Do Morals Matter? The Influence of Ethics on Courts and Congress in Shaping U.S. Environmental Policies

Christopher D. Stone"

TABLE OF CONTENTS

INTRO	DUC	TION	7: I	HAS E	NVIRONMENTAL ETHICS HAD — AND HOW	
Migh	ТIT F	I AV	Έ —	- AN IM	IPACT ON PUBLIC POLICIES?	14
I.	Sou	JRCI	ES O	f Evidi	ENCE REGARDING EE'S IMPACT	18
II.	SEA	RCF	IINC	THE S	OURCES FOR EVIDENCE OF EE INFLUENCE	25
	Α.	Th	e Se	arch Te	rms	25
	В.	Th	e Re	sults		28
		1.	Th	e Philo	osophers Search	28
			a.	The C	Congress	28
			b.	The C	Courts	29
		2.	Th	e Key '	Terms Search	31
			a.	The C	Congress	31
					Rights of Nature (or Environment)	
				(2)	Environmental Ethics	31
				(3)	Balance of Nature	32
				(4)	Existence Value	33
			b.	The C	Courts	33
				(1)	Rights of Nature (or Environment)	
				(2)	Environmental Ethics	33

Prepared for delivery at the Symposium, Environmental Ethics and Policy: Bringing Philosophy Down to Earth, U.C. Davis School of Law, Apr. 4, 2003. The author would especially like to thank Baird Callicott, Michael Fern, University of Southern California Law School class of 2004, who served as research assistant, and the staff of the U.S.C. law library, in particular Agis Bray, Rosanne Krikorian, Jennifer Murray, and Jessica Wimer.

[&]quot; J. Thomas McCarthy Trustee Professor of Law, University of Southern California Law School.

(3) Balance of Nature	34
(4) Existence Value	35
3. Issues	35
a. Congress	
b. The Courts	
III. IS THIS LACK OF IMPACT EVIDENCE A SIGN OF INDIFFERENCE TO	
PHILOSOPHY IN PUBLIC POLICY GENERALLY?	40
IV. IS THE SPARSENESS OF IMPACT A SIGN THAT THE EE LITERATURE	
Is Being Overlooked — or Is the EE Literature Failing to	
PRODUCE USEFUL POLICY-LEVEL CONTRIBUTIONS?	41
V. TO EXPAND THEIR INFLUENCE, WHAT TASKS NEED	
ENVIRONMENTAL ETHICISTS ADDRESS?	44
A. What Are the Ethic's Ambitions?	. 45
B. What Is (Are) the Ethic's Foundational Basis(es)?	46
C. The Ontological Conundrums: What "Things" Count	
Morally?	. 46
D. What Does "Counting Morally" Entail?	47
CONCLUSION	49

INTRODUCTION: HAS ENVIRONMENTAL ETHICS HAD — AND HOW MIGHT IT HAVE — AN IMPACT ON PUBLIC POLICIES?

What is the influence of didactic ethics — of the things philosophers worry about, and the ways they worry them through — in shaping public policies affecting the environment? How might that impact be expanded? These questions are empirical and causal, not philosophical. We are not asking "what is right?" but "what impact has speculative consideration of 'what is right?' had on environmental law and policy?"¹ The inquiry therefore lies outside the realm of philosophy proper and somewhere within the social sciences. The answers are, of course, extremely speculative. But the availability today of computer search engines means that one can scour legislative debates and judicial opinions for appearances of philosophers and their concepts. As a result, the speculation about philosophy's influence can be better informed than was formerly feasible.

¹ A "consideration" of moral philosophy might be indicated where, for example, a court, without reaching a philosophically ordained conclusion, adopts a philosophical term and procedure, such as "veil of ignorance" from JOHN RAWLS, A THEORY OF JUSTICE (1971); see Martin v. Dugger, 686 F. Supp. 1523 (S.D. Fla. 1988) ("... The court is not that lucky. Of course, if the court was fortunate, it could situate itself behind a "veil of ignorance.").

Several conclusions emerge from this paper. The direct impact of environmental ethics (EE) on policy-makers is veiled, but, as best we can glimpse, it has not been substantial. A computer-based review of legal databases reveals only sparse allusion to environmental ethicists and their literature. This disregard cannot be attributed to a blanket refusal among legislators and judges to invoke moral philosophy.² Ethical discourse surfaces in both branches. In Congress, ethical authorities are invoked in debates touching on the environment less frequently than in debates concerning other issues, such as medical research. The imbalance is replicated in the courts. John Rawls' ethical, but non-environmental work gets more "hits" (and appears to be used more meaningfully, when invoked) than do the writings of Aldo Leopold or any other philosophically-oriented environmentalist. The courts have listened to "moral expert witnesses" in bio-ethical cases,³ but not, thus far, in litigation affecting biodiversity or other environmental matters.

Why the relatively deaf ear to EE? Part of the explanation may lie in the fact that ethicists speak with a less convincing and unified voice about environmental abuse than about many non-environmental matters on the legislative and judicial agendas. But the picture is more complex. For a supposedly "applied" field, a conspicuously small percentage of the contributions descend to the specific, policy-addressing level commonly found in bio-ethics or business ethics journals. The bulk of the attention in the EE field remains moored to the foundational challenges, such as whether nonhumans can be said to have "intrinsic value" or be "morally considerable." Thus, a sympathetic judge or legislator inclined to turn to the literature of EE as a guide would be hard pressed to find a clear, coherent treatment of the specific issue he or she faces.

 $^{^2}$ Richard Posner argues that judges do not really apply moral theory in The Problematics of Moral and Legal Theory, ch. 2 and passim (1999).

³ See Hart v. Brown, 289 A.2d 386 (Conn. Super. Ct. 1972) (authorizing organ transplantation between minor siblings); In re Quinlan, 355 A.2d 647 (N.J. 1976) (authorizing appointment of comatose patient's father as guardian of her person, effectively authorizing withdrawal of her life support); BIOETHICS AND LAW, CASES, MATERIALS, AND PROBLEMS (Michael H. Shapiro et al. eds., 2d ed. 2003).

⁴ See infra notes 96-98 and accompanying text. This confirms a conjecture of Baird Callicott, that "[e]nvironmental philosophy has been less of an 'applied' subdiscipline of philosophy than some of the other applied subdisciplines with which it is often lumped, biomedical ethics... for example. Environmental philosophy has, more particularly, been more involved with reconstructing ethical theory than with applying standard, off-the-rack ethical theories to real world environmental problems." J. Baird Callicott, *The Pragmatic Power and Promise of Theoretical Environmental Ethics*, 11 ENVTL. VALUES 3, 4 (2002).

⁵ See infra notes 96-98 and accompanying text.

Consider one of — perhaps *the* — most-cited passages in the environmental literature, Aldo Leopold's "land-ethic principle." According to Leopold, "[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." Even should the principle be defensible, what does it entail in application? For example, at issue today is whether to exclude the robust populations of minke whales from the current moratorium on commercial whaling (a move favored by Norway, Iceland, and Japan, among others). Baird Callicott, one of the major EE contributors, tried to extract guidance from Leopold on the minke issue but was unable to draw any decisive conclusion. Leopold's philosophy (and there is something telling about having to stretch out to a forester to swell the list of influential "philosophers") provides little practical guidance.

Hence, EE's continued attention to its foundational questions — what are the operative principles? — is understandable. The groundwork still has to be laid. In "ordinary" moral discourse, the moral considerability of humans can be regarded as given. By contrast, the moral status of animals and forests is crucial and elusive. But even cogent answers to the basics, alone, would not assure policy impact. Even if a legislator were persuaded that, for example, "wildernesses are morally considerable," that phrase would not tell her whether to increase the supply of wilderness beyond the present level, nor beyond the margin supportable by more familiar utility-based arguments. The impact of EE in the policy arena depends largely on its ability to extract from its foundational positions a host of intermediate level guides that are persuasive and have the power to resolve matters at the policy level, if

⁶ ALDO LEOPOLD, A SAND COUNTY ALMANAC AND SKETCHES HERE AND THERE 224-25 (1949).

⁷ J. Baird Callicott, Whaling in Sand County: A Dialectical Hunt for Land Ethical Answers to Questions About the Morality of Norwegian Minke Whale Catching, 8 Colo. J. Int'l. Envtl. L. & Pol'y 1 (1997). He concludes with a question: "should [we] give the minke whale, and all other cetacean species, the benefit of the doubt until there are more definitive answers to fundamental questions about the nature of the beings that whalers propose to kill, with so very little reason?" Id. at 30. The would-be hunters' reasons — culture and food, directly and indirectly as a means of eliminating mammals that compete for fish stocks — are not clearly "little." See Christopher D. Stone, Whaling and its Critics, in TOWARD A SUSTAINABLE WHALING REGIME 269-91 (R. Friedheim ed., 2000).

⁸ Leopold's academic service was as professor of Game Management at the University of Wisconsin. ALDO LEOPOLD, COMPANION TO A SAND COUNTY ALMANAC 288 n.2 (J. Baird Callicott, ed., 1987). Callicott notes that Leopold's reputation among philosophers is uneven at best; he is largely ignored in the philosophy literature although, as we shall see, he dominates "real" philosophers in the Congress. *Id.* at 186.

not at the case level. To do so, the EE literature has a number of significant challenges to overcome. The main purpose of this paper is to clarify the agenda that EE should address if it is to increase its impact in law-making fora. A secondary purpose is to stimulate discussion of the promises and limitations of the sort of database study that we have employed and that others may be tempted to adopt and improve upon.

Of course, no one is suggesting that societal impact is the goal of philosophy. Those who "do" philosophy, and perhaps those who do it most admirably, are not aiming to persuade senators, judges, or the general public. Philosophers commonly employ everyday hypotheticals, but their focal audience is, and always will be, other philosophers and academics. Furthermore, philosophers are often less committed to persuasion than to systematizing beliefs or to uncovering uncertainties. None of these elements is calculated to make philosophy, ethical or otherwise, "influential."

On the other hand, those doing philosophy in "applied" ethics fields, such as bio-ethics, environmental ethics, and business ethics, are presumably among the most eager to achieve impact, having traded some measure of universality (and perhaps, regrettably, stature among their peers) in exchange for added relevance. Baird Callicott takes cheer in the thought that EE finds itself today "fund[ing] the formation of public policy and practice." This does not mean the "activists" aim uniquely at public policies. Some of the targets are individuals making decisions in their private capacities, such as whether to hunt, eat meat, buy only certified "green" products, or join a conservation society.

But I want to focus on public policy fora for two reasons. First, in the case of public decisions, the availability of public records makes evidence of philosophy's impact more readily discernible than when we try to gauge its effect on private choice. Second, many environmental issues, perhaps including the most weighty, such as the protection of endangered species and the reduction of greenhouse gases, involve public goods and therefore require political action. Thus, if EE is to affect the flow of events, it must persuade public agencies. How persuasive have environmental ethicists been with courts and

⁹ Kate Rawles, *The Missing Shade of Green, in* ENVIRONMENTAL ETHICS 535-46, 542 (David Schmidtz & Elizabeth Willott eds., 2002).

