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A Nonanthropocentric Response to the Cosmic Perspective Problem

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A NONANTHROPOCENTRIC RESPONSE TO THE COSMIC PERSPECTIVE PROBLEM

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ABSTRACT
EVEANNE EASON: A Nonanthropocentric Response to the Cosmic Perspective Problem
(Under the direction of Neil Manson)

This paper responds to issues that have been raised for environmental philosophy in light of developments in astrobiology and exoplanet science. In recent years, we have moved much closer to confronting evidence of life beyond Earth. Pairing such a discovery with a certain theoretical understanding of the universe, we might be motivated to address a question: with knowledge of abundant, potentially infinite alien life on Earth-like planets, why must we save our planet? In anticipation of this discovery, we can use the scenario, the Cosmic Perspective Problem, to refine a widely-held position with substantial implications for our environmental ethics. The purpose of this paper is to consider what happens when our scope is greatly increased, especially as nonanthropocentrists are concerned. It offers solutions for moving away from a maximizing consequentialist framework in favor of an ethical framework that better facilitates consistency in one's environmental ethics.

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I. The Cosmic Perspective and Other Problems for Nonanthropocentrists

Introduction

I am writing this paper in response to one published in 2012.[1] It raises issues for environmental philosophy in light of developments in astrobiology and exoplanet science, and in the eight years since, we have moved much closer to confronting evidence of life beyond Earth. NASA is actively searching for it; some of their scientists anticipate finding signs of alien life by 2025.[2] We might be motivated, in the meantime, to address a question that arises with knowledge of alien life on Earth-like planets: if there are many other life-sustaining planets out there, why should we save this one? In anticipation of this discovery, we can use the scenario to refine a widely-held position with considerable implications for our environmental ethics.

To put it very simply, anthropocentrists hold that only humans and maybe some other human-like beings have intrinsic worth. If other things are valuable, it is only in relation to their instrumental value to us; for instance, I might say that my pet dog is instrumentally valuable because of the joy it brings me. Nonanthropocentrists, on the other hand, hold that other things, potentially many other things, are intrinsically valuable as well. Things with intrinsic value are said to be valuable in themselves, so the set might include both me and my dog (and everything like me and my dog in the right sorts of ways). The way one might determine what counts as intrinsically valuable can vary widely, and whatever criteria one chooses will direct her perspective of environmental ethics towards anthropocentrism or nonanthropocentrism. I will have to say a lot more about each term because their use is inconsistent and the concepts they

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[1] Neil A. Manson, "Anthropocentrism, Exoplanets, and the Cosmic Perspective," *Environmental Ethics* 34, no. 4 (2012): 275-290.

[2] NASA chief scientist Ellen Stofan in 2015: "I think we're going to have strong indications of life beyond Earth within a decade, and I think we're going to have definitive evidence within 20 to 30 years." Mike Wall, "Signs of Alien Life Will Be Found by 2025…" *Space*, April 7, 2015. https://www.space.com/29041-alien-life-evidence-by-2025-nasa.html

refer to are complex; understanding them is crucial for evaluating the state of our conventionally Earth-bound environmental philosophy. The purpose of this paper, though, is to consider what happens when our scope is greatly (perhaps infinitely) increased, especially as nonanthropocentrists are concerned.

Nonanthropocentrists could put a stop to this conversation before it begins. They might do this by claiming any of the following about damaging the environment: "that it treats the planet as a means to an end, that it harms things that are intrinsically valuable, or that it violates the rights of future generations."[3] These deontological responses are consistent with the work of some nonanthropocentrists,[4] so it is important to note early on that I am making an assumption about the majority of nonanthropocentrists: they often operate within a consequentialist ethical framework, typically seeking to maximize what is good, which is usually biodiversity. I will detail why the Cosmic Perspective challenges nonanthropocentric maximizing consequentialism in particular and recommend alternative explanations for why we should save the Earth. Ultimately, I hold that nonanthropocentrists can mitigate the Cosmic Perspective Problem by basing our duty save the Earth in special obligation.

Beginnings of the Cosmic Perspective

Exoplanets are planets outside of our solar system. As of March 2020, over 4,000 exoplanets in over 3,000 planetary systems have been cataloged as confirmed discoveries.[5] In the Milky Way alone, there are potentially billions of "Earth-like" planets.[6] These are roughly

[3] Manson 282.
[4] For an interesting example, see Hugh McDonald, "Toward a Deontological Environmental Ethic," *Environmental Ethics* 23, no. 4 (2001): 411-430.
[5] Exoplanet.eu/catalog, accessed March 2020.
[6] From Kepler Data, as published in Danley C. Hsu et al, "Occurrence Rates of Planets Orbiting FGK Stars," arXiv.org, revised Jan. 7, 2020. arXiv:1902.01417

the same size as ours, and they orbit a sun from a distance within the "habitable zone," which allows for liquid water on the surface. If what astronomers are observing continues, "the Universe will form more than 10 times more planets than currently exist," and "this would imply at least a 92% chance that we are not the only civilization the Universe will ever have."[7] The idea is that with billions and billions of planets capable of sustaining life in the Universe, it seems far more likely than not that life will arise from non-living matter on some other planets, as many believe it did on Earth, and that it will follow its own path of evolution, as many believe life did on Earth. Alternatively, or perhaps additionally, panspermia theory raises the probability for life occurring in exoplanets, as life might originate from microorganisms distributed by space matter.[8] While I doubt that discovering alien life on a single planet would be devastating for our notions of Earth-bound environmental ethics, it would suggest that the probability of life existing on exoplanets is not nearly as rare as we might have thought.[9] Multiplying some positive probability of abiogenesis or panspermia by the high number of Earth-like planets will result in a very high likelihood that life exists on exoplanets, but this only assumes that the number of planets in the universe is finite.

