

## What the Hills Are Alive With: In Defense of the Sounds of Nature

If one feels protective about the word “music,” protect it and find another word for all the rest that enters through the ears.

— John Cage

Reflection on the nonmusical sounds that occur around us suggests a puzzle for aesthetic theory. Many of these sounds—particularly those associated with nature—are quite beautiful if we listen to them attentively. Many are interesting, singly or (especially) in combination. (Certainly there is as much richness and complexity in the sounds around us as occurs in music.) Some move us emotionally.<sup>1</sup> Many are irritating or tedious. Our responses to nonmusical sounds of all types are thus often (perhaps most often) aesthetic. Oddly, in spite of the *prima facie* aesthetic value of many of these sounds, particularly the sounds of nature, aesthetic theory has largely overlooked them. Those interested in the aesthetics of nature have done the same. They have approached nature almost exclusively through vision and the visual arts.<sup>2</sup> This neglect by theory of the sounds around us is in striking contrast to the attention theory pays to music. For, within aesthetic theory and within the arts, music is regarded as a major art form. For many people it is the supreme art. For most it is the most influential and widely experienced art medium.

Yet, is it really true, as the existence of this contrast suggests, that sounds are worthy of serious (aesthetic) attention only when intentionally manipulated? And are they of marginal importance even in an account of the aesthetics of nature? I take it that reflection, particularly on the often beautiful and intriguing sounds of nature, implies that the answers to these questions must be: no and no.<sup>3</sup> I assume, in short, the *prima facie* plausibility of the claim that the sounds of nature are worthy of aesthetic attention and that they contribute to the aesthetic value of nature. Why then do we tend to ignore them when we theorize about nature? In this

essay I will explore what I take to be the most significant impediments to including sound in accounts of the aesthetics of nature. There may be those who think that sounds that are nonmusical do not merit attention. Others may think that sounds are not important features of nature. Still others might reason that the characteristics of aesthetic appreciation in general are such as to exclude our auditory responses to nature sounds from the realm of proper aesthetic appreciation. In what follows I will try to show that the reasoning underlying each of these concerns can be disarmed. Although many of the points that I will develop apply to nonmusical sounds in general, those sounds that we appear to value the most and that are relevant to an aesthetics of nature are those sounds produced in and by nature.

What emerges in the argument is that our appreciation of the sounds of nature does not conform to the appreciation of music or to the strictures of conventional aesthetic theory, as these have been extended by various thinkers from their application to the arts to appreciation of nature.<sup>4</sup> If this is right, one moral to draw is that it is a mistake to assume that the aesthetics of nature must parallel the aesthetics of art.

### 1. SOUNDSCAPES AND SOUNDSCAPE EVENTS

Sound is a huge and relatively unexplored subject. Because of this, several initial questions and distinctions must be addressed. The first and most fundamental concerns what sort of object of appreciation is most appropriate for the exploration of the sounds of nature. To understand one plausible object of aural aesthetic attention we must turn to the notion of a “soundscape,” a term coined in the 1970s by R. Murray

Schafer to refer to “the sonic environment.”<sup>5</sup> A soundscape contains all the sounds within a given environment—whether that environment is human made, natural, or mixed—as they occur spatially and temporally. Thus, we can speak of the soundscape of St. Peter’s square, Niagara Falls, or the inside of a gambling casino.<sup>6</sup> By contrast, a different object of aural attention would be the sounds of individual *kinds* of things considered in themselves: birds, crickets, tractors, wind, fireworks, waterfalls. My proposal is that the type of object appropriate to an aesthetics of nature is the set of sounds occurring in a soundscape.

One reason to make sounds as they occur in soundscapes primary involves the idea that the aesthetics of nature is at bottom about what and how we experience nature. Aesthetic theory applied to most of the arts attempts to understand what we see and hear.<sup>7</sup> By contrast, discussions of the aesthetic value of nature and wilderness often work on an abstract level several steps removed from sensory experience. An example would be concern for the *balance* and *harmony* of an ecosystem. Now, clearly, the sounds of a bird or a frog, for example, contribute greatly to the soundscape of a particular environment. What I propose to set aside is aesthetic attention directed to a bird or frog song type *abstracted* from any particular environment in which it might occur. I do so because directing attention in that direction would be to ignore how nature actually sounds, how that bird song sounds in any of its actual instances.<sup>8</sup> When we hear any actual tokens of the sounds of animals or natural features of the landscape we hear them as part of the overall ensemble of sounds in a soundscape.<sup>9</sup> And our aesthetic pleasure or displeasure in nonmusical sounds comes from sounds as actually heard, including background sounds.

There is another reason for focusing on soundscapes rather than on sounds of kinds of things. Many of the sounds of nature, e.g., the sounds of oceans or rivers or the forest canopy or weather events, vary significantly from place to place, from time to time, and with each instance. What is the sound of the wind, for example? It all depends on what it is blowing. What waves sound like hitting the shore depends on the weather as well as on the structure and texture of the coast against which they are moving. This points not only to the variability

and causal complexity of nature sounds but also to a difficulty for any attempt to fully account for the sounds of nature by thinking of a catalogue of the sounds of individual kinds of things. For the examples just mentioned raise the further problem about how to individuate the sounds of nature by their causes. At the shore is one hearing the sound of water against rocks? Or is it the waves that one is hearing? The wind? The tide coming in? Wind *and* waves, or what? That each answer may be equally right indicates that it is the particularity of the sound ensemble that we must focus on.

Soundscapes also change over time. They change perhaps even more significantly than do landscapes. Whereas a landscape’s visual appearance may be merely enhanced at dawn and dusk, natural soundscapes change dramatically as various species of birds, insects, and other animals (as well as weather events) either make sounds or cease to make them. Birds, although beautiful in themselves close up, do not significantly affect the visual appearance of a landscape, whereas the daily cycle of their sounds have a powerful affect on the soundscape. (This is even more true of insects, such as crickets and cicadas, that we seldom see. Their stridulations create a rich blanket keynote for many soundscapes.) Both landscape and natural soundscape change significantly by season as well.

For these reasons, it is natural to begin to speak of the soundscape, defined as it is by the boundaries of a particular physical environment, as the containing space of sounds. Accordingly, the soundscape is then regarded as the repository of soundscape events, which as objects of attention can be any set of sounds to be heard together in the soundscape over some given period of time.<sup>10</sup> These could include either the total set of sounds or various subsets of sounds to be heard over a given period of time.

