

## BOOK REVIEW

### PRAGMATISTS AND ENVIRONMENTALISTS

ECO-PRAGMATISM: MAKING SENSIBLE ENVIRONMENTAL DECISIONS IN AN UNCERTAIN WORLD. By Daniel A. Farber. Chicago: University of Chicago Press. 1999. Pp. xii, 210. \$23.00.

*Reviewed by Lisa Heinzerling\**

#### I. ECO-PRAGMATISM

Lake Superior is the biggest, coldest, and deepest freshwater lake in North America. For a long time, it was also the clearest. On a calm day, the water was once "as pure and transparent as air" and "vividly blue and so transparent that the bottom a hundred feet down seemed within reach of an oar."<sup>1</sup> On a stormy day, Lake Superior is like a living animal: its white-capped waves snarl at the shoreline, devour iron freighters whole, and remind otherwise landlocked midwesterners of their link to the world's oceans.

In 1955, a company called Reserve Mining began mining taconite on the north shore of Lake Superior.<sup>2</sup> Reserve extracted iron ore from taconite through a process that left two tons of taconite residue — "tailings" — for each ton of iron ore produced.<sup>3</sup> The company dumped the tailings into Lake Superior. Soon after Reserve began operations, fishermen began to report that gray slimes were growing on their nets, that they were catching fewer fish, and that their once clear, blue lake had turned a cloudy green along almost forty miles of its shoreline.<sup>4</sup> Studies conducted by scientists at the Minnesota Department of Health in 1956 and 1957 indicated that the gray slime and green cloud were associated with the tailings from the Reserve Mining plant.<sup>5</sup> These studies were not made public until the late 1960s.<sup>6</sup> By then, Re-

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<sup>1</sup> THOMAS F. BASTOW, "THIS VAST POLLUTION . . .": *UNITED STATES OF AMERICA V. RESERVE MINING COMPANY* 63, 64 (1986) (quoting Jonathan Carver and Webb Waldron, respectively).

<sup>2</sup> See *id.* at 8.

<sup>3</sup> See FRANK D. SCHAUMBURG, *JUDGMENT RESERVED: A LANDMARK ENVIRONMENTAL CASE* 32 (1976).

<sup>4</sup> See BASTOW, *supra* note 1, at 9.

<sup>5</sup> See *id.*

<sup>6</sup> See *id.* at 10, 12.

serve was daily unloading 67,000 tons of tailings, along with 700 million gallons of waste water, into the lake.<sup>7</sup> In twelve days, Reserve “discharged more sediments into Lake Superior . . . than all the lake’s U.S. tributaries discharged into it in an entire year”<sup>8</sup> — a volume that led one researcher to conclude that Reserve Mining’s activities constituted “a major geological event in the history of the world’s largest expanse of fresh water, comparable to the arrival of European civilization.”<sup>9</sup>

In 1972, the United States sued Reserve Mining to stop its discharge of taconite tailings into Lake Superior.<sup>10</sup> The litigation initially focused on the effect of taconite tailings on Lake Superior’s ecology (p. 20).<sup>11</sup> A little over a year into the litigation, however, a scientist at the National Water Quality Laboratory in Duluth discovered asbestos in Duluth’s water supply and traced it to Reserve’s tailings.<sup>12</sup> Thereafter, the litigation fixed on the question whether any of the 200,000 people who lived on the north shore of the lake would, sometime in the future, contract cancer due to prolonged consumption of water contaminated with asbestos (pp. 20–21). Although it was by then clear that inhaling asbestos was dangerous, it was not known whether drinking asbestos was similarly risky (p. 22).

Throughout the litigation, federal district judge Miles Lord expressed a desire to develop a remedy that would both abate the pollution of Lake Superior and keep the Reserve Mining plant open (p. 23). He pointedly questioned Reserve officials about the possibility of disposing of the tailings on land. The officials consistently maintained that the only alternative to Reserve’s existing method of disposal was disposal through a 150-foot-deep pipe in the lake, which would move the tailings toward the very bottom of the lake where they would, in theory, produce less harm.<sup>13</sup> Reserve representatives repeatedly denied having any plan for land disposal.<sup>14</sup>

Near the end of trial, this testimony was shown to have been false. Not only had Reserve itself rejected the plan for “deep pipe” disposal as technically infeasible, it had also conducted detailed studies of the

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<sup>7</sup> See *id.* at 8–9.

<sup>8</sup> *Id.* at 17.

<sup>9</sup> *Id.* at 82 (discussing the findings of Dr. James Kramer, an expert on the sedimentary geology of the Great Lakes).

<sup>10</sup> See *United States v. Reserve Mining Co.*, 380 F. Supp. 11 (D. Minn. 1974). Citizens’ groups and the states of Michigan, Minnesota, and Wisconsin later joined the case as plaintiffs. See BASTOW, *supra* note 1, at 73.

<sup>11</sup> Parenthetical page references are to DANIEL A. FARBER, *ECO-PRAGMATISM: MAKING SENSIBLE ENVIRONMENTAL DECISIONS IN AN UNCERTAIN WORLD* (1999).

<sup>12</sup> See SCHAUMBURG, *supra* note 3, at 149.

<sup>13</sup> See BASTOW, *supra* note 1, at 50–51, 145.

<sup>14</sup> See *id.* at 145.

feasibility of land disposal and had concluded that land disposal would cost less than half the amount the company had suggested to Judge Lord.<sup>15</sup> Settlement discussions begun in light of these surprising revelations came to an abrupt halt when the Chairman of the Board of Reserve Mining announced that Reserve was prepared to proceed with land disposal only if the following conditions were met: Reserve would continue operating for the five years needed to construct the land disposal system; Judge Lord would come to "a satisfactory resolution of the alleged health hazard issues"; and state and federal governments would assist the project financially.<sup>16</sup>

That same afternoon, Judge Lord issued his decision. He found that the discharge of taconite tailings into Lake Superior "substantially endanger[ed]"<sup>17</sup> public health and stated that Reserve's proposal to condition a settlement on favorable factual findings — "without regard to the weight of the evidence" — was "shocking and unbecoming in a court of law."<sup>18</sup> He ordered the Reserve Mining plant closed as of midnight that night.<sup>19</sup>

Two days later, the Eighth Circuit dissolved the injunction.<sup>20</sup> The appeals court eventually required Reserve Mining to abate its water pollution through land disposal,<sup>21</sup> which, according to the company's estimate, would cost approximately \$240 million (p. 30). The plant continued to dump tailings into Lake Superior until 1980, when the land disposal system was finally completed (p. 31).

In *Eco-pragmatism: Making Sensible Environmental Decisions in an Uncertain World*, Daniel Farber uses *United States v. Reserve Mining Co.* to explain the features of environmental problems that make environmental decisions hard. The characteristics of environmental problems that, according to Farber, render environmental disputes technically complex and morally divisive are the incommensurability of economic and physical harms, long timelines, and scientific uncertainty (p. 1). This is a good list.<sup>22</sup> And in choosing to use *Reserve Mining* to illustrate these characteristics, Farber has chosen a case that lingers in one's mind long after one puts down Farber's book. The case — with its massive lake and invisible poison and lying defendant

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<sup>15</sup> See *id.* at 149–50.

<sup>16</sup> *Id.* at 158–59.

<sup>17</sup> *United States v. Reserve Mining Co.*, 380 F. Supp. 11, 16 (D. Minn. 1974).

<sup>18</sup> *Id.* at 20.

<sup>19</sup> See *id.* at 21.

<sup>20</sup> See BASTOW, *supra* note 1, at 163–67.

<sup>21</sup> See *Reserve Mining Co. v. United States*, 498 F.2d 1073, 1085 (8th Cir. 1974).

<sup>22</sup> Of course, Farber's list of the challenging features of environmental problems is not exhaustive. Environmental hazards also tend, for example, not to respect political boundaries; they tend to range as far in space as they do in time. This characteristic creates many political and jurisdictional dilemmas.

— is haunting. With disarming candor, Farber admits that he had a hard time figuring out what he himself would have done in *Reserve Mining* and, indeed, sometimes comes close to saying that he still does not know (p. 72).

Farber argues that pragmatism can help us to think through difficult environmental issues like those raised in *Reserve Mining*. Pragmatism has lately enjoyed a renaissance in legal scholarship,<sup>23</sup> and now, via Farber and others, it has come to environmental law.<sup>24</sup> Farber sees, in pragmatism, an opportunity to avoid “grand theories” and to build instead “an interlocking web of arguments that will support a decision based on diverse, overlapping considerations” (p. 10). In particular, he believes that pragmatism offers a way to bridge the conflicting philosophical premises of cost-benefit analysis and environmentalism (p. 9).

