Allen Carlson's Environmental Aesthetics and the Protection of the Environment

Ned Hettinger*

Evaluation of the contribution that Allen Carlson's environmental aesthetics can make to environmental protection shows that Carlson's positive aesthetics, his focus on the functionality of human environments for their proper aesthetic appreciation, and his integration of ethical concern with aesthetic appreciation all provide fruitful, though not unproblematic, avenues for an aesthetic defense of the environment.

I. AESTHETICS AND ENVIRONMENTAL PROTECTION

Clear-cuts, strip mines, toxic waste dumps, spewing sewage pipes, fish belly-up in the creeks, belching smokestacks, urban blight, junkyards, bill-boards, tacky neon strip-developments, and suburban sprawl. These symbols of environmental degradation are also paradigms of aesthetic disvalue. Conservation-education leader David Orr notes a decline in our capacity for aesthetic appreciation and argues that this decline manifests an "ecological illiteracy" that allows us to feel comfortable with ugliness. Along with Rene Dubos, Orr worries that "our greatest disservice to our children" is giving them "the belief that ugliness is somehow normal." "Ugliness," he argues, "is the surest sign of disease . . . or 'unsustainability'" and signifies a "fundamental disharmony between people and between people and the land."

Orr is not the only environmental thinker identifying aesthetics as crucial to environmental protection. Among environmental philosophers, Eugene Hargrove, Mark Sagoff, and Janna Thompson take aesthetics to be central

^{*} Department of Philosophy, College of Charleston, Charleston, SC 29424. Hettinger's research focuses on environmental philosophy, most recently on the role aesthetics can play in a defense of the environment. He thanks Allen Carlson, Sanford Levy, and Yuriko Saito for helpful comments.

¹ David Orr, Ecological Literacy (Albany: State University of New York Press, 1992), pp. 87-88.

² Hargrove takes the preservation of natural beauty to be key to the historical development of the environmental movement and to his own argument for environmental preservation. See Eugene C. Hargrove, *Foundations of Environmental Ethics* (Englewood Cliffs, N.J.: Prentice Hall, 1989).

³ Sagoff thinks that "anyone who has a 'sense of place' environmental ethic (as he does) takes aesthetic concerns to be fundamental" (personal communication, July 2003). One place Sagoff stresses aesthetic values in the protection of nature is "Zuckerman's Dilemma: A Plea for Environmental Ethics," *Hastings Center Report* 21 (1991): 32–40.

⁴ Thompson argues that "Everyone (whether they make the effort to appreciate this worth or

to environmental concern. Holmes Rolston, III does as well, if we take a broad enough view of aesthetic value. Aldo Leopold stressed the importance of aesthetics to environmental protection, making preserving the beauty of the biotic community one of three criteria for right action concerning the environment. Baird Callicott argues that Leopold believed cultivating an appropriate aesthetic response to nature was as important as developing an appropriate ethical attitude. Some aestheticians also stress the importance of aesthetics to environmental protection. For example, Marcia Eaton claims that "Ecologists internationally recognize that in the absence of a change in aesthetic preferences, sound environmental practices have little chance of being widely adopted."

Despite these voices emphasizing the importance of aesthetics for environmental protection, many have serious doubts about appeals to aesthetic value. One feel aesthetics is a weak type of value easily brushed aside by the serious moral concerns—employment, income, development—that are used to justify environmental degradation. Many believe that far stronger moral and utilitarian values can be pressed into the service of environmental protection, and hence that it is neither necessary nor important to stress aesthetic values.

not) has a duty to protect and preserve natural beauty that is at least as demanding as the duty to preserve great works of art." See Thompson's "Aesthetics and the Value of Nature," *Environmental Ethics* 17 (1995): 305.

⁵ Philosopher of biology Elliot Sober has argued that environmental concern is best understood as a kind of aesthetic concern. See Sober's "Philosophical Problems for Environmentalism" in Bryan G. Norton, ed., *The Preservation of Species* (Princeton: Princeton University Press, 1986), pp. 173–94.

⁶ Concerning a broadly conceived nature aesthetics founded on knowledge and appreciation of natural history, Rolston asks: "Does environmental ethics need such an aesthetics to be adequately founded?" He answers, "Yes, indeed." See Rolston's "From Beauty to Duty: Aesthetics of Nature and Environmental Ethics," in Arnold Berleant, ed., Environment and the Arts: Perspectives on Environmental Aesthetics (Aldershot, Hampshire, UK and Burlington, Vt.: Ashgate, 2002), p. 140. Allen Carlson argues that Rolston's environmental ethics is deeply tied to aesthetic value in "We See Beauty Now where We Could Not See It Before': Rolston's Aesthetics of Nature" (typescript available from the author).

⁷ "A thing is right when it tends to preserve the integrity, stability and beauty of the biotic community. It is wrong when it tends otherwise." Aldo Leopold, A Sand County Almanac (New York: Oxford University Press, 1949), p. 240.

⁸ Callicott writes: "To cultivate in the public . . . 'a refined taste in natural objects,' is vital to enlightened democratic land use decisions. A Sand County Almanac aims to do just that, quite as much as it aims to instill an ecological conscience." See Callicott's "The Land Aesthetic," in J. Baird Callicott, ed., A Companion to a Sand County Almanac: Interpretive and Critical Essays (Madison: University of Wisconsin Press, 1987), p. 158.

⁹ Eaton provides the following example: "As long as people want large, green, closely mowed yards no matter what the climate or soil or water conditions, they will continue to use polluting gasoline mowers and a toxic cocktail of fertilizers, herbicides and pesticides." Marcia Eaton, "Professional Aesthetics and Environmental Reform," Aesthetics online, http://www.aesthetics-online.org/ideas/eaton.html, p. 1.

¹⁰ For one skeptic, see J. Robert Loftis, "Three Problems for the Aesthetic Foundations of Environmental Ethics," *Philosophy in the Contemporary World* 10, no. 2 (Fall-Winter 2003): 41–50.

Others argue that aesthetic value is anthropocentric and instrumental, and thus provides an inappropriate basis for environmental protection. Nevertheless, a widely assumed rationale for environmental protection is to prevent the loss of aesthetic value resulting from environmental degradation.