¹⁰ J. Baird Callicott, The Pragmatic Power and Promise of Theoretical Environmental Ethics: Forging a New Discourse, 11 ENVTL. VALUES 3, 23 (2002).

¹¹ One could, however, poll individuals about their beliefs on issues such as preservation and ask them why they hold those beliefs, and perhaps ferret out the ethical components and their sources.

legislatures? How, to start with, might we tell?

I. SOURCES OF EVIDENCE REGARDING EE'S IMPACT

At the outset, we must decide which passages in the public records to identify as bearing the stamp of EE's influence. If we start with the EE literature, we find two distinguishable, but not always well distinguished, missions. The first accepts the notion of human welfare as the ultimate foundation for moral analysis and simply argues for a properly appreciative, presumably increased valuation of Nature within that accounting process. An argument not to eliminate whales points to the revenues generated by commercial whale watching, and adds what people would pay, collectively, to preserve whales for our descendants. The second, a more ambitious and controversial strategy, seeks to establish EE as an independent framework outside of human-centered welfare and, if need be, to render judgments in opposition to those of the welfarist. Whales have a right to exist even if, for example, their consumption of ocean resources in competition with humans makes them a bad bargain.

More specifically, the first route, while utilitarian, exploits the fact that what we are willing to pay for protecting Nature potentially increases (or decreases) with moral deliberations exogenous to, and prior to, the utility calculations. As one of my colleagues puts it, EE, so viewed, adopts as its aim "to educate our preferences." It may do so by emphasizing the intricacy of elements of Nature, their beauty, their capacity to inspire awe (when rightly understood), or their adaptability and perseverance. There are several rubrics under which an expansive welfarist may welcome these considerations, such as "existence value"

Leopold ordinarily appears to boost conservation because it redounds to long-term human advantage. There is serious scholarly question, too, whether a preference-regarding utilitarianism cannot be stated robustly enough as to envelop all moral bases, that is, to deny any stand-alone weight for moral claims such as "our non-utility based obligations to the environment." See, e.g., STEVEN SHAVELL, FOUNDATIONS OF ECONOMIC ANALYSIS OF LAW, ch. 26 (forthcoming 2004) (maintaining that robust version of welfare economics — counting preferences for, for example, equitable distribution — is more sturdily defensible than ostensible deontological foundations, such as Kantianism, that are often set up in conflict with welfare).

¹³ We could refer to it, cautiously, as a "taste" for whales.

¹⁴ Thanks to Ron Garet.

¹⁵ This accords with Shavell's notion of a "morally inclusive social welfare," in which tastes for morals, that is for choices that do not advance narrowly-defined individual wellbeing, are included in the social welfare function. SHAVELL, supra note 12, at 10.

(what we would pay, collectively, to preserve X), "option value" (what we would pay for the option to have X on hand in our own futures), and "legacy value" (what we would pay to include X as part of our legacy for future generations). After all, is the pleasure of contemplating our progeny enjoying the Grand Canyon qualitatively different from the pleasure of contemplating their inheriting an ancestral brooch? Note that this literature makes no appeal to any utility-transcendent and exotic "environmental ethics." When all is said and done, it accepts welfare's verdict.

It is clear that EE in this weaker sense has already made strong inroads in United States law. As early as 1989, the Court of Appeals for the D.C. Circuit rebuked the Department of Interior for regulations limiting the role of non-consumptive values, such as option and existence values, in calculating damages to natural resources. The Exxon Valdez litigation used even more expansive and explicit language. Under CERCLA:

"Natural Resource Damage" means compensatory and remedial relief recoverable by the Governments in their capacity as trustees of Natural Resources on behalf of the public for injury to... all Natural Resources... including... compensation... for loss of use value, non-use value, option value, amenity value, bequest value, existence value, consumer surplus, economic rent, or any similar value of Natural Resources.¹⁷

Even though such developments can be viewed as no more than a sympathetic accounting for the environment within the utility framework, we collect them as evidence of EE's influence on the grounds that such an expanded accounting is at least consistent with some part of the EE agenda.¹⁸

¹⁶ Ohio v. U.S. Dep't. of the Interior, 880 F.2d 432, 464 (D.C. Cir. 1989). In response, on Mar. 25, 1994, the Department of the Interior published revised rules, "Damage Determination Phase — Cost Estimating and Valuation Methodologies," 43 C.F.R. § 11.83 (2003) (inviting liberal use of non-use values in calculating Natural Resource damages under CERCLA).

¹⁷ In re Exxon Valdez, 1993 WL 735037, 4 (D. Alaska 1993) (dismissing suit for failure of plaintiff sports fisherman to demonstrate injuries cognizable under statute); see also Puerto Rico v. SS Zoe Colocotroni, 456 F. Supp. 1327 (D.P.R. 1978) (imposing stern environment-restoration damages in admiralty law on owners of tankers who allowed vessel to deteriorate, resulting in wrecking and marring of mangrove area), vacated in part, Puerto Rico v. SS Zoe Colocotroni, 628 F.2d 652, 676-77 (1st Cir. 1980).

¹⁸ Consider, for example, a very well-argued case that fishing is wrong in large measure because of the pain to the fish, A. Dionys de Leeuw, *Contemplating the Interests of Fish: The Angler's Challenge*, 18 ENVTL. ETHICS 373, 382-87 (1996). Such an argument may well be utilitarian, that is, counting pleasures and pains (if not preferences) of all creatures, great and small.

The second, more radical, project is to reject welfarism and its conceptual baggage of Pareto-improvements, willingness to pay, and so on, as inappropriate in dealing with environmental dilemmas. The grounds may be that welfarism is objectionably homocentric ("speciesist"), or that although economics may be fit for decisions we make as consumers, it is unsuited for analyzing issues, such as environmental protection, that we resolve outside markets, in political arenas, as citizens. 9 Such writers, in claiming that we have a duty to some environmental (nonhuman) object X, or a duty to future generations to leave them X, or that X has a *right* to continued existence. purport to invoke something other and beyond the aggregated satisfaction we collectively get contemplating X or leaving X to our progeny. Certainly, most who put their claims in such deontological form are not prepared to admit refutation by contingent value surveys by evidence of what people in fact would pay for X's existence (even after enlightenment by the weaker form of EE). If pay is a legitimate issue at all, the claimant is at the least implicating what people, thinking about the problem rightly, ought to pay for X's continued existence. In the strong form of EE, the welfarist verdict is, in a word, appealable because it may be wrong.21

It might be supposed that the influence of EE, whichever way construed, needs no demonstration. After all, the emergence of systematic environmental philosophy²² is usually traced to the 1960s and

¹⁹ The seminal exposition is MARK SAGOFF, THE ECONOMY OF THE EARTH 27-29 and passim (1988). Sagoff, in distinguishing between what we want (consumers) from who we are (citizens), maintains that "[p]rivate and public preferences belong to different logical categories." *Id.* at 94. Thus, a person voicing his preferences over public matters, such as maintenance of the environment, is stating "not desires or wants, but opinions or views [as to what] is best or right for the community ... as a whole." *Id.* Those who, like this author, are sympathetic to Sagoff's thesis must be concerned with how unreflective the relevant congressional debates appear. *See infra* notes 45-51.

For an excellent exposition of the inappropriateness of applying cost-benefit analysis in the environmental context, set in a general critique of mainstream ethics, see ELIZABETH ANDERSON, VALUE IN ETHICS AND ECONOMICS 203-15 (1993). Anderson gives a central place to a nuanced and pluralistic concept of "appreciation," which varies in quality with its object.

²¹ Making such a position coherent is a primary goal of EE, but not my principal focus here. I leave unexamined the relationship between the soft and strong versions. Even if the reach of EE in the strong sense is only congruent to what a utilitarian would recognize, we can imagine a legislator, unpersuaded by the utility arguments not to drill on the Arctic reserve, being persuaded by a utility-independent, EE approach. One can easily imagine two legislators each independently persuaded to support the death penalty but for different reasons: the one who rejects utility on Kantian grounds, and the other who rejects Kant for reasons of utility.

²² One can find much earlier evidence of attention, but ordinarily these are

'70s,²³ a period that saw a surge in environmental legislation, including the Wilderness Act (1964),²⁴ the National Environmental Policy Act (1969),²⁵ and the Endangered Species Act (1973).²⁶ This contemporaneity might suggest a causal relationship. But it must not be forgotten that conservation laws and treaties emerged long before, and without the apparent benefit of, philosophical elaborations about the moral considerability of Nature.²⁷ Indeed, some of the environmental movement's strongest roots have been traced less to philosophy than to French romanticism and even turn of the nineteenth century colonialist self-interest!²⁸ And even regarding the modern surge, how can we be sure how much of it owes to philosophy and how much to literature? Can the philosophy of whaling (pro and con) compete in the public arena with *Free Willy* and other cetacean narratives?

The most direct approach to determining the impact of EE is to review legislative floor debates and judicial opinions on representative issues affecting the environment for evidence of how decision makers used EE authors, terminology, and arguments. This approach is, let us grant in advance, a far from perfect way of evaluating impact. To begin with, identifying potential ethics-affected discussions turns out to be more complicated than one might imagine, even with the aid of computer search engines. As explained more fully below, we ran a group of relevant terms through the federal court and congressional databases but

ungrounded in any general principle, for example, the Biblical injunction not to destroy certain plants in wartime. *Deuteronomy* 20:19-20.

²³ See RODERICK NASH, THE RIGHTS OF NATURE 74-86 (1989). Nash reviews the works of this period, which includes that of Aldo Leopold, Joseph Wood Krutch, René Dubois, and Rachel Carson.

^{24 16} U.S.C. §§ 1131-1136 (1964).

^{25 42} U.S.C. §§ 4321-4335 (1969).

^{26 16} U.S.C. § 1531 (1973).

¹⁷ In Patricia Birnie & Alan Boyle, International Law and the Environment (1992), the first wildlife protection treaty cited is the 1885 Convention for the Uniform Regulation of Fishing in the Rhine, although they advert to "ad hoc" whaling understandings to the 16th Century. *Id.* at 425. Simon Lyster, International Wildlife Law 63 (1985) traces the movement to protect birds useful to agriculture to 1868 (although not eventuating in a Convention until 1902). These treaties may be narrowly homocentric in motivation (birds "useful to agriculture"), but perhaps less so an early U.S. federal statute, the Migratory Bird Treaty Act of 1918 (16 U.S.C. §§ 703-712 (2000); 40 Stat. 755) (implementing 1916 Convention between U.S. and Great Britain (for Canada) for protection of migratory birds). One should consider in this context Alyson C. Flournoy's point that from the existence of a body of environmental laws one cannot conclude that there is any coherent environmental theory underneath. Alyson C. Flournoy, *In Search of an Environmental Ethic*, 28 COLUM. J. ENVTL. L. 63, 69 (2003).

