



Environment & Society



White Horse Press

Full citation:

Norton, Bryan, "Objectivity, Intrinsicity, and Sustainability: Comment on Nelson's 'Health and Disease as "Thick" Concepts in Ecosystemic Contexts.'" *Environmental Values* 4, no. 4, (1995): 323-332.
<http://www.environmentandsociety.org/node/5546>

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Objectivity, Intrinsicity and Sustainability: Comment on Nelson's 'Health and Disease as "Thick" Concepts in Ecosystemic Contexts'

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ABSTRACT: Ecosystem health, as James Nelson argues, must be understood as having both descriptive and normative content; it is in this sense a 'morally thick' concept. The health analogy refers (a) to the similarities between conservation ecology and medicine or plant pathology as normative sciences, and (b) to the ability of ecosystems to 'heal' themselves in the face of disturbances. Nelson, however, goes beyond these two aspects and argues that judgements of illness in ecosystems only support moral obligations to protect them if they are attributed a 'good of their own'. But this latter extension of the analogy flies in the face of ecological science, which has been forced to abandon organicism. If one separates the question of the warranted assertibility of environmentalists' goals from the question of where values in nature are located, the search for an objective realm of value realism can be seen to be unnecessary.

KEYWORDS: Ecosystem health, intrinsic value, objectivity, organicism

James Lindemann Nelson defends the idea that the concept of health is 'at once descriptive and prescriptive, objective and normative'. Nelson provides a phenomenological analysis and analogical justification for this idea, once adopted, but later rejected by J. Baird Callicott, (Callicott, 1992a, p. 42; Nelson, this issue).¹ Nelson argues persuasively that health and integrity are 'evaluatively thick' concepts – ones that embody both objective status and moral force. What's more impressive is that he promises to arrive at this admirable endpoint without addressing the recalcitrant problems of epistemological objectivity that have until now plagued intrinsic value theorists, who argue endlessly concerning whether intrinsic value in nature is subjectively constructed or objectively knowable.² Nelson apparently avoids these problems by offering an analogical argument that judgments of health and disease in ecological systems are *as objective as judgments regarding human health*. Indeed, I believe that this conclusion is shared by most scientists and environmental managers who have

endorsed the concepts of ecosystem health and integrity. Nelson and I also agree that the crux of the matter is the concept of objectivity. That's quite a bit of agreement, but there remains one very important difference between our approaches to understanding ecosystem health.

When Nelson concludes that 'clinical ecology must stand on a theory of the goodness of insentient, abiotic systems', that ecosystems must have a 'good of their own', and that this theory explains why we ought to protect ecological communities, I must disagree. Nelson's argument is informative because he compares this controversy to the one in medical ethics – between 'naturalists' and 'normativists' regarding definitions of human health – which helps us to understand the main contours of the debate regarding objective and normative judgments, at least as that debate has been prosecuted by environmental ethicists. Then, having established the linguistic possibility of evaluatively thick concepts, he transfers this evaluative thickness by analogy to the concept of ecosystem health, showing that it could indeed be an evaluatively thick concept also, *provided we attribute the value of health to the ecosystem itself*. Leaving aside for the moment this latter proviso, the advantage of this clever analogical argument, which can be stated without defining the difficult and contentious concept of objectivity, is that Nelson can, by this device, avoid addressing objectivity concepts directly. I understand Nelson's reluctance to address objectivity concepts, but I cannot agree with his implied solution that the objectivity of an ecosystem's health depends on the value associated with health belonging to the ecosystem itself; in this respect, I think Nelson pushes a useful analogy too far, by treating ecosystems as analogous to human patients. Everything we can learn from the 'health' metaphor, I believe, can be learned from its use in plant pathology, for example, a context in which we feel perfectly comfortable applying the metaphor, but in which there is hardly ever an attribution of moral personhood to ill plants.

The ecosystem health approach is based on two, related ideas. First, it proposes an analogy between environmental management/conservation biology and human medicine (as well as veterinary medicine and plant pathology) – all are *normative* sciences (Norton, 1991a). Second, more specifically, the analogy carries the implication that ecologists must deal with integrated systems that are self-organising in the sense that, when disturbed, they often 'recover', or 'heal' themselves; and ecosystems, like humans and other organisms, have considerable – but not unlimited – ability to snap back in response to disturbances and illnesses (Callicott, 1992a). But why does Nelson assume that these undisputed conclusions *require* the personification of moral subjects independent of humans?

