the *qualities of systems* that enable them continue robustly through internal disruption and exogenous shocks. This ethical approach does not rely on any thought of a “world without us” from which to measure our effect, but assumes an inhabited world already shaped by our use. One might address the same question of “integrity, stability, and beauty” to a wilderness area or a heavily farmed region, and one might think of the global atmosphere and climate system as itself such a “place.”

Leopold included “beauty” in his list of system characteristics, but his aim was to redefine beauty from a stable pastoral order, tending to simplicity and regularity, to a quality residing in sustainable complexity.¹⁸⁷ He also aimed to reorient ethical judgment to a standard compatible with this appreciation of complexity: the tendency of a way of acting, or a way of living, to sustain or undercut complex systems. The ambition here is to cultivate a kind of virtue ethics in which a part of what the virtuous person perceives and responds to in the natural world is an ecological version of beauty, and in which complexity stands as its own value and motivates action that is consistent with preserving it.

There are several reasons that this approach might have more promise than others that have run up on the shoals of climate change. For one, this account of both the criteria of good action and its motivation seems better able to capture the stakes of personal action in climate change than the concept of harm, dogged as the latter is by dispersed and uncertain causation. Whether an action tends to support or degrade certain characteristics of the atmospheric system is an easier judgment

¹⁸⁵ See Leopold, *The Round River*, *supra* n. __ at 201-02 (calling for new “ethical and aesthetic premises” built in part on “universal curiosity to understand the land mechanism,” that is, to understand ecological relations).

¹⁸⁶ ALDO LEOPOLD, *The Land Ethic*, in *A SAND COUNTY ALMANAC*, *supra* n. __ at 262.

¹⁸⁷ See LEOPOLD, *The Round River*, *supra* n. __ at __ (calling for an agriculture that integrates wild and tame in a sustainable and productive system, and for learning to find beauty and wonder in such a system).

than whether it harms some more specific entity via the climate system, and is also easier than whether it somehow “harms” the climate system itself by moving it off a “natural” baseline. One could argue, of course, that defining good system characteristics (“beauty, stability, integrity”) is a way of setting a baseline for harm, but my – contestable – claim here is that a different moral grammar gets engaged by the virtue-ethics question, which does not require describing the harmed entity or causal relation with anything like the same precision.

For another thing, the central place that perception plays in this account fits the fact that changes in perception – what can perhaps be best described as value-drenched perception – have been vital in environmental value. Again and again, seeing the natural world in a new way has been the wellspring of new accounts of the value of nature and of the human place in it. To think about the ethics of climate change in these terms is to think of it as involving a cultural and imaginative challenge: to find a way to perceive global and largely invisible processes in ways that are responsive to their beauty, integrity, and stability, or cognate values. Even to name this challenge marks the difference between its scale and that of earlier changes in perception, which involved learning to see differently something we can in fact see, such as a bare granite landscape, once monstrous, then divinized. Here the challenge is closer to learning to envision what we do not literally see: atmospheric processes and the cumulative condition of much of the planet. Thinking of this sort of change as possible presupposes that our existing moral grammar, which is thwarted by dispersed agency and hyper-complex causation, is not fixed once and for all, but can expand to make perceptible and salient what was once unavailable or impossibly obscure. The same moral grammar whose harm-aversion template impedes clear thinking in environmental ethics can also adopt new perceptions of value through its aesthetic and virtue-ethical modes.

There are a couple of reasons for optimism about this prospect, even though the perceptual change it would involve might seem qualitatively different from earlier changes. One is that, although “seeing” the planet or atmospheric system might require technological mediation because it is impossible (for those of us not planning to ride Sir Richard Branson’s for-hire space shuttle) to do with the ordinary eye, this mediation is not new to developments in environmental ethics. Although the paradigmatic experience of Romantic preservation for Sierra Club members was the high-country pilgrimage, an enormous amount of the sentiment that gathered around Romantic environmental politics centered on photography, with its power to transport to the eye to a memorialized sublime vista.¹⁸⁸ A collection of pictures from Dinosaur Monument was a centerpiece of the Sierra Club’s public appeal in that emblematic conflict, and most of those who were moved

¹⁸⁸ See HANS HUTH, *NATURE AND THE AMERICAN: THREE CENTURIES OF CHANGING ATTITUDES* 30-53, 87-104 (1990)(on the importance of visual culture in the development of Romantic attitudes to the natural world).

to defend that place never saw it in person.¹⁸⁹ The use of pictures goes back to the beginning of this mode of preservation politics, and precedes it in the sublime landscape paintings and popular prints that prepared the cultural ground for it in earlier decades of the nineteenth century.¹⁹⁰

Moreover, climate change is not the first case to present the challenge of capturing elusive and frequently invisible processes through concrete activity that is partly a literal engagement with those processes, partly a matter of symbolic relation to them. As I argued earlier, food and agriculture have become emblems for ecological engagement.¹⁹¹ It is certainly imaginable that similar developments could happen around climate.

