

Nature Restoration as a Paradigm for the Human Relationship with Nature

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I. Introduction

It has been proposed that nature restoration should be taken as a new environmental paradigm for the human relationship with nature and that this model should supplant the old environmental paradigm of preservation. I think there is much to be learned both positively and negatively from this suggestion. The debate between restoration's proponents and its critics teaches us much about how we should conceive of the human/nature relation. The restoration paradigm presents serious challenges to preservationism and identifies important components of a healthy human relation to nature. But restoration also involves deep confusions. Restorationists are good at diagnosing problems in and criticizing the excesses of preservationism, but their solutions fail to provide for what they show us we need.

Preservation was the reigning 20th century nature-protection paradigm. According to this model, to protect nature we must set aside nature preserves and keep them "untrammeled by man" (U.S. Congress, 1964). For preservationists, nature's key value is its "naturalness" or "wildness," that is, the degree to which it is independent of human influence. According to this paradigm, humans are, by and large, separate from nature and human involvement with nature degrades it.

Nature restoration has become the major competing paradigm for the protection of nature. Given increasing human alteration and degradation of nature, and greater awareness and understanding of these effects, attempts to restore degraded nature have become a key environmental goal. Examples include a controversial but successful restoration of gray wolves to the Greater Yellowstone Ecosystem and an ongoing multi-billion dollar attempt to restore parts of the Everglades. Fire is being returned to—rather than banished from—many fire dependent ecosystem. Dams are being removed for the first time in history, and there is what might be called a national war on exotic species.

The restoration paradigm has been articulated by way of challenges to preservationism. Restorationists claim that preserving nature won't save it; instead we must restore nature if it is to continue. Among other factors, they point to damage to nature caused by global warming as indicating the necessity of restoration for nature protection. Rather than locating nature's value in its lack of humanization (as do preservationists), restorationists see nature's value in its thriving biodiversity. Restorationists stress that humans need not be separate from nature and argue that through restoration we can once again become part of it.

Many thoughtful environmentalists have embraced the restoration paradigm. MacArthur fellow Gary Nabhan has written that:

“The emergence of ecological restoration is . . . the most important environmental development since the first Earth Day. It allows people to participate in healing the wounds left on the earth, acknowledging the human power to create as well as to destroy” (1991, p. 4).

Writer Michael Pollan (2003) claims that “Ecological restoration is one of today’s most constructive, hopeful, and provocative environmental movements,” and he identifies William Jordan III as “its leading visionary.”¹

Philosophers have been among the chief critics of restoration and the restoration paradigm. Robert Elliot (1982, 1997), for example, in his well known paper and book “Faking Nature” argues that restoration can be used to undermine preservation. He argues that if a restored nature is perceived of as good as original nature, then it would be irrational to preserve nature rather than utilize/degrade nature and then restore it. Elliot rejects the “restoration thesis” and argues that a restored nature is not just as good as the original; instead, it is “faking nature.”² Like a replicated artwork, it is not as valuable as the original for it lacks the type of genesis that gave the original so much of its value. A restored nature is a product of human culture and technology rather than a product of natural history.

Another philosopher has argued that the restoration paradigm amounts to a paternalistic domination of nature. Stanley Kane argues that: “By holding that humans are the lords of creation, restorationist metaphysics tolerates no enclaves anywhere kept free of human domination and control” (1994, p. 83). The restorationist manipulates and control natures for its own good, deciding, for example, when nature will burn and what plants and animals are to be allowed.

Philosopher Eric Katz, the dean of the anti-restorationists, sees restoration as “The Big Lie.”³

“A ‘restored’ nature is an artifact created to meet human satisfactions and interests . . . it is an unrecognized manifestation of the insidious dream of the human domination of nature. . . . Humanity will demonstrate its mastery of nature by ‘restoring’ and repairing the degraded ecosystems of the biosphere” (1992, p. 95).

¹ I focus on Jordan’s account of restoration in 1986, 1994, 2000, 2002, and, 2003.

