



Convergence in Environmental Values: an Empirical and Conceptual Defense

BEN A. MINTEER AND ROBERT E. MANNING

Original manuscript received, 15 February 1999

Revised manuscript received, 22 April 1999

ABSTRACT *Bryan Norton's convergence hypothesis, which predicts that nonanthropocentric and human-based philosophical positions will actually converge on long-sighted, multi-value environmental policy, has drawn a number of criticisms from within environmental philosophy. In particular, nonanthropocentric theorists like J. Baird Callicott and Laura Westra have rejected the accuracy of Norton's thesis, refusing to believe that his model's contextual appeals to a plurality of human and environmental values will be able adequately to provide for the protection of ecological integrity. These theoretical criticisms of convergence, however, have made no real attempt to engage the empirical validity of the hypothesis, the dimension that Norton clearly takes to be the centerpiece of his project. Accordingly, the present paper attempts to provide an empirical analysis of the convergence argument, by means of a study of the Vermont public's environmental commitments and their attitudes toward national forest policy. Our findings support a generalized version of Norton's thesis, and lead us to suggest that environmental philosophers should try to be more inclusive and empirically minded in their discussions about public moral claims regarding nature.*

Introduction

Must our disagreements about the moral status of nature prevent us from supporting the same environmental policies? This question is at the core of Bryan Norton's convergence hypothesis, first discussed in an early paper in *Environmental Ethics* and later developed in his book *Toward Unity among Environmentalists* as well as in several more recent publications (Norton, 1986; 1991; 1995a, b; 1996; 1997). Stated simply, Norton's claim is that individuals who rely on a sufficiently broad and temporally extended range of

Ben A. Minteer, School of Public Policy, 685 Cherry Street, Georgia Institute of Technology, Atlanta, GA 30332-0345, USA. E-mail: ben.minteer@pubpolicy.gatech.edu; Robert E. Manning, School of Natural Resources, University of Vermont, Burlington, VT 05401-0088, USA. E-mail: rmanning@nature.snrv.uvm.edu

human values (a position he originally termed 'weak anthropocentrism'), and non-anthropocentrists who embrace a consistent notion of the intrinsic value of nature, will both tend to endorse similar policies in particular situations. This overlapping of human and nonhuman concerns is to be expected, since in order adequately to sustain a broad range of human values over time, the ecological contexts on which these goods depend must also be sustained—a goal accomplished through the formulation of long-sighted, multi-value environmental policy. If this sort of common ground exists among individuals of varying ethical stripes, then Norton believes environmental philosophers (and environmentalists generally) might consequently agree to set aside many of our increasingly worn contests over the philosophical bearing of various environmental commitments. Once this happens, attention could then be turned toward more concrete (and therefore more useful) analyses of the location and character of environmental values in actual policy discussions. The theory of convergence thus comports well with Norton's general pragmatic approach to environmental ethics, a stance which has found him calling for a practical environmental philosophy focused not on speculative metaphysical arguments about nonhuman nature, but on the complex and interpenetrating moral underpinnings of actual environmental policies and practices (Norton, 1995a).

Given the traditional emphasis of environmental philosophers on the founding and vigorous defense of general and universal moral principles (the very habits that Norton is attempting to leave behind), the convergence hypothesis has, not surprisingly, met with less than universal support in environmental ethical circles. In particular, Callicott (1989; 1995a, b), Westra (1997) and Steverson (1995) have come out in strong opposition to Norton's thesis. As we will go on to explain, we take it to be significant that none of these critics attempt to engage the convergence hypothesis at an empirical level—the realm in which Norton clearly believes his thesis is to be either validated or rejected. Elsewhere we have argued that environmental philosophers can learn much from such experimental approaches toward environmental values (Minteer and Manning, 1999). This need is especially great with respect to notions like convergence because, in their objections, Norton's critics have tended to revert to their own precast environmental ideologies, taking issue with Norton's own philosophical proclivities rather than considering the practical questions he raises about the relationship between concrete public environmental values and policy judgements.

Of course, Norton's epistemological and ontological claims are fair game, and we do not seek to discourage critical analyses of the serious philosophical concerns at stake here. We simply suggest that more attention needs to be paid to the examination of the idea of value convergence on environmental policy from an empirical standpoint. This sort of analysis could provide a useful service for environmental philosophical discussions, and might contribute to the ongoing development of a more practical and effective style of environmental ethical inquiry. If it can be demonstrated that public ethical diversity toward the natural world does not preclude a high level of agreement on common policy goals (at least in particular cases), then we would argue that environmental philosophers should refrain from dismissing arguments like the convergence hypothesis out of hand, especially if such dismissals are made simply because the convergence model refuses to be blindly monistic in its countenance of a range of moral programs.

In the present paper we will therefore attempt to provide an empirical exploration and defense of a general convergence framework. First, we will briefly rehearse and consider the various critiques of convergence, and show that while his critics attempt to draw out perceived philosophical flaws in Norton's thesis, they do indeed avoid the important practical question about convergence on real matters of environmental policy. We will

then present and discuss an empirical study of environmental ethics, values and attitudes toward forest policy (carried out in the context of Vermont's Green Mountain National Forest) that leads us to endorse a reading of Norton's thesis as an accurate model of public environmentalism, at least in the Vermont case. We will conclude by discussing how these data lead us to question a number of the dispositions and the practices of environmental philosophy. In particular, we will suggest that the unmistakable pessimism in Norton's critics' attitudes toward the ability of the public to arrive at sound environmental policy without sole recourse to a nonanthropocentric foundation is unwarranted. Further, we will propose that this stance is detrimental to the development of a more inclusive public environmental philosophy.

