

Restitutive Restoration: New Motivations for Ecological Restoration

John Basl

Abstract: Our environmental wrongdoings result in a moral debt that requires restitution. One component of restitution is reparative and another is remediative. The remediative component requires that we remediate our characters in ways that alter or eliminate the character traits that tend to lead, in their expression, to environmental wrongdoing. This paper offers an account of *restitutive restoration*, a way of engaging in ecological restoration that helps to meet the remediative requirement that accompanies environmental wrongdoing. This account of restoration provides a new motivation and justification for engaging in restorative practices besides the standard pragmatist justification and motivations.

Introduction

This paper begins from the premise that we commit a wrong, in many instances, by degrading nature, and that such wrongdoings result in a moral debt. Anthropogenic, environmental degradation therefore requires restitution. The central claim defended in this paper is that *restitutive restoration* provides new grounds for engaging in restorative practices. In what follows I explain and defend this account of *restitutive restoration*.

After a brief synopsis of the traditional restoration debate and the current trend in restoration philosophy, I define and explicate restitutive restoration (section 2). The remediative requirements of restitution must be distinguished from the reparative requirements. Restitutive restoration is the attempt to meet the remediative requirements of restitution. I then defend this claim from some initial objections (section 3). I also argue that

the account of restitutive restoration I endorse is not committed to any particular view of which entities have moral status. This discussion paves the way for an explanation of what restitution in the restorative context requires (section 4): remediation of those dispositions that lead to consumptive practices. Finally, (section 5) I argue that restoration, done in the right way, is an appropriate means for remediating character in the requisite ways.

1. The Traditional Restoration Debate

The traditional restoration debate can be traced to Robert Elliot's "Faking Nature".¹ Elliot's concern is that promises of environmental restoration are being used (or will be used) as an excuse to degrade the natural environment. Such promises are based on the restoration thesis; the thesis that environmental restoration, insofar as it replicates the pre-degradation conditions of the environmental space in question, fully recreates, or replaces, any value lost due to degradation. He challenges this thesis by comparing a restored environment to an art forgery. The value of a piece of art derives, in part, from its particular history or origin; in particular the fact that it was created by a certain figure, say Bernini. A perfect forgery of a Bernini will lack some of the value of an actual Bernini; namely the value that it has in virtue of being sculpted by Bernini. Similarly, part of the value of a natural area is derived, claims Elliot, from a fact about its origin; namely that its origin is non-anthropogenic.² Any restoration, even a perfect replica, will not share this origin with the pre-degradation environmental space. As such, all things being equal, a perfect replica of a non-anthropogenic environmental space will not replace or replicate all the values attached to an environmental space before it is degraded.

Elliot's arguments have been taken to support various conclusions about restoration and the restoration thesis. One such conclusion is that any inference from the fact that a

restoration is a perfect replica of pre-degradation conditions to the claim that the restored area is of equal value to the pre-degraded area is invalid because there are values besides those associated with the tangible qualities of the restored area. Another, rather moderate conclusion, we might draw from Elliott's arguments is just that a perfect replica of an environmental space lacks an origin that would add to its value and is therefore less valuable, all other things being equal. Those who endorse the restoration thesis, and proceed as if all the value of the natural environment can be restored via perfect replication fail to appropriately appreciate an important source of value. I call this conclusion moderate because it is compatible with the claim that restorations can result in environmental spaces with equal or greater value than the pre-degradation space. For example, assuming that providing an ecosystem for rare or endangered species contributes to the value of an environmental space, an environmental replica of some previous area might have more value than the replaced system in virtue of the fact that some species that inhabits the restored area is rare, but wasn't when the original space was degraded. It is possible that in such a circumstance, that the loss in origin value is made up for by the value added by housing what is, at the time of restoration, members of a rare species.³

A stronger conclusion that some have taken Elliott's arguments to support is that all attempts at restoration result in fakes or forgeries. On this understanding of Elliott, restorative practice is doomed, for restoration is impossible. I would suggest that this reading of Elliott is overly strong. This is mainly because Elliott allows that with respect to art genuine restoration is possible; not every attempt to return a degraded painting to pre-degradation conditions results in a fake or even something of less value than the original. Insofar as Elliott is endorsing the

analogy between works of art and ecological spaces, we should understand his view as allowing that some restorations don't result in fakes and preserve origin value. This is consistent with other views on which certain restorations done on ecological spaces that are not radically degraded are value preserving while others done on radically degraded spaces are not.⁴

