

A Lighter Shade of Green: Reproducing Nature in Central Florida

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Imagineering Nature

Sorkin and others have recently described contemporary social and material developments as just so many “variations on the theme park” ideal (Sorkin 1992). This “theming” of everyday life is understood as relating directly to the transition from an industrial to a post-industrial society. Changes in the dominant forms of material production have led to what Lash and Urry (1994: 15) call the increasing “aestheticization of material objects,” or the “increasing sign value” of goods and services in post-industrial society. Image has become an increasingly important source of value, particularly in information rich, service-based economies. How well products, services, and even places are “imagineered” (in Disney parlance) for exchange is of ever greater concern in the quest for economic viability.

A similar process of imagineering is rapidly becoming the most dominant aspect of the human-nature nexus. This is particularly so in post-industrial societies like the United States where most people’s lived experience lacks any direct contact with non-human nature other than in the process of consumption or in the role of spectator. The model of this post-industrial relationship with nature is not the farm, mine, or industrial site but, rather, the *garden*, where nature is produced not so much to yield a material surplus but, rather, an aesthetic, symbolic one.

The present argument is somewhat different from the one put forth recently by Cronon concerning the growing number of wilderness buffs in post-industrial societies. Cronon argues that the dream of many contemporary environmentalists of a return to an:
unworked natural landscape is very much the
fantasy of people who have never themselves had
to work the land to make a living—urban folk for

whom food comes from a supermarket or a restaurant instead of a field, and for whom the wooden houses in which they live and work apparently have no meaningful connection to the forests in which trees grow and die (1995: 80).

These latter are the sort of connections he makes in his earlier book, *Nature's Metropolis* (1991).

Yet, it is not so much that post-industrial folk do not work the land. After all, how many instances of the mis- and over-working of natural resources are necessary to bring home the point that those who work the land are often least likely to be good land stewards? Rather, the present argument is that, in evolving post-industrial societies, the majority of people do not come into much contact at all with non-human nature and what nature they do experience is increasingly imagineered for leisure or aesthetic consumption.

Indeed, the myth of a return to wilderness on the part of many environmentalists has been conjured by those who fully recognize this imagineering process. The very value of "wilderness" derives from a sense that it is desirable to cast humans completely out of the scene and let nature be somehow more natural. Yet, the quandary is that it could equally be argued that this mythology is merely another sort of human imagineering of nature, in this case imagineering nature on the model of Eden, equally a site of leisure and aesthetic consumption. The only difference between this type of imagineering of nature and what takes place, say, in Disney World, are the kinds of leisure and aesthetic attributes that come to be privileged in the competing visions of what is most "natural."

Disney-Nature

In this paper, I attempt to fill in the details and implications of this argument on the basis of two case-studies of the large-scale imagineering of nature in central Florida: Disney's own as well as the plan to restore a major section of the Kissimmee River. Although the imagineering process may be most obvious with regard to Disney-Nature, the apparently more scientifically sound restoration of the Kissimmee River can equally be seen as a form of imagineering. The key in both cases is: whose image of nature is to be produced, for what purposes, and with what social and material results?

In terms of Disney-Nature, well within the 43-square-mile (69-square-kilometer) Disney territory in central Florida is found Bay Lake, an approximately 450-acre (182-hectare) body of water. Unlike other lakes in this part of Florida, the water of Bay Lake is surprisingly clear, there is very little aquatic vegetation at its surface or along its shores, and these shores themselves have beaches with a fine grain white sand base; most unlike the muck and reeds and murky waters found along the shores of Florida lakes outside the Disney gates. Just west of Bay Lake is a similar body of water covering 200 acres, the Seven Seas Lagoon, the water and beaches of which seem even more clear and clean and, indeed, safe and sanitized. These and all other water bodies on Disney's property seem entirely out-of-place where they are in the wider context of the central Florida natural environment yet, at the same time, quite appropriately placed within the context of Disney's world.

