

Aesthetics and Ethics in the Environment

AESTHETIC experiences of nature, and the role they play in making lives worth living, are at least as important and central as those experiences that have as their focus works of art.¹ Kenneth Clark has gone so far as to say that the key term 'beauty' may for many people have its foremost application in nature. "Almost every Englishman, if asked what he means by 'beauty' would begin to describe a landscape—perhaps a wood with bluebells, and silver birches, perhaps a little harbour with red sails and whitewashed cottages; but at all events a landscape."² In the last chapter, I suggested that there may be something morally suspect about individuals who do not take an adequate interest in the lives of others. Many people also intuitively sense that something is morally lacking in people who do not cherish aesthetic experiences of nature. Immanuel Kant insisted that we "require" others to take an interest in nature, indeed, that "we regard as coarse and ignoble the habits of thought of those who have no feeling for beautiful nature."³

In this chapter, I present an argument that I developed as I worked with an interdisciplinary team of scholars, artists, and practitioners who met for two years to discuss cultural ecology—the study of the interaction between scientific and human phenomena in the environment. One of the remarkable things about these discussions was that from the outset there was no question on the part of scientists, social scientists, policy makers, and designers that ethical questions underlie everything we do. What *should* be done shared the spotlight with what *can* be done. It was also acknowledged that human aesthetic values have played a major role in landscape management—and thus are open to the same ethical scrutiny that agricultural or forestry practices must undergo. Only an aesthete who believed that aesthetic experiences are not and cannot be separated from other human experiences could have contributed, I think, to our ongoing workshops. A formalist who insisted that the aesthetic is solely concerned with apprehension of formal properties would not have lasted. In what follows, the deep connections between ethics and aesthetics will sometimes be made explicit but will always be implicit.

Almost every country has some legislation that has established national preservation zones, regulates waste, punishes littering, and so on. These laws often refer to what the U.S. Environmental Policy Act of 1969 refers to as "aesthetic amenities." In increasing numbers, individuals spend weekends and vacations in places that they consider naturally beautiful. Residents of our ugliest cities treasure the pres-

ence of trees, squirrels, and birds in their everyday experiences.⁴ Ecologists often report that what first led them to their specialty was an aesthetic experience of nature. From being intrigued by beautiful butterfly designs to delighting in the smell of a forest interior, what drives people who study the environment is a profound concern for what Aldo Leopold calls the “integrity, stability, and beauty of the biotic community.”⁵

It is sometimes claimed that evaluating nature is inappropriate—that all biosystems are valuable intrinsically and that ranking one above another aesthetically is misguided, for there is nothing ugly in nature.⁶ But such a view makes rational decision making with regard to managing and preserving natural environments impossible. At most, it could apply only to “pristine” environments, and the number of these decreases daily. It also flies in the face of the fact that people do rank natural sites and that these preferences seriously affect ecological processes.

As a philosophical aesthetician concerned to show connections between aesthetics and ethics, landscapes and environmental values provide a sterling example of the intersection. The continuum from individual experiences to public policy making through ecological sciences provides a wealth of examples of the impossibility of separating kinds of judgments and values when one attempts to understand experiences of nature. Aesthetic experience, I have argued, is marked by perception of and reflection upon intrinsic properties of objects and events that a community considers worthy of attention. I have also insisted that anything that draws attention to these properties is aesthetically relevant. Furthermore, communities, not individuals responding in isolation, determine what is worthy of attention and how aesthetic attention becomes directed to aesthetic properties. And when one comes to ask the central question that shapes ecology and environmental policy—how we can create and maintain biosystems that are sustainable—it becomes quickly apparent that ethical values (and political, scientific, religious, economic values) are essentially integrated with a community’s aesthetic values. We also begin to uncover another “aesthetic ought:” Creating sustainable environments necessitates asking not just what people do find beautiful but what they should find beautiful. This is a major consequence and a happy one, I think, of a theory like mine that allows for and insists on a connection between ethics and aesthetics.

Allen Carlson has suggested a model of nature appreciation that is, in my opinion, the most promising so far articulated if one’s goal is to produce, protect, or preserve environments that are both beautiful and healthy. In a seminal essay in 1979, “Appreciation and the Natural Environment,” he asserted that we know fairly well how to go about appreciating paintings or piano performances—that is, we know what we should attend to and what we can disregard. (The “we” here is, of course, culturally bound.) In large part, he thinks, this is because these objects and events are human creations whose production we understand. But, he asks, what of those “unproduced” natural objects and events that we admire?⁷

Carlson identifies two models for nature appreciation that he thinks have figured both in theory and in practice in central ways: the nature-as-object model and the nature-as-scenery model. In the first, people interpret and evaluate parts of na-

ture as if they were artworks. But, he says, this approach treats natural objects as if they were self-contained entities and not as what they really are: parts of a larger organic whole. When we look at a rock as if it were a piece of sculpture, we see interesting shapes or pleasing light-reflecting planes, but we may miss seeing how these properties are related to the forces in the natural environment that shaped them. If aesthetic appreciation is of *nature*, the viewer must be aware of *natural* connections, and treating natural objects solely as artworks is inadequate to this task, Carlson argues. Many theorists share his view; some actually see dangers in looking at natural objects as if they were works of art. The landscape architect John Tillman Lyle complains that, for most people, “shelter [is] separated from its environs and, in large terms, from the processes of global ecosystems and its heat balance. In the twentieth-century city, people . . . think of landscape as the frame around a picture . . . rather than as the source of life.”⁸ The result is that we become oblivious to nature and thus a threat to it.

Similarly, the scenery model, according to Carlson, distorts or leaves out what is special in nature. By emphasizing qualities that are related to prospect, such as coloration and overall design, nature is viewed as if it were a static unity. I shall say more later about the ways in which this bias has worked against the production of sustainable landscapes.

What Carlson believes is necessary is a model of appreciation that emphasizes both nature and environment and allows for an involvement of all the senses and of cognition as well, in particular, scientific understanding of ecological forces and processes. In Carlson’s view, instead of a creative act guiding attention (as it does in our experience of a painting or a piano performance), it is knowledge of nature that should guide an aesthetic experience of nature. “If to aesthetically appreciate art we have to have knowledge of artistic traditions and style within those traditions,” he writes, “to aesthetically appreciate nature we must have knowledge of the different environments of nature and of the systems and elements within those environments.”⁹ Appreciation based on knowledge is the only way to avoid aesthetic omissions and deceptions, he thinks.

Like Leopold, Carlson also insists that sound aesthetic views will shape ethical views about how to manage environments.

We do not aesthetically appreciate simply with our five senses, but rather with an important part of our whole emotional and psychological selves. Consequently, what and how we aesthetically appreciate cannot but play a role in the shaping of our emotional and psychological being. This in turn helps to determine what we think and do, and think is correct for ourselves and others to think and do. In short, our aesthetic appreciation is a significant factor in shaping and forming out ethical views.¹⁰

Carlson’s outlook is precisely the sort needed not only for understanding at least many occasions of the appreciation of nature but also for establishing and maintaining sustainable landscapes. It thus lends itself to exhibiting how ethical and aesthetic values converge.

What counts as *sustainable* has, of course, been variously interpreted by ecologists and public policy makers. A United Nations panel defined it as follows: “A sus-

tainable condition for this planet is one in which there is stability for both social and physical systems, achieved through meeting the needs of the present without compromising the ability of future generations to meet their own needs.¹¹ Although sustainability became an increasing problem for the globe in the twentieth century and promises to be a crisis in the twenty-first, ours is not the first degenerative civilization. In the sixteenth century, Easter Island underwent a devastating deforestation when its inhabitants cut down trees in order to move huge stones from the interior to the coast to create the awesome statues still standing there. A thriving civilization was reduced to subsistence level.¹² The fact that at least some of its members must have realized to some extent what was happening without desisting in the practices bringing it about strikes one with an eerie sense of familiarity.

I have asserted that aesthetic value is a matter of that which sustains attention. Great works of art and beautiful landscapes repay prolonged and repeated perception and reflection. Kenneth Clark puts it this way: "I fancy that one cannot enjoy a pure aesthetic sensation . . . for longer than one can enjoy the smell of an orange, which in my case is less than two minutes; but one must look attentively at a great work of art for longer than that, and the value of historical criticism is that it keeps the attention fixed on the work while the senses have time to get a second wind."¹³ Aesthetically relevant information (which we saw in chapter 2 is anything that draws attention to intrinsic properties considered worthy of that attention) helps to sustain perception and reflection; indeed, it not only sustains it but also "regenerates" it. When one learns something that directs perception to or stimulates reflection on an aesthetic property of an object or an event, the rich experience that results may well lead someone to seek more information about it. New knowledge redirects attention, which motivates a desire for more knowledge, which redirects attention, and so on and so on and so on. Thus is attention *sustained*. We protect artworks to which we want to give repeated attention—put them in museums, record and write scores for them, print or memorize them, for example. Through art education and criticism, we provide the background necessary for delighting in the intrinsic properties our community deems valuable. Aesthetic sustainability exists when cultures provide for repetition of aesthetic experiences over the long haul, as it were. Artworks engage a sustained aesthetic when they repeatedly support and invite aesthetic experiences.