*Eco-pragmatism* offers three basic proposals for environmental policy, proposals intended to confront the three features of environmental problems that make such problems so challenging. First, Farber suggests, regulators should begin from an “environmental baseline” that is overtly friendly, rather than hostile or even neutral, toward environmental protection. As a decision rule, Farber describes his environmental baseline as follows: “When a reasonably ascertainable risk reaches a significant level, take all feasible steps to abate it except when costs would clearly overwhelm any potential benefits. Meanwhile, take prudent precautions against uncharted, but potentially serious, risks” (p. 201). Farber offers his environmental baseline as a “hybrid” between environmental “fanaticism” and economic “cold-bloodedness” (p. 119).

Farber’s second major proposal relates to regulators’ approach to the future. Currently, regulators often compare the values of present and future events by applying a “discount rate” to the value of future events, which lowers the value of future events compared to present ones.<sup>25</sup> Farber endorses this practice with regard to future events af-

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<sup>23</sup> See, e.g., RICHARD A. POSNER, *OVERCOMING LAW* (1995); Thomas C. Grey, *Holmes and Legal Pragmatism*, 41 STAN. L. REV. 787 (1989); Margaret Jane Radin, *The Pragmatist and the Feminist*, 63 S. CAL. L. REV. 1699 (1990); Symposium, *The Renaissance of Pragmatism in American Legal Thought*, 63 S. CAL. L. REV. 1569 (1990). This rebirth has been partly Farber’s work. See, e.g., Daniel A. Farber, *Legal Pragmatism and the Constitution*, 72 MINN. L. REV. 1331 (1988); Daniel A. Farber, *Parody Lost/Pragmatism Regained: The Ironic History of the Coase Theorem*, 83 VA. L. REV. 397 (1997); Daniel A. Farber, *Reinventing Brandeis: Legal Pragmatism for the Twenty-First Century*, 1995 U. ILL. L. REV. 163.

<sup>24</sup> In addition to Farber, Sidney Shapiro and Robert Glicksman have recently embraced pragmatism as a framework for solving environmental problems. See Sidney A. Shapiro & Robert L. Glicksman, *Risk Regulation at Risk: Restoring a Pragmatic Balance* (Sept. 30, 1999) (unpublished manuscript, on file with the Harvard Law School Library).

<sup>25</sup> For general discussion and criticism, see Lisa Heinzerling, *Discounting Our Future*, 34 LAND & WATER L. REV. 39 (1999).

fecting the present generation, but he also argues in favor of a relatively low — one to two percent — discount rate in this context (p. 142).<sup>26</sup> This rate is tied to Farber's estimate of the current rate of return on riskless investment (pp. 142-44). For events affecting future generations, Farber argues, regulators should use "accepted ideas about responsibilities toward descendants" as a "benchmark for duties to future generations generally" (p. 154); this approach implies, according to Farber, ensuring that our descendants will "enjoy a decent standard of living, at least if this can be done without extreme self-sacrifice" (p. 155). Farber also suggests that the current generation might "treat aspects of the ecosystem as if they were family heirlooms, as a technique of increasing savings" (p. 161).

Finally, to address the problem of "radical uncertainty" (p. 165) in environmental law, Farber proposes a "dynamic" regulatory system in which decentralization and deregulation play important roles (pp. 180-98). Among the many recommendations Farber offers to make the regulatory system more flexible, a few stand out. These include waiting for better information before regulating (pp. 186-87); making the Environmental Protection Agency (EPA) an independent agency "rather than one run by a political appointee" (p. 197); and giving the EPA the power to "deregulate when a federal scheme as a whole no longer implemented the environmental baseline of feasibly regulating all significant risks" (p. 195).

*Eco-pragmatism* is a fine account of the enduring dilemmas in environmental law. Although many scholars have ruminated on the challenges of environmental law, few have made the basic dilemmas — in economics, ethics, and science — as crystalline as Farber has. And few have mounted such a patient defense of the existing environmentalist tilt in environmental law. Farber's tone is unfailingly measured, polite, and self-effacing. He does not claim to have all the answers — indeed, his embrace of pragmatism seems driven in part by his awareness of the limits of our cognition — and he does not even claim that the answers he does provide are particularly novel. His basic aim, he says modestly, is simply "to clarify the analytical framework for considering" environmental decisions (p. 11).

In that spirit, this review has a similarly modest aim: to examine the broad outlines of Farber's analytical framework, particularly his pragmatic philosophy. In previous scholarship, Farber has allied himself with the philosophies of early pragmatists such as John Dewey and William James, and in doing so he has embraced several prominent

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<sup>26</sup> By contrast, the Office of Management and Budget currently directs federal agencies undertaking cost-benefit analyses to discount future costs and benefits at a rate of seven percent per year. See *Benefit-Cost Analysis of Federal Programs; Guidelines and Discounts*, 57 Fed. Reg. 53,519, 53,522-23 (1992) [hereinafter *Benefit-Cost Analysis*].

pragmatic commitments: to the ecumenical and eclectic choice of tools in problem-solving; to the collapse of conventional dichotomies, such as that between means and ends; and to an experiential, contextual, contingent vision of truth and knowledge.<sup>27</sup> I suggest, however, that in *Eco-pragmatism*, Farber tacitly embraces a very different, and disappointing, kind of pragmatism — deeply political, excessively abstract, and overly impressed by scientific disagreement. Unfortunately, the combination of these three attributes makes Farber's eco-pragmatism a kind of straitjacket rather than an aid to action.

First, as I explain in Part II, Farber's pragmatism is mostly pragmatism with a small "p" — pragmatism in the everyday, unfancy, unphilosophical sense of a willingness to engage in strategic or even unprincipled political compromise. It is an anxious-to-please kind of pragmatism, without much room for strong feelings. This pragmatism cannot do the job Farber assigns to it, which is to defend environmental law against transitory political challenges. Second, as I discuss in Part III, Farber's pragmatism is formally attentive to context, but it focuses, in practice, mainly on the abstractions that can be pulled from concrete settings. Indeed, Farber's pragmatism valorizes human experience but not the emotions — anger, fear, outrage, sympathy, awe — that accompany it. Thus, the modern morality play that, to me, is the *Reserve Mining* case — with its outrageous river of pollution, its greedy and dishonest defendant, and its stern and righteous judge — is essentially reduced to the well-worn tradeoff between jobs and health risk. In Part IV, I discuss Farber's approach to uncertainty. Despite his avowed pragmatism, Farber seems unwilling to let go of the distinction between facts and values and even, ultimately, unwilling to let go of a yearning for the one right answer to questions of scientific fact. Yet he also appears to embrace a consensus-based view of facts under which disagreements within the community are equated with uncertainty about the way things are. Perhaps for these reasons, Farber is unduly flummoxed by uncertainty.

It did not have to be this way. In Part V, I argue, with Farber, that pragmatism has much to offer environmental law. Its emphasis on the experiential, the physical, and the contextual; its skepticism; and its aspiration (at least as understood by John Dewey) of enlarging human capacity and releasing human potentiality all could have large salutary lessons for modern environmental law. Indeed, the experiential, skeptical, and transformative attitude of pragmatism is a close, even if somewhat abstract, cousin of my own vision of environmentalism.<sup>28</sup>

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<sup>27</sup> See Farber, *Legal Pragmatism and the Constitution*, *supra* note 23, at 1341–49.

<sup>28</sup> For elaboration, see Heinzerling, *Discounting Our Future*, *supra* note 25; Lisa Heinzerling, *Environmental Law and the Present Future*, 87 GEO. L.J. 2025 (1999) [hereinafter *Present Future*]; Lisa Heinzerling, *Reductionist Regulatory Reform*, 8 FORDHAM ENVTL. L.J. 459 (1997);

Perhaps my desire to call these commitments environmentalism rather than pragmatism is thus merely a semantic quibble. But too often, as happens in Farber's book, pragmatism in the philosophical sense morphs into pragmatism in the political sense, and then it becomes an excuse for watered-down and muddled substance, rather than — what it was in the beginning — a clear-eyed call for social change.

## II. POLITICS

It is unfortunate that the American philosophers John Dewey, William James, and Charles Sanders Peirce did not invent a new word for their new philosophy.<sup>29</sup> The term "pragmatism" can easily be used to exploit both its fancy philosophical pedigree and its current everyday meaning. Thus, it may provide cover for simple power politics, unprincipled compromise, and even cynicism. I am sorry to say I believe this is what happens in *Eco-pragmatism*.