The reason for Bay Lake's difference is not too difficult to determine. Disney took full control of his vast Florida territory by pressuring the Florida Legislature to provide his company the powers to proceed with development without state intervention. The Reedy Creek Improvement District was formed for this purpose in 1967 as an essentially private political structure with virtually all of the powers accorded to other local political structures, including the ultimate power to develop the territory within its borders (Foglesong 1995). In this context, the original Bay Lake, exhibiting all the ecological characteristics of its place, simply did not fit Disney's image of a proper natural environment.

So Bay Lake was completely drained, its bottom dredged of several feet of muck and vegetation to reveal a sand base, and then it was refilled with clarified water. The dredgings were used to create the rolling topography of Disney World and some of the sand base was distributed along the newly cleared and weeded shores to create clean beaches. In the meantime, Seven Seas Lagoon was dug out of neighboring swampland and modeled after the newly sanitized Bay Lake.

A Disneyfied nature was thus produced as a direct result of "blending creative imagination with technical knowhow" or, in Disney discourse, as a result of "imagineering" (Beard 1982: 25). Like the social relations of the Disney's world, Disney-Nature is actively imagineered to be safe, sanitized, human-friendly, even delightful, or, in other words, Disney-Nature is produced singularly

to entertain humans. It is a nature that is pleasing to the eye, where everything seems to fit, and where nothing ever seems to disturb the prevailing equilibrium. In short, Disney-Nature is nature as it should be for humans, providing a quite innocuous backdrop for human activity.

In the southeastern portion of Bay Lake is found an even more profound example of imagineered nature: Discovery Island. This 11 1/2-acre (4.7-hectare) island was produced from the ground up.

As a popular guidebook puts it, Discovery Island's:

long, white-sand beaches, its hills, and its hidden groves were sculpted and planned by Disney Imagineers, who brought in 15,000 cubic yards of sandy soil, added 1,000 tons of boulders and trees, planted 20 types of palm trees, 10 species of bamboo, and dozens of other plants whose original habitats ranged from Argentina, Trinidad, and Costa Rica to the Himalayas and South Africa.

The guidebook goes on without the least bit of irony to state that "despite all this work, Discovery Island remains the least artificial attraction in Walt Disney World" (Fodors 1995: 135).

Clearly, Discovery Island is unlike any other lake island in central Florida. It is now home not only to exotic plant species but birds such as swans, pelicans, flamingos, and cranes and even tortoises and Asian deer. Discovery Island is a veritable hodge-podge of mostly non-indigenous landforms and plant and animal species which have very little traditional ecological connection either with each other or with the nature outside Disney's gates. This produced natural diversity ironically flaunts the exotic yet clearly was imagineered to suggest authenticity, as the flora and fauna are largely of the sub-tropics, if not necessarily from Florida. Natural authenticity is also suggested by the fact that the movement of animals is not apparently restricted and that Disney guests are allowed to wander through the various themed areas of the island at their leisure. As another popular guidebook puts it, "far from taking a backseat to the manmade, *nature* is the big deal on Discovery Island" (Birnbaum 1994: 198; emphasis added).

Like other zoos and botanical gardens, the nature of Discovery Island is not only out-of-place, but also out-of-time. Change as disturbance to the imagineered ecological equilibrium is simply not allowed to happen as it would upset the choreography of species

that, ironically, lends authenticity to the display. Change of this sort is also to be avoided because it might threaten the security of the human consumers of nature, rendering nature less benign, even out-of-control. The imagineered nature of such gardens as well as most suburban yards tend, for this reason, to suppress the evolutionary forces of species competition and other forms of species conflict or violence. Natural evolution, other than tightly controlled, imagineered evolution, is simply to be avoided in such gardens.

This is the key to the irony of authenticity at a place like Discovery Island. In order for Disney guests to experience the authentic natural world, nature must be actively managed. Authentic nature thus becomes a nature that actually has been consciously selected and maintained by humans. While Disney-Nature may be an extreme example of this type of authenticity, for many, particularly in the post-industrial world, this type of authentic natural experience is the only type that is experienced. Authentic nature is best, for most of us, the more it actually is like Disney-Nature: safe, sanitized, and easily consumed. If the scenery is green, the water is clear, and the existing plant and animal species are non-threatening to us or even to each other, then it is nature as it should be. In this context, it simply does not matter that the anemones on the aquarium walls are ceramic (as long as they are not too obvious), or that Disney islands are entirely humanly constructed, or that Kentucky Bluegrass is really not native to Kentucky.