This is true for landscapes as well as for artworks. Building on the UN's definition of 'sustainability', in aesthetics we require landscapes that repeatedly support and invite aesthetic experiences. Obviously environments, like artworks, must exist to be experienced at all; thus, they must be *physically* sustained. But aesthetic sustainability goes beyond this. Institutions and practices must be in place that invite attention to intrinsic properties that yield aesthetic satisfaction once the culture has identified them as worthy of attention. Just as critics and educators help to sustain and regenerate attention to artworks by discussing them in a variety of ways that may direct attention to aesthetic properties, so ecologists provide information about ecosystems that may direct attention to aesthetic properties of the landscapes—or to intrinsic properties that may become valued within a commu-

nity and thus become aesthetic properties. This is why Carlson's cognitive aesthetic model of nature appreciation is so powerful. Not only does it provide an explanation of why knowledge plays a key role in the enjoyment of nature but also it suggests why his model *should* be the one that guides aesthetic education.

First, knowledge sharpens aesthetic experience, both of art and of nature. Understanding a system enables one to perceive elements of the system and their relationships. Mushy, desultory responses become more vivid and focused. As Ronald Hepburn has pointed out, perceptions can be attentive or inattentive, discriminating or indiscriminating, lively or lazy—just as thought can be.¹⁴ Since thought and perception are components of aesthetic experience, sharper thought and perception make for sharper aesthetic experience.

Second, knowledge contributes to sustainability, for it not only sustains attention in the present but also makes one more aware of what may or must be the case if attention is to be possible at all in the future. Even a modicum of ecological knowledge—enough to see that a city park in an arid climate can be maintained only with enormous amounts of scarce water—will force one to admit that such a park is unlikely to exist in the future. What is ecologically bad begins to be seen as aesthetically bad.

Carlson's knowledge-based theory of nature appreciation is not without problems, however. Many theorists agree with the formalists whom we have encountered earlier and insist that all aesthetic experiences, including those of nature, are subjective responses disconnected and separate from intellectual or ethical concerns. When applied to nature, this view yields the argument that when one is enthralled with a landscape, one cares little about its biology or geology; indeed, if one takes a strong Kantian view, one does not even care whether it is real.

Even nonformalists sometimes object that Carlson's view undervalues the role of imaginative engagement with nature. Emily Brady thinks that Carlson's view precludes the flights of imagination that mark the delight many people take in nature. She agrees with Immanuel Kant's position that central to human aesthetic pleasure is what he called the "free play of imagination." As we saw in earlier chapters, aesthetic experiences are marked, he argued, by disinterestedness. We put aside ordinary scientific, ethical, or personal interests and respond to objects as we please. We allow our imaginations full rein and range. We are free to think of a tree as a person or an animal or a tower or a mountain or whatever. And this freedom gives us, according to Kant, tremendous pleasure. Brady agrees.

Like Carlson, Brady believes that basic distinctions between objects of art and objects of nature generate important distinctions between artistic and natural appreciation. "Various natural objects . . . lack a human maker, an artist, and also an artistic context in respect of the type of artwork."¹⁵ In artworks, intentional acts of an artist give us clues that direct our attention and thus our imaginations. These clues and cues are not present in natural objects. Thus, the response is additionally free—free from any concern about what it is intended to express or how it should function as an object. To put it in my terms, there is nothing to guide attention to specific intrinsic properties. Distinguishing natural from artistic objects as she does, Brady is perhaps correct to point out that human responses to nature do not

involve considerations about artistic intentions. But this distinction does not, I think, also entail that information about context is either nonexistent or irrelevant. Indeed, knowledge concerning how nature functions within a particular context is exactly the sort of thing that Carlson and I insist plays a major role in appreciation of nature. It is precisely a failure to understand the proper function of certain kinds of trees or forest soils, for instance, within their specific biosystems—that is, within their context—that has led to mismanagement of forests, for instance, even when providing aesthetic value has been one goal. (I shall discuss more such mistakes later.)

Brady is primarily interested in the special ways in which immersion stimulates imagination, for imagination, she thinks, “intensifies” experience. It plays exploratory, projective, amplifying, and revelatory roles, she says. Surely she is right about this. There are, admittedly, many positive roles that imagination can play in aesthetic appreciation of nature. I remember very well what was, when I was a child, a very small thicket (in memory, it is still very big, of course) that served as a jungle where we Midwestern Americans fought off a variety of animals and foreign enemies. What harm could there have been in thinking that dread poisonous tropical snakes lurked under the blackberry bushes? Or that not only an enemy soldier but also a tiger might at any moment spring from behind the elm tree? Who really cares that tigers and elm trees do not share the same biotic patches or that there were no tropical snakes for a thousand miles?

Surely rich imagination is just what is needed if we are to develop new metaphors for designing sustainable landscapes. The clichés that we have inherited from romantic and sentimental visions of the picturesque no longer work; indeed, they often work against development of ecologically sound landscape designs. New visions are required, and this does require creative imagination.

Such vision may come from what R. W. Hepburn calls “metaphysical imagination.” Sometimes our aesthetic experiences of nature, he insists, involve more than perceptual or expressive pleasures. “We may experience a polar scene of ice and snow as revealing something fundamental (and no doubt grim) about how things really, or ultimately, are: something concealed from us in more familiar, temperate, farmed countryside. Or, in sharpest contrast, we may experience a nature whose poignant beauty on some occasion seems to speak of a transcendent Source for which we lack words and clear concepts.”¹⁶ Landscapes can be occasions of revelations of truth that go beyond rock structures or whether we need at least forty inches of rain annually to maintain a particular plant in the garden.

So what do I have against imagination or fiction in the appreciation of nature? Let me begin by quoting a couple of Brady’s examples of her own imaginative flights.

In contemplating the bark of a locust tree, visually I see the deep clefts between the thick ridges of the bark. Images of mountains and valleys come to mind, and I think of the age of the tree given the thickness of the ridges and how they are spaced apart. I walk around the tree, feeling the wide circumference of the bark. The image of a seasoned old man comes to mind, with deep wrinkles from age. These imaginings lead to an aesthetic judgment of the tree as stalwart, and I respect it as I might a wise old

sage. My interpretation of the locust tree is tied to its nonaesthetic qualities, such as the texture of the bark, as well as the associations spawned by perceptual qualities.¹⁷

And a second example: “A quick glance at a lamb reveals little except an acknowledgment of its sweetness. But the fuller participating of perception and imagination can lead to a truth about innocence. Contemplating the fresh whiteness of a lamb and its small, fragile stature evokes images of purity and naivete. It is through dwelling aesthetically and imaginatively on such natural things that we achieve new insights.”¹⁸

Brady, we see, believes that aesthetic experience, interpreted in terms of imagination, provides us, as she puts it, with “insight” into the tree and the lamb. The cognitive model of aesthetic appreciation of nature in its restrictiveness precludes access to the richness of imaginative insight, she fears. These insights amount to what she refers to as “aesthetic truths,” but she fails to adequately explain these. Furthermore, if there are aesthetic truths, there should also be aesthetic falsities. Brady does not give examples of these. She does, however, maintain that some imaginative responses are “appropriate,” so perhaps aesthetic falsity is related to responses that are inappropriate. As an example of an inappropriate response, she points to actions that are “self-indulgent.”¹⁹ Appropriate responses involve what she calls “imagining well.” Imagining well in turn “involves spotting aesthetic potential, having a sense of what to look for, and knowing when to clip the wings of imagination. This last skill involves preventing the irrelevance of shallow, naive, and sentimental imaginative responses which might impoverish rather than enrich appreciation.”²⁰

The very notion of sentimentality, I argued in chapter 9, is at once ethical and aesthetic. Brady, of course, emphasizes the aesthetic, speaking only of the impoverishment of one’s own appreciation. But there are moral consequences of sentimental responses to nature—ones that impoverish nature itself, not simply one’s own experiences of it. Let us go back to Brady’s own examples. Is responding to a little lamb with reflections on innocence or to a tree as a stalwart man or haggard witch appropriate? Are these responses such that they indicate a sense of what to look for? Do they avoid being shallow or naive? When do we know that we have gone too far and need to clip imagination’s wings? I see no way of answering these questions without relying on the kind of cognitive model that Carlson demands. Knowledge does not simply deepen the experiences that imagination provides. As with artworks, knowledge directs perceptions and actions—or should direct them if we hope to preserve and design sustainable landscapes. Concepts such as *imagining well* make no sense unless one knows what the object is that one is talking about. Something—in fact, as much as possible—must be known about the object and its context before one can distinguish healthy from unhealthy imaginings.