The role of politics in Farber's pragmatism is clearest in his endorsement of an "environmental baseline" in environmental law. From an academic perspective, this is the most novel of Farber's proposals. Environmental law, and environmentalism itself, have taken a beating in the academic press in recent years, and much of the criticism has been leveled against the very kind of presumption Farber endorses. The "better safe than sorry" approach to regulation — which encourages us, for example, to regulate even when harm is not certain to occur<sup>30</sup> and to assess risks in a way that tries, if anything, to overstate rather than understate the actual risk<sup>31</sup> — has come under particularly heavy attack. Critics have argued that this approach actually makes us less rather than more safe because regulation pervasively creates

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Lisa Heinzerling, *Regulatory Costs of Mythic Proportions*, 107 YALE L.J. 1981 (1998) [hereinafter *Regulatory Costs*]; Lisa Heinzerling, *The Rights of Statistical People*, 24 HARV. ENVTL. L. REV. 189 (2000) [hereinafter *Statistical People*]; Lisa Heinzerling, *Political Science*, 62 U. CHI. L. REV. 449 (1995) (reviewing STEPHEN BREYER, *BREAKING THE VICIOUS CIRCLE: TOWARD EFFECTIVE RISK REGULATION* (1993)).

<sup>29</sup> When Dewey, James, and Peirce were developing their philosophies, "pragmatism" apparently had a meaning quite different from its meaning today. The UNIVERSAL DICTIONARY OF THE ENGLISH LANGUAGE 3716 (Robert Hunter & Charles Morris eds., N.Y., Collier 1897) defined "pragmatical" as "1. Busy, active, diligent. 2. Versed or skilled in affairs; skilled in business. 3. Given or inclined to interfering or meddling in the affairs of others; meddlesome; impertinently curious as to the affairs of others; officious." In light of this definition, it is less surprising that thinkers interested in social transformation would call their philosophy "pragmatic."

<sup>30</sup> See, e.g., *Ethyl Corp. v. EPA*, 541 F.2d 1, 7, 17 (D.C. Cir. 1976) (upholding an EPA regulation that reduced the lead content of gasoline because the Clean Air Act's "will endanger" standard "is precautionary in nature and does not require proof of actual harm before regulation is appropriate").

<sup>31</sup> For an early and much-cited discussion, see Talbot Page, *A Generic View of Toxic Chemicals and Similar Risks*, 7 ECOLOGY L.Q. 207, 230-36 (1978).

new risks that are just as large or larger than the risks it avoids,<sup>32</sup> because the cost of regulation reduces wealth and therefore kills people,<sup>33</sup> and because the money we spend on many forms of regulation could save more lives if spent on other life-saving interventions.<sup>34</sup> To endorse an environmental baseline in the face of these criticisms is, on my reading of the literature, to go against the grain of contemporary academic scholarship on environmental regulation, and for this independence Farber should be applauded.

Strikingly, however, Farber's proposal for an environmental baseline is not novel from a legal perspective. As Farber himself acknowledges, most of our environmental statutes already reflect an environmental baseline: they allow, perhaps even encourage, regulation in the face of scientific uncertainty,<sup>35</sup> and they do not generally require a minute balancing of costs and benefits in the establishment of environmental standards.<sup>36</sup> Indeed, to some extent, Farber's environmental baseline would *reduce* the protection afforded under many of our environmental laws. As I have noted,<sup>37</sup> Farber's baseline allows feasible regulation of significant environmental risks in situations in which costs do not grossly outweigh benefits. Many of our environmental statutes, however, do not require a finding of "significant" environmental risk; in fact, several statutes simply list the pollutants to be regulated without requiring any showing of risk, significant or not.<sup>38</sup> More importantly, Farber's environmental baseline adds a kind of rough-hewn cost-benefit analysis — according to which regulations will be rejected if costs are "grossly disproportionate" to benefits —

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<sup>32</sup> See, e.g., RISK VERSUS RISK: TRADEOFFS IN PROTECTING HEALTH AND THE ENVIRONMENT (John D. Graham & Jonathan Baert Wiener eds., 1995); Cass R. Sunstein, *Health-Health Tradeoffs*, 63 U. CHI. L. REV. 1533, 1535 (1996).

<sup>33</sup> First suggested by Aaron Wildavsky in *Richer Is Safer*, 60 PUB. INTEREST 23 (1980), the "richer is safer" idea has spawned a large literature. See, e.g., Ralph L. Keeney, *Mortality Risks Induced by Economic Expenditures*, 10 RISK ANALYSIS 147, 147 (1990); W. Kip Viscusi, *Regulating the Regulators*, 63 U. CHI. L. REV. 1423, 1452 (1996).

<sup>34</sup> See, e.g., Tammy O. Tengs & John D. Graham, *The Opportunity Costs of Haphazard Social Investments in Life-Saving*, in RISKS, COSTS, AND LIVES SAVED: GETTING BETTER RESULTS FROM REGULATION 167 (Robert W. Hahn ed., 1996).

<sup>35</sup> See, e.g., *Ethyl Corp.*, 541 F.2d at 7 (upholding national ambient air quality standards for lead).

<sup>36</sup> See, e.g., *Lead Indus. Ass'n v. EPA*, 647 F.2d 1130, 1149 (D.C. Cir. 1980) (upholding an interpretation of the Clean Air Act that disallowed consideration of economic and technological feasibility in setting national ambient air quality standards).

<sup>37</sup> See *supra* p. 1424.

<sup>38</sup> See, e.g., Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. § 1317(a)(1) (1994) (referring to lists of covered toxic pollutants); Clean Air Amendments of 1970, 42 U.S.C. § 7412(b)(1) (1994) (listing hazardous air pollutants).

that is absent from the typical environmental statute.<sup>39</sup> Farber apparently believes that allowing rejection of regulatory standards only when there is a *gross* disparity between costs and benefits would not make cost-benefit analysis “decisive” in setting regulatory standards (p. 122). But it is hard to see why he believes this; cost-benefit analysis is “decisive” under Farber’s approach because it is an integral part of his decision rule. And it is naive to believe, as Farber apparently does, that making the standard turn on the “gross disparity” between costs and benefits rather than a simple disparity would discourage industry from requiring accuracy that cost-benefit analysis cannot now provide (p. 122).<sup>40</sup> No aspect of any major regulatory standard escapes industry, or ultimately judicial, scrutiny these days, and if cost-benefit analysis — even in a relatively forgiving form — became a part of regulatory standard-setting, the details of this analysis would be untangled with a fine-toothed comb.<sup>41</sup> Thus, in terms of legal rather than academic precedent, Farber’s proposal is novel only insofar as it would likely lead to less rather than more stringent environmental regulation.

With respect to understanding the nature of Farber’s pragmatism, however, the most significant fact about Farber’s environmental baseline is that he draws it from public opinion. Farber argues that we must listen to public opinion if we hope to create a regulatory system that is sustainable over the long haul:

The ultimate challenge for environmental law is social sustainability. It will do little good to save the planet today, only to lose it tomorrow. Thus, we need an approach that not only embodies our firm commitment to the environment, but also recognizes competing goals and the need to keep up with changing scientific knowledge. Otherwise, we will have a regulatory structure that is too draconian for us to live with in the long run. (p. 12)

For the first feature of his baseline — requiring the regulation of significant risks — Farber takes federal environmental statutes to be an indication of what the public wants. Our environmental statutes

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<sup>39</sup> *But see* *Ohio v. U.S. Dep’t of Interior*, 880 F.2d 432, 446 (D.C. Cir. 1989) (finding that Congress did not intend for the restoration of natural resources during cleanups of hazardous waste sites when the costs of restoration would be grossly disproportionate to the benefits).

<sup>40</sup> Actually, Farber refers to the lack of “precision” of cost-benefit analysis, but in fact, cost-benefit analysis is perfectly capable of being precise. It has a much harder time, however, being accurate. *See generally* Lisa Heinzerling, *The Perils of Precision*, 15 ENVTL. F. 38 (1998).