But my argument goes beyond Disney. For most living in a post-industrial context, the imagineering of nature is commonplace. From landscaping and lawn services, to commons fees for the maintenance of sub-division nature, to chemical lawns that never brown, nature is rendered safe, sanitized, and thus easily consumed. To bring this point home, it is necessary to return to Discovery Island in order to elaborate on one crucial aspect of this post-industrial process already alluded to, that is, the control of change or disturbance to the imagineered ecological equilibrium.

Almost from the beginning, the nature of Discovery Island has been encroached upon by outside forces. One of the most difficult problems has been the black vulture, a migratory scavenger that is quite prevalent throughout the year in central Florida. These birds tend to swarm around the island, roost in its carefully choreographed trees, and generally bother the exotic bird and animal species on the island by, among other things, taking roosts and stealing provided food. Disney guests are also put off by the birds,

particularly because they are ugly, loud, and they defecate and regurgitate on the normally spotless Disney pathways. This species simply does not fit in Disney-Nature even though, quite ironically, it is more native to the place than almost any other on the island.

The black vulture is thus a weed in the garden. And like any weed, it must be removed or exterminated as it is a threat to the established equilibrium. It is not surprising, then, that Disney cast members (that is, workers) set out in the still of one night in late 1989 to do something about the pest. Night activity was important ostensibly so as not to disturb guests. It also was important, it now turns out, because the cast members were ordered to take care of the problem by whatever means possible. They did, of course, and it was not the sort of scene that is popularly associated with the Disney name. Cast members not only forcibly took hold of the birds and physically removed them, a good number of the harder to catch vultures were actually beaten to death with clubs.

Disney attempted to keep this extremely violent episode of species-cleansing on Discovery Island quiet for obvious reasons. The local press nevertheless got wind of it and Disney and, significantly, five individual workers were charged with animal cruelty and eventually convicted of a misdemeanor carrying a \$95,000 penalty. The Florida Game and Fresh Water Commission was also ordered to keep close watch on Disney actions in the future (*St. Petersburg Times* 1990).

There are many possible pathways out of this story. Most generally, it brings up the question of how to determine what is "native" and what is "exotic" in a particular ecosystem, something that is currently exercising many in the emerging fields of conservation biology (Soulé 1990) and restoration ecology (Cairns 1995). A related question concerns what is to be taken as authentic or appropriate nature as opposed to ersatz or inappropriate nature and, indeed, on what basis, and by whom, this is to be determined. As discussed below, both questions are now quite controversial after the so-called post-modern turn in the science of ecology (Ferré 1995; Worster 1995).

Most important for the present argument, however, is that the attempted species cleansing at Discovery Island starkly exhibits the extent to which an imagined ecological equilibrium such as a garden needs to be actively managed in order to remain in equilibrium. The experience also underscores that gardeners need to do whatever it takes to preserve such an equilibrium. In other words,

while the imagineered nature within the fence may be harmless, non-changing and, then, quite pleasing, in order to keep it this way, extreme violence must be wrought to maintain the fences as barriers to outside, possibly disruptive natural forces.

Disappearing Nature

For most post-industrial folk the imagineering of nature means two things. First, not only do such folk not have direct contact with non-human nature in their daily lives but also, secondly, what contact they do have is with carefully imagineered nature. Again, as the guidebook states, it is not the artificial or the “manmade” but actually *nature* that predominates on Discovery Island. And, again, in this context, it simply does not matter how really natural this nature is, as long as it looks right and is ultimately harmless. Indeed, from this perspective, the desire is generally to emulate Disney-Nature in individual yards and common green spaces and not to question its authenticity.