The Convergence Hypothesis in Environmental Philosophy

As his declaration of the convergence hypothesis as 'dead wrong' attests, Callicott (1995a) has been one of the most strident critics of Norton's thesis in recent years. It is clear in his critique of Norton's project, however, that Callicott has mostly been concerned with what he sees as the theoretical shortcomings of the convergence argument, rather than the more practical question of whether Norton's proposal is an accurate portrayal of how people *actually do* go about supporting certain types of environmental policy. In other words, and not unexpectedly, Callicott appears less interested in the empirical bearing of convergence than he is in the axiological and ontological problems he finds in Norton's own weak anthropocentrism. As he writes:

If all environmental values are anthropocentric and instrumental, then they have to compete head-to-head with the economic values derived from converting rain forests to pulp, savannahs to cattle pasture, and so on. Environmentalists, in other words, must show that preserving biological diversity is of greater instrumental value to present and future generations than lucrative timber extraction, agricultural conversion, hydroelectric impoundment, mining, and so on. For this simple reason, a persuasive philosophical case for the intrinsic value of nonhuman natural entities would make a huge practical difference (Callicott, 1995a, p. 22).

Here Callicott is objecting to a specific move Norton makes following the argument for convergence; namely, since both nonanthropocentric and weak anthropocentric projects can be expected to support similar policies in particular cases, environmental philosophers (and others) might therefore be better off embracing something like Norton's contextualism. Norton's justification is that such a position is ultimately less problematic than the endorsement of intrinsic value theory, a stance he holds to be both practically and metaphysically troubling (Norton, 1995b). Since Callicott is one of the preeminent nonanthropocentrists in the field, however, it is not surprising that he cannot bring himself to accept Norton's invitation to the anthropocentric camp. This leaves Callicott (1995b) little choice but to assert the 'practical' necessity of intrinsic value for environmental protection, and to deny that such a position is rendered a 'pernicious redundancy' by the conclusions of Norton's convergence hypothesis. Callicott therefore concludes that convergence between human-based and nonanthropocentric positions is highly unlikely since Norton's contextualism will always lack the moral force necessary to defeat consumerist values in environmental policy contests.

Westra (1997) takes a similar tack in her appraisal of Norton's approach. In claiming that there is little to commend the appeal to human values in the formulation of strong environmental policy, she goes on to suggest that Norton's weak anthropocentrism is nothing more than a convenient fiction: 'Norton refers to a rare, if not nonexistent

ethic—that of the “long-sighted anthropocentrist”. Where does one find such a position? (Westra, 1997, p. 290). We are puzzled by Westra’s incredulity here, since our experience, and that of scores of other researchers into public environmentalism (for example, Kempton *et al.*, 1995), has been that future generations-oriented environmental values consistently draw strong support from a broad segment of the public. But moving on, we can see that Westra, much like Callicott, believes that since Norton does not advance an unswerving articulation of intrinsic value (like the ‘principle of integrity’ that figures in Westra’s own ‘biocentric holism’), his prediction of convergence is, in most cases, simply wishful thinking. She does concede that convergence between human and nonhuman considerations in some sense exists at the base level of survival (since it would be difficult to imagine how civilization could flourish after nature’s total demise), but this is essentially an uncontroversial and philosophically trivial claim. At the end of the day, it seems clear that Westra thinks that Norton’s weak anthropocentrists will, more often than not, part company with ecocentrists because of the profoundly different policy directions she thinks these philosophical commitments necessarily entail.

Also like Callicott, Westra (1997) fails effectively to engage the empirical merit of Norton’s claim. Even though she couches her arguments against convergence in a real-world example involving a Canadian contest over fishing rights, she ends up considering how Norton’s position *might* have panned out in the specifics of the case—how it *would have been* if weak anthropocentric appeals were made—rather than discussing the degree to which participants in this setting *actually* employed arguments resembling Norton’s contextualism. Following this hypothetical reasoning, Westra proceeds to reject the weak anthropocentric approach based on her conclusion that it would have been unable to support the cause of protecting ecological integrity in the fisheries example. Such a strategy might tell us much about Westra’s nonanthropocentrism and why she finds it more attractive than any alternative anthropocentric posture, but it unfortunately does not get us any closer to understanding whether such theoretical contests may actually collapse in real policy agreements. Westra can only turn to speculative predictions about what policies the fishing communities would arrive at if they argued from a contextualist standpoint, reading these conclusions through the lens of her own philosophical commitments instead of drawing them from the real claims and decisions made by the citizens involved. Nowhere in her critique does she provide anything approaching falsification of the convergence hypothesis.