If the universe is infinite, as some cosmologists theorize, the number of Earth-like planets is infinite.[10] The same would thus be true for extraterrestrial life. As Manson points out, an infinite number of Earth-like planets multiplied by some positive probability of abiogenesis on

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[7] Peter S. Behroozi and Molly Peeples, "On the History and Future of Cosmic Planet Formation," arXiv.org, Aug. 5 2015. arXiv:1508.01202

[8] This is not addressed in Manson's paper, but I include it to offer yet another reason to take the CP Problem seriously. Thanks to Dr. Manson for introducing the concept to me later. "Panspermia is underlain by the idea that the vast number of stars in the Milky Way is somehow matched by the fecundity of life." Paul S. Wesson, "Panspermia, Past and Present: Astrophysical and Biophysical Conditions for the Dissemination of Life in Space," Space Science Reviews 156, no. 1 (2010): 239-252.

[9] Caleb Scharf and Leroy Cronin, "Quantifying the origins of life of a planetary scale," *PNAS* 113, no. 29 (2016): 8127-8132.

[10] G.F.R. Ellis and G.B. Brundrit, "Life in the Infinite Universe," *Royal Astronomical Society* 20 (1979): 37-41.

such a planet results in an infinite amount of life in the Universe.[11] Alien life could coexist with us in the Universe right now, and it could inhabit a planet that is more beautiful and biologically diverse than our own. Its people could be more advanced and peaceful than ours, and, coming from certain ethical perspectives, we might struggle to come up with reasons to think our Earth and its life are more valuable than that of another Earth-like planet. More importantly for environmentalists, with the knowledge that we can do nothing to add or subtract to the potentially infinite amount of biodiversity in the Universe, we run the risk of becoming indifferent to protecting our environment; this is the Cosmic Perspective Problem. Before I develop it more fully, I want to return to the two main positions in environmental philosophy that would serve as a starting point for tackling the implications of infinite Earth-like planets.

Anthropocentrism and Nonanthropocentrism

Environmental philosophers generally fall into two camps: the anthropocentrists and the nonanthropocentrists. 'Nonanthropocentrism' is a catch-all term that includes perspectives like ecocentrism, deep ecology, and ecofeminism, to name a few, but they all share opposition to a human-centric understanding of the environment. For many environmental philosophers, anthropocentrism put into practice is the major cause of damage and degradation to the environment; it would appear from the literature that anthropocentrism is deeply unpopular. By rejecting it, nonanthropocentrists refuse to assign gratuitous value to humans and our place in the world.

Nonanthropocentrists generally prefer instead to expand their perspective to include the entire Earth, which is valuable on its own and of which humans are only a part. (To be more

[11] Manson 286.

specific is to enter into the weeds of nonanthropocentrism's diverse subgroups, some of which I listed above.) In any case, taking on the Planetary Perspective, or that of the Earth as a whole, raises a few issues for the way we think about what is at stake in "protecting" the global environment.

A Note about Terms

Environmental philosophy is a relatively new field arising from the environmental movement, and the use of terms like 'anthropocentrism' and 'speciesism' has not been standardized. The issues I raise in this paper are not meant to contribute to the anthropocentrism/nonanthropocentrism debate; I ultimately find most of these issues to be orthogonal to the two positions. But the Cosmic Perspective is a more obvious problem for nonanthropocentrist, so I must begin with characterizing it to the best of my ability. Each side sometimes mischaracterizes the other, which is easy to do when some members of each broad category differ in their self-definition.

A very brief definition from one of the early papers on the topic puts it this way:

> "an anthropocentric value theory (or axiology), by common consensus, confers intrinsic value on human beings and regards all other things, including other forms of life, as being only instrumentally valuable, i.e., valuable only to the extent that they are means or instruments which may serve human beings. A nonanthropocentric value theory (or axiology), on the other hand, would confer intrinsic value on some non-human beings."[12]

[12] J. Baird Callicott, "Non-Anthropocentric Value Theory and Environmental Ethics," *American Philosophical Quarterly* 21, no. 4 (1984): 299.

When Callicott's paper was published in 1984, this may well have been the common consensus, but my review of the literature today suggests this is no longer the case, as use of the terms has become much murkier. For the purposes of this paper, I will adjust the definition slightly:

> an *anthropocentric* value theory confers intrinsic value on persons (most if not all humans and maybe some other persons) and only instrumental value on all non-persons, whereas a *nonanthropocentric* value theory assigns intrinsic value to non-persons in addition to persons.

I often see anthropocentrists attacking the strongest version of nonanthropocentrism and vice versa. When describing their opposition's position, nonanthropocentrists usually build value claims into their definition. Manson's article cites a definition of 'anthropocentrism' as assigning human beings "undue" importance.[13] Anthropocentrists would hardly consider their high assessment of human value excessive or undue. For another example, Oxford Dictionary defines 'speciesism,' a term coined by a nonanthropocentrist, as "the assumption of human superiority *leading to the exploitation of animals*" (emphasis mine). Again, this is a point of contention, especially if the exploitation of animals is necessarily an aspect of speciesism. One anthropocentrist holds that anthropocentrism does not exclude the possibility of things in nature having intrinsic value,[14] while other anthropocentrists and nonanthropocentrists alike would call this anthropocentrism's very meaning.