More specific implications of this evolving post-industrial understanding of nature can be found in the literature on global ecological problems. Nabhan, an ethnographer and conservationist working among the peoples of the Sonoran Desert, has recently described the fading knowledge of the natural environment exhibited between generations of four different cultures, Mexican, Anglo, Yaqui and O’odham. As he recounts:

Essentially we learned that with regard to knowledge about the natural world, intergenerational differences within cultures are becoming as great as the gaps between cultures. While showing a booklet of drawings of *common* desert plants and animals to O’odham children and their grandparents, for example, we realized that the children knew only a third of the names for these desert organisms in their native language than their grandparents knew.

Of interest is what Nabhan considers to be a major cause of this decline in knowledge of the natural environment: the fact that the children “spend more time in classrooms and in front of the television than they do directly interacting with their natural surroundings” (Nabhan 1995: 98-99).

A similar sentiment is expressed by Soulé, considered to be one of the founders of the new transdiscipline of conservation biology, in the midst of an explanation as to why conservation policies do not seem to be very effective in slowing the degradation of the global environment. It is not, according to him, a problem resulting from our lack of understanding of natural processes. Rather it is a problem resulting from having the wrong sort of people, that is, politicians and bureaucrats, formulating environmental policies and managing conservation projects. As Soulé (1995:162) puts it:

most politicians and bureaucrats are city people.

The influence of city people will increase as the world becomes more urban. This is one of the quietest and most profound changes of consciousness that has occurred in the twentieth century. It does not portend well for informed, compassionate decisions about the future of wild nature.

While there is no little scientific chauvinism in Soulé's account, his reading of the global situation is similar to Nabhan's reading of a specific local situation. Classrooms and televisions disseminate "city" messages creating "city" people even outside the city. In short, if "post-industrial" is substituted for "city" in the last citation, Soulé's message is essentially the same as the present one. Because fewer and fewer of us need to have daily truck with non-human nature, we have lost knowledge of this nature, and, as a result, this nature has effectively disappeared from our view only to be replaced, increasingly and largely unbeknownst to most of us, by imagineered nature. The key question at this point, however, is: does any of this matter?; or, rather, is there anything really wrong with imagineered nature?

The implication of Soulé's account is that leaving city people in charge will only lead to increasing levels of ecological degradation on a global scale. Such people do not know nature and therefore cannot adequately manage it nor do they have the proper care to succeed in the task. The scientific chauvinism in Soulé's account, of course, is the implication that only "real" natural scientists like himself know properly what to do to solve ecological problems and would in fact solve them, if only city people would listen or, indeed, step aside. From this point of view, imagineering nature in the manner described in this paper does not solve ecological problems but, in fact, is an ecological problem itself. Perhaps, then, the answer

to the question about imagineered nature can be found in the work of natural scientists.

Restoring the Kissimmee River

To abbreviate the discussion I will focus on two specific, yet highly interrelated, issues found in the natural science literature. The first issue concerns the now quite topically important issue of biological diversity. A now common concern among ecologists is the apparently increasing rate by which biodiversity is being lost on a global scale, particularly as a result of human activity. According to many ecologists and summed up by Ehrlich and Wilson (1991), biodiversity is important for three broad reasons which can be paraphrased as: *moral*, that is, humans should be good stewards of their natural home, *economic*, that is, diversity allows for a larger number of potential natural goods for human benefit, and *natural*, that is, species diversity allows ecosystem processes successfully to provide essential ecological services to other parts of nature. Save for the moral reasoning, in other words, maintaining biodiversity appears to be a way to hedge our bets as to how much our very existence as a species depends on non-human nature.

From this point of view, Disney-Nature, as well as the imagineered nature of the typical suburban yard, is undesirable because such imagineering appears necessarily as a thinning out of natural diversity. The very process of weeding the flora and fauna in order to maintain the designed equilibrium of such gardens implies as much. To the extent that ever larger portions of nature are imagineered, then, so biodiversity is likely to decrease.