Steverson (1995) is up-front about his neglect of the empirical status of the convergence argument, although of Norton’s critics he alone seems to recognize the need for such a discussion in the literature. Stating that he is not interested in exploring the validity of Norton’s convergence hypothesis itself, Steverson nevertheless does conclude that this sort of analysis is required; indeed, he believes that whether convergence can hold as an empirical hypothesis and also serve as a guide in decision making about management and policy are ‘important questions to consider’ (Steverson, 1995, p. 139). But again, like Callicott and Westra, Steverson chooses to direct his entire critical attention to Norton’s anthropocentrism, specifically the logical implications of Norton’s contextualist position within the convergence framework. Arguing that this approach would not be adequate for the protection of individual species in particular cases because Norton’s contextualist manager would allow extinction if it did not threaten larger ecological processes, Steverson concludes that such a stance obviously runs counter to the practical judgements and normative intuitions of nonanthropocentrists. As a result, he believes that we should not expect to find convergence between these camps at the level of policy formation. In fact, according to Steverson (1995, p. 137), the possibility is nearly ‘nonexistent’.

Norton (1997) has persuasively replied to Steverson's arguments in a recent article appearing in *Environmental Ethics*, and interested readers should refer to his defense of contextualism therein. Here we would only like to observe that a significant part of Norton's response devolves on the empirical question of the validity of convergence, a subject he believes is avoided with Steverson's appeal to nonanthropocentric intuitions and his reliance on a hypothetical critique of contextualism and the convergence thesis. As Norton (1997, p. 99) writes, 'The convergence hypothesis is a general empirical hypothesis about policy ... I do not know if [it] is false in Steverson's imaginary, probably impossible, world ... It is supported by facts, both directly and indirectly; it could be falsified, but so far it has not been'.

The Empirical Evasion

By now it should be clear that it is not our purpose here to explore the metaethical questions that arise in the particular anthropocentric/nonanthropocentric division held within the convergence debate, although they are important and merit critical attention. Hopefully, our discussion has revealed that there are (at least) two distinct paths of inquiry pertaining to the convergence argument. The first concerns matters of ontological and epistemological import and the consequences for philosophical practice that follow from Norton's hypothesis. These are the issues that Callicott, Westra and Steverson are obviously concerned with. It is the reason they fall back on strong arguments for the necessity of nonanthropocentrism and intrinsic value theory, and why they assert the improbability of convergence based on an inflated view of the philosophical determination of public policy choices.

The second path of inquiry—that with which our paper is primarily concerned—addresses the empirical validity of Norton's prediction of convergence of differing ethical stances on similar environmental policies. On this point, as mentioned above, his critics have little to say. Callicott simply assumes that an unshakeable commitment to intrinsic value—one held prior to inquiry into the varying contexts of specific environmental problems—makes a practical difference in discussions over policy options. Westra, despite her promising set-up of a real-world case involving fisheries management, nevertheless retreats to hypotheticals and ideological criticisms of the weaknesses of the anthropocentric claims in Norton's framework. And Steverson openly discards the empirical question altogether, preferring to address the faults he finds in the contextualist position and its divergence from the 'intuitions' of nonanthropocentrists.

By taking aim at Norton's anthropocentrism rather than attempting to refute the empirical claims of the convergence hypothesis through falsification, we feel that his critics have essentially backed away from the real-world problems and questions to which environmental philosophy was originally intended to speak. Callicott, Westra and Steverson seem to be saying that Norton's understanding of convergence is somehow philosophically *wrong* and should therefore be swept aside, regardless of whether it might actually hold in particular cases. For Norton's critics, the moral justification of environmental practice and policy is delivered through their universal nonanthropocentric principles (i.e. Callicott's ecocentric reading of Leopold's 'land ethic' and Westra's 'principle of integrity'), under which all cases and situations must ultimately be subsumed. What concerns us here is that the biophysical and cultural settings in which actual public moral inquiry occurs is, for these theorists, essentially deemed irrelevant to ethical judgement. As Callicott (1995b, p. 9, emphasis added) puts it, 'providing *theoretical grounds* for according intrinsic value to nature ... [is] the principle, the defining project of environmental ethics'. Once this philosophical foundation is laid, the

task is then to "institutionalize" this ecocentric ethic in natural resource management and policy arenas (Callicott, 1995a). Our fear is that Callicott's move threatens to undercut real democratic debate about the appropriateness of such foundations as universal ethical prescriptions for human-nature relationships, and that the turn to ontological arguments (i.e. the single-minded desire to fashion a 'master principle' that supports the moral standing of nonhuman nature) draws attention away from the empirical contexts of specific environmental problems. In taking this route, we believe Norton's critics miss the potential resources located within normatively diverse human value experiences that might be up to the task of promoting strong environmental protection. Westra (1997, p. 293), for example, also appears to subscribe to a foundational view of moral judgement and decision making, as evidenced by her remark that 'Even reaching a right decision on wrong principles may not be sufficient, if the principles are such that they would permit a morally bad decision on another occasion'. Implicit here is that only those justifications that rely on a narrow set of nonanthropocentric claims articulated prior to moral deliberation will be able to meet the demands of protective environmental attitudes. In other words, to the extent that ethical debate over the multiple values at play in specific decision making contexts does not reduce these goods to a nonanthropocentric principle defined in advance, it can produce only second rate, weedy justifications for environmental policy, or possibly the philosophical equivalent of 'dumb luck'.