On the face of it, of course, it seems quite harmless, even charming, to think about trees in terms of human faces or lambs in terms of purity. But, in fact, imaginative flights—often directed by works of art (some of them very sentimental)—can and do lead to harmful actions. Fiction, for example, has played an important role in shaping the attitudes, images, and metaphors with which we approach na-

ture. Perhaps the most striking example of art's power to inform responses to nature is *Bambi*—a book written in 1923 by the Austrian writer Felix Salten. The Walt Disney film version is a classic. Both the book and the movie contain much that is beautiful and in other ways valuable. Many passages and images make it easy to understand why the literary classic has achieved such worldwide popularity that it is hard for anyone to look at a deer and not see a Bambi. It has also made it incredibly difficult to look at a deer in terms that are true to it as an object on its own and even more difficult to respond to it in terms appropriate to the role that it increasingly plays in the ecological systems it has come to dominate. In the United States, most states' departments of natural resources have had as a primary goal preserving and providing deer in sufficient numbers to satisfy hunters. (Bambi lovers are in complete denial about the extent of influence of hunting lobbyists in forest management, of course.) Landscape architects have tended to exacerbate the situation with their preference for defined edges and have thus contributed to an increase in forest edge. Such planning has been carried out with disregard for organisms other than game animals and birds. The result has been an explosion in the deer population and a decrease in the population of several songbirds and tree species. We are told, in fact, that in some areas deer have become vermin.

But how can one look at a deer or a picture of a deer and not imagine it as the innocent, noble creature that Salten depicts? We tend to respond as the fictional account directs us to respond. In the book, we are given the following episode, for example. Bambi and his mother see a ferret kill a mouse. Frightened by the violence, Bambi asks his mother if they will kill a mouse.

"No," replied his mother,
 "Never?" asked Bambi.
 "Never," came the answer.
 "Why not?" asked Bambi, relieved.
 "Because we never kill anything," said his mother.²¹

This is valuable if one wants to teach children not to be violent, but totally misguided if one wants to teach children about the actual effect of overpopulation of deer in the forest.

The prose of the story is often beautiful and does, as Brady hopes, heighten some imaginative insights about the forest. There are beautiful inventories—ones in which vivid images and metaphors certainly help children learn to observe details and connect individual species into an organic whole. But Salten contrasts the gentle deer with the vulgar species that fight for food. Deer, we are told, never fight for food, because there is enough for all. We are seduced into a sentimental image that is hard to shake. Even in the presence of trees ravaged by deer who in their own way do, indeed, fight for food, we continue to think of all deer as Bambi, the consequence being that forest managers find it difficult to convince the public that their numbers should be severely decreased in some areas.²²

In fiction, there is often a tendency to sentimentalize. There is also a tendency to demonize. Both result in misconceptions. Just as there are lots of deceptively innocent creatures in the arts, so there are lots of monsters. One reason that it is hard

to get people to appreciate wetlands is that they have so often been conceptualized as "swamps" inhabited by various kinds of slime monsters.²³ Death by drowning in quicksand has been a common fear of children, even those of us who grew up in the heart of the U.S. corn belt. Should lions come to flourish in numbers great enough to threaten the environment, a hard sell will be required for the generation that watches *The Lion King* several times a year. In his book *Land Mosaics*, Richard Forman discusses the importance of protecting "keystone species"—species that play a central role in an ecosystem. One keystone species that he describes is the cassowary bird.

This territorial bird, as tall as and able to rip the guts out of a man, is believed to be the only seed disperser for more than one hundred species of woody tropical rain-forest plants in Queensland, Australia. The bird normally inhabits large forests. Logging and fragmentation have eliminated the bird from several areas where only small remnants remain. Consequently, a progressive and massive loss of trees and other woody species can now be expected, unless the big bird can adapt or adjust its behavior.²⁴

I would guess that if regional fiction describes the cassowary bird as a terrible monster, it will be harder to save this bird.

As I have already said, I do not want to claim that there is no positive role for fiction or for the imagination in general in developing a sound nature aesthetic. I do insist that it must be based on, tempered by, directed, and enriched by solid ecological knowledge that leads to ethical practices.

Noel Carroll worries that Carlson may have overintellectualized the human experience of nature at the expense of the importance of emotional engagement. Driving through the countryside would truly involve appreciation of nature only if one understood large-scale agricultural practices; responding positively, or at least profoundly, to a wildflower would necessitate knowing not only its name but also its evolutionary history. Carroll thinks that this leaves out one important kind of appreciation—the ordinary experiences we all have had standing near a raging waterfall or watching a bird in flight. It would seem that all we really need to realize is that the water is cascading or that some sort of bird is going somewhere. Carroll does not deny that there is always a cognitive element in emotional response. But, "it is far from clear that all the emotions appropriately aroused in us by nature are rooted in cognition of the sort derived from natural history."²⁵ He does not think Carlson's arguments need to be completely abandoned, but he does think that we must also accept nonscientific arousal in nature as genuinely aesthetic experience of it. Stan Godlovitch further worries that Carlson does not leave room for the "mystery" that he believes characterizes many of our experiences of nature.²⁶

I certainly want to make room for the role of pleasure, imagination, emotion, metaphysical revelation, and even mysteriousness in the experience of nature; as I said earlier, this sort of awe often accounts for individuals' becoming interested in learning more about nature in the first place. Certainly, we all have had "wow" experiences in the absences of any, or much, information about what we see or hear

or smell or feel; these are often the most memorable experiences we have and contribute significantly to the meaning of life. Are experts' experiences better than these?

I am reluctant to "rank" various ways of responding to nature. But even if it were possible to rank them, I see no point in, or necessity for, doing it in general. However, if we want to develop a basis for rational evaluation of a landscape's ecological sustainability, I am convinced that we must stress the cognitive. A patch of purple loosestrife, with its brilliant color, may cause a lot of pleasure. A fawn at a forest's edge may stimulate tender emotions, particularly for those of us who suffer from the Bambi syndrome—a tendency to sentimentalize this animal. A large expanse of closely clipped, deep green grass may cause soothing flights of imagination. But all of these objects threaten certain biosystems, and only someone whose aesthetic response is based on knowledge will act in ways that are sustainable ecologically and, ultimately, aesthetically. Even a theorist such as Emily Brady, who favors an imaginative model of nature appreciation, finally agrees that one's imaginings must take account of the integrity of the object. Hepburn also insists that imaginative metaphysical visions of natures be coherent and sustainable. I do not see how the concepts of integrity or coherence or sustainability can be explained or applied without relying on knowledge of the object and its relationship to other biota. This is what Carlson shows us.

My own view of aesthetic appreciation of nature, influenced as it has been by Carlson, relies, of course, on my own characterizations of the aesthetic and of aesthetic relevance. To repeat,

A is an aesthetic property of O if and only if A is an intrinsic property of O and A is culturally identified as a property worthy of attention, i.e., of perception and reflection.

F is an intrinsic property of O if and only if direct inspection of O is a necessary condition for verifying the claim that O is F.

But how can these definitions be brought into line with a cognitive theory such as Carlson's? Ecologists, as they come to understand the environment better, point to the kinds of information that one must have to understand how certain ecosystems work—to inconspicuous plants, to soil types, to underground drainage systems, to histories of fires and storms and other "nonperceivables." A couple of specific examples will help to indicate why this might apparently create a problem for me.

Increasingly, ecologists have become aware of what they call "edge effects." Landscapes consist of patches, each with its own biota, that interact with one another, particularly at the boundaries. Certain interior species flourish only when an appropriate distance from the edge is maintained. Harvesting trees via clear-cutting of patches has a disproportionate effect on these interior-loving organisms. If edges become overabundant, habitat for rare interior populations may lose out to species that are not threatened.²⁷ When departments of natural resources have as their primary goal maintaining large populations of game animals and birds that, as a matter of contingent fact, frequent forest edges, one effect has been a decrease

in the number of interior songbirds. Knowing this, if you see a deer or grouse at a forest's edge, should you have a negative aesthetic experience—or at least try to restrain yourself until you know the status of the interior species? It seems that one cannot rely simply on direct inspection.

Ecosystem managers typically rally for native species, knowing as they do that importing exotic species to an area can often have devastating intrusive effects. Does this mean that one should feel aesthetic repulsion at the sight of a nonnative tree or bird? What about nonnative species that seem to fit right in, the way China pheasants have in the Midwestern United States? Must I feel guilt when I respond positively to seeing one of them along a Minnesota highway?

These examples involve properties that cannot be immediately seen or heard or otherwise perceived directly. In general, it is very difficult to say what ecological health looks like.²⁸ Many biosystems and landscape projects involve planning or thinking in terms of scales (both spatial and temporal) that go far beyond human experience, even as imagined. Aesthetic experience as I have characterized it, on the other hand, is immediate—focused on what is present in the moment. So how can one explain how knowledge concerning the nonperceivables that often determine ecological health is important, perhaps even necessary, for aesthetic appreciation of nature? The explanation is twofold, with the second being a special case of the first.

First, knowledge of certain nonperceivables is generally relevant, too, and hence a part of aesthetic experience, just as certain extrinsic features of objects and events can be relevant to experiences of intrinsic features of those objects and events. In chapter 2, I defined aesthetic relevance as follows.

A statement (or gesture) is aesthetically relevant if and only if it draws attention (perception, reflection) to an aesthetic property.