A response to this charge, however, is that imagineering nature does not necessarily mean a thinning of biodiversity. Discovery Island, for example, is nothing if not species diverse; in fact, for an island of its size it is arguably over diverse by any coherent measure, biological or aesthetic. Moreover, the emerging fields of restoration and landscape ecology involve design and planning processes that are very similar to imagineering (Cairns 1995; Kim and Weaver 1994; Naveh and Lieberman 1994). There is no reason to believe, then, that nature cannot be imagineered in a manner that conserves, and even enhances, biodiversity.

Here is where the second issue discussed in the ecological literature becomes important. This involves the larger question of the precise ways in which natural species actually interact and

evolve. A traditional cut at the difference between Disney imagineering and that of restoration ecologists, for example, is that the latter imagineer on the basis of a full and careful understanding of the ways in which diverse species interact to form a place-bound and place-creative community. That is, while Discovery Island may be species diverse, this diversity is really only the juxtaposition of difference with no important ecological links among the species. Discovery Island is not an ecosystem that potentially could exist on its own, or with much lower levels of human intervention. Conversely, what restoration ecologists attempt to do is to recreate lost ecosystems, species piece by species piece, the ultimate goal of which is to leave these restored ecosystems alone to evolve on their own.

A concrete example of this sort of argument can be found in the debate over the plan to restore a large section of the Kissimmee River. As is now well known, the meanders of the Kissimmee River were destroyed between 1962 and 1970 as a result of a federally authorized flood control project. The resulting canal runs straight and relatively deep toward Lake Okeechobee to the south. This original Kissimmee project "obliterated" approximately 56 kilometers of river channel by converting a 166 kilometer long meandering river with a 1.5-to-3-kilometer-wide floodplain to a 90-kilometer long, 9 meter deep, 64-to-105 meter wide canal. In total, 2,800 hectares of floodplain wetlands were destroyed (Toth 1993, 30). Costing on the order of \$30 million dollars, this large-scale imagineering of a riverine environment opened up land for farming and housing, rendered the river navigable year-round for large pleasure craft, and still provides effective flood control for the surrounding areas.

Less positive results of the project, however, began to manifest themselves soon after its completion. Altered river flow provided much less favorable habitat for many of the indigenous and migratory flora and fauna of the area. Channelization also provided a virtual highway for dumped effluent from new farms and settlements along the banks, severely clouding the waters of Lake Okeechobee. These, and other, negative ecological effects of the flood control project eventually led many to demand some sort of ameliorative action by the mid-1960s (Kissimmee River Restoration Study 1992).

The result of this growing demand for ecological restitution was a proposal to restore the Kissimmee's meanders in order to recover

biodiversity and to slow the pollution of Lake Okeechobee. According to the recommended proposal of the Army Corps of Engineers (ironically the same organization that handled the original channelization project), such a project:

will provide the conditions necessary for natural reestablishment of an ecosystem similar to that which existed and functioned prior to construction of the basin's flood control project. The restored ecosystem will include 56 miles (90 kilometers) of restored river, about 29,000 acres (11,736 hectares) of restored wetlands, improved water quality, and restored conditions for over 300 fish and wildlife species, including waterfowl, wading birds, alligators, and three endangered species (Kissimmee River Restoration Project 1992: 26).

The cost of the proposed restoration project is estimated to be \$422,667,000 (USD) with the Federal Government picking up about 30 percent and "non-Federal sources" picking up the remaining 70 percent. Proponents of the project have argued that the money would be well spent, both because of the increase in biodiversity and the decrease in the rate of the eutrophication of Lake Okeechobee.

Now, I want to argue that this proposed restoration of the Kissimmee River is just as much an example of imagineering nature as is the construction of Discovery Island. The difference, of course, is that great pains will be taken in the case of the Kissimmee both to increase biodiversity and restore ecological integrity. That is, an attempt will be made to restore an entire functioning ecosystem. Yet, the project remains an example of imagineering in the sense that an image of a better, or more "real" in this case, nature is assumed as a model to be constructed, and ultimately consumed, by humans. Humankind has taken on the role of producer, manager, and primary consumer of non-human nature in both the Disney and the Kissimmee River case.