We do not think that there is much to be gained by these approaches to moral argument in environmental philosophy. Since one of us has written elsewhere about the virtues of an alternative, pragmatic approach toward ethical justification regarding nature that draws upon Dewey's moral contextualism, we will not rehearse the specifics of this sort of project here (see Minter, 1998). Rather, our purpose in the present discussion is simply to suggest that stances like Callicott's, Westra's and Steverson's seem to discount the relevance of actual public opinion for the business of supporting our environmental commitments through management and policy actions. Indeed, there seems to be an open dismissal of the legitimacy of citizens' environmental philosophies by Norton's nonanthropocentric critics. This refusal to engage the specific claims in the convergence hypothesis reveals an anti-empirical sentiment that we feel is counterproductive to the practical policy goals of environmental ethics. Accordingly, we would like now to turn our discussion toward one example of an empirical study that we think illuminates the usefulness of Norton's convergence hypothesis—the Vermont public's general environmental commitments and their specific attitudes toward National Forest policy. Specifically, we believe our research in this arena addresses the main question raised in Norton's thesis; that is, does public value pluralism regarding nature necessarily prevent practical agreement at the level of sustainable environmental policy? If the Vermont data we report on below are at all accurate, the answer to this question would appear to be a resounding 'no'.

An Empirical Test

To empirically measure public environmental ethics, values and forest policy attitudes, we adopted a mail survey technique commonly used in social scientific research. Specifically, we administered a study questionnaire to a representative sample of 1500 Vermont households, as drawn from telephone directories covering the state. The questionnaire was administered in the spring of 1995 following procedures recommended by Dillman (1978). Two hundred and seventy-two questionnaires were returned as undeliverable, reducing our sample size to 1228. Six hundred and twelve completed questionnaires were returned, yielding a response rate of 50%.

Because our study was designed to measure the Vermont public's support for a range of environmental ethical positions, we needed to construct a typology of philosophical claims about human-nature relationships. We did this through an analysis and synthesis of a wide selection of philosophical and historical literature in environmental thought.¹ The resulting typology of 17 environmental ethics, grouped in five thematic categories, is presented in Table 1. Since we were interested in developing an extensive (though by no means exhaustive) list of potential environmental ethics, our study identified an additional number of moral stances that fell outside the weak anthropocentric and bio/ecocentric positions that Norton sets up in his convergence framework, although biocentric and weak anthropocentric positions are clearly included in our analysis. If the notion of convergence can hold among the positions captured within our broader philosophical net, then we think that Norton's thesis is even more persuasive and of greater practical import. Furthermore, this extended typology resonates with our approach to a set of metaphilosophical issues in environmental ethics. Specifically, we believe that a contextual and situation-centered understanding of ethical judgements is a more appropriate model of moral experience; a stance which suggests that individuals are (and should be) less ideological and categorical in their views of what actions are 'right' regarding nature (see Minter, 1998). If this is so, then our investigations into public environmentalism need to adopt an unabashedly experimental spirit, employing materials and tools that are shaped, but not entirely determined, by well-known theoretical debates in environmental philosophy.

To test public support for these ethical positions regarding nature, we composed a battery of 64 statements designed to measure agreement with each of the 17 environmental ethics included in our typology. Study participants were directed to indicate whether they agreed or disagreed with each statement by means of an 11-point Likert-type scale. Summary results of respondents' mean scores for these 17 ethics are presented in Figure 1.

In addition to this examination of citizens' support for specific environmental ethical claims, we also investigated the more general types of values that nature (in this case, Vermont's Green Mountain National Forest) might provide for the public. These were drawn from several conceptual classifications of the potential social values supported by the environment, including those offered by Kellert (1985) and Manning (1989). Respondents' support for these 11 human values of nature were measured by means of a six-point scale, ranging from 'not at all important' to 'extremely important'. Results of this investigation are reported in Table 2.

As we have discussed in more detail elsewhere, our study of public environmental ethics reveals a strong moral pluralism embraced by Vermont citizens (Minter and Manning, 1999). Even a quick glance at the results presented in Figure 1 suggests not only that respondents subscribed to a diverse mix of moral claims about nature (from utilitarian views to radical environmental stances), but also that a considerable number of these positions drew high levels of agreement from the study sample. We can see that the 'future generations' ethic (a claim that is the centerpiece to Norton's contextualism) and the 'organicism/animism' and 'natural rights' ethics (elements common to much biocentric and ecocentric theory) all enjoy a substantial level of public support. This pluralism in public environmental commitments is further bolstered by the results of the human values of nature analysis reported in Table 2. A number of these values produced high average importance ratings, especially aesthetic, ecological, recreational and educational values. Significantly, economic values were at the bottom of the heap, suggesting, contra Callicott, that nonconsumptive human-based environmental values are not always held hostage to commercial values in public opinion.