² Elliot has moderated his anti-restoration views significantly in his more recent book (Elliot, 1997), arguing only that a restored nature lacks a particular (on his view very important) component of natural value (namely, a nonhuman genesis) and not that it lacks all natural value.

³ I focus on Katz’s views of restoration in 1992, 2000, and 2002.

Katz claims that restored “nature” is an anthropocentric human artifact. When we restore, he says, “we are creating artifactual systems—or at best, hybrid systems of natural entities and artifacts” (2000, p. 39) that resemble nature, but they are not authentic nature. Rather than healing nature and making it whole and healthy again, restoration is “putting a piece of furniture over the stain in the carpet” (1992, p. 106).⁴

The ambivalence toward restoration and the restoration paradigm expressed in these remarks is justified: The theory of restoration provides deep insight and equally deep confusion concerning the proper human relationship with nature. I now examine the insights and perils this paradigm offers us.

II. Virtues of the Eco-restoration Paradigm

There is much of value in the practice of restoration and the restoration paradigm. Restoration can help heal nature and it needn't be anthropocentric. By stressing the importance of restoration, we acknowledge the massive damage humans have caused (and continue to cause) nature. Restorationists have helpfully pressed the need for full human participation in nature and have cautioned against the dangers of apartheid-style preservationism. Relatedly, restorationists have tried to correct preservationism's failure in providing a positive vision for human's place in nature. I shall elaborate on each of these points.

Restoration is an important and valuable human activity and it need not be anthropocentric in motive or result. Not only can restoring degraded nature help humans, but restoration has the power to help heal nature and let a degraded piece of nature once again flourish on its own. For example, the restoration of wolves to the Greater Yellowstone Ecosystem is not just good for us (e.g., providing more exciting tourist visits and increased income for park-related businesses), but it also has made the gray wolf species more robust and it arguably has improved the health and integrity of the Yellowstone ecosystem. In many cases, restoration is needed for the sake of nature.

One might think that any thoughtful commentator on restoration would acknowledge this point. After all, even Eric Katz, who stigmatizes restoration as “the big lie,” says he favors restoration:

“Nothing I have said . . . should be taken as an endorsement of actions that . . . injure areas of the natural environment and leave them in a damaged state” (1992, p. 105-106). “I believe that remediation of damaged ecosystems is a better policy than letting the blighted landscape remain as it is” (2002, p. 142).

⁴ There have been many critiques of Katz's views on restoration. For one of the most useful, see Steven Vogel, “The Nature of Artifacts,” *Environmental Ethics* 25,2 (Summer 2003): 149-168.

Ironically, Katz can only endorse *anthropocentric* restoration, that is, restoration projects whose motive and result are for the benefit of humans.⁵ Because restoration creates artifacts (or further artifactualizes ecosystem already affected—and thus for Katz, artifactualized—by humans), from nature’s perspective, the best we can do is to leave degraded nature alone. Thus Katz cannot consistently support restoration for nature’s sake, though he could for the sake of humans. Thus Katz’s views entail that when the human costs of cleaning up—say, an oil spill—outweigh the human benefits, we should not clean it up. But it seems clear that we need restoration not just for our sake, but for nature’s sake as well.⁶

A second virtue of the restoration paradigm is that it acknowledges the massive damage humans have caused (and continue to cause) the natural world. Preservationism ignores the extent of human influence on nature and pretends that nature will be okay if we just leave it alone. But sometimes, to use a provocative phrase of Jared Diamond’s (1992), “We must shoot deer to save nature.” Sometimes, human inaction can mean the further degradation of natural areas due to ongoing affects of past human action. Left alone, humanly-introduced exotics can wreak havoc on native ecosystems, species, and individuals. It is arguable that after decades of fire suppression, unless humans actively reduce fuel loads, fires on a scale that would seldom have occurred naturally will denude huge swaths of the landscape. Restoring predators to ecosystems from which they were extirpated can stop the ongoing degradation due to the overabundance of prey. Restoration recognizes the harm we’ve caused and seeks to make amends.