How might law contribute to this possible cultural development? One step is for scholars and commentators to hold themselves open to the thought that political efforts to build legal regimes may make essential cultural contributions even if, viewed as lawmaking or regulatory strategies, they seem futile. For instance, municipal efforts to address greenhouse gas emissions and community-level attempts to define a personal ethics of low-carbon living, although palpably ineffective in one way – they will not directly contribute much to reducing global emissions – may nonetheless turn out to be effective in somewhat the way Sierra Club excursions were: as essays in new ways of experiencing climate change as important, and in new shared vocabularies for expressing and elaborating its importance.¹⁹² That is, we might regard law and lawmaking as forums in which a cultural and imaginative argument proceeds – an argument that will help to lay the foundation of any legal regime that effectively addresses climate change. This is not so much a matter of what the law *should do* as it is about how all involved in it should understand what it already does and is likely to do: provide a forum in which we give increasingly definite shape to shared questions that, however regrettably, we are not yet prepared to resolve.¹⁹³

¹⁸⁹ See WALLACE STEGNER, *THIS IS DINOSAUR: ECHO PARK COUNTRY AND ITS MAGIC RIVERS* (1955).

¹⁹⁰ See Angela Miller, *The Fate of Wilderness in American Landscape Art*, in *AMERICAN WILDERNESS: A NEW HISTORY* 91, 91-112 (ed. Michael Lewis, 2007) (on the role of landscape painting in the development of wilderness sentiment).

¹⁹¹ See *supra* IV.A.

¹⁹² See Krakoff, *supra* n. __ (so arguing); Purdy, *The Politics of Nature*, *supra* n. __ at 1198-99 (same).

¹⁹³ See Benjamin Ewing & Douglas A. Kysar, *Prods and Pleas: Limited Government in an Era of Unlimited Liability*, 121 *YALE L.J.* 350 (2011) (arguing for seeing law's processes, such as torts suits on climate change, as moves in a cultural and political debate over basic values)

This last paragraph contains an undeniably thin and abstract set of legal proposals, especially in proportion to the length of the discussion of moral psychology that precedes it. This reflects in part the fragmentation of climate law and policy, which is such that there is no practical and institutional corollary to the problem of climate change.¹⁹⁴ The failure of US legislation and concomitant guarantee that global emissions-control efforts will be piecemeal and inadequate for the foreseeable future coincide with, and in some ways usher in, a new focus on adaptation.¹⁹⁵ Adaptation is necessarily as diverse as the problems that existing regimes are already addressing, from coastal management to biodiversity, which will change as the global climate does.¹⁹⁶ Having failed to build a regime that unified the problem as a legal topic, we are now thrown back on diverse approaches to a problem that is at once coherent – the basic science is simple and global – and terrifically various in its effects. At the same time, we are also thrown back on the continuing effort to make climate change as a whole tractable for ethics.

The practice that is emerging as a lived ideal in the food movement is one point of possible comparison because it involves assessing acts and ways of life as ethical responses to the complexity of natural systems and of human involvement in them. Like the possibility I have sketched for climate change, it develops an account of how to interact with the natural world that is powered by an appreciation of the beauty of ecological complexity and a motivation to participate sustainably in it. Whether anything comparably concrete and, so to speak, felt, might emerge around climate is an open question.

One might, alternatively, start from the fragmented state of practical responses to climate change and ask how any of these might integrate awareness of climate into a more specific and concrete ethics, as with the food-systems example. Either way, the essential thing to appreciate would be that law and other practical measures are doing two things at once: trying to fix, or at least mitigate, a series of problems, and generating ways of understanding the values that the problems

¹⁹⁴ See James Salzman, *Climate Change and the Law of the Horse* (observing the fragmentation of climate-change law and policy) (forthcoming article, on file with author).

¹⁹⁵ See Alejandro E. Camacho, *A Learning Collaboratory: Improving Federal Climate Change Adaptation Planning*, 2011 B.Y.U. L. REV. 1821 (2011); Camacho, *Assisted Migration: Redefining Nature and Natural Resource Law under Climate Change*, 27 YALE J. ON REG. 171(2010); Daniel A. Farber, *The Challenge of Climate Change Adaptation: Learning from National Planning Efforts in Britain, China, and the USA*, 23 J. ENVTL. L. 359 (2011); J.B. Ruhl, *General Design Principles for Resilience and Adaptive Capacity in Legal Systems – With Applications to Climate Change Adaptation*, 89 N.C. L. REV. 1373 (2011); .