Discussions of soundscapes often focus on the typical sounds one hears in a certain specified environment. If we think of the sounds made by inherent elements of a given environment, we might not include transitory sounds that are not ascribable to the underlying landscape, sounds such as human voices or jet planes going overhead, although they are certainly part of particular soundscape events. Of course, it is difficult to define precisely what counts and

what does not. Part of the soundscape of St. Peter's Square in Rome includes the sounds of traffic from just in front of it, just as part of the soundscape in certain wilderness areas inevitably includes the sounds from nearby highways. We should note as well that typical events need not be frequent; they can be very rare. Let me give an anecdotal example: one hot sunny summer afternoon in a meadow I heard a strange rhythmical cracking, crackling sound, a bit like a fire starting, or big heavy rain drops hitting dry vegetation with the rhythm of popcorn just beginning to pop. It was in fact dry pea pods on the wild Sweet Pea plants that covered the hillside. Heated by the sun, they were popping open in slow concert, with a crack every three or four seconds.

## II. ON DISREGARDING THE SOUNDS AROUND US

The neglect of nature sounds in aesthetic theorizing in part reflects the fact that modern urban dwellers often ignore or suppress awareness of many of the sounds around them. It is not only possible, but no doubt common, to go on a hike through woods, along a stream, climb above tree line to a mountain pass and come back down without ever once consciously noticing any of the sounds one has heard, such as the stream, a waterfall, the birds and animals, the wind, the sound of one's steps on logs, snow, or rocks. We hear and react to sounds in nature without being conscious that we are hearing what we are hearing. In this section I want to argue that this behavior toward the sounds around us is not best explained by claiming that in fact nature sounds lack aesthetic value.

Our inattentive behavior toward environmental sound may be quite useful in urban settings. On the one hand, we need to ignore sounds that would mask speech and hence information flow. On the other hand, many industrial sounds impinge on the edges of discomfort in frequency and intensity. Thus many people have developed the psychological capacity to ignore sound to a high degree. We often pay attention to environmental sounds only when they significantly interfere with such activities as talking or listening to music. But surely this is largely learned behavior. It is behavior which has to be unlearned to become an effective bird watcher, for instance.<sup>11</sup> Rural people of times past surely did

not go into nature paying no conscious attention to the sounds.

Nor do many people in other cultures. For example, the Kaluli of New Guinea not only listen to the sounds of nature very alertly and responsively, but they also model their music on the sounds of nature, and they model their way of listening to music on the way that they listen to nature sounds.<sup>12</sup> Steven Feld has described some of the sounds that the Kaluli listen to in the tropical rain forest where they live:

What we were both hearing [in the morning] were sounds of mists, winds, waterways, insects, birds, pigs, dogs, all located in diffuse but auditorially present space. ... At the village edge, dusk brings sounds of birds, insects, people, animals, and drizzling drops after a typical late afternoon rain. In the late night or early morning hours, crickets, mists, and frogs are more sensually present.<sup>13</sup>

Feld speaks of the "deeply pleasurable aspect to the way the Kaluli approach the forest, which couples a sentimentality based on land as mediator of identity and an outright enjoyment of the soundscape. The Kaluli find the forest good to listen to, and good to sing with as well."<sup>14</sup> The responsive attention of the Kaluli to the soundscape indicates, if we doubted it, that there is a basic human capacity to discriminate subtly and respond strongly to environmental sounds.

Our habit of ignoring sounds thus has a natural explanation that does not require us to conclude that there are not aesthetically rich soundscape events in our environments to hear, nor that we do not value many of these events when in a receptive frame of mind. When people pay attention to them, the sounds of a visually beautiful meadow, for instance, are obviously an important and desirable part of experience of the meadow: the birds, the wind, the insects, the grass swishing and crinkling under foot. Even in our society it is important to hear certain sounds, although it is not equally important to notice that one is hearing those sounds.

Sounds also play a role in our conception of wilderness. The definition of wilderness in the federal Wilderness Act of 1964 includes as a requirement for a potential wilderness area that it have "outstanding opportunities for solitude." Part of the notion of solitude is that one can escape from the sounds of modern civilization.<sup>15</sup>

We might think that the desire for solitude is simply the desire for the absence of sound, but that is not plausible. For one thing, we are never in fact surrounded by a total absence of sound; something is always making sounds. What one can find in nature is often "silence" of a special sort. Negatively, this silence is the absence of *human-made* sounds, but positively this silence comprises a background of low-level sounds that provide a sonic carpet on which other sounds of nature appear to great effect. That "silence" can be a resonant chorus of insects in the evening. It can be the soft splash of waves against which one bird sings a striking song in the middle of the night. The absence of human-made sounds enables us to hear with pleasure the sound events that occur in a natural soundscape.

### III. NONMUSIC AND MUSIC

I have noted that many of us disregard the sounds around us, even when they would be rewarding to listen to. It might seem that there is a conceptual justification for ignoring nonmusical sounds. This resides in the tendency to think of music as resisting and opposing all other sounds. In our society, we learn that among sounds it is music that has the value and merits attention. Nonmusical sounds are noises that get in the way of music. Robin Maconie expresses this thought when he says that "for most listeners what distinguishes music from other sound or noise is that it is pleasing to listen to," and he adds, "the converse of music is noise."<sup>16</sup> The thought seems to be that the only sounds that are pleasurable occur in music.

There is confusion in such an idea. Just because nonmusical sounds are not intentionally produced to be pleasing to listen to, it does not follow that they are *not* pleasing to listen to. Schafer has formulated a plausible explanation of how such an attitude came about. His thesis is that our present (Western) concept of music developed with our transition to indoor living: "With indoor living, two things developed antonymously [*sic*]: the high art of music and noise pollution—for noises were the sounds that were kept outside."<sup>17</sup> The resulting concept of music that we have developed is characterized by "its abstraction from daily life, its exclusivity. Music has become an activity which requires silence for its proper presentation—con-

tainers of silence called music rooms."<sup>18</sup> We might put the psychological inference this way: because other sounds interfere with music, either potentially or actually, and musical sounds have value, other sounds must have negative value. If music gives us aural pleasure, environmental sounds must only interfere with aural pleasure.