²⁸ See Richard Groves, Origins of Western Environmentalism in SCIENTIFIC AMERICAN, 42-47 (July 1992) .

found that counting "hits" alone is of limited value. 29 For one thing, each role in the policy-making process veils "real" motivation in its own ways. Legislators are under no obligation to take the floor to give the reasons for their votes. And when reasons are offered, the decisive one may go unstated: that the vote simply served a powerful constituency, be it the National Rifle Association or the Sierra Club. 10 Judges, by contrast, at least at the appellate levels, are expected to justify themselves in principle-referenced opinions. On the other hand, their formal obligation to follow precedent, or to execute the will of other authors (to find "the intention of Congress"), discourages forays into fundamental, top-down principled reasoning. Of course, we all know that the ostensibly authoritative sources underdetermine outcomes, leaving judges some leeway to "fill in." Nonetheless, judges who "fill in" in accordance with their ethical agenda are under some pressure to cover their tracks with established principles and cannons.³¹ This "track covering" makes it difficult to reconstruct what they were really thinking or whether their real thinking was remotely philosophical. As an

²⁹ The general weakness of "hits" (mere references) to illuminate actual influence is well argued in Peter Goodrich, *The Perspective Law of the Ego: Public Intellectuals and the Economy of Diffuse Returns*, 66 MOD. L. REV. 294 (2003). Regarding the impact of jurisprudence upon judges, Goodrich opines, "influence is structural, delayed, indirect and most usually inominate." *Id.* at 307.

Moreover, are we to suppose from a Senator's invoking the name of Immanuel Kant that it was really Kant who convinced him? See 140 CONG. REC. S5893 (daily ed. May 18, 1994) (remarks of Senator Robert Dole critical of President Bill Clinton's foreign policy (reading into the CR an article by James Baker citing Kant as one whose principles of liberalism are embodied by the modern societies of Western Europe and the United States)). Indeed, what are we to make of a Senator's not invoking Kant in a floor debate in which he takes a distinctly Kantian position? Perhaps he was a closet Kantian, swayed by Kant, but leery of turning off the folks back home with highfalutin philosophy. There is no way to know. See the remarks of Rep. Hyde in regard to human cloning, infra note 93. They are unmistakably Kantian in flavor, without the use of "Kant."

³¹ See, for example, the Second Circuit's complaint that the Sixth Circuit, in deciding whether Elvis Presley's right of publicity survived his death, was too quick to "rel[y] on John Rawls' A Theory of Justice (1971) and the Restatement of Torts.... Clearly, familiarity with Tennessee law and practice was of no consequence in the Sixth Circuit's endeavor." Factors, Etc. v. Pro Arts, 652 F.2d. 278, 285-86 (2d Cir. 1981). A separate question is whether judges should be "acquainted with" philosophy. Judge Learned Hand wrote: "I venture to believe that it is as important to a judge called upon to pass on a question of constitutional law, to have a bowing acquaintance with Acton and Maitland, with Thucydides, Gibbon, and Carlyle, with Homer, Dante, Shakespeare, and Milton, with Machiavelli, Montaigne, and Rabelais, with Plato, Bacon, Hume, and Kant as with books that have been specifically written on the subject. For in such matters everything turns upon the spirit in which he approaches the question before him. The words he must construe are empty vessels into which he can pour nearly everything he will." H. ABRAHAM, JUSTICES & PRESIDENTS 53 (2d ed. 1985) (quoting J. Hand).

illustration of judicial resistance to academic philosophy, Richard Posner offers the Supreme Court argument over the constitutional right to physician-assisted suicide:

The question whether a doctor should be allowed to hire a doctor to kill him is a favorite of moral philosophers, so much so as to have provoked a distinguished group of them to join [Ronald] Dworkin in submitting an amicus curiae brief urging the Supreme Court to recognize ... [the] ... right. The Court refused ... without taking sides on the philosophical issue, which had been vigorously contested as part of a larger debate on the morality of suicide, the "philosopher's brief" representing just one point of view. The Justices did not explain why they ducked the philosophical issue, but they had several compelling practical reasons The first is that given the balance between the opposing philosophical arguments as they would have appeared to most people both inside and outside philosophy, the Court could not have written a convincing endorsement of either position. It would have been seen as taking sides on a disagreement not susceptible of anything remotely resembling an objective resolution.³²

Our efforts to identify such influence as may exist, through computer search, is dogged by the fact that there could be, residing in the public records, well-formed, fully fleshed out moral arguments that simply fail to invoke any of the obvious (searchable) words. Key *concepts* may be employed without the speaker using the *word* being sought. If so, our search would have missed them completely. Witness the Congressman

³² POSNER, *supra* note 2, at 130-31. On the other hand, the courts surely write many decisions that those both inside and outside the law find to be "taking sides on a disagreement not susceptible of anything remotely resembling," and so on. Nonetheless, Posner may be right that *openly invoking* "philosophy" even in such a matter as assisted suicide is institutionally discouraged, so that the failure to refer to philosophical sources provides no basis for inference that the justices considered the briefed arguments uninteresting or irrelevant. Besides, in other cases, as we show below, philosophers do receive an airing. Posner advances other reasons why judges may really, and not just apparently, eschew philosophy, including that "judges more than law professors want to preserve the autonomy of the law, not make the law the handmaiden of other disciplines, especially one as remote from the understanding and affections of the average American, including the average and indeed the above-average judge, as moral philosophy." *Id.* at 132. One wonders whether Judge Posner will be critical of his brethren on learning our finding that the *American Economic Review* gets 34 cites in ALLFEDS; would he have economics be less a "handmaiden"?

For a skeptical view of the influence of ethics in international diplomacy, see David G. Victor, *The Regulation of Greenhouse Gases: Does Fairness Matter? in FAIR WEATHER?* 193 (Ferenc L. Tóth ed., 1999).

who, without using the searched-for term "existence value" nails it ever so nicely ("... just the knowledge that [whales] are out there still alive... just gives me a good feeling"³³) so that the "use" of the relevant idea is discovered only fortuitously in the course of a parallel search. Moreover even "hits" we did get were frequently faux. Running a names-of-philosopher search in federal court database, one discovers the count inflated by there being an attorney named John Rawls. "Existence value" gets eighteen results, but on closer examination a few of the cites were to irrelevant sentences like, "the existence, value, or transfer of which..." Thus, in order to produce meaningful data, searches had to be followed up with contextual examinations, which involve subjective interpretations.³⁴

Even when we reviewed hits in context, classification of a dialogue as ethics-influenced often turns out to be considerably ambiguous. What are we to make of a Congressman's complaint that greenhouse gases "have tipped the very fine balance of nature?" Is his concern that we have impaired *Nature* (valued either intrinsically or as part of expanded social welfare function) or just that our tampering is undermining conventional goods and services, such as agricultural productivity and fuel costs?

In addition, even to focus on federal courts and the Congress overlooks the influence of EE on the formation of policy, even the formation of tastes, at the grassroots level, and in stimulating careers. Nor even are all judicial opinions reported. If for example, a trial judge invoked EE in sentencing a corporate polluter, it would probably not appear in our searches. Our search also fails to pick up the ruminations of specialized public agencies whose decisions may be more influential than those of the courts and legislatures, such as state fish and game commissions, the Environmental Protections Agency, National Marine Fisheries Service, and National Oceanographic & Atmospheric Administration (NOAA).³⁶

 $^{^{33}}$ 139 CONG. REC. H603 (daily ed. Feb. 16, 1993) (statement of Rep. Ravenel, Jr., opposing resumption of commercial whaling).

 $^{^{34}}$ In at least one search, of the Congressional Record database for right! /2 (nature or environment), we returned so many (2675) hits. Therefore, an independent evaluation of each hit was impractical, requiring us to sample.

³⁵ See 143 CONG. REC. S10872 (daily ed. Oct. 21, 1997) (statement of Sen. Kerry in connection with U.S. position in Kyoto climate change conference).

³⁶ See MICHAEL L. WEBER, FROM ABUNDANCE TO SCARCITY, ch. 8 (2002) (maintaining that attitude of administrative agencies in implementing Marine Mammal Protection Act (MMPA) and Endangered Species Act (ESA) may significantly override legislation).

Moreover, to gauge the influence of EE in the policy levels we did examine, one would want to know whether some particular ethical position: (1) was given *some weight* in the decision; (2) was given *decisive weight* in the array of consideration presented; (3) *trumped* all other considerations; or even (4) was considered so dominant that it merited *explicit incorporation* in the system as a rule, not just as the basis for an *ad hoc* decision. But such discriminations are simply inaccessible.

To make assessment even muddier, what one ideally seeks is not the mere invocation of the moral judgments any culture holds in an inventory of accepted "facts" ("killing babies is wrong"), but moral reasoning called upon to resolve genuinely unsettled frontier issues ("ought we to fund stem cell research?").37 That is, the ideal "find" the strongest marker of EE's influence - would be a fairly fleshed out, formal, deductive argument for an EE-based position offered as trump Such a gem would include a clearly over all other contenders. articulated and defended major premise of EE (such as, for thus-andsuch reasons, all species of high intelligence merit protection beyond what is warranted by their usefulness to us), a minor premise (minke whales display high intelligence), and a conclusion (therefore, we have a compelling duty to preserve the species, minke whales, even at some sacrifice of human welfare). But neither judges nor legislators are apt to structure their arguments formally. Even when a point is argued, the presentation is commonly casuistic, a looser blend of paradigm cases, maxims, and analogies.38

II. SEARCHING THE SOURCES FOR EVIDENCE OF EE INFLUENCE

A. The Search Terms

To locate even the weakest evidence of direct policy influence, we selected two databases: one for congressional debates (Westlaw CR, which runs from 1985) and the other for federal court decisions (Westlaw ALLFEDS, which runs from 1944).³⁹ Three sorts of searches were run on these databases: (1) a key terms search, (2) a philosopher by name search, and (3) an issues search. Each "hit" was recorded; spurious "hits" were discarded (such as "John Rawls, of counsel"); and the

³⁷ See POSNER, supra note 2, at 140-41 and note 93.

³⁸ See generally Albert R. Jonson & Stephen Toulmin, The Abuse of Casuistry 250-61 and passim (1988).

³⁹ A future researcher might wish to employ the broader ALLCASES database.

remaining hits were examined with a qualitative reading in context.

- (1) The key terms search. Key terms included: (1) "environmental ethic!"; (2) "environmental moral!"; (3) "balance of nature"; (4) "future generation!"; (5) "right! /2 (nature or environment)"; (6) "existence value".
- (2) The philosophers search. Six philosophers were run on both databases. These were: Baird Callicott, Aldo Leopold, Bryan Norton, Mark Sagoff, John Rawls, and Peter Singer. The selection of the first four was highly subjective: philosophy journals lack the law literature's capacity to provide a count of most cited authorities. All four are well known and respected, although Leopold, a foresteressayist, might have been surprised to find himself grouped with "philosophers." Neither of the last two named is predominantly an environmental philosopher. Their inclusion was to provide a baseline for comparison.
- (3) The issues search. The third approach was to search through discussions of policy where one would expect to find EE injected into the dialogue if EE mattered. This tactic should enable us to pick up some evidence of impact not "hit" by the key terms search or the philosophers search.

