

On the Concept of Independent Nature

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Abstract: Multiple concepts of nature are at play in environmental theory and practice. One that has gripped several theorists is the idea of nature as referring to that which is independent of humans and human activity. This concept has been subject to forceful criticism, notably in the recent work of Steven Vogel. After clarifying problematic and promising ways of characterizing independent nature, I engage Vogel's critique. While the critique is compelling in certain respects, I argue that it fails to appreciate what I take to be an important motivating concern of those drawn to the concept of independent nature, or something like it. I offer a characterization of that concern—a worry about problematic instrumentalization of the nonhuman world—and suggest why this concern, and the idea of independent nature which helps to make it intelligible, should continue to inform environmental theory and practice. In offering a qualified defense of the concept of independent nature, and of its value, I assume that such a concept is only one possible tool in a multi-pronged approach to environmental theorizing, deliberation, action, and policy.

I. INTRODUCTION

Multiple concepts of nature are at play in environmental theory and practice. Some are plausible, others are not. In some cases, plausible concepts of nature have been entangled with implausible ideas or used in problematic ways. In other cases, we seem to lack clear concepts that can adequately reflect concerns it makes sense to have. One concept of nature that has gripped a number of contemporary theorists and environmentalists is the idea of nature as referring to that which is independent of humans and human activity. This concept has been subject to forceful criticism, notably in the recent work of Steven Vogel (2015). Contra critics, I think a plausible view of independent nature can be articulated and defended. In offering a qualified defense of in-

dependent nature, and of its value, I assume that such a concept is only one possible tool in a multi-pronged approach to environmental theorizing, deliberation, action, and policy.

I begin by clarifying problematic and promising ways of characterizing the concept of independent nature. I introduce some interpretive complexities regarding how this concept is best understood and about the relation of the concept to normativity and practical reasons. I then turn to the details of Vogel's critique. While the critique is compelling in certain respects, I think it largely misses the mark. Not least this is because the critique fails to appreciate what I take to be an important motivating concern of those drawn to the concept of independent nature, or something like it. I offer a characterization of that concern—a worry about problematic instrumentalization of the nonhuman world—and suggest why this concern, and the idea of independent nature which helps to make it intelligible, should continue to inform environmental theory and practice.

II. THE CONCEPT OF INDEPENDENT NATURE

Independent nature refers to nature that is independent of humans and of human activity (or humanization). A number of environmental theorists endorse a version of this concept, though there is divergence regarding how the concept is best characterized.¹ Much depends on how we understand the relevant sense of independence. Based on how that issue is settled, one can identify different views among those who endorse the idea of independent nature. In this section, I begin by considering an extreme interpretation of independent nature that I think is implausible. I then consider a more promising way of conceptualizing independent nature, before turning to some complexities regarding the relation of that concept to normativity and practical reasons.

“By changing the weather [through anthropogenic climate change], we make every spot on earth man-made and artificial. We have deprived nature of its independence, and that is fatal to its meaning. Nature's independence is its meaning; without it there is nothing but us.” So claimed Bill McKibben in his well-known book announcing the end of nature (1989, 58). McKibben's view exemplifies what I'll call the extreme interpretation of independent nature. Two characteristics distinguish this interpretation. First, independent nature is understood to refer to places completely untouched or unmodified by human

1. Consider, for example, the different accounts of independent nature argued for in McKibben 1989, Soper 1995, Katz 1997 and 2012, Elliot 1997, and Plumwood 2002 and 2006. Of course, the authors in question don't always present their views as a defense of what I'm calling independent nature. But I think the accounts in question are plausibly construed as offering possible interpretations of that concept.

beings and human activity. Such a view is evident in McKibben's claim that *any* human modification of the natural world turns it into something "man-made and artificial," as though a switch is flipped. Second, independent nature is offered as a concept through which humanity thinks (or is supposed to think) its distinction in relation to the rest of nature.² Clearly, the idea of independent nature, as characterized by a McKibben-style view, assumes a human/nature demarcation. Whether that distinction is best conceived of as a form of dualism, and as involving metaphysical commitments that should trouble us, is something I'll return to later.

I think we need a more qualified view of independent nature than is offered by McKibben. To appreciate this need, I'll briefly highlight some difficulties that accompany the extreme interpretation. Consider an historical version of the concept of independent nature—the colonial or settler concept of wilderness. According to this concept, wilderness is understood to refer to places where humans are absent (or were thought to be absent). As has been argued by a number of writers, the colonial concept of wilderness has involved historical amnesia. It has also been implicated in the unjust marginalization and treatment of indigenous persons and communities, both in actuality and in

2. Compare Kate Soper's discussion of what she calls the "metaphysical" concept of nature in her taxonomy of senses of nature (1995, 155–56). A claim from Eric Katz is relevant here: "Humanity is different from nature. Ultimately, I believe that this conceptual dualism is necessary for an understanding of what nature means. The dualism is embedded in our use of language" (2012, 79). While it's true that a distinction between humanity and nature is embedded in our use of language, I do not find it plausible to defend this distinction by focusing on the "grammar" of the language-games in which 'nature' and 'natural' are used, as for example Paul Keeling argues (in Keeling 2008; see also Katz 2012, 91–92). Keeling is certainly right to emphasize that the words 'nature' and 'natural' are used in multiple ways, and that their usage is often context dependent and purpose relative, all of which is illuminated by attention to our linguistic practices. But I do not share what seems to be Keeling's considered view, namely, that it is sufficient to focus our attention on the contexts in which we talk about nature in order to understand nature's meaning. That focus, Keeling thinks, makes the philosophical objection to the wilderness idea—that it is premised on an untenable ontological human/nature dualism—a "red herring" (2008, 507). Keeling writes: "When we consider how the words 'nature' and 'natural' are actually used by looking at our language-games it is readily obvious that a key purpose of the concepts of 'nature' and 'natural' is to distinguish human agency from nonhuman agency" (2008, 511). In this respect, "differentiating artefacts from natural objects is partly constitutive of the meaning of the two terms" (ibid.). It follows that "[a]n empirical investigation into the essence of human artefacts or natural objects presupposes the grammar of these terms, because the latter determines what counts as an 'artefact' or a 'natural object'. One cannot justify this internal grammatical relation empirically by an appeal to reality" (ibid.). Contra Keeling, I think asking what the terms 'nature' and 'natural' refer to, and inquiring into the ontology of nature (in the manner characteristic of those philosophers Keeling is critiquing), is an important aspect of understanding different concepts of nature. Of course, such inquiry can be done well or poorly.

thought.³ Further, critics suggest that the colonial concept of wilderness has helped to support and entrench romantic fantasies of there being such a thing as “pristine nature.” The belief in pristine nature often has its complement in regret and despair about such nature having become “sullied” by human activity.⁴

I mention the colonial concept of wilderness to suggest a hazard we need to avoid in our thinking about the concept of independent nature. On a charitable reading, I assume McKibben, and others attracted to his kind of view, do not wish to endorse the colonial concept of nature. I assume, further, that defenders of a McKibben-style view would object to the harmful and unjust ways that concept has been understood and deployed, both in theory and in practice. Nonetheless, McKibben’s characterization of independent nature unfortunately has the implication of playing into the hands of critics. We need a way to understand the relevant sense of independence, when we speak of independent nature, which is not premised on the total absence of humans and human activity. Various ideas have been advanced in the literature. I’ll briefly consider three lines of argument that help us identify a plausible notion of independent nature.⁵

One useful perspective is offered by Val Plumwood (2006). Following Plumwood, we can, as a first approximation, understand the relevant independence as referring to the positive presence and agency of various nonhuman