This is not to say that most of the pro/anti-anthropocentrism disagreements are lexical, but it is meant to point out that it is not always clear what these philosophers refer to when they use these terms. Calling oneself an anthropocentrist assumes fifty years of characterizations,

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[13] Manson 275.
[14] W. H. Murdy, "Anthropocentrism: A Modern Version," *Science* 187 (1975): 1169.

recharacterizations, and strawmen in environmental philosophy, not to mention the hundreds of years the idea has been around in creation theory and philosophy in general.[15]

For clarity, I will try to be consistent with the terms as they were used in the paper that inspired this one. Speciesism might also be called "biological anthropocentrism" because it favors the human race over other types of living things. In comparison, personal anthropocentrism holds that what matters are those that belong to the category of persons, where qualifying for personhood could require something like the capacity for reason. This becomes difficult when we encounter nonhuman persons on Earth, as we have in certain intelligent animals like gorillas, or in the Universe, as we might in aliens. An anthropocentrist could claim both the biological and personal qualifiers and thus only count *human persons* as mattering most. For example, some anthropocentrists subscribe to a creation theory that sees humans as a special set of creatures that have dominion over the Earth and might also have the duty to shepherd it; they might be biological or personal (especially if they worship a personal God) in their anthropocentrism. Justifying why one might take any of these positions is a task for anthropocentrism, but this paper is about nonanthropocentrism. For my purposes, nonanthropocentrism rejects all types of human-oriented perspectives. A consequence of this is that they might be forced to take on the Planetary Perspective.

The Planetary Perspective

As many environmentalists point out, life has existed since long before humans were on the Earth. Unless our species lives to see the death of the Sun, life on Earth will presumably go

[15] Sarah Boslaugh, "Anthropocentrism," *Encyclopedia Britannica*, accessed March 2020.

on without us.[16] Put differently, if all humans were to disappear tomorrow, plants, oceans, and animals would take over our cities; the Earth was here for billions of years before humans, and it would not take nearly as long without us for it be unrecognizable. Some think it would take about a thousand years.[17] If this is true, it seems especially strange that we would view our species as any more important than any other. Some philosophers would call this mistake "speciesism,"[18] and others call it "human chauvinism."[19]

Unfortunately for proponents of anti-speciesism, a concept that drives environmentalist advocacy, there is another potential consequence of the whole-planet viewpoint: environmental indifference. This is the problem of the Planetary Perspective, and it precedes the Cosmic Perspective. Nonanthropocentrists will have to supply reasons to view our impact on the Earth as anything but negligible, particularly as we come to better understand how long life has been on Earth and its capacity to rebound from major events. Because nonanthropocentrists would refuse to commit an act of speciesism in preferring say, humans to pigs, it is unclear on what basis they would prefer the world as it is now to the way it could be in a million years, adapted with a thinner ozone layer or more acidic oceans. For the anthropocentrist, the answer is easy: we care because we are here on this Earth, now. (Perhaps we prefer a habitable planet, flourishing according to standards that work for us, or perhaps we feel a human-centric religious obligation to shepherd the Earth. As I have said, like nonanthropocentrism, there are varieties of motivators for anthropocentrism.) At least one difference between the two perspectives is that the Earth has

[16] I want to take this opportunity to affirm moral realism for this paper's metaethical position. I will assume that ethical truths are true whether or not humans exist. See Manson 281 for further discussion.
[17] For an exploration of this sort of Earth, see *The World Without Us* by Alan Weisman.
[18] A term popularized by Peter Singer and Tom Regan in their individual work and coined by Richard Ryder in his 1971 essay "Experiments on Animals."
[19] Richard Routley and Val Routley, "Against the Inevitability of Human Chauvinism," *Ethics and Problems of the 21st Century*, eds. K.E. Goodpaster and K.M. Sayre, Notre Dame (1979): 36-59.

not always existed and will one day be enveloped in the Sun, so its total biodiversity is finite. Infinity, and thus the Cosmic Perspective, is a much bigger problem for nonanthropocentrists that seek to maximize biodiversity.

Consequentialism

The type of nonanthropocentrist that is most vulnerable to the Cosmic Perspective Problem is a maximizing consequentialist who holds that all living things are equal. In reality, it seems that most self-identifying nonanthropocentrist activists are either inconsistent in their ethical frameworks or more limited in what they will consider intrinsically valuable, restricting it to, for instance, mammals. Nevertheless, it seems that many environmental advocates hold this view or crucial aspects of it, which could make them susceptible to the problem. So, the strongest version of this nonanthropocentric position 1) holds that all living things are equal and 2) seeks to maximize good outcomes and minimize bad outcomes, which is the definition of maximizing consequentialism.

Most of the nonanthropocentrism literature, from what I have read, reflects an endorsement of utilitarianism, and many of those positions are made specifically from a maximizing consequentialist framework. There are a few reasons for this. The field of environmental philosophy was born out of an advocacy agenda; while not a philosophical work, Rachel Carson's 1962 book, *Silent Spring,* is often cited as one of the first writings to advance the environmental movement (including the creation of the Environmental Protection Agency in the US). Environmental philosophy rose to meet the challenges that resulted, particularly in the area of animal welfare. This is all to say that much of the environmental ethics work is written with an eye towards policy, the arena in which cost-benefit analyses are commonplace. In his very influential paper which I cited earlier, Callicott acknowledges that "since normal ethical

theory is conventionally anthropocentric…environmental ethics is thus reduced to more or less cost-benefit analyses and public policy considerations."[20] So, in addition to its role in policy-shaping, the field also struggles to draw on the philosophical foundations in ethics that almost invariably come from an anthropocentric perspective, as they typically deal with topics like what we owe other persons. As we will find in my efforts to suggest an alternative basis for environmental concern, it is difficult to treat the Earth like a person that has a claim on us. It would be easier to evaluate its moral status by taking the sum of all the things that matter and easier still if, in addition to holding maximizing consequentialism, we decide that everything of value matters equally.

