

Conservation of What?

1.

This paper takes as a starting point the disastrous state of the global environment, and the efforts undertaken by many biologists and policy makers to remedy it. By advocating for, among other things, the preservation of biological diversity, the restoration of the landscape to pre-human wilderness, and the prevention of species invasions, these parties aim to ensure the long-term viability of natural systems for the benefit of humans as well as the natural world itself. However, it turns out that environmentalists (as well as policy makers) have underappreciated the way in which questions of value necessarily inform the very foundations of conservation biology, and thus failed to argue for positions that, in their eyes, must appear self-evident. Indeed, in what follows, it will be demonstrated that the prevailing postulates which govern environmental conservation efforts are anything but obvious.

To bring this out, the present project will concentrate on the most central and pervasive ethical premise of all conservation, that *biological life is intrinsically valuable, irrespective of any utility it provides humans or other sentient beings*. Even as the movement increasingly splits between those supporting a traditional biodiversity-model (in which biodiversity preservation is the primary aim) and those promoting one based on ecosystem services (which additionally considers how the environment benefits humanity¹), this assertion offers us the fundamental justification for conservation. Why preserve and protect nature? Because life is intrinsically valuable. Initially, the claim appears plausible, even obviously true, as so many take it to be. And one assumes that those parties advocating the position come ready with an array of arguments in support of its adoption. But that is not the case. Not only do conservationists fail to forcefully argue for this stance, but their position is, in fact, the considerably stronger claim that one need not argue

¹ For instance, “maintaining hydrologic cycles, regulating climate, cleansing air and water, maintain atmospheric composition, pollination, soil genesis, and storing and cycling materials.” (Hooper et al. 2005)

for it—its validity is so evident that if traditional Western ethical theories cannot account for it, then that merely demonstrates the inadequacy of said theories.

2.

The explicit declaration that biological life is intrinsically valuable is not something frequently encountered in academic works on conservation, even when these works specifically address matters of environmental ethics. Nevertheless, despite the absence of this claim at the surface, it is certainly present at a more foundational level, where it provides support to a variety of other ethical principles. Take, for instance, the slightly different claim that biological diversity is intrinsically valuable, which *does* frequently appear in the literature. It seems a necessary condition of this more specific stance that biological life in general is intrinsically good—if this were not the case, why would biological diversity then be intrinsically valuable? A brief look at what we mean by biodiversity will illustrate this point.

Exactly how to define biodiversity has been a point of contention in the literature of conservation biology. For present purposes, E.O. Wilson's comprehensive definition will suffice:

*The variety of life at every hierarchical level and spatial scale of biological organisations: genes within populations, populations within species, species within communities, communities within landscapes, landscapes within biomes, and biomes within the biosphere.*²

This concept can be further developed by recognizing not only diversity proper, but also the disparity between organisms, as Stephen Gould does.³ *Diversity* in this sense signifies the number of unique species in a given group, whereas *disparity*, recognizes the variety of the morphological features among species. Consider one taxonomic subfamily of cats, Felinae. We might call this set of organisms diverse because many unique species compose it: cheetahs, ocelots, domestic cats, cougars, bobcats, servals, and about twenty-eight others. But, in terms of disparity, this same group shows little variety in biological architecture—it is more a difference of scale than of different

² Wilson (1988)

³ Gould (1990)

constituent parts. There would be a greater amount of disparity if we compared the members of Felinae to groups of birds or fish, and still more if the cats were contrasted to conifers or protobacteria. Biological diversity considered broadly, then, represents variety at (at least) these two levels across all scales of organisms.

Now, why would an individual find a wide “variety of life at every hierarchical level and spatial scale of biological organisations” to be intrinsically valuable? Perhaps it is because diversity itself is good. Michael Soulé, for instance, advocated this position in his classic paper “What is Conservation Biology?”, claiming that the normative postulate “diversity of organisms is good” is rooted in the fact that diversity in general is good. Hypothesizing that there may be an evolutionary psychological explanation for this value judgment, he noted that, in general, humans enjoy variety and that this emotion “may be as close to a universal norm as we can come.”⁴ Overlooking the fact that Soulé drifts from statements of description to statements of normativity, how plausible is this claim about the intrinsic value of diversity?