Note that Nelson's argument comes in two parts. He first argues that ecosystem health is an important concept in guiding environmental policy and that this term must have moral, as well as empirical, operationalisable content. It must also be possible (if we are to defend a rational environmental policy) to

argue that the moral claims in question carry special weight in certain situations. Environmental activists must be able to claim that there is an obligation to act sustainably in our treatment of ecological systems, and that this obligation overrides at least some – perhaps many – values/preferences that are currently pursued by humans at the expense of their environment. Indeed, I have argued specifically and explicitly for each of this cluster of propositions. Nelson's specific, and very important contribution, is to show how terms such as 'health' and 'integrity' can be reasonably understood within the most plausible current accounts of moral discourse, as useful, 'morally thick' terms that can guide policy. By invoking the work of Bernard Williams (1985) and Charles Taylor (1989) to show that our moral language can accommodate these terms without any infractions of the rules of moral discourse, Nelson has provided a meta-ethical analysis that allows us to avoid the fact-value dichotomy and declare some sentences to express value that is inseparably descriptive and normative.³

This complex of ideas and arguments represents a lot of agreement, and progress. If we, anthropocentrists and nonanthropocentrists alike, could agree regarding this set of propositions, the way to a coherent, morally responsible, and scientifically sound definition of ecological sustainability would be open. A process of discussion and refinement of sustainability definitions could begin – this is the process that C.S. Holling and colleagues (1978; Walters, 1986; Lee, 1993; Gunderson, Holling, and Light, 1995; Norton, 1995) have called 'adaptive management'. A commitment to our community and a belief in obligations to leave future generations a healthy ecological community for their use and enjoyment (including their perhaps finding nonanthropocentric value in nonhuman nature) is adequate to motivate such a process. Indeed, this brief moral statement almost exactly characterises what many economists and ecologists mean by 'strong sustainability'. Further, it fulfils all the requirements that really face activists who advocate their policies in opposition to unlimited consumption (Arrow, et. al. 1995; Norton, forthcoming b). I also believe that many environmental policies, perhaps all of them, can be justified on the basis of *intragenerational* equity. The current patterns of consumption separating the developed from the undeveloped world, which are inextricably tied to problems of international law and justice, are clearly immoral, and support an urgent moral obligation to work to protect the access of indigenous peoples to forests and other of their traditional resources. So it is just wrong to equate all anthropocentrism with moral relativism, and jump from moral relativism all the way to moral realism with no argument to justify the very questionable and metaphysically confounding commitments associated with moral realism.

What I really disagree with in Nelson's argument is therefore just a tag-on to this cluster of significant agreements. Unfortunately, it is a very important, and destructive, tag-on. It is Nelson's belief that this argument requires not only (what might be called) 'epistemological' objectivity, but that this argument commits us to 'attributing' this value to nature – it is his commitment to the view

that nature has a 'good of its own' in some metaphysically independent sense. Unfortunately, Nelson says very little about why he thinks this next step is necessary, nor does he further define what it means to say that ecosystems have this kind of value.

The crucial turning point in Nelson's argument is when he reasons:

'One might convey useful information by saying something like, 'that's one sick carburettor you've got there', but this metaphoric use of 'sick', while still evaluatively thick, surely doesn't carry a moral assessment with it. So it isn't enough to make a case that health concepts in their environmental employ are thick; one would also have to show that what they are employed of has the right kind of value for the assessments to count as moral agents'. (p. 8 of ms.)

But this argument is convincing to Nelson only because he has already dismissed the possibility of resting moral obligations to protect ecosystems on obligations to humans. Suppose, to explore Nelson's analogy, the carburettor in question is installed in a Red Cross ambulance filled with wounded children and I have accepted responsibility to transport the children out of a war zone and to a safe hospital. Observing that the carburettor is 'sick', in this case, however metaphorical, implies that I have an obligation to find someone who can fix the carburettor, or find a new carburettor, and that correcting the problem carries the highest of moral priorities. The point then is that it is not the *metaphorical* nature of the attribution that blocks its moral import, but Nelson's failure to consider the possibility that healthy ecosystems can be of instrumental value to currently existing or future human individuals.