This is the second aspect of this strongest type of nonanthropocentrism. Peter Singer claims, in "All Animals are Equal" and elsewhere, that non-human animals are deserving of the same respect or equal consideration as are humans; this is because the basis of all interests is the capacity to feel or suffer.[21] Consciousness, or the capacity to feel, must be understood as insufficient for personhood, or else we could call Singer an anthropocentrist. He is, on the contrary, one of the most famous nonanthropocentrists alive. By contrast, Tom Regan, who also holds that consciousness entails inherent value, escapes the central problem of this paper by avoiding Singer's move to couple this consciousness criterion with consequentialism; Regan operates from a rights-based theory.[22]

If the ability to suffer grants the right to equal moral consideration, there are some troubling consequences in the light of the Cosmic Perspective. First, knowing what we ought to respect is contingent upon knowing what is conscious, so we could conceivably find ourselves

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[20] J. Baird Callicott, "Non-Anthropocentric Value Theory and Environmental Ethics," *American Philosophical Quarterly* 21, no. 4 (1984): 299-309.
[21] Peter Singer, "All Animals are Equal," *Philosophic Exchange* 5, no. 1 (1974): 107.
[22] Tom Regan, *The Case for Animal Rights*. University of California Press, 1983. Print.

one day expanding the set beyond animals to include all living things. (There is a recurring conversation about whether plants can feel pain, for instance.) This is not an immediate problem for consequentialists, as sacrificing the interests of some can be justified if it results in meeting a net-higher number of interests; it might be okay to kill a single pig if it will prevent a plural number of people from starving to death. There are ways this can go sideways on Earth if the theory runs without qualifiers to mitigate it, but these are mostly extreme hypotheticals.[23] The real problem comes with the Cosmic Perspective. If there is infinite life in the universe, there is no reason to see Earth's inherently valuable life—here and now—as any more special than the infinite life of the infinite universe.

Biological Geocentrism

This brings us to the undesirably arbitrary position that consequentialist nonanthropocentrists would have to adopt: biological geocentrism. In the conclusion of his paper, Manson suggests this concept as the analogue of biological anthropocentrism: associations with this Earth would have to be morally relevant properties.[24] Life originating on other planets would not be morally relevant because it did not come from our planet. Even if it seemed just like ours or even better, it would not count because we had drawn the line at Earth. I think we should find this unacceptably arbitrary. Manson writes:

> Being from Earth just does not seem to be morally relevant. But perhaps the appearance of irrelevance is rooted in intuitions we have about the moral irrelevance of extrinsic properties. As discussed earlier, these intuitions are not decisive. We have intuitions in

[23] This article heightens the absurd conclusions that can result from strict consequentialism coupled with a low threshold for moral status: Amanda MacAskill and William MacAskill, "To truly end animal suffering, the most ethical choice is to kill wild predators (especially Cecil the lion)" Quartz, Sept. 9, 2015. https://qz.com/497675/to-truly-end-animal-suffering-the-most-ethical-choice-is-to-kill-all-predators-especially-cecil-the-lion/

[24] Manson 289.

> the opposite direction—for example, regarding artistic forgeries, human replicas, and restored environments. Perhaps embracing the moral relevance of extrinsic properties is the best way for environmental philosophers to remain nonanthropocentric without succumbing to the indifference of the cosmic perspective.

I will take the challenge in evaluating some intuitions we have about how and why we might have reason to prefer our own planet. My first intuition does not require that we adopt an entirely new ethical framework, as we might be able to categorize it as an extrinsic property to be factored in the consequentialist calculus.

II. Proximity

My first reaction to the Cosmic Perspective Problem and biological geocentrism is that we might have a special duty or preference to help this planet because it is the one we are on, and this is not immediately contrary to nonanthropocentrism. As Singer says, we and all animals are equal but not the same. It is fair to conclude, I think, that there is something unique about humans that results in our having a much greater responsibility to the world.

As a brief aside, I would like to elaborate on our responsibilities. An unfortunate characterization of anthropocentrism left it open to warranted criticism:

> To be anthropocentric is to affirm that mankind is to be valued more highly than other things in nature—by man. By the same logic? spiders are to be valued more highly than other things in nature—by spiders. It is proper for men to be anthropocentric and for spiders to be arachnocentric. This goes for all other living species.[25]

[25] Murdy 1168.

It is reasonable that both nonanthropocentrists and (probably especially) anthropocentrists hold humans to a higher standard of ethical responsibility, even if they disagree as to the exclusivity of our moral status in the animal kingdom. Indeed, the same capacities that allow humans to (rightly or wrongly) dominate the Earth, like rational thought, are accompanied with the duty to make ethically good choices. We do not hold spiders to the same standard because we do not believe they are capable of it. This paper and the problem of the Cosmic Perspective presume that everyone concerned will buy in to the idea that humans can have responsibilities outside of themselves, and I am trying to find an explanation in order to preserve our duty to the Earth for the nonanthropocentric perspective.