The significant social difference entailed in the two cases, however, is an important part of the present argument. Disney-Nature is arguably more molded according to post-industrial tastes. A restored Kissimmee River offers benefits which seem quite distant not only to the farmers, residents, and houseboaters to be displaced in the process, but also to many others who never intend to canoe,

hike, or birdwatch in the restored "wildlands." It may be that increasingly popular environmental discourse has convinced many "city-people" of the ecological necessity of restoration. Yet, the sort of nature to be restored will be much less controllable, and therefore potentially much more dangerous to humans than what exists today. One wonders, for example, how much popular support for such a project will remain after the first major flood occurs, or after mosquitoes begin to breed in the restored wetlands, or after snakes and other nefarious fauna return in great numbers, or after the family boat runs aground. That is, most support for restoration from nonscientists rests arguably on a certain Edenic image of a pleasant, visually breathtaking, quite innocuous landscape; sort of like Disney World's version of Yosemite in its "Wilderness Lodge." As one local politician puts it, the restoration project "gives Mother Nature the opportunity to do some work and restore herself, and Mother Nature will respond with majesty" (cited in Bair 1994).

Given the post-industrial alienation from nature, popular support for increasing biodiversity or ecological restoration would seem to be quite volatile, based more on these Edenic dreams than on a thorough understanding of ecosystems. But the debate about ecological restoration can also be taken to a higher level of sophistication. There are at least two responses to the very idea of the human restoration of non-human nature that need to be addressed by ecologists themselves. First, from the arguments justifying projects like the Kissimmee restoration, it appears entirely possible to determine objectively a base ecosystem from the pre-degradation past that can be used to provide an appropriate model for ecological restoration. Yet, how far back into the past do ecologists need to look for such a base? How far back was there a non-human produced nature along the Kissimmee River? If the nature we seek to restore was also produced, what makes this nature better than that which exists now? What, in other words, is the "authentic" ecosystem that should be restored? As one opponent of the Kissimmee River project points out:

The ecosystem that existed prior to the channelization for the river is gone. In its place another ecosystem has evolved. Now the government and the environmentalists not only want to put it back the way it was, **but to put it the way it might be**, based on a computer simulation of probabilistic one in one-hundred year rainfall and

flood occurrence (cited in Kissimmee River Restoration Study 1992:335; emphasis added).

The restoration scenario also presumes considerable knowledge of the history of species interaction as the means to restore the proper species to their proper roles in the proper order. Not surprisingly, there is a quite healthy debate in the literature concerning the validity of all of these assumptions (Sprugel 1991; Luken 1990; Aronson, Dhillon and Le Floc'h 1995).

A more significant problem with this view of ecological restoration and management involves the very notion of ecosystem. In recent years, many more ecologists have cast a critical eye on this idea of ecological community or system. This new ecology suggests that nature is not a community of communities as much as it is a veritable mosaic of different species processes and relationships. This conception goes way beyond the traditional difficulty of defining the borders of ecosystems—that is, the question of spatial scale—to criticize the very notion of system. Worster (1995:73-74) neatly summarizes this increasingly popular view of nature. As he puts it, the new message in ecology is that:

the old ideal of equilibrium is dead; the ecosystem has receded in usefulness; and in their place we have the idea of the lowly "patch." Nature should be regarded as a landscape of patches of all sizes, textures, and colors, changing continually through time and space, responding to an unceasing barrage of perturbations.

Worster clearly is perturbed himself about this new development that he, and others, significantly associate with the recent post-modern turn in science. From his point of view, the loss of the notion of ecosystem means a loss of an essential holistic lens through which ecological health can be determined. What is left is an image of a very disorderly, rapidly changing nature that is difficult to conceive in its entirety. Elsewhere, Worster even suggests that the new ecology is playing into the hands of those who would legitimize the further degradation of nature on the basis of the new mantra: "change and disturbance is natural" (Worster 1994: 1993).