3. For example, landscapes in the U.S. designated as “wilderness” (e.g., Yosemite National Park) were often cultural landscapes—a fact obscured by the wilderness designation. As Gary Nabhan observes: “In the Yosemite area, where John Muir claimed that ‘Indians walked softly and hurt the landscape hardly more than the birds and squirrels,’ Anderson’s (1993) reconstructions of Miwok subsistence ecology demonstrate that the very habitat mosaic he attempted to preserve as wilderness was in fact the cumulative result of Miwok burning, pruning, and selective harvesting over the course of centuries” (1995, 94). (The reference in the quote is to M. Kathleen Anderson, “The Experimental Approach to the Assessment of the Potential Ecological Effects of Horticultural Practices by Indigenous Peoples on California Wildlands,” Ph.D. Dissertation, University of California, Berkeley.) Further, indigenous peoples were routinely evicted, often violently, from the landscapes they had historically inhabited, cultivated, and (in many cases) helped to sustain in a flourishing ecological state (see, e.g., Dowie 2009). The case of Yosemite is again illustrative: “Yosemite National Park was spawned in war, a ‘war of extermination’ declared by California’s first governor, Peter Burnett, to rid the nation’s newest state of Indians” (Dowie 2009, 1). Of course, such evictions were not done solely for the sake of establishing wilderness areas. For relevant discussion, see Nabhan 1995; Cronon 1996; Guha 1997; Callicott 1998, 348–53; Plumwood 2002, 104–06, and 2006, 134–37; O’Neill et al. 2008, 132–34; Dowie 2009; and Vogel 2015, 5–8.

4. Robert Elliot (1997) defends a view of nature that resembles, in certain respects, the wilderness view. At different points in his discussion, Elliot seems prone to a despairing way of thinking along the lines suggested above. That said, I think Elliot’s view is richer than, and not ultimately susceptible to, the problems associated with the colonial wilderness idea.

5. The discussion that follows is intentionally selective and aims to highlight three promising lines of thought sufficient for my purpose in this section.

others, as well as that of terrestrial or aquatic ecosystems (or aspects of them). The independence at issue is an empirically discernible property. Various non-human others inhabit land and aquatic sites, shaping and altering them, and being shaped and altered by them in turn. These nonhuman others participate in myriad relationships, such as different forms of mutualism, parasitism, and predatory-prey interactions. Further, as Plumwood emphasizes (in the vein of United Nations Environment Programme [UNEP] reports), terrestrial and aquatic ecosystems, and the various nonhuman beings that inhabit and partly constitute them, provide a range of “services”—e.g., carbon sequestration, pollination, nutrient cycling, soil production, and much else.⁶

The idea just identified, which is often glossed in contemporary discussions as “ecosystem (or ecological) services,” offers a clear example of what Plumwood means by the independent presence and agency of nature. As the language of services implies, nature (or certain parts of it) does things for us, enabling us and other beings to survive and thrive. Nothing conceptually crucial depends on this claim being relational (i.e., a claim about ecosystem services being *good for* humans and various other beings). At issue is identifying a relevant respect in which nature manifests independence. A central aspect of Plumwood’s analysis is that the various service-providers, and the ecological relationships they instantiate, are “disappeared” (to use Plumwood’s apt term⁷) by entrenched patterns of human thought and action. Examples include practices of backgrounding and taking for granted these service-providers; as well as practices that actively deny, thwart, and imperil these providers and the ecological conditions they require to subsist.

Although Plumwood doesn’t explicitly do so, one could elaborate her view by connecting it to widely discussed conservation concepts in the scientific and environmental ethics literature—notably, ecological health and biodiversity. The functional focus of the concept of ecological health is typically understood to entail the provision of various ecosystem services; indeed, that provision is commonly understood to be an indication of healthy functioning ecosystems. A similar point applies in the case of biodiversity. Although the concept of biodiversity is sometimes understood to be focused on a diversity of discrete compositional elements—e.g., genes, organisms, populations, species—the practical relevance of such elements is that they provide various goods and

6. Plumwood discusses the UNEP Millennium Assessment Report from 2005 in presenting her view. Subsequent UNEP reports, as well as the many Intergovernmental Panel on Climate Change (IPCC) reports of recent years, provide further support for Plumwood’s analysis. The shortlist I give above regarding relevant “services” is my own, but it tracks Plumwood’s central idea.

7. See Plumwood 2006, 125.

services that we and other beings rely on.⁸ Accordingly, we could say that independent nature is manifest when a high degree of ecological health obtains or when a high degree of (contextually relevant) biodiversity is present.⁹

Importantly, such independence does not imply or require the absence of humans. What it implies is the positive presence of various nonhuman others, of the ecological relationships they instantiate, and of the ecosystem services they provide.¹⁰ Of course humans can, and too often do, threaten or undermine the relevant service-providers and their ecological conditions. But understood in the way characterized by Plumwood, the concept of independent nature does not suggest or presuppose a totalizing dualism—that is, one in which nature refers to places where humans are totally absent or merely minimally present.¹¹ A non-totalizing or qualified idea of independent nature is thus conceptually available and contrasts sharply with the colonial wilderness idea.

We can further advance Plumwood's line of reasoning by recovering another argument from the philosophical literature. Robert Elliot discusses how nature can develop and unfold according to its own dynamics, despite the fact of human influence or modification (1997, 123–27). One example of this occurring is the case of “ecosystem drift” in response to subtle and pervasive anthropogenic climate change. Another example is the recolonizing by non-human species of sites previously disturbed by human activity (e.g., by mining operations or excessive grazing of domesticated animals). For my purpose here, what is interesting about such cases is that they exemplify nature (or some parts of it, such as particular nonhuman species) responding and developing in

8. For relevant discussion of these concepts, see Norton 1987; Angermeier and Karr 1994; Karr 1996 and 2000; Rapport 1995 and 2007; Callicott 1999; Callicott et al. 1999; Wood 1997; and Wilson 1999 and 2016.

9. There are complexities here that need more careful discussion. For example, if biodiversity is understood contextually, and thus in terms of the biodiversity that obtained historically at a particular site, then the appeal to degrees needs to be qualified. For example, a low degree of biodiversity might be historically common in certain ecosystem types and a high degree in others. Further, there is the issue of whether historical baselines are still relevant given human modifications, the effects of climate change, and so on. For discussion of the last issue (focused on the concept of biological or ecological integrity, but the analysis applies to other conservation concepts as well), see Scoville 2016, 81–86.

10. In Plumwood's words: “Where the term ‘nonhuman’ indicates a positive presence of other-than-human agents, there is an implication of independence, but no implication of human absence. Thus there is no incompatibility between recognizing the presence of nature or the nonhuman, as [per] the claim that there are elements of independent agency in the land, and recognizing a human presence, indigenous or otherwise” (2006, 136). Plumwood speaks of ‘the land’ here, but nothing crucial rides on that. Her point can easily be extended to apply to aquatic ecosystems of various sorts.

11. See, e.g., the discussion in Plumwood 2006, 135–36.

its own way. That occurs even though the causal occasion for that response and development is human activity.¹²

The independence exemplified by nature in cases of the sort described will vary considerably by context and as a matter of degree. As is commonly pointed out by ecologists and theorists of biodiversity, some forms of human modification can unleash biological, ecological, and evolutionary potentials comparable to the potentials at play prior to the modification. While other forms of human activity can cause changes that lead to irrevocable (at least according to a human timescale) diminutions in the biological, ecological, and evolutionary potentials of particular sites and their inhabitants. These complexities aside, Elliot's view suggests a clear sense of nature, or certain aspects of it, responding in its own way to changes that may be human-induced (to focus on that case). Such a view gives further empirical and conceptual content to the idea of independent nature.