Here, an example from the discourse of egalitarianism may prove instructive. When we consider the moral weight of particular inequalities, what matters is not the fact that the distribution of some or other good or opportunity is disproportionate between individuals or social groups; rather, equality of *what?* is the question that determines whether the uneven distribution warrants moral examination. As Hausman and McPherson (2006) recognize, “inequalities of particular goods seem to be of moral concern only when those goods themselves are of central importance – like health, income, wealth, or social status.”⁵ So, whereas inequality of access to affordable medicine is clearly a topic of moral concern, the same could not be of, say, the inequalities in the presence of great pizza between Lawrence, Kansas and Chicago, Illinois (or New York).

⁴ Soule (1985)

⁵ Hausman & McPherson (2006)

Diversity, I claim, should be analyzed analogously. Considered in abstraction, the concept has no intrinsic moral weight precisely because it is a term of description which encodes information about the distribution of kinds among and between sets of things. In the present case, this signifies the amount of diversity and disparity among the set of organisms, and we know we are dealing with measurement because biological diversity *increases* and *decreases*. If we help ourselves to Hausman and McPherson's point about equality, then diversity becomes a legitimate site of moral inquiry only when it characterizes a set of things that themselves are morally important. This rules out, for instance, the diversity among types of sediment present on Mars, since sand and dirt are not morally significant entities. Thus, whether we can conceptualize biodiversity as intrinsically good, indeed, whether it is even a site for ethical contemplation, depends on whether biological life itself is something morally significant. This is what was meant by the assertion that the intrinsic value of biological life was a necessary condition for the intrinsic value of biological diversity, should it be established.

The intimate connection between these two claims becomes significant for our present concern precisely because the preservation of biodiversity, for the sake of biodiversity, is absolutely essential to conservation efforts. In what has since been recognized as the founding manifesto of the academic-scientific conservation movement, Soulé emphasized this very postulate as the most fundamental normative principle for any ecosophy (ecological philosophy) that would seek to constitute the "basis of an ethic of appropriate attitudes towards other forms of life."⁶ Thirty years on, the force of this claim has diminished very little, especially for those engaged in "traditional" conservation, which really just *is* conservation based on the preservation of biodiversity.⁷

⁶ Soulé, (1985), pp 731.

⁷ For a general sketch of the framework, methods, and aims of "traditional" conservation, see the recent anthology *Keeping the Wild: Against the Domestication of Earth*. In this work, an assortment of scientists, philosophers, and humanists (including Soulé, to whom the book is also dedicated) respond to criticisms of the biodiversity-based model of conservation.

Even for the individuals working within the other dominant model of contemporary conservation—those alternately dubbed “new conservationists”, “neo-greens”, and “green postmodernists”—the intrinsic value of biodiversity and the preservation of it retain a central position in their normative framework.⁸ They do not attempt to “undermine arguments based on ethical duty or intrinsic value,” but to supplement them with concerns for human health and well-being. Evidence for this is seen in how their statements of value translate to practical conservation efforts. With reference to the interests of human beings, they promote economic development initiatives traditionally absent from conservation. But they still advocate for the establishment of protected wildlife areas and national parks, the fundamental approach of the biodiversity-based model; indeed, they affirm, “the protected areas strategy is and will continue to be a cornerstone of conservation.” Thus, although this paradigm certainly revises the aims and methods of the discipline in significant ways—e.g. by advocating urbanization, heavily designed and managed landscapes, and partnerships with corporate multinationals—on the issue of the intrinsic value of biodiversity, there is no dissent.