If we are to fairly assess the role that aesthetic value can play in environmental protection, we need to look at what those working in the field of environmental aesthetics are saying about such value. The most significant work in this area belongs to Allen Carlson. For more than twenty-five years Carlson has been exploring the aesthetic appreciation and value of non-art, in most all of its forms. He has had few associates. ¹¹ Gradually, however, interest in environmental aesthetics has grown, and especially with the publication of his book Aesthetics and the Environment in 2000, ¹² philosophical environmental aesthetics has blossomed. To my knowledge, those working in the field have not systematically addressed what use their work could be to their colleagues in environmental ethics and policy or how their views might be used to protect the environments that they help us appreciate. ¹³

This paper explores the implications of Carlson's work in environmental aesthetics for environmental protection. I argue that although Carlson's environmental aesthetics poses significant problems for those who want to use it for environmental protection, those problems can be substantially resolved. Carlson's ideas provide helpful resources for this project. I focus on three dimensions of Carlson's views and their implications for environmental protection: positive aesthetics (section two), the role of functionality in the appreciation of human-shaped environments (section three), and the relation between aesthetic values and ethical concerns (section four).

Other major figures who have worked in environmental aesthetics for some time include Arnold Berleant, Ronald Hepburn, and Yrjö Sepänmaa.

¹² Allen Carlson, Aesthetics and the Environment: The Appreciation of Nature, Art and Architecture (New York: Routledge, 2000). All page references in parentheses refer to this book unless otherwise specified.

¹³ Carlson frequently stresses that a virtue of his cognitive approach to environmental aesthetics, with its emphasis on scientific knowledge for appropriate aesthetic appreciation of nature, is that it "endows the aesthetic appreciation of nature with a degree of objectivity" and this "holds out promise of a more direct practical relevance in a world increasingly engaged in environmental assessment" (p. 12). However, except for his paper, "Environmental Education and the Dilemma of Aesthetic Education" from 1976 (chap. 9 of Aesthetics and the Environment), Carlson never directly addresses the connection between environmental aesthetics and environmental protection in any detail. In a recent paper, Carlson suggests that the relation is straightforward. Perhaps this suggestion explains the lack of attention he has given to this subject. He says: "'This is ugly, so prevent it' is almost as close to 'tautology' as is 'This is morally bad, so do not do it." "Other than the ever-present problems of competing interests and desires, the difficulty is typically not in convincing individuals to prevent ugliness and to appreciate and preserve natural beauty, but rather in helping them initially to discover the extent and the diversity of nature's aesthetic value." ("'We See Beauty Now where We Could Not See It Before': Rolston's Aesthetics of Nature," typescript, p. 25). Thus, Carlson focuses on helping us find aesthetic value in the environment and not on how such beauty should be used to help preserve it.

II. POSITIVE AESTHETICS

In environmental ethics, Carlson is probably best known for his defense of the positive aesthetics of nature. In his original paper from 1984 on this topic, Carlson explains positive aesthetics thus:

The natural environment, insofar as it is untouched by humans, has *mainly* positive aesthetic qualities; it is graceful, delicate, intense, unified, orderly, not dull, bland, insipid, incoherent, chaotic. All virgin nature in short is *essentially* aesthetically good. The appropriate or correct aesthetic appreciation of the natural world is *basically* positive and negative aesthetic judgments have *little* or no place." (p. 72; emphasis added)

Even with this host of qualifying words, this is a very strong—and for some—counterintuitive thesis.¹⁴

Let me distinguish four claims that might be associated with Carlson's positive aesthetics:

- (1) Essential beauty thesis: Virgin nature essentially has positive aesthetic qualities.
- (2) No negative judgment thesis: Negative aesthetic judgments about nature are inappropriate.
- (3) Equal aesthetic value thesis: All of nature is equally aesthetically valuable.
- (4) Perfect aesthetics thesis: Nature is maximally aesthetically valuable.

Carlson explicitly rejects the perfect aesthetics thesis. He writes, "For all we know, the natural world also could have been different, could have been aesthetically better than it is. In fact, that it could have been seems very likely" (p. 80). At one point, Carlson seems to have embraced the equal aesthetic value thesis (pp. 120–21). However, Carlson now explicitly rejects this thesis, asserting that all he meant to say was that "all natural objects, since they all have positive aesthetic value, are equally worthy of appreciation, and not that they all are actually equal in positive aesthetic value." By denying the equal aesthetic value thesis, Carlson makes his positive aesthetic thesis not only more plausible, but also more useful for environmental policy. Practically

¹⁴ Yuriko Saito, for example, argues that "even if we try to bring ourselves to listen to nature's stories, some things in nature are so repulsive, annoying, or unattractive . . . that our negative reaction to these things outweighs their positive aesthetic value." "As long as we are talking about our aesthetic experience based on our all too human sentiments . . . not everything in nature can or should be appreciated aesthetically." See Saito, "The Aesthetics of Unscenic Nature," in Arnold Berleant and Allen Carlson, eds., Special Issue on Environmental Aesthetics, *Journal of Aesthetics and Art Criticism* 56 (1998): 106, 109.

¹⁵ Allen Carlson, "Hargrove, Positive Aesthetics, and Indifferent Creativity," *Philosophy and Geography* 5, no. 2 (2002): 233, n. 27 (emphasis added).

speaking, we must make decisions about which natural environments to preserve or protect, and aesthetic value could not help us with such discriminations if all were equal in beauty.

In this same paper, Carlson adds precision and strength to the essential beauty and the no negative judgment theses. He rejects the view that only natural kinds are aesthetically positive and asserts that "each natural thing, either with appropriate appreciation or at many, if not almost all, levels and conditions of observation, has substantial positive aesthetic value and little, if any negative aesthetic value." ¹⁶

Positive aesthetics, thus understood, provides strong (aesthetic) support for environmental protection, specifically nature preservation. The aesthetic value that pristine nature has is almost always positive, it is substantial, and it is possessed not only by nature in general, but by "each natural thing." Thus human alterations of nature must exercise great care, lest we degrade this substantial beauty. Because a similar positive aesthetics thesis for human-shaped environments is not plausible, the human-shaped environments that replace pristine nature will likely have less aesthetic value. Thus, from a consequentialist moral perspective for which it is wrong to lower the amount of value in the world, Carlson's positive aesthetics gives us a strong aesthetic reason for preserving and protecting nature.¹⁷

But is Carlson's positive aesthetics plausible? Carlson's argument for positive aesthetics is that natural science interprets nature as orderly, harmonious, unified, and regular, and that these are characteristics we find aesthetically pleasing.

A significant consideration in the creation and selection of scientific descriptions is whether or not they make the natural world appear aesthetically better... more unified, orderly, or harmonious. I find this claim somewhat plausible in part because science aims at human understanding and by in large, we humans find more understandable that which appears to us to have properties such as unity, order, and harmony.¹⁸

Because appropriate aesthetic appreciation of nature is informed by science, such an appreciation will find it aesthetically positive. Carlson sees the advance of science as simultaneously a march toward greater aesthetic appreciation of nature.