A third line of thought, articulated in recent work by Jan Deckers (2021), offers a way to further qualify the concept of independent nature, which might be relevant in certain contexts. Deckers's basic idea is that entities can be influenced by human beings in ways that are more or less compatible with what Deckers calls an autonomous response or developmental trajectory on the part of the entity in question (2021, 301–312). The relevant sense of 'autonomous' does not refer to the self-conscious agential activities of, say, normally functioning adult human beings, or of the conscious agency of various nonhuman animals. Deckers's focus is on developmental responses by an entity that are significantly similar to the counterfactual natural development of that entity (i.e., its development in the absence of human influence or modification). Thus, an autonomous developmental response by an entity that is significantly similar to its counterfactual natural development is more natural than an autonomous developmental response that is more dissimilar. The highest degree of unnaturalness obtains when an entity's development does not reflect its autonomous response to the human influence or modification.¹³

12. In cases of this kind we have, as Elliot puts it, "a natural response to a non-natural stimulus" (1997, 127). This statement reflects Elliot's assumption that humans have "transcended the natural" (*ibid.*, 123). Hence human activities are "non-natural," even if humans are also the product of, and still embedded in, natural processes.

13. I'm grateful to an anonymous reviewer for prompting me to clarify and qualify my characterization of Deckers's view in this paragraph, and at a number of other points in the discussion. Other philosophers have discussed the relevance of appealing to degrees of (un)naturalness (e.g., Elliot 1997; Katz 1997 and 2012; Siipi 2008); or have defended the idea of nature's "autonomy" or "autonomous development" (e.g., Katz 1997 and 2012). I'll say more about my reasons for focusing on Deckers's account in the discussion that follows.

According to Deckers's account, many wild animals have responded to human alterations of their environments in ways that are relatively similar to how they might have responded counterfactually (i.e., in the absence of human alteration). For example, some responses induced by anthropogenic climate change—e.g., genetic mutations or behavioral changes in an animal's reproductive behavior or foraging habits—could plausibly have occurred, counterfactually, in response to naturally occurring or nonanthropogenic climate change. Such responses can exemplify independent nature to a relatively high degree. Importantly, that independence is compatible with human influence as a causal driver of the changes in question.

In contrast, the responses of most conventionally farmed animals are more dissimilar to the responses one would expect counterfactually (and, in that sense, are less autonomous and therefore less natural). To take one of Deckers's examples, it's extremely unlikely (though not impossible) that, in the absence of intensive human breeding efforts, cows would have developed in a way that maximized their muscle mass and milk production capabilities. This point is magnified in the case of genetically engineered animals. Consider, for example, the case of "Herman"—a bull whose embryo was genetically engineered to include a human gene with the goal of causing the production of lactoferrin in the milk of his female offspring.¹⁴ A more recent example is the genetically modified *Aedes aegypti* mosquito, which has been released in a number of places in an effort to control the spread of viruses such as dengue, Zika, and chikungunya.¹⁵ According to the view of naturalness advanced by Deckers, Herman and the genetically modified mosquitoes are highly unnatural creatures, as they did not depend on humans coaxing the autonomous capacities of nonhuman entities, but on the human engineering of novel entities. The attribution of different degrees of (un)naturalness obviously depends on the details of specific cases. To take another example, Deckers suggests that the wild animals living near Chernobyl might be rightly regarded as less natural (given the changes attributable to chronic exposure to radioactive contaminants very unlikely to have emerged counterfactually due to nonhuman factors) compared to some populations of farmed reindeer, which differ little from their wild relatives.¹⁶ Clearly, there is no neat mapping of unnaturalness onto the condition of domestication or of naturalness onto being wild (i.e., not domesticated).

14. For a brief overview of Herman's genetic modification, and its goals, see Pascoe 1994. Deckers discusses the case of Herman at various points in his article.

15. For discussion, see: <https://www.cdc.gov/mosquitoes/mosquito-control/community/sit/genetically-modified-mosquitoes.html> (last accessed 10 September 2023).

16. See Deckers 2021, 304; and Mousseau and Møller 2014.

This is not the place for a detailed discussion of cases or of Deckers's view more generally. For my purpose, what is useful about Deckers's account is the tool it provides for analyzing cases where changes or developments (say, within particular organisms or ecosystems) were occasioned by human activity but could plausibly have occurred counterfactually without the human activity. Such cases manifest a high degree of (in my preferred language) independent nature (in Deckers's language, a high degree of naturalness). This is so *despite* the human modification.¹⁷ Other cases—in which changes or developments are

17. Contrast this way of framing things with a different approach exemplified by Katz (in his discussion of the “big lie” of restoration): “Depending on the adequacy of our technology, these restored and redesigned natural areas will appear more or less natural, *but they will never be natural*—they will be anthropocentrically designed human artifacts” (Katz 1997, 98, my italics). Later in the same essay, Katz observes: “Although there is an obvious spectrum of possible restoration and redesign projects which differ in their value [. . .] all of these projects involve the manipulation and domination of natural areas. All of these projects involve the creation of artifactual natural realities, the imposition of anthropocentric interests on the processes and objects of nature. Nature is not permitted to be free, to pursue its own independent course of development. The fundamental error is thus domination, the denial of freedom and autonomy” (1997, 105). Clearly, Katz grants that restored nature can be natural to a greater or lesser degree. Yet Katz maintains that restored nature can never be *natural* in some more fundamental or substantial sense, ostensibly one that embodies nature's “independent course of development” or “freedom and autonomy.” If, however, restored (or other forms of modified) nature exhibit patterns of autonomous response that are relatively similar to responses that might plausibly have occurred counterfactually (i.e., in the absence of the human modification), then it seems wrong to claim that restored (or otherwise modified) nature must necessarily fail to be natural in a clear and substantial sense—one that reflects a high degree of naturalness (understood in terms of nature's autonomous responsiveness).

Although Katz qualifies his view in subsequent work (e.g., in Katz 2012), the later discussion is still vulnerable to the point just made. For example, Katz writes: “Unlike artifacts, a large part of what makes natural entities valuable is their freedom from human control. Nature is mostly that wild other realm separate from human plans and projects. There is a sense in which we can say that nature is autonomous, analogous to a human subject in its ability to develop by means of its own internal logic. It is this autonomous development that is modified when we interfere to control the processes of nature. If this autonomous development is replaced with human intention and design, we have a system with a different origin and a different history: we no longer have an authentic natural system or entity. A natural entity or system modified or controlled by human intentionality and design has a different value than a natural entity or system that follows its autonomous development” (2012, 71). From the standpoint of a Deckers-style analysis, the question of whether a natural object's autonomous development is compromised or impaired by the imposition of human intentions and designs depends on whether the developmental response by the object (or relevant parts of it) could plausibly have occurred counterfactually (i.e., in the absence of the human intervention). It follows that the fact of humans imposing their intentions and designs on nature (or some parts of it) does not, as such, compromise that nature's autonomy or naturalness. That important point aside, I take it to be clear that when humans modify or restore some part of nature that does change the history of the object in question. Depending on the details of the case, and on one's theory of value, such a change might support

clearly attributable to human activity and could not plausibly have occurred counterfactually without the human activity—indicate instances in which nature's independence is much more seriously compromised or impaired.¹⁸

a negative valuation. For example, according to Elliot's historical view of natural value (see Elliot 1997, Ch. 3–4), humanly modified nature has less natural value (other things being equal) than nature that has not been humanly modified. Of course, one of the things at issue in this discussion is how much normative significance we should attach to the fact of human modification when evaluating natural (or partly natural) objects. Relevant to addressing that issue is whether the human modification of nature *as such* compromises nature's (or some part of nature's) autonomous response or development. The arguments I canvas in the text above—from Plumwood, Elliot, and especially Deckers—all suggest the answer is “no.”