Mere Proximity as a Source for the Duty to Rescue

This section follows some of the major moves in F.M. Kamm's "Does Distance Matter Morally to the Duty to Rescue?".[26] Like Callicott said, most of our ethics is human-centered, as is her paper, but demonstrating concern for the Earth in the form of "rescue" is consistent with the sort of environmentalist rhetoric we often hear. My intuition is that we might owe more to this Earth because it is the closest to us, even if it is not special in any other way. Since we often feel the same way about helping people near to us, I will try to apply the lessons learned in Kamm's paper to the Cosmic Perspective Problem. Her method is useful: Kamm strips scenarios of all other variables to isolate mere proximity, so while I find that it is insufficient alone, returning to those other variables could lead us to finding the ones that drive our intuition and matter morally after all.

[26] F.M. Kamm, "Does Distance Matter Morally to the Duty to Rescue?" *Law and Philosophy* 19 (2000) 655-681.

Despite my complaints about terms in environmental ethics, I have not been very precise with general ethical terminology up to this point. My excuse is that I do not think precision with some of moral philosophy's finely-differentiated terms is crucial for this paper. I will continue to use "duty" and "responsibility" interchangeably. So far, I have used a number of phrases to say something to the effect of "environmental concern," and it is crucial to note that this could include several meanings. (I will explore this towards the end of the paper but expect to accomplish my primary goal with the loose concept of environmental concern.) The duty to rescue could be one, assuming that the Earth is actually in peril. One of the reasons it is important to clarify what we mean by environmental concern is that our normative ethics often deal with negative and positive duties.

A negative duty to the Earth is our duty not to harm it. It seems that we are the only species that can be accused of harming the Earth. If my earlier aside about human responsibility tracks with what most environmentalists believe about holding humans to a higher ethical standard, we might have a monopoly on harming the environment in an ethical sense. Does it make sense to say that wolves are causing environmental harm when they overhunt deer or that elephants are causing environmental harm when they uproot trees? Perhaps it does, if we can say that they are hurting the environment against some standard of how it ought to be, which is dubious. At the very least, we do not hold them morally responsible. Anyway, with regards to *our* negative duties in general, we would not intuitively think that distance makes a difference; I seem to have an equal duty not to hurt someone in cases where everything is equal apart from my proximity to them.

I am more interested in positive duty, a responsibility to intervene and act on the Earth. Obviously, the distinction between the two with regards to our relationship with the Earth is

fuzzy. If we take up our negative duty not to harm the Earth, we could presumably stop the output of our harmful activities, but we seem to have surpassed this point, as righting the Earth will require corrective measures that would constitute positive actions. Since it seems to me that leaving the Earth alone is not an option, I will regard our duty to it as a positive one.

Addressing Contingencies

Kamm has argued against Singer that distance could matter morally.[27] So, if she is right, it could be a reason for our Earth-specific environmental concern. I want to take a moment to acknowledge that Singer, in advocating for pan-species moral equality, is aware of the technological advances that make it possible to help people and animals across the world. Sending money to the most effective charities is often the best way to maximize good outcomes, something that we have not always had the means to do. Our obligation to help is contingent on our ability to help.

The same goes for addressing the problem of the Cosmic Perspective. At present, we cannot reach other planets to affect their biodiversity. We can only be responsible, if we are responsible at all, for what we are able to reach. The fact that we are able to reach nearly every corner of the Earth creates the problem of global environmental damage and makes us responsible for its protection. If we are protecting what is inherently good, it is still good even if it does not have an impact on infinity, but if we are also maximizing consequentialists, our inability to maximize the good when the good is infinite leaves our ethical framework feeling pointless. So, even if we cannot reach exoplanets, the knowledge that life is infinite is enough to require a basis for biological geocentrism at the very least.

[27] As written in the 2000 paper I am focusing on as well as in "Famine Ethics: the Problem of Distance in Morality and Singer's Ethical Theory," ed. D. Jamieson, *Singer and His Critics*. Blackwell (1999) 181-186.

Eliminating Confounding Variables from Intuitions

With all that out of the way, we can consider whether proximity will work, and we will do this by imagining that we actually can reach exoplanets. I will offer a variation on Kamm's cases, which are variations on Singer's cases.

> *Earth*: I stand at the mouth of a toxic river that flows into a lake. If I lower a gate into the river with my hands, I will ruin my $35 rubber gloves but save the lake. Intuitively, I should lower the gate.
>
> *Earth-2*: I know that, on another planet just like ours, Earth-2, a toxic river just like the one on Earth flows into a lake just like the one on Earth. It would cost $35 to remotely lower a gate to save the lake. Intuitively, I do not have an obligation to do so.

When Kamm introduces similar scenarios in this way, she points out the problem with these cases: "if we are using cases to see whether distance per se matters, all other factors in the cases should be held constant."[28] Both lakes would have to have the exact same biodiversity, from fish to algae, and stand to be damaged by the toxic river water in the same way. Even still, I might gain from the lake on my Earth being clean because I drink from it, or I might be the only person who can lower the gate on my Earth, while there might be intelligent aliens that could do the same on Earth-2. Perhaps I would be assured of the efficacy of my actions on my Earth but perhaps not on Earth-2. I might have special duties to this Earth's lake because I grew up using it. It might be a matter of justice because my fellow humans contaminated the river in the first place. These are all the sorts of variables that we have to control for. Modifying the cases might look like this:

[28] Kamm 656.

Planet A: I have just touched down on an Earth-like planet for the first time and stand at the mouth of a toxic river that flows into a lake. If I press a button right next to me and pay $35, a machine-operated gate will fall in the river and certainly save the lake. I am the only person who can do this.