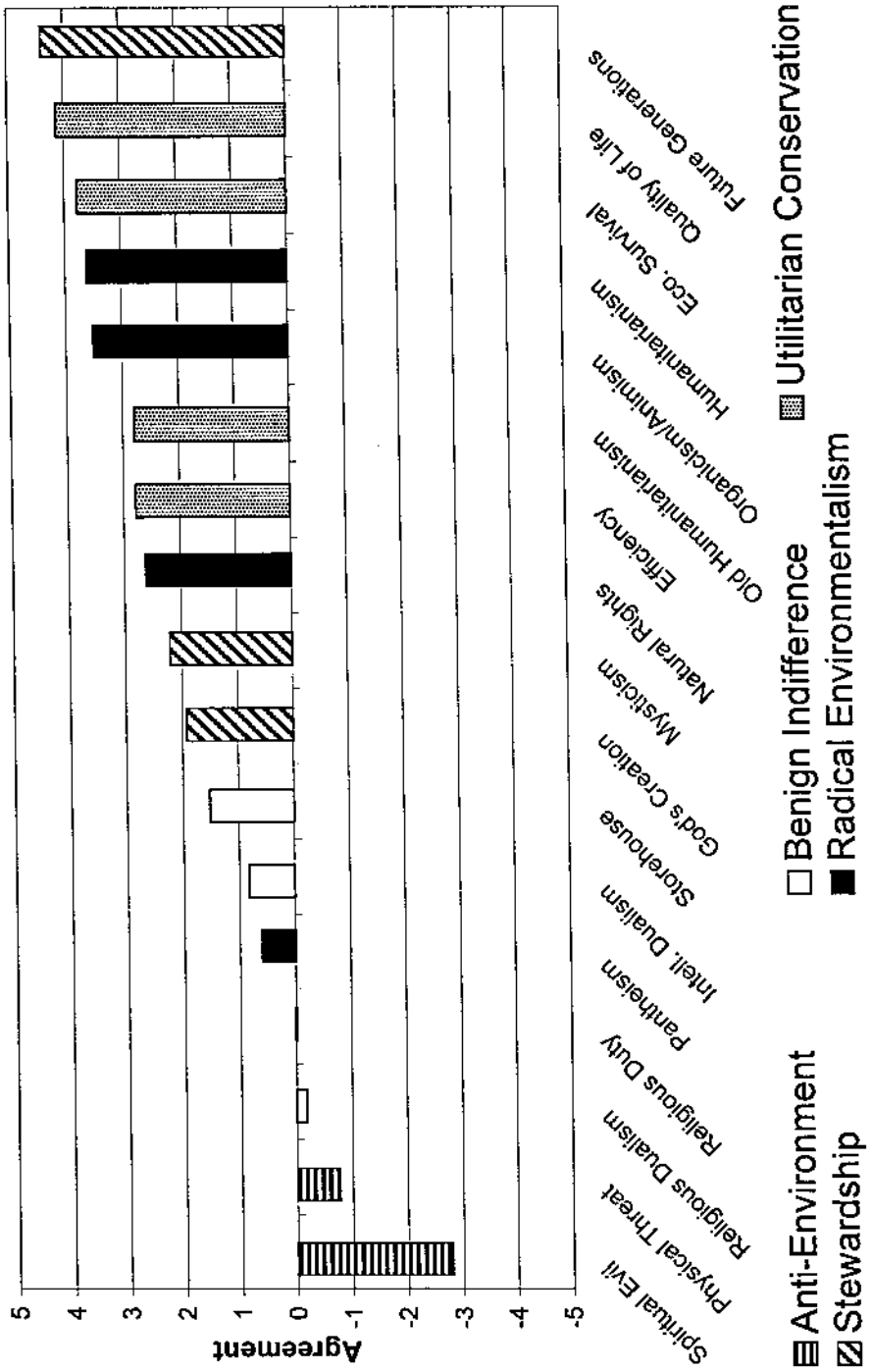


Figure 1. Environmental ethics.

Table 1. Environmental ethics typology

Environmental ethics	Representative statement
<i>Anti-environment</i>	
(1) Physical threat	(1) Nature can be dangerous to human survival
(2) Spiritual evil	(2) Nature can be spiritually evil
<i>Benign indifference</i>	
(3) Storehouse of raw materials	(3) Nature is a storehouse of raw materials that should be used by humans as needed
(4) Religious dualism	(4) Humans were created as more important than the rest of nature
(5) Intellectual dualism	(5) Because humans can think, they are more important than the rest of nature
<i>Utilitarian conservation</i>	
(6) Old humanitarianism	(6) Cruelty toward animals makes people less human
(7) Efficiency	(7) The supply of goods and services provided by nature is limited
(8) Quality of life	(8) Nature adds to the quality of our lives (for example, outdoor recreation, natural beauty)
(9) Ecological survival	(9) Human survival depends on nature and natural processes
<i>Stewardship</i>	
(10) Religious/spiritual duty	(10) It is our religious responsibility to take care of nature
(11) Future generations	(11) Nature will be important to future generations
(12) God's creation	(12) Nature is God's creation
(13) Life-based/mysticism	(13) All living things are sacred
<i>Radical environmentalism</i>	
(14) Humanitarianism	(14) Animals should be free from needless pain and suffering
(15) Organicism/animism	(15) All living things are interconnected
(16) Pantheism	(16) All living things have a spirit
(17) Natural rights	(17) All living things have a moral right to exist

Turning to the question of support for environmental policy, we constructed a series of statements concerning various ecosystem-based goals and objectives for managing Vermont's Green Mountain National Forest.² Support for these items was recorded on a five-point agreement scale, ranging from strong disagreement to strong agreement with the policy items. These statements, along with respondents' average agreement scores, are presented in Table 3. Taken as a whole, these statements effectively map out the sort of 'long-sighted' and multi-value environmental policies described by Norton in the convergence hypothesis.