Identifying the issues, however, was problematic. There are many social issues that may affect the environment, but so minimally or remotely (think of farm subsidies and military appropriations) that the injection of EE into discussions is unlikely. Even where the impact on the environment could be substantial, the effects on humans may be so vast and widespread (think of nuclear weapons testing and proliferation) that considerations of EE would add little weight to the scales. We put these too small/too big issues aside. And we also put aside classic animal rights issues such as fox hunting, "humane slaughtering

⁴⁰ Also, but without significant results, we ran:

^{(1) &}quot;at least 3(beauty) w/s at least 3(natur!)"

^{(2) &}quot;aesthetic/para environment"

^{(3) &}quot;aesthetic/para nature"

⁴¹ See supra note 8 and accompanying text.

⁴² Writings on nuclear winter do, however, note effects on non-human life. JONATHAN SCHELL, THE FATE OF THE EARTH (2000).

methods," and zoos, which have a distinct literature in which sentience and cruelty, inapplicable to landscapes and species, are available as arguing points.⁴³

Of course, there is no consensus on a checklist of public "environmental" issues when the area is so shaven down. There are undoubtedly many valid categorizations, at different levels of descriptions (of effects, of actions), but we adopted the following as a basis for further analysis both of the public record and of EE's own literature.

- (1) Preservation issues. Preservation issues include conservation of areas, such as pristine forests, habitats, and ecosystems; preservation of organism-transcending "things" such as stock and species; and preservation of functions, such as wetland "services."
- (2) Innovation of life form issues. These issues range from modification of life forms by selective breeding to more direct and radical shifts through genetic engineering, such as creating new breeds of transgenic fast-growing fish, cloning, and xeno-transplants. We searched under "cloning," partly because it would provide a comparison of discourse where humans (independent of the environment) were affected.
- (3) *Repair issues*. This includes positive measures to restore and repair prior modifications of the environment. We selected restoration of the Everglades and the re-introduction of wolves.

⁴³ I do deal with whaling as a representative of the animal rights wing of the environmental movement, broadly considered. *See infra* notes 79-87 and accompanying text.

[&]quot;Inevitably, based on intuition and anticipating theory, some will find that what I have presented as two distinguishable categories should be combinable into one, or that one category that made my list could be distinguishable into two. In actual institutional debate, a single policy question can appeal to two bases combined: for example, the objections to a life-form innovation, such as a genetically engineered salmon, can be based on either or both threats to habitat (preservation) or insult to Nature (excessive innovation).

B. The Results

1. The Philosophers Search

a. The Congress

Very few philosophers get "hits" in the Congressional Record database (CR). Of the first four philosophers, the sampling of environmentalists, only Leopold's name appears, garnering eighty-three hits. But he appears, typically, as father of a movement, not as an intellectual whose thought brings analytical insight to particular legislative issues. Thus, on Earth Day 1990, Senator Daniel Moynihan pays tribute:

Mr. President, as we all know, this Sunday marks the second observance of Earth Day. This is a day for us to reflect on what we mean by "environmentalism." The first and best modern exposition of this idea was written by Aldo Leopold in "A Sand County Almanac": "an ethic dealing with man's relation to land and to the plants and animals that grow on it."

Peter Singer had ten congressional references, only one of which involves, tangentially, the environment.⁴⁸ One involves animal rights, and eight involve abortion. Moreover, an examination of Singer's appearances alerts us to the fact that "hits" need not equate with influence. All references to Singer range from mocking (animal rights) to demonizing (abortion rights). Typical of the latter is:

[T]he intellectual framework for legalization of killing unwanted

⁴⁵ Mark Sagoff returned two hits, neither of which involved his work on the environment, but on factions within bureaucracies.

⁴⁶ A number of the Leopold hits are flatly neutral, as in references to Aldo Leopold Native Heritage Grant Program, 147 CONG. REC. E2392 (daily ed. Dec. 20, 2001) (statement of Rep. Rahall), and the Aldo Leopold Award for Editorial Writing, 147 CONG. REC. E2158 (daily ed. Nov. 28, 2001) (statement of Rep. Udall).

⁴⁷ 136 CONG. REC. S4724 (daily ed. Apr. 20, 1990) (statement of Sen. Moynihan).

⁴⁸ Senator Mark Hatfield reads into the Record an article lamenting the failure of environmentalists to credit the force of Christianity's support for the environment: "Australian scientist Peter Singer says that any claim that persons have a status different from monkeys and moles is 'speciesism.'" 139 CONG. REC. S10961-02 (daily ed. Aug. 6, 1993) (quoting from Ronald J. Sider, *Redeeming the Environmentalists in Christianity Today* (June 12, 1993)). Another reason why Singer's work on animal rights may not drive philosophical arguments in public fora is suggested by Posner, *supra* note 2, at 43, in pointing out that Singer's ANIMAL LIBERATION (1975) is grounded more on gruesome photos than on any technical philosophy.

babies is being constructed by a prominent bioethics professor at Princeton University. Professor Peter Singer has advocated allowing parents a 28-day waiting period to decide whether to kill a disabled or unhealthy newborn. In his widely disseminated book, Practical Ethics, he asserts, "killing a disabled infant is not morally equivalent to killing a person. Very often it is not wrong at all."

John Rawls' thoughts were mentioned only twice in Congress.⁵⁰ He was not treated as uncharitably as Singer, but he was not cited for any idea that might be even remotely connected to the environment, such as the just savings rate.⁵¹

b. The Courts

Of the environmental philosophers, Aldo Leopold alone shows up in the courts, three times. Justice Douglas, in dissent, cites Leopold's views approvingly in *Sierra Club v. Morton*, dealing with a challenge to corporate development of Mineral King Valley. In another case, Defenders of Wildlife challenged the Department of Interior's decision not to designate the flat-tailed horned lizard as a "threatened species." The majority of the Ninth Circuit, voting in support of a broadened understanding of "threatened," quotes Leopold: "There seems to be a tacit assumption that if grizzlies survive in Canada and Alaska, that is good enough. It is not good enough for me.... Relegating grizzlies to Alaska is about like relegating happiness to heaven; one may never get there."

Here, it is interesting to contrast the courts' use of Leopold with their use of John Rawls.⁵⁴ The allusions to Leopold are cursory, and basically

⁴⁹ 147 CONG. REC. S6319-01 (daily ed. June 14, 2001) (statement of Sen. Santorum); see also 145 CONG. REC. S12972 (daily ed. Oct. 21, 1999) (statement of Sen. Santorum).

⁵⁰ The *name* appears nine times, mostly referring to the philosopher, but spuriously, as the winner of an award, etc.

⁵¹ "The philosopher, John Rawls, has told us that we are part of an American family and that there is something completely insidious and unacceptable about the randomness of poverty." 133 CONG. REC. H11445 (daily ed. Dec. 15, 1987) (statement of Rep. Downey commenting on Family Welfare Reform Act of 1987).

⁵² "'Ecology reflects the land ethic;' and Aldo Leopold wrote in A SAND COUNTY ALMANAC 204 (1949), 'The land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land.'" Sierra Club v. Morton, 405 U.S. 727, 752 (1972) (Douglas, J., dissenting).

⁵³ Defenders of Wildlife v. Norton, 258 F.3d 1136, 1145 n.10 (9th Cir. 2001). In a third case, Mountain Apache Tribe of Arizona v. United States, 11 Cl. Ct. 614, 660 (1987), the court cites a study by Leopold without reference to his ideas.

⁵⁴ Peter Singer, who appeared in Congress, does not appear in the courts.

conscript his name to support a substantive position that could be easily arrived at without much philosophizing. However, among Rawls' twenty hits, we find references of appreciable depth, occasionally with methodological implications. For example, Judge Jon Newman, concurring in a sentence review that implicates the acceptable ratio of convicted innocents, says:

Whatever ratio one selects, procedural protections must be fashioned to give some reasonable assurance that the pattern of erroneous releases and erroneous confinements will approximate the ratio that one finds tolerable. And in setting the ratio and formulating the appropriate procedural protections to achieve it, we would do well to consider the matter from behind John Rawls's veil of ignorance we should select a pattern we would find tolerable not knowing whether we would be one of those erroneously released or one of those erroneously confined.⁵⁵

In another case, a district court employs the "veil of ignorance" to identify the appropriate class representative:

By contrast, we see Mr. Elzinga's ignorance as a crucial aspect of the settlement's fairness and of his adequacy as class representative. This class certification and settlement present us with a rare, concrete, working example of John Rawls' celebrated theory of the "veil of ignorance." In *A Theory of Justice*..., Rawls postulated that fairness is best assured where... no decision maker knows anything about his own status in the world so that he cannot effectuate his own ends while supposedly making decisions for the general good. ⁵⁶

We found no passages in the courts that treat environmental moral concepts with equivalent respect, or that appear to provide equal service in working out a solution.

⁵⁵ Goetz v. Crosson, 967 F.2d 29, 39 (2d Cir. 1992) (Newman, J., concurring); *see* JOHN RAWLS, A THEORY OF JUSTICE ch. 24 (1971). Query, whether one employing Rawls' "behind-the-veil" methodology would not be concerned with the impact of alternative rules on one as a citizen, at risk of arrest and risk of criminal victimization, and not merely with the prospect of erroneous release or erroneous confinement if arrested.

⁵⁶ Uhl v. Thoroughbred Tech. and Telecomms., Inc. 2001 WL 987840 17 (S.D. Ind. 2001); see also Martin v. Dugger, 686 F. Supp. 1523, 1569, n.18 (S.D. Fla. 1988) (declining to use "veil of ignorance" to determine required mental state to be death eligible: "The court would have no conception of the good, and would not understand its role within society.").

2. The Key Terms Search

a. The Congress

(1) Rights of Nature (or Environment)

A search of the CR database for "right! /2 (nature or environment)" returned 2675 hits. In the sampled one percent, the expression was never elaborated upon adequately to suggest a meaningful reliance on EE. The most elaborate employment was:

What we have been talking about tonight is nothing less than the right of each of us to breath clean air, eat nutritional food, drink unpolluted water, take nonlethal medicines, and live in uncontaminated houses. But we have also been talking about the rights of nature: of soil, water, air, plants, animals to be healthy, to exercise their God-given natures. We are beginning to see that these two sets of rights are intimately connected, that human wellness and ecological wholeness or wellness are inextricably linked.⁵⁷

Interestingly, this speaker derives the rights of Nature from a biblical foundation:

... the bible drives home the point again and again that the lord of salvation is also the Lord of creation. Religion has not merely to do with the health of the soul, but with the health of the body, the family, the community, the workplace and the good earth that sustains them all. The same God who warns against the oppression of our brothers and sisters warns against the devastation of the land and its creatures.⁵⁸

(2) Environmental Ethics

"Environmental ethics" gets fourteen hits in the CR. Almost all are devoid of normative guidance; none even appears truly eco-centric. Representative invocations are: "Vermont is an example to the nation in its environmental ethics..."; "[m]y legislation... promotes an environmental ethic within the [Corps of Army Engineers] that

⁵⁷ 131 CONG. REC. E4591-02 (daily ed. Oct. 10, 1985) (statement of Rep. Edgar).