<sup>41</sup> The most dramatic recent example of aggressive judicial scrutiny of environmental rules is the D.C. Circuit’s opinion in *American Trucking Ass’ns v. EPA*, 175 F.3d 1027 (D.C. Cir. 1999), in which the court struck down the EPA’s new national air quality standards for ozone and particulate matter because, among other reasons, it found that the EPA’s interpretation of the 30-year-old Clean Air Act inadequately constrained the agency’s own discretion and thus violated the non-delegation doctrine. *See id.* at 1034–40. In that case, virtually nothing in the EPA’s massive record went unchallenged by the industry, and many aspects of the agency’s decisions were overturned by the court.

reveal "a profound national commitment to environmental protection" (p. 1) and embody an "overwhelming series of legislative judgments" favoring an environmental baseline (p. 104). Farber also relies on public opinion in supporting the second feature of his environmental baseline, which is the rejection of regulatory standards that display a gross disparity between costs and benefits. In arguing that the environmental baseline must be tempered by some resort to cost-benefit analysis, Farber invokes the likelihood of public resistance to more stringent standards:

Only by acknowledging the claims of both the public and the private spheres can we hope to create a durable scheme of environmental protection. Without appealing to public values, environmental regulations could not long enjoy general support based purely on the calculus of competing private interests. But without recognizing private interests as legitimate, environmental regulations may provoke unmanageable resistance from those paying the price and are likely to be seen by society as a whole as too draconian to be acceptable. Long-term, sustainable environmental regulations must appeal to public values, while recognizing the significance of economic interests as well. (p. 58)

Farber thus, awkwardly, uses current law to demonstrate that the public favors regulation of significant environmental risks, but he departs from most current environmental laws in arguing that the public also favors some form of economic analysis.<sup>42</sup> One begins to wonder whether Farber's view of what constitutes "public opinion" may be mostly a reflection of what Farber himself believes.<sup>43</sup>

Farber's environmental baseline, grounded as it is in public opinion, cannot serve the task Farber assigns to it, which is to provide a bulwark against generalized attacks on environmental protection. For if the environmental baseline comes from public opinion, then there is nothing to stand between changed public opinion and changed environmental law. The baseline could be dissolved tomorrow, and *Eco-pragmatism* would offer us almost nothing to argue against the change.<sup>44</sup>

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<sup>42</sup> In other places, Farber appears to argue in favor of cost-benefit analysis not on the basis of public opinion, but rather out of a desire to avoid "fanaticism": aversion to the unfortunate symbolic consequences of cost-benefit analysis should not, in Farber's words, "sacrifice the individuals most affected to abstract disputes over language and technique" (p. 118).

<sup>43</sup> The uncertain connection between current law and public opinion becomes blurriest in Farber's endorsement of a "green canon" of statutory interpretation, which would counsel courts to construe ambiguous statutes to reflect Farber's environmental baseline (p. 124). But because his baseline is itself derived from current environmental statutes, this proposal becomes quite circular.

<sup>44</sup> It makes little sense, therefore, for Farber to answer Cass Sunstein's call for statutory reform that would allow cost-benefit balancing by saying that Sunstein's proposal fails "to acknowledge the nature of our national commitment to the environment" (p. 96). According to Farber, our environmental laws provide evidence of this national commitment; if these laws were changed as

There are glimmers of a larger perspective in Farber's book, but only glimmers. In discussing the *Reserve Mining* decision, for example, Farber briefly suggests the possibility that the "sheer symbolic outrage" of Reserve's massive pollution of Lake Superior might have been enough to justify ordering the company to switch to land disposal, thus hinting faintly at the idea that there might have been something wrong with — and not merely politically unpopular about — this pollution (p. 175). Likewise, in discussing why we might want to protect biodiversity, Farber begins to *sound like* an environmentalist, summing up several very nice paragraphs on the beauty and mystery of nature with the strong conclusion that "[t]he government need not be neutral between people holding [environmentalist] values and those who would prefer a sterile world with no organic life apart from humans and their agricultural inventory" (p. 109). But then his voice suddenly turns monotonic again as he reminds us about the importance of public opinion and wheels out the old public-goods justification for environmental law (p. 109).

For the most part, Farber simply relies on public opinion to justify his environmental baseline, and he leaves it to others to explain why public opinion might be on to something valuable and important.<sup>45</sup> The omission of a sustained substantive argument in favor of environmental values would not be so unfortunate if, for the sake of conciseness, Farber merely assumed a particular stance explicated by others on the importance of environmentalism, and then argued from that stance to its legal implications. But the lack of a substantive argument in favor of environmentalism does not, I think, arise from a simple desire to write a manageably sized book. It is endemic to Farber's position. Throughout the book, Farber seems first and foremost concerned with how various environmental reforms will "play" with the public, and thus the substance of his argument is deeply intertwined with whatever the public happens to want and believe at any given moment. This is pragmatism at its least interesting.<sup>46</sup>

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Sunstein has proposed, they would simply show a different national commitment, one more impressed by economic analysis.

<sup>45</sup> Farber cites works by Christopher Stone, Andrew Brennan, and David Takacs (p. 200 n.1).

<sup>46</sup> Farber's version of pragmatism closely resembles what David Luban has called "primitive pragmatism," which Luban describes as "what journalists mean when they describe a politician as a pragmatist":

They mean someone who does not let principles stand in the way of getting the job done. The primitive pragmatist has principles, to be sure, but understands that you shouldn't get carried away with following them to the letter. He likewise respects logic, but has no sympathy with people who take sensible ideas 'to their logical conclusion,' as we often say, meaning to impractical extremes.

David Luban, *The Posner Variations (Twenty-Seven Variations on a Theme by Holmes)*, 48 STAN. L. REV. 1001, 1007-08 (1996) (reviewing RICHARD A. POSNER, *OVERCOMING LAW* (1995)).

The relationship between public opinion and Farber's pragmatism is also evident in Farber's discussion of the future. Here, as I have said,<sup>47</sup> Farber endorses different approaches for future effects on this generation and for future effects on future generations. For this generation, Farber embraces agencies' current practice of discounting the future costs and benefits of environmental regulation, but he proposes to lower the rate at which agencies discount benefits to between one and two percent, reflecting current rates of return on riskless investments.<sup>48</sup> For effects on future generations, Farber apparently demands sacrifice consistent with our perceived obligations to our own descendants, and he uses these perceived obligations to define the limits of our responsibilities to more distant generations (pp. 153-57).

In this discussion, Farber seems largely to forget the environmental baseline he constructed earlier. In developing his environmental baseline, Farber made a point of distinguishing private (consumer) from public (citizen) preferences. He persuasively argued that, in environmental policy, the latter should be privileged over the former. In discussing the future, however, Farber endorses discounting and a specific discount rate on the basis of market information alone — the rate of return on riskless investments. Thus, with regard to the future, Farber tinkers with but does not dislodge the mainstream economic perspective on discounting.<sup>49</sup> He justifies this approach based on a desire to avoid paternalism,<sup>50</sup> but one might raise the same concern about paternalism against Farber's own environmental baseline. Indeed, if anything, concerns about paternalism are least forceful when long time horizons are involved, as those are the instances in which we all might need a little help — from the government, from private savings plans,<sup>51</sup> from internal accounting strategies<sup>52</sup> — to act in our own long-term best interests.

Furthermore, once again, Farber's proposals are closely tied to his view of what is politically acceptable. Farber expresses eagerness to develop environmental law for the long haul — meaning, environ-

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<sup>47</sup> See *supra* p. 1425.

<sup>48</sup> The Office of Management and Budget (OMB) directs agencies to discount future costs and benefits at seven percent per year, reflecting the opportunity cost of the capital investments supposedly foregone due to regulation. See *Benefit-Cost Analysis*, *supra* note 26, at 53,522-23.

<sup>49</sup> As I have noted, Farber's discount rate is lower than the rate recommended by OMB.

<sup>50</sup> At the same time, however, Farber defends his lower discount rate against higher alternatives by contending that the lower rates — based on riskless investment rather than, say, borrowing rates — "are less likely to be impulsive and more likely to reflect thoughtful deliberation" (p. 143 n.24). This sounds like paternalism to me.

<sup>51</sup> For example, Farber describes Christmas clubs, in which people locked up money, without earning interest, to ensure that money would be available at Christmastime (p. 141).

<sup>52</sup> See, e.g., RICHARD H. THALER, *THE WINNER'S CURSE: PARADOXES AND ANOMALIES OF ECONOMIC LIFE* 107-21 (1992) (examining how a desire for self-control influences saving and consumption patterns).

mental law that does not ask too much of the people it affects and thus avoids a backlash against itself. Farber clearly wants to find a middle path between protecting the health and opportunities of people in the future and not requiring politically unacceptable sacrifices of people right now (p. 153). Though this approach may be pragmatic in the political sense, it is not pragmatic in any interesting philosophical sense. Nothing in philosophical pragmatism — at least nothing in the old-fashioned pragmatism of, say, John Dewey — requires us to shrink from reforms that will cause inconvenience or discomfort or political opposition. Indeed, Dewey's whole pragmatic philosophy was offered in the service of larger concepts of social progress and justice that arguably have never enjoyed an overwhelming political consensus.

Moreover, in asking for only the amount we are currently willing to sacrifice for the future, Farber ignores the transformative potential of law itself. Environmental law not only reflects, but fosters, an ethic of stewardship that asks more of us as a society than each of us individually would likely provide. To look to prevailing market rates of return on riskless investment, as Farber does, to answer the question of what we owe the future, even our own future, is not only to let the market dominate a non-market arena, but is also to ignore the educational and transformative capacity of law. To my surprise and dismay, Farber dismisses the educational and transformative potential of law by pointing out that even "totalitarian dictatorships" such as the former Soviet government have had little success changing people's desires (p. 56).

