

Journal of Buddhist Ethics

ISSN 1076-9005

<http://blogs.dickinson.edu/buddhistethics/>

Volume 24, 2017

## Dependent Origination, Emptiness, and the Value of Nature

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# Dependent Origination, Emptiness, and the Value of Nature

David Cummiskey and Alex Hamilton<sup>1</sup>

## Abstract

This article explains the importance of the Buddhist doctrine of dependent origination to contemporary environmental ethics and also develops a Buddhist account of the relational, non-instrumental, and impersonal value of nature. The article's methodology is "comparative" or "fusion" philosophy. In particular, dependent origination and Nāgārjuna's doctrine of emptiness are developed in contrast to Aldo Leopold and J. Baird Callicott's conception of deep ecology, and the Buddhist conception of value is developed using Christine Korsgaard's Kantian analysis of the distinction between intrinsic/extrinsic value and means/ends value.

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## **Introduction**

What is the relationship between Buddhist philosophy and contemporary environmental ethics? In particular, from a Buddhist perspective, does nature have value in itself or only instrumental value because it is necessary for sentient life? At the core of Buddhism are the four noble truths, which are centered on the reality of suffering, the nature of suffering, the elimination of suffering, and the path that leads to enlightenment. Compassion and relieving suffering focus on sentient beings that can suffer, and not on the intrinsic value of species or ecosystems. If only sentient beings have moral status, then the value of biodiversity and ecosystems is instrumental and not intrinsic. Nonetheless, we hope to show that, although Buddhist ethics does indeed emphasize compassion for suffering, the Buddhist conception of interdependence, the doctrine of dependent origination, provides a key premise in an argument that justifies the non-instrumental, but nonetheless relational, value of nature and the biosphere.

We start with the recognition of the pervasive impermanence of all of existence, which at one level is easy to see but which is only fully realized in the appreciation for the “emptiness” of all things. We argue that many deep ecologists emphasize causal interdependence without an adequate appreciation of the significance of dependent origination and the more difficult Buddhist doctrine of emptiness (sections 1-2). After explaining these difficult aspects of Buddhist philosophy, and their significance to the concepts of ecosystems, species, and holistic conceptions of the biosphere, we develop an approach to environmental ethics that engages more deeply with Buddhist philosophy. We argue that the Buddhist rejection of essential, intrinsic properties undermines the idea that nature has intrinsic value. The relational and dependent nature of all phenomena implies that all value must be relational, and thus extrinsic. The distinction between intrinsic value and extrinsic value is central

to our argument (and it is explained in section 3). We conclude by arguing that the value of alleviating suffering and the value of nature are intertwined and interdependent (section 4-5). Like all else, all value is relational and rooted in dependent origination.

Buddhism has a long and rich history that incorporates many cultures, rituals, and doctrines. There is now an extensive secondary literature on Buddhism and environmental ethics. Sponsel, James, Harris, and many others, focus on textual, historical, and cultural attitudes toward the value of nature.<sup>2</sup> An alternative to these more textual approaches to Buddhist philosophy, our approach in this article, is what Mark Siderits has described as “fusion philosophy” and Jay Garfield calls “cross-cultural philosophy.” The idea is to integrate Buddhist philosophical insights and arguments into contemporary philosophical debates. The goal of fusion philosophy is to go beyond a descriptive comparative analysis, and also avoid simply assimilating other philosophical traditions into the paradigms established by Western Philosophy. Perhaps the concept of

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<sup>2</sup> Leslie Sponsel and Poranee Natadesca-Sponsel approach Buddhist environmentalism from a more anthropological perspective and argue that the “triple refuge” of the Buddha, Dharma, and the Sangha provide a framework for Buddhist environmentalism. They also explore the positive relationship between Thai Buddhism and environmental preservation (especially Buddhadasa and the forest monks). Ian Harris and Simon James each offer scholarly explorations of Buddhist views about nature and its value. Harris provides an especially comprehensive and useful summary of different Buddhist cultural and spiritual attitudes towards nature and the environment. Harris’ article has the virtue of exploring both the “positive evidence” for Buddhist environmentalism and also the “negative evidence,” which includes the lower karmic status of animals and the natural world (and many other factors). For an interesting textual approach to environmental ethics and the three marks of existence, see Colette Sciberras. Simon James also develops a cross-cultural Zen inspired account of the intrinsic value of nature, which combines both aesthetic appreciation and ethical response. The relationship between James approach and the view develop in this article is discussed in section 3.

“intercultural philosophy” best captures the commitment to integration without assimilation (Cummiskey). At any rate, this is the approach that we take in this discussion. We argue that some core Buddhist philosophical insights elucidate the foundations of environmental ethics. In particular, we focus on impermanence, dependent origination, and the doctrine of emptiness.

### 1. Interdependence, Impermanence, and the Flux of Nature

We begin with the apparent affinity between Buddhist metaphysics and deep ecology. The realization that all things are interdependent, historian Donald Worster writes, is the upshot of all our knowledge of human and natural ecology. The “interdependency principle,” Worster maintains, “is as fundamental and as objective a truth as we are capable of attaining” (429). We live in an interdependent world, and thus must always be aware of unintended consequences of our actions. “You can’t do just one thing,” to quote Barry Commoner (apparently referencing Garrett Hardin). This dictum, Commoner argued, followed logically from the “first law of ecology,” which states, “everything is connected to everything else” (29). John Muir, the father of the preservationist wing of American environmentalism, offered a similar maxim a century earlier, observing succinctly “everything is hitched.” The first law of ecology, in other words, is that the fundamental relationships of our world, the relationships among living beings and with the non-living systems with which they interact, are interdependent (Thiele 257).