I am worried that, on Carlson's account, nature's beauty becomes almost

¹⁶ Ibid. (emphasis added). This formulation is in response to Malcolm Budd's suggestion that "Positive aesthetics with respect to nature would be more plausible if it were to maintain that each natural thing, at some level of observation, has a positive aesthetic value." See Budd's "The Aesthetics of Nature," *Proceedings of the Aristotelian Society* 100, no. 2 (2000): 155. Carlson thinks this version of positive aesthetics is too weak.

¹⁷ Robert Elliot shows how the intrinsic value of nature can lead to preservationist policies on deontological grounds as well. See Elliot's, *Faking Nature: The Ethics of Environmental Restoration* (Routledge: New York, 1997), pp. 50-53.

¹⁸ Carlson, "Hargrove, Positive Aesthetics, and Indifferent Creativity," p. 229.

necessary. On his view, appropriate aesthetic appreciation of nature must be informed by science, and if nature is scientifically intelligible, then it is aesthetically positive, for science interprets nature in ways we find aesthetically stimulating. But nature's beauty seems to be contingent. Nature's tremendous positive aesthetic value is miraculous in part because it need not have been so. Nature could have been dull, bland, relatively boring, and even significantly disorderly. I do not see why scientific knowledge of nature would be impossible in such a world. This worry is related to Hargrove's objection that for Carlson, the source of nature's creative beauty is science rather than nature itself. ¹⁹

One might try to support Carlson's positive aesthetics by noting his emphasis on *untouched* or *virgin* nature as what is aesthetically positive and arguing that all negative aesthetic qualities in nature are due to human influence. This argument fits with the controversial (though fairly widespread) conclusion in the environmental ethics literature that human alterations of nature necessarily degrade its value (here understood as aesthetic value). If nature is positively aesthetically valuable to the extent that it is free from the human touch, then to preserve its aesthetic value we ought to leave nature alone.²⁰

While I find it plausible that nature's wildness—the degree to which nature has been unaltered by humans—is an important facet of its value²¹ and that some dimensions of this value might be appropriately conceived as aesthetic, I do not think we can cash out nature's aesthetic value solely or even primarily in these terms. The extent of human manipulation of a natural area is not a reliable gauge for how much aesthetic value it has. Human manipulation of nature produces a wide variety of outcomes, including, on the one hand, flower gardens, farm fields, and architectural marvels, and on the other hand, oilsoaked beaches, clear-cut forests, and billboards. Although the former are superior aesthetically to the latter they seem to involve more rather than less human manipulation of nature. Furthermore, equating how wild a natural area is with how aesthetically valuable it is ignores that the human history of a landscape can add rather than detract from our aesthetic appreciation of it. That William Clark, Sacagawea, and their companions camped on the banks of the Yellowstone River where one is standing enhances the aesthetic appreciation

¹⁹ See Eugene Hargrove's "Carlson and the Aesthetic Appreciation of Nature," *Philosophy and Geography* 5, no, 2 (2002): 217. A further worry about Carlson's argument that science ensures that nature is aesthetically positive is that this claim seems to entail that all environments (including the most defiled) are aesthetically positive. There is just as much scientific interest in a toxic waste dump as in the Grand Canyon. However, Carlson can respond that scientific knowledge is not the main type of aesthetically relevant information necessary for appreciating human-manipulated environments. His view is that knowledge about their functions is what is relevant in appreciating such environments (see section three below).

²⁰ The notion that nature is positively aesthetically valuable *in virtue of* its being free from the human touch does not seem to fit with Carlson's claim that nature is aesthetically valuable because science describes it in ways that are aesthetically pleasing to us.

²¹ See Ned Hettinger and Bill Throop, "Refocusing Ecocentrism: De-emphasizing Stability and Defending Wildness," *Environmental Ethics* 21 (1999): 3–21.

Spring 2005

and value of that place, rather than detracting from its aesthetic value—as would be the case if wildness were the only grounds for nature's aesthetic value.

One might try to support the no negative judgment thesis by using Carlson's contrast between the "design appreciation" appropriate for art and the "order appreciation" appropriate for nature. In art appreciation, we can critically assess the design and the extent to which it was successfully embodied in the art object, and this allows for negative appraisals. In contrast, appropriate appreciation of nature allows for no such critical assessment of design or success, but rather a search for order that—Carlson argues—natural science readily provides. Because humanization of the environment (like art) involves artifice, it legitimizes negative aesthetic appraisal that was previously inappropriate.

One problem with this argument is that Carlson's version of positive aesthetics cannot rule out all types of negative judgments about pristine nature. Because Carlson allows that natural objects are aesthetically imperfect and of unequal aesthetic value, there will be examples of superior aesthetic value in nature that will justify critical and negative aesthetic evaluations of the less aesthetically positive aspects of nature. For example, we might criticize the awkward impala in light of her more graceful cousins or downgrade a recently emerged avian species in comparison to the ancient lineage represented by the crane. Thus, humanization of nature does not create for the first time the possibility of negative aesthetic judgments about nature. Of course, such negative comparative judgments are consistent with holding that each natural object is of great positive aesthetic value.

In addition, Carlson rejects the idea that the design appreciation which grounds the negative and critical aesthetic evaluation of art is appropriate for many human environments. Often such environments were not deliberately designed, but grew organically over time in response to various human interests.²² Thus, humanization of a natural environment does not necessarily open the door to the negative and critical aesthetic evaluation appropriate for art. Carlson's views, however, do countenance critical aesthetic evaluation of human-shaped environments based on moral criteria (see section four, below). Because moral evaluation of pristine nature is not appropriate, Carlson does give us grounds for the critical and negative aesthetic evaluation of human environments that do not apply to natural environments.

Note that although moral evaluation of pristine nature is not appropriate, evaluating natural events on nonmoral grounds remains an option. We might think that the pain of an elk attacked by a wolf is unfortunate, even while acknowledging that it is not appropriate to morally evaluate the wolf. Does the vast amount of suffering in pristine nature provide grounds for negative

²² Carlson says: "Since most of our human environments are not in fact deliberately designed, expectations shaped by the designer landscape approach are typically not satisfied. See Carlson's "On Aesthetically Appreciating Human Environments," Philosophy and Geography 4, no. 1 (2001): 15.

aesthetic judgments of it? Yuriko Saito argues that it is morally inappropriate to aesthetically appreciate those dimensions of nature that involve great suffering.²³ Note that this criticism does not involve our moral evaluation of nature, but rather our moral evaluation of our aesthetic response to nature.