⁵⁸ Id.

 $^{^{59}}$ 144 CONG. REC. S3409 (daily ed. Apr. 22, 1998) (statement of Sen. Leahy marking twenty-eighth anniversary of Earth Day).

emphasizes good stewardship of natural resources...";⁶⁰ and "[w]e know that the current method of demilitarization by open burn-open detention and static firing will not be acceptable in an era of new environmental ethics."⁶¹

Interestingly, the most detailed reference stops short of attributing to EE a meaning or force that would carry beyond conventional utilitarianism:

I hope my proposal for an economic impact statement will be received in the spirit in which it is offered. It is years now since Aldo Leopold's "A Sand County Almanac" appeared, and Americans began to think to some purpose about an "ethic dealing with man's relation to land and to the plants and animals that grow on it." This environmental ethic is above all an ethic of responsibility to the future. It is the most demanding of all the responsibilities that we accept. And of course it is easily, all too easily put off. I hold, and here declare, that the ethic extends to a consideration of costs, and of alternate uses of resources. I do not fear such information. I long for it; just as I long for an environmental movement eager to make its case and able to do so. 62

(3) Balance of Nature

"Balance of nature" gets three congressional hits. One, made in the course of addressing the United States participation in the Kyoto Accord, observes that greenhouse gases "have tipped the very delicate balance of nature," leaving open whether the tipping is worrisome as a decline in straightforward human welfare, or for some less homocentric reason. Similarly ambiguous is the remark that "biological diversity gets back to the idea of the balance of nature, that a certain equilibrium must be maintained for the productivity of natural systems to be realized." It is impossible to tell whether "productivity" is limited to productivity of goods and services valued by humans. The third appearance is

 $^{^{\}omega}$ 136 Cong. Rec. E2490 (daily ed. July 25, 1990) (statement of Rep. Strangeland in support of legislation he introduced, Corps of Engineers Environmental Protection Act of 1990, H.R. 5370, 101st Cong. (1990)).

 $^{^{61}}$ 136 CONG. REC. S15249 (daily ed. Oct. 15, 1990) (statement of Sen. Garn regarding environmental concerns involving Department of Defense).

 $^{^{62}}$ 136 Cong. Rec. S519-01 (daily ed. Jan. 30, 1990) (statement of Sen. Moynihan in support of the Clean Air Act Amendments of 1990).

⁶³ See supra note 35.

 $^{^{64}}$ 137 CONG. REC. H5708 (daily ed. July 23, 1991) (statement of Rep. Jontz in support of his Federal Land Policy and Management Act of 1976).

prompted by a decision of the Department of the Interior's (DOI's) Fish and Wildlife Management Office to send a sharpshooter to cull deer on a crane reservation. A Congressman argues, "We have an obligation to nature and to our children and grandchildren that we do all that we can to preserve the gentle balance of nature and take the least intrusive action whenever man's interests run up against the balance of nature." Interestingly, he does not dispute or delve into the DOI's claim that the deer had become too plentiful, but "because man has caused that disruption . . . man has an obligation to correct that imbalance in the least intrusive manner possible."

(4) Existence Value

"Existence value" gets only one congressional hit, in an early climate change bill, never enacted, that would have instructed the Executive Branch to identify the indirect values of forest resources, such as option value and existence value, "prior to determining appropriate support projects." ⁶⁷

b. The Courts

(1) Rights of Nature (or Environment)

"Right! /2 (nature or environment)," which netted 2675 hits in the Congressional Record database, gets 192 in the ALLFEDS database, even though one might have expected courts to be the more hospitable forum for rights-talk. None of the 10% sampled was philosophically significant.

(2) Environmental Ethics

"Environmental ethics" appears six times in CR, three of which involve a single litigant: Forest Service Employees for Environmental Ethics. A fourth reference is to someone's field of study. None is remotely philosophical.

^{65 131} CONG. REC. E3178 (daily ed. July 9, 1985) (statement of Rep. Markey).

⁶⁶ *Id.* Rep. Markey charges that "this principle was violated" by the shooting, and that "the possibility of relocating the deer was not explored adequately." *Id.*

⁶⁷ Global Warming Response Act, S.603, 101st Cong. § 118 (1989).

(3) Balance of Nature

"Balance of nature appears in reported federal case law five times, twice rather provocatively. In the first case, arising from a Supremacy Clause challenge to Maryland's ban on the importation of seal skins:

The scientists made the point that man's thumb is already on the balance of nature and that to remove it altogether might be far more cruel and damaging than would be the effect of a responsible management program. Witnesses called to the attention of the Committee the situation in the British-held Farne Islands, where a strict "hands-off" policy has resulted in thousands of starving and disease-ridden seals.⁶⁸

In another case, involving a NEPA challenge to a highway widening project with apparent implication for neighboring wetlands and vegetation, the court said:

We may agree with the authors of a newly published book that "[t]here is then no 'balance of nature' unless it includes man as part of the balance..." even while we "desire to conserve nature in many instances for unabashed aesthetic reasons and hold that these are basic, necessary and indeed do define the nature of man on a par with energetics, economics or any other reason; moreover we have Gorky's charge that aesthetics will be the ethics of the future."

Elsewhere, after quoting extensively from Thoreau, the court goes on to say:

To those of us who are so fortunate to live in Vermont and to have a little wildness surrounding us, it is probably not so difficult as it may be for others to conceive in terms of the preservation of all mankind of the importance of a little limestone hill rising abruptly from a valley floor, covered with basil and marjoram and creeping thyme, with columbine and yellow ragwort in dramatic abundance. The more so any of us find it difficult to conceive of the lasting, indeed the underlying importance of wetlands or bogs — perhaps because understandably we do not recognize, or we wish to forget, our own insignificant beginnings in what Judge Learned Hand

⁶⁸ Fouke Co. v. Mandel, 386 F. Supp. 1341, 1357 (D. Md. 1974) (referring to testimony of scientists regarding H.R. RPT. No. 92-707 (1972), which accompanied House version of Marine Mammal Protection Act).

⁶⁹ Conservation Soc'y of S. Vt., Inc. v. Volpe, 343 F. Supp. 761, 768 (D. Vt. 1972) (quoting D. WETHERBEE ET AL., TIME LAPSE ECOLOGY (1972)).

called the "primordial ooze."70

(4) Existence Value

"Existence value", which appeared only once in Congress, in an unpassed bill, plays a more frequent role in the courts with eleven hits. The use of the term is consistently sophisticated, for example, "the feeling of loss people might feel upon the extinction of the whooping crane even though they had never seen one." This use, however, is also consistent with existence value as a straightforward empirical concept, to be gleaned from contingent valuation surveys, not necessarily augmented by philosophical reflection.

3. Issues

a. Congress

Congress has taken up several issues that might be expected to invite consideration of EE. These include a prominent preservation versus development issue, the proposed oil search in Alaska National Wildlife Refuge (ANWR); a restoration issue, the Comprehensive Everglades Restoration Plan;⁷² and a mixed conservation-animal rights issue, whaling.

The congressional debates on the first two issues are wide-ranging, but, again, as far as our samplings indicated, not marked with notable excursions into anything resembling moral philosophy. Regarding the Everglades, proponents argued:

[T]his 106th Congress, it can look back and say that we put forth the greatest, largest environmental restoration project in the history of this globe. It is a wonderful moment for this institution. It is a wonderful moment for our country.... [P]rotection of the Everglades is a national priority, because most Americans speak of this national treasure in the same breath as the Redwood Forests, the Mississippi River, Old Faithful, the Appalachian Trail, or the Grand Canyon.... Most Americans also understand the basic concepts of clean water and the delicate balance that nature

⁷⁰ Id. at 767-68.

 $^{^{71}}$ See Minn. Pub. Interest Research Group v. Butz, 401 F. Supp. 1276, 1311 (D. Minn. 1975) (quoting Volpe, 343 F. Supp. at 767-68).

⁷² Another restoration issue that might be examined involves the restoration of wolves.

requires. Everglades restoration is about restoring the balance that was disturbed by man-made structures as we pursued the noble goal of flood protection in decades past.⁷³

In the extended debates over ANWR, opponents of drilling characteristically invoke the value for future generations of "this country's largest, most diverse remaining example of a largely untouched arctic ecosystem." But those favoring drilling respond in the same coin: "we will need to begin now so that the petroleum products, the jet fuel, the gasoline, the pharmaceuticals, the plastics, everything that has made industrial life possible can continue for future generations."

Whaling comes to the floor of Congress in connection both with the Marine Mammal Protection Act (MMPA) and United States participation in the International Whaling Commission (IWC). One might imagine the related discussions to be particularly fertile for moral philosophy, inasmuch as whaling presents dual issues of conservation (of the species) and humane treatment (of individual animals.)⁷⁶ As already indicated, a search for "whal!", does in fact turn up so many Congressional Record hits that we had to rely on sampling. But at least as far as the sampling suggests, the moral considerability of whales (and other marine mammals) does not get raised in any depth. Perhaps a sense of moral considerability is simply assumed, as a cultural fact needing no argument. However, no one has recruited even the most obvious philosophical source for a major premise, Jeremy Bentham's renowned footnote, "The question is not, Can they reason? nor Can they talk? but, Can they suffer?"⁷⁷ Instead, support for the IWC's moratorium on commercial whaling has tilted towards the homocentric, with allusions to what the academic would call existence value: "I have never seen a

⁷³ 146 CONG. REC. H10290 (daily ed. Oct. 19, 2000) (statement of Rep. Shaw).

^{74 148} CONG. REC. S2774 (daily ed. Apr. 17, 2002) (statement of Sen. Kerry opposing development).

⁷⁵ 147 CONG. REC. H5162 (daily ed. Aug. 1, 2001) (statement of Rep. Carson favoring development).

⁷⁶ J. Baird Callicott, Whaling in Sand County in THE PHILOSOPHY OF THE ENVIRONMENT 156-79 (T.D.J. Chappel ed., 1997); Callicott, supra note 7; see also Anthony D'Amato & Sudhir K. Chopra, Whales: Their Emerging Right To Life, 85 Am. J. INT'L. L. 21, 21 (1991) (making startling claim that whales constitute "a species... that scientists speculate has higher than human intelligence," and crediting them with communicating in language "that seems to include abstruse metaphysical poetry").

 $^{^{77}}$ J. Bentham, The Principles of Morals and Legislation 311 note (1789). The negative, that Bentham is not invoked by Congress, relies not on the sampled reading but on a CR search of Bentham and whal!, CR visited Feb. 10, 2003.

whale. Maybe I will never see one, but just the knowledge that they are out there still alive, the greatest creatures that ever inhabited the face of this Earth, just gives me a good feeling."⁷⁸

The congressional debates display, as one would expect, some flavor of moral relativism, that is, that the majority of Americans (morally) disapprove of commercial whaling.⁷⁹ The debates also offer a market-based utilitarian twist: that whales produce more revenue left in the sea to be whale-watched than taken out to be eaten.⁸⁰ Unsurprisingly, there are pragmatic observations: if we press exemptions for our native tribes, such as the Makah, floodgates will be opened for other nations to carve out exemptions for their special communities.⁸¹ But this does not get to the basic philosophical question: whether the majority has any justifiable basis for its conclusion that killing marine mammals is bad, while the slaughter of terrestrial mammals is permissible.