Early ecological accounts of interdependence also emphasized the seeming integrity of ecosystems. It is now widely recognized, however, that *impermanence* also characterizes the fundamental relationships of our world. In his article “The New New (Buddhist?) Ecology,” J. Baird Callicott discusses the implications of the paradigm shift in ecology from

a “balance of nature” conception to an appreciation of the “flux of nature,” and he argues that the flux of nature paradigm is a better fit with the Buddhist recognition of the impermanence of all things. Pickett and Ostfeld provide the best short summary of this paradigm shift. According to *the balance of nature* ecological paradigm:

1. Ecological systems were considered to be closed,
2. Self-regulating, and
3. Subject to a single stable equilibrium . . .
4. Changes in communities or ecosystems through time were thought to occur by successions that must always pass through the same phases.
5. Any disturbances that might affect natural systems were considered to be exceptional events, and
6. Humans were excluded from the roster of normal ecological factors. (113)

The new paradigm of *the flux of nature* rejects or revises each of these points:

1. Not only are ecosystems open to energy and water, but to nutrients and pollution entering by means of a variety of vectors, as well as to invasive organisms.
2. Important regulatory factors are often external to ecosystems. In addition to climate, migrating organisms—such as bison passing through prairies—can have regulative effects on ecosystems.
3. Ecosystems manifest no single, stable point of equilibrium, but they do often manifest multiple potential domains of ecological attraction. For example, at mid-elevations, the American south-

west was formerly characterized by open coniferous forests with a grassy understory; it was ‘flipped’ by fire suppression and stock grazing to dense brush and dog-hair pine forests, which persist despite efforts to return it to its former condition.

4. Succession from bare ground to forest, where climate and soils permit, occurs, absent frequent disturbance, but rarely follows any repeatable sequence of component species, nor ends in any predictable complement of species. There is no Aristotelian *telos* to succession any more than there is to evolution. The only certainty is change itself.
5. Disturbance is common and incorporated.
6. And finally, landscapes that have not experienced important human influences have been the exception for hundreds if not for thousands of years. (115)

As Callicott argues, Aldo Leopold’s land ethic was modeled on the old (fictional) balance of nature conception of ecology. Leopold’s fundamental principle was that “A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise” (224-25). This principle is designed for the outdated balance of nature paradigm, but it does not fit the flux of nature. In considering a philosophical basis for an ecological principle that fits the actual flux of nature, Callicott concludes, “Many forms of Buddhism also reject any doctrine of essences and affirm the emptiness, *sunyata*, at the core of all phenomena. This metaphysical idea seems to me to be compatible with the ontological indefiniteness of ecosystems and biotic communities in contemporary ecology.” (180). We will now take up Callicott’s suggestion and explore the links between Buddhist philosophy and deep ecology. We start with the concept of dependent origination and the doctrine of emptiness. We will then incorporate an ecological



perspective into Buddhist ethics, providing an account of the value of nature.

## 2. Dependent Origination and the Doctrine of Emptiness

What, then, is dependent origination? In the simplest terms, as explained by the Dalai Lama, we cannot separate any specific experience or phenomena from the context of other phenomena (37).<sup>3</sup> This apparently simple concept is more complex than it may seem. There are three distinct aspects of dependent origination. The first aspect is causal interdependence, the second is part-whole (mereological) interdependence, and the third is pragmatic conceptual dependence. The doctrine of dependent origination entails that nothing has intrinsic essence or an intrinsic nature, which is a rough statement of the doctrine of emptiness.

The first aspect of dependent origination concerns the nature of cause and effect relations. No single thing comes into existence by itself, and the continued existence of that thing is, in fact, an effect of a series of other things, all of which are, in turn, simultaneously causes and effects. To say that *x* is the cause of *y* is not to say that *x* is essentially a cause and *y* is essentially an effect. Rather, although *x* is a causal factor of *y*, a multifaceted web of causation always produces any effect (37). In addition, as Westerhoff explains in his discussion of Nāgārjuna, “Cause

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<sup>3</sup> For an interesting discussion of the Buddhist history and evolution of the concept of interdependence, see David McMahan, “A Brief History of Interdependence” in *The Making of Buddhist Modernism*. The early Buddhist understanding of dependent origination, as the twelve-fold chain of ignorance, birth, suffering, and death, is not our focus. We present one approach to fleshing-out and explaining the concept, which we hope is clear and convincing. Although the interpretation here defended has a clear Buddhist pedigree, there are many forms of Buddhism; others may understand and elaborate the concept in quite different ways.

and effect cannot be substantially distinct. This is because although the effect depends existentially on the cause (if the cause did not exist the effect would not exist), the focus on the cause depends at least notionally on the effect (if there was no effect the cause would not be called 'cause').” We can say that “the thunderstorm caused the Douglas Fir to fall,” but here the relationship we establish between the thunderstorm, as the specified cause, and the tree falling is a conventional one.

The idea that all our concepts impose pragmatically useful distinctions on a seamless and undifferentiated flow of phenomena is controversial and we cannot adequately defend it in this paper. Both Siderits and Garfield develop the argument and its points of contact with contemporary Western philosophy. The rough idea, however, is fairly clear. First, the causal web of conditions which led to both the storm and the tree falling can be expanded indefinitely: the storm was itself the effect of certain wind speeds, barometric pressure, humidity, ocean temperatures, and so on; likewise, the tree’s falling was also the effect of its age, its height, and the soil where its seed initially fell. The isolation of a single cause for a single effect is inescapably a convention that is relative to a given frame of reference. For example, unlike when the Douglas fir falls after the storm, when a newly planted maple tree falls over in the yard after the first rain, the cause is that the gardener did not pack the soil properly, leaving the root ball too loose and free to easily fall over. The soil should not be over-packed, but it also must be secure enough to hold the tree. It is not the rainstorm alone that causes the tree to fall; the rain was expected and the tree should have been able to withstand normal wind and rain. Of course, this is not to deny that the tree would not have fallen without the rain; the rain is part of the interconnected causal nexus that preceded the tree falling in the garden. The causal story also includes the aesthetic reasons the tree was planted in that particular spot and the reasons the soil was poorly packed; perhaps the gardener was distracted by personal problems and thus did a poor job that day. Alt-

though conventionally and pragmatically, we mark out and focus on a cause, in reality all events are dependent on and arise from a seamless web of interdependent factors. The complete causal story includes the undifferentiated complete history of the universe.

As we see in the above examples of trees falling after storms, in each particular context, we focus on particular factors as the cause, because of our specific interest in the particular event, or type of events, that is the effect. As Garfield explains, we typically distinguish the cause and the cooperating conditions. In the case of a new sprout, we can say the seed caused the sprout, or in a different context, that rain and good soil caused the seed to sprout, but if in previous years the mice had been eating the seeds, we might respond, “the cat finally got the mice under control; that’s why the seeds sprouted this year” (29). The complex interdependence of cause and effects is the first aspect of dependent origination.