Whether or not Elliot's arguments support the stronger conclusion stated above, his work has served as an impetus for other views that, in the spirit of this stronger conclusion, are highly critical of restorative practice. Eric Katz, the main proponent of such views, has argued that all instances of restoration express an anthropocentric worldview, and are thereby acts of domination.⁵ Not only is the result of restoration an artifact, but because of the anthropocentric nature of artifacts, the practice expresses, necessarily, an (inappropriate) attitude of domination over nature. As such, restoration as a general environmental policy is to be avoided.⁶

There have been a variety of criticisms of both the moderate and strong conclusions. Some critics deny the strong nature-culture dualism that arguments like the above rely upon (Higgs 2003; Light 2000, 2003).^{7, 8} An appropriate understanding of the relationship between humans and nature will not rule out the possibility that some human interactions with nature will count as natural. Insofar as some of these interactions can result in restorations, these restorations won't be artifactual as opposed to natural but rather, will be natural artifacts (or natural in one sense; and artifacts in another sense that is not opposed to natural), and the value that the restored area has in virtue of being natural may not be lost.

Against Katz, it has been argued that, despite the fact that the results of restoration are, in some sense, artifactual this need not express an anthropocentric worldview, and therefore,

restoration need not be an activity of domination.⁹ On the contrary, it has been proposed that restoration can serve as a foundation for building a healthy relationship with the natural environment by which we come to appreciate non-anthropocentric values.^{10, 11}

In the same vein, arguments have been given that restoration, done correctly, is a value-adding activity that can result in environmental spaces with more value than the pre-degraded space. Not only does restoration serve to build healthy human-nature relationships, but it creates value by bringing together communities, giving people a sense of place in the natural world, and creating new cultural rituals.^{12, 13, 14}

The account of restoration I defend in this paper is supportive of these notions of the value of restoration and think that restoration can be value adding in the ways described above. However, I believe there is a complementary justification for restoration in addition to the fact that restoration can be value adding, or that, in general, restoration is good environmental practice, and so therefore, should be endorsed (this last kind of consideration is a general feature of the environmental pragmatism endorsed by Light.¹⁵

2. Restitutive Restoration

Restitution is the act of making right in response to making wrong. Often, when a wrong has been committed we recognize that restitution is due. If I trample Jane's flowers while running through her yard, I ought to compensate her for her loss; this compensation is a form of restitution. It is a common and significant feature of our ethical experience/orientation that wrongdoings, at least sometimes, require restitution.

We can further distinguish, at least, two distinct components of this requirement of restitution. The first of these components, what I will call the *reparative requirement*, is closely related to repayment. It is the requirement that we repay or compensate the entity whom we have wronged. Let us call this entity the object of restitution. In the example above, Jane is the object of restitution and I might pay for the seeds and help Jane replant her garden, and, in doing so, I meet the reparative requirement of restitution.

It might seem that the reparative requirement is all there is to restitution. However, imagine that instead of trampling Jane's garden, I break into her garage and borrow her car. Suppose also that I do this on a monthly basis. Even if I return the car each time, clean it, and pay for gas and maintenance, I will not have made good on the requirement of restitution. Repayment in this situation is not adequate. The wrongdoing in this circumstance is not merely a feature of the individual episodes of flower trampling, but a feature of the agent's dispositions, habits, and outlook regarding Jane and her property.

Given that the wrong arises not merely from a given episode but from something deeper within the agent, repayment is not adequate for restitution. Rather, what is required in this case is that steps be taken to remediate the character dispositions that led to occurrences of the wrong in question. Not only do I need to compensate Jane for the monthly violations of her privacy and property rights, but I also need to take steps to correct the dispositions, e.g., lack of respect, indifference, etc., that result in my behavior. This seems, in part, to be the reasoning behind sentencing people to take anger management or alcohol rehabilitation classes. While there is no doubt a preventative justification for such sentences, it seems also to be a requirement of making right, i.e. restitution. A further case may help to make the point:

Andy the Angry Pacifist: Andy is a committed pacifist and has never in his life committed an act of physical violence. Everyone in his community is confident that he would never physically hurt them. However, Andy is prone to angry outbursts of yelling which are often unprovoked and uncalled for. The members of the community, knowing Andy's commitment to pacifism, are not threatened by these outbursts. However, a new judge from outside the community has recently entered the employment of the community. While grocery shopping, the judge witnesses one of Andy's infamous outbursts from the back of the store. The judge approaches Andy and requires him to appear in court the very next day on a charge of disorderly conduct. Andy appears in court along with several members of the community, including the clerk who was the subject of Andy's outburst. Andy apologizes to the clerk, and members of the community explain to the judge Andy's past behavior. The clerk admits that he was not worried by Andy's outburst. Despite this, Andy is sentenced to anger management class.