Strictly speaking, an aesthetic property is intrinsic; roughly speaking, by reference to what draws attention to a valued intrinsic property, anything aesthetically relevant can be construed as an aesthetic property. Does it matter that a painting is located in a particular museum? Only when we know how knowledge does or does not causally affect one's perception or reflection can this question be answered. An extrinsic fact about a piece of music—being written in 1717, for instance—will be aesthetically relevant just in case knowing this fact causes the listener to attend to an intrinsic property of the music, its particular structure, for example. Knowing that a painting was made in Italy in 1540 will cause someone who is "in the know" to experience in a special way the glow around the head of a man who is attached to two pieces of wood nailed together in a t shape. When one has an aesthetic experience, there are always intrinsic properties of the object of the experience that one can claim to be attending to and that one believes are at least a partial cause of one's experience. But both the attention to the intrinsic properties and the directing of attention can themselves be caused by awareness of properties not intrinsic to the object.

Just as works of art must often be "read"—with extrinsic information determining the reading that results—so landscapes will be read in terms of the knowl-

edge one brings to experiences of them. Even intrinsic properties (such as the soil type or presence of polluted groundwater) may not be directly perceivable without action that would seem extraordinary when viewing artworks—digging up the soil or conducting chemical tests. But the knowledge that a microorganism is present, or that drainage has been adversely affected, or that too many deer may result in too few songbirds may very well cause a viewer to perceive genuinely intrinsic properties that would otherwise be overlooked. Just learning the names of wildflowers (surely an extrinsic property) does sometimes make it more likely that one will see the flowers. As one learns more about the invisible things that make particular ecosystems healthy, landscapes begin to look more or less healthy. As aestheticians, I think we should concentrate more effort on determining the extent to which looking healthy and looking good or beautiful are related, and give more attention to specific ways in which knowledge influences particular aesthetic experiences. Thus, I want to suggest a second, more specific way of understanding how ecological knowledge directs attention to aesthetic properties and vice versa. This connection is related to the merit aesthetic and ethical that has been the topic of this book.

In a 1992 essay, “The Appearance of Ecological Systems as a Matter of Policy,” Joan Nassauer insists that reliance on what is typically considered the picturesque in landscape design will not protect ecosystems. Designers must use “social signs” to indicate ecological function. “The general principle that we can use to guide design and policy is to label ecological function with socially recognized signs of human intentions for the landscape, setting expected characteristics of landscape beauty and care side by side with characteristics of ecological health.”²⁹ The development of specific principles, I believe, challenges philosophical aestheticians to explain more fully what is involved in aesthetic landscape preferences and how it might relate to ethical ecological management. Thus, what I am exploring in this chapter is an extension and elaboration of Nassauer’s general principle, which is related to contemporary cognitive models of nature appreciation of the sort that Carlson proposes.³⁰

I referred before to scale as a problem that confronts us as we try to perceive ecosystems. One research team has written, “No issues attract as much attention within conservation biology as those connected with geographic scale and distribution: How large should reserves intended to maintain diversity be? How should they be arranged relative to each other? Should they be connected via corridors? Do species common within old growth require areas of some minimum size?”³¹ Due attention to scale can produce the “problem of nonperceivables.” When stretches of time and space become too big, human beings can no longer “see” them—and hence it is hard to conceive of how aesthetic experience at such scales is possible. This problem was recognized early by Aristotle, who pointed out that things too big or too small cannot be beautiful because they cannot be held in memory. Therefore, he insisted in *Poetics* that the action of a play must cover just the amount of time that a human being can take in (a day or so, he thought). More recently, John Lyle has acknowledged that the holistic treatment of landscape rarely works because “it is so difficult to see . . . a vast landscape as a whole.”³²

To some extent the problem of nonperceivability at large or small scales is handled by the general method I suggested earlier, whereby extrinsic information directs attention to intrinsic properties. But the scale factor in ecology also has important connections of a different kind to the aesthetic appreciation of nature. Ecologists must pay attention not only to different scales but also to different types or categories of landscapes. Obviously, what is studied in a desert will not be studied in an ocean. And increased awareness and understanding of the primary role of categories of scale and landscape type in ecology has suggested to me that aestheticians should pay closer attention to the role of scale and other landscape categories. This is both an aesthetic and an ethical *should*, or, as I called it in chapter 11, an obligation aesthetic and ethical that results in merit aesthetic and ethical. Formalists, of course, would dismiss any such advocacy. But when the goal is experiencing healthy, sustainable landscapes, category mistakes become aesthetic-ethical mistakes.

In discussions of works of art, we are accustomed to the fact that certain features are category-specific. Properties possessed by a measure of music will not typically be possessed by the work as a whole. What characterizes a line of a poem (having twenty-two syllables, for instance) will not typically characterize a stanza, and vice versa.³³ But observations “upscale” affect observations “downscale.” The fact that it is an epic we are reading affects how we read individual lines or verses. We look for plot development in an epic, but not in a sonnet. The fact that something is called a “march” will determine how we emphasize the rhythm of each measure.

Category mistakes have consequences for the experiences of artworks. Someone who mistakes a satire for a serious political essay will miss or misinterpret many important intrinsic properties. Similarly, landscape-aesthetic category mistakes have consequences for the appreciation. Before I describe some specific landscape-aesthetic categories, I want to mention some of the mistakes (many of these have been acknowledged by landscape architects) that my proposal is intended to help avoid.

One of the most serious criticisms that has been leveled against conventional design practices is that designers have too often acted as ‘beauticians,’ that is, as if their task were to “prettify” by covering up, not really altering, underlying flaws. This criticism is not just a recent complaint. At the turn of the twentieth century in the Midwestern United States, such landscape architects as Jens Jensen argued that Beaux Arts formalism or the romantically and sentimentally picturesque standards that had a grip on city planning should give way to more regionally appropriate styles. Thus, the Prairie School called for greater use of indigenous species and materials to express the spirit of the area. But the use of particular design principles may not be a mistake simply because of regional inappropriateness. It may result from what others have described as landscape architects’ undue emphasis on “scenery.” Clearly agreeing with Carlson, Paul Hellmund writes, “One of the traditional concerns of landscape architects has been preserving or enhancing views. But, narrowly pursuing visual goals by trying to capture or re-create static images can have tremendous costs, both financial . . . and ecological.”³⁴ Hellmund is worried, for example, that trying to offer motorists beautiful vistas may threaten

wildlife migration corridors. I would also like to suggest that there may be aesthetic costs when landscape architects treat all landscapes as if they were located within a single landscape-aesthetic category.

Another mistake is a tendency to leave human beings out of "nature." "Natural" is, I believe, a term whose application changes when there is a shift in aesthetic category. What is natural on a farm will not be natural in a city, and what might be natural on both of these may not be natural in a desert or forest. J. B. Jackson has criticized the ways in which undisturbed, conventionally photogenic landscapes have been taken as the sole standard of ecological and aesthetic integrity.³⁵ He has also discussed Edgar Anderson's work on the effect of human beings on plants, not all of which has been deleterious. Sunflowers, for instance, which grow only in rather poor soil where grass does not overtake them, thrive in areas where humans have depleted nutrients. This provides an example of "how man has not only destroyed ecosystems but has also devised *new* ones."³⁶ Jackson's most famous non-conformist defense is of mobile homes—a human artifact that may be as natural in the landscape as the beaver dam, he insists. "Indeed, it almost seems as if those shortcomings which critics never tire of mentioning—the lack of individuality, the functional incompleteness, the dependence on outside services and amenities, and even the lack of such traditional architectural qualities as firmness, commodity, and delight—all are what make the trailer useful and attractive to many of its occupants."³⁷ But even those who are not generally put off by trailer courts will not relish them in a wilderness. What counts as "natural" depends on the category within which one is operating.

Another category-relative term is 'stewardship'. What counts as care for the land or sound management practice in a forest does not translate directly into care at the urban level. (I will say more about this later.) 'Biodiversity' is another ambiguous term. One often comes across it in the following sort of admonition: "We want to conserve all cultural approaches that are compatible with conserving biodiversity,"³⁸ and "Areas set aside to fulfill recreational or esthetic objectives do not necessarily meet biodiversity conservation goals."³⁹ But is the converse true? Too often, the unexamined assumption is that biodiverse environments will automatically meet aesthetic and ethical goals.

What I hope attention to landscape-aesthetic categories can do is to undermine the often too glibly held attitude that we all know and agree about what is good and beautiful in the landscape. Jackson and others have made us wonder about mobile homes and fast-food restaurants and Las Vegas. Leopold urged us to think not about "building roads into lovely country, but of building receptivity into the still unlovely mind."⁴⁰ But are all roads into lovely places then ugly? In his report of discussions with David Brower, an early leader of Friends of the Earth, John McPhee describes how Brower's early love of trains affected his aesthetic sensitivities: "A railroad over the Sierra is all right. It was there. An interstate highway is an assault on the terrain."⁴¹ Are they really so different? John Lyle wonders why Dutch windmills are so lovely and power lines are not.⁴²

Hepburn has urged, "If we wish to attach very high value to the appreciation of natural beauty, we must be able to show that more is involved in such appreciation

than the pleasant, unfocused enjoyment of a picnic place, or a fleeting and distanced impression of countryside through a touring-coach window, or obligatory visits to standard viewpoints."⁴³ (The connections between ethics and aesthetics reverberate in this remark.) I believe that one component of progress in understanding more about such appreciation and hence of avoiding some of the mistakes described is a greater awareness of environmental aesthetic categories and aesthetic scales, and of the interactions herein of ecology, aesthetics, and ethics.