Finally, even if it were the case that critical and negative aesthetic evaluations only become possible when an environment has been altered by humans, this view seems compatible with such environments having greater aesthetic value than more pristine ones. Perhaps critical aesthetic evaluation of my six-year-old son's art projects is inappropriate, but accepting this view does not imply that his projects have greater aesthetic value than the work of a professional artist who can be roundly criticized for failing to achieve some design he or she intended. We ought not to assume that domains where negative aesthetic evaluation is appropriate will have less overall aesthetic value than domains where such evaluation is inappropriate.

This brief exploration of positive aesthetics indicates that however plausible such a surprising thesis might initially be to many environmentalists, articulating and defending an acceptable version of the thesis is not easy. Carlson's support of positive aesthetics is provocative, but not definitive. Even if we grant the truth of Carlson's positive nature aesthetics, its implications for environmental protection are not as straightforward as it might seem. We may not assume that the positive aesthetic value of an environment is determined solely by the extent of its freedom from human alteration. Clearly, some human created or altered environments have greater aesthetic worth than the natural (or more natural) areas that they replaced. Imagine building the Sistine Chapel in some aesthetically undistinguished natural area, or compare the natural area including Frank Lloyd Wright's Falling Water with what existed there before the creation of this architectural masterpiece. The extreme nature of these examples should help us see, however, that many (perhaps most) anthropogenic environmental changes will fail to produce results that have the "substantial positive aesthetic value and little negative aesthetic value" that Carlson's positive aesthetics attributes to each and every thing in pristine nature. Thus, Carlson's strong version of the positive nature aesthetics (if true) provides significant aesthetic support for a type of environmental protection, namely, nature preservation.²⁴

III. THE PROBLEM OF APPRECIATING HUMAN ENVIRONMENTS

Although the aesthetics of nature is an important part of his view, Carlson is at least as interested in the aesthetics of human altered or created environments.

²³ See Saito, "The Aesthetics of Unscenic Nature," pp. 108-09.

²⁴ That positive aesthetics provides *aesthetic* support for nature preservation leaves aside the difficult question of how to weigh such aesthetic values against other values that may count against the preservation of nature.

His work goes beyond nature aesthetics and encompasses environmental aesthetics more generally. According to Carlson, environmental aesthetics assumes that "every environment, natural, rural, or urban, large or small, ordinary or extraordinary, offers much to see, to hear, to feel, much to aesthetically appreciate." Relatively pristine nature is only one of the environments we can aesthetically appreciate. Given that humans spend most of their time in—and have the greatest impact on—nonpristine environments, the aesthetics of these environments is likely to be more important for environmental protection.

Carlson's focus on the aesthetics of human-impacted environments would seem quite helpful to the project of using environmental aesthetics for environmental protection. The environmental movement must offer help in protecting urban and rural environments, not just in preserving significantly wild areas. Unlike many environmental philosophers, Carlson cannot be charged with ignoring our local, everyday environments and only paying attention to wilderness.

Unfortunately, Carlson's writing in this area focuses almost exclusively on positively appreciating these environments rather than on a comparative aesthetic evaluation of them. Many environments that environmentalists judge to be problematic, degraded, or eyesores are ones that Carlson suggests we can aesthetically appreciate, and he often helps us do so. To a certain extent, Carlson does with human environments what nature aestheticians have been doing with the natural environment: Providing knowledge and insight that turns dimensions of nature once considered aesthetically negative (e.g., swamps and snakes) into positively appreciable natural objects. Carlson might even be seen as exploring the possibility of positive aesthetics for human environments! Such an interpretation of Carlson's environmental aesthetics is worrisome from the perspective of those who want to use aesthetics for environmental protection.

Consider the following remarks as evidence for such an interpretation. Carlson claims that the aesthetic appreciation of environment is "essentially limitless" in scope and includes "amusement parks, shopping centers, and beyond." He states that one of the goals of his book is to provide knowledge that will help us appreciate "human-altered environments such as those of modern agriculture" with its "huge fields devoted to single crops... and vast uniform landscapes" (p. xx). Carlson encourages us to drop the assumption that all human environments are deliberately designed, for this often leads us to judge them harshly. If we focus on their functional fit, human environments have an organic unity we can aesthetically appreciate. He mentions "those parts of cities that are dedicated to industry and commerce"—including factories, refineries, and gas stations—as having an especially clear functional fit and as being "equally as viable candidates for aesthetic appreciation as are

²⁵ Allen Carlson, "Environmental Aesthetics," chap. 36, in Berys Gaut and Dominic McIver Lopes, eds., *The Routledge Companion to Aesthetics* (London: Routledge, 2001), p. 433.
²⁶ Ibid.

the traditional, paradigmatic works of architecture."²⁷ He wants us to place "equal emphasis on non-buildings . . . for example, sidewalks, streets, roads, bridges, ditches, railroads, rail yards, harbors, power and communication lines" and suggests that rather than consider these eyesores, they should be seen as offering "much that is of aesthetic interest and merit."²⁸ He also recommends shifting to larger units of appreciation that allow us to appreciate the ambience and feel of, among other things, urban sprawl and industrial parks and thus find greater aesthetic significance in them.²⁹ At one point Carlson worries that "many individuals have some aesthetic difficulty appreciating farming, mining, urban sprawl and other kinds of human intrusions into natural landscapes" and goes on to say that "the aesthetic difficulty appreciating other smaller scale intermixing of the artificial and natural, such as, . . . graffiti on rocks, initials carved into trees, artificially designed plants and animals, and even tattoos" "is more a matter of confusion than condemnation" (pp. 164–65).

Now amusement parks, shopping centers, farm monocultures, factories, refineries, gas stations, ditches, power and communication lines, urban sprawl, industrial parks, mining sites, graffiti on rocks, and initials carved into trees are not environmentalists' favorite items. By suggesting that they have aesthetic merit, Carlson weakens the aesthetic criticisms of them. Teaching us how to aesthetically appreciate these dimensions of our environments is likely to be seen as encouraging the sort of "ecological illiteracy" that allows us to live comfortably in a world of aesthetic and ecological wounds. To take just one example, rather than relaxing our design assumptions so that we may learn to aesthetically appreciate the unplanned sprawl that eats away at the rural landscape around our cities, we need to criticize planning officials for letting our cities grow haphazardly and for being poorly designed or simply ugly. Rather than putting environmentally friendly and faulty human environments into the same category and telling us that they "can be as aesthetically rich and rewarding as are the very best of our works of art,"30 Carlson should be distinguishing between such human environments and helping us aesthetically appreciate the former and aesthetically criticize the latter.³¹

Fortunately, Carlson's work provides the resources to respond to this criticism. Although he does not use them, Carlson has the tools needed to

²⁷ Carlson, "On Aesthetically Appreciating Human Environments," pp. 14, 19.