The judge's sentence seems an appropriate one, despite the fact that the subject of the wrongdoing asked for no repayment and that it isn't clear what repayment would be beyond an apology. And, the appropriateness of the sentence is not best explained in terms of its preventative effect.

To see this, we might amend the thought experiment such that Andy was planning to move to a secluded island and become a hermit a week before he is sentenced. Even knowing this, the judge's sentence would be appropriate. But, if it is appropriate, it isn't because it will

prevent people from suffering Andy's outbursts. The explanation for the appropriateness of the sentence is that restitution, not merely prevention, requires that Andy take steps remediate his character in ways that avoid future outbursts.¹⁶ I call this requirement of restitution the *remediative requirement*.

The distinction between remediative and reparative restitution made, we are almost in a position to define *restitutive restoration*. Before doing so, it will be necessary to say a little bit about what counts as an ecological restoration. I take it that, at a minimum, an act of restoration must remove the traces of degradation. In many cases, successful restoration will require that we return a degraded area into a flourishing environmental space. For the purposes of this paper I will leave it open what it means for an environmental space to flourish. This will allow us to avoid certain issues in restoration philosophy such as the role of history in determining reference points for restoration projects. While this definition of restoration is rather broad, and somewhat vague, it can be considered a benefit of the restitutive account of restoration that it is consistent with such a broad understanding of what constitutes the product of successful environmental restoration.

Restitutive restoration is restoration done in a way that meets, or helps to meet, the remediative requirements of restitution. The account of restitutive restoration to be provided does not require that we meet any reparative requirements of restitution. As I am using it, restitutive restoration does not and need not aim at reparation. This is partly due to skepticism about who is owed reparations and partly because, often, many of the benefits of restoration may be had only after repayment is impossible (several generations later).¹⁷

Being required to make environmental restitution is a result of someone's participation in practices which result in environmental degradation. So, an act of restoration will be restitutive if and only if:

1. The person owes restitution, that has a remediative component, for environmental degradation, and
2. The act of restoration satisfies, or helps to satisfy, the remediative component.

3. The Object of Restitution

In what follows, I assume that environmental restoration is possible, and that, much anthropogenic, environmental degradation is wrong and requires restitution. The focus of the arguments to follow is to identify what remediation requires given the nature of our wrongdoing, and to show that restoration is an appropriate means to remediation. First, I provide a brief discussion of issues of moral status which will help to answer a potential objection to my view.

Many will wonder, "If restoration is to be restitutive, there must be someone or something that has been wronged. So, who or what is the object of wrongdoing?" The question of *who or what* is due restitution for the environmental wrongdoings that most of us have contributed to is an open question. It will depend on who is wronged by environmental degradation; which, in turn, depends on what kinds of beings have (direct) moral status. Views on moral status range from those that assign moral status only to humans (Anthropocentrism),^{18, 19} to all beings at a certain level of consciousness

(Sentientism/Conscientism),^{20, 21, 22} to all living things (Biocentrism),^{23, 24, 25} and to ecosystems (and species) themselves (Holism).^{26, 27} Proponents of each of these views will give different answers to the question of who is wronged by environmental degradation; which will, in turn, give different answer to the question of who is due restitution. An Anthropocentrist will answer that humans and only humans are wronged by environmental degradation (either because they live in an area where local degradation harms them directly, or because environmental degradation alters the planet in ways that harm them). A Sentientist will answer that humans as well as sentient non-human animals are wronged by environmental degradation. And so on and so forth.