There are various ways of thinking about scale, of course. To ecologists and geographers, scale is a quantitative concept defined in terms of sheer numbers of organisms or patch acreage or mapping grain. Just as the set of intrinsic properties valued in a sonnet is not identical with the set of intrinsic properties valued in an epic (these artworks have different "scales"), so the set of intrinsic properties valued in a bonsai garden is not identical to the set of intrinsic properties valued in a vista from a mountaintop or airplane. Due attention to a rough continuum ranging from the microscopic to the macroscopic is essential. Awareness that one is judging a small, medium, large, or very large area is required if one is to avoid category mistakes.

Although size is relevant, aesthetic evaluation obviously goes beyond considerations of quantity. Another important, more traditionally entrenched aesthetic category is the perception of the purpose(s) behind the particular manipulation of a medium. (Obviously, there will be connections here to the ways in which artistic intentions point in the direction of the contextual nature of the aesthetic. See chapter 3.) Attention to purpose will be as important in assessing nature cognitively as it is in assessing artworks. Some landscape units are what they are almost completely as a result of an individual's or group's aesthetic intentions; in others, intentional design is a lesser factor in determining their constitutions. At each scale, the intention of the designer affects the aesthetic properties meant to be a focus of attention. Designing sustainable landscapes requires relating the geographer's and ecologist's attention to scale and biota that is so important to their work with the aesthetician's attention to category and manipulation of medium in an attempt to draw attention to intrinsic properties that reward perception and reflection.

Here are examples of categories that differ considerably from one another with respect to the extent to which their intrinsic properties are what they are as a result of the particular purposes of human manipulation and intervention:

1. Landscape art
2. Parks and gardens
3. Managed urban and suburban landscapes
4. Managed rural landscapes (especially farms, but also mines and other "worked" nonurban areas)
5. Relatively pristine managed landscapes
6. Relatively pristine unmanaged landscapes

Specific examples from each category will be discussed shortly. At the first level, we have discrete artifacts (objects and events) that have landscape elements as core components. At the final level, we have landscapes in which human manipulation

drops out—though I describe them as only “relatively” pristine because such effects as acid rain and ozone depletion influence even the wildest environments. In between, and even within a particular level, a continuum of intent and possibility for control exists. Individual artists often have a greater control over what they produce and a firmer image of what they want to create than urban designers, farmers, or wilderness managers. But we need to bear in mind that “reading” intentionality into a landscape will be greatly influenced by cultural factors. For example, many people see a garden as more intentionally determined than a farm, though in fact the former may be more a matter of chance.

Each category has its own history—both natural and cultural—and these histories have a tremendous influence on the properties within these elements. Martin Warnke has described the ways in which political values can be read off landscapes.⁴⁴ For example, roads converge at castles, churches, and city squares, and the size of fields reflects equal or unequal distribution of wealth. Nonaesthetic values affect one’s preferences. Do you see a castle or a church as a positive sign of stability or a negative sign of oppression? Curt Meine describes how the sociopolitical grid permeates the design and perception of many American landscapes.⁴⁵ Sociopolitical values affect, and are in turn affected by, aesthetic values.

This interdependence is also true of aesthetic and ecological values—or at least they *should* be, if we are to have sustainable landscapes and hence sustainable landscape aesthetics. For every site or design project, an aesthetic as well as an ecological inventory must be made. Other writers have proposed inventories, of course, but they have often been formulaic; that is, they have assumed that one can simply apply a list of a priori properties like “vividness” or “uniqueness.” But categories are culture-bound and culturally constructed, just as aesthetic values are, as I argued in chapter 1. Descriptions of sites will vary to a greater or lesser extent from culture to culture, both temporally and spatially. For example, the presence of red barns in a rural setting is not universally valued. Just as one cannot expect all ecological features to be found at every site (the presence of a particular microorganism, for instance), so aesthetic categories and the properties relevant therein can be determined only after a site has been fully studied. Categories used elsewhere may provide guidelines but should never be simply reapplied without being “translated” for each new project. Even when one is deeply fluent in a culture and tremendously knowledgeable about the ecosystems in which one is working, one must constantly remind oneself that disagreement is possible. Individuals who share a culture often disagree and have themselves inconsistent goals.⁴⁶ Scientists also disagree, of course. The best assessments will be those produced through holistic, interdisciplinary work, where values are seen as integrated and inseparable.

Some examples will be useful, perhaps, but these can be regarded only as prototypes, since actual analysis must be site-specific. Even prototypes are local—for what counts generally as beautiful or healthy in one sociogeographical locale may not apply in others. In the upper Midwest of the United States, what people tend to like in medium-sized urban parks is serenity, clean water flowing in fountains, a variety of plants and flowers arranged in neat patterns, careful maintenance, and wildlife that is clean and nonthreatening; and what they tend to dislike is messi-

ness, stagnant or dirty water, and “vermin.”⁴⁷ I have put ‘vermin’ in quotation marks, for which animals are classified as such will differ from site to site. Rats, for example, are accepted, even enjoyed, in relatively pristine landscapes. In large, relatively pristine unmanaged landscapes, people want vast outlooks and majestic, sublime scenery and are irritated if there are too many other people around or if trails appear overmaintained. In wilderness areas, they even like what would count as “messy” undergrowth in residential gardens.⁴⁸ The presence of a windmill may enhance landscape at one point and diminish it at a different scale or at a different level of manipulation. Adding one will probably not enhance the beauty of a relatively pristine vista or even a postmodern city center. The fact that people treasure human-built structures along the Rhine River but not along the Colorado River is not inconsistent when one realizes that different sites are involved. The Rhine is much more urban than it is pristine. In aesthetics as in ecology, we must first be clear about the locale and the relevant positive and negative features if we are to avoid inappropriate, misguided, or even dangerous assessments and designs.

Previously, I referred to the fact that categories have a history. I want now to provide more detail about some examples to show the importance of reminding oneself continually about the appropriateness of the features one does or should attend to.

As with all art, twentieth-century landscape art changed dramatically from what may still be the vernacular stereotype of landscape art—a nineteenth-century Hudson Valley representation, for instance. Viewers must thus attune themselves to category shifts while remaining conscious of the artistic traditions in which artists work. In Mel Chin’s *Spirit*, a barrel (symbol of commerce and/or the effects of alcohol abuse) precariously balances on a rope made of samples of vanishing indigenous prairie grasses. It derives its power not from the viewer’s admiration of the picturesque but from the awareness of the forceful way in which Chin has symbolized the impact of European immigrants on the American prairie. Nonetheless, it still depends on the viewer’s close attention to many intrinsic properties (shape, proportion, balance) resulting from as meticulous a manipulation of the medium as that found in nineteenth-century landscape paintings.

Other landscape works of Chin seem to me less clearly located in the category of landscape art. In *Revival Fields*, his interest in chemical pollution led to collaboration in 1990 with a soil scientist, Rufus Chaney. Though Chin did use some conventional design principles—circular plantings within a square, for instance—the main goal of this project was experimentation with “hyperaccumulators”: plants that absorb large amounts of minerals and metals and thus act as toxic sponges to restore the soil in which they grow.⁴⁹ Chin and Chaney’s field was not found in a museum but in a landfill. It no longer exists, and even when it did, it was very difficult to get to and to perceive. Enabling attention to intrinsic design properties was simply not the primary intention. It is difficult to do an aesthetic evaluation of such “works” when there is uncertainty about the category into which they fit; the ability to provide aesthetically appropriate descriptions is lacking. In some ways, Chin’s work is rural, for the toxic metals absorbed in the plants were meant to be “harvested” or “mined.” Perhaps another category needs to be introduced. (This

has, after all, often happened in the history of art.) Or one object may need to be evaluated according to several different categories. For example, the environmental artist Lynne Hull's work *Raptor Roost* provides a roost for birds that will not electrocute them, and she does "hydroglyphs"—drawings in desert stones that provide water storage for animals. The shape of the roost or the delicacy of the drawing is aesthetically pleasing in the category of small or medium landscape art; the fact that habitat is sustained and often present will be characteristic of aesthetic pleasure within the category of larger parks or relatively pristine landscapes.⁵⁰

Many works of landscape art move upscale or cross categories into the realm of parks and gardens, and vice versa. Indeed, Mara Miller titles her very interesting book on gardens *The Garden as Art*. She defines a garden as "any purposeful arrangement of natural objects (such as sand, water, plants, rocks, etc.) with exposure to the sky or open air, in which the form is not fully accounted for by purely practical considerations such as convenience."⁵¹ This definition also covers parks. Both are marked by what she calls an "excess of form"—and this is what connects gardens to artworks. Biology and culture, she argues, intersect. Biology is "categorized" via culture.⁵² Gardens and parks are often designed with wildlife habitat in mind, but the territory or corridor provided therein differs significantly from that which guides designers at the level, for example, of managed wilderness. (In this sense, National Parks are not "parks" at all, a fact that both aestheticians and ecologists should remember.) Ornamentality, such as that provided by topiary, for instance, is quite valuable in some kinds of city gardens and parks; it can easily become excessive in residential lawns and would be quite jarring in a relatively pristine landscape.