Schafer's history reminds us that in our culture we are sometimes explicitly taught, and in any case are habituated by our musical practices to regard nonmusical sounds as a potential hindrance and intrinsically inferior to musical sounds. As Maconie says: "Environmental sounds are a part of life, but not normally part of our musical experience. We pay little deliberate attention to them, or, more accurately, we try not to notice them."<sup>19</sup> This attitude toward nonmusical sound does not stand up to much scrutiny: when we are not thinking of the contrast with music, other sounds are often regarded as pleasurable.

### IV. THE SOUND OF THE LAND

Let me briefly turn to a different source of reluctance to taking nature sounds seriously. Those who take seriously the aesthetics of nature obviously do not believe that something must be intentionally produced to be aesthetically appreciated. Nonetheless, from the environmentalist point of view, sounds may seem to be too slight and ephemeral to characterize units of environmental concern. Accordingly, sound cannot contribute to an aesthetics of nature capable of supporting preservation of nature. The objects of environmentalist aesthetics,<sup>20</sup> it might be urged, should be large units of land, such as a mountain range, a swamp, a coast, a river, a plateau, in general, an ecosystem. It might be argued that it makes no sense to talk about the sounds of these things, e.g., the sound of the Grand Canyon, any more than we can speak of the sound of a painting.

This concern may be predicated on an implicit analogy between the land and visual artworks. But even accepting the analogy does not rule out sound as an important feature. To be sure, *usually* we do not ascribe sounds to visual works, but we can do so if they are intentionally made to include sound, as in sound sculptures.<sup>21</sup> Moreover, gardens are units of land deliberately arranged to produce and include various sounds

as part of their design (fountains in European gardens, sounding objects in Japanese gardens). So there is no conceptual impropriety in ascribing sounds to an object or a unit of land and regarding the sounds as an important feature of the object or unit of land.

It may seem odd to attribute particular sounds to the larger ecosystem, but that is because they are sounds to be attributed to a part, the particular soundscape, of the whole. The sound events are (say) of the soundscape of a valley, not of the whole mountain range. Nevertheless, the value of the sound events ought to accrue to the whole just as the visual beauty of the valley redounds to that of the whole mountain range.

It is true that soundscapes are changeable, sound events ephemeral. But this does not rule them out as occurring in and as ascribable to environments. If it did, it would also rule out much of the visual appearance of the land as this too changes daily and seasonally. An environmentally significant unit of land will have many soundscapes and these soundscapes will be continually changing. Insofar as the sound events in the soundscapes, although unique, are aesthetically valuable, so to that extent will be the land.

#### V. A REQUIREMENT OF AESTHETIC APPRECIATION: OBJECTIVITY

I now turn to the most significant set of problems for appreciation of nature sounds. These center on the idea that acts of true aesthetic appreciation must be governed by conventions of objectivity. To illustrate this idea I will focus on Carlson's early and influential articles on the appreciation of nature. These articles posit that appreciation of nature should be expressed in aesthetic judgments and that aesthetic judgments need to be objective. Carlson proposes, contrary to some previous opinion, that aesthetic judgments of nature are objective just as are aesthetic judgments of art. He starts by noting that some of them are objectively true (e.g., "The Grand Tetons are majestic") and some objectively false ("The Grand Tetons are dumpy"). He argues that to explain this fact we must suppose that appreciation needs to be guided by the character of the nature being appreciated. This implies that something must play the role in regard to nature that artistic categories play in regard to art, that of making aesthetic judgments

of artworks true or false, as, for instance, the fact that *Les Demoiselles d'Avignon* is a proto-cubist painting makes the judgment "*Les Demoiselles* is awkward" mistaken.

Since we believe that nature is most adequately described by natural science, *correct appreciation* of nature, that is, appreciation applying the correct categories to its object, appears to require the guidance of scientific knowledge. As Noël Carroll puts it: "for epistemological reasons, we are driven to the view of nature appreciation as a species of natural history." He adds: "any competing picture of nature appreciation, if it is to be taken seriously, must have a comparable means ... for solving the problem of the objectivity of nature appreciation."<sup>22</sup> Moreover, objectivity is clearly desirable from the environmental perspective. Janna Thompson argues that aesthetic judgments of nature must be objective if they are to support preservationist claims about the noninstrumental value of nature: "A judgment of value that is merely personal and subjective gives us no way of arguing that everyone ought to learn to appreciate something, or at least regard it as worthy of preservation."<sup>23</sup>

The insistence that aesthetic responses to nature produce objective judgments, however, poses a problem for anyone wishing to take the aesthetics of nature sounds seriously. One reason is simply the familiar fact that people differ greatly in their responses to sounds. I may find the "coo coo" sounds of a flock of doves to be extremely harmonious and to express a soothing calm. A friend may find the same sound insistently obtrusive.<sup>24</sup> As I will argue below, there are other even weightier reasons to doubt that appreciation of the sounds of nature measures up to the requirements of objectivity. Because of this, I propose to re-examine the necessity of aesthetic objectivity. I want especially to resist the claim suggested in Carlson's writing that to be aesthetic a response has to be modeled on objective judgments of art.<sup>25</sup>

The demand that aesthetic appreciation be objective in fact comprises two distinguishable requirements, one of which is more clearly plausible than the other. The first is the notion that our responses and judgments ought to be guided by the object of appreciation, by its actual characteristics. Call this the *guidance-by-object requirement*. This requirement is unexceptionable and a condition of any aesthetic appreciation of

any sort of object. The second is the notion that our aesthetic judgments, like our epistemological judgments, should be potentially universal. In Kantian terms, when we make such a judgment we can rightly demand that others ought to agree with it if they are appropriately placed perceivers. Call this the *agreement requirement*. Of these two requirements it is usually the second and more debatable requirement that writers have explicitly in mind when they discuss objectivity.<sup>26</sup> Sometimes these two requirements are not clearly distinguished, perhaps on the assumption that agreement follows from guidance by the object.

But they are logically distinct. This is clear if our aesthetic response is *underdetermined* by the characteristics of the object of appreciation. This, it should be clear, is exactly the case in many acts of aesthetic appreciation of both art and nature. Perhaps “The Tetons are majestic” qualifies as a universal judgment (or nearly enough), but it is also and not coincidentally remarkably clichéd. Rather than a sensitive response to fresh perceptions, this judgment seems to be a paradigmatic assertion of the sort that teaches us what “majestic” means. Most nonstereotyped aesthetic responses are not going to be so obvious.