While the literature on moral status is full of important, substantive debates, there is a general consensus among proponents of all these views, at least within the arena of environmental ethics, that excessive, anthropogenic environmental degradation is *prima facie* wrong (indeed, it seems to be a feature of the debate about anthropocentrism that an adequate environmental ethic must, at least, be able to ground the wrongness of anthropogenic, environmental degradation.²⁸ While the question of moral status is an open one, the account of restitutive restoration on offer is compatible with any of the most plausible answers. On any of these answers, *someone* or *something* is owed restitution for our environmental wrongdoings, for the account of restitutive restoration nothing more is required. However the debates on moral status turn out, the account of restitutive restoration defended will still be applicable

It might be objected that restitution requires that we are able to identify the subject or subjects to whom we owe restitution; otherwise we would not be able to determine the

requirements of restitution. In response to this objection, I want to once again distinguish between the remediative and reparative components of restitution. It might well be that fulfilling the reparative requirement requires that we identify the objects of restitution. However, it is not a necessary condition for fulfilling the remediative requirement that we identify the object of restitution. The following thought experiment should help to underscore this point.

The Artful Dodger: A now prosperous boy, Jack, who is trained as a pickpocket, successfully steals dozens of wallets per day. As it happens, Jack happens to steal only wallets that lack any identification of the previous owner. One day Jack has a change of heart and decides to give up the pickpocketing business.

Given the circumstances, Jack is unlikely to be able to identify, and therefore repay, those from whom he stole. However, it seems entirely possible for Jack to realize the error of his ways and to work in ways that alter his character such that he is more respectful of other people's property and of the laws in general. But, it is hard to see what more the remediative requirement of restitution could demand. So, it seems that the remediative requirements can be fulfilled without identifying the object of restitution and that by identifying the wrongdoing and the dispositions that led to it we can also identify what remediation requires. Furthermore, the remediative requirement can be met independently of the reparative requirement (which in this case is not met at all).

4. What Restitution Requires

In order to ground my account of restoration as restitution, it will be necessary to:

- A. Determine what restitution requires in the environmental context
- B. Show that restoration is an appropriate means to meeting this requirement.

In this section I will take up A and in the next section I will take up B.

The cases of the angry pacifist and the artful dodger suggest a general method for determining what restitution requires. First, we identify a wrong that has been committed. Depending on the nature of the wrong, we make a determination as to whether restitution is required and a further determination as to whether there is a remediative component to restitution. The feature present in both cases that, I suggest, results in our determination that restitution is required and that it has a remediative component, is that in each case the wrong committed is not an anomaly, but rather the wrongdoing is intimately tied to the character of the wrongdoer. The contrast between trammeling Jane's flower garden and the repeated theft of her car further illustrates this point. The trammeling of Jane's flower garden is described as if it were a singular event. The description of my car thievery was a recurring event. I submit that under the first description restitution has only a reparative requirement while under the second it has a both a reparative and a remediative requirement. Restitution has a remediative requirement when the wrongdoings under consideration stem from improper character dispositions of the wrongdoer and those improper dispositions, in the absence of contingencies that would rule out possibility of future wrongdoing, are likely to lead to future occurrences of similar wrongdoing.²⁹

After determining that restitution has a remediative requirement, we may determine how to satisfy that requirement by identifying the dispositions that led to the wrongdoing. In

our cases above these may include disrespect, intemperance, wrathfulness, etc. I do not here wish to defend an account of what makes a character trait a vice neither do I think my account is necessarily committed to a particularly strong form of virtue ethics (despite all the talk of dispositions) since most normative theories will include a set of virtues and vices. The account on offer doesn't require that virtues and vices be the primary concept in an ethical theory, only that there are dispositions, habits, etc. which will tend to lead to actions that are right (virtues) or wrong (vices). I take it as a given that we can identify these traits which tend to lead to immoral behavior and it is in this identification that we can determine what remediation requires; the correction of those traits that led to immoral behavior and may continue to do so.

To wrap up, determining what remediation requires involves:

- I. Identifying a wrongdoing
- II. Classifying that wrongdoing as a result of improper character dispositions
(as opposed to classifying it as an anomalous wrongdoing)
- III. Identifying those character dispositions

Above, I have already identified the wrongdoing as environmental degradation. In particular the wrongdoings I have in mind are those practices that we, as members of industrial nations, participate in that lead to environmental degradation.³⁰ Many of these practices fall under the heading of overly-consumptive practices. While there are other practices that lead to environmental degradation, the overly-consumptive practices and the character dispositions that lend to these practices will be my focus.