18. In the discussion above, I emphasize the significance of interpreting autonomous responses of nature, or certain parts of it, in terms of fit with a possible counterfactual natural development. That leaves to the side other variables that might matter to our analysis, such as the type and extent of human intentionality involved when some X (such as a genetically modified animal or a restored ecosystem) is brought into existence. In her account of the criteria for being an artifact, Helena Siipi emphasizes two conditions for artifactuality: that the X in question is intentionally brought into existence (by humans) through the intentional causing of X to have certain properties; and that those properties lead X to have some new function (2003, 424). Siipi's analysis is obviously useful when we're trying to clarify what it means to say that some X is an artifact, or that *this* X is an artifact. Further, there are numerous connections between discussions of artifactuality and discussions of (un)naturalness that are worth exploring. For example, if one holds a history-based view of (un)naturalness (such as Robert Elliot's in 1997, Ch. 3–4), then the fact that some X has been intentionally caused by humans to have certain properties or functions decreases that X's naturalness (other things being equal). I take it to be an implication of Deckers's view that focusing on the type and extent of the human intentionality involved (in cases of human modification of natural entities) might not always be apt. Rather, what might matter when judging an X's (un)naturalness (at least in many imaginable cases, such as those I discuss in the text above) is whether that X exhibits properties or responses that could plausibly have emerged in a counterfactual history where the human modification was absent. Deckers is thus providing a particular ideal comparative model to ground attributions of (un)naturalness. Siipi (2008, 85–91) outlines three different ideal comparative models. Deckers's model is not exactly reflected in any of the options Siipi discusses, though it is most similar to the first of the three models (i.e., historically natural entities; see Siipi 2008, 86–88).

The framing of Siipi's discussion suggests that we only need ideal comparative models when judging property-based (un)naturalness, where the properties are understood in a non-historical sense (see *ibid.*, 85–86). I agree that we need ideal comparative models in that case, but I think we also need to consider different ideal comparative models when judging history-based views of (un)naturalness. Deckers's argument is relevant on both counts. History-based views of (un)naturalness commonly presuppose one ideal comparative model, namely, having a history of being unmodified by human beings (see, in particular, Elliot 1997, Ch. 3–4; also Siipi 2008, 78–85). With Deckers's analysis in mind, history-based views of (un)naturalness (understood in a gradient way) could be analyzed according to another comparative model. Rather than defaulting to the common (Elliot-style) emphasis on paradigmatic naturalness, understood as independence from human activity or modification, one could assess degrees of (un)naturalness by comparison with a counterfactual history in which certain outcomes or responses could plausibly have occurred in the absence of human influence. While I think more needs to be said

I have argued that the presence of a high degree of independent nature is compatible with significant human modification of said nature. Marking distinctions between different degrees of independent nature, which might serve a theoretical or practical purpose we have, does not presuppose human/nature dualism. All that is supposed is the distinction between (a) certain outcomes that likely only occurred (according to our best available scientific understandings) as a result of human activity, and that could not plausibly have occurred without human activity; and (b) outcomes that did result from human activity, but counterfactually could plausibly have resulted (according to our best available scientific understandings) from nonhuman causal antecedents.¹⁹

There is obviously more to say about the lines of argument canvassed above. But if these views are plausible, as I believe they basically are, then there is a clear conceptual sense of independent nature which is compatible with human influence or modification. The insights of Plumwood, Elliot, and Deckers suffice to ground the concept of independent nature by showing that it can be given a meaning that is not entangled with implausible ideas (as was the case, for example, with the colonial wilderness concept).

Having established a clear conceptual basis for the idea of independent nature, I'll now offer three further qualifications regarding that concept and

(beyond what Deckers does say) to clarify the semantics of the appeal to counterfactual natural histories, I think Deckers's central idea is nonetheless a useful contribution to discussions of (un)naturalness. Another issue that needs more careful discussion here is the propriety of applying one versus another ideal comparative model to ground attributions of (un)naturalness—whether in the non-historical property-based cases, or in history-based cases. That issue is left unsettled in Siipi's wide-ranging and careful analysis (2008); and Deckers (2021) doesn't address this issue. I assume that any answer to the question of ideal comparative model selection will depend on what our practical goals are in trying to determine some X's (un)naturalness.

19. Deckers offers a three-part categorization of unnaturalness (see the table in Deckers 2021, 305). My distinction in the text above glosses over certain distinctions between the three types of unnaturalness identified by Deckers. I don't see that as a problem, for the distinction above is sufficient for my purpose here. It is, of course, open to readers to pursue more qualified distinctions with respect to attributions of (un)naturalness in light of Deckers's analysis. Also, while a Deckers-style view most clearly applies at the level of individual living organisms, I think it can also be applied to mark distinctions regarding the naturalness of responses or developmental trajectories by entities above the level of individual organisms. Deckers seems skeptical that the relevant sort of autonomous response is possible when we speak of holistic entities, such as ecosystems (see, e.g., Deckers 2021, 302). Even if that skepticism is justified, Deckers's analysis supports the idea that various parts of ecosystems can respond more or less autonomously. That seems sufficient to ground claims about the relative (un)naturalness of various developmental states that obtain in the case of ecosystems. One further interpretive detail: I assume one can avail of Deckers's view regarding the existence of certain autonomous developmental responses on the part of different entities without thereby assuming the truth of the Aristotelian-Whiteheadian teleological view that Deckers uses to ground his account.

how it should be understood. First, independent nature should be understood in a scalar way—i.e., as a matter of degree. I highlighted that issue at different points above. Second, according to an extreme interpretation of independent nature, nature and humans seem to be contrasted in a strongly dualistic way. I don't think dualism is a necessary feature of the extreme interpretation, nor of more plausible interpretations of the concept of independent nature. But even if it were, being a dualist about humans in relation to the rest of nature does not necessarily mean being a metaphysical dualist—at least not in a sense that is philosophically worrisome. For example, one might be a dualist in virtue of regarding humans as distinctive in the order of nature, either as a matter of degree or kind, while still believing that humans are naturally evolved beings and in that sense part of the natural world.²⁰

This distinction reflects a point made by J. S. Mill in his “Nature” essay (Mill 2009). If nature refers to the ordinary, as opposed to the supernatural, physical processes that account for what exists, then humans are clearly part of nature in that sense. One can contrast that sense of nature, which is premised on a natural/supernatural distinction, with a different sense, which is premised on a natural/artificial distinction. According to the latter distinction, we can distinguish a product of ordinary nonhuman physical processes from one that is specifically the product of human art or contrivance. Thus, one might be labeled a dualist (implausibly in my view, but no matter) in virtue of marking a distinction between products or outcomes produced by humans, versus those produced by nonhuman causal forces or beings, without thereby being a metaphysical dualist who thinks humans are supernatural beings (and, in that sense, somehow outside or beyond or other to nature).

Distinguishing between things produced by humans and things produced by nonhuman causal forces or beings could be understood as marking an ontological distinction. After all, marking this distinction involves saying that, among the things there are, some are produced by humans and others are produced by nonhuman causal forces or beings. But such a distinction strikes me as innocuous. We don't gratuitously expand our ontology of the world by marking the distinction at issue. Indeed, our accounts of things and occurrences in the world would be impoverished if we lacked such a distinction. Further, marking such a distinction does not presuppose human/nature dualism. Both of the points just made are supported by examples.

Consider, for instance, climate change models. In such models, the presence of humans (e.g., population density) and human activity (e.g., greenhouse gas emissions from industrial production and transportation, land-use changes

20. Robert Elliot, for example, defends a dualist view of this sort (see 1997, Ch. 4, esp. 122–30).

due to agriculture or deforestation, etc.) are variables along with various non-human factors (e.g., volcanic eruptions, solar radiation, the operation of the greenhouse effect, etc.). Marking distinctions between humans and the rest of nature in a multivariable climate model does not presuppose or require human/nature dualism, much less a worrisome metaphysical dualism.²¹ I'll return to some of these issues in the next section, as a dualist concept of independent nature is, at least in part, the target of Vogel's critique.