The second analytically distinct aspect of dependent origination is the (mereological) mutual dependence of parts and wholes. The idea of a “whole” is predicated upon the existence of parts that compose it. Without a whole, the “parts” cease to be related to one another; the concept of “parts” becomes unintelligible without the contributory reference of a whole (Dalai Lama 37). All parts are also wholes, composed of their own parts, and all wholes can be considered parts of other wholes. A car is an object, but of course it is also a whole that consist of parts. The carburetor and wheels are different functional parts of my car, but each also is composed of parts. The wheels are also wholes that are composed of tires and rims, and the steel-reinforced tires also have parts, etc. But the specification of the parts of a whole is also dependent on the purpose or interest at issue. For example, we might also break a car down into parts to recycle it; the metal of the rims and the steel-reinforcement of the tires are the metal parts, and they can be distin-

guished from the rubber of the tires and hoses. The wheels are no longer a relevant part. As with cause and effect, the dichotomy between parts and whole exists only in relation to particular interests. The same holds for the parts of an animal. We can break down the whole into particular organs, or into the different functional systems, the circulatory system, nervous system, digestive system, etc., or different cellular components. For different reasons, we break down the whole into different constitutive parts.

Although the causal conception of ecological interdependence and the doctrine of dependent origination are similar, dependent origination is a more radical metaphysical doctrine that denies the *ultimate* reality of any particular causal relation, mereological part/whole relation, and thus also of the metaphysical significance of parts and wholes. Parts of a system are dependent on the wholes and the wholes are dependent on the parts; neither has a metaphysically privileged status. As we will see in sections 3-5, this idea is ethically significant. This does not mean, however, that the different part/whole relationships are illusory or mistaken. For particular purposes, distinguishing parts and wholes is useful and correct. And dependent origination emphasizes that the whole is often constituted by a functional organization of the parts. The point is that it is a mistake to think of either the parts or the whole as ontologically fundamental outside of a particular contexts and purpose.

It is still common to reify ecosystems and treat them as clearly defined, closed systems. The “balance of nature” paradigm discussed above has an intuitive appeal. In reality, however, the delineation of ecosystems is contextual and rooted in epistemic pragmatism. The following passage from Callicott nicely explains this point:

Ecosystems are even more postmodern, ontologically speaking. Ecosystem ontology is driven by epistemology—and has been from the first introduction of the concept . . .

For example, when an ecologist studies a pond ecosystem—as, classically, did Raymond Lindeman (1942)—the object of study is somewhat arbitrarily and artificially isolated from the watershed, the airshed, the biome, and so on up, of which it is a part. Moreover, how the ecologist isolates the object of study depends on what ecological questions are posed. If, like Lindeman, the ecologist proposes to study the energy flow of an ecosystem, then the pond itself is the natural isolate. If he or she proposes to study the nutrient load of the same pond then the isolate must be much larger and include nutrient input from the drainage into the pond, nutrients brought in by migrant animals, those borne on the winds, and so on. (197)

Ecosystems thus provide a clear example of the contextual nature of our judgments of causal and mereological relations.

The third and most difficult and controversial aspect of the doctrine of dependent origination is the corollary doctrine of emptiness. All phenomenological experience is constituted by our perceptual and conceptual capacities; and this implies that the structure of experience itself is subject to dependent co-arising. As Nāgārjuna explains (Ch. 24, verse 18),

Whatever is dependently co-arisen  
That is explained to be emptiness.  
That, being a dependent designation  
Is itself the Middle Way.

This conclusion is a Buddhist anticipation of what is now called the “myth of the given” in Western philosophy (Garfield 35-36). Consider the following response to idea that our concepts do not represent and map out ultimate reality. In response to the pragmatic and contextual nature

of our concepts, one might nonetheless maintain that the best explanation of the success of our concepts is that they are correct; they capture the real essence of the underlying reality. In one sense, this is indeed correct. When we are successful, the success is the result of the dependent co-arising of the phenomena. The question, however, is whether the concepts succeed because they capture the *distinct essences* of an underlying reality. According to the doctrine of dependent co-arising, the underlying phenomena are interdependent and individual identity claims are conventional designations of an underlying interdependent reality. But if this is true, then no thing or type has a distinct “essence.” As William Edelglass and Jay Garfield describe, “to have an essence is to exist independently, to have one’s identity and to exist not in virtue of extrinsic relations, but simply in virtue of intrinsic properties. Because all phenomena are interdependent, all are [devoid of essence] in this sense” (Edelglass and Garfield 27).<sup>4</sup> This is the doctrine of emptiness.

It is a common unreflective assumption that different things have different essential natures and intrinsic characteristics that distinguish them and constitute their identity. But we have seen that all phenomena are subject to dependent origination and co-arising; everything must be defined in relation to other things, and these relations determine our conception of the nature of any given thing. The particular conceptual relations are based on our particular interests and our perceptual and conceptual capacities. The things themselves are empty of any intrinsic essence. Nāgārjuna further develops the doctrine of emptiness applying

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<sup>4</sup> This is one traditional view of essence. On some accounts, relational properties can be essential properties. For an excellent discussion of biological essentialism, see Elliott Sober.

it to the concepts of causality, time, and space, and to emptiness itself, but we will not develop these arguments here.<sup>5</sup>

In the context of environmental ethics, it is widely recognized that individuals are dependent on larger ecosystems. The assumption, however, is that there is a discrete individual that is dependent on a more basic ecosystem. For many deep ecologists, the ecosystem instead of the individual is given ontological priority. This misses, however, the mereological codependence of part and wholes. The whole depends on the parts that constitute it, and the parts depend on the whole. And the individual parts themselves are complex mereological wholes.<sup>6</sup>

Another common and familiar ecological perspective focuses on species as the essential functional parts of the ecological system, not the discrete individuals. Species differentiation, however, also does not mark off intrinsic differences between individuals. A California Condor is considered a California Condor, *vultur californianus*, and not an Andean Condor or an Osprey by virtue of its extrinsic relations and the many different features which it holds simultaneously—its wingspan, its markings, its habitat, its diet, etc.—not because there is some essence which constitutes “Condorness.” A particular individual can lack any of its characteristic features and still be a California Condor. Furthermore, there is no singular definition of what does or does not define a species (Kitcher). Every definition is subject to its own exceptions, regardless of whether we try to classify a species morphologically, genetically or reproductively (Mayr 275-76). John Brookfield nicely summarizes the problem of capturing the concept of species:

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<sup>5</sup> Again, for a more thorough discussion of the semantic and epistemological implications, see Siderits or Garfield.