²⁸ Ibid., pp. 19-20

²⁹ Ibid.

³⁰ Carlson, "Environmental Aesthetics," p. 433.

³¹ The distinction between aesthetic appreciation and the judgment of the presence of aesthetic value is relevant to assessing this criticism. Might the desolation of a ghetto or an atomic-bomb mushroom cloud have overall positive aesthetic value even though they should not be aesthetically appreciable by morally sensitive observers? If so, then the presence of positive aesthetic value need not entail the appropriateness of positive aesthetic appreciation. Might the appropriateness of positive aesthetic appreciation also fail to entail the presence of positive aesthetic value? If so, Carlson could be seen as teaching us how to positively aesthetically appreciate environments that lack significant positive aesthetic value. On this view, Carlson's claims about

distinguish aesthetically between environmentally friendly and faulty human environments. These resources are, first, Carlson's emphasis on the functionality of human environments for their proper aesthetic appreciation, and second, Carlson's broad conception of aesthetic value that includes not just the formal, sensuous qualities of aesthetic objects but also their expressive qualities and particularly the "life values" (including moral values) they embody.

Carlson's provocative paper on "Appreciating Agricultural Landscapes" (pp. 175–93) illustrates both the problem I've identified and the resources he has with which to respond. In this paper, Carlson aesthetically evaluates both traditional family farming and modern industrial agribusiness, and surprisingly defends industrial agriculture from the charge that it is aesthetically impoverished. Carlson begins by powerfully articulating the view that traditional farming evidences great aesthetic and moral values, while modern industrial agriculture is aesthetically repellant and morally bankrupt. The traditional farm of the mid-twentieth century is, he says, a "storybook farm" "rich with perceptual and expressive elements" including tidy and patterned fields, fence rows, a diversity of animals and plants, and thriving rural communities, all on a human scale that made this period a "golden age for the aesthetic appreciation of agriculture" (pp. 176-77). In contrast, the new agricultural landscapes involve larger scale, greater uniformity, fewer farms and towns, less diversity, and no fences. It is a terrain where hills and gullies have been bulldozed into a "flatscape," a home for huge expensive equipment, prefabricated warehouse-like buildings, and giant storage towers. The bustling rural towns have been replaced with strip highways littered with fast food joints and machinery outlets. In sum, the charming rural community with picturesque and pastoral qualities has been replaced by a dull, barren, and monotonous sameness. The new agricultural lands also possess negative expressive qualities: They manifest a loss of social stability, cultural vitality, and environmental integrity.

Carlson responds to this common aesthetic evaluation by arguing that these industrial agricultural landscapes are unfamiliar. When confronted with a new object of aesthetic appreciation, we often compare it to an earlier aesthetic object with which we are familiar. But doing so, Carlson suggests, risks appreciating a new type of aesthetic object on the basis of an obsolete model, and this results in a failure to appreciate the object on its own terms, for what it is, thus misconstruing its aesthetic merits. Carlson argues that negatively evaluating industrial agriculture because it lacks the aesthetic virtues possessed by traditional farming makes the same type of mistake made by those who negatively judged the first exhibits of futurist and cubist art in the early 1900s because such art failed to live up to the aesthetic standards set by impressionism.

the rich possibility of aesthetically appreciating environmentally faulty human environments would not entail any claims about their positive aesthetic value. I am skeptical about denying this second entailment.

The new agricultural lands can be properly aesthetically valued, he argues, only if we appreciate them on their own terms and use the correct models and categories. Searching for "a snug little farmstead and intimate tree-enclosed field" in the vast modern agricultural lands will lead to "frustration and dismay" (p. 185) and allows them to be "prejudiced by their own past" (p. 186). Carlson suggests that if we focus on their formal and functional qualities, we can find much to appreciate. The new landscape has, he says, "orderly sharpness," geometric power and elegance, "intensity of color and boldness of line," in short, "breathtaking formal beauty" (pp. 185-86). In addition to these positive formal qualities, Carlson suggest we will also find positive expressive qualities in modern agricultural lands, once we appreciate them for what they are: Namely, deliberately designed, functional landscapes. Agricultural lands have been deliberately designed for the production of food and fiber, a function necessary to fulfill important human goals. To appreciate functional landscapes, Carlson says, "we must explicitly consider their functions and how and how well they are designed to perform these functions" (p. 187).

Appreciating the necessity and seriousness of modern agriculture's function is also important for its positive aesthetic appreciation, for well-designed lands that perform unnecessary functions or aim at trivial goals—his example is Las Vegas—will typically express "capriciousness, superficiality, or crassness" (p. 188). Carlson argues that the main trends of modern agriculture—its massive scale, its elaborate equipment, its vast uniform fields—are necessary and inevitable in the modern world. Thus,0 he says they "express the seriousness, rightness, and appropriateness of necessity" (p. 189). Given this understanding of these lands and these criteria by which to judge their aesthetic merit, modern industrial agriculture, Carlson thinks, has significant aesthetic value: Such lands are "paradigms of good design—crisp, clean, uncluttered in appearance and expressive of ingenuity, efficiency, and economy" (p. 187).³²

While there is much to worry about concerning Carlson's ingenious defense of the aesthetic value of industrial agriculture, there is much we can learn from it as well.³³ In particular, I think Carlson's focus on the functional nature of agricultural (and indeed all human) environments and his appeal to morally thick expressive qualities point the way to a deep aesthetic critique of much

³² In the conclusion (p. 189 and n. 37, pp. 192-93) of "Appreciating Agricultural Landscapes," Carlson somewhat weakens his defense of the aesthetic value of modern agricultural lands and shows he is aware of the type of criticism I'm about to offer. He admits that there are rational grounds for disputing the appropriateness and necessity of the goals and techniques of modern agricultural as he has described them and claims that his aim is really to show that modern agriculture is an "equivocal" object of aesthetic appreciation" (p. 189).

³³ Why is it inappropriate to compare the aesthetics of modern industrial agriculture with those of the traditional farm? Rather than being prejudicial, looking at modern agriculture with an eye to what it destroyed focuses on factors that surely affect its expressive qualities. It is true that aesthetically appreciating much modern (so-called) development will be made more difficult if we keep in mind the aesthetic value of what it destroyed, but this seems to me to be an appropriate

contemporary "development" that would resonate with environmentalists. Human environments, Carlson says, "are what they are in virtue of what they are meant or intended to accomplish" (p. 134). Central to their appropriate aesthetic appreciation is information about their functions. The primary question is "What does it do and why does it do it?" (pp. 134–35). Carlson provides a strong case for the view that appreciating human environments in light of their purposes and functions is essential to proper aesthetic appreciation of them.