The third qualification I'll note concerns the relationship between the concept of independent nature and normativity. There is no simple or direct connection between independent nature and nature's value or normative significance. Here I register a metaethical claim that generalizes to any concept of nature: the relationship between a concept of nature and that nature's value is, at the very least, *underdetermined*. An ontological account of what nature is doesn't get you a normative account of nature's value or significance. Put differently, there is a "normative gap" (to borrow a phrase from Darrel Moellendorf) that needs to be bridged.²²

To appreciate the central issue here, suppose one thought the concept of independent nature tracked a deep ontological distinction between human beings and the rest of nature. This assumption would still leave open the question of the normative significance of that distinction, and of the beings that fall on either side of it. This means that even if humans were assumed to be ontologically distinctive, and in that respect relevantly other to nature (or vice versa), further argument would be needed to show that humans were more (or less) valuable, or uniquely valuable (or disvaluable), compared to nonhuman nature.

The common critique of biocentrism also illustrates the normative gap worry. A number of philosophers have argued that there is a gap between an entity "having a good" (such that it can flourish or be harmed) and that entity "having a normatively relevant good." Only the latter gives us reasons to re-

21. This is one reason why I am uncomfortable endorsing Katz's claim that "dualism [between nature and humanity] is a necessary requirement for any meaningful discussion of environmental policy and ethics" (2012, 93). If by 'dualism,' one just means a distinction between nature and humanity, then that seems on point. But I take it that human/nature dualism often carries more (e.g., ontological) baggage than that. I agree, in any case, with Kate Soper when she writes: "I have consistently argued that there can be no ecological prescription that does not presuppose a demarcation between humanity and nature [. . .] Since any eco-politics, however dismissive of the superiority of *homo sapiens* over other species, accords humanity responsibilities for nature, it presumes the possession by human beings of attributes that set them apart from all other forms of life" (1995, 160). Whether such a demarcation constitutes human/nature dualism seems to me not obvious, and also not crucial to settle here. What matters is that we have a way of marking certain distinctions useful for certain purposes (such as the one I note in the text above).

22. Moellendorf (2014) introduces and develops the idea of the "normative gap."

spect, protect, not destroy, etc., the being in question and its good. Thus, we need an account of the considerations that support thinking beings that have a good also have a normatively relevant good. Such a move—from a *good* claim to an *ought* claim, as John Nolt (2006) aptly characterizes it—requires argument and can't just be read off from descriptions of beings that have a good.²³ Which is to say, normative considerations must be advanced that support reasons to care about the being in question and its particular good. Thus, establishing that some entity has a good of its own, itself not always a trivial achievement, does not determine or settle the question of the nature and force of the practical reasons we have as reason-sensitive beings in relation to that entity's good. In short, there is no straightforward move from recognizing that a being has a good (or exhibits some other evaluatively relevant property X) to a normative conclusion regarding how we should conduct ourselves toward that fact.²⁴

Failure to appreciate the preceding metaethical point about the normative gap is one of the mistakes made by those who think appealing to what something is somehow settles the normative question of that thing's value or significance, and how we should relate to it. Some environmental theorists and activists make the same mistake when they appeal to the property of *naturalness* (i.e., "X is natural") as sufficient to provide a reason for valuing (e.g.) particular entities, activities, or states of affairs.²⁵ In all such cases, specific normative arguments need to be advanced to establish normative conclusions about what is valuable and about what we have reason to do. Clarifying what some X is, or clarifying the properties X exhibits that might ground or inform a normative claim, is of course often relevant to sorting out the practical rea-

23. For relevant discussion, see O'Neill 1993, Ch. 1; Soper 1995, pp. 175–76; Nolt 2006; and Moellendorf 2014, esp. Ch. 2. As noted above, I borrow the language of the "normative gap" from Moellendorf, though the problem Moellendorf is identifying has been discussed by many theorists before him. It's also worth noting that Paul Taylor, who offers the classic statement of the biocentric view, is well aware of the problem critics are raising. Taylor conceptualizes the gap as between the concept of a being having a good and the concept of that being having inherent worth (see Taylor 1981, 204). The account of the biocentric outlook on nature (ibid., 206–18), Taylor believes, suffices to bridge the gap, while his critics demur on that count.

24. Here I assume the fact in question—i.e., that a being "has a good," such that it can flourish or be harmed in various ways—is one that already involves evaluative elements (as opposed to being a value-free description). This seems clear, for example, in descriptions of living things. Such descriptions typically involve accounts of how certain things are *good for* or *harmful to* the being in question (as is pointed out in Nolt 2006, 358).

25. See, for example, the discussion in Elliot 1997, 116, in particular Elliot's remark in note 1 of Ch. 4, which appears to state his positive view: "[T]here is no explanation for at least part of natural value apart from naturalness itself. That nature has value is, so to speak, a brute value fact. Although the fact does not admit of further explanation, it requires emphasis and discussion in order to direct attention to its direct, unmediated, normative appeal" (1997, 157).

sons we have. But it is not sufficient to establish those reasons in the absence of further normative argument. We need to bear in mind this metaethical point, which generalizes beyond the case of nature and its value.

Let me take stock of the argument so far. When I speak of independent nature, I mean nature that manifests certain empirical properties, such as the positive presence and agency of various nonhuman others and/or the presence or agency of the land or aquatic ecosystems (or aspects of them). Also relevant here is the idea of nature, or certain parts of it, responding in its own way or autonomously (as these ideas were characterized above). I'll elaborate further on the idea of independent nature in the next section. But my initial characterization suffices to show that there is a clear conceptual sense of independent nature. That sense does not imply or require the complete absence of humans or human influence. However, the relevant sense of independence does require a degree of humanization compatible with certain empirical properties continuing to exist or be manifest (an issue I'll say more about in the next section). Further, while the notion of independent nature might conceivably be undergirded by metaphysical dualism about the relation of humans to the rest of nature, such a commitment is not entailed by belief in the concept of independent nature. All that is presupposed by belief in that concept is a distinction between products or outcomes that are produced by humans (or that result from the human presence or from human action) and those produced by nonhuman beings or nonhuman causal forces (or that result from the activities of nonhumans or from nonhuman causal forces playing out). While such a distinction can be construed as an ontological one—in the sense that it informs our account of what there is—it's not metaphysically extravagant in any respect that should trouble us. Finally, the existence of independent nature does not, as such, settle or determine anything about that nature's normative significance.

III. VOGEL'S CRITIQUE

In *Thinking Like a Mall: Environmental Philosophy After the End of Nature*, Steven Vogel articulates a wide-ranging and forceful case for a post-natural environmental philosophy. Vogel's argument incorporates a range of concerns that animate the contemporary critique of the concept of nature. Although Vogel claims at various points that we should abandon the concept of nature entirely (e.g., 2015, 9), his target is actually a very specific view, namely, nature understood as referring to that which is independent of humans and human activity, or independent of humanization.²⁶ Given that I offered a qualified de-

26. See Vogel 2015, 9ff. "Humanization" is discussed at different points (e.g., 2015, 6, 15). As discussed above, several environmental theorists endorse a version of the concept of nature at

fense of such a view of nature in the preceding section, it is fitting to attend to Vogel's critique.

We can distinguish four lines of reasoning that constitute Vogel's main critique of the concept of independent nature. First, Vogel argues that this concept is premised on a purely conceptual distinction—one that is entirely negative, or defined by what it is not (2015, 11). Accordingly, independent nature is assumed to have no empirical properties that humanized nature lacks, other than the property of *not being humanized*—which is what *naturalness* is thought to consist of.²⁷ Second, even if one thought that independent nature had a clear conceptual referent, Vogel claims that such nature no longer exists due to pervasive human modifications of the world (e.g., 2015, 3, 29). Indeed, Vogel suggests at different points that humans “end” nature simply by encountering it (e.g., 2015, 8, 57). Third, Vogel argues that the very idea of nature's independence is premised on a philosophically and biologically untenable dualism between humans and nature (e.g., 2015, 24, 80). Lastly, Vogel questions the usefulness for environmental theory and practice of a concept of nature premised on its independence from humans (e.g., 2015, 6–7, 13, 25–26).