<sup>6</sup> For the further development of this idea see, Sean C. Lema.

The essence of the ‘species problem’ is the fact that, while many different authorities have very different ideas as to what species are, there is no set of experiments or observations that can be imagined that can resolve which of these views is the right one. This being so, the ‘species problem’ is not a scientific problem at all, merely one about choosing and consistently applying a convention about how we use a word. So, we should settle on our favorite definition, use it, and get on with the science. (107)

We can add that one of the most promising and fruitful approaches, developed by Hey and favored by Brookfield, is that “there exists real ‘evolutionary groups’, sharing genetic similarity but defined by competition, and sharpened by recombination” (107). As Brookfield emphasizes, this definition is simply a useful convention, but we can also note that the definition of the concept is itself relational. We do not look for intrinsic properties of the individuals to identify species, but instead focus on competition between groups of organisms, where the organisms that make up the groups are themselves changing and adapting in a fluid and changing ecosystem.<sup>7</sup> The concept of a species is itself conventional because there is no intrinsic property to define and differentiate species.

This is not a simple problem of vagueness in our categories, but it is instead a consequence of the imposition of particular sortals, for particular purposes, on a thoroughly interdependent flux of existence. Within and across species there are constant mutations and changing circumstances, and new characteristics and adaptive or maladaptive behaviors. Fixed and stable species is a convenient and useful classification. Species classifications reflect human interests in conventional catego-

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<sup>7</sup> For another interesting case, which focuses on “de-extinction,” see Beth Shapiro.



ries; they do not reflect the ultimate nature of reality. Although we categorize species with categorical sortals, members of the same species exhibit striking variation, including genetic and behavior differences. Of course, to emphasize that species classifications do not reflect nature's joints, as it were, is not to say that they are mistaken or illusory in any way. Although, species and ecosystems do not have fixed joints (because nature is a fluid system of dependent origination), species classifications are correct, in the only sense that they can be; that is, when they prove to be useful conventions for organizing our experiences.

We can continue to carry this line of reasoning beyond species. A species is a dependently originated phenomenon that is constituted by a web of relations; even in our conventional definitions of a species, we note that they are constituted (in part, of course) by individual living beings. But just as a species has constitutive causes/parts, so too do individual organisms; and just as a species does not have a singular defining essence, neither do individual living organisms. Living beings exist interdependently and have constitutive parts, which can include both other living beings (like symbiotic bacteria or parasites) and non-living things. The designation of individual living beings is also based on useful conventions that conceal a more complex underlying reality.

Many Buddhists follow Nāgārjuna and conclude that all concepts are conventional and pragmatic. We recognize that the sketch of the argument presented here does not establish this stronger claim. We have focused on ecological concepts and have not shown that the fundamental elements of chemistry and physics are not the basic explanatory building blocks of reality. It is worth noting, however, that David Danks argues for the "Goal Dependence in (Scientific) Ontology" in one of the most cited philosophy articles of 2015. The argument that all ontological classifications are pragmatic and conventional takes us beyond our more narrow focus on environmental ethics. For our purposes, however, we do

not need to establish that all concepts are conventional. What is important is that (at least) biological and ecological concepts are conventional (Sober).

And again, the conventional nature of our concepts does not imply that they are wrong or mistaken. Our concepts are tremendously useful. Distinguishing between a California Condor and an Andean Condor (*V. gryphus*) is not some grand metaphysical misinterpretation; nor is distinguishing between table and chair. The point is not that we have misidentified a type of bird. The point is about the nature of reality and categories. Conventions and categories are right when “they do not contradict knowledge acquired either through empirical experience or through inference, and when they serve as the foundation for a common discourse within which we situate such notions as truth and falsity” (Dalai Lama 43; and see Garfield).

This completes our discussion of dependent origination, emptiness, and ecological pragmatism. It should go without saying that this is not an exhaustive account.<sup>8</sup> We will next explore its implications for value theory and environmental ethics.

### **3. Two Distinctions in Goodness**

As a prelude to explaining the significance of emptiness to environmental ethics, we first need a clearer specification of the concept of intrinsic value. Christine Korsgaard in a groundbreaking article explained that there are “two distinctions in goodness” (which are often conflated), and

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<sup>8</sup> We simply cannot also fully flesh out and defend the doctrine of emptiness here, for excellent discussions, see the Dalai Lama, Siderits, and Garfield for the most comprehensive analysis.

Karen Green argued that claims about the intrinsic value of nature also typically conflate the two distinctions. In particular, when discussing the value of nature, it is common to contrast instrumental value and intrinsic value. This is misleading or confused. Intrinsic value contrasts with extrinsic value; instrumental value, that is, valuing something as a means, contrasts with valuing something as an end. These are two different but overlapping conceptual distinctions: Extrinsic/intrinsic and means/end. Instrumental value is *one kind* of extrinsic value. If something is valuable as a means, its value depends on the value of the end it advances. That something is valued as an end, however, does not show that it has intrinsic value.

Indeed, many things are valuable as ends for me only because I value them as ends. For example, I might set myself a goal of climbing a particular mountain, Mt. Katahdin for example, and in order to achieve this goal, I need to get in better shape, buy good shoes, and do many other things as means to my end goal of climbing the mountain. I may value this end for its own sake (not as a means to something else) but this does not mean that climbing the mountain is intrinsically valuable. It is valuable to me *because* I set myself the end. If I did not value it, I would not have any reason to do it. The value is thus conditional on my desire and extrinsic to the goal itself. But again I do not value it as a means to something else or some other goal. (Of course, one can value something both as an end and as a means to other goals. For example, if climbing Mt. Katahdin is on my “bucket list,” the accomplishment also helps complete my bucket list. But it is only on the list *because* I value it for itself.) I also might value climbing Mt. Katahdin because it is the tallest in Maine, because of its symbolic significance, and because of its natural beauty. We

can value something as an end in a particular context because of its extrinsic relations.<sup>9</sup>

The logic here holds for many of my goals. In contrast, to say that something is intrinsically valuable is to say that it is valuable because of its intrinsic properties. If something has intrinsic value, it does not depend on my valuing it. Indeed, I might value things that lack intrinsic value and fail to value things that have intrinsic value (or more accurately, as we will argue, impersonal value). If people fail to value things with intrinsic (or impersonal) value these things are still valuable nonetheless.