There is, indeed, a hint that the dominant moral concern arises less from a conflict of humans versus whales, than one group of humans (indigenous peoples) versus others (non-indigenous whaling communities). This leads one Congressman to express his ambivalence towards United States support for the whaling ban in moral relativist terms:

Is killing whales wrong? It is if you are an urban resident who doesn't depend on whale meat. It is not if you are an Alaska Native who relies on harvesting bowhead whales for subsistence. It is also

⁷⁸ 139 CONG. REC. H602 (daily ed. Feb. 16, 1993) (statement of Rep. Ravanel opposing resumption of commercial whaling).

[&]quot;The [accidental] death of this gray whale should call our attention to those who would like to reverse the will expressed in Congress and by an overwhelming majority of the American people who oppose allowing the hunting of whales, particularly for commercial purposes." 146 CONG. REC. H2171 (daily ed. Apr. 12, 2000) (statement of Rep. Metcalf, "Say No to Commercial Whaling"). See also 139 CONG. REC. H602 (daily ed. Feb. 16, 1993) (statement of Rep. Studds: "Let me say to the gentleman that I think he is going to have to live with the distinct possibility that the Norwegians are just plain wrong, and the people of the United States, in this country, and the peoples of most of the rest of the world are right in their impassioned insistence that we not resume commercial harvest of whales period. . . . ").

⁸⁰ "Living whales have far greater value as marine resources than they do as steaks for the Japanese dinner plate." 138 CONG. REC. H3394 (daily ed. May 19, 1992) (statement of Rep. Studds in support of commercial whaling moratorium).

⁸¹ "The Makah have claimed a cultural need as subsistence.... If accepted, this will now open the door for more quota increases around the world. Japan has already stated the desire to allow four villages on the Taiji peninsula with no subsistence need to be granted a cultural quota. Iceland, Ireland, Norway, China, where will it end?" 143 CONG. REC. H9476 (daily ed. Oct. 23, 1997) (statement of Rep. Metcalf regarding proposed reduction in quota of gray whales).

not wrong if a carefully controlled harvest for genuine food, cultural, and religious purposes is allowed.... Too often, we in this country extend our morals to other people without thinking through to what we are doing. Whaling is a good example. I think it is time that we reconsider our actions at the International Whaling Commission. We don't need factory fleets hunting down the last of an endangered species. However, we should give every consideration to the morals and traditions of other nations, just as we ask them to consider our own.

The economic value of whale watching is alleged to be \$1 billion for Massachusetts annually, 83 but this, of course, however accurate, is a straightforward appeal to pocket-book utilitarianism. What is largely missing is any allusion, beyond passing reference to cetacean intelligence and sociability, 84 to the intrinsic value of whales, or even to their capacity to suffer from harpooning. 85

The unwillingness to enter the realm of moral reasoning is not peculiar to the United States Congress. In the United Kingdom's House of Commons, the analogy proffered by whaling states — that their hunting whales was no worse than Englishmen hunting their traditional game — was not welcomed as an opportunity to turn the debate toward basics. A Member of Parliament says:

On the "Today" programme recently, someone from the Japanese embassy compared the hunting of whales with the hunting of deer. When I raised the issue with the then Norwegian Prime Minister, Mrs. Brundtland, she went further and compared whaling with fox

 $^{^{\}rm 82}~$ 139 CONG. REC. H602 (daily ed. Feb. 16, 1993) (statement of Rep. Young opposing resumption of commercial whaling).

⁸³ 138 CONG. REC. S8396 (daily ed. June 17, 1992) (statement of Sen. Kerry supporting moratorium on commercial whaling). Sen. Kerry also refers to "respect for life and awe at the majesty of nature [that] has educational value that far exceeds that [sum]." *Id.*

⁸⁴ 139 CONG. REC. H602 (daily ed. Feb. 16, 1993) (statement of Rep. Saxton in opposition to resumption of commercial whaling: "As humans, we have an instinctive respect and curiosity for these intelligent creatures whose near extinction challenges our own intelligence to manage the natural resources and global commons on which we all depend. The for profit harvesting of whales is an unnecessary and primitive behavior that has no purpose in an increasingly interdependent world."); see also 137 CONG. REC. E1084 (daily ed. Mar. 22, 1991) (extending remarks of Rep. Yatron: "[Whales] are highly intelligent with distinct emotional features. Powerful moral and ethical questions have been raised over killing them for profit.").

⁸⁵ A future-regarding reference turns up: "Preserving our most precious sources of life and sustenance on land and sea is a heritage too often forgotten by modern societies." 137 CONG. REC. H5283 (daily ed. July 9, 1991) (statement of Rep. Mink supporting restrictions on large drift-nets).

hunting. Those comparisons are grotesque, odious and totally irrelevant, but they reveal the bankruptcy of those who try to defend their arrogant defiance of world opinion. 86

39

Nonetheless, for what it is worth, the Parliamentary debate airs humane issues not found in the congressional debates:

Whaling is an animal welfare issue, because we inflict terrible pain and suffering on warm-blooded mammals when the harpoon is fired into them. The time it takes for a whale to die often exceeds one hour; it is estimated that on average 50 per cent of whales are not killed by the first weapon impact. An independent study financed by Her Majesty's Government showed that some whales were still alive when the whalers cut them up. There is no way of finding a painless way to kill a great whale. Not only is organised whaling economically unnecessary and ecologically unacceptable, it is also extremely cruel.⁸⁷

b. The Courts

The "key issues search" in the federal courts turned up no gems not located by the prior searches. On whaling, for example, the courts may feel their own voice is role-restricted:

There is a legitimate clash of values between those who care more about whale hunting from the point of view of the hunter, and those who care more from the viewpoint of the whale. The political organs of government have the authority to choose. We have no warrant in this case to interfere. 88

⁸⁶ 371 PARL. DEB., H.C. (6th ser.) (2001) 371 (statement of Mr. Banks).

 $^{^{\}it s7}$ $\,$ Id. If there is a way to hunt foxes without inflicting pain on them, Mr. Banks does not share it with us.

Metcalf v. Daley, 214 F.3d 1135, 1151 (9th Cir. 2000) (Kleinfeld, J. dissenting) (disagreeing with majority decision to reverse agency support of Makah aboriginal whaling rights on procedural grounds). The ALLFEDS search of "whal! /p (moral! ethic! "future generation" right)" turned up 1196 hits. Many hits were *faux* and only lightly sampled for a full reading (about 1%). For example, from a CR hit: "We can pass this destructive monster the tax whale today and continue to have huge deficits hanging over our heads . . ." 139 Cong. Rec. H6150 (daily ed., Aug. 5, 1993) (statement of Rep. Dornan).

III. IS THIS LACK OF IMPACT EVIDENCE A SIGN OF INDIFFERENCE TO PHILOSOPHY IN PUBLIC POLICY GENERALLY?

The scant evidence might reaffirm Posner's thesis, that public policy-makers are indifferent to, or restrained from, invoking moral philosophy in general. But the picture is complicated. While moral philosophy of any sort is slighted in both the judicial or legislative branches, the traces of EE influence appear to be particularly skimpy. We say "appear" because our data, particularly of the non-EE references, is too scant and unsystematic to support sweeping comparative generalizations. But we have already remarked on the "use" the courts make of John Rawls' "veil of ignorance," which has no equal among the concepts from environmental philosophy. As further illustration, one finds a United States district court, faced with a sentencing determination, mulling over the Kantian and utilitarian tensions:

As in the case of Kantian just deserts, the felicity calculation is subject to considerable difficulty and dispute. Another major problem with the utilitarian approach is that the individual criminal can be treated very cruelly, to gain some societal advantage even though the crime is minor or very leniently, despite the shocking nature of the crime if that will on balance benefit society. 90

The court goes on to decide,

Given these problems, it may make sense to continue to equivocate, oscillating between these poles, tempering justice with mercy, just deserts with utility calculations, in varying pragmatic ways. "Pragmatism," one of the hallmarks of the American political and legal system, itself suggesting a leaning toward utilitarianism. . . . "in philosophy [pragmatism] . . . tests the validity of all concepts by their practical results." ⁹¹

Nothing we could find in the environmental or even animal rights areas comes close to displaying this clear appeal to bedrock moral philosophy.

The anecdotal impact of moral philosophy in Congress is also more extensive in non-environmental than in environmental areas. There are so many references to ethics in Congress, in so many areas, that a systematic analysis has to await the work of others — perhaps that of a

⁸⁹ For example, the search revealed heavier "hits" for American Economic Review (74) than for the journal Environmental Ethics (0).

⁹⁰ United States v. Blarek, 7 F. Supp. 2d 192, 203 (E.D.N.Y. 1998).

 $^{^{91}}$ *Id.* (citing Webster's New Twentieth Century Dictionary (William Collins ed., 2d ed. 1979)).

bio-ethicist, business ethicist, and so on. But it is not hard to see why incidence and depth of ethical discussions might be more pronounced in some non-environmental areas. For example, in the areas of stem cell research and cloning, the debates — should science and medicine be restrained? — are fueled almost entirely by morals. Database searches confirm the moral link. Approximately one-half of the hits for both terms (256 total for stem cells, 331 for cloning) also hit for "morals," "ethics," or "religion." Without trying systematically to plumb the depth of these discussions, 33 we can at least flag the readiness to associate these issues with moral choice.

IV. IS THE SPARSENESS OF IMPACT A SIGN THAT THE EE LITERATURE IS BEING OVERLOOKED—OR IS THE EE LITERATURE FAILING TO PRODUCE USEFUL POLICY-LEVEL CONTRIBUTIONS?

One might wonder whether the scant direct influence of EE stems from the failure of legislators and courts to capitalize on work that is available in the EE literature or whether the literature is unhelpful or disconnected from the policy choices that have to be made. 94

 $^{^{92}}$ For "stem /2 cell! — 256 results; stem /2 cell! and religi! or moral! or ethic!" — 133 results. For "clon!" — 747 results; "clon! and (religi! or moral! or ethic!)" — 331 results. Modifying the stem cell search to filter out those including "philosoph!" still left 138 hits, indicating a far greater willingness to recognize a moral/philosophical dilemma than in any comparable environmental matter. CR search results, as of Jan. 10, 2003.

⁹⁹ For a flavor of the debates, see 147 CONG. REC. H4916 (daily ed. July 31, 2001) (statement of Rep. Hyde in connection with Human Cloning Prohibition Act of 2001: "[L]ike the knowledge gained by the physicists, the new knowledge acquired by biology and genetics can also be used to do great evil: and that is what human cloning is. It is a great evil. For it turns the gift of life into a product — a commodity The questions before us in this bill, and in setting the legal framework for the future development of biotechnology, are not questions that can be well answered by a simple calculus of utility: will it 'work?' The questions raised by our new biological and genetic knowledge summon us to remember that most ancient of moral teachings, enshrined in every moral system known to humankind: never, ever use another human being as a mere means to some other end. That principle is the foundation of human freedom.").