For the purposes of this paper we need not identify, in particular, all the dispositions that lead to environmental degradation.³¹ Instead it will be enough to note that there is a class of dispositions which lead to overly-consumptive behavior. People who embody these dispositions (e.g., greed, gluttony, excessiveness) are likely to engage in practices (e.g., purchasing luxury items excessively, consistently eating exotic foods) that consume resources in ways that contribute to global environmental degradation (global warming, acid rain) as well as local ones (pollution due to industrial agriculture).³² Hence, we have identified a class of character dispositions that lead to environmental degradation. This satisfies condition III above.

5. Restoration is an Appropriate Means to Restitution

Restoration will be an appropriate means to restitution if, and only if:

- i. Restoration can serve to remediate at least some of the character dispositions that result in consumptive practices (the fixes-it condition).
- ii. Restoration does not instill in us or reinforce character dispositions that are antithetical to meeting the requirements of restitution (the doesn't-further-it condition).

The appropriateness of these conditions is easily seen by reflection on our previous example of Andy the angry pacifist. In the case of Andy, the remediative requirement cannot be met if the means of remediation (anger management) cannot bring about the desired changes in character. Furthermore, it won't do to have the means of Andy's remediation instill or promote dispositions that tend to lead to further inappropriate behavior.

There is a burgeoning literature on the psychology of consumerism that suggests ways of combating consumerist dispositions. Erika Rosenberg suggests that cultivating mindfulness is

a cure for consumerism. Mindfulness, she argues, can be cultivated through education and extended contemplative practice.³³ Another proposed solution is that we rethink our relationships, and change our activities in ways that might cultivate a more appropriate value orientation.^{34, 35} Restoration seems an excellent venue for engaging in these activities which may cultivate anti-consumptive dispositions, which in turn serve to counteract those dispositions which lead to consumption in the first place. I agree with Jordan, Light, and Higgs and others who argue that restoration can offer a place, and a way, to rethink our relationship with nature, educate us about non-consumer values, and give us the opportunity to contemplate and participate in environmental values in a non-consumerist manner.^{36, 37} If restoration really does offer these opportunities, then it satisfies the fixes-it condition.

An important addendum to the above is that to gain these remediative benefits, and therefore to satisfy the remediative requirements of restitution, and to satisfy the doesn't-further-it condition, restoration has to be done in a particular way. Returning to our beloved Andy, it isn't that any anger management class will result in Andy's remediation. In order for anger management to be remediative it must be set up in a way that provides the means for character remediation. Particular acts of restoration will be restitutive insofar as they are arranged in such a way that they are conducive to character remediation. It is beyond the scope of this paper to give the details of what particular acts of restoration are to be like if restoration is to be restitutive, but one form of good restoration in practice (i.e. restoration that is restitutive) may be very similar to the kind of restoration advocated by Higgs.³⁸ For example, good restoration in practice should avoid professionalization and encourage public

participation. After all, if people have no access to restoration, it is unlikely to be a useful tool for remediation and thereby restitution.

I now want to take on the challenge, raised by Katz, that it is impossible to satisfy the doesn't-further-it condition. Recall that Katz claims that acts of restoration express an attitude of domination. Presumably, if we endorse restorative practice as a positive environmental policy, it will then follow from Katz's claim that we will tend to instill or promote this attitude of domination. If so, we should worry that in engaging in restorative practice we can't help but fail to meet the requirements of restitution since we are instilling or promoting an attitude that is conducive to further environmental degradation.

According to Katz the product of any restorative act is an artifact. Artifacts are intimately connected to human nature and are therefore anthropocentric. But, anthropocentrism is an inappropriate value system and therefore fails to appropriately include non-human values.³⁹ So, by engaging in restorative practice, we express an inappropriate value system that sets us above other entities that are of equal value, which Katz takes to be an expression of domination. This is compounded by the fact that we might then go on to value a restored area as if it had the same value as a natural area.⁴⁰

This would be a worry if it were not for the fact that Katz is equivocating between two senses of anthropocentric. When Katz tells us that the products of restoration are anthropocentric, he can, on pain of begging the question, mean only that they are created by humans (the artifact sense). This is surely true, but it does not follow from this that anything created by humans expresses a worldview that values humans above other entities (the worldview sense). It is perfectly consistent that an object be created by humans and that it

promote non-human values and even a worldview that is non-anthropocentric. For example, imagine that we install traps around the borders of some wilderness area that only react to humans. The traps capture humans and remove them from the area. Further, let us say we installed the traps because humans were disrupting the members of the ecological community present in the area. Here, it seems to me, we have an artifact that is intended to promote non-human values.