Even in the arts it is notorious that critical judgments are generally disputable. Even though such judgments are *guided* by the artwork, they are significantly underdetermined by that object. This does not mean that *any* critical or interpretive judgment is properly assertable, but it does mean that even in the arts we can have judgments that are both aesthetic and not universal. What this shows is that although the agreement requirement may specify a desirable property of some aesthetic judgments, it does not specify a necessary condition for acts of appreciation to be aesthetic.

If our appreciation of nature is unstructured or if there is more than one way to structure it (as I shall argue is the case for sounds), then the agreement requirement may fail to be satisfied in that case. Fortunately, there are conceptions of the aesthetic that are plausible and which do not make agreement a logical requirement of an aesthetic judgment.

No thinker in recent decades did as much to elucidate the aesthetic point of view as Monroe Beardsley. Yet, consider his conception of aesthetic gratification:

Gratification is aesthetic when it is obtained primarily from attention to the formal unity and/or regional qualities of a complex whole, and when its magnitude is a function of the degree of formal unity and/or the intensity of regional quality.<sup>27</sup>

We do not need to accept this definition fully to note that it leaves open the question whether there is a common, much less universal, response of gratification to a given complex whole. Different acts of attention to the perceptual qualities of the same complex whole could easily lead to different sorts of gratification or none at all and yet all be aesthetic by this definition.<sup>28</sup>

#### VI. FRAMING

Having seen the limitations of the agreement requirement, we are now in a position to examine the application of the guidance requirement. Even though when we hear nature sounds we are surely guided by sounds to be heard in the environment, our acts of appreciation are far more radically underdetermined than they are when we listen to music. Or so I shall argue in this section and the next.

Because nature does not provide an intentional object of appreciation the way musicians do, there is a serious framing problem concerning the sounds of nature: which sounds do I pay attention to and for how long? We have extensive and complicated conventions for appreciating music, anchored by a conception of music as produced in integrated whole units by the intentional activities of musicians and composers. We have clear boundaries around the musical units excluding ambient and environmental sounds. Such boundaries exclude what is “noise” relative to music. Do we also have boundaries conventionally regimenting the “noise” into certain sound event packages? It sounds fantastic to claim that we do.

Framing is a more significant problem for sounds than for sights. A visual sight includes all the discernible features within an intuitive geometric frame. (Perhaps we find this natural because we have a tradition of representational visual art—e.g., landscape painting—that reinforces conventional notions of a “natural” frame.) However, because sound has the property of coming from all directions at once (filling up the auditory spectrum) and is not blocked by vi-

sually opaque materials such as walls and trees, we have developed a corresponding ability to select the sounds to which we attend. Suppose you are sitting in a hot tub in a city in the Arizona desert listening to the sounds around you. Do you just listen to the Western Warblers and the wind in the fruit and palm trees or do you (should you) also notice the sounds of the hot tub jets and the popping bubbles making a pleasant hissing on the water? Do you add or ignore the sounds of ventilator fans spinning hot air from attics and occasional jet planes overhead? At Niagara Falls do I strain to hear birds in the forest over the constant roar of the water? In the Tuscan countryside do I ignore the high pitched whining of mosquitoes? Shall I just focus on the loons from across the lake in Minnesota or shall I strain to hear others from more distant parts, and do they go together with the chattering of squirrels and the buzzing of flies? One can, of course, propose principles of framing, but I do not see how they could fail to be partially arbitrary, even if they seem natural in one respect or another. Nature does not dictate an *intrinsically* correct way to frame its sounds in the way that a composer does. We can listen to the total ensemble of sounds or focus on some subset of the sounds, and I do not see how the nature of the sounds we are listening to dictates that one way of framing is more correct than another.<sup>29</sup> Even what is foreground and what background in environmental listening is somewhat a function of the nature of the listener's attention: e.g., I can focus on "s" sounds in a conversation, I can notice the two or three quiet pings that a florescent light makes when it is turned on, I can concentrate on the musical pitch of a ping-pong ball when it is hit.<sup>30</sup> In all these cases, something becomes prominent in my auditory experience that would ordinarily not be noticed even if I were consciously listening to the same overall sound event.

From this perspective, recordings of nature are misleading. Although my argument implies that such recordings are worthy of aesthetic attention, they certainly differ from hearing actual soundscapes. For they give us one take, one set of balances, excluding much and focusing on selected sounds, much as a photograph frames and organizes a scene visually in a very specific way. I cannot imagine how one could argue that it would be either right or wrong to hear (say)

drops of water falling from a roof after a rain as having a rhythm or even as having a rhythm that relates to the songs of a nearby bird. But while most of us would ignore or altogether miss hearing particular drops that way, a sound recordist might highlight and relate them to the sound of birds or distant traffic in just such a way.<sup>31</sup>

A further problem for sounds is *temporal* framing. When do significant sound events begin and when do they end? How many separate events can go on at the same time? Several bands can play different musical works at the same time. Can nature do the same? Are there significant sub-units, measures that determine a meter, as it were? How long *is* the sound event in nature; how long does the relevant whole last? Musical works with significant structural relations can run from a few minutes (Webern) to hours (Wagner). As performances of musical works develop in time, structural relations and patterns emerge. Something as simple as the repetition of a theme takes time. In nature, are themes being repeated, perhaps in something like different keys or perhaps in altered guises? How long shall we listen for a repetition and what should we hear as a repetition? Consider an example: I am sitting on a rural hillside and the wind is blowing very hard and noisily through the bushes and trees. Suddenly the wind stops and there is a surprising and powerful silence. Then one frog begins to sound, followed by one bird. This interlude lasts for thirty seconds at the most. Then other birds and crickets join in until there is a crescendo of sound to which the wind finally adds an overwhelming whooshing and bustling as it picks up again and drowns out the other sounds. This interlude strikes me as a lovely sonic moment, and my framing of it was no doubt natural. But it was entirely dependent on (Western) musical analogies. Even though it was "natural," this is not the same as universal, nor is it the same as a frame that is dictated by the intrinsic nature of the sound events themselves. Much of the effect of the moment of relative silence was created by the effect of the long period of loud wind sounds that preceded it. But how long a period was the *correct* period to pay attention to the preceding sounds in order to determine the quality of the moment of quiet? Would ten seconds of noisy wind be adequate? And why is my thirty-second interval of relative quiet an appropriate length

for significant aesthetic appreciation? I see no way to raise the status of my framing to that required to make my judgments objective without claiming that we have conventions—not just typical or understandable responses—for listening to the sounds of nature. And to claim that we have such conventions, in my opinion, would not be a plausible claim about the acts of listening to nature in our society.<sup>32</sup>