⁹⁴ To what extent it might reflect a disinterest in academic journals generally is discussed below.

Analysis of Article Content, Volumes 1-10 of the Journal Environmental Ethics

1979-88; n = 192 (details in Appendix A)

- 1. Foundational (118) (62%)
 - a. Basic General Foundational (56) (29%)

Ex: "Elements of an Environmental Ethic: Moral Considerability and the Biotic Community."

- b. Models in various cultural, historical and religious perspectives (21) (10.94%)
- i. Religious (8) (4%) Ex: "Christian Spirituality as Openness to Fellow Creatures."
 - ii. Historical (10) (5%)

Ex: "The Historical Foundations of American Environmental Attitudes."

iii. Comparative (3) (2%)

Ex: "A Metaphysical Grounding for Natural Reverence: East-West."

- c. Express or implicit treatment by specific philosophers (29) (15%)
- i. Non-contemporary (17) (9%) Ex: "Toward a Heideggerean Ethos for Radical Environmentalism."
- ii. Contemporary (12) (6%) Ex: "Justice and the Treatment of Animals: A Critique of Rawls."
 - d. Movements (12) (6%)
- i. Eco-Feminism (7) (4%) Ex: "Deeper than Deep Ecology: The Ecoeminist Connection."
 - ii. Other (5) (3%)

Ex: "A Conservative View of Environmental Affairs."

2. Motivational Issues (8) (4%)

Ex: "Future Generations, Public Policy, and the Motivation Problem."

To try to clarify, we analyzed the content, as best we could, of the articles and comments printed by the most specialized American journal, *Environmental Ethics*, over its first ten volumes.⁹⁵

⁹⁵ No criticism of the Journal is implied by the author, who is proud to have served ten years, 1986-1995, on the Journal's Editorial Advisory Board.

As the Box indicates, considerably more than half of the articles, 118 out of 192, are seeking a foundational basis for EE in general rather than assessing any particular problem area. Some of these foundational contributions, twenty-nine percent of total contributions, seek to provide a general, and sometimes novel, basis (Beauty: A Foundation for Environmental Ethics). 6 Others suggest a basis in religion (four percent), or in historical or cultural sources (seven percent). Fifteen percent root about among general philosophers for a basis (Toward a Heideggerean Ethos for Radical Environmentalism); 97 and six percent examine how EE plays out within, or draws upon various social movements, such as ecofeminism. Four percent appeared to deal principally with motivation. We deemed the remaining thirty-four percent (66 total) to be "applied," but the designation should not be misconstrued to equate with Congress- or court-ready. Twenty-six are what we called "ontological," that is, dealing with the application of EE at a relatively abstract level regarded from the perspective of the actual law-making grist mill. These contributions included articles such as: The Rights of the Subhuman World; Self-Consciousness and the Rights of Nonhuman Animals and Nature; The Value of Wilderness; Why Should We Care about Rare Species?; Are Mere Things Morally Considerable?; The "Interests" of Natural Objects; Why Do Species Matter?; The Value of Wildness; The Moral Standing of Natural Objects; and Against the Moral Considerability of Ecosystems.

This left about one-fifth of the contributions (twenty-one percent) offering a level of issue-specificity that might make them useful to lawmakers. Of course, the difference between this group and the "ontological" group is blurred and subjective, but we sorted into this heading articles with, among other titles: Ethical Issues in Whale and Small Cetacean Management; The Morality of Hunting; Environmental Impact Assessment and the Fallacy of Unfinished Business; The Ethics of Earthworks; The Just Takings Issue; and The Military Commander's Responsibility for the Environment.⁹⁸

[%] Richard Cartwright Austin, Beauty: A Foundation for Environmental Ethics, 7 ENVTL. ETHICS 197 (1985).

⁹⁷ Michael E. Zimmerman, Toward a Heideggerean Ethos for Radical Environmentalism, 5 ENVTL. ETHICS 99 (1983).

⁹⁸ Others included: Some Ethical Decision Criteria With Regard to Procreation, Hardining National Parks, The Decline and Fall of Quality Recreation Opportunities and Environments?, Atmospheric Carbon Dioxide: Environmental Ethics and Environmental Facts, Economic and Social Foundations of Solar Energy, Need and Safety: The Nuclear Power Debate, Air Pollution: Group and Individual Obligations, Ethics, Energy Policy, and Future Generations, Space Exploration and Environmental Issues, The Development of Natural Resources and the Integrity of Nature, The Medical Treatment of Wild Animals, Nuclear Weapons and the Ultimate

None of the EE articles, from these volumes or any other, turned up either in ALLFEDS or CR. On the other hand, neither did we have "hits" for the prestigious *Philosophy and Public Affairs*. The *Journal of Bio-Ethics* fared no better. The fact is few academic journals get cited. Our search brought up fifty-six references to the *American Economic Review* (34 in Congress, 22 in the courts), "9 ten for the *American Political Science Review* (15 Congress, 5 in the courts) and fourteen for the *Political Science Quarterly* (11 Congress, 3 in the courts). But *Philosophical Review* nets only one "hit," a United States Supreme Court reference via Felix Frankfurter's famous opinion in *Rochin v. California*. The *Journal of Philosophy of Science* also got one citation in federal district court. None of the philosophy journals searched were cited in congressional debate.

V. TO EXPAND THEIR INFLUENCE, WHAT TASKS NEED ENVIRONMENTAL ETHICISTS ADDRESS?

Given the small number of academic citations by courts and the Congress there is no assurance that had EE authors done anything differently, they would have captured more attention. But the relatively limited direct influence of EE suggests that, as among applied ethical philosophies, EE has a special burden to overcome. No one doubts the significance of ethics for public policy when the policy issue relates to a conflict among persons. Thus, the judge in *United States v. Blarek*, ¹⁰³ the sentencing case discussed above, knows philosophers have had relevant things to say, and he sees nothing role-violating in introducing and balancing Kant and Bentham. By contrast, in a dispute that implicates landscapes, the proponent of EE has more difficulty getting her ideas into chambers. She has to start by showing that she is not only relevant,

Environmental Crisis, Ethical Dilemmas and Radioactive Waste, On the Social Rate of Discount: The Case for Macroenvironmental Policy, Questions about Environmental Ethics — Toward a Research Agenda with a Focus on Public Policy, Environmental Impact Assessment and the Fallacy of Unfinished Business, Endangered Species: Costs and Benefits, and Uncertainty Arguments in Environmental Issues. It is not clear how many of these contributions invoke an EE argument in my distinct sense.

_

⁹⁹ In journal searches, a document that cited to the same journal multiple times was counted as one cite.

¹⁰⁰ Rochin v. California, 342 U.S. 165, 172 n.5 (1952).

¹⁰¹ Berg v. Morris, 483 F. Supp. 179, 185 (E.D. Cal. 1980) (citing to Rudolf Carnap's classic *Testability and Meaning*, 3 J. PHIL. SCI. 419, 419-71 (1936); 4 J. PHIL. SCI. 1, 1-40 (1937)).

¹⁰² We searched without success on both databases for *Journal of Philosophy* and *Philosophical Quarterly*. Other celebrated journals, such as *Mind and Ethics*, are not feasibly searched (because a tidal wave of references to "mind" and "ethics" would turn up).

¹⁰³ Supra note 90.

but also coherent.

Indeed, the need for EE to provide groundwork and detail is all the more evident when one considers, as Dan Tarlock has pointed out, that "the easy regulatory actions have been taken." We have, after all, the Endangered Species Act and the Marine Mammal Protection Act, and any further actions have to "intrude more deeply into personal choice and conflict more directly with the pursuit of other firmly rooted cultural interests." 105

We might add that the further environmentalists push an EE agenda, the less defensibly cost beneficial the move is apt to be when assessed in traditional welfare accountings. Protesting dams in the name of the environment is an uphill battle on slippery terrain. Thus to advance as a field of philosophical inquiry, or even as a platform for social change, EE has to go considerably beyond what Tarlock aptly calls a "simple nature veneration ethic." But what, more precisely? If EE is to enhance its impact, there are several tasks it must perform. We can put the tasks in the form of overlapping questions that require further analysis.

A. What Are the Ethic's Ambitions?

The first issues are meta-ethical. For one, is EE to remain within a welfarist framework, aiming to "educate preferences" but accepting, ultimately, welfare's verdict? Or is it to aim higher, to furnish independent constraints, modeled after notions of human rights that "trump" utility? If the latter, under what circumstances do rights of (or duties towards) nonhumans come into play? If EE is to evaluate choices (as distinct from, say, ascribing character judgments to actors), what are its goals? Should it aspire to rank order all viable alternatives (a theoretical virtue of utilitarianism)? Or might it be satisfied to concentrate on excluding certain choices, leaving a range of unranked options "permissible," or perhaps not forbidden (with the sternness of Kant) but only "morally unwelcome"? 108

¹⁰⁴ A. Dan Tarlock, Environmental Law: Ethics or Science?, 7 DUKE ENVIL. L. & POL'Y F. 193, 195 (1996).

¹⁰⁵ Id.

¹⁰⁶ Id. at 194.

 $^{^{\}mbox{\tiny 107}}$ Ronald Dworkin, $\it Rights$ as $\it Trumps,$ in Theories of Rights 153-67 (Jeremy Waldron ed., 1984).

¹⁰⁸ See Christopher D. Stone, Earth and Other Ethics 158-61 (1987).

B. What Is (Are) the Ethic's Foundational Basis(es)?

If EE is to reject utility, then what concept plays the role in EE that "welfare/human preferences" plays in utilitarianism or that the "categorical imperative" plays in Kantianism? Or is it quixotic (as I have maintained) to expect to find one monistic, over-arching principle applicable to all environment-implicating conflicts? 109 If so, and EE is to be principle-based, we will need to put forward different principles, or frameworks, each tailored to different sorts of disputes. For example, one framework might be applicable for sorting choices affecting sentient nonhumans, another, for those touching geological features. challenge of establishing such frameworks is severe. We can, with some confidence, put ourselves in the shoes of our neighbors; comprehend their pain, suffering, and indignities; and conjecture what outcomes they are likely to prefer. But when we depart into realms outside human welfare, the intuitions and theory-building material are less abundant. With what assurance can we put ourselves in the hooves of a horse, much less in the banks of a river? And lacking those guides, what takes their place?

C. The Ontological Conundrums: What "Things" Count Morally?

Third, how are we to carve the world into those things whose existence, condition, or treatment *count* morally? Are all species equal?¹¹⁰ Is the unit of our concern the individual ant, the species of ant, ant DNA (which we can store *ex situ*), the anthill, or the ant's habitat?