As the results suggest, our Vermont sample overwhelmingly supported this kind of sustainable forest policy. Specifically, respondents endorsed a holistic model of environmental management, strongly agreeing with the importance of protecting species diversity, wildlife habitat and the overall ecological and social sustainability of the Green Mountain National Forest.

Discussion and Conclusions

How do our study results bear on the question of convergence? Based on our findings, we can conclude that, at least in the case of the Vermont citizenry and the Green

Table 2. Human values of nature

Value	Statement	Average importance rating ^a
Aesthetic	The opportunity to enjoy the beauty of nature	4.97
Ecological	The opportunity to protect nature in order to ensure human well-being and survival	4.95
Recreation	The opportunity to camp, hike and participate in other recreation activities in nature	4.83
Education	The opportunity to learn more about nature	4.68
Moral/ethical	The opportunity to exercise a moral and ethical obligation to respect and protect nature and other living things	4.53
Historical/cultural	The opportunity to see and experience nature as our ancestors did	4.4
Therapeutic	The opportunity to maintain or regain physical health or mental well-being through contact with nature	4.35
Scientific	The opportunity for scientists to study nature and ecology	4.3
Intellectual	The opportunity to think creatively and be inspired by nature	3.93
Spiritual	The opportunity to get closer to God or obtain other spiritual meaning through contact with nature	3.81
Economic	The opportunity to get timber, minerals and other natural resources from nature	2.98

^a 1, 'Not at all important'; 6, 'extremely important'.

Mountain National Forest, a convergence model is empirically valid for the understanding of the integration of ethical pluralism at the level of sound environmental policy. Our sample visibly subscribed to a wide range of environmental ethics and human values of nature, including traditionally identified anthropocentric and biocentric positions. Rather than discouraging agreement in attitudes toward sustainable forest management, however, this philosophical diversity seems to have converged on an ecosystem-based policy regime in the manner predicted by Norton. As mentioned above, we believe that his hypothesis is even more persuasive in light of our data because it holds not among narrower camps of environmentalists, but among the broader Vermont public. While ours is but one empirical study offered in support of Norton's thesis, and is obviously constrained by demographic and situational parameters, we believe that our results nevertheless provide support for his convergence hypothesis. Moreover, we think that our findings provide a firm response to Norton's philosophical critics. According to their predictions (which again we would suggest stem from their commitment to *a priori*, moral foundations), the potential for public convergence on common policy goals ranged from the 'highly unlikely' to the 'nearly nonexistent'. It should be clear from our analysis, however, that Norton's detractors have taken an overly cynical view of the likelihood of convergence on specific environmental policy regimes. We would therefore suggest that contributors like Callicott, Westra and Steverson should be much more cautious when making empirical predictions about the actual policy preferences and environmental values of the general public.

One of the more intriguing facets of Norton's project is, we believe, its applicability to interdisciplinary and trans-disciplinary discussions outside the walls of environmental philosophy. Because of its inclusive ethos and empirical spirit, we consider the notion

Table 3. Forest policy attitudes

Statement	Level of agreement (%)					Mean score ^a
	Strongly agree	Agree	Uncertain/ no opinion	Disagree	Strongly disagree	
(1) Greater protection should be given to fish and wildlife habitats on the Green Mountain National Forest	42.8	37.3	11.7	7.4	0.8	1.86
(2) Greater efforts should be made to protect the remaining undisturbed forests on the Green Mountain National Forest	47.8	32.0	11.2	7.4	1.5	1.83
(3) Management of the Green Mountain National Forest should emphasize a wide range of benefits and issues rather than timber and wood products alone	36.1	50.9	7.5	4.3	1.2	1.84
(4) Management of the Green Mountain National Forest should focus on the forest as a whole and not on its individual parts (such as bears and trees)	21.9	54.1	8.6	13.0	2.4	2.2
(5) Logging on the Green Mountain National Forest should not be allowed to disrupt the habitat of animals such as bears	26.4	45.9	13.4	11.8	2.5	2.18
(6) The Green Mountain National Forest should be managed to protect basic ecological processes and not to favor individual plant or animal species	13.1	46.2	20.0	17.1	3.5	2.52
(7) The Green Mountain National Forest should be managed to meet the human needs and desires as long as the basic ecological integrity of the forest is protected	12.1	59.1	13.4	11.9	3.5	2.36
(8) Human and economic uses of the Green Mountain National Forest should be managed so that they are sustainable over the long term	28.8	60.9	7.3	2.0	1.0	1.86
(9) The Green Mountain National Forest should be managed as a complete ecosystem and not as a series of towns or other political jurisdictions	31.5	51.1	11.7	5.2	0.5	1.92
(10) The Green Mountain National Forest should be managed to protect the natural diversity of plant and animal life	33	57.8	6.5	2.3	0.3	1.79
(11) The Green Mountain National Forest should be managed to meet the needs of this generation while maintaining the options for future generations to meet their needs	25.7	56.4	9.7	6.5	1.7	2.02

^a 1, 'Strongly agree'; 5, 'strongly disagree'.