There is a further reason to doubt that we have conventions for objective framing of sound events: the uniqueness of natural sound events. Nothing could be more conceptually central to music than the repeatability of musical works. Sound events that are performances of the same musical piece are in large measure duplicates of each other, and conventionally so regarded. And the capacity of musical works both to exist over time and to receive aesthetic appraisals—even to receive conflicting appraisals—depends on the repeatability of the works, i.e., on the idea that multiple performances are performances of the same work. By contrast, ensemble sound events in nature are largely unique; ensemble sound events are not instances of a sonic object abstractable from this or that soundscape and to that extent repeatable. This is so especially of sound events that contain any human influence (e.g., whether a plane flies over or a distant train whistle sounds), but it is true even for purely “natural” sound events because of the variability of weather and season and the complexity of particular events. (Indeed, it is plausible to hold that a certain amount of aesthetic value and pleasure derives from the very nonrepeatability of the sound events we hear in nature.)

This fact makes it implausible to claim that we have significant constraining conventions about how to frame sound events in soundscapes. To be sure, there are conventions of a sort for the sounds of individual types of things which give them approximate boundaries. Striking examples of human-made sounds that are now becoming only vivid memories are given by Murray Schafer: “milk bottles, steam whistles, bicycle bells, horseshoes being tossed against a metal spike.”<sup>33</sup> Perhaps we have a common agreement about the character and boundaries of these sounds, as indeed we do about animal sounds. There are natural enough boundaries framing bird songs and bull elk bugling, but beyond that there are not similar

conventions about how to frame the sound events that include this bird singing to another bird on this hill in this weather on this morning or about how to frame the sounds of all the bull elk in this mountain meadow with this forage in this weather and so on.<sup>34</sup> Given the unique quality of natural soundscape events generally, it is doubtful that we could establish conventions about how to frame such sound events, even if we wanted to.

It does not follow that aesthetic response to and appraisal of unique and ephemeral sound events is impossible. We have, after all, the example of musical improvisation. But an important fact about musical improvisation and our appreciation of it is that it is practiced against a background of extensive musical conventions about how to frame the sounds we hear; improvised music is still to be listened to as music. I have argued that there is no similar set of constraining conventions for ensemble sound events in nature. And so response to and appraisal of nature sounds will be that much more underdetermined than response to and appraisal of improvised music.

#### VII. WAYS OF LISTENING

I have described a number of reasons why the appreciation of sound events in nature is not governed by the conventions governing appreciation of music that organize groupings of sounds into salient wholes. But could we not relativize our acts of listening to a particular physical location, a particular sound event, and a particular framing of sounds? In that case, even though the framing is partially arbitrary, and even though the event is essentially unique and ephemeral, could we not then ask whether in principle anyone who had the requisite auditory apparatus and had been in the same situation and had devoted the same attention to the soundscape would have agreed about how it sounded?

It is not clear that this pale imitation of the agreement requirement would provide what we need for the purposes of aesthetic appraisal. How could we ever establish that there *would be* agreement with particular acts of appreciation of unique sound events? It would be hard to prove that this relativized objectivity was not a property of almost any response to unique events of nature. There is reason to doubt, in any



case, that we can insist on even this weak and relativized notion of agreement for acts of appreciation of nature sounds. This is because there are no grounds, as far as I can see, for ruling out a plurality of *ways of listening* to the sounds.

Murray Schafer suggests that “certain ears”—here he is thinking of different cultures—“are trained to listen to sounds peripherally—that is, equally from all directions—while others are trained to place sounds in series which are proportionate to one another, the strong to the weak, the desired to the undesired.”<sup>35</sup> He bases this suggestion on the different ways musics are structured: “We know that different cultures listen differently—the predilection for sound combinations in different musics hints at this.”<sup>36</sup> Return to the hillside I mentioned earlier and consider a mixed set of soundscape events. I look out over many hills covered with groves of olive trees and fields of wheat rising to their crests. The wind is now calm and for quite a while I have been hearing some sort of machine slowly struggling on a distant hill. At the same time there is a rich and complex chorus comprising several species of birds singing continually. Eventually I realize that the distant machine is a tractor patiently plowing up and down the slope of a hill. I start to hear the tractor, with its baritone frequency range and its repeated sound pattern, as like a ground bass to the other sounds. Then there is another tractor, and now there are two related bass lines. I listen to the birds, finally, as an excitable chorus of soprano voices on top, much as in some pieces of music by Charles Ives and Elliott Carter. I do not pretend that this is composed music; rather I hear these sounds as related together and somewhat as formalists claim to hear music, that is, without emotional expression or ideational content.<sup>37</sup>

Now, it might be hard to hear the sounds this way, but I think I could maintain this with training. The question is: would it be incorrect or un-aesthetic to hear the sound this way? I do not see how it could be.

There are other possibilities: associational and/or representational listening. Schafer explains how pieces of metal are arranged in the tea kettle of the Japanese Tea Master so that when the water boils, in the words of Kakuzo, “one may hear the echoes of a cataract muffled by clouds, of a distant sea breaking among the

rocks, a rainstorm sweeping through a bamboo forest, or the souging of pines on some far-away hill.” This fanciful way of listening to these sounds corresponds to the Japanese word for music, *ongaku*, which Schafer insists “means the enjoyment of sounds; it is an inclusive rather than an exclusive concept.”<sup>38</sup> Thus in *Ko wo kiku*, “listening to the incense,” each piece of burning incense is both smelled and listened to. This reminds us of how much a fire or a bubbling brook sounds like many other things. And so this way of hearing could easily be extended to nonintentionally produced sounds. If it were, it too would not appear to be inappropriate.