The combination of reliance on public opinion and dismissal of opportunities for shaping people's desires puts Farber's pragmatism at the mercy of inertia. If people change the way they feel about the environment — if they reveal, through laws enacting regulatory reform, that they actually *like* cost-benefit analysis — then Farber's pragmatism not only counsels us to respect those opinions, but also advises against seeking to change them. And, as I next discuss, the possibility of achieving education and transformation indirectly, through the recitation of compelling facts from emotionally charged settings, is squelched by Farber's highly abstracted contextualism.

### III. ABSTRACTION

Farber insists that we study environmental problems in context and continually reevaluates his proposals by reference to the specific circumstances of *Reserve Mining*. He also argues that the significance of a risk is a function of the risk's qualitative properties — such as its novelty or potentially catastrophic nature — and of the numerical

probabilities of harm (p. 88).<sup>53</sup> I can only praise Farber for his theoretical commitment to context, which is in keeping with his embrace of pragmatism.<sup>54</sup> But in practice his contextualism is so incomplete, and smuggles so much abstraction into environmental decisionmaking, that it ultimately disappoints.

Farber's discussion of *Reserve Mining* exemplifies the selective nature of his contextualism. Farber never considers the possibility that shutting down the plant — the option finally chosen by Judge Lord — was the right thing to do. For Farber, the only question is whether requiring land disposal — and allowing the plant to continue operating while Reserve Mining developed land disposal facilities — was the right solution (pp. 81–82). He makes only the most glancing reference to the fact that Reserve Mining lied about its disposal options until the very last stages of the case (p. 23).<sup>55</sup> Reserve's dishonesty deserves more than this cursory treatment because it called into question all of the company's assertions regarding both the feasibility of land disposal and the risks of lake disposal. It also may have magnified the experience of risk for the people of Duluth because risk perception and trust are often tightly intertwined.<sup>56</sup> The same is true of the state's decade-long failure to publish its studies of Reserve's effects on the ecology of Lake Superior.<sup>57</sup> Although Farber admits the importance of the qualitative features of risk (which should include the trustworthiness of the relevant actors) in discussing policy in the abstract (p. 88), he does not fully account for their importance under the specific facts of *Reserve Mining*. Moreover, he does not mention at all Judge Lord's finding that to require land disposal would only cut into the profits of the plant and (if it had been undertaken voluntarily) would certainly not lead to its closure.<sup>58</sup> Nor does Farber mention that Reserve's profits from the quite inefficient process of taconite mining<sup>59</sup> were made pos-

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<sup>53</sup> Oddly, however, Farber appears to argue that the qualitative features of risk should be reflected in our *quantitative* estimates of risk, rather than in our qualitative appraisals of those quantitative estimates (p. 88).

<sup>54</sup> Cf., e.g., Radin, *supra* note 23, at 1707 (describing the commitment of pragmatism (and feminism) "against abstract idealism, transcendence, foundationalism, and atemporal universality; and in favor of immanence, historicity, concreteness, situatedness, contextuality, embeddedness, narrativity of meaning").

<sup>55</sup> In my opinion, Farber understates Reserve Mining's deceptive conduct with his references to "misleading discovery responses" and "inaccurate, if not dishonest, testimony about the feasibility of dumping the tailings on land" (p. 23).

<sup>56</sup> For details on the relationship between trust and risk perception, see Paul Slovic, *Perceived Risk, Trust, and Democracy*, 13 RISK ANALYSIS 675 (1993).

<sup>57</sup> See *supra* p. 1421.

<sup>58</sup> See *United States v. Reserve Mining Co.*, 380 F. Supp. 11, 69–70 (D. Minn. 1974).

<sup>59</sup> Recall that the process produced two tons of tailings for every one ton of ore. See *supra* p. 1421.

sible, in part, through a constitutionally guaranteed state subsidy.<sup>60</sup> And, as I have said,<sup>61</sup> he only briefly flirts with the idea that dumping 67,000 tons a day of asbestos-containing refuse into the clear, blue, special waters of Lake Superior was, in and of itself, unconscionable (p. 175). All of these features of the case — the lying, profit-hungry defendant; the economics of taconite mining; the special clarity of Lake Superior — might have been combined, pragmatically and holistically, to justify not just land disposal, but also a shutdown order. Such an analysis might have looked, in addition, at the unsatisfactory incentives created by allowing companies to initiate a highly polluting, resource-inefficient process like taconite mining; to shave off considerable profits for officers and stockholders (profits gained partly at the expense of taxpayers); and then, when faced with a complaint that their process is too dirty, to point to the workers who will be hurt if they are forced to close.<sup>62</sup>

Farber's contextualism, in other words, is selective. It emphasizes the specific numerical risks and monetary costs of individual settings, but it overlooks or glosses over their qualitatively distinct characteristics. Farber's analysis of *Reserve Mining* strips the case of its emotional and moral texture and essentially frames it as a choice between a certain number of human lives and a certain number of dollars (p. 33). Given this framing, it is all too easy to turn the specific decision in that specific context into an exercise in abstraction, in which unidentified human lives are given some fixed dollar value.

Throughout his book, in fact, Farber defends cost-benefit analysis on the ground that we must all agree that at some point the tradeoff between dollars and lives becomes too great to justify saving another life (pp. 3-4). In this regard, Farber cites his own "intuitions," suggesting that from \$1 million to \$10 million dollars is an appropriate amount to spend to save a life (p. 87). But whose life? Endangered in what setting? At whose hand? It is surprising to me that Farber, an

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<sup>60</sup> In 1964, the citizens of Minnesota approved a constitutional amendment that prohibited, for 25 years, any tax increase levied against the taconite industry. See BASTOW, *supra* note 1, at 8.

<sup>61</sup> See *supra* p. 1431.

<sup>62</sup> In Judge Lord's words:

Defendants have the means to abate the risk, refuse to do so, yet ask the Court not to abate the risk because defendants' employees may be put out of work. In essence, defendants are using the work force at Reserve's plants as hostages. In order to free the work force of Reserve, the Court must permit the continued exposure of known human carcinogens to the citizens of Duluth and other North Shore communities. The Court will have no part of this form of economic blackmail. The defendants are daily endangering the lives of thousands of people, have the engineering and economic capability to obviate the risk and choose not to do so in order to continue with [the] profitability of the present mode of operation. This Court cannot honor profit over human life and therefore has no other choice but abate the discharge.

*Reserve Mining*, 380 F. Supp. at 70-71.

avowed pragmatist, should have an "intuition" about an acontextual, generalized valuation for a human life.<sup>63</sup>

Farber defends his intuition by saying that it is in line with jury awards in wrongful death cases and with "an amount that we might seriously consider funding to save a life through some expensive medical procedure" (p. 87). In addition, he argues, larger amounts begin to seem "a bit extravagant," because, for example, a valuation of life at \$50 million implies that an individual would be willing to pay \$50,000 to avoid an increased mortality risk of one in one thousand (p. 87).<sup>64</sup> Farber can hope to achieve rough uniformity in the valuation of life across different settings only by artificially assuming rough uniformity in decisionmaking contexts. When one changes the decisionmaking frame, the possibility of uniformity — even rough uniformity — disappears.

For example, even if a range of \$1 million to \$10 million is roughly consistent with jury awards in wrongful death cases, jury awards should not necessarily guide our assessment of how much it is worth to prevent a death in the environmental setting. Despite their relative stinginess in many wrongful death actions, juries have imposed enormous punitive damages in cases in which product manufacturers engaged in cost-benefit analysis to decide whether to implement certain safety measures, such as designing a fuel tank that would not catch fire upon impact.<sup>65</sup> Likewise, even though Farber is right to suggest that few people would *pay* \$50,000 to *avoid* an increased risk of one in one thousand — how many of us have \$50,000 to spend on *anything?* — many of us do refuse to *accept* money in exchange for *suffering* an increased risk. In one study, for example, Kip Viscusi and his co-authors found that when they asked parents with children living in

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<sup>63</sup> Farber also seems to have this kind of intuition about the significance of individual risk, suggesting, without reference to any specific set of qualitative circumstances, that it "seems reasonable enough" to conclude that an increased risk of one in one thousand is significant (pp. 76–77).

<sup>64</sup> Multiplying the \$50 million figure by the one in one thousand probability of death yields \$50,000. In addition to the more fundamental problems with this example, which I discuss in the text, it also suffers from a technical difficulty: it appears to assume that the value of a particular risk can be derived from the value of life. Just the opposite is true: the value of life is derived from the value associated with particular risks. See, e.g., W. KIP VISCUSI, *RATIONAL RISK POLICY* 46 (1998). Elsewhere in his book, Farber shows that he understands that the value of life is derived from the value of risk (p. 48).