Of course Katz may reply that this is us expressing an attitude of domination as well; we have decided that some area has value and decided to protect it for our own sake. I grant that this is a possible explanation of why we choose to protect an ecological space, but it need not be the correct explanation in every case. Katz of course will want to avoid the claim that it is necessary that every artifact expresses an attitude of domination (e.g., the creation of a splint to mend a wounded bird's broken wing), but to do so he must admit that some artifacts can be created for the sake of non-humans. In doing so, he opens the way for ecological restoration that is non-anthropocentric (in the worldview sense) and therefore that ecological restoration doesn't necessarily express an attitude of domination.

In answering Katz's objection we have removed an obstacle to the claim that it is possible that restoration can satisfy the doesn't-further-it condition. Unfortunately, removing this roadblock is not enough to claim victory. Nor do I pretend to have a general argument that restoration, done correctly, satisfies the doesn't-further-it condition. Whether or not restoration satisfies this condition is largely an empirical matter and one for which there is little data to appeal to. Perhaps the best we can appeal to, for now, are lives that seem to exemplify this fact; those who claim to have come to appropriately value nature by engaging with it. At

least on the face of it, it doesn't seem as if anything in the concept or practice of restoration necessitates that it instill, or promote in us dispositions which are antithetical to restitution. Coupled with the previous discussion of the possibility that restoration can meet the fixes-it condition, we arrive at the conclusion that restoration can serve as an appropriate means to restitution.

6. Conclusion

In some ways the above serves only as a sketch for an account of restitutive restoration. What it provides is an account of restoration that helps to meet the remediative requirements of restitution and even here I have focused only on individual agents, where the nature of environmental problems requires that the account be extended to collectives and institutions.

Neither does this account provide an account of how the reparative requirement of restitution might be met by restoration. This is partly because saying something to this effect requires a particular view on moral status and answering the hard question of how to make reparations to things that are now gone (though perhaps accounts of reparations in the human domain, e.g., slavery cases, can serve to answer this question). I have also not provided, or attempted to provide, a full account of good restorative practice. Doing so would consist of a substantive account of how to go about doing restoration in ways that satisfy the fixes-it condition.

What is promising in this account is that it grounds restoration in a way that makes sense of our obligations of restitution, and provides a mechanism by which to determine good

restorative practices. It can serve as a way to strengthen the motivation for doing restoration and incorporate those restorative practices endorsed by other environmental philosophers.

NOTES

¹ Robert Elliot, "Faking Nature," *Inquiry* 25 (1982): pp. 81-93.

² Ibid.

³ The environmental space might also come to have more value by adding components, for example, biodiversity, that are valuable after restoration is complete. In this scenario, the replica isn't more valuable but, by addition the environmental space comes to have more value than the pre-degradation space.

⁴ Holmes Rolston III, "Restoration," in William Throop (ed.), *Environmental Restoration* (Humanity Books, 2000).

⁵ Eric Katz, "The Big Lie: Human Restoration of Nature," *Research in Philosophy and Technology* 12 (1992): 231-41.

⁶ This is not to say that a particular restoration is not justifiable or that environmental degradation is never justifiable. Rather, the worry is that restoration, as opposed to preservation or conservation, will govern our decisions concerning natural areas.

⁷ Andrew Light, "Restoration or Domination? A Reply to Katz," in William Throop (ed.), *Environmental Restoration* (Humanity Books, 2000).

⁸ Eric Higgs, *Nature by Design* (Cambridge, Mass: MIT Press, 2003).

⁹ Light, "Restoration or Domination."

¹⁰ Ibid

¹¹ William Jordan III, *The Sunflower Forest: Ecological Restoration and the New Communion with Nature* (University of California Press, 2003).

¹² Andrew Light and Eric Higgs, "The Politics of Ecological Restoration," *Environmental Ethics* 18 (1996): 227-45.

¹³ Higgs, *Nature by Design*.