I'll begin with the claim that defenders of the concept of independent nature offer a purely conceptual distinction that defines nature in a negative way. Vogel's critique is apt with respect to an unqualified McKibben-style view of nature. But it misses the mark with regard to a more plausible view of independent nature. Understood as I characterized that idea above, independent nature (and a corresponding sense of naturalness) has clear empirical content; it's not just defined negatively.

Consider the second aspect of Vogel's critique, namely, the claim that non-humanized nature doesn't exist anymore. Vogel supports this claim with a skillful deployment of a Marxian practice-based view of human reality and activity. Such a view emphasizes the many respects in which the world around us is physically constructed through our social practices. Accordingly, the world contains many built environments, but we won't find any nature that is entirely independent of human beings.²⁸ “*There is no nature*,” Vogel bluntly asserts at one point (2015, 29). The word “environment” is Vogel's preferred term of art for those landscapes or sites that are socially constructed, which,

issue. McKibben (1989) and Katz (1997) seem to be Vogel's primary targets.

27. Vogel writes: “To be unhappy about the replacement of nature by a humanized world, I am suggesting, one must be able to point to some (presumably valuable) empirical characteristic that the natural world possesses that a humanized one does not. But then (if natural means non-human) that characteristic cannot without begging the question be its naturalness *alone*” (2015, 15).

28. This is a recurring theme in Vogel's discussion; see, e.g., 2015, 29, 43, 79, 80, 117, 231, 236.

it turns out, are basically all places on earth. According to the practice-based account, “the environment we encounter and live within is always already a built environment, because we cannot be in-an-environment without acting in it, and cannot act in it without changing it” (2015, 58). With this thought in mind, Vogel suggests it is a mark of our alienation to subscribe to the “mistaken belief that there *is* anything like ‘nature’ distinct from the (built) environment we inhabit” (2015, 80).

The obvious reply to the claim that independent nature no longer exists is to appeal to a notion of degrees.²⁹ Accordingly, nature can be modified or impacted by human beings to varying degrees. If there are places (or things, processes, etc.) on earth that exhibit a meaningful degree of independence from human modifications (e.g., the human modifications have not curtailed or crowded out nature’s independent activity in those places), then independent nature still exists. This view seems straightforwardly supported by empirical reality: New York City has been far more modified by human activity compared to many rural or suburban areas; or compared to any number of nature or wildlife preserves throughout the world.³⁰ Of course, virtually all earthly environments have been modified by humans to some extent. And even in the rare cases that humans haven’t inhabited or used the areas in question, the places are (or will be) affected by anthropogenic climate change. But if we’re concerned to show nuance in our discussions of how humans have encountered and modified places or things on earth, it seems obvious to mark distinctions based on degrees.

Vogel considers the appeal to degrees but rejects it. His rejection largely consists of a redirection of the discussion. That is, rather than reject the appeal to degrees just outlined, which would be implausible on empirical grounds,³¹ Vogel suggests that the problem with such an appeal is that an underlying dualism between humans and nature is going unquestioned here. This is the third aspect of Vogel’s critique. The following passage gives expression to Vogel’s line of reasoning:

29. As argued, e.g., in Elliot 1997, 124; and as discussed above.

30. According to E. O. Wilson, the total number of protected areas worldwide (as of 2015) occupies about 15 percent of the earth’s landscapes and 2.8 percent of the oceans (Wilson 2016, 186). I assume such areas do not reflect substantial humanization, even if they have been altered or inhabited by human beings.

31. As Vogel recognizes; see, e.g., 2015, 24, 169.

Recasting a binary opposition as a continuum doesn't render it less dualistic, it only extends the dualism along an axis whose poles [. . .] remain fundamentally opposed to each other. Why is "naturalness" measured along an axis whose negative pole (so to speak) is the human and not, say, the shrimp or the beaver? Human beings here are still being anthropocentrically picked out here as animals with the remarkable ability to remove items from nature. That this removal is always partial and takes place by degrees does not transform the fundamentally dualist (and anthropocentric) character of the position. (2015, 24)³²

Later, Vogel elaborates this argument by connecting it to what he calls a dualism between matter and practice. He implies that it's irredeemably dualist to think there is some matter—some *nature*—that is independent of, or prior to, our practices (see Vogel 2015, 62). I'll remark on three issues here, each of which suggests flaws with the argument.

First, to think that the upshot of the Marxian practice-based account of human reality is that there can be no independent nature is implausible. Even if we supposed that the nature we encountered was always already transformed by our practices, it would not follow that there is no independent nature in the sense I outlined above.³³

Consider next the claim that human/nature dualism is anthropocentric and problematic on that count. While Vogel doesn't define how he's using anthropocentric here, if we consider common (and plausible) meanings of anthropocentric, and recall my metaethical argument from the last section, we can see that Vogel's claim is unconvincing. Consider two common meanings of 'anthropocentric': 'regarding humans as the most important or valuable beings in the world' and 'treating nature as a (mere) means for human ends or purposes.' In either case, there is no implication that the alleged dualism is necessarily anthropocentric. As I argued above, a commitment to human/nature dualism would not determine or settle the question of the value of nonhuman nature or of humans. Nor would such a dualism entail, absent further normative argument, the claim that nature is reduced thereby to a (mere) means for human ends. Which is to say, human/nature dualism is not problematically

32. I assume, for the purpose of discussion, that having the "ability to remove items from nature" is an instance of the more general phenomenon of having the ability to modify or impact nature. This assumption accords with Vogel's general account, so I don't think he would have any objection to my suggested gloss.

33. There is also the obvious point that prior to the evolution of human beings there presumably was nature that was not the object of human practices.

anthropocentric simply in virtue of being dualist.³⁴ At most, we could say that such dualism, together with some further normative premises, might support anthropocentrism; but that is not the argument Vogel advances. Of course, a human/nature dualist might *in fact* be anthropocentric. But that is not what is at issue here. More importantly (and to recall another point from the previous section), I don't see why marking a distinction between humans and the rest of nature is necessarily dualist. The charge of dualism in this context strikes me as undermotivated.

There is a further problem here. Vogel's critique fails to appreciate what I regard as a central motivating concern of those drawn to the concept of independent nature, or something like it. My interest in investigating this concern is to understand a type of concern that seems important for our evaluative thinking about nature or the environment. If my discussion of this concern is apt, then Vogel's worry about dualism is not only undermotivated but a distraction from things that matter. In the next few paragraphs, I'll try to bring into focus the relevant concern, while disentangling it from some implausible ideas regarding the natural/artificial distinction.

Suppose one thought, as some defenders of the concept of independent nature do, that the issues raised by humanization were helpfully clarified in terms of a black-and-white construal of the natural/artificial distinction, as per a McKibben-style view. In response, Vogel questions why, for example, we should think that the extraction and combustion of fossil fuels, or really any use of technological means, is not a natural or biological process (2015, 17–18). While I think it's inapt to characterize human technological activity as a "biological" process,³⁵ I grant Vogel's point that technological activity is, in a basic sense, natural. After all, such activity is the realization of a capacity that certain naturally evolved beings have. Note, however, that the sense of natural here refers to being a product of ordinary natural processes, in contrast to supernatural ones. That is the first of the two senses of natural discussed by Mill, which I considered above. Availing of that sense does not rule out other ways of being

34. If it were true that being a dualist entails a problematic form of anthropocentrism, this would have the surprising implication that certain notable nonanthropocentric views in the literature (e.g., Elliot 1997 and Katz 2012), which assume a dualism between humans and nature, would not make sense as forms of nonanthropocentrism.