<sup>65</sup> Two decades ago, a jury imposed a punitive damage award of \$128 million on Ford Motor Company due to Ford's decision not to change the design of the fuel tanks on its Pinto model; Ford had based its decision on an economic analysis that showed that the projected costs of re-design surpassed the projected costs of compensating the people expected to be hurt by the faulty design. See *Grimshaw v. Ford Motor Co.*, 174 Cal. Rptr. 348, 358, 360–61 (Ct. App. 1981). More recently, a jury imposed a staggering \$4.9 billion in punitive damages on General Motors for similar reasons. See Andrew Pollack, *Paper Trail Haunts G.M. After It Loses Injury Suit*, N.Y. TIMES, July 12, 1999, at A12.

their homes whether they would accept a riskier household product in return for a price break (or even for being *paid* to take the riskier product), the vast majority of parents would not accept the product at all.<sup>66</sup> Results like these not only highlight the important difference between willingness-to-pay and willingness-to-accept frameworks for valuing lives, which Farber himself ably and admirably explicates (pp. 99–102); they also call into serious question the whole project of attaching a monetary value to human life in the regulatory context. Sometimes people do not participate at all in the “market” for risk, and no one — including Farber — has satisfactorily explained why the decisions not to participate in this market are not the ones that should guide public policy.

Again, much of this debate turns on how decisionmaking is framed. If a decision is framed as a decision to save a life, this will activate one decisionmaking model; if a decision is framed as a decision to allow one person to kill another, however, this will activate a different model. The first frame may invite economic analysis, whereas the second repels it.<sup>67</sup> For example, by framing our obligations to future generations in terms of how much we are willing to “sacrifice” for them, Farber makes it seem as though environmental regulation provides a kind of windfall to future generations; we give something up so that someone else can enjoy a benefit. But this is an inaccurate way to describe much environmental regulation, which prevents people from being killed by the actions of other people. It is bizarre to refer to the prevention of this kind of harm as a “sacrifice” in the way Farber does, as if refraining from killing were a favor rather than an obligation. In doing so, Farber ignores the fundamental problem of baselines and entitlements that, elsewhere in the book, he so powerfully explores.<sup>68</sup>

Farber’s pragmatism thus inadequately accounts for the range of considerations relevant to environmental decisionmaking. It also inadequately accounts for the range of human experience with respect to the environment. Farber claims that we have only two ways in which we can express our commitment to the environment: through the market or through politics (p. 42).<sup>69</sup> In either case, whatever experiential relationship we have with the environment is translated into one of two abstract forms: dollars or votes. Farber leaves little room for expression of environmentalist commitments through other, more physi-

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<sup>66</sup> See W. Kip Viscusi, Wesley A. Magat & Joel Huber, *An Investigation of the Rationality of Consumer Valuations of Multiple Health Risks*, 18 RAND J. ECON. 465, 477 (1987).

<sup>67</sup> See generally Heinzerling, *Statistical People*, *supra* note 28.

<sup>68</sup> See, e.g., p. 113.

<sup>69</sup> Indeed, Farber at times seems to suggest that we really have only one means of expressing our views about the environment, as he labels “eccentric” the people whose political and market behaviors diverge (p. 55).

cal means, familiar to many environmentalists. To be sure, many of us express our environmental commitments by voting for environmentalist candidates or referenda, or by buying "greener" products, or by not buying some products at all. But many, probably most, of us also express our environmental commitments by spending time in, and taking care of, the environment more directly. We go outside, and hike and swim and watch birds, and don't litter, and reuse things, and walk instead of drive, and keep our thermostats set higher in the summer and lower in the winter than optimal comfort might demand. The fact that those of us who engage in these activities might like to see government action that encourages, or perhaps even requires, such activities does not mean that politics is what they are *about*. Nor does the fact that modern economists almost certainly have the technical prowess to impute an economic value to each of these activities mean that economics is what these activities are about. In short, Farber's reduction of environmental expression to dollars and votes excludes the whole range of being-with and caring-for experiences that involve neither buying nor voting. Dollars and votes are the ultimate abstractions; they are only as good as the things they represent. But being-with and caring-for are physical events, embodied expressions of our moral commitments. A contextualism that excludes them is no contextualism at all.

Thus, by the end of the book, Farber's pragmatism has become foggy with abstractions. One final example of the strange disembodiment of Farber's pragmatism comes in the midst of his discussion of possible ways to "promote the vitality of environmental values":

Many of us are "armchair environmentalists," rather than wilderness backpackers. Indeed, society cannot afford too many backpackers without putting the wilderness itself at risk. Yet people cannot be expected to support environmental protection unless nature is somehow part of their lives. Perhaps we should promote Internet contact with the environment as well, through real-time virtual viewings of wilderness. In an increasingly crowded world, not only is it an increasing challenge to preserve nature, but also it may be even more of a challenge to preserve opportunities to experience nature without overloading it. (pp. 204-05)

I find this passage deeply unsettling. Virtual wilderness is an oxymoron. A wilderness is a wilderness because it is *physically* challenging, *physically* unsettling, *physically* undeniable. It is, at its whim, too hot, too cold, too wet, too dry, too bug-infested, too quiet, too loud. Wilderness is not a pretty picture, and my pun is intended. Wilderness can enlarge human potentiality and at the same time inspire humility precisely because it is at once so physically demanding and yet so uncontrollable. Thus, just as Farber's pragmatism understates the transformative capacity of environmental law by fixating on current public opinion, it also undercuts the transformative potential of the environment itself by giving abstraction and physicality equal billing.

## IV. UNCERTAINTY

Thus far, I have argued that, although *Eco-pragmatism* offers tantalizing possibilities for environmental law — in its occasional glimpses of a deep environmental consciousness and in its embrace of a contextualized approach to risk — it is ultimately too politically cautious and too selectively contextual to inspire very much by way of social action. The final aspect of Farber's pragmatism I wish to examine is its approach to uncertainty.

Farber's attitude toward uncertainty also tends to discourage change. Farber appears at once to believe that a lack of consensus about the answer to a question of fact means that the correct answer has not yet been found, and yet he also seems to yearn for objectively correct answers to questions of fact. Thus, Farber appears to embrace both a consensus-based and an objective view of truth. I argue that these attitudes toward facts and uncertainty bespeak a confused epistemology and also that they threaten to turn Farber's "dynamic" environmental regulation into quite the opposite.

Throughout *Eco-pragmatism*, Farber emphasizes the "radical uncertainty" surrounding environmental questions (p. 165). Although most would agree that we know all too little about the effects of human activity on humans and ecosystems,<sup>70</sup> I nevertheless believe Farber often overstates this uncertainty by accepting any disagreement among interested persons as evidence of radical uncertainty about the facts. His examples of the pervasive uncertainty in environmental law often have a nonjudgmental "on the one hand, on the other hand" quality, as if opposing published references prove uncertainty rather than something else. The "something else" I have in mind includes conflicts of interest, differing analytical frameworks, and opposing values. Farber does not seem to recognize that the disagreements he highlights might result from one of these factors. In his discussion of the (never-ending) reassessment of the risks of dioxin (p. 176), for example, Farber does not mention that some of the studies concluding that estimates of the risks of dioxin should be downgraded were funded and promoted by the very industries that would benefit from such action.<sup>71</sup> Nor does he mention that some of the recent contro-

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<sup>70</sup> See, e.g., Rena I. Steinzor & William F. Piermattei, *Reinventing Environmental Regulation Via the Government Performance and Results Act: Where's the Money?*, 28 *Env'tl. L. Rep. (Env'tl. L. Inst.)* 10,563, 10,565 (1998) ("In a recent report covering 2,863 organic chemicals produced or imported in amount above one million pounds annually, EPA concluded that there is no basic toxicity information available for 43 percent of such chemicals and that a full set of basic toxicity information is available for only 7 percent.").

<sup>71</sup> See *How Two Industries Created a Fresh Spin on the Dioxin Debate*, *WALL ST. J.*, Feb. 20, 1992, at A1. For a discussion of a similar campaign by the oil and coal industries to downplay the

versy over the risks of dioxin turns on whether one looks only at cancer risks or also at reproductive risks.<sup>72</sup> Where there is disagreement, it is important to try to tease out the reasons for the disagreement in order to see if it is a result of a conflict of interest or an arbitrary framing effect, which should not cause one to throw up one's hands and declare the science too uncertain to justify regulation.