But this idea can be taken too far. Advocates of the restoration paradigm often overstate the necessity of restoration. William Jordan, the founder of the journal *Ecological Restoration* and restoration’s most outspoken promoter, claims we will need to manage and restore the entire earth. “Preservation,” he says, “is impossible. . . All systems are constantly changing, and . . . this change reflects at least some degree of human influence” (1994, p. 19). The Midwest’s tallgrass prairies and oak openings are examples where, Jordan says,

“The entire native ecosystem has been virtually eliminated as a direct or indirect result of new kinds of human activities. . . . This situation is

⁵ This is ironic because there is no stronger philosophical critic of anthropocentric environmental ethics than Eric Katz.

⁶ Although I’m inclined to think that the notion of nature’s own good can be specified in a workable way, I don’t intend to commit myself to the idea that nature has ‘a good of its own’ in the same sense as do sentient animals (or plants). Such a commitment can be avoided if we translate my language of benefitting “nature’s good” or “the good of a species or ecosystem” into the language of “increasing natural value.” My claim that restoration can not just benefit humans but nature as well should be interpreted as the claim that restoration can make nature more valuable in a non-anthropocentric-instrumental sense of value.

actually paradigmatic, however, and is true in the final analysis of all ecosystems everywhere” (1994, pp. 19-20).

But it is not true that all human influence requires or justifies restoration. That humans have touched virtually the entire surface of the planet doesn't make preservation without restoration impossible. For example, a slightly higher level of acidity in Yellowstone's rain does not make restoration necessary there. Nor does it mean that we are preserving an unnatural Yellowstone. Only a perverse fixation on absolute purity would lead to these conclusions.

One might argue that human induced global warming justifies the contention that we will need to restore the entire earth, especially if we want it to become natural again. For changing the climate in a region will have impacts on all the biota that live there and on much of the abiota as well. To use Bill McKibben's words proclaiming the end of nature:

“We ended the natural atmosphere, and hence the natural climate, and hence the natural boundaries of the forests, and so on (1989, p. 78) . . . There is no such thing as nature any more (1989, p. 89). As we heated the planet. . . we would change the flora and fauna *everywhere*; even at the poles or in the Adirondack wilderness, we now influence every physical system (1995, p. 10). Nature as something separate from man has vanished” (1995, p. 11).

For a variety of reasons I don't think global warming has the conceptual power that McKibben in his early work gives it. Nor do I think that it provides a justification for the claim that we need universal restoration or that it is desirable. Here again a dominant motivation is a problematic desire for an absolutely pristine nature and the even more problematic insistence that real nature must be a virginal nature—untouched by man. Nature can be nature and remain natural even while impacted by humans to a significant extent. There are degrees of naturalness and being somewhat less natural does not entail being unnatural or losing the status of nature.

Further, although caused by humans, the dramatic changes in nature that presumably have resulted and will continue to result from climate change do not constitute human domination or control of nature. We neither intend nor control the consequences for nature and humans that climate change brings. What's more, climate change makes us more vulnerable to nature and less able to predict or control it. With climate change, nature is very much in charge, even though humans are responsible for pushing natural systems onto different trajectories. For these reasons, I do not think climate change has brought about the end of nature or is pushing us into, as McKibben has suggested, “a world of our own making” (1989, p. 85).

I do not want to belittle the harm that global warming can and is causing to humans, animals, plants, species, or ecosystems. Nor do I deny that restoration activities are an important response to this harm. For example, when warming ocean temperatures bleach

coral reefs and subsequently kill them, humans are harmed (by loss of tourism and fisheries), habitat for fish species is destroyed, and spectacularly beautiful and amazing animals and ecosystems are wiped out. This is the end of very special individual pieces of nature. If global warming does threaten massive die offs of species and ecosystems, humans will have responsibilities to try to mitigate and prevent these harms, and restoration will certainly play a role. But I don't think it plausible to claim that virtually all species and ecosystems will need to rely on human intervention and restoration for their survival. Species and ecosystems can and do migrate as climate shifts, though the rapidity of human caused climate change is a serious worry here. Some ecosystems and species are tolerant of a wide range of climate conditions. Moreover, it is likely that many of these species and ecosystems will adapt or evolve in response to a changing climate and the goal of preventing this adaptation or evolution, or recreating the pre-global warming conditions, will often result in a much more heavy-handed human manipulation and management of nature that is involved in human caused global warming.