This apparent lacuna in the argument is justified by reference to the viewpoint of Mark Sagoff (1991), who argues that, based on an economic criterion of social welfare, it is *always* 'better' from a human perspective to destroy or degrade ecosystems in pursuit of economic gain. This implausible premise is used by Sagoff – one assumes, rhetorically – to argue that, since economists can provide no instrumental arguments to protect ecosystems, we must attribute to these systems a 'good of their own'. Nelson cites this view of Sagoff approvingly, and contrasts Sagoff's viewpoint with that of the ecologist, David Rapport (1992), who has stated a highly relativistic viewpoint – a viewpoint clearly not shared by other health/integrity theorists, as represented by several writers included in the anthology under discussion (see, for example, Page, 1992). Surely there is some middle ground between rank relativism of preferences and the moral realism that Nelson hastens to adopt. For those of us who believe, for example, that while turning the Chesapeake into a 'liquid highway' may be good for shipping magnates, it is not so good for the watermen who have traditionally gained their livelihood and self-identity from the Bay, Nelson's argument simply misses the mark. As is so often the case, nonanthropocentrism is invoked in order to avoid the real moral work of adjudicating between the morality of policies that harm some human individuals

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(usually those who lack political clout) for the benefit of other human beings, who wield their clout without moral sensitivity or constraint.

Also, there is not nearly enough discussion in Nelson's paper of the exact meaning of what it is for a natural object – in this case an ecological system – to 'have a good of its own', to allow assessment of the exact meaning of this phrase. Leading environmental ethicists such as Rolston (1986, p. 111), Callicott (1989, p. 163), and others have used an *ownership* metaphor to explain this concept. An object that has intrinsic value (what is usually called 'inherent' value) if that value is owned by the object itself, independent of human valuation. In morality and the law, ownership usually requires an 'owner', a moral or legal individual – even if that is a fictitious individual such as a corporation – who can speak for the interests of the whole, has responsibility, and can be held liable, etc.⁴ But aren't we at least owed some explanation of why this apparently inappropriate analogy of human societies clearly settles the issue in favour of a particular brand of moral realism?

My puzzlement extends also to the surprising imposition of an apparent commitment to some form of misplaced individualism that treats complexes of processes of life as moral individuals. 'Value', Rolston (1986, p. 111) says, 'attaches to a nonsubjective form of life (a *trillium*), but is nevertheless owned by a biological individual, a thing-in-itself.' But ecosystems are not unitary 'objects'; they are multi-layered and essentially complex 'processes'. Can multi-layered processes 'own' the intrinsically valuable characteristic of being healthy? I admit that I do not know how to answer this question. What makes me uneasy is that I have no idea what might count as evidence one way or the other. Note that if Nelson's rule that metaphors cannot establish moral obligation, noted above, were applied here, it would also block any obligation to act to protect ecosystems on the basis of their intrinsic value, because the value is attributed to ecosystems only by metaphorical connection to ownership in human societies. Leaving this ad hominem aside, I suspect that there is a category mistake involved in the attempt to predicate 'ownership' of health to ecosystemic processes and that much of the impetus toward attributing intrinsic value to ecosystems rests on the substantivist bias of much of Western language and thought. As I have argued elsewhere, the analogy between medicine and conservation biology is methodological, not ontological – (Norton, 1991a; 1995). It has been established by painful re-evaluation of much of ecological theory that the organicist analogy ascribes a more directed pattern of development to ecological systems than is warranted by empirical evidence (McIntosh, 1985; Sagoff, 1988; Norton, 1993). Nelson's desire to establish a nonanthropocentric value scheme by insisting that the health analogy be *more than metaphorical*, therefore flies in the face of ecological fact and theory. Having established the possibility of a normative/descriptive science of ecosystem health, Nelson has the opportunity to cite our relatively uncontroversial obligations to the future and to indigenous tribes, and declare victory against

relativism and nihilism. Instead, he says: ‘To use health and illness language nonmetaphorically – as we do of persons, rather than as we do of carburettors – requires that the system of which such terms are predicated have a value which cannot be reduced without remainder to our “instrumental desires” or even our cultural predilections. What reason is there for thinking that ecosystems might have such value?’ (ms. p. 12). Once again, he ignores the possibility that we have moral obligations to other persons, or the future persons for whom these systems support their very livelihood and sense of personal identity. Why *should* we, after all, insist that ecosystems have noninstrumental value? A few pages of reading in the ecological literature on ecological systems yields mainly empirical generalisations about energy flows, biomass accumulation, etc. These descriptive pre-occupations seem to me to bring much more to mind the kind of instrumental good we attribute to carburettors than the value we place on a child, once born, for example.