Planet B: I know, on a different Earth-like planet that I am not on, there is an exactly similar toxic river that flows into a lake. If I press a button right next to me and pay $35, a machine-operated gate will fall in the river and certainly save the lake. I am the only person who can do this.

Even if life is finite and only exists on these two planets, the loss to the universe by my failing to enact my positive duty on either planet is the same, and it seems permissible that I choose either. It seems to me that if the cost is the same and I have no ties to either planet, I have no stronger obligation to Planet A than to Planet B on the basis of proximity alone. Kamm comes to a more nuanced conclusion, but I would like to depart from proximity now to evaluate two of the variables we controlled for: special relationship and justice.

III. Deontological Alternatives

This section offers my best suggestions for nonanthropocentrists responding to the Cosmic Perspective Problem. In order to isolate situations to matters of proximity, we had to dismiss several variables, some of which I believe could indicate other sources of obligation. After all, it was intuition that guided the proximity inquiry, so the driving force of these intuitions could lie in those unexamined variables. A problem that I find is that it feels strange to talk about the Earth or environment as a whole in the way we usually talk about individual, intrinsically valuable persons. We often anthropomorphize the Earth, rightly or wrongly, so I will

take it as a cue to proceed with this attempt. We are continuing to grant that the Earth has intrinsic value.

Special Obligation

Perhaps we have a special obligation to the Earth because we have interacted with it in a certain way. Special obligations "play a central role in commonsense morality."[29] It is generally regarded as a feature of deontology whereby we might owe more to those with whom we have special relationships than we automatically owe everyone else with moral standing. We can agree that all the sorts of things that have intrinsic value are worthy of some basic level of respect, but we can also build on that obligation by examining our relationships. Relationships might give rise to responsibilities, or relationships might comprise responsibilities. Either way, they are often brought up to respond to the consequentialist position that fails to accommodate the special ties we have to others. It seems intuitive to me that I owe my dog more than I owe a stranger's dog. Similarly, I prioritize my friend over a person I do not know.

Friends and dogs are easy examples because they are often relationships we enter into, at least for our part, voluntarily. (We would expect the same opt-in from our friends, but probably not from dogs.) Voluntarism grants that the person who makes a promise and enters into a relationship assumes a certain burden for the other person in the relationship.[30] This does not have to be reciprocal. I took on a duty to provide for my dog when I adopted it, and the dog had no say in the matter. The same could be said for my parents and their voluntary decision to enter into a relationship with me. It gets more difficult to determine the obligation I have to my parents. The voluntarist objection points to these sorts of relationships as a problem. I bring this

[29] Diane Jeske and Richard Fumerton, "Relatives and Relativism," Philosophical Studies 87, no. 2 (1997): 143.
[30] Samuel Scheffler, "Relationships and Responsibilities," Philosophy and Public Affairs 26, no. 3 (1997): 191.

up because, like my pet dog's relationship with me, the Earth did not choose to enter into a relationship with humans. Nor did we decide to be born on this planet. I will apply Diane Jeske's explanation of a special obligation to family members we did not choose to the Cosmic Perspective Problem, as it suggests why we might have a special obligation to the Earth.

Jeske holds that there is nothing special about familial relationships as biological or circumstantial relationships that ground special obligations, but we have them nonetheless. The reason is that "familial relationships are often relationships of intimacy, and intimate relationships, whether between family members or others, generate obligations."[31] Intimacy cannot be established in a discrete act. By adopting deep ecology, seeing the entire world as intrinsically valuable, we can see how we have had expectations of the Earth and it has delivered; we have planted seeds and the Earth produces crops. The problem with this line of thought is that it ascribes moral responsibility to the Earth just because it has moral worth. Once again, the Earth had no say in our relationship and, as a whole, lacks autonomy.

Jeske's account will only take us so far, as she requires that all parties of an intimate relationship (or surely any relationship) are autonomous.[32] This cannot be said for the Earth in our relationship, and it cannot be said of us until we have the option to leave it. Nevertheless, we as a people have interacted with the Earth, tilling the ground, cultivating crops, and so on. We cannot say we are indifferent to it like we might be in relation to an exoplanet. So, on some weak conception of special relationships, ours with the Earth might qualify. If we can accept a special obligation in a meta sense, we can interpret our responsibility to maximize biodiversity as normatively consequentialist in each individual interaction. Jeske makes an interesting point, saying that "it is not always morally permissible to abandon people with whom one has a history

[31] Diane Jeske, "Families, Friends, and Special Obligations," *Canadian Journal of Philosophy* 28, no. 4 (1998): 554.
[32] Jeske 544.

of intimacy and caring."[33] If we see the Earth as it is today as one that has adapted to our shepherding influence, we might owe it; we would thus have good reason to be partial to it. This mostly assumes that our relationship with the Earth has been one of mutual protection. It seems that we would owe it even more so if what we have done to the Earth is mostly harm it. This brings us to the concept of justice.

Justice

I do not want to dwell too long on justice. If every living thing matters morally, every living thing can make a claim on us with regards to its interests. I have been referring to the agents of our duty to the Earth without specifically enumerating them, but I suppose I mean humanity as a whole, now and going forward. That said, it is a controversial statement that I might be responsible for the wrongdoing of my ancestors. This is the Earth we inherited, but we continue to contribute to its degradation. If it even makes sense to say that it is damaged, then the type of justice we must seek out is rectification.