A third insight of the restoration paradigm is its insistence on the importance of full human participation in nature. William Jordan has argued that preservation offers a severely limited human relation to nature. It limits people's role in nature to a non-participatory "take only pictures, leave only footprints." It makes humans visitors on the planet, instead of active, contributing members. Such participation, Jordan argues, is a necessary part of a healthy human/nature relation.

Eric Katz's suggests just such a non-participatory approach to nature as. We might sum up his recommendations as: Love and respect nature, but don't touch her. He says:

"Here is my solution: as much as possible, we humans *leave nature alone*. To 'let it be' seems to be to be the highest form of respect we can muster . . . And while I leave it alone, I try to learn as much as possible about it, so that knowledge, respect, and love can all grow together" (2002, p. 143).

Although in most of his writing Katz strongly contrasts nature with artifacts, he suggests we should relate to nature as we do to a work of art:

"We can use the art object/nature analogy again . . . If I respect a work of art, I show this respect by my mere appreciation, by learning about the artwork . . . I do not attempt to change the work of art . . . I do not attempt to improve it . . . Any intervention in the artwork itself will change its quality and value. My proper respectful role is to leave the physical object alone."

For Katz, appropriate respect for both art and nature involves appreciating them and leaving them alone. I think Jordan is right that a healthy relationship with nature "Must engage all our abilities. . . These include our physical, mental, emotional and spiritual capacities" (1994, p. 18-19). It must be a "working relationship" including "ecological interaction" (1994). Preserving wildland that we study, love, and leave alone

is not the only dimension of a healthy human relationship with nature, though it certainly is one of them.

Steven Vogel has made a similar criticism of Robert Elliot's concern that restorationists seem content with continued manipulation and management of the restored ecosystem. Elliot argues that although restoration will often involve some long-term human monitoring and minor interference, he says "the ultimate aim [of restoration] implicit in the preservationist ideal, is to achieve a situation from which humans are absent, except as respectful, careful and unobtrusive visitors" (1997, p. 145). Vogel's response is:

"Such an aim seems to me to express a deep alienation from nature and a failure to understand the human role in it. We are not visitors on Earth, and indeed we are never absent from it—not, nowadays, from any of it. Restoration's value, I think, would rather come precisely from our experience in it of our involvement in the world, our responsibilities regarding it" (2003, p. 165).

Visitor status for humans in designated wilderness areas is a good model. But Vogel is surely right that such a status is not the right way to think of humans' relation to the entire planet.⁷ We need a more active, participatory, involved conception of the human role in earthen nature than we get from modeling humans' relation to nature on how we should relate to wilderness areas or art objects

We might reinforce this restorationist critique of preservation by calling attention to what might be called a tendency in preservationism toward human/nature apartheid. The belief that respect for nature requires such separation is based on the dubious idea that, as one commentator expresses it, "nature can be fully itself and thus have full value only when left undisturbed by humans" (Kane, 1994, p. 71).⁸ Philosopher John Visvader puts his finger on the problem when he argues "We need to understand both the 'natural' and the 'wild' in such a way that we can imagine giving more to the world around us than the gift of our mere absence" (1996).

A final (and related) criticism that restorationists have leveled at preservation is that it lacks a positive vision for human's place in nature. Eric Katz has said he thinks it is dangerous to articulate such a positive vision of humans' role in nature (2002, p. 143). Given the extent of human manipulation of the earth today and the extensive damage we have caused, perhaps there is some danger in promoting a positive vision of humans place in nature. It is imperative that humans reduce their impact on the natural world and that we clean up our mess. But humans live on earth and must use nature to survive. We need a theory that characterizes an appropriate human use of nature and the model of art appreciation that Katz embraces offers no help in this regard. Further, unless one thinks

⁷ Of course it is not clear that Elliot intended his remark about how we should relate to restored ecosystems to be generalized to our relation to all of nature on earth.