More generally, Schafer sums up several possible ways of listening:

In the external soundscape the ear is always wavering between choices. ... We are always at the centre of the soundscape, listening out in all directions simultaneously. We know that in Indian music one does not concentrate on the melodies but rather on the drone in order to hear the melodies and embellishments as though through a veil. One has the impression that in traditional Japanese music, while the drone is absent, a similar process is encouraged. ... Its events are often layered so that several kinds of material may be presented simultaneously and independently. ... There seems to be no particular hierarchy in such music, no domination, no focus.<sup>39</sup>

Trained to listen to such music, I might find it natural to listen to sound events in nature in the same way.

This is clearly illustrated by the Kaluli way of listening, which is notable in being equally applicable to the sounds of nature or culture. This is no accident, since the Kaluli hear them as unified. The Kaluli term that describes both their musical style and their way of listening is *dulugu ganalan*, which Feld translates as “lift-up-over sounding.” This spatial-acoustic metaphor is explicated by Feld this way:

Parts, sounds, whether few or many, must constantly “lift-up-over” one another; one cannot speak of sounds “leading” or “following” or “starting” or “finishing.” Human sound making must stagger in layers, like bird calls, or arch up and over, like waterfalls. ... Kaluli like all sounds to be dense, compacted, without breaks or pauses.<sup>40</sup>

This style of sound preferences, as Feld calls it, is modeled on the sounds of the forest:

In the forest, sounds constantly shift figure and ground; examples of continually staggered alternations and overlaps, at times sounding completely interlocked and seamless, are abundant. For Kaluli, this is the naturally coherent organizing model for soundmaking, whether human, animal, or environmental: a constant textural densification constructed from “lift-up-over sounds.”<sup>41</sup>

Lift-up-over sounding, accordingly, applies to sound relations of all sorts: within the sounds of one instrument; and between this instrument and surrounding sounds; or between voice sounds, song, and talk; or voice sounds and work tools; or finally, simply to sounds of nature.

Evidently the Kaluli aesthetic fits the sounds of nature very well. What could rule out the Kaluli way as an inappropriate way to appreciate these sounds? Surely we must conclude that the complexity of environmental sounds as well as the complexity of our ways of hearing combine to make it probable that there are multiple ways to listen to the sounds around us.

Talk about ways of listening to sounds can be reformulated in terms of attribution of different sound structures and relations to the sound events around us. Some of these relations, as we have seen, may even involve listening through metaphors and analogies. Nicholas Cook argues that such listening is even true of music. He holds that analytical theories of music do not describe the music as it might be heard neutrally or objectively:

Analytical methods as distinct from each other as Schenker’s, semiotics, and set theory share as their common aim the demonstration of the manner in which musical elements combine with one another to form integrated compositional structures. In this book I argue that the structural wholeness of musical works should be seen as a metaphorical construction, rather than as directly corresponding to anything that is real in a perceptual sense.<sup>42</sup>

Cook finds support in Roger Scruton’s views of the role of imagination in creating a critical account of an artwork. Scruton claims that “much of music criticism consists of the deliberate construction of an intentional object from the infi-

nitely ambiguous instructions implicit in a sequence of sounds.”<sup>43</sup>

As ambiguous as musical sounds may be, a sequence of sounds in nature is many times more ambiguous. The ambiguity in either case raises the question of the reality of the relations and metaphors the listener ascribes to the heard sounds. Here it seems to me there is another difference between music and nature (or more broadly, environmental) sounds. In the case of music, a tradition of pedagogy, theory, and intention—what Cook calls “musical culture”—can justify critical and theoretical ascriptions of complex structures and relations to musical sound events, for instance, that a sequence of sounds exhibits the return of a theme in a highly modified form. By contrast the sounds of nature are neither composed nor performed, nor notated, studied, or taught. In our society, at any rate, there is no “nature-sound culture,” no set of conventions, unambiguously ascribing a significant set of relations to the sounds of nature. Whether our hearing is guided by representational associations or baroque musical analogies or Kaluli relations of dense, shifting, overlapping layers of sound, if the relations can be imaginatively heard by an appropriately programmed listener who is attending to sound events that are in the soundscape, then the relations are justified. There is a large multiplicity of structures and relations that we might hear, and all seem equally legitimate.

We can, however, grant that our appreciation ought to be constrained to this extent, that it would be wrong to hear nature sounds in *just* the same way as we hear music. For, music, as we conceive of it in our society, is an intentional activity of musicians (composers and performers) who produce a sound object to be appreciated, and our conception of this intended object controls how we listen to music and what counts as appropriate appreciation.<sup>44</sup> But the truth about nature, most of us believe, is that it is not intentional; neither the sound of the waterfall nor the combination of the sound of the waterfall, the birds singing, and the wind blowing through the aspen trees is deliberately produced to be heard as sound events. To the extent that we listen to music as symbolic of ideas or expressive of emotions, for example, and on the assumption that these require the sounds to be intentionally generated, it would be incorrect to listen

to the sounds of nature as if they were literally produced to symbolize ideas or express emotions.

#### VIII. CONCLUSION

I conclude that appreciation of the sounds of nature is an appropriate part of the aesthetics of nature, even though it does not conform to the patterns that have been established for appreciating music or artworks in general. Aesthetic judgments of soundscapes and sound events, for the reasons that have been given in sections VI and VII, will be many times more underdetermined than are typical judgments of art or musical works. There are few constraints on appreciation of such sounds, even granting that we require appreciation to respond to the sounds that are there to be heard.

There could be little that on the surface is more disquieting to aesthetic theory than such freedom. It may appear to make responsible criticism and discourse about the objects of appreciation impossible. But we can see from our ability to discuss nature sounds that it does not have such devastating effect.<sup>45</sup> The person who listens to nature is simply free of the criteria that govern appreciation of music and that function to rule out many possible ways of listening to musical soundscapes. Given that nature is filled with sounds, our freedom of appreciation of these sounds simply yields an even greater abundance to listen to.

If seriously attending to nature's sounds requires giving up much of the universality that we normally expect of aesthetic appreciation, this is balanced by the enlivening effect that our subjective freedom can have on our auditory imaginations. Nature's sounds thus merit serious aesthetic attention both theoretically and experientially.<sup>46</sup>

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1. Noël Carroll describes this sort of experience: "we may find ourselves under a *thundering* waterfall and be excited by its grandeur; or standing barefoot amidst a *silent* arbor, softly carpeted with layers of decaying leaves, a sense of repose and homeyness may be aroused in us." "On Being Moved by Nature: Between Religion and Natural History" in *Landscape, Natural Beauty and the Arts*, eds. Salim Kemal and Ivan Gaskell (Cambridge: Cambridge University Press, 1993), p. 245, emphasis added.