Rectification

A lot of work has been done on justice and rectification in general that would suggest how we can restore our relationship with the Earth; since we cannot return to the Ice Age world, we might be able to follow a model of reparations. The study of restoration ecology suggests that it would be possible to right many of what we perceive as wrongs: oceans, global mean temperature, deforestation, etc. As for what we would be restoring the world to, Margaret Walker offers a different way to look at restorative justice in general:

[33] Jeske 554.

> The terminology of 'restoration' is sometimes criticized because it implies a return to a condition of relationship that either did not exist or was unacceptable. I propose that we understand "restoration" in all contexts as normative: "restoration" refers to repairs that move relationships in the direction of becoming morally adequate, without assuming a morally adequate status quo ante.[34]

This indicates that there might be a way to arrive at justice with the Earth. Walker's point is well taken in its application: we do not need to return the Earth to the way it was before humans existed. For me, though the issue remains with deciding what the Earth is supposed to be like. I will conclude this section, having offered special relationships and justice as grounds for our duty to the Earth, and I will move on to consider this remaining problem for nonanthropocentrists going forward.

IV. What It Means to Save the Earth

Even if my solution helps nonanthropocentrists escape the Cosmic Perspective Problem, more fundamental issues remain unresolved. Two ideas are more crucial to the success of nonanthropocentrism, whether or not we are alone in the universe: in the statement "we must save the Earth," what do we mean by "save," and what do we mean by "Earth"? My source literature on proximity revolved around the positive duty to rescue. If by 'Earth' we mean a planet that will always thrive in one way or another, there might not be anything to rescue or save. Perhaps we mean the Earth as the sum of all the biodiversity it contains currently. If we are cultivating a relationship with the Earth by fulfilling our obligations to it, this might only be to the extent that we promote biodiversity by some unspecified means. If we must rectify our

[34] Margaret Urban Walker, "Restorative Justice and Reparations," *Journal of Social Philosophy*, 37 (2006): 24. 384.

wrongs in service of justice, saving the Earth might mean returning it to its pre-Anthropocene state, whatever that means.

As an aside, again, for anthropocentrists, I think they would have an easier time: if we say, "we must save the Earth," we mean the obligation to maintain what is instrumentally valuable to us (we who are intrinsically valuable). That said, apart from some additional, perhaps religious, obligation to this planet in particular, this is only a contingent obligation for anthropocentrists. When presented with a habitable planet and a spaceship big enough for all persons, the anthropocentrist has even less reason to stay than the cosmically-aware nonanthropocentrist: not only is there infinite biodiversity, it (for the most part) has no moral status. I do not know if we could identify a special obligation or concept of justice for that which is only instrumentally valuable to us.

Returning to the nonanthropocentrist, it seems that Callicot foresaw these problems when he laid out his criteria for nonanthropocentrism, which I will include here and refer back to. It suggests what he means by "save the Earth":

> An adequate value theory for nonanthropocentric environmental ethics must provide for the intrinsic value of both individual organisms and a hierarchy of superorganismic entities—populations, species, biocoenoses, biomes, and the biosphere. It should provide differential intrinsic value for wild and domestic organisms and species. It must be conceptually concordant with modern evolutionary and ecological biology. And it must provide for the intrinsic value of our present ecosystem, its component parts and complement of species, not equal value for any ecosystem.[35]

[35] Callicott 304.

That last line is my focus. Why should we care in particular about our present ecosystem (or biosphere, the sum of all the ecosystems)? Why should we care about its component parts? These are what I refer to when I mention the Holocene and biodiversity, respectively. Before I do that, I want to take a moment to give an example of how these concepts permeate our enviro-political culture.

Lately, I have seen more conversation online about implicit human chauvinism as a reaction to observations following the onset of the global coronavirus crisis. Reports show a resurgence of animal life and cleaner air and water where shelter-in-place orders have limited human activity. The discussion often seems to be driven by curiosity for what the world might look like without us than by the desire for evidence of the ethical faults of anthropocentrism. Photos of Venice, Italy in the midst of its shutdown show cleaner water in the canals. Similar photos show how "animals were bouncing back, running free in a humanless world," including some that were doctored or paired with misleading captions, the flavor of which was often something like "we are the virus," or "nature just hit the reset button on us."[36] Feeling this way is not exclusive to nonanthropocentrists, but feeling this way assumes that there is a way the Earth ought to be.

If the Earth-as-it-ought-to-be is not sufficiently one that is suitable for human persons, what is the version we should aim for? From animal rights to landscape design, we have a pervasive sense that there is a "natural" state of the world and that "natural" is good. This might be because the natural state of things assumes the flourishing of lifeforms. From what I ascertain, "flourishing" is meeting one's evolution-enabled lifetime potential within a lifetime, but it is not

[36] "Fake animal news abounds on social media as coronavirus upends life." National Geographic. https://www.nationalgeographic.com/animals/2020/03/coronavirus-pandemic-fake-animal-viral-social-media-posts/

clear to me how evolution correlates with what is good or true in the moral realm. This brings us to the title question of a book called *What's So Good about Biodiversity?*.[37] It is difficult to see what the basis is for saying that the Earth as it was 80 million years ago was less flourishing than the Earth as it was 80,000 years ago, or even 8,000 years ago.