35. Human technological activity is socially and culturally mediated in all sorts of interesting ways. While human sociality obviously has a biological basis, it seems problematic not to acknowledge the importance of social and cultural mediations that are not plausibly construed as "biological" (assuming we want to avoid reductionism here in our descriptions of phenomena in the world). Consideration of other cases, such as the relation between gender identity and biological sex, further supports the worry I'm raising.

natural, or of being unnatural, that might be important or interesting.³⁶ Indeed, it is common for entities to be natural or unnatural in more than one sense.³⁷ That said, I agree with Vogel that some interlocutors draw the natural/artificial line too simply and hence implausibly.

Further difficulties are revealed, Vogel suggests, when we consider how an appeal to intentionality is figuring in the conceptualization of the natural/artificial distinction. One sometimes encounters the view that ‘artificial’ refers to anything intentionally produced by humans, while ‘natural’ refers to everything not intentionally produced by humans. Vogel rightly points out that being capable of producing something intentionally is a naturally evolved capacity, one that is obviously not restricted to humans. Accordingly, there are artifacts produced by humans and artifacts produced by some nonhumans; both are natural in a relevant sense.³⁸ Further, artifacts that are intentionally produced often escape the intentions and understandings of their producers—sometimes in troubling and even catastrophic ways. Hence the aptness of Vogel’s characterization of humanmade artifacts, and of reality more generally, as always containing a certain *wildness*.³⁹

In light of Vogel’s critique on these counts, perhaps we should say that being an artifact is one way of being natural. But saying that should not obscure the fact that artifacts and non-artifacts can have very different properties (as well as some overlapping properties, of course), which might be theoretically or practically important in different contexts. The same point applies to artifacts produced by nonhumans (assuming they can produce artifacts) versus those produced by humans. I won’t pursue these thoughts further here. What

36. As Vogel is presumably aware, given that he discusses Mill’s argument at different points.

37. To echo a point emphasized by Siipi 2008, 76, 95.

38. In her discussion of the conditions of being an artifact, Siipi argues that for an X to be an artifact it must be intentionally brought into existence and caused to have certain properties, including properties that lead the X to have some new function (Siipi 2003, 424). Siipi maintains that “being an artefact presupposes that the function is *anthropogenic* [though not necessarily anthropocentric]” (ibid., 426). This accords with her earlier discussion, and with her examples throughout the article (see, e.g., ibid., 416, 425–26). I don’t see any good reason to agree to that stipulation. That is, assuming it’s correct to say, as I believe it is, that at least some nonhuman animals can (a) engage in intentional action and (b) that the intentional action of those nonhuman animals can be aimed at producing certain things with properties that exemplify new functions (which seems true, e.g., in the case of a constructed beaver dam; or in the case of a tree nest constructed by a chimpanzee as a place to sleep). Of course, the claim just made is compatible with the observation that the structure of agency may differ in important ways among different nonhuman beings, as well as differ from the structure of human agency.

39. See Vogel 2015, Ch. 4, specifically 115; as well as the discussion at 140–41 and 169, where the character of what is real is glossed in terms of having a notable kind of independence or autonomy from the human and from human control.

interests me is something else, namely, a concern animating environmental theorists and activists that Vogel seems to be missing in his critique of the concept of independent nature and its alleged basis in a problematic dualism.

The relevant concern can be formulated in different ways, but here is one that suffices for my purpose. Taking a cue from David Wiggins (2000), we could say that when environmentalists or theorists express concern about the loss of independent nature, what they are concerned about is not the fact of human modifications of (or impacts on) the nonhuman world *per se*, but rather the pervasive instrumentalization of the nonhuman world through human artifice or technology.⁴⁰ To understand the idea of problematic instrumentalization, and its connection to the loss of independent nature, we need to distinguish two different issues. One is the issue of humans relating to the nonhuman world in a *reductive* way; this is often expressed in terms of things being reduced to a “mere means” for our ends. The other issue concerns the pace and scale of the human modifications and their resulting consequences, including untoward side effects, for independent nature (among other things). I’ll comment on each of these issues in order to give more content to the idea of problematic instrumentalization. Doing so will, in turn, help us make sense of a concern motivating those drawn to the concept of independent nature.

The first issue—regarding reductive ways of relating to nonhuman nature—can be approached in terms familiar from the critical theory of technology. With a nod to Heidegger, and theorists influenced by him,⁴¹ one could say that problematic instrumentalization occurs when things are “de-worlded,” and thereby opened to reductive forms of valuation and use. De-worlding essentially involves decontextualization, that is, removing things from their relational embeddedness in particular contexts, thus revealing them as affordances for some new purpose. On this view, decontextualized things are denied their significance as elements of a larger whole, and thereby deprived of a variety of potentials they had in those originating contexts. To borrow an example from Andrew Feenberg, “[t]he tree conceived as lumber, and eventually cut down, stripped of bark and chopped into boards, is encountered through its usefulness rather than in all its manifold interconnections with its environment and the other species with which it normally coexists” (1999, 125).

40. Wiggins discusses things—such as hedgerows, wetlands, meadows—that “form one part of the benign aspect of Nature, where Nature may be understood not as that which is free of all trace of our interventions—in England few things could pass such a test—but as that which has not been entirely instrumentalized by human artifice, and as something to be cherished by the farmer or forester in ways that outrun all considerations of profit” (Wiggins 2000, 10).

41. See, e.g., Heidegger 1977; Borgmann 1984; and Feenberg 1999, Ch. 9.

While there is something compelling about the view just sketched, it's too simple for most cases we might consider. A more adequate view is offered by Feenberg's instrumentalization theory (see, e.g., Feenberg 1999, Ch. 9; and 2010, Ch. 4). According to that theory, the de-worlding described above is only a first stage ("primary instrumentalization") in a process that modern technological engagements with the world characteristically involve.⁴² On Feenberg's account, a second stage of instrumentalization ("secondary instrumentalization") involves a "re-worlding" of things that had previously been de-worlded. Re-worlding occurs when objects, which were functionalized by being made available for use, are integrated into a new context that supports the realization of the object's functioning. For my purpose here, what is crucial about such re-worlding is how it can be mediated by various social and environmental values, thereby providing a new context of meaningful relationships. To recall the earlier example, whether or not the de-worlding of the tree, and its functionalization as lumber, is problematic depends on how the process plays out. If the tree reduced to lumber becomes re-worlded in a context of meaningful relationships (mediated by relevant social and environmental values), then it seems wrong to say that the tree was reduced to a *mere means*, or otherwise reductively valued or used. Which is to say, we would have reason to reject the claim that the tree was problematically instrumentalized simply in virtue of being regarded as a resource for our ends.⁴³

Of course, we would need to flesh out specific forms of secondary instrumentalization that successfully block or correct for reductionism and devaluation (with respect to the things instrumentalized, the human laborers involved in the process, and so on). I won't attempt a detailed specification of such forms here, but the general idea is hopefully clear enough. Importantly, the sort of view just sketched suggests that using things—instrumentalizing

42. I take human artifactual production to be a paradigm case of technological activity. Since the latter is the broader category, I'll focus on that in the discussion above.

43. An alternative way to frame things here might be this: the tree *is* being used in this case as a *mere means*, but this can be justified on some occasions (e.g., when the tree is being used as a source of heat by some human being who would otherwise be very cold). On Feenberg's analysis, the tree is being instrumentalized in this case, but its functioning is also being realized in a new context—one mediated by, among other things, the (presumptively high) value of human need satisfaction. Thus, the tree is not being reductively used (i.e., treated as a *mere means*). I'm not sure which framing is most apt, in part because settling this issue depends on considerations of scale (e.g., the size of the human population; whether we're only using some trees for necessary heat, while leaving others to flourish *as trees*, or *as part of forests*, etc.). Also relevant, of course, are our (collective) judgments about the weight of different values at stake in this kind of case. I'll say more about the issue of scale below. I'm grateful to an anonymous reviewer for prompting me to think more carefully about the framing issue here.

them—is not objectionable *as such*. It's possible to imagine ways of using the natural world that are ethically and aesthetically informed and commendable. This aspect of my account is responsive to an observation Vogel makes about the work of those who defend the concept of independent nature. Vogel aptly remarks that such work is often “drenched in nostalgia and regret” (2015, 29). Of course, even on the view I just sketched there is still plenty of room for regret (and other negative emotions and evaluations) about the human relation to the rest of nature. But, importantly, the occasion for regret is not the mere fact of our using or modifying the nonhuman world at all, but rather its being used or modified in certain ways.