¹⁹⁶ See, e.g., Camacho, *Assisted Migration*, supra n. __ (specifically dealing with endangered species).

engage. As we have seen, this is far from the first time that environmental law has been intensively embedded in a cultural and ethical argument. In fact, that is frequently its situation. All the recommendations in this Part are aimed at recognizing and making better use of this role of law: as a generative participant in ongoing ethical argument.

D. Convergent Reasons for Law to Support Ethical Innovation

It is not obvious that, because there is plasticity in some area of environmental value, law should structure the area to support exploring that plasticity. There are, though, at least three kinds of reason to think that it should, which speak to basically different perspectives on environmental values.

The argument for plasticity that emerged in the 1970s took a decidedly liberal-humanist approach to the stakes of ethical development. As discussed earlier, Tribe's argument against taking CBA as the measure of nature's value *for us* turned on the case that moral perception is an essential aspect of freedom, in which we at once experience ourselves as responding to genuine values and choose those values by accepting their claim on us.¹⁹⁷ Ceasing that process would force an unhappy choice between freedom and the genuineness of value.¹⁹⁸ Whether or not one accepts Tribe's formulation, the basic thought is not hard to get hold of: developing moral perception cultivates a special blend of human capacities in which we are at once responsible and creative, free enough to remake the world and fixed enough to keep our footing as we do so. So seen, environmental ethics is centrally, if not exclusively, an expression of something *about us*, a set of powers we can put to more or less appropriate use. Douglas Kysar has recently re-engaged these themes from a more post-modern point of view, emphasizing that the *liberal* thing, that is, the free and freedom-respecting thing, about moral judgment is precisely its refusal of closure, of any final answer to the questions of value that it both frames and provisionally resolves.¹⁹⁹ Like certain marine mammals, we humans must keep moving or drown.

In a second perspective, environmental ethics is not about us: it is the attempt to see and honor accurately the value present in the natural world. The point of environmental ethics is not what it enables us to do, but what it puts us in touch with or shows us. This was, for instance, the concern of Aldo Leopold, who, although he was concerned with building "receptivity into the yet-unlovely human mind," was centrally concerned with what we should be receptive *to*: his was a

¹⁹⁷ See Tribe, *supra* n. __ at 1332-38.

¹⁹⁸ See *id.*

¹⁹⁹ See KYSAR, *supra* n. __ at 97-98, 194-99, 242-45. My use of *liberal*, of course, refers to the word's etymological root in the Latin for *freedom*.

program of ethical change, but one worth undertaking because the natural world, in all its complexity, was there to be valued.²⁰⁰

The case for promoting ethical development seems most straightforward here. We know enormously more than we once did about the natural world, and our knowledge is growing exponentially. Correspondingly, our power over the rest of nature is vast. Many of our habits of valuing the natural world come down to us from times when the world itself looked very different—erroneously, it now seems. Many of the practical questions we have to resolve engage options—geo-engineering, for instance—that would have been science fiction at best when our existing environmental values came into being. It seems almost unavoidable that, in these circumstances, there would be much left to appreciate about the ethical meaning of natural world and the attitudes we might take toward it.

The third approach is quite different in that it regards ethical perception as instrumental to functional ends, rather than as essentially about the perception of value that is its apparent business. This functional view of ethics has come along with much of the recent work in experimental psychology, reflecting the influence of evolutionary thinking in that field and today's social sciences generally. Jonathan Haidt, for instance, sets his account of the basic, trans-substantive structure of moral psychology within such a theory: ethical responses enable humans to solve collective-action problems, “suppress selfishness”²⁰¹ and achieve widespread cooperation. The question to ask about any formulation of ethics is how it serves this beneficial cooperation by producing and supporting virtues, practices, and institutions that make defection from cooperation less frequent and damaging.

This is nominally a descriptive question, and Haidt and others prudently avoid pronouncements on the philosophers' territory of meta-ethics. Nonetheless, to proceed in this vein *just is* to assume that cooperation and collective flourishing are basically good goals and so that explaining ethics in terms of its service to those goals shows that ethics *makes sense*, not just descriptively as a pattern of phenomena, but normatively as a strut of a reasonable, desirable human achievement. Were it otherwise, one could not finish a defense of the functional theory of ethics with the feeling that contradictions had been resolved into a larger purpose. Thus Haidt can defend “a social-functionalist perspective” by asserting, “The many biases, hypocrisies, and outrageous conclusions of ... moral thinking ... appear to be design features, not bugs.”²⁰²

So, from this perspective, it would seem to be a design failure for a system of social cooperation to produce collective-action problems so extensive in their effects

²⁰⁰ See LEOPOLD, *supra* n. __ at 295. See also Ralston, *supra* n. [38] (arguing a version of this idea); Goodpaster, *supra* n. [38] (same).