Now the central objection in recent environmental thought to many human environments, developments, and ways of living is that they are not sustainable and thus do not perform their proper functions well. This critique has certainly been leveled at the modern industrial agricultural systems that Carlson defends. If aesthetically appreciating modern agricultural landscapes involves focusing on their functions, and if such landscapes are unsustainable, as environmentalist critics of agriculture charge, then instead of a positive aesthetic response to well-functioning landscapes, the appropriate response will be dismay at a massively dysfunctional system. Modern agriculture is fossil-fuel and fossil-water reliant, it is soil eroding, it is a prime water polluter, and it destroys rural communities. As such it is unsustainable and hence not functional. Far from being a necessary landscape, it is—over the long term an impossible one.³⁴ With 800 million malnourished people on the planet and with over one-half adult Americans overweight, it is clear that the massive amounts of food produced by this agriculture do not go to those who need it. This agricultural system utterly fails to meet the goal Carlson suggests it is seen as having, namely of "ensuring the survival of as many human beings as

focus, especially considering Carlson's "ecological account" of aesthetic appreciation of human environments (discussed below). In his chapter on the appreciation of architecture (chap. 13), Carlson argues that imaginatively contemplating the landscape without the building is a proper part of our appreciation of the architectural work, and that as a result such appreciation is typically deepened and enriched. This argument suggests that in appreciating any human structure placed on the land, we can and should compare it with what was there before. Such a comparison need not lead to enrichment of appreciation but might lead instead to disappointment. Such is the case when assessing modern industrial agricultural lands. It is probably not fair to interpret Carlson as claiming that we may not criticize a strip mall or a Wal-Mart by comparing its aesthetic quality with the aesthetic quality of the nature that it replaced. What Carlson is arguing is that the appreciative model by which one determines the aesthetic value of the old environment may be inappropriate for determining the aesthetic value of the new environment. But in the case of agricultural lands, it is not clear why the same appreciative model should not be used to assess the aesthetic value of both. Although it is probably inappropriate to think of their functions as identical, both types of agricultural lands aim to provide food, employment, and income. To look at traditional farms and modern industrial farms with a similar appreciative model is not to confuse categories in anything like the way one does when one tries to appreciate Duchamp's Fountain by using an aesthetic sense honed in the study of Van Gogh's works.

³⁴ I am relying on the work of writers such as Wendell Berry and Wes Jackson for the judgment that industrial agriculture is unsustainable. For a recent argument to this effect, see Andrew Kimbrellm ed., Fatal Harvest: The Tragedy of Industrial Agriculture (Washington, D.C.: Island Press, 2002).

possible for as long as possible" (p. 192, n. 37). In light of this focus on the purposes, goals, and functions of modern industrial agriculture, such land-scapes are expressive of waste, shortsightedness, and profligacy.

Carlson's focus on the functionality of human environments dovetails with the environmentalist's focus on their (frequent) unsustainability and provides a compelling criticism of many environments. Although suburban sprawl has, as Carlson says, "'organically' grown in response to human needs, interests and concerns"35 and has a "functional fit" in that sense, it does not work well. Sprawl uses land inefficiently, causes traffic jams and an ever-escalating "need" for more roads, enforces automobile use, undermines public transit, disregards pedestrians and cyclists, and cripples the community in many other ways. Carlson's emphasis on the functionality of human environments, placed in the hands of those who believe they work poorly, highlights their numerous unsavory expressive qualities. For those worried about overconsumption, shopping centers are expressive of waste, shallowness, and greed. Gas stations and refineries illustrate our devotion to the automobile and a short term. nonrenewable energy source; they express myopia. Power and communication lines express profligacy, at least in a country that consumes over one quarter of the world's energy production while housing a mere five percent of the world's population. Ditches and factories bring to mind water pollution and unfishable and unswimable rivers; they express filth and disease. Many contemporary human environments will not survive over the long term and thus will appear broken, especially in comparison to the sustainable natural systems they replaced. If we focus on their consequences for the less fortunate, for future people, and for other species, rather than appearing necessary and serious, many human environments will seem frivolous and trivial. If we take seriously Carlson's claim that "his ecological approach to the aesthetics of human environments is primarily interested in bringing ecological considerations to the appreciation of human environments,"36 then many of these environments will be difficult to aesthetically appreciate and will have low or negative aesthetic value.

One might object that human environments have various functions and wonder why sustainability is part of the appropriate function by which a human environment should be aesthetically evaluated. Sanford Levy puts the concern this way:

You criticize a built environment because it is not sustainable. But what makes sustainability part of the relevant function? Factory owners rarely have "sustainability," as environmentalists understand it, as one of their goals. So why should the factory be evaluated by that standard? Why not evaluate it in terms of

³⁵ Carlson, "On Aesthetically Appreciating Human Environments," p. 14.

³⁶ Ibid., p. 13.

its ability to make products, or money, or to pass pollutants on to others? ("Wonderful, factory George. I notice how well that chimney is designed to float smoke over the boarder and away from our fine town. Beautiful. A true work of ART!")³⁷

In response, it should be noted, first, that the purposes of the individual owner, designer, or user of a human environment or artifact are not conclusive in determining the appropriate functional description for the purposes of aesthetic (and moral) evaluation. Community or social uses and purposes seem more relevant. So, for example, factories ought to serve the community's purpose of producing goods in a socially responsible manner. That some factories serve to enrich their owners by allowing them to shift pollution onto their neighbors does not mean they are appropriately appreciated as well-designed poisondelivery systems. Second, the type of functional fit Carlson argues is relevant to appreciating human environments is connected with their survivability: "The importance of . . . functional fit in general, has to do with survival . . . and it is in that sense that the fit is functional. . . . As in the natural world, success or failure of the functional fit may ultimately determine the fate, whether they survive or not, of various human environments."38 I think Carlson is right that survivability (and hence sustainability) are key ingredients of functionality. We would not say of an automobile falling apart due to built-in obsolescence that it was performing its function well because the managers of the company were succeeding in their purpose of increasing new car sales. Similarly, we should not say that community-crippling sprawl development is functioning well because it maximizes profits of developers or that an unsustainable agricultural system is functioning well because it produces vast quantities of food and profits by externalizing its environmental and social costs.