Urban landscapes are, of course, very mixed and perhaps can be fully comprehended only as such. Parks must coexist with landfills. (Indeed, some landfills have become parks, even golf courses.) Concrete jungles provide habitat for raptors. Within some residential lots, one finds native and exotic species. One simply cannot plan rationally for anything except a multifunctional domain. Though trees within cities certainly provide ornamentation and some wildlife habitats and corridors, it is unreasonable to expect them in the vast numbers or variety that will result in majestic forests. Safety contributes positively to aesthetic experiences of cities; it is not usually managed for in the same way in landscape artworks or pristine environments. Rutherford Platt's history of urban open-space paradigms shows how factors relating to aesthetic value have changed in North America over the past two centuries.⁵³ He identifies several paradigms that characterize nonnative settlements. They have overlapped but are roughly chronological: civic-agrarian colonial commons, picturesque parks, areas providing public health, cities beautiful with their monumental plazas, garden cities with greenbelts separating zones, preserved ecological sites within cities. None should be given automatic priority in urban planning; both vegetable patches and preserved wetlands clearly provide citizens with aesthetic opportunities. But it is crucial for both city planners and aestheticians to keep them straight. A single park zoned for both gardening and wetland might fail to achieve much success for either—unless it is designed to distinguish clearly and label coherently each category.

Of course, neither wetlands nor gardens are by any means the most typical urban landscape in an age when most open space in cities (at least in the United States) is devoted to parking lots and human corridors. Martin and Warner discuss the conflicting policies and values that create tensions in city planning.⁵⁴ As the fact that people value both wide and narrow streets shows, people like different things, depending on the context. Applying values from other categories must be done carefully and consciously. At the same time, undue observance of conventional or vernacular values (e.g., insisting that all city lawns be a uniform height, green, and edged with sidewalks and curbs) has also caused a great deal of environmental harm.

Nassauer's research on the aesthetic preferences of farm dwellers is very telling here.⁵⁵ Farmers tend to appreciate aesthetically landscapes that signal stewardship. Stewardship is not itself a sufficiently specific concept; caring by both fertilizing and refusing to fertilize are signs of stewardship to different persons. What is category-specific is the sort of care and control that is ecologically sound in specific biosystems. The fact that a city or rural resident exerts a great deal of effort does not in itself guarantee health. Signs of pollution are not always obvious; effects of fertilizers, irrigation, or overgrazing are not immediately or easily perceived, particularly by viewers whose only experiences of farms are those had speeding through or above the countryside. Rural dwellers themselves are often oblivious to the fact that what pleases them visually may hide or cover unsound ecological practices. Contour planting—a component of many farms still found lovely by many farmers—is usually accompanied by the unsustainable use of chemical fertilizers and weed killers. One problem for designers and philosophers is developing an aesthetic "language" that will communicate ethical ecological health within this as well as the other categories. Experimental farming techniques will not be seen as beautiful until ecologically valuable properties of landscape types are more readily recognized.

The term 'nature' for most people typically connotes relatively pristine landscapes. Vastness, majesty, vistas viewed from elevated outlooks—in general, "the scenic" is what people like. Even in areas that one knows are highly managed (such as national parks and preserves), one generally prefers as little trace of that management as possible. Some things, for example, clearly marked trails, will be acceptable within managed, but not within unmanaged, relatively pristine areas. There have been several excellent studies of the ways in which human perceptions and assessments of wilderness have changed across the centuries, and of how they differ geographically and culturally.⁵⁶ These changes can be read, for example, in tourism trends. There has been less study of what is valued in "nature" in rural or urban environments. Ecologists—largely for aesthetic reasons, I think—have tended to concentrate on relatively pristine landscapes and too often have assumed that what is beautiful there must be what makes for beauty everywhere else. City "beautification" has too often taken the form of planting along corridors whose concreted soil produces unlovely, usually soon dead, trees. Nassauer describes ways in which paradigms of "scenic beauty" have often widened the gap between vernacular conceptions of beauty and ecological conceptions of health.⁵⁷

Most people assert that the presence of human structures in pristine landscapes, especially unmanaged ones, is a negative factor. But further investigation of this reinforces the claim that specificity of category is a crucial determinant of aesthetic appreciation of nature.⁵⁸ Most people admit that not every human structure in a relatively pristine landscape is distracting; coming across a log cabin is not upsetting in the way that coming across a fast-food restaurant would be—indeed, the cabin might heighten an already positive experience. What is the difference? The answer lies in fuller awareness of how what is “natural” is category-specific. Fast-food restaurants are “natural” landmarks that we expect and are therefore appropriate to, and even admired by some, at urban scales—those urban patches where the population of meat-eating, economically able bipeds has attained a certain level. Abandoned shacks in urban areas are eyesores. The occasional abandoned hut—but not a busy Pizza Hut—will be fine along a trail in relatively pristine landscapes. Thus, the term ‘presence of human structures’ is itself too vague to explain positive or negative aesthetic response. Attention to scale and to degree of manipulation is essential to making this term precise enough to guide planning.

I have talked about the mistakes that can be made if one fails to contextualize aesthetic values via category specificity. But how else might such attention be positively useful? If landscape architects are to take advantage of aesthetic preferences as they design ecologically sound landscapes, then they must make accessible the aesthetic properties people delight in.⁵⁹ Ecologically sustainable landscapes will be possible only if due attention is given to the cultural values that determine people’s choices and actions. I suggested earlier that a general strategy for drawing attention to aesthetic properties consists of showing viewers how nonperceptibles or factors in themselves not aesthetically valued are connected to the perceivable intrinsic properties that members of a community consider worthy of attention and reflection. I would now like to suggest another way in which designers might exploit aesthetic values—one that utilizes aes-ethical and ecological categories and one that underscores their relations.

In general, *showing* consists of using gestures, words, or signs that point to something and draw a viewer’s attention. There are, of course, many theories of signifying. But most share the idea that there are “natural” signs (e.g., signs related causally to their referents: smoke signifies fire) or “conventional” (e.g., a word in a spoken language stands for something: ‘cup’ signifies something from which one drinks). Designers must use both kinds of signs. By having a certain kind of tree pointed out, one may look more closely to see if (or at least value the possibility that) a particular kind of orchid may be nearby, for some trees are natural signs of some varieties of orchids to people who have adequate knowledge of the biosystems in which they occur together. Nassauer’s research is again helpful here, for she has proved that simply putting up a placard (a “conventional” sign) that says that an area is being cared for via certain conservation practices enhances the aesthetic value for most viewers.⁶⁰ Signs that simply let us know where we are (“You are now crossing the National Divide”) provide frames that may enrich our aesthetic experiences.

In each aesthetic category, there are properties valued by members of a community: carefully laid out patches, vistas, winding roads, monuments, windmills, clearly marked trails, colorful forbs, bright lights. These clear indicators can be borrowed and used in a variety of environments to signify that designers have given attention to aesthetic values. Not every property is a clear indicator, of course. Silence may be a positive feature of a serene garden but not of an exciting city; it may even be a negative indicator in a forest where one had hoped to hear songbirds. Nor will all indicators cross categories. A mass of lights will not be appropriately borrowed from the city to signify aesthetic attentiveness in a rural or pristine landscape. A chaotic jumble of species valued at the relatively pristine level may not translate automatically to city parks. But clearly marked (e.g., “socially signed,” to use Nassauer’s phrase), a chaotic patch in a city’s open space may come to have aesthetic value for residents if they read it as a sign of an attempt at achieving biodiversity within urban boundaries. Formal properties such as balance, color, or shape (valued at rather small scales, for instance, in residential yards) become signs of due attention to aesthetic amenities at larger scales, even in relatively pristine landscapes. Whether the signs actually work to enhance aesthetic experiences, of course, depends on the knowledge that the viewer brings to the site. Park boards that opt for less mowing will be reelected only if the public sees too much mown turf as a sign of an unhealthy ecosystem. A wetland initially read as a dirty swamp may be read as a park if there are boardwalks or species markers. The ethical and the aesthetic once again come together in the realization that responsible policy making is underway.

Artists are in the business of providing communities with new metaphors that challenge and hence broaden our comprehension of the world. Our attitudes toward nature are largely determined by the metaphors with which we conceptualize it, and many of these have come to us from the arts. We have the tree, the spring, the sea, the waters of life. We categorize in terms of light and dark, sun and moon, heaven and earth. We are warned not to lose the forest for the trees. We strive to reach rock bottom or to get at the root of a problem for ideas to blossom. Imaginatively developing new metaphors may indeed allow us, as it has sometimes been put, to “think outside the box.” Fiction is of great use here. But this does not mean that there should be no restrictions on the imagination. As we have seen, fiction can sentimentalize and demonize, with serious harm resulting. If sustainable environments are the goal, then fiction must be at the service of fact.

I suggest that landscape designers can apply and introduce new metaphors, and that one way of providing new vision is by crossing categories. Once aesthetic and ecological studies have been produced that take careful account of the categories specific to a site, one is in a position to ask whether properties valued at other sites can fruitfully be borrowed and used. Like artists who expand languages by describing or portraying one thing as another (a petroglyph as water source, for instance), landscape architects may be able to expand their vocabularies and those of their patrons by borrowing clear signs from other categories. Of course, this will be successful only if we have a clearer understanding of the specific properties val-

ued at each specific site and of what the clear indicators are. Incorporating the “messy” at smaller scales will work only when deep attention has been given to aesthetic values at the location of the particular design project.