Nelson has fallen victim to the fallacy committed by most nonanthropocentrists – he *assumes* that the only truly moral and ‘objective’ basis for an environmental policy that limits the behaviour of humans must come from outside humanity, and then concludes that we must – if we are to restrict human behaviours that destroy natural systems – attribute value directly to ecosystems. But what about obligations to future generations? To the Creator? etc. These intellectual foundations would provide alternatives to moral realism as an answer to radical relativism. While all of these approaches have heavy philosophical burdens, my point is that *so does moral realism*.

I believe that the main problem of environmental ethics and policy is to provide a rational justification for improved policies to protect nature, one that can be appealed to when environmentalists must make moral arguments to their fellow citizens that some of our current activities are wrong, and that we should in many cases re-examine our attitudes and preferences.

Addressing this need of activists obviously requires an epistemological theory that allows us to sincerely claim to have ‘good reasons’ for policies we defend – in this sense, environmentalists’ goals and priorities must be ‘objectively’ supportable. Some nonanthropocentrists, such as Rolston (1986; 1994) openly adopt a subject-object dichotomy, and proceed to construct an explicitly representational account of how we know that nature has objective value, claiming that we ‘find’ intrinsic value in nature, with disastrous epistemological consequences (Norton, 1992; forthcoming a; Callicott, 1989; 1992). The problem with Rolston’s account, of course, is that, if intrinsic value exists independently of human perception, it is difficult to see how it can guide environmental policy, because there is no logical possibility of using references to objects, except as perceived and described, as part of a justificatory inference (Sellars, 1956; Norton, 1992; forthcoming a).

Nelson’s phenomenological approach may in fact provide a way around Rolston’s unfortunately Cartesian formulation of the objectivity problem; but I

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caution Nelson *not* to follow Rolston in his disastrous epistemological commitments. I am concerned, here, because – despite his phenomenological statements of method – he too readily accepts the language and assumptions of modernist and dualist concepts of epistemological objectivity. A similar realism-subjectivism dichotomy is implicit in the ecosystem analogue to what he characterises as the ‘big-ticket problem’ in medical ethics: are diseases social constructs, inherently entwined with ideologies, values, and preferences, or do they ‘really’ exist, ‘having at least the same kind of ontological robustness as the biological systems they damage’.

While I agree with Nelson that objectivity is the crux of the matter, I wish he would not taint his very sensible and constructive argument for a normative *and* descriptive conception of ecosystem health with an unnecessary commitment to the dualist, objectivist conception of moral value. Either we must, he reasons, *find* environmental values ‘out there’ in a nonmental, objective reality, or we must settle for preferences that are ‘in here’ and subject to the whims of taste and contingency of technological solutions. In order to see that these are false alternatives, it is useful to consider the exact function of objectivity in environmental policy. As noted above, environmental ethicists can provide a real service for activists if they can relate environmental policy goals to social values that trump mere consumer preferences. But, to assume that the only means to justify morally overriding preferences is to refer to values that exist outside consciousness is to confuse two philosophical questions:

- I. Where are the properties that justify overriding value assignments *located*? Or, alternatively, by what ‘owner’ are these properties ‘owned’?
- II. Can the overriding values assigned environmental goods be asserted with epistemological warrant?