2. A recent anthology of twelve articles on natural beauty and landscape edited by Kemal and Gaskell, *Landscape, Natural Beauty and the Arts*, does not even mention sound in its index.

3. Besides the overwhelming evidence that human beings arrange their lives so as to control sound and so as to seek out pleasing sounds, further evidence for "no" answers here comes from the burgeoning popularity of environmental recordings. This is not necessarily evidence that we value and listen to sounds of nature in the *same* way as we do to musical sounds, but it is some evidence that we value the sounds of nature and that they engage our aesthetic attention.

4. Most notably by Allen Carlson in a series of papers. Of special note for my purposes are his: "Appreciation and the Natural Environment," *The Journal of Aesthetics and Art Criticism* 37 (1979): 267-275; "Nature, Aesthetic Judgment, and Objectivity," *The Journal of Aesthetics and Art Criticism* 40 (1981): 15-27; and "On Appreciating Agricultural Landscapes," *The Journal of Aesthetics and Art Criticism* 43 (1985): 301-312.

5. R. Murray Schafer, *The Tuning of the World* (New York: Alfred Knopf, 1977), p. 274. Also see R. Murray Schafer, "Music, Non-Music and the Soundscape," and Barry Truax, "Electroacoustic Music and the Soundscape: The Inner and Outer World," both in *Companion to Contemporary Musical Thought*, vol. I, eds. John Paynter, Tim Howell, Richard Orton, and Peter Seymour (London: Routledge, 1992).

6. I will be dealing throughout with mixed soundscapes because they are by far the most common and familiar. Only in distant wilderness or inside modern buildings do we enter soundscapes that consist solely of nature or human-made sounds. Sounds of nature occur both in pure wilderness and in mixed soundscapes (street, garden, park). Although my interest is especially in illuminating the appreciation of nature sounds, many points that apply to the appreciation of pure nature soundscapes apply to soundscapes in general and are easier to make with more familiar examples from mixed soundscapes. I should also add that it would be a mistake to make a sharp distinction between nature and human-made sounds—consider, for instance: the flapping of sails, the splashing of paddle wheels, the sound of a bonfire, the sound of a baby crying.

7. Allen Carlson, in "Appreciation and the Natural Environment," implicitly accepts the criterion of faithfulness to experience when he criticizes the so-called landscape model of appreciation of nature. Carlson criticizes the model for not putting us *into* the environment.

8. Malcolm Budd, in "The Aesthetic Appreciation of Nature," *The British Journal of Aesthetics* 36 (1996): 209, asks: "Is aesthetic appreciation of nature confined to individuals (and individuals as related to each other) or does it extend to kinds?" But he fails to note the significantly different accounts we would get depending on which we choose as pri-

mary. Even if we can form some conception of the visual appearance of the Bald Eagle in itself or the song of the Western Warbler in itself, the experience of *these* kinds of things becomes at best only indirectly related to actual visual or listening experiences.

9. Contrast bird song recordings made as teaching aids, with ambient sounds edited out, with recordings of a "walk in the woods" designed to give an instance of what one forest sounds like on one particular day. We listen to the first to learn the characteristics of the song, we listen to the second for some sort of aesthetic pleasure. This is not to deny that someone can listen to the former recordings aesthetically, but for most people aesthetic pleasure in the sounds of nature is generated by a listening experience of a particular token set of sounds.

10. This usage arguably differs from Schafer's in *The Tuning of the World*. He there defines the "soundscape" as the "sonic environment" (p. 274), and at one point he says that the "soundscape is a field of interactions, even when particularized into its component sound events" (p. 131, emphasis added). This appears to imply that the soundscape, i.e., the sonic "environment," consists of sound events.

11. Schafer has developed a series of "ear cleaning" exercises designed to teach people to pay real attention to the sounds around them. See *The Tuning of The World*, chap. 14.

12. See Steven Feld, "Sound Structure as Social Structure," *Ethnomusicology* 28 (September 1984): 383–409, and Steven Feld, *Sound and Sentiment: Birds, Weeping, Poetics, and Song in Kaluli Expression* (University of Pennsylvania Press, 1990).

13. Steven Feld, "Aesthetics as Iconicity of Style (uptown title); or (downtown title) 'Lift-up-Over Sounding': Getting into the Kaluli Groove," in Charles Keil and Steven Feld, *Music Grooves* (University of Chicago Press, 1994), p. 126.

14. Feld, "Sound Structure as Social Structure," p. 395.

15. Indeed, the Bureau of Land Management (BLM) has used the intrusion of outside sounds to attempt to exclude potential wilderness areas from official designation as wilderness. The usual culprit is traffic noise, but airplanes and industrial sounds can also be a problem. For a discussion of wilderness solitude and various attempts to measure it, see Mark Woods, "Rethinking Wilderness in the United States" (Ph.D. diss., University of Colorado–Boulder, 1996).

16. Robin Maconie, *The Concept of Music* (Oxford: Oxford University Press, 1990), pp. 12–13.

17. R. Murray Schafer, "Music, Non-Music and the Soundscape," p. 35.

18. *Ibid.*

19. Maconie, *The Concept of Music*, p. 15.

20. "Environmental aesthetics" is sometimes used to refer to the aesthetics of the environment around us, whether that environment is natural or human made. It is also sometimes used to refer to the recent tradition that focuses on the aesthetic value of unspoiled nature. Often environmental aesthetics is fueled by preservationist intuitions, i.e., by a desire to find aesthetic values in nature that help to justify preservation of areas of land. For a vigorous defense of this sort of environmental aesthetics project see Janna Thompson, "Aesthetics and the Value of Nature," *Environmental Ethics* 17 (1995): 291–305.

21. In some earthworks, e.g., Walter De Maria's *Lightning Field*, the relevance of sound can hardly be missed.

22. Carroll, "On Being Moved by Nature," p. 257. It is

worth noting that Carroll seems also to accept an objectivity requirement on aesthetic responses to nature.