There are dangers in borrowing. Signs can be confusing, even deceptive—as when a corporation announces that it is employing environmentally friendly safeguards when, in fact, it is not. We often have trouble knowing where we are. How many of us know the watershed or soil chemistry of our residence, for example? Honest, clear use of signs may help to alleviate the dissonance that characterizes so much of the contemporary human condition, especially when they inform us not just about the names of things but about the workings of an ecosystem as well. Details of a system that promotes category crossing for aes-ethical purposes remain to be worked out. It is an area in which ecologists, landscape architects, ethicists, and aestheticians may work fruitfully together in the effort to design ecologically sustainable landscapes that succeed culturally.

Ideally, we want landscapes that show which aesthetically valuable properties and which ecologically sound properties come together, and a human population that recognizes that a meaningful life demands this. We want educated people who do not destroy what they value as they seek it out—a population whose cultural practices do not lead to a repetition of the experience of Easter Islanders. We aim for a public that does not, as Nassauer puts it, mistake a well-kept prairie park for a weed patch. Hedgerows that maintain diversity can come to be perceived as creating beautiful contoured patterns. Colorful native flowers can be perceived and reflected upon as an indication of soil unpoisoned by harsh chemicals. An adequate canopy will signify the presence of songbirds. Too rapid runoff of rainwater will result in one’s seeing concrete curbs as ugly rather than neat. Aesthetics, ethics, and sound ecology will come together, and when they do a healthy nature that includes meaningful human experiences will result.

It is often objected that insisting on a scientific basis for appreciation of nature “takes all the fun out of it.” I doubt it; I have never myself experienced knowledge getting in the way of aesthetic experience. Ecological notions are no more necessarily separable from the aesthetic than are ethical ones. And if we want a healthy environment, it is time to insist that they all be integrated perceptually and conceptually and imaginatively.

THIRTEEN

Aesthetics and Ethics in Communities

MANY claims have been made about the power of the arts. As the title of this chapter suggests, one of the things I believe aesthetic activity can do is contribute to conditions required for the sustainability of communities. But I also want to alert the reader to some limits of making this and other claims about the power of art. In an age of hyperbole, more measured avowals are called for. For this reason, I have chosen to begin by considering a speech made by Evan Mauer, the director of the Minneapolis Institute for the Arts, early in 1998. It was a clearly written, heart-felt articulation of many of the claims that are generally made for the power of the arts. The occasion—a Minneapolis mayoral inauguration—made it natural for the speaker to stress the role of the arts in community building, as well as particularly useful for the purpose of this discussion.

Mauer began by citing the claims made by persons who supported the establishment of cultural and artistic institutions (civic libraries, museums, symphonies, etc.) in nineteenth-century America. The arts were then, as now, alleged to elevate, humanize, educate, refine, uplift, ennoble—generally to make those who come into contact with them better people and citizens. Mauer’s claims, he acknowledged, fit solidly into this tradition. Here’s what he asserted the arts do:

1. Through an expression of people’s and peoples’ most important values, art ties people to nature, history, and each other.
2. The arts embody and express religious beliefs, foundation myths, and civic ethics.
3. By embodying essential elements of humanity, the arts allow persons to understand themselves and others better (“better,” one assumes, than we could do without the arts and the more we engage with the arts).
4. Arts can unite culturally diverse American cities.
5. The arts are the best way to achieve bonds of communication, understanding, and respect.
6. The arts can improve academic achievement.

At the end of his talk, Mauer claimed to have “shown that [the arts] can . . . be the most effective means of bringing together our diverse population and of helping our children become better students, better citizens, and better future achievers.”¹ I contend that he did not *show* anything, in the sense of providing the sort of proof philosophers seek. Rather, he simply made a series of claims. This is, unfortunately,

Chapter Twelve

1. Much of this chapter is based on earlier published papers, "The Beauty That Requires Health," a chapter in *Placing Nature: Culture and Landscape Ecology*, ed. Joan Nassauer (Washington, D.C.: Island Press, 1997, and reprinted by permission of Island Press.); "Fact and Fiction in the Appreciation of Nature," *Journal of Aesthetics and Art Criticism*, Vol. 56, No. 2, Spring 1998, pp. 149–55.
2. Kenneth Clark, *Landscapes into Art* (London: John Murray, 1949), p. 3.
3. Immanuel Kant, *Critique of Judgment*, see chap. 4, n. 1. Unfortunately Kant's position is not with problems; he seems to contradict himself here, for elsewhere in this *Critique* he insists that pleasure taken in nature is separate from morality. For a discussion of this, see Malcolm Budd, "Kant on Aesthetic Appreciation, Part II," *British Journal of Aesthetics*, Vol. 38, No. 2, April 1998, pp. 117–26.
4. C. H. Nilon, "Urban Wildlife Management in 2020," in *2020 Vision: Meeting the Fish and Wildlife Conservation Challenge for the 21st Century*, ed. T. J. Peterle, Proceedings of a symposium held at the fifty-third Midwest Fish and Wildlife Conference, Des Moines, Iowa, 3 December 1991, p. 61.
5. Aldo Leopold, "The Land Ethic," in *Sand County Almanac* (London: Oxford University Press, 1996), p. 61.
6. For a discussion of this position, see Stan Godlovitch, "Valuing Nature," *British Journal of Aesthetics*, Vol. 38, No. 2, 1998, pp. 180–97.
7. Allen Carlson, "Appreciation and the Natural Environment," *Journal of Aesthetics and Art Criticism*, Vol. 37, No. 3, Spring 1979, pp. 267–76. I have a minor quibble with Carlson's view that nature is "unproduced." If scientists and designers are right about the extent of human dominance in the global landscape, then nature is becoming less and less unproduced. Certainly many environments typically described as "natural" are highly designed and managed. Indeed, many ecologists and landscape architects have recently drawn attention to the extent to which people are made to think or feel as if they are "out in nature" when, in fact, they are in highly artificial, even deceptive landscapes. A related confusion comes from widespread attitudes that exclude human beings from nature. Too often the very individuals who urge a renewed sense of human beings' connectedness with other organisms also talk as if people are enemies of nature. Some theorists have stopped using the term. Where I want to make it clear that I am including the role of humans in landscapes or ecosystems, I shall refer to more or less "pristine" landscapes. This difference aside, I believe that Carlson's question, Do we appreciate nature in the way we appreciate art? is an extremely important one, as is the answer that he gives.
8. J. T. Lyle, *Regenerative Design for Sustainable Development* (New York: Wiley, 1994), p. 99.
9. Carlson, "Appreciation and the Natural Environment," p. 273.
10. Allen Carlson, "Nature, Aesthetic Judgment, and Objectivity," *Journal of Aesthetics and Art Criticism*, Vol. 40, No. 1, Fall 1981, p. 24. Carlson and Arnold Berleant have engaged in a debate about the nature of aesthetics and the extent to which objects with the special status of artworks regarded in a special way are the central focus of aesthetic experience. Berleant has called for an "aesthetics of engagement," in which one's whole being is relevant. In this passage of Carlson's I think the debate between him and Berleant fades, insofar as it is nature rather than art that they are interested in. An exchange between these two theories is found in *Journal of Aesthetics and Art Criticism*, Vol. 52, Spring 1994, pp. 237–41.
11. Quoted in R. T. T. Forman, "Ecologically Sustainable Landscapes: The Role of Spatial Configuration," in *Changing Landscapes: An Ecological Perspective*, ed. I. S. Zonneveld and