⁸ Kane is criticizing the view expressed in the quote, not embracing it.

that the human role on the planet is necessarily detrimental to nature, one needs an account of humans role in nature that is positive.

In so far as it has a vision of how humans should live on earth, preservationism would seem to embrace primitivism. On this view, benign human participation in nature requires that we “go back to the Pleistocene” and adopt a hunter-gatherer lifestyle.⁹ Restorationists have pointed out that this conception of appropriate human community with nature would have us give up much of what makes for human flourishing (namely, civilization and technology).

Restoration offers itself as the missing positive role for humans in nature. Restoring nature involves the use of science and technology and thus, unlike preservationism, the restoration paradigm does not require repudiating the achievements of civilization. Jordan argues that restoration involves the “re-inhabitation of nature” “without abandoning the lessons learned on ‘the pathway to the moon’” (1994, p. 23).¹⁰

Again Jordan’s valid critique is turned to excess. He argues that we can re-inhabit nature without giving up what he calls the “the accouterments of civilization” (1994, p. 21). Jordan thinks we need not give up our accessories, equipment, and furnishings. But there will be no healthy human-nature community without consumption reduction and abandoning our environmentally-unfriendly technologies and ways of life.

III. Perils of the Restoration Paradigm

While there is much to learn from the restoration paradigm and particularly from its critique of what might be called “pure” preservationism, there are also serious problems with taking restoration as a positive model for human/nature relations. I will discuss four such problems. First, restorationism is often grandiose and hubristic. Second, restorationists are insufficiently appreciative of the value of wildness in nature. Third, restoration is misconceived as providing a net-benefit to nature. And finally, its positive vision for the human/nature relation fails as it rests on a prior destructive relationship with nature.

William Jordan’s description of the importance of restoration is particularly grandiose.

“Restoration,” he says, “has the elements of a kind of ritual, even a sacrament, of reentry into nature” (1986, p. 25). “It’s a way of participating in the Creation with a capital ‘C’” (2002, p. 17). “While the preservationist in us continues to believe, with Columbus, that Eden actually exists,” Jordan argues, “. . . the restorationist has turned to a

⁹ There would seem to be the possibility of a “high-tech” preservationism which uses the most sophisticated modern technology to limit human impact and involvement with nature.

¹⁰ Jordan is here quoting Eiseley 1970, Ch. 7.

different task—the task not of finding an existing Eden, but of actually making it out of the raw materials in a landscape compromised by history” (1992, p. 3).

The hubris in restorationism can be seen in its contention that “nature needs us” in some fundamental way. Steve Packard, a noted restorationist who is now senior editor for *Chicago Wilderness Magazine*, once suggested that those who restore should be seen as “parents” of nature. He writes:

"It's an honor to be among the first to have a nurturing relationship with wild nature . . . If we are dependent on nature, what's so terrible about nature being dependent on us too . . . In some ways nature was our parents and now we're its parents. Now it depends on us" (1990 p. 72). “A restorationist, like a parent, need to protect an unsteady being from certain insults to its health or existence . . . [and] help some life go forward on its own” (1993, p. 14).

I find it presumptive to think that those involved in the contemporary restoration movement are trail blazers in terms of having a nurturing relation with (wild) nature. One would think, for example, that native peoples who saw their use of nature in spiritual terms had (and have) a nurturing relationship. Traditional methods of farming and gardening might also justifiably be seen as nurturing. Or consider the practice of feeding birds or the activity of those, like Johnny Appleseed, who have helped particular species flourish in new habitats. Additionally, the violence toward existing flora and fauna involved in many restoration projects (including those that Packard has supervised) should make one nervous about seeing restoration as “nurturing” in its approach to nature.¹¹

The suggestion that restorers should be seen as parents of a child-like nature is even more presumptuous. Nature on earth really did produce human beings and continues to provide absolutely essential conditions and resources for human life. While it is certainly true that restoration returns ecosystem processes that were absent in an area and can bring back extirpated species, a healing metaphor is much more apt and far less tendentious than the model of parenting.¹² Even in cases where restoration results in new ecosystems in an area, such systems are not produced from scratch, but rather use preexisting ingredients. In restorations involving removal of exotics or human structures, or the cleaning up of harmful chemicals or trash, a janitorial model seems the best.