But now consider the problem of the intrinsic value of nature: first, the claim that nature has intrinsic value is not the claim that everyone values nature as an end. Many people value nature only as a means and not as an end. If one claims that nature has intrinsic value, one is probably arguing that it has value even if many people do not in fact value it. The argument is that people ought to value it as an end because of its intrinsic value. This brings us to the core problem. If there are no essential elements of nature and no intrinsic properties of things, then nothing has intrinsic value. Intrinsic value presupposes that there are intrinsic properties. If all properties are relational then all values are relational too. Indeed, the claim that individuals or species have intrinsic value conceptually presupposes that they have an intrinsic nature.

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<sup>9</sup> Shelly Kagan also argues that many things are valued as ends, and not means, because of their relational, extrinsic, properties. He gives the example of Lincoln's pen that signed the Emancipation Proclamation and of culinary arts that are valued as an end but also only because cooking is useful. However, he misleadingly refers to anything valued as an end as being valued intrinsically. This mistake is also found in James (88) who references Kagan. Our argument concludes that all value will depend on its causal and mereological roles, and is in this important sense value is always extrinsic.

From a holistic ecological perspective, the value of species is intertwined with their functional role in an ecosystem. To use Green's widely referenced example, the cane toad is an invasive species in Australia where it has few predators (35). In its native environment of South America, however, the cane toad is an ancient species integrated into the ecosystem. The cane toad is toxic to many animals and it also has a prolific appetite. In efforts to help control agricultural pests, it has been introduced into new environments around the world. In some cases, it establishes itself in the new environment and in others it fails to survive. Its most famous success was when it was introduced into Puerto Rico to control a beetle infestation that was devastating the cane sugar crops. In its native environment, it is a stable part of the larger ecosystem; in Puerto Rico it perhaps added to the stability and resiliency of ecosystem of the sugar cane plantation by providing a check on the exploding beetle population; but, in Australia, the cane toad is an invasive species that failed to control the beetles that were damaging crops, found ample alternative food, and was highly toxic to local species significantly diminishing the biodiversity of the ecosystem. The (ecological) value of the cane toad clearly depends on its effect on the overall system. In some environments, it adds to the stability and resiliency of the ecosystem and in other environments, it is a disruptive invasive species. Its value is thus extrinsic and dependent on its constitutive role in the system (Tyler). The same is true of all species.<sup>10</sup>

We might be tempted to say that the value of a species is instrumental to the "end," which is the ecosystem. This is partially correct, but it is more accurate to say that it has *contributory value* to an overall system that has value. The individual organisms (animals, plants, or single-celled organisms) are constitutive elements of the ecosystem; they are

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<sup>10</sup> For a well-sourced discussion of native, non-native, and invasive species, see Ned Hettinger; also see Michael Pollan.

not the means to this other thing, the ecosystem, which is the end. And, of course, ecosystems do not have ends. Ecosystems do not aim to preserve themselves; they are systems in flux maintained by the interrelation of the parts. Humans have ends and set themselves ends, and animals also pursue goals, and plants are goal directed; but ecosystems are constituted by all of the organisms pursuing ends in a physical environment. An ecosystem is a particularly vivid manifestation of dependent origination. The parts and the whole are causally and mereologically interdependent.

The obvious next alternative is to argue that it is the ecosystem itself that has intrinsic value and that its organisms and the physical environment (the land, air and water) have extrinsic contributory value. This might have been more promising on the old, discarded, balance of nature paradigm, but ecosystems are fluid and in flux and we have seen that the designation of an ecosystem is always itself pragmatic and conventional. The conclusion that ecosystems have intrinsic value, presupposes that an ecosystem has an intrinsic structure. Recall that the mistaken balance of nature paradigm, which emphasizes the integrity of stable, closed, self-regulating system, assumed that ecosystems have an intrinsic nature. We have seen, however, that this is an outdated and mistaken conception of ecology. Ecosystems are subject to the flux of nature and have no intrinsic nature.

After explaining the relational and non-intrinsic nature of species, Karen Green (38 and 45) suggests that we should posit the biosphere itself as the intrinsically valuable source of all value. Her suggestion fits the holistic picture often embraced by environmentalists. Species are embedded in ecosystems, and all of the interconnected ecosystems make up the biosphere. This is an attractive picture but it does not resolve the conceptual problem.

First of all, what is the normative principle? Green refers to the *health* of the biosphere. Is this a reiteration of Aldo Leopold's land ethics, that "*a thing is right when it tends to preserve the integrity, stability and beauty of the land [i.e. the biotic community]. It is wrong when it tends otherwise*" (Leopold 48)? We have seen that this principle assumes the balance of nature paradigm and does not fit the flux of nature paradigm. As Callicott has argued, and discussed above, the harmonious model of a stable organic biosphere does not fit with the ecological reality and thus cannot guide environmental ethics (178). Callicott suggest the alternative principle, "*A thing is right when it tends to disturb the biotic community at normal spatial and temporal scales; it is wrong when it tends otherwise*" (179). Callicott's principle is clearly prudent; when we disrupt the rate of change in the biosphere, we threaten the biodiversity of the biosphere on which we all (humans, animals, plants and all life forms) depend for life. Preserving the environment is clearly of instrumental value to humans and also to many other organisms. But why is the current overall state of flux and disruption of intrinsic value? Recall that delineations of species and of ecosystems are useful fictions but do not correspond to some deeper more real holistic reality. Individuals also both depend on and are constituted by a system of relations. The biosphere as a whole is nothing more than the concept of the totality of relations whatever they are. It is not a thing that has an essential nature.<sup>11</sup>

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<sup>11</sup> The problem with holism becomes even more intractable if one includes the inanimate natural world. As Ian Harris explains when discussing the Hua-Yen teaching of extreme holism, if everything depends on and contains everything else, then everything in the universe depends as much on nuclear waste as it does on an endangered species (125). Harris also here responds to the Buddhist eco-activist Joanna Macy. On Macy's view and the holistic view of Arne Naess, see McMahan (169-172). Also see McMahan on Hua-Yen (178-180), but see Sullivan for a defense of a holistic eco-Buddhist approach.