23. Thompson, "Aesthetics and the Value of Nature," p. 293.

24. John Cage says, "What is more angry than the flash of lightning and the sound of thunder? These responses to nature are mine and will not necessarily correspond to another's." *Silence* (MIT Press, 1961), p. 10. Murray Schafer speaks of *sound phobias* and *sound romances*. He has interviewed people in many countries to discover which phobias and romances are common across cultures and which are not. The cultural bias of many likes and dislikes is evident: "As people move away from open-air living into city environments, their attitudes toward natural sounds become benign. ... every one of the Jamaicans interviewed disliked one or more animals or birds—particularly at night. Hooting owls, croaking frogs, toads and lizards were mentioned frequently. Barking dogs and grunting pigs were also strong dislikes. The animal sound most universally disliked was the purring cat" (*Tuning of the World*, p. 147).

25. This claim is made by Carlson in "Appreciation and the Natural Environment." Janna Thompson, in "Aesthetics and the Value of Nature," only requires that there exist some objective aesthetic judgments that judge some natural environments (e.g., wildernesses) as more aesthetically valuable than human-made environments. The aesthetic value, thus established by objective judgments, provides reason for preservation.

26. The agreement requirement needs careful analysis beyond the scope of this paper. The requirement might have varying degrees of strength, from the claim that proper aesthetic judgments are true and require agreement from other (sensitive and rational) perceivers to the much weaker claim that aesthetic judgments must be based on reasons having to do with the object being appreciated. The weakened sense *does* shade into the guidance-by-object requirement. As I will argue below, there are different ways of hearing the same physical sound events, but each way can claim to be grounded on the sounds and thus meet a weakened agreement requirement.

27. Monroe Beardsley, "The Aesthetic Point of View," in *The Aesthetic Point of View: Selected Essays*, eds. Michael J. Wreen and Donald M. Callen (Cornell University Press, 1982), p. 22. Note that Beardsley defines the aesthetic point of view in terms of the aesthetic value of something and the aesthetic value of that something in terms of its capacity to provide aesthetic gratification.

28. The account of the aesthetic appreciation of nature developed by Malcolm Budd also analyzes the notion of aesthetic response without making commitments about aesthetic judgments. He says, "a response [is] aesthetic insofar as the response is directed at the experienced properties of an item, the nature and arrangements of its elements or the interrelationships among its parts or aspects, and which involves a felt positive or negative reaction to the item, considered in itself ... so that what governs the response is whether the object is intrinsically rewarding or displeasing to experience in itself" ("The Aesthetic Appreciation of Nature," p. 213). This definition makes our attentive responses to nature sounds aesthetic, but it does not entail a general agreement about the sort of positive or negative response that will be appropriate to a given sound event.

29. An example from Stockhausen illustrates this. In 1958 he spent much time flying in propeller planes. He is quoted

in Jonathan Cott, *Stockhausen; Conversations with the Composer* (London: 1974), pp. 30–31: “I was always leaning my ear ... against the window, listening with earphones directly to the inner vibrations. And although theoretically a physicist would have said that the engine sound doesn’t change, it changed all the time *because I was listening to all the partials within the spectrum*. It was a fantastically beautiful experience” (emphasis added).

30. These examples come from W. A. Mathieu, *The Listening Book: Discovering Your Own Music* (Boston: Shambhala Publications, 1991).

31. One of the most interesting recordings I know contains the sound of a car engine cooling off as this is juxtaposed with doves and frogs in the car’s environment. The engine makes a very rhythmical sound, but this required very close miking to make it sound as prominent and dramatic as it does on this record.

32. Nor do I think the problem can be resolved by knowledge of the sounds *themselves*, whatever that might mean. I am in disagreement with Carlson, who claims: “Our knowledge of the nature of the particular environments yields the appropriate boundaries of appreciation, the particular foci of aesthetic significance, and the relevant acts of aspection for that type of environment” (“Appreciation and the Natural Environment,” p. 274). I see no plausible way to apply this to sounds. Knowledge will certainly affect our experience and bring out features otherwise missed, but I do not think it can dictate frame or significance.

33. Schafer, *Tuning of the World*, p. 180.

34. A good recording of wolf howls, such as *Wolf Talk* (Northsound, 1992), will include not just an isolated wolf howl or two but detailed sonic events that exhibit the ways that the wolves react to each other and howl with each other, and it will include the rich changing tapestry of sounds that surround a listener, such as typical insects for that time of day and place, various birds singing to each other, a rain storm in the forest, stream sounds, frogs, and other animals. The overall effect of a particular context in time in which the wolves live and produce their howls can be enormously

powerful. It is the context in which the wolf howl occurs that is open to multiple attention frames.

35. Schafer, “Music, Non-Music and the Soundscape,” p. 42.

36. *Ibid.*

37. The same story can be told, of course, for a “pure” soundscape comprising only natural sounds, for example, a “chorus” of howling wolves commenting on and responding to a bird and insect ostinato. In noting that a general freedom of ways of framing and listening applies to all types of soundscapes, including mixed ones, I do not wish to imply that all sounds are of equal aesthetic value to us. I have tried to explain why we place a greater value on natural sounds in “Appreciating the Sounds of Nature: Surveying Some Problems” (paper delivered at the American Society for Aesthetics, Pacific Division meetings, April 1997).

38. Schafer, “Music, Non-Music and the Soundscape,” p. 40.

39. *Ibid.*, p. 42.

40. Feld, “Sound Structure as Social Structure,” p. 392.

41. *Ibid.*

42. Nicholas Cook, *Music, Imagination, and Culture* (Oxford: Oxford University Press, 1990), p. 5.

43. Roger Scruton, “Understanding Music,” quoted by Cook, p. 20.

44. Freedom is relative. I do not deny that there may be multiple ways to listen to particular musical works.

45. As evidence for this, it is worth noting that in his classic “Categories of Art,” *Philosophical Review* (1970): 334–367, Kendall Walton proposes just such an account. As Carlson notes in “Nature, Aesthetic Judgment, and Objectivity,” p. 17, Walton there proposes that aesthetic judgments about nature are “relative to the way in which a perceiver happens to perceive a part of nature or a natural object on a particular occasion.” This is essentially correct for sounds. It does not rule out communication between similarly (mentally and physically) placed listeners.

46. Thanks are due to Jason Potter and Christopher Shields for helpful comments on earlier drafts of this paper and to Donald Crawford for comments on a related paper.