Yet there are others, like Botkin (1990), who believe this new view of nature actually provides a better base for conservation practice, precisely because it moves away from such static notions

as equilibrium and ecological climax. Viewing nature as a mosaic of different processes with unequal rates, and diverse patterns, of change renders the ecologist's lens that much more discerning. Such a view appropriately emphasizes the diversity of nature and natural evolution. And it is here, especially, that the parallels with contemporary social theory are most apparent.

For the specific purposes of this paper, the importance of this post-modern view of nature rests in what it implies for the case-studies. Clearly, imagineered Disney-Nature on Discovery Island cannot be dismissed anymore as ersatz simply because it does not constitute an ecosystem. Here, indeed, is the basis for Worster's concerns about the new ecology. Yet, Disney-Nature can be criticized from the point of view of post-modern ecology precisely because ecological change is not allowed to happen. What change does take place takes place only because humans allow it to. From this point of view Disney-Nature is ersatz and even detrimental because it impedes natural evolution.

Similarly, the Kissimmee Restoration project can be upheld as providing more ecological benefits because it does provide non-human nature the opportunity to evolve. Put differently, the project ideally restores a nature that will not be as actively managed by humans, which of course raises the stakes of uncertainty and ultimate danger to humans. In short, judgements about what kinds of imagineering are more ecologically sound than others are not impossible to make even though it must be recognized that there exists many different notions of what authentic, or real, "nature" might be.

Who is to be the Gardener?

There is an increasing concern among conservationists and others concerned with global nature that humans need to take a more active management role. Virtually all of the chapters of a recent edited textbook on conservation biology emphasize the necessity of such concerted action in order to save the natural world from total destruction (Meffe and Carroll 1994). Soulé (1991) has even called the current global situation a "constant crisis" for conservationists, necessitating direct action even in the context of uncertainty or the lack of perfect knowledge. There is a growing perception, in other words, that because non-human nature is being

disturbed by humans at ever increasing rates, it is up to other humans to protect nature as much as possible.

Significantly, a recent article on this notion of managing nature for ecological integrity suggests that:

There is room for choice in the kinds of ecosystems with integrity that humans might prefer. In human-dominated ecosystems, it really is a matter of: "What kind of garden do we want? What kind of garden can we get?"... Forecasts of future ecosystems are not possible, but some future imaging of preferred ones is (Regier 1993:16).

As another author from this same collection puts it, ecological integrity is really "about our sense of the wholeness and well being of ecological systems and, in this, must reflect our sense of what we value in them" (Kay 1993:203).

The question, it seems to me, is not *whether* nature is to be managed by humans, it clearly already is and has been for a very long time. Rather the question is *how* nature is to be managed. The post-industrial imagineering of nature is a process with a dynamic that springs from the continuing process of capitalist accumulation. It is, in turn, a process which alienates increasing numbers of people from non-human nature. In this context, what is natural is merely relative, actively imagineered for ease of consumption. Disney-Nature, in this sense, is as real as any other non-human nature.

The alternative to this mode of natural management would be to produce nature to conform as closely as possible to natural processes. That is, instead of producing nature for pure entertainment value, this alternative mode would seek to produce a nature that is based on ecological history and imbued with a future that may be unforeseeable, yet, at the same time, inevitable given evolutionary processes. The Kissimmee River restoration project is a good example of this, but it must be underscored that a project such as this must be sold to folks increasingly ignorant of natural evolutionary processes. That the restoration will cost hundreds of millions of dollars which otherwise might be spent on schools, roads, and even prisons, makes it all the more necessary for ecologists to be aware of this ever widening social context in which they argue their case.

In the starkest terms, the question is who is to be the gardener: Disney or the ecologist. But this is not the same lament as Soulé's

tirade against city people. The twist in the present argument is that, if the ecologist is to be the gardener, she will have to elicit a veritable cultural revolution in post-industrial societies if her message is to be heard, let alone absorbed and acted upon. Disney's imagineered nature seems just as good, indeed, even better than anything the ecologist has to offer, particularly because this nature can be enjoyed without giving up any of the comforts of the city. And this, I think, is what portends the worse for the future of nature and, then, our species.

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