On the other hand, if the norm is simply the mere preservation of the biosphere itself, however constituted, the biosphere has survived asteroids and massive disruptions. Preserving the biosphere does not require that we preserve any particular species, or the current rich instantiation of biodiversity. As Elizabeth Kolbert has spelled out in compelling detail, the Earth may now be facing the “Sixth Extinction;” and as, Beth Shapiro explains,

Extinctions were mostly caused by catastrophic events. We [humans] are a catastrophic event for this planet—like asteroid impacts that caused the dinosaur extinction. The Earth recovers and the species that were dominant prior to whatever that catastrophic event was go extinct and other types of species, other lineages, rise and become dominant. I think that is probably what we have to fear—that the dominant species goes extinct. But the planet will be fine, eventually. (*Five Books*)

The changing and evolving biosphere can survive mass extinctions. As a result, the idea of the “intrinsic value” of the biosphere does not provide a basis for environmental ethics.

This brings us back to the doctrine of emptiness: (recall) “all phenomena are interdependent, all are [devoid of essence]” (Edelglass and Garfield 27). If all phenomena are devoid of essence, then all phenomena depend on extrinsic relations; and thus their value cannot depend on their non-existent intrinsic properties. In short, no intrinsic properties entails that there is no intrinsic value. All things come into existence in dependent, conventionally designated, relationships. As a consequence of the doctrine of emptiness that nothing has intrinsic value, all value is necessarily extrinsic.



Simon James, in his excellent discussion of Zen environmental ethics, also emphasizes the relational nature of environmental values, but he does not seem to appreciate the meta-ethical significance of Green's argument. James instead appropriates the concept of "intrinsic" value to mean value that is *non-instrumental to specifically human ends*. He writes,

. . . environmental thinkers generally understand intrinsic value to mean the value that a being has independently of its instrumental value as a resource for humans . . . The upshot is that if environmental thinkers are not understanding intrinsic value as non-relational, then there would not seem to be a problem with reconciling a commitment to the intrinsic value of individual beings with the teaching of emptiness. (87-88)

There are two problems with this claim. First, actually many environmentalists are indeed committed to the non-instrumental intrinsic value of species and ecosystems. Obviously, the instrumental value of ecosystems to non-human animals does not imply that species, ecosystems, or the biosphere have any intrinsic value. The idea that nature itself has intrinsic value, distinct from the individuals, is perhaps a defining attribute of deep ecology, and disputes over the intrinsic value of nature itself are a major focus of environmental ethics. Second, and more importantly, what is at issue is not a terminological question about how environmentalists use the phrase "intrinsic value." If intrinsic value is redefined as value that is essentially relational, then this simply erases the intrinsic-extrinsic distinction in goodness. The deeper meta-ethical problem cannot be defined away. As argued above, the problem is that the concept of intrinsic value presupposes an intrinsic nature.

If all value is relational, if nothing has intrinsic value, the question that must be answered is how can all value be extrinsic?

One possibility is that all value is subjective and agent-relative. Some people may value preserving nature as an end. But for all people, the natural ecosystem will have instrumental value because of, but only in so far as, it is necessary for everything else that we value. If one takes this approach, nature does not have intrinsic value or objective value; but since we all depend on nature it does have instrumental value for anyone that values anything.

Can nature also have *extrinsic* but nonetheless “objective” or *impersonal* value, in the particular sense that all people ought to value it as an end? Although Buddhist views typically reject the idea of a fundamental subject-object duality, the *conventional distinction* of subjective value, which is only an agent-relative value, and an objective value, something that all subjects ought to value, is useful here. The concept of *impersonal* value, however, perhaps best captures this distinction. Does nature have extrinsic, non-instrumental, impersonal value?

Buddhism begins with the reality of suffering, illness, and death and argues that all sentient beings strive to avoid suffering; ending suffering is in this sense a universal end. The (dis)value of suffering is conditional and relational but also an impersonal end. Suffering is rooted in ignorance, selfishness, and aggression. The Buddhist middle way aims to reduce and transcend suffering by developing wisdom, virtue, and clarity of awareness (which is achieved through meditative practice). Buddhist ethics aims at a form of enlightenment that ends suffering. We will first explore the relationship between emptiness and Buddhist ethics in the next section, and then argue that the doctrine of dependent origination expands the conception of value beyond mere individual suffering to include the web of interdependent relations that are the conditions of suffering and enlightenment. The value of nature is thus a conditional value and the condition of its value is its relation to sentient life. The

conditional value of nature, however, is not its instrumental value. Nature is conditionally valuable as an end, not a mere means.

#### **4. Suffering and the Virtue of Compassion**

The doctrine of emptiness is an extension of and corollary to the perhaps better-known Buddhist doctrine of “no-self.” There is no essential self that constitutes the essence of a human being. Instead each person is “made-up” of an amalgamation of cognitive, conative, sensory, and physical elements. For classical Buddhism the components (the five skandhas) of the self are: (i) physical body, (ii) feeling and sensations of pleasure and pain, (iii) perception, (iv) volition, and (v) consciousness of physical and mental states. Details aside, the conception of the self here is similar to David Hume or Derek Parfit’s accounts of personal identity.<sup>12</sup> Since this aspect of Buddhist doctrine has received so much attention, we will not recount it here. We are instead interested in the resulting conception of Buddhist ethics and morality, and in particular in extending this conception to environmental ethics.

The self like all else is subject to dependent origination and the doctrine of emptiness. In most contexts, there is nothing wrong with referring to oneself or others, but there is no essential self that constitutes our identity at any one time or over time. At the core of Buddhist ethics is the conviction that egoism is rooted in delusion and in particular, a misconception of the self with its metaphysically indefensible self/other dichotomy. If there really is no substantial self, then there is no real basis for egoism. On the other hand, suffering is something that all (dependently originated) sentient beings are moved to avoid. Conceptually,

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<sup>12</sup> See Garfield for the comparison with Hume and Parfit.

suffering marks off negative experiences. If suffering is unsatisfactory, causing suffering is unwholesome; this is true of all suffering as such. If all suffering is bad, then we have a reason to prevent or alleviate suffering; and our original aversion to suffering provides a reasonable determining ground for compassion and loving-kindness to all sentient beings. A desire to prevent “one’s own suffering” leads us to a desire to prevent all suffering, period. Universal compassion, unlike egoism, is rooted in a clear perception of nature of reality. Some argument of this form is essential for any Buddhist moral theory.