To assume that II can be answered only by answering I is to fall into the trap set by Descartes’ representational and dualistic framing of the problem of objective knowledge (Norton, 1992; 1995). If, however, we reject the myth of a Cartesian objectivity that exists beyond perception *both* as it applies to knowledge *and* as it applies to value, we can defend objectivity of a post-modern kind; if we can defend a conception of objectivity that is relational rather than representational, and one which recognises that facts and values do not always present themselves independently of each other, then we may be ready to develop a new approach to the ‘objectivity’ of environmental values. The approach I have in mind is based in the pragmatic tradition and rests on ‘unavoidability’ within a constructivist system of knowledge and value.⁵

The meta-ethical concept of evaluative thickness, so important in Nelson’s analysis, is perfectly consistent with the pragmatic, constructivist tradition in epistemology and ethics; Nelson can thus avoid the Cartesian ideal of objectivity without weakening his central point: descriptions of ecosystems as healthy or ill

have normative force, and prescriptions that one should try to protect and restore sick ecological systems have empirical content. This is simply an alternative version of the Deweyan idea that facts and values are inseparable and that both function as regulative in inquiry. One is forced to admit that an environmental goal is 'objective' – that one can no longer ignore or resist that goal – when one cannot construct a plausible set of complete scientific models on which (a) one follows one's present course of action and (b) no humans, present or future, are unjustifiably harmed.

I have obviously raised more questions than answers. But I cannot hope to reconfigure traditional concepts of epistemological objectivity in this brief response; I will, nevertheless, assert four propositions without arguing for them here.

1. The problem of whether nature has a good of its own, or intrinsic value, is more of an epistemological issue than it is a normative one (Norton, 1992). Indeed, the question of whether an object has value independently of human consciousness only arises within a representational conception of perception and knowledge. If one does not believe in a noumenal world that exists beyond human consciousness, then one will have no temptation to seek the good of ecosystems in that shadow world.
2. A relational theory of perception and knowledge, coupled with a constructivist approach to 'objectivity' and 'reality', are more consonant with the Darwinism of activist environmentalists than are the various forms of representationalism. As long as the constructivist approach is supplemented with a strong concept of 'warranted unavoidability', environmental activists can claim that their environmental objectives override mere preferences without defending the dualistic framework of Cartesian modernism, and without appeal to nonhuman, moral individuals who own their own value (Norton, 1992).
3. We will not succeed in understanding the moral force behind environmentalists' objectives until we dig deeper and root out the conceptual vestiges of Cartesianism, and recognise that fact and value do not first exist in different places and then get united. Is-statements signal and express values just as ought-sentences presuppose factual claims.
4. The conceptual geography of Cartesianism, we must remember, is a *mental* geography. It is constituted by our concepts and assumptions. If we are to succeed in developing an environmental policy that is both warrantably assertible *and* morally forceful, we will have to reconfigure the way we think about science as well as values. The bad news is that we cannot achieve Nelson's goal, as he sees it, by employing Cartesian concepts of objectivity. The good news is that this problem simply does not exist in another conceptual geography, the one that was sketched out by Peirce and Dewey.

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What locks the anthropocentrists and nonanthropocentrists in a death-grip is the assumption of moral monism – the belief that we only have moral obligations to those things which have some shared feature common to all moral patients (Stone, 1987; Callicott, 1990; Norton, 1991; 1995). If we eschew monism and admit pluralism in moral values, then we can begin to sort values according to scales – the individual scale, the community-ecological scale, and the global scale. In contexts in which our actions threaten higher-level values such as the survival of our culture or the survival of our species, moral obligations can override preference-values. But little is gained by describing these higher values as ‘owned’ by the ecosystem itself. Our concern for our culture and for our species provide warrantably assertible environmental values and goals; these are anthropocentric, but they are not based in the preferences of individuals. They are, rather, based on our ‘objective’ moral obligations to future generations, an idea that provides, I believe, a much more promising direction in which to search for values that have unavoidable moral force (Norton, 1995).

NOTES

¹I take this statement to be equivalent to my own claim (1991) that conservation biology and associated disciplines, like medicine, are ‘normative sciences.

²See, for example, Rolston (1986) and Callicott, 1992b.

³My understanding of the importance of separating meta-ethical from substantive ethical positions such as moral realism results from a discussion with Andrew Brennan.

⁴One anonymous reviewer of an earlier version of this paper asked whether I think human individuals have intrinsic value. While I think it *may* in some situations be useful to classify some experiences of valuing (as in ‘He values the painting intrinsically; it pains him even to consider selling it’), I see no use in categorising *objects* as intrinsically or instrumentally valuable. As for the question, why do I feel an obligation to protect the interests of other humans, I take it that a broadly contractual argument will be sufficient to support such obligations, though it would carry us far beyond the subject of this paper to develop and defend this idea.

⁵See Norton, 1991b; 1995, for a fuller discussion of this option.

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