IV. INTERMINGLING ENVIRONMENTAL AESTHETICS AND ETHICS

One might object to the idea of aesthetically evaluating human environments in terms of their functionality and sustainability because such ethical concerns are not relevant to aesthetic appreciation. Moral assessments of human environments should not be confused with aesthetic evaluation: that certain human environments are unsustainable and morally objectionable on those grounds is perfectly compatible with those environments having great aesthetic appeal. That Roman coliseums were places where spectators eagerly watched the slaughter of innocent people does not detract from their architectural value.³⁹

However meritorious, this objection does not fit with Carlson's approach to environmental aesthetics which closely connects ethical and aesthetic values.

³⁷ Sanford Levy, personal communication, August 2003.

³⁸ Carlson, "On Aesthetically Appreciating Human Environments," pp. 13-14.

³⁹ The debate over whether excellence in art is influenced by moral goodness has a long and

Carlson explicitly rejects "aestheticism" which he defines as "the view that aesthetics and ethics are two separate realms and thus that aesthetic appreciation is not subject to moral constraints." He argues that

If human environments cannot be fully appreciated without reference to ecological considerations, they likewise cannot be fully appreciated without reference to the complete range of cultural considerations and at the heart of culture is morality. In short aestheticism is ruled out from the start by the holistic nature of an ecological approach to the aesthetic appreciation of human environments.⁴¹

Carlson argues that a "thin" sense of the aesthetic that treats only the physical appearance of an aesthetic object as aesthetically relevant is incomplete. Aesthetic objects can and should also be aesthetically appreciated in a "thick sense" for their expressive dimensions and the "life values" they embody. Although a suburban neighborhood that is the result of racist, exploitative, and corrupt political and economic forces may look attractive, it exudes life values that—given our moral views—will make it "difficult if not impossible to aesthetically appreciate and value." Roadside litter, he argues, is an eyesore not solely because of its physical appearance, but also because it expresses "waste, disregard, carelessness, and exploitation" (p. 144). Such expressive qualities are clearly morally charged. For Carlson, at least, arguing that many human environments are unsustainable, and ethically suspect on those grounds, can be relevant to their aesthetic appreciation and evaluation. 43

Unfortunately, by allowing ethical judgments about environments to enter into our aesthetic evaluation of them, we may be undermining the contribution such aesthetic arguments can make to environmental disputes, at least when those disputes reflect ethical concerns—for rather than appealing to independent

distinguished history. For a useful discussion, see Noel Carroll, "Art and Ethical Criticism: An Overview of Recent Directions of Research," *Ethics* 110 (2000): 350–87. Carroll argues that a moral defect in art can *sometimes* be an aesthetic defect as well. Although pristine nature has no moral defects, human shaped environments clearly do. Carlson argues that such defects can be relevant to their aesthetic appreciation.

⁴⁰ Carlson, "On Aesthetically Appreciating Human Environments," p. 16.

⁴¹ Ibid., p. 17.

⁴² Ibid., p. 19. Carlson wonders about a "more controversial empirical claim... that when we are actually unable to find an object aesthetically pleasing in the thick sense because of the (negative) nature of its expressive qualities, this often makes aesthetic enjoyment of this object in the thin sense psychologically difficult, if not impossible" (p. 145).

⁴³ One way to allow but limit the role of ethics is to insist that moral considerations are only relevant to aesthetics when they draw our attention to features of the aesthetic object itself or affect (or should affect) how we experience the aesthetic object. Knowing that an attractive suburban neighborhood is the product of exploitative political and economic forces may, for example, draw our attention to the skin color of the laborers or make the houses appear gaudy. Moral considerations that have no such affect on our experience of the aesthetic object would be irrelevant to its aesthetic evaluation. That the carpenter who built much of someone's home beat his wife seems irrelevant to our architectural appreciation of the structure.

considerations to help solve moral disagreements about environmental policy, appeals to environmental aesthetics (understood as including moral considerations) may smuggle in the very moral disagreements we were trying to circumvent. For example, in a dispute about whether a community should preserve the rural character of its environs or allow strip-highway, sprawl development, the debate might center on the conflict between community values and private property rights. If environmentalists attempt to shift the focus by arguing that great aesthetic value would be lost with strip-highway development because such development expresses unsavory life values such as selfish exploitation and disregard for the community, their opponents can rightfully object that these are precisely the moral values about which there is disagreement. The pro-development forces might argue that strip-highways are of high aesthetic value because they express individual freedom and entrepreneurial ingenuity. Those who want to use environmental aesthetics to help resolve disputes about environmental ethics and policy risk begging the question by embracing a conception of environmental aesthetics that gives a prominent place to ethical considerations.

The strength of this objection depends not only on the nature of the environmental dispute to which aesthetic concerns are brought to bear, but also on the manner in which ethics is brought into the aesthetic appreciation and evaluation of the environment. Sometimes Carlson's language suggests that he thinks that the relationship between aesthetics and ethics is an external one: speaking about the attractive suburban neighborhood that is the result of racist, exploitative and corrupt forces, he says, "Insofar as the moral and the aesthetic appear to come into conflict, the former trumps the latter."44 This remark suggests that moral concerns are never really integrated into our aesthetic appreciation but are brought in after our aesthetic responses in order to regulate them. This possibility could make the appeal to environmental aesthetics to help resolve ethically motivated disputes in environmental policy blatantly and self-defeatingly circular. But Carlson also provides a more integrated account of the relationship between aesthetics and ethics. He argues that to aesthetically appreciate a Playboy centerfold model involves perceiving the model not as what she is, a human being, but as a sex object, and that doing so is to "endorse and promote" a sexist attitude toward women in ourselves and others. He writes.

It is clear that we do not aesthetically appreciate simply with our five senses, but rather with an important part of our whole emotional and psychological selves. . . . what and how we aesthetically appreciate cannot but play a role in shaping our emotional and psychological being. This . . . helps determine what we think and do and what we think is correct for others to think and do. In short, our aesthetic appreciation is a significant factor in shaping and forming our ethical views. (pp. 66–67)

⁴⁴ Carlson, "On Aesthetically Appreciating Human Environments," p. 19.

Similarly, he suggests that "our aesthetic appreciation of nature helps to determine our ethical views about nature" (p. 67). Here Carlson embraces a more intimate view of the connection of aesthetics and ethics, and in particular, we get the suggestion that our aesthetics shapes our ethics. Carlson's claim that unsavory, ethically charged life values expressed by certain human environments make us unable to aesthetically appreciate them in a thick sense suggest that he also thinks our ethics shapes our aesthetics.⁴⁵

Carlson is right that our aesthetic sense is not an isolated compartment of our lives but is fundamentally tied with who we are, what we believe, and what we value (including ethically value). That is why we rightfully worry when one we love fails to share our aesthetic judgments, for this difference manifests a potentially deep rift between people and not just a difference in one isolated area of their lives. If Carlson is right about the interconnections between these values, those with environmentalist world views will likely not only disagree with their opponents on ethics and policy, but also on the aesthetics of the environments in dispute.