A classic example of the argument against egoism and for compassion is found in Śāntideva (Ch. 8, verses 90-103):

90. One should first earnestly meditate on the equality of oneself and others in this way: “All equally experience suffering and happiness, and I must protect them as I do myself.”

91. Although it has many divisions, such as arms and so on, the body is protected as a whole. Likewise, different beings, with their joys and sorrows, are all equal, like myself, in their yearning for happiness.

94. I should eliminate the suffering of others because it is suffering, just like my own suffering. I should take care of others, just as I am a sentient being.

95. When happiness is equally dear to others and myself, then what is so special about me that I strive after happiness for myself alone?

96. When fear and suffering are equally abhorrent to others and myself, then what is so special about me that I protect myself but not others?

101. The continuum of consciousness, like a series, and the aggregation of constituents, like an army and such, are unreal. Since one who experiences suffering does not exist, to whom will that suffering belong?

102. All sufferings are without an owner, because they are not different, they should be warded off, simply because they are suffering. Why is any restriction made in this case?

103. Why should suffering be prevented? Because everyone agrees, if it must be warded off, then all of it must be warded off; and if not, then this goes for oneself as it does for everyone else.

Siderits (82) reconstructs the argument as a *reductio ad absurdum*. We assume a premise (egoism) and show that, in conjunction with other premises we accept (the doctrine of no-self), the assumption leads to a contradiction and thus the assumption (egoism) must be rejected. Here is Siderits version:

1. First assume (wrongly) that we are obligated (or have reason) to prevent only our own suffering.
2. It would be true that in the case of preventing one's own future suffering, it is one "self" which does the preventing for another future version of oneself that would otherwise suffer;
3. and in the case of one's own present suffering, it is one part of oneself which does the prevention of suffering for another part of oneself experiencing the suffering.
4. Understanding and accepting the doctrine of emptiness, we recognize that the sense of "I" which leads us to identify distinct future and present "selves" as a cohesive "me" is a fiction.

5. Hence, it cannot be true that some suffering is one's own and some is that of others,
6. and so the claim that we are obligated (or have reason) to prevent only our own suffering lacks justification.
7. Therefore, there is either an obligation to prevent suffering regardless of where it occurs, or there is no obligation to prevent suffering at all.
8. But everyone agrees that suffering should be prevented (namely one's own).
9. So we are led to conclude that there is an obligation to prevent suffering regardless of where it occurs.

## 5. Suffering and the Value of Nature

Can we extend this argument to an environmental ethics and deep ecology? The above argument hinges upon the normative disvalue of suffering; that is, the value theory that underlies Buddhist ethics assumes that preventing suffering is justified. The capacity to experience suffering is the exclusive source of value. Buddhist value theory leads us to an obligation to prevent suffering in general. This is an end for all agents and in this sense it is an impersonal end.<sup>13</sup>

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<sup>13</sup> Although it is based on a very different meta-ethical foundation, the Buddhist focus on suffering seems to be similar to a utilitarian hedonistic account of value. In particular, since the focus is on ending suffering, and not maximizing hedonistic pleasure, Buddhist ethics seems to be a form of negative utilitarianism: Ethical action minimizes suffering. Of course, this conclusion is too fast and a Buddhist account of morality must also incorporate (at the least) both the diagnosis of the root of suffering in craving and

At first glance, this Buddhist argument seems incompatible with the perspective of deep ecology, and a more holistic approach to the value of nature, but we argue that this is a mistake. First, the metaphysics of dependent origination implies that just as the boundaries of the individual and even the species is a conventional construction, pragmatically imposed on a causally and mereologically interdependent web of phenomena, so too is the concept of the suffering subject and suffering itself.

The capacity for pain and suffering, pleasure and contentment are experiences that distinguish sentient beings. The Buddhist argument for compassion for all sentient beings is based upon this, along with the starting point, or assumption, that suffering is to be prevented. But what happens when we consider the dependently originated nature of sentient beings, and of suffering itself?

If suffering is disvaluable, and sentient beings are being subject to suffering, then the sentient beings themselves are important and central. Suffering has no value or disvalue, except in relation to the experience of it. But dependent origination tells us that there is a constitutive relationship between subjects and objects, such that their existence is interdependent. When we frame this in terms of suffering, we cannot conclude that sentient beings are the only beings of importance because (by definition) only they can experience suffering; nor can we conclude that suffering is the only thing of intrinsic disvalue. This is because both sentient beings and suffering itself have no distinct identity or essence. There is no “suffering” as such and there are no “sentient beings” as such; these, too, are the products of constitutive relationships and conventional designation.

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delusion, and the eightfold path to achieving enlightenment, which focuses as much on character and intention as particular actions.

In short, suffering dependently arises from the web of relations; however, suffering does manifest itself in the experiences of what we (rightly) conventionally designate as sentient beings. How then should we interpret and understand the central normative claim that suffering is disvaluable.

If we claim that suffering is disvaluable, are we not supposing that it has a distinct, identifiable essence? The answer is no; dependent origination and emptiness apply to suffering too. It is a mistake to think that suffering has an intrinsic nature. There is no homogeneous experience of suffering or non-suffering; indeed, even different perceptions and attitudes modify the nature of the experience of suffering. The Dalai Lama gives the example of two people with an identical form of terminal cancer. Both have the same physical symptoms (and associated physical pain), but one may be suffering significantly more. If one is also experiencing the “afflictive emotions” of anxiety, fear, or bitterness, this will manifest itself in greater suffering. Another person with the same cancer symptoms but without any afflictive emotions will experience an inner calm and suffer less (138). This is a common phenomenon. In addition, suffering is a heterogeneous class of experiences. First, pleasures and pains vary greatly in quality and kind. Second, suffering and non-suffering are not tantamount to pleasure and pain. Depression is not the same as pain, even severe pain; breaking a leg and losing a child both cause suffering but are completely different and phenomenological heterogeneous; falling in love and getting a massage are both pleasurable but completely distinct experiences. Although the complex phenomenology of pleasure and suffering is a rich source of arguments, the idea that an experience of pleasure or pain is constituted by the particular activity, experience, mood, context, and cognition of the subject should not be controversial.