¹⁴ Andrew Light, "Ecological Citizenship," in R. Platt (ed.), *The Human Metropolis: People and Nature in the 21st Century City* (Amherst, Mass: University of Massachusetts Press, 2005).

¹⁵ Andrew Light, "Faking Nature Revisited," in D. Michelfelder and B. Wilcox (eds.), *The Beauty Around Us* (Albany, New York: SUNY Press, 2003).

¹⁶ For those readers who are still unconvinced that the justification for the sentence is not preventative, it might be conceded that the sentence is best justified as a preventative measure or that in many cases the justification will be, in part, preventative. However, it seems that prevention can plausibly be seen as part of restitution; i.e., making right requires preventing future occurrences. Even on this gloss, there will be a remediative component to restitution in that part of prevention involves remediation.

¹⁷ None of this is to say that there may not be a reparative requirement of restitution. In cases of ecological emergencies, such as an oil spill, it might be that there is a reparative requirement. It will take some further work to determine the relationship between the reparative requirements and the restitutive requirements of restitution within the practice of restoration.

I have defined restitutive restoration solely in terms of the remediative requirement, in part, to make obvious the connection between remediation and restitution and to emphasize this relationship in providing a new justification for restorative practice.

¹⁸ William Baxter, *People or Penguins: The Case for Optimal Pollution* (Columbia University Press, 1974).

¹⁹ Bryan G. Norton, "Environmental Ethics and Weak Anthropocentrism," *Environmental Ethics* 6 (1984): 131-48.

²⁰ Peter Singer, *Animal Liberation*, (Paladin, 1977).

²¹ Joel Feinberg, "The Rights of Animals and Unborn Generations," in William Blackstone (ed.), *Philosophy and Environmental Crisis* (Athens: University of Georgia Press, 1974).

²² Tom Regan, *The Case for Animal Rights* (University of California Press, 1983).

²³ Kenneth Goodpaster, "On Being Morally Considerable," *The Journal of Philosophy* 75 (1978): 308-25.

²⁴ Paul Taylor, *Respect for Nature* (Princeton: Princeton university Press, 1989).

²⁵ Gary Varner, *In Nature's Interest* (Oxford: Oxford University Press, 1998).

²⁶ Aldo Leopold, *A Sand County Almanac* (Oxford: Oxford University Press, 1987).

²⁷ Katie McShane, "Ecosystem Health," *Environmental Ethics* 26 (2004): 227-45.

²⁸ Norton, "Weak Anthropocentrism."

²⁹ This description raises a particular epistemic issue. How can we determine whether the dispositions that lead to a wrongdoing are such that they will lead to similar future wrongdoings? It might be that my trammeling of Jane's garden is the first of such trammeling. If this is so, even on that first occasion, restitution would seem to have a remediative component. I do not have any theory about how to determine from a single event whether a wrongdoing is the result of improper character dispositions or not, or if those dispositions are such that they are likely to lead to future occurrences of similar wrongdoing. However, I take it that repeated offenses provide good evidence the dispositions in questions satisfy my conditions. For the most part, environmental wrongdoings are of this kind and so we need not worry about this particular epistemic problem for the purposes of this paper.

³⁰ I choose to focus on members of industrial nations because environmental degradation is often excessive and unnecessary. Degradation in non-industrial nations is often harder to condemn and is arguably not as much a result of inappropriate character dispositions as it is of necessity.

³¹ For a discussion of some of these dispositions see Peter Wenz, "Synergistic Environmental Virtues," in Ronald Sandler and Philip Cafaro (eds.), *Environmental Virtue Ethics* (Rowman & Littlefield Publishers, 2004).

³² Ibid

³³ Erica Rosenberg, "Mindfulness and Consumerism," in Tim Kasser and Allen Kanner (eds.), *Psychology and Consumer Culture* (American Psychological Association Press, 2003).

³⁴ Tim Kasser, *The High Price of Materialism* (Cambridge: MIT Press, 2001).

³⁵ Tim Kasser and Allen Kanner, "Where is the Psychology of Consumerism," in Tim Kasser and Allen Kanner (eds.), *Psychology and Consumer Culture* (American Psychological Association Press, 2003).

³⁶ Jordan III, *Sunflower Forest*.

³⁷ Higgs, *Nature by Design*.

³⁸ Ibid

³⁹ Katz, "The Big Lie."

⁴⁰ Elliot, "Faking Nature."