Biodiversity

Even within our biospheric moment, we seem to have an idea of how life ought to flourish. The most robust area of environmental ethics is animal rights, and it is within the context of animals that we see most of the development for the nonanthropocentric perspective; the work of Peter Singer is one of the best-known examples. Animal rights is in the news lately with the release of an immensely popular documentary about tigers and other exotic animals living outside their natural habitats in private zoos and sanctuaries. The consensus among animal rights advocates is that the best scenario for these types of animals is a life in their natural habitat, free from human intervention. If the reason is that animals in captivity suffer by being in captivity, it tracks with the Singer approach and is potentially verifiable. But suppose that animals demonstrate less suffering in certain types of captivity and human care, out of reach from any predators or the risk of starvation, not forced to hunt or hide but still able to grow. This counterargument is particularly compelling when such animals are on the verge of extinction. If we could be sure that irrigating and growing crops in Middle Eastern deserts would not have any unintended environmental consequences, I do not see an ethical issue with moving plants out of their natural habitat. Nevertheless, the feeling persists that animals (and maybe plants) are better off living as they were (by God or evolution) intended. I think it is worth interrogating the

[37] Don Maier, *What's So Good About Biodiversity?: A Call for Better Reasoning about Nature's Value*. Springer (2012).

teleology that nonanthropocentric or nonreligious environmentalists might hold, but that is a topic for another paper.

The Holocene

Callicott identified a similar problem for nonanthropocentrists but offered no solution: if we resist the Planetary Perspective, we are guilty of temporal parochialism.[38] Our current geological epoch is the Holocene; more controversially, we also exist in the Anthropocene, a division of the epoch characterized by anthropogenic climate change.[39] I reference the Holocene more for its utility as a period of time than its geological significance, but a different paper on nonanthropocentrism might be more interested in the Earth from the land's perspective, perhaps citing Aldo Leopold's soil-inclusive "Land Ethic."[40] Anyway, my assumption is that if we asked most people, the sort of ideal Earth they have in mind is like the one we had just before the Industrial Revolution, perhaps right before the global population exploded to exceed one billion. This Earth was relatively cleaner and had seen far fewer human-attributed extinctions. Then again, this might not go back far enough: the dodo bird went extinct in the 1660s and new research suggests that humans actually caused the extinction of the woolly mammoths 10,000 years ago.[41] But going back that far, the Ice Age Earth is unrecognizable. I do not think this is the ideal Earth we want, nonanthropocentric perspectives notwithstanding. We want the Earth more or less as we recognize it, to prevent any further extinctions, or, more precisely, to prevent

[38] Callicott 303.
[39] Even stratigraphy is subject to environmental politics, see Robinson Meyer, "Geology's Timekeepers are Feuding," *The Atlantic* (2018). https://www.theatlantic.com/science/archive/2018/07/anthropocene-holocene-geology-drama/565628/
[40] Aldo Leopold, "The Land Ethic" in *A Sand County Almanac*. Oxford University Press (1949).
[41] Lewis J. Bartlett et al, "Robustness Despite Uncertainty," *Ecography* 39, no. 2 (2015): 152-161.

causing further extinctions.[42] As for reasons why, it remains unclear to me how we decide what sort of Earth is most choice-worthy.

It is tempting to use the contingency cop-out that we tried with the Cosmic Perspective Problem: the Earth-as-it-is now is the only Earth that we can affect, so we only need to consider today's Earth. Unfortunately, this corollary does not hold up. The problem is that environmentalists agree that the Earth is *not* as it should be, and they maintain that we did change and can continue to change it, for better or for worse. Without assuming a purpose for the Earth, our duty is a moving target. Why is the Earth 200 years ago better than the Earth as it is projected to be 200 years from now? On a very broad, human-indifferent scale, the Earth is resilient; on that same broad scale, it is true that "life finds a way." We still need reasons to say that we want to limit or promote our actions in accordance with some ideal Earth.

If it is fair to assume the burden of our ancestors and their hand in the you-break-it-you-buy-it rectification scheme, perhaps we should try to return the Earth to its pre-industrial, dodo bird-abundant glory. We can also reject consequentialism and the requirement that we regard every life as equal, so we can value the Monarch butterfly of today over the adapted Monarch butterfly of tomorrow, the one we might have without intervening on climate change.

There is also the matter of time according to the theory of special relativity. I have mentioned that cosmologists think that the universe will continue to produce Earth-like planets. It might be the case that thinking about the Planetary Perspective and the Cosmic Perspective temporally makes no sense. It might be that we are part of a simultaneous existence with everything in the Universe. It might be that we should expand the Cosmic Perspective to the

[42] To be fair, we cannot help what we do not know, and it seems that we have only formally identified about 1.5 million of the potentially 6 billion species on Earth, so many of which must come and go without our knowledge. See Brendan B. Larsen et al, "Inordinate Fondness Multiplied and Redistributed: the Number of Species on Earth and the New Pie of Life," *The Quarterly Review of Biology* 92, no. 3 (2017): 229-265.

Multiverse Perspective, where there are not only infinite Earth-like planets but infinite Earths. I do not have much more to say about this because I do not understand it.

V. Conclusion

I find myself supporting a controversial idea as I conclude; Bryan Norton's convergence hypothesis predicts that nonanthropocentrists and anthropocentrists will tend to end up with the same conclusions for how we ought to protect the environment.[43] I think this is probably true, and I mostly think this because most of environmental philosophy seems to be reverse-engineered. My goal was to find a way for nonanthropocentrists to end up in the same place as they have always been, rightly advocating for the environment. Just because they adopt a deontological response to the Cosmic Perspective Problem does not mean that they should stop using the cost-benefit language that motivates policy. I remain unconvinced though, of the nonanthropocentrist goal in the grand scheme of things: what is the Earth they want to save?

[43] Bryan G. Norton, *Toward Unity Among Environmentalists*. Oxford University Press (1991).