One might wrongly think that the claim that suffering is also subject to the doctrine of emptiness implies that suffering is an illusion. But the important point to recall is that the doctrine of emptiness does not imply nihilism. To say that suffering, as an experience is empty, does not imply that suffering is an illusion.<sup>14</sup> Everything lacks intrinsic essence; this is the nature of reality. Dependent origination and co-arising is the nature of reality and the nature of suffering. Once this is understood, the concept of value is correctly linked with the normal and conventional experience of suffering.

We saw above that Buddhism is committed to the impersonal disvalue of suffering itself. But in the same argument, we find that subjects of suffering lack inherent identity and so the experience of value or disvalue, suffering or non-suffering, cannot be ultimately attributed to any one being. This should lead us to see that, if value lies in non-suffering, and non-suffering is a dependently originated phenomenon, which is only conventionally distinguishable from other phenomena, then the

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<sup>14</sup> The most famous classical discussion of this distinction is from *The Questions of King Milinda* (for summary and discussion see Siderits 2007, 50-56). Following a discussion of the doctrine of emptiness that uses the example of the King's chariot, Nāgasena explains that despite the fact that chariot has no essence and is a conventional kind, it is still true that the King arrived on his chariot! The idea is not that the chariot is unreal, the point is to understand the nature of reality—that everything is subject to dependent co-arising and that the very categories of that understanding are irreducibly conventional and contextual. The anti-essentialist metaphysics does not mean that there is no chariot. The chariot is not an illusion! The metaphysical and semantic error is in taking the chariot to have an essential nature that makes it a chariot and that constitutes its identity. Similarly, as discussed above, if one is asked, "What kind of raptor is that?" one can correctly respond by saying "A California Condor." The existence of the condor is not illusory. The response is indeed correct if the raptor satisfies the semantic conventions. Our conventional conception of reality relies on a "common-sense ontology" which is very useful—but also semantically misleading (Siderits 55).

experience of suffering, the source of suffering, and the subject of suffering, all arise only as dependent phenomena. There is no simple subject, cause, or experience of suffering. (And, of course, understanding all of this is part of the enlightenment that both transforms and helps eliminate actual suffering; but that is a longer story.)

We have now found our way back to the interdependent nature of ecology. There is no such thing as an isolated, suffering, value-bearing subject. Suffering and the subject experiencing suffering are dependently originated phenomena. All sentient beings and all living things have a constitutive interdependent relationship with the natural world, the biosphere, which is itself nothing but a web of dependent relationships. It is dependent co-arising all of the way down. The point is not simply the common and obvious point that sentient beings depend on the natural world. As discussed above, the doctrine of dependent origination involves both a deeper understanding of causal interdependence and a constitutive conception of mereological dependence. Sentient beings are constituted by complex mereological relationships. Indeed, in an important sense, each living thing constitutes an ecosystem. Of course, by definition, sentient beings are the only beings that can experience suffering, but sentient beings themselves are *constitutively inseparable* from the rest of the natural world, both non-sentient and non-living.

It is thus necessary to expand the Buddhist argument for compassion in a way that leads to the conclusion that the interconnected systems have impersonal value or disvalue. The argument above concluded that suffering should be prevented wherever it occurs.

Our repurposing of the argument for environmental ethics is identical to (1) through (8) above. Since both suffering and sentient beings are subject to dependent origination, we can continue:

9. There is an obligation to prevent suffering regardless of where it occurs.
10. Both suffering and sentient beings are dependently originated, and have a constitutive relationship to the rest of the natural world.
11. Suffering does not exist exclusively *in* sentient beings, because those beings are dependently originated and have no intrinsic essence or individual identity.
12. Thus extrinsic relations and relationships, which include the natural world, constitute both suffering and sentient beings and thus preventing suffering must address its relational nature.

When we say (correctly) that “sentient beings alone can experience suffering,” we must take note of the fact that sentient beings are conventionally designated from a web of constitutive relationships. The phenomenon of suffering is also constituted by, and dependent on, these relationships. In the context of environmental ethics, it is a mistake to focus on the individual, and it is also a mistake to focus on the ecosystem or biosphere ignoring the individuals. The ecosystem, or biosphere, does not experience suffering. Suffering is indeed localized but it is also dependent on the ecosystems and biosphere, and the individuals that suffer are also inseparable from their web of relationships.

Although the Buddhist account of value starts with the undesirability of suffering, the argument would have the same structure for any positive goods. If flourishing, inner peace, and nirvana are valuable and worth pursuing, I have reason to assist all beings in finding inner peace and enlightenment. For simplicity, however, we have focused on the disvalue of suffering.

Given this understanding of suffering, the distinction between intrinsic and extrinsic value is misleading. The intrinsic-extrinsic distinction presupposes a separation and distinctness. To say that suffering has intrinsic disvalue, or that non-suffering has intrinsic value, implies that suffering is a distinct thing that has value in itself. Indeed the concept of intrinsic value marks off the idea that the value does not depend extrinsically on anything else. To avoid this implication, we suggest that a Buddhist instead use the broader concept of impersonal value. The value is impersonal because it is a value for all beings (it is ownerless), but since all things are subject to dependent origination, nothing is intrinsically valuable. Suffering and non-suffering are dependent values. All value is manifest in a web of codependence. Right view, right intention, right speech, right action, right livelihood, right effort, right mindfulness, and right concentration must all take account of the dependent origination of all value. These are broad strokes that provide a rough framework for action and policy.

Despite the metaphysical doctrine of emptiness, individual suffering, species preservation, and ecosystem biodiversity are useful concepts and signifiers of value. Compassion for other sentient beings requires care for the biosphere and recognition of the contributory value of both organic life and the inanimate world. Suffering itself is constitutively dependent on the causally and mereologically interdependent web of relationships that are our shared biosphere.<sup>15</sup>

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<sup>15</sup> We thank Mark Okrent, Paul Schofield, Susan Stark, Tom Tracy, and an anonymous reviewer for helpful comments on drafts of this article.

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