However, despite the central role that the intrinsic value of biodiversity (and, thus, life generally) plays in structuring the ethical framework and practical actions of conservationists, those working in the field have done remarkably little to evaluate whether these assertions are actually justified. Even when the normative postulates of the movement are explicitly laid out, as Soulé did in the aforementioned paper, they often take the form of a declaration rather than that of a conclusion motivated by a sound argument. For instance, he writes that his postulates “cannot be tested or proven” and that “the mechanisms by which such value judgements arise in consciousness are unknown.” The implication here seems to be that these value judgments are so obvious—so intuitive—that justifications for them actually need not be given, or perhaps even that they cannot

⁸ The three figures at the heart of this campaign are Kareiva, Marvier, and Lalasz. See Kareiva and Marvier (2012) and Lalasz et al. (2011) for an illustration of their positions, as well as the exchange between Marvier and Soulé in *Conservation Biology*: Soulé (2013) and Marvier (2014).

be given. Similarly, Claudio Campagna and Daniel Guevara write that the most crucial obstacle faced by contemporary conservation is that “we do not have the concepts or language for expressing, or explicitly understanding, the intrinsic value of nature,” although we collectively recognize that it is valuable in this way.⁹ Such formulations leave much to be desired.

Surely, if global conservation efforts are to be carried out with reference to a moral framework in which the intrinsic value of biological life is fundamental, we must provide good justifications for why this framework, and not some other, should guide our actions. But this is precisely what is lacking in the work of conservationists, both “new” and traditional, who tell us that they know this principle to be true, even though they cannot explain why. They offer as evidence of their claim the fact that many people intuitively agree with the postulate—an assertion that becomes especially problematic when one considers that intuitive judgments might vary across cultural and gender boundaries.¹⁰ So, although those advocating for the intrinsic value of biological life may tell us *what* many people believe (though even this is not clear), they forsake the further question of whether such beliefs are justified—whether we can provide convincing reasons to adopt them. Fortunately, some scholars *have* tried to develop arguments in this direction, the most prominent contemporary example of which we now turn to.

3.

In an attempt to answer the question, “Is There a Need for a New, An Environmental, Ethic?”, Richard Sylvan constructed several thought experiments designed to elicit the intuition that nature is, in fact, valuable in some non-instrumental (i.e. intrinsic) way. Because we consider biological life a cornerstone of the natural world, the *last man example* is of particular interest to the present project. In this thought experiment, Sylvan attempts to establish a set of conditions under which the intrinsic and inexpressible value of life can be intuitively grasped. It reads as follows:

⁹ Campagna & Guevara (2014).

¹⁰ See Machery et al. (2004) and Stich & Buckwalter (2013)

The last man (or person) surviving the collapse of the world system lays about him, eliminating, as far as he can, every living thing, animal or plant (but painlessly if you like, as at the best abattoirs).¹¹

The conclusion intended by this hypothetical is that, when the last person acts in this way, they do something morally impermissible. This intuition is offered as evidence that biological life is intrinsically valuable—valuable in a way that cannot be understood from the utility it grants humans (e.g. sustenance, shelter, spiritual or aesthetic experience, etc.). Here, for the reasons mentioned above, we should be cautious about intuitions derived from thought experiments. No data exists as to the extent to which populations in the United States or other countries actually judge the situation in this way, but among environmental ethicists, at least, the intuition is widely held. For instance, when considering possible objections to the last man example in a recent revisitation, Martin Peterson and Per Sandin actually set aside any attempt to challenge the thought experiment's conclusions based on the rejection of its intended intuition. They note that “enough scholars have had strong enough intuitions about it not to question the ambition.”¹² While this last assertion ought not to be taken for granted, it is the contention of this paper that, however many people actually have these intuitions, this thought experiment fails to convincingly argue for the intrinsic value of biological life.