of convergence to be a valuable tool for inspiring and guiding collaborative, multidimensional studies of human–nature relationships. Along these lines, we are heartened by the growing number of nature–culture analyses that complement the virtues of the general pragmatic approach in environmental ethics. In particular, several researchers laboring in the environmental history arena appear to be charting a parallel course in their localized, place-based studies of environmental values. Indeed, the recent works of McCullough (1995) and Judd (1997), which examine the regional beginnings of the American conservation impulse, mark an emerging contextual trend in several fields of environmental thought. By tracing the neglected story of New England communal landscape norms and management, these authors construct intricate portraits of the region's complex and evolving moral geography, demonstrating the weaknesses of the dogmatic utilitarian narratives commonly ascribed to this place and its people throughout the 19th century. Importantly, their work shows how conventional accounts miss the nuanced aesthetic and ethical sensibilities exhibited in New Englanders' civic management of their forests, fields and waters; worldviews that, even though decidedly human-centered, would spark the popular beginnings of the conservation movement and visibly outlined a nascent stewardship ethic of care for the natural world. This sort of historical attention given to the local context of environmental sentiments, by empirically documenting the practical moral resources present in community traditions, reinforces and embellishes the core philosophical project of environmental pragmatism. We would like to think that such sympathetic multi-disciplinary research into environmental values can make a number of valuable contributions to the study of public attitudes toward nature, with environmental philosophers closely working alongside not only historians, but also sociologists, political theorists, anthropologists, economists, geographers and others interested in the interpretation of the elaborate cultural web of human–environment relationships.

Finally, our findings lead us to draw a few conclusions about the practice of environmental philosophy and its relationship to public life. Specifically, we would argue that our study's support of the convergence hypothesis underscores the nonideological character of most citizens' environmental commitments. In the main, despite holding a number of dramatically different moral commitments about the philosophical value of nature, the sample of the Vermont public queried in this study arrived at policy-oriented common ground in their goal of managing the Green Mountain National Forest in a sustainable, multi-value manner. This makes us question some of the assumptions prevalent in environmental philosophy, especially the notion that adequate environmental protection is unattainable absent the guarantees provided by some sort of universal, nonanthropocentric master principle. For example, as his remarks excerpted earlier illustrate, Callicott is worried that the convergence argument will force a 'head to head' competition between economic and environmental values, a contest he seeks to avoid through an appeal to ecocentric considerations—values he presumably feels are able to trump all other goods in discussions about environmental policy.

What concerns us in this sort of pessimism toward the virtues of citizen environmental debate is the extent to which such an attitude acts to forestall the development of a truly public philosophy of the environment, one characterized by an open interchange between professional philosophical argument and everyday public discourse. Instead, since Callicott states that he is interested in giving the 'right' reasons for environmental protection—those foundational intrinsic value arguments that get their moral weight from philosophical purity rather than from public debate and discussion—the citizenry is effectively left out of the serious moral project of environmentalism (Callicott, 1995b). And even though he clearly wants to assert the practicality of an intrinsic value stance, Callicott (1995a, p. 22) views Norton's project as 'antiphilosophical', an old canard

about pragmatists and a riposte that only underscores his aversion to empirical discussions about public environmental values and their relationship to policy.

As the political theorist Benjamin Barber (1998, p. 42) observes, the consequence of such positions is often the construction of a barrier to a fully democratic conversation about the environment as a fount of common values:

Nowadays, rather than developing a discussion on behalf of the civic good, environmentalists often feel compelled to engage defensively in strident, unlistening polemics focused as much on their own moral self-righteousness as on the common good, or on, say, the rights of hikers and bird-watchers deployed as counterweight to the rights of snowmobilers and loggers. In the face of adversarial interest politics, the public good that might bring together loggers and bird-watchers in a community of concern about sustainable environments goes missing.

We see Norton's convergence hypothesis, in its quest for 'unity among environmentalists', as an attempt to avoid these ideological tendencies in debates over the appropriate course of human-nature relationships. Further, his thesis properly turns philosophical attention to the interpretation and evaluation of specific matters of environmental policy, the domain in which environmental values are effectively harnessed and administered through the institutional realm. In light of this, it seems clear that rather than dispelling the value diversity in public environmentalism through appeals to *a priori* or intuitively defended moral foundations, environmental philosophers might better draw upon citizens' value pluralism in a practical engagement of the alternatives available within policy and problem-solving discussions. It is our belief that this sort of pragmatic approach will go a long way toward building strong and lasting public constituencies for meaningful environmental stewardship. If, on the other hand, a majority of ethicists prefer to vociferously defend some version of nonanthropocentrism as the *only* valid mission of moral inquiry into human-nature relationships, and therefore the only correct ethical stance when it comes to environmental protection, then we are unfortunately less sanguine about the likelihood that Barber's discussion of the environment as a common good will be realized. Regardless, we hope that the results of our study have demonstrated the relevance of public attitudes research for discussions in environmental philosophy, and that they will encourage further empirical investigations into the thick moral context of human-nature relationships.

Acknowledgements

We thank Bryan Norton and Bob Pepperman Taylor for their thoughtful suggestions and criticisms, as well as two anonymous referees for *Ethics, Place and Environment* for their helpful recommendations made for an earlier version of this paper. We also owe a debt of gratitude to Bill Valliere for his methodological assistance over the course of this study. Lastly, we'd like to acknowledge the essential support of the USDA Forest Service North Central and Pacific Southwest Forest Experiment Stations and the McIntire-Stennis Forestry Research Program.