Holmes Rolston’s response to Packard’s suggestion has insight:

¹¹ For a powerful critique of the methods and goals of one restoration project that Packard was involved with, see Mendelson et al. 1992.

¹² For the virtues of understanding restoration in terms of a healing metaphor, see Throop (2008).

“The parent-child analogy is misleading. Parents cease to operate as parents when they are dependent on us. Though, owing to the inevitable decline of individuals, parents will become dependent on their children, we do not want to cultivate those dependencies. Our parents are failing when these are required. Nature is not some failing parent that now needs to become dependent on us” (1994, p. 201).

It is highly misleading to think of nature as old, worn out, no longer able to provide us with what we need from it, and now needing us to take care of it. Further, to the extent it is true that some concrete bits of nature have become dependent on us for survival, this is not something we should celebrate. In many cases, what these pieces of nature need from us is to stop attacking them and to leave them alone. There remains a good deal of truth in the preservation perspective. Far from needing us, much of nature would be far better off without humans on the planet.¹³ And even in cases where active human restoration is required (e.g., with endangered species such as the California condor or the red wolf), humans act much more like physicians who transplant organs than parents who give birth.

Part of what is objectionable is the suggestion that nature *as a whole* has become dependent on our restoration activities, rather than particular pieces and forms of nature being so dependent. As Jordan puts it: “It seems obvious that . . . the fate and well-being of the biosphere depends ultimately on us” (1994, p. 27). Stephen Jay Gould’s response to the often heard suggestion that humans must save the planet points out the scientific ignorance and moral failings involved in this suggestion. He writes:

“Such views . . . are rooted in the old sin of pride and exaggerated self-importance. We are one among millions of species, *stewards of nothing*. By what argument could we, arising just a geological microsecond ago, become responsible for the affairs of a world 4.5 billion years old, teeming with life that has been evolving and diversifying for at least three-quarters

¹³ Paul Taylor (1986, pp. 114-15) makes this case powerfully. “It seems quite clear that in the contemporary world the extinction of the species *Homo sapiens* would be beneficial to the Earth’s Community of Life. The destruction of natural habitats by housing developments, industrial complexes, airports, and other large-scale projects would cease. The poisoning of soil and pollution of rivers would come to an end. The Earth would no longer have to suffer ecological destruction and widespread environmental degradation due to modern technology, uncontrolled population growth, and wasteful consumption. After the disappearance of the human species, life communities in natural ecosystems would gradually be restored to their former healthy state. Tropical forests, for example, would again be able to make their full contribution to a life-sustaining atmosphere for the whole planet. The lakes, oceans, and wetlands of the world would slowly become clean again. Spilled oil, plastic trash, and even radioactive waste, after many centuries might finally cease doing their terrible work . . . Our presence, in short, is not needed.”

of that immense span? . . . We are virtually powerless over the earth at our planet's own geological time scale. All the megatonnage in our nuclear arsenals yield but one ten-thousandth the power of the asteroid that might have triggered the Cretaceous mass extinction. Yet the earth survived that larger shock . . . [which] paved the road for the evolution of large mammals, including humans. We fear global warming, yet even the most radical models yields an earth far cooler than many happy and prosperous times of a prehuman past. We can surely destroy ourselves, and take many other species with us, but we can barely dent bacterial diversity and will surely not remove many million species of insects and mites. On geological scales, our planet will take good care of itself. . . . Our planet simply waits" (1990, p. 217).