I see little to be gained in seeking refuge in a holistic or Gaian viewpoint. From the foundation that the biosphere is the basic "good," we can conclude that we should not destroy the basis of life on earth—hardly a useful constraint. The forms and mixture which life might take are so incredibly varied, and our ability to obliterate the bases of life is so unlikely even through nuclear war, that these grand viewpoints utterly fail to provide guidance for the specific questions which we really face: is it right to factory farm animals; or is it right for one species, humankind, to commandeer forty percent of the net primary energy that reaches the terrestrial earth from the Sun?¹¹¹ If the totality is good, what can we do wrong or right? On what basis might whales be morally

¹⁰⁹ See id. at 13-14.

¹¹⁰ For a well considered negative, see David Schmidtz, *Are All Species Equal?*, in ENVIRONMENTAL ETHICS, *supra* note 9.

¹¹¹ Peter M. Vitousek, Paul R. Ehrlich, & Anne H. Ehrlich, Human Appropriation of the Products of Photosynthesis, 36 BIOSCIENCE 368-73 (1986).

considerable, but fetuses and foxes, not? Presumably, the answers are governed by the responses to the foundational questions: is rationality crucial?; or being able to suffer; or taking (having?) an interest in one's self?¹¹²

D. What Does "Counting Morally" Entail?

To say that a thing "counts morally," and to deem it to be "morally considerable," invites further questions. We have alluded to the issue of whether X's being morally considerable means that "X has a right" or that "we have a duty to X." Either way, does it entail holding that X is immune from any alteration in all circumstances? And if there are exceptions (as there are to the "right to life" in jurisdictions that recognize the death penalty), what are the exceptions? Or does moral considerability mean that a world in which X exists is "morally preferable" to one devoid of X?

The problem here is that to clarify our moral thinking, it is not enough to carve up the world into those things that are deemed morally considerable. Nor is it enough to agree how that decision to value something translates into prima facie good and bad acts regarding it. What are we to do in the case of conflict, when there is moral tug on both sides? For example, suppose that a prima facie case can be made for preserving each of two species, but we cannot preserve both. And suppose that from the perspective of homocentric welfare, we are indifferent as to the survivor. Do we favor the rare species of lower animal over the less rare but "higher" one? One can imagine a moral framework whose basic principle is "more life is better than less." One can imagine, too, support for the preservation of a singular, pristine desert. But then, how do we judge an irrigation project that offers to transform the morally desirable desert into a morally desirable habitat teeming with vegetation? In general terms, the problem is the familiar one of balancing: even if the continued existence of a species is demonstrated to be a (noninstrumental) good, how strongly does that good withstand the moral force of other, competing, perhaps even incommensurable goods?

One response to the tension of competing values is the proposal, put forward by Warwick Fox¹¹³ and endorsed by Baird Callicott, ¹¹⁴ to award

 $^{^{112}}$ I have argued elsewhere that no single criterion can plausibly account for popular intuitions about, variously, animals, species, and nonliving natural objects. EARTH AND OTHER ETHICS, *supra* note 108.

Warwick Fox, What Does the Recognition of Intrinsic Value Entail? 10 TRUMPETER No.

to the entities that "count" a benefit analogous to the one enjoyed by the holder of a favorable burden of proof in law. In this version, if X has intrinsic value, then anyone proposing an action that would violate X's interests or integrity faces a "burden of proof" in the court of morals. The stratagem is thoughtful, but the burden of proof strategy goes only so far. Suppose the environmental issue is whether the Navy should be allowed to conduct undersea tests that raise some risk of injuring the hearing, and consequently perhaps the lives, of whales. If we determine (on some basis) that whales, like people, have intrinsic value, that determination does not, in itself, tell us who should have the burden of proof. Why should we place the burden on the Navy, which has the lives of sailors and national security in mind, to surmount the threat to the whales, rather than to place on representatives of the whales the burden of surmounting the avoidable risk to the sailors?¹¹⁶

One reason the law analogy fails is that in a court of law, for example, in a murder trial, the guilt-creating state of affairs has been fairly well defined: did the defendant intentionally kill the deceased? The probability that the defendant did so is n, and that he didn't is 1-n. There is an agreed rule (with variations among jurisdictions) that the prosecution has to show that n rises at least to some specified level n^* , otherwise the defendant is not guilty. The prosecution, in arguing to place a high value on n, and the defense, in deflating it, are both arguing over the probability to be assigned the same state of affairs. If we return to the sonar case, we can see the contrast: the parties are arguing over several probabilities simultaneously, without benefit of an over-arching rule of decision. There is the probability of injury to the whales and the probability of injury to humans (sailors). Whatever the standard of proof

^{3,} at 101 (Summer 1993).

¹¹⁴ Callicott, *Pragmatic Power*, supra note 10, at 14-15.

¹¹⁵ See NRDC v. Evans, C 01-042 JL (N.D. Cal. 2002), available at http://www.cand.us courts.gov/cand/tentrule.nsf/Recent+Orders?OpenView (granting temporary injunction against tests in marine sensitive areas, refusing to issue blanket injunction against carrying out any such experiments in peacetime anywhere) (last visited Sept. 2, 2003).

¹¹⁶ The burden of persuasion issues are related to issues over the burden of production (or "going forward"). We might say that if the whales were to make a prima facie case that they would suffer harm should the tests proceed, then the Navy had the burden of rebutting the risk. But of course the burden of going forward, too, could be placed on the whales. Consider NRDC v. Evans, C 01-0421 JL (N.D. Cal. 2002), supra note 115. There, the core moral/policy judgment, made at the congressional level, amounts to a whale-favoring burden, viz., the Marine Mammal Protection Act, which generally prohibits the "taking" of marine mammals, 16 U.S.C. § 1371(a)(3) (1972). The "national defense" exception that defendants would read into the law, a claim the court does not reject, might be viewed as tantamount to shifting the burden back onto the whales.

("beyond a reasonable doubt," "clear and convincing," or "a preponderance of the evidence") on each element, there is no meta-rule for integrating the two probabilities. Will the moral injunction issue, if the probability of a sailor's death is greater than that of two whales?"

CONCLUSION

A medieval work of piety, addressing what we modernly call "conscience," was titled, with the characteristic directness and vividness of the Anglo-Saxon: the *Ayenbite of Inwyt*, literally the "second" ("ayen" = "again") "bite of inner wisdom ("wit")." Perhaps we should conceive the aim of EE as seeking to furnish us with a considered, second bite of inner wisdom before we run totally roughshod over the planet. And, by "second bite," we mean something over and above utility, with its only "first bite" of homocentric welfare, its not always-ingenuous conjectures that if we tear out our forests for grazing land, the gains in beef protein will be outweighed by some foregone needle-in-the-haystack cancer cure. EE wants us to take an "ayun bite" and so to apply the brakes more quickly and across a broader front. It knows our sympathies for the forest are made of nobler instincts than utility, instincts for which we have yet to develop an alternative systematic vocabulary.¹²⁰

Is anyone listening? Anyone, in the courts or Congress? We sought evidence of EE influence via a computer-assisted search of federal cases and congressional debates. We reviewed each database from different angles: through the names of philosophers, through key terms and issues, and by looking (without reward) for judicial or legislative citations to the lead EE journal, *Environmental Ethics*.

Here one is reminded of Leibniz's line: "It is certain that God sets greater store by a man than a lion; nonetheless, it can hardly be said with certainty that God prefers... a single man to the whole of lion-kind." GOTTFRIED WILHELM LEIBNIZ, THEODICY, § 118 (E. M. Huggard trans., Yale University Press 1952) (1710). Where does the moral equilibrium lie?

My indispensable online etymology source, http://www.etymonline.com/, defines conscious as: "12c., from O.Fr. conscience, from L. conscientia 'knowledge within oneself, a moral sense,' prp. of conscire 'be mutually aware,' from com 'with' + scire 'to know.' Probably a loan-translation of Gk. syneidesis." http://www.etymonline.com/c8etym.htm.

 $^{^{19}\,}$ Dan Michel, Ayunbite of Inwyt (1979); see also Literature: An Introduction to Fiction, Poetry, and Drama 803 (X. J. Kennedy & Dana Gioia eds., 8th ed. 2002).

¹²⁰ See Bryan Norton's narration of his encounter with a little girl gathering sand dollars on the beach: "Nor could I precisely express it in the language of rights of sand dollars, especially if that language is given its accepted meaning in the tradition of John Locke and Thomas Jefferson." BRYAN G. NORTON, TOWARD UNITY AMONG ENVIRONMENTALISTS 4 (1991).

Our approach turned out to be a crude and narrow way to plumb impact. EE may be quite influential outside the federal courts and Congress, for example, in the courts of public opinion. Even within the databases we searched, we may have missed real gems of EE discussions that simply did not reference a sought-after philosopher, or use any of our key search terms. Moreover, the failure of a judge or senator to refer to, for example the rights of Nature, does not prove that she had not some well-developed, environment-favoring argument in mind when voting on a bill. Nor, conversely, can we take a reference to Aldo Leopold as demonstrating that the speaker was moved by (or even had read) Aldo Leopold.

Even if the evidence we did find is too soft to draw sturdy conclusions, nonetheless it is suggestive. It suggests that judges and congressmen acknowledge only infrequently the relevance of moral philosophy of any sort. We do not mean that they are disinterested in the kind of moral judgments any culture holds in inventory (e.g., "killing babies is wrong"). What is infrequent is using deductive or even casuistic moral reasoning as the means of working through genuinely contested issues (e.g., "ought we to convert a wildlife preserve into an oil field?").

Our "findings," if we may call them that, also include a comparative interpretation of the data: EE exercises less influence than do other fields of ethics. That is as one would have surmised: EE has not yet developed a message as coherent as that which the utilitarians or neo-Kantians offer those wrestling with ordinary interpersonal conflicts. The evidence is that the courts get more service out of John Rawls than out of Aldo Leopold. Another finding: we were surprised by how little the lead specialized journal, Environmental Ethics, addressed policy issues at a level of specificity useful for public bodies. Therefore, even if the courts and Congress were to peruse the literature, it is not clear what guidance they would find available. These two findings are related: the EE literature is weighted towards the foundational questions, which is humans considerability of understandable. The moral uncontroversial. By contrast, the moral status of Nature, somehow conceived other than as a means to human welfare, remains problematic.

It is far from clear that, even were EE more attentive to public issues, the law-making fora would exploit what it had to offer. Courts and legislatures have, each for their own institutional reasons, some ambivalence about drawing (openly?) on philosophy. Yet, some congresspersons and judges on occasion do delve there. If EE is to increase its influence, it has further work to do on the foundational questions, with even more attention to bedrock meta-ethical issues.

What are the ambitions of an ethic (or ethics) that seeks grounding outside human welfare? What questions does it propose to answer, and what will a satisfying answer — or insight — look like?

In the meantime, we appear to be speaking, largely, among ourselves. Some good things, undoubtedly, have been said. But one might consider, if an environmental ethicist were sworn in the sonar test litigation, ¹²¹ or called to testify on those tests before Congress, what would she have to add? Thus far, the direct influence of environmental ethics on public fora, as far as can be gleaned from the evidence, has not been appreciable.

¹²¹ See supra note 116.