Likewise, it is important to know whether conflicting opinions, ostensibly about facts, are really conflicting opinions about values.<sup>73</sup> In this and previous work, Farber has masterfully demonstrated that differing conclusions with respect to questions of "fact" often turn not on uncertainty about facts, but on disagreement about the values at stake.<sup>74</sup> It is surprising, therefore, that in *Eco-pragmatism* Farber often fails to recognize when situations reveal differing values more than uncertain facts. For instance, after discussing the uncertainty surrounding environmental problems, Farber writes:

Given these uncertainties, it is hard to say whether current environmental regulations are cost-justified. The estimates of total costs for a single year (1988) range from \$55 to \$77 billion, while benefit estimates range from \$16 to \$135 billion. This means that for every dollar we invested in environment protection, we got back somewhere between \$0.21 and \$2.27. We were either losing 80 percent of our investment or more than doubling our money, *we don't know which! And in particular, we have no idea whether the total cost-benefit analysis for environmental protection is favorable or unfavorable.* (p. 168)<sup>75</sup>

This is an arresting passage. First, as I have said, Farber has, as much as any other environmental scholar, fruitfully demonstrated that the conclusions of cost-benefit analysis are utterly dependent on the values one brings to the analysis. Yet here he seems to assume that one factually correct (but unknown) answer exists to the question whether environmental regulation has produced more benefits than costs. In addition, the possibility, which he credits, that environmental law has actually produced more costs than benefits is in considerable tension with his endorsement of the environmental baseline in environmental law. Before endorsing such a baseline, would not one want to decide whether one believes that environmental law has been, on

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risks of climate change, see ROSS GELBSPAN, *THE HEAT IS ON: THE HIGH STAKES BATTLE OVER EARTH'S THREATENED CLIMATE* 33-61 (1997).

<sup>72</sup> See, e.g., *E.P.A. Affirms Health Dangers From Dioxin*, N.Y. TIMES, Sept. 13, 1994, at A14.

<sup>73</sup> For an extended exploration of the effects of value choices on estimates of regulatory costs per life saved, see Heinzerling, *Regulatory Costs*, *supra* note 28.

<sup>74</sup> For example, Farber shows how the results of cost-benefit analysis depend crucially on the value of human life and the discount rate employed in analysis (pp. 89-90). See also Daniel A. Farber, *Risk Regulation in Perspective: Reserve Mining Revisited*, 21 ENVTL. L. 1321, 1350-52 (1991).

<sup>75</sup> Emphasis has been added. Footnote has been omitted.

the whole, worthwhile? Yet Farber displays remarkably little interest in getting to the bottom of the questions he raises here. In a footnote in this passage, he cites conflicting cost-benefit studies without making any attempt to scrutinize them and explain their differences (p. 168 n.13).<sup>76</sup> In offering these examples of expert disagreement without discussing the causes of disagreement, and indeed without discussing whether the subjects of disagreement are matters for experts at all, Farber obscures the common ground that might be found if financial conflicts of interest, framing effects, and conflicting values were not blended into the factual mix.

As a pragmatist, Farber has a powerful response to this last possibility. The lesson of pragmatism, he might remind me, is that facts and values are not separable in the way I suggest. As David Luban summarizes: “[p]hilosophical pragmatism offers a set of recognizably and unashamedly philosophical theses: that truth means the ideal end of inquiry rather than correspondence or coherence; that propositions are justified holistically rather than individually; that shared social practice is constitutive of knowledge.”<sup>77</sup> Thus, Farber might say that pragmatism demands that he look for consensus within the relevant community as the means of finding true answers to questions of fact.<sup>78</sup> Where disagreement exists, Farber might say, truth has not been found.

This hypothetical response exposes some of the problems of pragmatism. If knowledge is “warranted assertibility,” as John Dewey said,<sup>79</sup> can assertions be warranted when people disagree? It might be possible to dismiss as untrue ideas that some people are willing to assert — and thus find truth in the absence of consensus — if, as William James insisted, new theories “must derange common sense and previous belief as little as possible”<sup>80</sup> to be classified as true. It might then be possible, for example, to dismiss the possibility that dioxin is good for you<sup>81</sup> by saying that this theory severely “derange[s] common sense and previous belief.” But this approach also leads to a conserva-

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<sup>76</sup> Farber cites Robert W. Hahn & John A. Hird, *The Costs and Benefits of Regulation: Review and Synthesis*, 8 YALE J. ON REG. 233, 256 (1991), and Alec Zacaroli, *Final Report Finds Benefits of Air Act at Least 10 Times Greater Than Costs*, 28 Env't Rep. (BNA) 1243 (Oct. 24, 1997). For a persuasive critique of the rather pessimistic conclusions of the Hahn and Hird study, see Shapiro & Glicksman, *supra* note 24 (manuscript ch. 3, at 4–5).

<sup>77</sup> Luban, *supra* note 46, at 1008.

<sup>78</sup> Charles Sanders Peirce defined truth as “[t]he opinion which is fated to be ultimately agreed to by all who investigate.” *Id.* at 1013 (quoting CHARLES SANDERS PEIRCE, *How to Make Our Ideas Clear*, in 5 COLLECTED PAPERS OF CHARLES SANDERS PEIRCE 248, 268 (Charles Hartshorne & Paul Weiss eds., 1934) (footnote omitted)).

<sup>79</sup> JOHN DEWEY, *LOGIC: THE THEORY OF INQUIRY* 9 (1938).

<sup>80</sup> WILLIAM JAMES, *PRAGMATISM* 104 (1975).

<sup>81</sup> This possibility is intimated in one of Farber's footnotes (p. 176 n.33).

tive and exclusive pragmatism, a pragmatism that might, for example, turn a deaf ear to the dissenting voices of the oppressed.<sup>82</sup>

In implicitly suggesting that disagreement implies factual uncertainty, Farber tacitly embraces a more expansive pragmatism, one that would appear willing to credit ideas even when they “derange common sense and previous belief.” But this leads to a conservatism of its own. For unless we can exclude *some* factual claims — because they are influenced by financial interests or arbitrary framing or because they are choices about values masquerading as assertions of fact — we will never attain the state of certainty Farber seems to desire. In environmental law, there is inevitably someone with a financial or moral stake in seeing the facts pronounced in a certain way, and thus Farber’s expansive pragmatism threatens to keep us in a perpetual state of uncertainty about the effects of human activity on the environment.

Although Farber thus seems to equate disagreement with uncertainty, he also seems to believe in objectively correct answers to questions of fact, independent of social practice. He also appears to accept the idea that truth inheres in a result and not just a process and that inquiry can and should end with respect to some questions of fact. For example, in discussing the “radical uncertainty” surrounding environmental law (p. 165), Farber often expresses the hope, even conviction, that this uncertainty will diminish with time (p. 164). Although he does recognize that our knowledge base is constantly changing — this is the premise of his penultimate chapter on “dynamic environmental regulation” — he also seems to believe that at some point, with respect to individual questions of fact, we can reach correct conclusions that we need not continually revisit.<sup>83</sup> I think, in other words, that despite his pragmatism, Farber believes the truth is out there.

Farber’s apparent belief in the possibility of objectively true factual assertions — assertions that can be said to be true independent of social practice and consensus — is in tension both with his embrace of pragmatism and with his apparent belief that subjective disagreement means objective uncertainty. In addition, the combination of these two quite different attitudes toward uncertainty might at once convince us that we have not found the truth when there is disagreement about an assertion and yet also hold out the hope that objective truth one day will be found. This is a recipe for waiting rather than acting.

## V. PRAGMATISM AND ENVIRONMENTALISM

Despite my criticisms of Farber’s version of pragmatism, I believe that Farber is on to something important in arguing that pragmatism

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<sup>82</sup> See Radin, *supra* note 23, at 1710–11.

<sup>83</sup> For example, Farber posits a situation in which facts are known with certainty (p. 186).

holds much promise for environmental law. Indeed, the experiential, contextual, skeptical, and transformative attitude that I, at least, associate with pragmatism<sup>84</sup> tracks the primary components of my own vision of environmentalism. In this concluding section, I briefly explain how my perspectives on pragmatism and environmentalism are allied and suggest some implications of this alliance for regulatory policy. I also suggest, however, that “pragmatism” is ultimately too modest — too tepid, too cautious — a word for the kind of transformative attitude I have in mind.