This disagreement does not mean that appeal to environmental aesthetics in solving morally charged environmental disputes will be unhelpful. On the contrary, given deep interrelationships between moral and aesthetic values, explicitly appealing to the aesthetic dimensions of environmental disputes will likely help to clarify the issues (both aesthetic and moral). Although aesthetic values are not independent of moral values, they are not identical either. Adding aesthetic considerations to morally charged debates about the environment—even aesthetic judgments impregnated with moral views—will deepen and enrich those debates. It might even allow ethical concerns to enter the discussion when previously they could not.

Consider a recent debate over protections for the only fly on the U.S. endangered species list. To preserve the fly's habitat, the U.S. Fish and Wildlife Service required officials in Southern California to move the footprint of a new hospital (at an alleged cost of \$4 million) and to rethink a planned massive industrial development (that was supposed to create 20,000 jobs over five years). Some characterized the issue in moral terms as "jobs versus flies" and a state senator argued, "I'm for people, not for flies." A moralistic environmental response would have argued for the rights of endangered species to exist and that it is wrong for humans to drive other forms of life extinct. But the debate took a helpful aesthetic turn that moved the opponents beyond moral posturing and

⁴⁵ Consider Holmes Rolston's aesthetic excitement at his encounter with a decaying bull elk killed by wolves on an Alberta cliff. This response depends on Rolston's moral views concerning animal pain and his assessment of the value of predation in nature. Animal rights activists and those deeply concerned with animal suffering are unlikely to have a similar aesthetic response. See Holmes Rolston, Ill, "Does Aesthetic Appreciation of Landscapes Need to be Science-Based?" British Journal of Aesthetics 35, no. 4 (1995): 384–85.

encouraged more careful consideration of the values at stake. In response to the claim that the fly was "a creature that spends most of its life underground, living as a fat, clumsy, enigmatic maggot," defenders argued that the Delhi sands flower-loving fly "is spectacular" so that "if you see one flying around you don't soon forget it." They portrayed the inch-long fly as able to hover like a hummingbird above flowers and to use its straw-like mouth to extract nectar. Females of the species where described as telescoping their bodies three inches into the sand to deposit a clutch of eggs. Said one defender, "It's a fly you can love. It's beautiful. Nothing is too wonderful to be true in the world of insects."

These aesthetic characterizations of the species make possible a more informed assessment of the moral issues involved: exactly what kind of being is threatened with extinction becomes clearer, as does the value of such a being. This is true even though the participants' ethical stances motivated and informed these aesthetic arguments. Describing the fly in aesthetically thick, ethically loaded ways allows considerations to be entertained that disputants may not have noticed or appreciated. Because the language of aesthetics is more descriptive in comparison with the more prescriptive language of ethics, recasting the environmental debate in aesthetic terms may lessen the tendencies for opponents to simply assert opposing views about what should happen. Morally charged aesthetic evaluations can be of significant use in environmental policy.

The worry that morally loaded aesthetic arguments will be unhelpful in environmental disputes because they smuggle in the very moral disagreements at issue softens once we think of our moral and aesthetic values as typically already interwoven. Environmental aesthetics is important to environmental ethics because these value types are especially allied in the environmental arena. Consider, for example, how we might try to convince someone to intrinsically value (morally? aesthetically?) a type of landscape. Dale Jamieson suggests the following:

Many people think of deserts as horrible places that are not worth protecting. I disagree. I value deserts intrinsically and think you should too. How do I proceed? One thing I might do is take you camping with me. We might see the desert's nocturnal inhabitants, the plants that have adapted to these conditions, the shifting colors of the landscape as the day wears on, and the rising of the moon on stark features of the desert. Together we might experience the feel of the desert wind, hear the silence of the desert, and sense its solitude. You may become interested in how it is that this place was formed, what sustains it, how its plants and animals make a living. As you learn more about the desert, you may come to see it differently and to value it more. This may lead you to spend more time in the

⁴⁶ See William Booth, "Developers Wish Rare Fly Would Buzz Off," Washington Post, 4 April 1997, p. A1.

desert, seeing it in different seasons, watching the spring with its incredible array of flowers turn to the haunting stillness of summer. You might start reading some desert literature, from the monastic fathers of the church to Edward Abbey.⁴⁷

Jamieson's powerful appeal captures important considerations environmentalists have to offer in support of their judgments about intrinsically valuable environments. Notice that these considerations are aesthetic at least as much as they are moral. Notice, as well, how Jamieson's appeal instantiates the type of cognitively informed aesthetic appreciation of environment that Carlson's work articulates and defends.

V. CONCLUSION

Carlson's environmental aesthetics provides challenges as well as a wealth of resources for those who would appropriate his ideas in the service of environmental protection. Carlson's positive aesthetics, his focus on the functionality of human environments, and his integration of aesthetics and ethics have great import for those seeking to use aesthetics to assist in addressing environmental controversies. Carlson's work gives me confidence that environmental aesthetics can provide significant support for environmental protection. Environmental ethics would benefit from taking environmental aesthetics more seriously.

⁴⁷ Dale Jamieson, "Animal Liberation is an Environmental Ethic," *Environmental Values* 7 (1998): 50.

⁴⁸ Some may worry that because aesthetic judgments are more idiosyncratic, subjective, and/ or relative than moral judgments, inserting environmental aesthetics into the debate over environmental protection will likely muddy the waters. Importantly, Carlson's work provides a wealth of resources for buttressing the objectivity of environmental aesthetics. His cognitive model for the aesthetic appreciation of nature requires that scientific knowledge ground one's aesthetic judgments. Aesthetic judgments about environments can be dismissed out of hand if they are based on biological, geological, or ecological ignorance. In response to worries about the subjectivity of the appeal to expressive qualities and life values, Carlson argues that the life values expressed by aesthetic objects must be "culturally embedded" and "embodied in the object" and this embeddedness works against idiosyncratic interpretations of the expressive qualities of environments (or art, for that matter). (For details on the "culturally embeddedness criterion," see "Landscape and Literature," chap. 14. For a discussion of how life values can be "embodied in the object," see ibid., p. 143.) Finally, Carlson's insistence that functionality is central to the aesthetic appreciation of human-shaped environments puts the focus on a factor that has significant dimensions of objectivity. A complete account of the implications of Carlson's environmental aesthetics for environmental protection would require a thorough assessment of Carlson's views on the objectivity of environmental aesthetic judgment.