A second major problem with restorationism is that it is insufficiently appreciative of the value of wildness in nature. Restorationists, for the most part, seem blind (or openly hostile) to the values in nature as other, in having a world not of our own making, and in minimizing human impacts on nature. I believe that any appropriate appreciation of nature and any proper conceptualization of the human role in nature must place significant evaluative weight on naturalness and particularly on nature's autonomy, that is, the degree to which a natural entity is not dominated or controlled by humans.¹⁴

Jordan hopefully predicts that "restoration will become the principal outdoor activity of next century and the result will be the conversion of nature from . . . 'environment' into habitat for human beings" (1994, p. 23). One wonders if this includes what is commonly thought of as wild nature: National parks, wilderness areas, mountains, and deserts? Restorationists see no problem at all with, as Jordan puts it, "leaving a distinctively human mark on the landscape" (1994). And as was pointed out by Elliot above, ongoing human management of restored landscapes is not seen as a problem but as a positive opportunity for human involvement in nature. On the restoration paradigm, it seems, nothing is off limits, as long as humans are helping to restore degraded nature. This perspective ignores the value of having some earthen biotic nature free from human control and manipulation.

Jordan's use of the garden metaphor clearly illustrates this insensitivity to the value of wildness in nature. Jordan has characterized ideal nature as a type of human garden. He argues: "Whether we wish to admit it or not, the world really is a garden, and invites and even requires our constant participation and habituation" (1986, p. 25). "Restoration," he writes, "is that form of gardening concerned specifically with gardening, maintenance, and reconstitution of wild nature and is the key to a healthy relationship with it" (1994, p. 18). Appreciation of the value of nature as other and respect for nature's autonomy are

¹⁴ For a defense of the value of wildness/naturalness, see Hettinger and Throop, 1999. For a discussion of the importance of the distinction between human influence on nature (its degree of naturalness) and human control of nature (its lack of autonomy), see Hettinger 2005.

not compatible with conceiving or treating nature as if it were significantly like a human garden. (In his later writing Jordan explicitly takes back this unfortunate metaphor.)¹⁵

A major problem with the restoration paradigm is that it misconceives restoration as a net-benefit to nature, instead of an attempt to heal or engage in restitution for harms caused. Jordan claims that “ecological restoration provides a basis—actually a paradigm—for a healthy, mutual beneficial relationship between ourselves and the natural landscape” (2000, p. 18). Jordan sees restoration as a human gift to nature. It is, he says, “Our gift back to nature. The restored ecosystem is something that we offer nature in return for what nature has given us . . . It represents our best gift” (2000, p. 25).¹⁶ But to degrade some natural entity or system and then attempt to restore it (even successfully) is clearly not to benefit nature or give it a gift. Instead, restoration is restitution for past harm and cleaning up of our mess. When a wife-beater gives his victim first aid, it is not a “gift” or net-benefit. When an oil “spill” soaks beaches, cleaning it up is not a gift or net-benefit to nature. When wolves are restored to ecosystems from which they had been extirpated, this is an attempt to make amends for past wrongs, to put back what we have taken away. Concepts like ‘gift,’ ‘benefit,’ and ‘exchange’ do not help us understand what we are doing when we restore a nature that we have degraded.

It is often true that individual humans who help restore a piece of nature may not have been directly involved in its destruction, and thus one might be tempted to claim they are providing a benefit or giving a gift to nature. But given that virtually all of us who live in modern industrial societies have in some ways benefitted from the wholesale destruction of natural entities, restoration by such individuals is still best seen as an attempt to make amends rather than bestowing a gratuitous benefit.

¹⁵ In an article published in 2000, Jordan abandons the naive garden metaphor and directly addresses the problem that gardening of nature suggests an unacceptable type of control and manipulation of nature: “Restoration is not...domestication. It does . . . involve manipulation and is a form of agriculture, but it is agriculture in reverse. If the gardener takes charge of the landscape the restorationist does the opposite . . . restoration amounts to a deliberate attempt to liberate the landscape from management” (2000, p. 27). He there helpfully conceives of restoration as “re-wilding” rather than gardening. In his 2003 book *The Sunflower Forest*, Jordan distinguishes restoration from traditional gardening (which he argues is a creative activity) by arguing that restoration “is valuable as a special form of gardening that is. . . explicitly *noncreative* with respect to objectives, neither improving on nature nor improvising on it but attempting, blankly, to copy it’ (p. 24). He also reiterates his idea that restoration attempts to free nature from human control: “While agriculture ordinarily involves bringing nature under control to a certain extent, simplifying an ecosystem in order to exploit it more effectively for some human end, restoration does just the opposite, recomplicating the system in order to set it free, to turn it back into or over to itself, with a studied indifference to human interests” (p. 87).