First, pragmatism’s focus on the experiential and the embodied would, in the environmental context, lead to a renewed emphasis on the *physicality* of environmental problems. A pragmatic (in this sense) environmentalism would eschew abstraction in favor of concreteness. Although attention to the physicality of environmental problems may seem, self-evidently, an integral part of environmentalism, in fact a large portion of environmental discourse in recent years has turned away from concreteness and toward abstraction. Perhaps the most striking example of this turn toward abstraction is the current discourse on the protection of human life through environmental law. It has become commonplace to refer to the people whose lives are protected by environmental law as “statistical” lives.<sup>85</sup> It has also become commonplace to use the distinction between statistical and nonstatistical lives to justify the differential treatment of the lives protected by environmental law; statistical lives are now routinely translated into dollars and almost as routinely differentiated from each other according to age, wealth, and health.<sup>86</sup> But there are no “statistical” people. A pragmatic environmentalism might insist that we keep in mind, always, that the things at stake in environmental law are not abstractions, not statistics, but are real humans with real bodies that feel real pain and with real loved ones who feel real loss. Thus, a pragmatic environmentalism would renounce the currently fashionable idea that we can do things to statistical people — price their lives to justify a refusal to prevent their deaths and price them according to age, wealth, and health — that we would not do to “real” people.<sup>87</sup>

A renewed emphasis on the physicality of environmental problems might also help to enlarge the focus of environmental policy beyond the current fixation on the deaths prevented by environmental law. Environmental hazards render humans vulnerable to many adverse conditions that, while not fatal, are nevertheless physically painful, un-

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<sup>84</sup> As David Luban has observed, “[a]mong contemporary writers, ‘pragmatism’ can refer to almost anything.” Luban, *supra* note 46, at 1007.

<sup>85</sup> See Heinzerling, *Statistical People*, *supra* note 28, at 191.

<sup>86</sup> See *id.* at 191–94.

<sup>87</sup> See, e.g., *id.* at 189–207.

comfortable, and debilitating.<sup>88</sup> A pragmatic environmentalism might turn our attention toward hazards that, even if they do not make us die, make us *hurt*.

A pragmatic environmentalism might also turn our attention away from regulatory solutions that, even if they help to keep us physically healthy, have other unacceptable physical implications. For example, one recurring proposal in environmental policy is to mitigate the adverse health effects of air pollution not by reducing or eliminating the pollution itself, but by encouraging the people most vulnerable to the adverse effects of the pollution to stay indoors when pollution levels are high. A renewed emphasis on physical context might remind us of the unique lessons — in vulnerability, in humility, even in reverence — that the outdoors offer over the indoors and might help us to resist the temptation (because it seems such a cheap way of solving our problems) to insist that the physically fragile among us stay indoors to stay healthy.

Second, a pragmatic environmentalism would also emphasize the human circumstances under which environmental risks and injuries arise. A pragmatic environmentalism might not only permit, but also require us to think about the kinds of human actions that can lead to loss and to distinguish losses not only on the basis of the nature of the losses themselves, but also on the basis of the nature of the actions leading to loss. To put the point in terms familiar to today's students of environmental policy, a pragmatic environmentalism would recognize the importance of the "qualitative" features of risk. Under this vision of environmentalism, it would matter whether risks are, for example, involuntary, inequitable, uncontrollable, or unfamiliar, with consequences that are potentially catastrophic and repercussions that may extend far into the future.<sup>89</sup> It would also matter whether risks were imposed in an atmosphere of openness and trust or were concealed or denied.<sup>90</sup> Thus, in *Reserve Mining*, for example, the defendant's dishonesty would figure importantly in fashioning an appropriate response to the defendant's pollution.

More generally, the circumstances in which risks arise would be important determinants of the regulatory responses to them. In this way, a pragmatic environmentalism might reassure us that we need not equalize life-saving expenditures across life-threatening contexts; we might instead, for example, distinguish the death due to an automobile accident from the death due to asbestos in drinking water.

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<sup>88</sup> See Heinzerling, *Present Future*, *supra* note 28, at 2047-52.

<sup>89</sup> For a classic discussion, see Paul Slovic, *Perception of Risk*, 236 *SCIENCE* 280 (1987).

<sup>90</sup> For a discussion of the relationship between perceptions of risk and trust, see Slovic, *supra* note 56.

Some might question whether it is possible, without contradiction, to stress both the physical and qualitative features of risk. After all, voluntariness, equity, and other qualitative attributes of risk are not *physical* entities or effects. However, emphasizing both the physical nature of the consequences of risk and the human circumstances that led to those consequences is all part of an effort to avoid acontextualism in environmental policy. Moreover, and perhaps more controversially, I believe that the *physical* experience of an event can be, and often is, strongly linked to the human circumstances under which that event occurs. The pain of childbirth is different from the pain of environmentally induced cancer. Physical experience depends, at least in part, on cultural meaning, and cultural meaning derives from the human circumstances in which physical experiences occur. Thus, the tangible and intangible features and consequences of risk are intertwined.

Third, pragmatism's emphasis on practical problem solving and its humble attitude toward scientific truth might encourage us to turn our attention away from precise refinements of our scientific understanding when we must know — pragmatically, experientially — that we already know enough. A pragmatic environmentalism might, for example, regard the ten-year effort to state the carcinogenic risks of benzene in precise numerical terms as a colossal waste of resources and, worse, a needless prolongation of human loss — especially when this numerical expression was, at the end of the day, scrutinized simply for its relationship to the Supreme Court's off-hand remark about what a reasonable person might consider a significant risk.<sup>91</sup> A pragmatic attitude toward environmental regulation might encourage us to end scientific inquiry at an earlier, less precise point and to spend more resources targeting problems than quantifying them.

Finally, pragmatism — certainly pragmatism in the spirit of John Dewey — might return our attention to the first principles of environmentalism, including the relationship between human potentiality and the natural environment. With respect to changes to, or protection of, the natural environment, we might ask, with Dewey: "Does it release capacity?"<sup>92</sup> Turning our attention to human potentiality might help us to resist the contemporary fixation on the quantified deaths averted by environmental law and to enlarge our perspective on the benefits

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<sup>91</sup> See *Industrial Union Dep't, AFL-CIO v. American Petroleum Inst.*, 448 U.S. 607, 639, 653 (1980); see also STEPHEN BREYER, *BREAKING THE VICIOUS CIRCLE: TOWARD EFFECTIVE RISK REGULATION* 14–15 (1993) (discussing the Occupational Safety and Health Administration's efforts to regulate workplace exposures to benzene and the Supreme Court's invalidation of the agency's initial rule on the ground that the agency had not found that benzene posed a significant risk).

<sup>92</sup> JOHN DEWEY, *RECONSTRUCTION IN PHILOSOPHY* 197 (1957).

provided by environmental law to include the prevention of painful and debilitating illnesses and emotional reactions that are hard to quantify and, more controversially, the salutary lifestyle changes that might be wrought by regulation. At its largest and best, environmentalism is not only about prolonging lives and preventing illness; it is also about encouraging a habit of living that is simple, frugal, and natural — a habit of living that seeks to release human potentiality by helping individuals to transcend the daily temptations of shallow and greedy consumerism.<sup>93</sup> At its largest and best, environmentalism aspires to achieve development without growth — to release individual potential in art and literature and science and human affairs, without at the same time continuing the relentless economic expansion that threatens to overwhelm the carrying capacity of the planet.<sup>94</sup>

Environmentalism aspires to do these things, moreover, partly through social institutions, including government. This is very much in the spirit of pragmatists such as John Dewey. For Dewey, pragmatism was not mere political savvy, nor mere scientific skepticism, but rather a means of releasing individual capacity and potentiality. And he placed social institutions front and center in the struggle to release capacity: “[W]hen self-hood is perceived to be an active process it is also seen that social modifications are the only means of the creation of changed personalities. Institutions are viewed in their educative effect:—with reference to the types of individuals they foster.”<sup>95</sup> A pragmatic environmentalism would be a transformative environmentalism, one that would not shrink from encouraging adjustments, even radical adjustments, in human attitudes, habits, and behavior. A transformative environmentalism would require a major redirection in environmental policy, which has directed most of its attention to the “end-of-the-pipe” outputs of environmentally destructive behavior and shrunk from changing its inputs — the individual attitudes, habits, and behavior that lead us all to want and demand things that necessitate environmental damage.

In the end, however, it is hard for me to believe that a transformative environmentalism could call itself “pragmatic” and still be transformative. A transformative environmentalism is not pragmatic in any commonly understood sense of the term; it is challenging, unrelenting, and not at all jaded. A transformative environmentalism cannot, moreover, mutate into an excuse for making policy based on a hodge-

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<sup>93</sup> On early pragmatic commitments to releasing human potentiality, see Robin L. West, *Liberalism Rediscovered: A Pragmatic Definition of the Liberal Vision*, 46 U. PITT. L. REV. 673, 690 (1985).

<sup>94</sup> See generally HERMAN E. DALY, *BEYOND GROWTH: THE ECONOMICS OF SUSTAINABLE DEVELOPMENT* (1996).

<sup>95</sup> DEWEY, *supra* note 92, at 196.

podge of ethical worldviews. These features of the environmentalism I am espousing make it superior to pragmatism. "Pragmatism" is just too calculating, too timid a word for the experiential, contextual, skeptical, and most of all transformative attitude I have in mind.

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