²⁰¹ Haidt & Kesiber, *supra* n. __ at 800.

²⁰² *Id.* at 814.

and difficult to solve that they threatened to overrun it. That, however, is precisely what climate change is: a phenomenon of externalities produced by the massively productive integration of individual self-interest and social benefit that defines market societies. So far, our ethical judgments do not go nearly far enough in registering contributions to climate change as harm, or otherwise motivating individual or political responses that approach the scale of the problem. From a social-functional perspective, it would seem that our moral psychology has enabled us to produce a form of social cooperation with collective-action problems larger than any of those that the same psychology helped to overcome along the way, and which that psychology, at present, cannot prevent. Our feature, like Kafka's Gregor Samsa, has woken up one day to find itself a bug.

If I am basically on sound ground in ascribing this normative attitude to the functionalist perspective, despite deliberately mixing normative and positive inquiry, then someone starting from this perspective would be interested in whatever turned our newly revealed bugs back into features. One way this might happen is through the development of ethical perceptions that can motivate a different set of personal and political responses to climate change. (This argument doesn't need to be restricted to climate change, and might be extended to the human ecological footprint generally over the next century, but climate is the clearest case because of the collective-action structure of the problem.) Laws that facilitate ethical development would therefore represent a self-aware effort to create conditions in which the functional account of ethics would describe a success rather than a devastating paradox.

Conclusion: One Relation Between Environmental Law and Environmental Ethics

The purpose of this article is not to give an exposition of John Rawls's thought, but some features of that thought make it an appropriate place to end as well as to begin. As far as I know, Rawls did not return to "right conduct in regard to ... nature." Readers will recall that his career was a steady tack away from metaphysics. In "Justice as Fairness: Political not Metaphysical" and his follow-up book, *Political Liberalism*, Rawls adopted a position that rested not on a theory of reason or human nature, but instead on what he called "the public, political culture" of the United States.²⁰³ This was in part a response to communitarian critics who argued that Rawls's account of justice relied on an indefensibly individualistic conception of the person. In his later work, Rawls built interwoven accounts of justice and political legitimacy on such materials as the Constitution, Supreme Court

²⁰³ There are plenty of debates about whether, on the best reading, *Political Liberalism* in fact develops, clarifies, or abandons Rawls's earlier project. I have no intent of getting into those here.

opinions, and touchstone presidential addresses, all instances of the underlying “public, political culture” whose commitments he aimed to make systematic.

This article argues that what Rawls concluded about political ethics is also true of environmental ethics. The values that orient a political community are the products of that community’s own struggles and efforts at persuasion and discernment. There is little hope of specifying such values, and none of making them authoritative, outside that community’s own experience and argumentative resources. When theorizing about such values aims to engage the community that lives by them (or fails to live by them), it is unavoidably engaged in drawing out the possible meaning of what people have already said and done and proposing how they (or others) might carry it forward. In other words, ethics done in a certain way participates self-consciously in a tradition of experience and reflection, disagreement and persuasion.

Rawls was right, though, that environmental ethics relies on “theor[ies] of the natural order and our place in it.” That these theories emerge through culture and politics, rather than from the head of Zeus, does not make them less essential. It does, however, lay due stress on the fact that they are part and parcel of broader conflicts that are not likely to be resolved by an apt conceptual formulation. Ethical reflection does not tell people what they must or cannot think. By the same token, it is not involved simply in scrupulous application of what they already think. It is part of a continuing argument whose elements include plasticity and creativity.

Environmental law is one of the settings where ethical development takes place. This happens not just in law’s internal processes, such as standing, or in the pronouncements of courts. At least as important is environmental law’s shaping and framing of experience. In experience, new kinds of ethical claims become available, even obvious, which would once have seemed strange. Sometimes this development is relatively quiet, as debate moves around familiar issues and settled compromises. At other times, further-reaching arguments come to the fore in issues not yet settled or even fully defined.

We are now in a time of the second sort. Both the history of environmental law and politics and a structured sense of the vocabulary of ethical change can give us compass-points in this terrain. Environmental law will inevitably shape the experiences and inflect the interpretations that will give these issues their shape in the next generation of what Rawls would have called our metaphysics – a common yet contested view of the world, which we cannot do without but should not expect ever to resolve into just one form. Shaping the law to play this role actively would mean embracing both our creative ethical capacity and our sense of responsibility to make sense of and do justice, in every sense of that word, to the natural world.