¹⁶ The notion that restoration is a gift back to nature continues throughout Jordan’s 2003 book.

Finally, and relatedly, restoration's supposed positive vision for the human/nature relation is flawed because it presupposes a prior destructive relationship. As we have seen, Jordan argues that restoration is an avenue for human "re-entry" into nature, that restoration is a paradigm for a "healthy" human relationship to nature, that it is a model for human "community" with nature, and that it is the basis for a "new communion with nature." Andrew Light has promoted restoration for its ability to recapture what he calls "the culture of nature," by which he means (in part) humans being in nature, working with it, and thereby coming to understand more about it. According to Light, "benevolent restorations . . . are valuable because they help us restore our relationship with nature" (2000, p. 67). "Restoration," he says, "is an obligation exercised in the interests of forming a positive community with nature" (2000, p. 67).

But although restitution and reparation are an important part of healthy communities, they only exist to rectify mistakes made by community members. An ideal community would not need such institutions and we certainly would not build healthy relationships and community with others based on policies that promoted members harming or wronging each other so that restitution could take place. The same point applies to our relationship with nature. Restoration involves an attempt to undo a (wrongful) harm. Thus the restoration paradigm suggests that the proper role for humans in nature is to first degrade nature, then attempt to fix it. This is not a positive vision of humanity's role in nature.¹⁷ Humans must find a type of participatory relationship with nature that doesn't presuppose degrading nature to begin with.

IV. Conclusion

What is needed is a conception of human flourishing that does not feed on the wholesale destruction and domination of nature. We must reject the supposition that culture, civilization, and technology—those things that make us human—necessarily destroy or dominate nature. If this were true, then perhaps restoration—or pure preservationism's human/nature apartheid—would be the best we could do in our relationship with nature. It is noteworthy that this assumption that humanity necessarily degrades and dominates nature seems shared by both Jordan and Katz, respectively the strongest advocate of the restoration paradigm and a major defender of pure preservationism.

To understanding the possibility of such a positive relationship between humans and nature we need to distinguish between respectful human use of nature and human abuse of nature. We must distinguish between human influence on, modification of, and involvement with nature on the one hand, and human domination and control of nature on the other. Humans can use nature and be involved with it while respecting its autonomy,

¹⁷ Light uses the analogy of a human carrier of disease who ignores warnings and infects other people. He then asks, "Would it not in the end benefit her to volunteer in a hospital ward full of people dying from this particular disease (2000, p. 66-67)?" While the answer is clearly yes and (as Light points out) she would learn a lot about the wrong she had done, this is not a model for positive community relationships.

if they do not massively impact nature or try to dominate or control it. It is only the abusive, domineering human impacts on nature that require restoration

A key dimension of such a healthy, non-destructive and non-domineering human relation with nature is insuring that the human scale on the planet is relatively small. With many fewer people, much more modest consumption levels, and use of the most environmentally-friendly technologies, human influence on nature need not be considered unfair or inappropriate. Far greater levels of wild nature would flourish than do so in today's overpopulated, overconsumptive, lethal and inefficient technology society. We would not be driving other forms of life or ecosystem types extinct. We would not be altering global climate or spewing our pollutants all over the planet. Humans would certainly be using nature and altering its course, but only on a local scale with harmful impacts limited to individuals.

On such a scale, human use of nature could be respectful and just, and thus it would not require restitution or reparations. Restoration of nature would not be morally required and would seldom be useful, for nature could typically heal itself from the minimal harms we cause it when we live on such a scale.

I conclude that restoration plays only a minor role in a healthy human/nature relation. Restoration as a paradigmatic relationship with nature only makes sense given the current abusive human treatment of nature. An appropriate human presence on the planet would not include restoration of nature as a central feature. While much can be learned from the movement to restore nature--particularly how to avoid the pitfalls of pure preservationism--restoration does not provide a paradigm for the ideal human relationship with nature.

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