Under the conditions originally given in the thought experiment, I too would conclude that something wrong, even profoundly wrong, has occurred; however, my justification for doing so diverges from that of Sylvan and the other environmental ethicists. I think it is plausible to believe that only sentient entities possess interests, for example, in continuing their life or in avoiding pain, although this proposition will not be explicitly argued for here.¹³ What makes the actions of the last

¹¹ Sylvan (1973)

¹² Peterson & Sandin. (2013): 127

¹³ See Regan & Singer (1989) and McMahan (2002) for arguments along this line.

person impermissible, then, is the total destruction of all sentient life forms on Earth, which, due to their capacity to have interests, are the types of things that can have some level of moral standing, even if they are not “persons.” Thus, one could accept the intended conclusion—that the last person acts impermissibly—without committing to the intrinsic value of life, which is what the thought experiment purports to show. In order to isolate the more specific claim about life, I propose we amend the conditions by eliminating nonhuman animals from it altogether, since, if my story about sentience and moral status is to be believed, the last man acts wrongly even if biological life is *not* intrinsically valuable. Moreover, if it *is* valuable in this way, as Sylvan and others claim to show, then eliminating sentience from the example should not undermine their argument—the actions of the last man would still be impermissible due to the slaughter of all remaining non-sentient life, such as plants, fungi, and microorganisms. If this is granted, the example would now read,

The Earth's last sentient being surviving the collapse of the world system lays about him, eliminating, as far as he can, every living thing.

This revised situation, I contend, could now be compared to one in which a lone astronaut is stranded without resources on a faraway icy planet, with no chance of a return to Earth. Does the astronaut do something morally wrong by activating a device set to destroy the planet after he or she has perished? Maybe, maybe not. Either way, it is certainly not clear that he or she does act immorally. Rocks and water, as non-organic matter, do not seem like the kind of things that are morally significant because they do not possess interests. If this is the case, then for non-organic entities, whether we speak on the scale of planets or pebbles, their destruction is not bad for *them* precisely because there is no *them* for which it would be bad. In the words of Singer: “It would be nonsense to say that it was not in the interests of a stone to be kicked along the road by a schoolboy.”¹⁴ Considering this, it seems likely that, in fact, the astronaut does nothing wrong in annihilating the planet, since the planet has no interests (and thus no moral standing) to violate.

¹⁴ Singer (2011)

For those supporting the intrinsic nature of biological life, then, the challenge is to make a distinction between the last man example and the case of the marooned astronaut that is morally-relevant *and* non-instrumental. We can differentiate between the two examples by citing that, for instance, the former occurs on Earth while the latter happens on a distant planet, but this distinction is clearly not morally relevant to the problem at hand. Similarly, one could distinguish the two examples by citing instrumental reasons, e.g. one benefits human well-being more than the other. Again, however, the present concern is whether biological life is intrinsically valuable, not descriptively distinguishable or instrumentally valuable for sentient beings. With this in mind how then might proponents of the intrinsicist position identify a way in which the elimination of all plants, fungi, and microorganisms on Earth is meaningfully different from the destruction of that faraway planet of ice and rock?

Here, the inquiry is finally propelled to its most decisive question: can a principled distinction be drawn between non-sentient organic matter and non-organic matter? That is, for illustration's sake, when one grasps a small plant in the left hand and a rock in the right, how are the two to be differentiated? Certainly, there are ways to do so: they are composed of different elements, the arrangement of their constituent molecules is distinct, an array of particular chemical processes transpire in one but not the other—all of which is to say, one is alive while the other is not. However, abstracting away from whatever instrumental implications these particular characteristics may have for humans or other sentient beings (which was the motivation for revising the thought experiment), it is not clear what statements of intrinsic value can be derived from those differences. Life is merely a particular organization of matter, which, while easily contrasted from non-organic matter on a descriptive level, is not so obviously contrasted on a normative one. This, again, is the distinction between descriptive statements of what *is* (various organizations of matter) and normative statements of what *ought to be* (life—a particular organization of matter). If I am correct in this assertion, and the principled distinction between the

rock and the plant dissolve, then the claim that biological life is intrinsically valuable seems untenable—as long as we reject the intrinsic value of rocks.¹⁵ And thus, the claim that biological diversity is intrinsically valuable becomes as tenable as the claim that diversity of rocks is—which is to say, not very.

¹⁵ It is worth considering, although I will not deal with it here, that some philosophers *do* hold the view that rocks are intrinsically valuable. See, for instance, Scott Davison's 2013 *On the Intrinsic Value of Everything*.

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