- R. T. T. Forman (New York: Springer-Verlag, 1990), p. 262. Some theorists worry about sustainable development, a term that many consider an oxymoron. Stability, richness, productivity, and diversity of species are all relevant, but some of these factors play a more central role in some theories of sustainability than in others. See, for example, J. T. Lyle, *Design for Human Ecosystems: Landscape, Land Use, and Natural Resources* (New York: Van Nostrand Reinhold, 1985).
12. For a discussion of this, see Clive Pointing, *A Green History of the World* (New York: St. Martin's Press, 1991).
13. Kenneth Clark, *Looking at Pictures* (London: John Murray, 1960), p. 16.
14. R. W. Hepburn, "Trivial and Serious in Aesthetic Appreciation of Nature, in *Landscapes: Natural Beauty and the Arts*, ed. S. Keman and I. Gaskill (Cambridge: Cambridge University Press, 1993), p. 68.
15. Emily Brady, "Imagination and the Aesthetic Experience," *Journal of Aesthetics and Art Criticism*, Vol. 56, No. 2, Spring 1998, p. 139.
16. R. W. Hepburn, "Landscape and the Metaphysical Imagination," *Environmental Values*, Vol. 5, 1996, p. 191.
17. *Ibid.*, p. 143.
18. *Ibid.*, p. 144.
19. *Ibid.*, p. 145.
20. *Ibid.*, p. 146.
21. Felix Salten, *Bambi*, trans. Whittaker Chambers (New York: Simon and Schuster, 1928), p. 16.
22. For a more extensive discussion of the role *Bambi* has played in shaping views toward nature, see Ralph H. Lutts, "The Trouble with *Bambi*," *Forest and Conservation History*, Vol. 4, October 1992, pp. 160–71.
23. Philip Terry, "The Sublime, the Beautiful, and the Swamp: Getting the Humanities into Environmental Studies," unpublished paper; American Culture Studies Program, Bowling Green University.
24. Richard T. Forman, *Land Mosaics: The Ecology of Landscapes and Regions* (Cambridge: Cambridge University Press, 1995), p. 10.
25. Noel Carroll, "On Being Moved by Nature: Between Religion and Natural History," in *Arguing about Art*, ed. A. Neill and A. Ridley (New York: McGraw-Hill, 1995), p. 140.
26. Stan Godlovitch, "Icebreakers: Environmentalism and Natural Aesthetics," *Journal of Applied Philosophy*, Vol. 11, 1994, pp. 15–30. Carlson has responded to Carroll and Godlovitch in "Nature, Aesthetic Appreciation, and Knowledge," *Journal of Aesthetics and Art Criticism*, Vol. 53, No. 4, Fall 1995, pp. 393–400.
27. R. F. Noss and B. Csuti, "Habitat Formation," in *Principles of Conservation Biology*, ed. G. K. Meffe and C. R. Carrol (Sunderland, Mass.: Sinauer, 1993).
28. For more on this, see Joan Nassauer, "Cultural Sustainability: Aligning Aesthetics and Ecology," in *Placing Nature: Culture and Landscape Ecology*, ed. Joan Nassauer (Washington, D.C.: Island Press, 1997), pp. 65–84.
29. Joan Nassauer, "The Appearance of Ecological Systems as a Matter of Policy," *Landscape Ecology*, Vol. 6, No. 4, 1992, p. 248.
30. In proposing this, I am also indebted to Kendall Walton's important work, "Categories of Art," *Philosophical Review*, Vol. 79, 1970, pp. 334–67; and to Arnold Berleant's *The Aesthetics of the Environment* (Philadelphia: Temple University Press, 1992).
31. W. S. Alverson, W. Kuhlmann, and D. M. Waller, *Wild Forests* (Washington, D.C.: Island Press, 1994), p. 75. Fascinating "perceivable facts" have been uncovered by attending to less visible holistic connections between fragmentation, edge increase, corridor inter-

ruption, and so on. For example, red-headed woodpeckers seem not to be sensitive to forest area, whereas pileated woodpeckers are never found breeding in forests of less than a hundred hectares. And it is not only spatial scale that demands attention. One must also attend to temporal scale. What will a particular seashore look like in a hundred or a thousand years if certain practices are carried out now? Is it true, as Clive Ponting says (*A Green History of the World*, p. 23), that an uncultivated patch in many parts of England would revert to oak and ash forest in 150 years? For an interesting discussion of geological effects on the landscape and on human history, see H. R. Muelder and D. M. Delo, *Years of This Land* (New York: Appleton-Century, 1943); and E. Cushing, *Quaternary Landscapes* (Minneapolis: University of Minnesota Press, 1991).

32. Lyle, *Design for Human Ecosystems*, p. 77.

33. Here it is obvious how indebted I am to Kendall Walton's "Categories of Art." He argues that one must know the appropriate category of a work, for example, epic or sonnet, to fully and correctly experience it. Although his theory of the category determinedness of experiences of artworks explicitly addresses artworks as wholes, what he says can easily be extended to parts, for there will subcategories that related to parts of epics or parts of symphonies and that thus distinguish one type of epic or symphony from another. Carlson discusses categories in nature that are analogous to Walton's categories of art in "Nature, Aesthetic Judgment, and Objectivity." In what follows, I attempt to give a fuller account of this possibility.

34. P. C. Hellmund, "A Model for Ecological Greenway Design," in *Ecology of Greenways*, ed. D. S. Smith and P. C. Hellmund (Minneapolis: University of Minnesota Press, 1993), p. 123.

35. J. B. Jackson, *A Sense of Place, A Sense of Time* (New Haven: Yale University Press, 1994), p. 102.

36. *Ibid.*, p. 195.

37. *Ibid.*, p. 62.

38. R. F. Noss and A. Y. Cooperrider, *Saving Nature's Legacy* (Washington, D.C.: Island Press, 1994), p. 14.

39. *Ibid.*, p. 22.

40. Quoted in *Ibid.*, p. 22.

41. John McPhee, *Encounters of the Archdruid* (New York: Farrar, Straus, & Giroux, 1971), p. 29.

42. John Lyle, *Design for Human Ecosystems*, p. 76.

43. Hepburn, "Trivial and Serious in Aesthetic Appreciation of Nature," p. 65.

44. Martin Warnke, *The Political Landscape* (Cambridge: Harvard University Press, 1995).

45. Curt Meine, "Inherit the Grid," in Nassauer, *Placing Nature*, pp. 45–64.

46. See Judith A. Martin and Sam Bass Warner Jr., "Urban Conservation: Sociable, Green, and Affordable," in Nassauer, *Placing Nature*, pp. 109–22.

47. For a discussion of these preferences, see T. R. Herzog, "A Cognitive Analysis of Preference for Urban Nature," *Journal of Environmental Psychology*, Vol. 9, 1989, pp. 27–43; and Rachel Kaplan, "The Role of Nature in the Urban Context," in *Behavior and the Natural Environment*, ed. I. Altman and J. F. Wohlwill (New York: Plenum, 1983).

48. Joan Nassauer, "Messy Ecosystems, Orderly Frames," *Landscape Journal*, Vol. 14, 1995, pp. 161–70.

49. Chin is not the only artist who has engaged in such experiments. In 1983, for example, Joseph Beuys planned the "Spufeld Altenwalder Project" for Hamburg. Trees and shrubs were planted that would help to bind toxic substances in the soil and groundwater. Other

artists such as Alan Sonfist have created earthworks that similarly challenged existing categories.

50. The catalog for an exhibit of Hull's work, "Visions of America: Landscapes as Metaphors in the Late Twentieth Century," shown at the Denver Art Museum and the Columbus Museum of Art, provides an excellent sample of contemporary landscape artworks and discussions of them by prominent critics (New York: Abrams, 1994).

51. Mara Miller, *The Garden as Art* (Albany: State University of New York Press, 1993), p. 15.

52. *Ibid.*, p. 54.

53. Rutherford H. Platt, "From Commons to Commons: Evolving Concepts of Open Space in North American Cities," in *The Ecological City: Preserving and Restoring Urban Biodiversity*, ed. R. H. Platt, R. A. Rowntree, and P. C. Muick (Amherst: University of Massachusetts Press, 1994).

54. Martin and Warner, "Urban Conservation."

55. Joan Nassauer, "Aesthetic Objectives for Agricultural Policy," *Journal of Soil and Water Conservation*, Vol. 44, No. 4, 1989; and "Landscape Care: Perceptions of Local People in Landscape Ecology and Sustainable Development," in *Landscape and Land Use Planning*, Vol. 8 (Washington, D.C.: American Society of Landscape Architects, 1988).

56. See, for example, J. R. Stilgoe, *Common Landscapes of America, 1589–1845* (New Haven: Yale University Press, 1982); and M. H. Segall, "Visual Art: Some Prospects in Cross-Cultural Psychology," in *Beyond Aesthetics*, ed. D. R. Brotherwell (London: Thames & Hudson, 1976).

57. Nassauer, "Cultural Sustainability: Aligning Aesthetics and Ecology."

58. See, for example, J. F. Wohlwill and G. Harris, "Response to Congruity or Contrast for Man-made Features in Natural Recreation Settings," *Leisure Sciences*, Vol. 3, 1994, pp. 349–65.

59. For a discussion of recent developments in ways in which landscape architects are trying to take due account of aesthetic values, see Paul H. Gobster, "An Ecological Aesthetic for Forest Landscape Management," *Landscape Journal*, Vol. 18, No. 1, Spring 1999, pp. 54–64.

60. Joan Nassauer, "The Appearance of Ecological Systems as a Matter of Policy."

Chapter Thirteen

1. Evan Mauer, "Keynote Speech at Inauguration of Mayor Sharon Sayles-Belton," January 2, 1998. Typescript available from Minneapolis Institute of Arts, Minneapolis, p. 6.

2. Eliot Eisner, "Does Experience in the Arts Boost Academic Achievement?" paper delivered at conference on arts in the workplace, sponsored by Getty Education Institute, Los Angeles, 1997, typescript, p. 1.

3. *Ibid.*, p. 8.

4. For an analysis of the aesthetic and other social aspects of this, see Clifford Goertz, "Deep Play: Notes of the Balinese Cockfight," in *The Interpretation of Cultures* (New York: Basic Books, 1973), pp. 412–53. I am grateful to Ronald Moore for this example.

5. I have been tremendously influenced here by the work of Robert Terry. See his *Authentic Leadership* (San Francisco: Jossey-Bass Publishers, 1993).

6. Erving Goffman, *Encounters: Two Studies in the Sociology of Interaction* (Indianapolis: Bobbs Merrill, 1962). In board games, rules of relevance dictate which features of the situation matter. In chess, for example, the material out of which the pieces are made is irrelevant; initial placement of tokens on the board is relevant. Rules of realized resources tell us