In thinking about problematic instrumentalization, we also need to take account of the pace and scale of human transformations of the world. Such a concern has been emphasized by a variety of environmental theorists going back at least to Aldo Leopold. In *A Sand County Almanac*, Leopold remarked that “evolutionary changes [. . .] are usually slow and local. Man's invention of tools has enabled him to make changes of unprecedented violence, rapidity, and scope” (1949, 217). Echoing this thought, O'Neill, Holland, and Light remark that “many of our conservation problems arise out of the fact that human-induced change generally has a faster pace than ecological change, thus preventing the numerous and subtle ecological checks and balances from operating as they might” (2008, 157). One way of concretizing this concern about pace and scale is to note the ways in which one species (in this case humans) crowds out or dominates others, making the world less rich and diverse thereby. This crowding out or domination can of course mean the actual extinction of other species. But it can also refer to such things as a decrease in the number of individuals or populations of particular species, or the impairment of various ecological relationships between species and of the ecological functioning those relationships help to support.

Conceivably, there are normatively appealing patterns for the human use of the world that are compatible with a radical diminishment of independent nature—where diminishment is understood in terms of the presence and abundance, and healthy functioning, of a diversity of nonhuman species and of the ecological relationships they instantiate. That is why it's important to highlight the pace and scale of human modifications of the world, rather than focusing exclusively on (avoiding) the reductive or devaluing aspects of our instrumentalizations of the world and of nonhuman others. Consideration of pace and scale helps to bring into focus various untoward side effects of our instrumentalizations, such as those noted above.

In light of the account of problematic instrumentalization just outlined, let me return to Vogel's claim that an objectionable human/nature binary is

undergirding the concept of independent nature. I've suggested that a central aspect of the concern about problematic instrumentalization is the crowding out or domination of other species, of their characteristic diversity, and of the ecological relationships (and related functionings) they instantiate. Nothing about that concern rests on or requires the assumption of human/nature dualism. Further, in reflecting on this concern, I wonder how important it is that the impacts are humanly produced. It seems we would have good reasons to worry about the pace and scale of the transformation (intentional or otherwise) of the world, or of particular environments, by any number of species or other forces. The culprit could just as readily be algae or mussels or deer; or, more dramatically, a volcanic eruption or an asteroid hitting the earth. But it happens to be humans a lot of the time. And, of course, some humans are often the victims of the relevant crowding out. This may be the direct result of the intentional activities of other humans, or an unintended side effect of such activities. Or it could be the consequence of some nonanthropogenic event, as in the examples above. In that respect, it can be true—and only superficially paradoxical—to say that certain aspects of nature can threaten or destroy independent nature (as I have characterized the latter idea).⁴⁴ But humans are often the main threat or destructive force, either directly or indirectly. With such thoughts in mind, I think it's clear we can have serious reasons to worry about the loss of independent nature. Vogel's preoccupation with the idea that a metaphysical binary between humans and nature underlies the concept of independent nature is a distraction from thinking clearly about those reasons. It seems reasonable, other things being equal, for our concern here to be focused on more radical human transformations of nature, and to a lesser extent on less radical human influences on nature.

Before turning to the last element of Vogel's critique, I'll briefly highlight a few examples that show why the distinction between what is human (or humanly produced) and what is not is useful for articulating various concerns we might have. First, it's evident that many people desire to live in a world not dominated by human beings or that pervasively reflects human artifice (even of the ethically mediated variety discussed above). A world that, so to say, reflects us back to ourselves at every turn might well be regarded as a less interesting and diminished world, compared to one that exhibits a variety of nonhuman beings with independent goods—goods that not only differ from ours, but which may be incompatible with ours.⁴⁵

44. For relevant discussion, see Elliot 1997, 133–37.

45. For relevant discussion, see Williams 1995, 237–40; Elliot 1995, 82, and 1997, 59–62; and Scoville 2016, 94–100.

Second, identifying climate change that is anthropogenic versus naturally occurring is commonly (and in my view, rightly) thought to be relevant to sorting out collective responsibilities for addressing climate change. Focusing solely on problematic impacts, actual or expected, without sensitivity to the specific causal agents and forces that produce those impacts blocks our ability to appreciate normatively important issues.

A third example recalls our discussion of Plumwood's argument above. It's important to be able to identify goods and services provided by various non-human others or entities. This is partly so that we can properly protect those goods and services, and their preconditions. But it's also important so that we are not deluded into thinking that human labor and social practices are the sole or primary source of valuable goods and services in our world. Vogel's Marxian practice-based account, if not suitably qualified, can fuel this delusion. None of the examples just given rests on an objectionable binary, metaphysical or otherwise, between humans and the rest of nature.

Let me turn to the fourth and final element of Vogel's critique. This is the concern that a concept of nature premised on its independence from humans, and in that sense ostensibly premised on humans *not* using nature, is useless for thinking about how humans should relate to nature or the environment in the contemporary world. There is obviously something right about this concern. But I'll note two things in reply. First, if the characterization of independent nature that I offered above is plausible, then defenders of the concept of independent nature are not committed to a view of nature that reflects no human modification or use. Rather, they are committed to a view that rejects problematic instrumentalization of the nonhuman world, with the accompanying worries about pace and scale that I highlighted above.

Second, the aptness of Vogel's fourth concern depends on what work we need the concept of independent nature to do. I take it to be obvious that the concept in question cannot, by itself, provide the resources for articulating all the relevant concerns that should inform environmental theorizing, deliberation, action, and policy. We need to avail of different concepts of nature to think clearly about different issues and problems. In cases of normative deliberation specifically, a concept of nature is only one aspect, and probably not always a relevant one, in a multi-pronged approach. In addition to appealing to relevant concepts of nature, we need to avail of a plurality of relevant values, normative principles, and regulative ideals, depending on the context of decision and action.⁴⁶

46. As per, for example, the pluralistic and socially grounded view of practical reason defended by Elizabeth Anderson (1993). In this regard, Vogel's worry "that the *employment* of [a concept

Let me summarize the argument advanced in this section. I agree with aspects of Vogel's critique, particularly regarding the need for more subtle ways of understanding the natural/artificial distinction. I also agree that contemporary environmental theory needs to offer tools and perspectives that can help us sort out how to live in our substantially humanized world. But Vogel misses, or at least doesn't appreciate the significance of, what I take to be an important concern animating those drawn to the concept of independent nature, or something like it. I offered an interpretation of that concern in terms of problematic instrumentalization and related worries about the pace and scale of our use and transformations of the world. Taken together, these concerns give expression to a legitimate worry about the loss of, or threat to, independent nature.

IV. CONCLUSION

Any concept of nature needs to be clearly specified if it is to instruct environmental theory and practice. The nature and extent of the specification will reflect the purposes we need the concept to serve. There is much to sort through regarding those matters and I believe philosophers have a useful role to play in that effort. The qualified defense of the concept of independent nature, and of its value, is just one part of a fuller conversation. Depending on the practical context, we'll likely need to avail of multiple concepts of nature, together with a plurality of values and normative principles, if we are to deliberate well about environmental action and policy.

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of nature] serves as a constant temptation to find a normative significance in it that it is unable actually to bear" (2015, 28) is, in my view, misplaced.

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