Notes

1. Material was drawn primarily from Attfield (1991), Black (1970), Callicott (1989), Fox (1995), Hargrove (1989), Hays (1959), Huth (1990), Nash (1989), Oelschlaeger (1991), Rolston (1988) and Worster (1994).
2. These statements were partly adapted (with modifications made for regional differences) from the forest attitude research conducted by Bruce Shindler, Peter List and Brent Steel in the Pacific Northwest. See Shindler *et al.* (1993) and Steel *et al.* (1994).

References

- Attfield, Robin (1991) *The Ethics of Environmental Concern*, Athens, Georgia: University of Georgia Press.
- Barber, Benjamin (1998) *A Place for Us*, New York: Hill and Wang.
- Black, John (1970) *The Dominion of Man: the Search for Ecological Responsibility*, Edinburgh: Edinburgh University Press.
- Callicott, J. Baird (1989) *In Defense of the Land Ethic*, New York: State University of New York Press.
- Callicott, J. Baird (1995a) Environmental philosophy is environmental activism: the most radical and effective kind, in: Marietta, D. and Embree, L. (eds) *Environmental Philosophy and Environmental Activism*, Baltimore, MD: Rowman and Littlefield, 19–35.
- Callicott, J. Baird (1995b) Intrinsic value in nature: a metaethical analysis, *The Electronic Journal of Analytic Philosophy*, 3, <http://phil.indiana.edu/ejap/>.
- Dillman, Don (1978) *Mail and Telephone Surveys: the Total Design Method*, New York: John Wiley and Sons.
- Fox, Warwick (1995) *Toward a Transpersonal Ecology*, New York: State University of New York Press.
- Hargrove, Eugene (1989) *Foundations of Environmental Ethics*, Englewood Cliffs, NJ: Prentice Hall.
- Hays, Samuel (1959) *Conservation and the Gospel of Efficiency*, Cambridge, MA: Harvard University Press.
- Huth, Hans (1990) *Nature and the American*, Lincoln, NB: University of Nebraska Press.
- Judd, Richard (1997) *Common Lands, Common People*, Cambridge, MA: Harvard University Press.
- Kellert, Steven (1985) Historical trends in perceptions and uses of animals in 20th century America, *Environmental Review*, 9, 19–33.
- Kempton, Willet, Boster, James and Hartley, Jennifer (1995) *Environmental Values in American Culture*, Cambridge, Massachusetts: MIT Press.
- Manning, Robert (1989) The nature of America: visions and revisions of wilderness, *Natural Resources Journal*, 29, 25–40.
- McCullough, Robert (1995) *The Landscape of Community*, Hanover, NE: University Press of New England.
- Minteer, Ben (1998) No experience necessary? Foundationalism and the retreat from culture in environmental ethics, *Environmental Values*, 7, 333–348.
- Minteer, Ben and Manning, Robert (1999) Pragmatism in environmental ethics: pluralism, democracy, and the management of nature, *Environmental Ethics*, 21, 191–207.
- Nash, Roderick (1989) *The Rights of Nature: a History of Environmental Ethics*, Madison, WI: University of Wisconsin Press.
- Norton, Bryan (1986) Conservation and preservation: a conceptual rehabilitation, *Environmental Ethics*, 8, 195–220.
- Norton, Bryan (1991) *Toward Unity among Environmentalists*, New York: Oxford University Press.
- Norton, Bryan (1995a) Applied philosophy vs practical philosophy: toward an environmental philosophy integrated according to scale, in: Marietta, D. and Embree, L. (eds) *Environmental Philosophy and Environmental Activism*, Baltimore, MD: Rowman and Littlefield, 125–148.
- Norton, Bryan (1995b) Why I am not a nonanthropocentrist: Callicott and the failure of monistic inherentism, *Environmental Ethics*, 17, 341–358.
- Norton, Bryan (1996) Integration or reduction: two approaches to environmental values, in Light, A. and Katz, E. (eds) *Environmental Pragmatism*, London: Routledge, 105–138.
- Norton, Bryan (1997) Convergence and contextualism: some clarifications and a reply to Steverson, *Environmental Ethics*, 19, 87–100.
- Norton, Bryan and Hannon, Bruce (1997) Environmental values: a place-based theory, *Environmental Ethics*, 19, 227–245.
- Oelschlaeger, Max (1991) *The Idea of Wilderness*, New Haven, CT: Yale University Press.
- Rolston III, Holmes (1988) *Environmental Ethics: Duties to and Values in the Natural World*, Philadelphia, PA: Temple University Press.
- Shindler, Bruce, List, Peter and Steel, Brent (1993) Managing federal forests: public attitudes in Oregon and nationwide, *Journal of Forestry*, 91, 36–42.
- Steel, Brent, List, Peter and Shindler, Bruce (1994) Conflicting values about federal forests: a comparison of national and Oregon publics, *Society and Natural Resources*, 7, 137–153.
- Steverson, Brian (1995) Contextualism and Norton's convergence hypothesis, *Environmental Ethics*, 17, 135–150.
- Westra, Laura (1997) Why Norton's approach is insufficient for environmental ethics, *Environmental Ethics*, 19, 279–297.
- Worster, Donald (1994) *Nature's Economy: a History of Ecological Ideas*, Cambridge: Cambridge University Press.