in humans, we may ask: "Is this a wise choice and, if so, why?" My answer in brief is that such a perspective is encouraged by our acceptance of the principles of *Appreciative Expansiveness and Magnanimity* and of *Experiential Richness*. This is not a matter of saying: "Sure. Why not?" There are payoffs without which we willfully and possibly stupidly deny ourselves valuable experiential options. Here are some of the benefits:

Does such a view of creativity give us yet another aesthetic category or dimension with which to judge natural settings or through which to appreciate nature? Yes. It broadens the notion of the aesthetic and allows one to break out of the confines artificially created by the cultural cocoon by which traditional art forms have sealed us off from the real world or, worse, convinced us perversely that the natural world somehow doesn't match up, doesn't make the grade, lacks some magical content or depth that makes all the aesthetic difference; and, in a word, alienates us aesthetically from the only real world there is.

Does it provide us with a quasi-moral outlook on the natural world, an opportunity to think that the natural world is not only beautiful but good in other ways? Yes. It provides yet another moral ground for respect, for it reminds us of the imperative Breakest thou not what thou admirest.

Does it provide anything epistemically fruitful? Are we better off in our understanding of nature by thinking nature creative? Yes, because to think nature creative provides a way of second-guessing (predicting, retrodicting) how nature responds to constraints and pressures (survival). The risk is that this can lead to Panglossianism, but there's nothing new in this risk that affects any sort of optimism.

Supposing that (1) attributions of creativity to nature enhance the value of nature to us and that (2) such value-added conceptions enrich and even sophisticate our relationship to the nonhuman sphere (thus giving us reasons to be receptive to the attribution), have we any further reason to regard nature as creative that doesn't depend upon our directly benefiting from such a regard? Does this all come down to saying that we should attribute creativity to nature primarily because we benefit thereby? My answer is: Even if this were our only reason, it serves as well and in such capacity in our regard for human creativity.

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The Value of Natural Sounds

I. Ambient Sounds/Ambient Issues

If a therapist were to ask you to "relax, close your eyes and imagine yourself in a beautiful setting," what would you imagine? Chances are you would imagine something like this: lying in a sunny meadow with a breeze

rustling grasses and tree leaves; or this: sitting beside a bubbling brook in a forest glade; or this: strolling along a beach with the surf rhythmically crashing and the calls of sea birds punctuating the misty air. As these examples illustrate, sounds are an integral part of our experience of nature, and especially attractive sounds are part of what makes many natural settings especially desirable.

Although we seldom consciously think about the sounds that we hear in nature, there should be little doubt about their impact on our experience of nature. Nonetheless, they are almost never mentioned in theoretical discussions of nature aesthetics. The tradition of ignoring sound is, in fact, an old one in Western aesthetic thought, which has instead focussed on the visual. As Aquinas tells us, "The notion of the beautiful is that which calms the desire by being *seen* or *known*."[1] In addition to the visual this enfranchises the intelligible as potentially beautiful. As for the audible—this is typically left out of consideration.

In this regard we've advanced little since Aquinas. Recent accounts of environmental aesthetics still assign sound no particular role or value worth mentioning.[2] Nonetheless, in what might be called "applied" nature aesthetics, sound is a frequent consideration. For instance, worries about the intrusion of nonnatural sounds regularly come up in debates about protecting wilderness areas. To take one example, the current controversy over whether to allow outboard motors, snowmobiles, truck portages, and so forth, in the Boundary Waters Canoe Area of northern Minnesota turns in large part on the intrusiveness of these activities, especially the way sounds made by engines globally broadcast throughout the surrounding wilderness area.[3] The same issue underlies current controversies about restricting tourist sightseeing flights over the Grand Canyon. Indeed, the original Wilderness Act of Congress of 1964 is formulated in language that stresses this concern. For it describes a wilderness as an area in which the "imprint of man's work [is] substantially unnoticeable" and which "has outstanding opportunities for solitude." Because sounds are a ubiquitous part of our world and because, as we shall see below, as hearers we tend to label and categorize the sounds we hear, the impact of human-generated sounds on the character of a region can dramatically affect whether it strikes us as a wilderness, as truly untrammeled nature.

The peculiar position of nature sounds in aesthetic theory can be accounted for, in part, by the fact that commonly we hear sounds only at a subliminal level. Yet "subliminal" is not the same as actually undetected. When sounds are not the right ones for a setting, we may notice. As the *New York Times* recently observed, an "eerie quiet" now blankets Yosemite as a result of the severe decline of frog and toad species: "Eighty years ago, the wilderness in and around Yosemite National Park was rife with the trilling, croaking songs of frogs and toads, but no longer."[4]

Even granting that the sounds of nature are very important to the aesthetics of nature, there are two puzzles—one obvious, one less so—concerning the aesthetics of nature sounds that need to be addressed before they can take their proper place in theoretical accounts of the aesthetics of nature. The obvious puzzle is this: How are we to understand their appreciation? Nature sounds are not like music, not intentionally produced to be appreciated as expressive or aesthetic objects. Nor are they regimented into units as in music to be appreciated in spatial and temporal separation from other sounds occurring simultaneously. They surround us, occurring at many levels and distances from us, with no beginning or end. Given such significant disanalogies with music, how should we approach their appreciation? At the least, we need to understand what the "objects" of sonic appreciation might be.

The less obvious puzzle will be the focus of this essay. It is the problem of accounting for the special value most of us ascribe to nature sounds over and against nonmusical artifactual sounds. ("Artifactual sounds" are all those sounds produced by human activity. Some of these sounds are intentionally produced to be heard, for example, the warning beeps of a backing vehicle; some are produced to be appreciated as sounds, for example, music; and some, the vast majority, are simply by-products of human activities, for example, the roar of a jet plane, the sound of feet running up and down a basketball court, and so on.) The puzzle deriving from the special value we ascribe to nature sounds can be brought out by noting sonic instances of the problem of indiscernible counterparts, the pivotal theoretical conundrum motivating the art theory of Arthur Danto. The problem of indiscernible counterparts in art theory is the problem of producing a theory of art that accounts for how there can be pairs of objects that on the surface seem to be identical or nearly so, but which are regarded in radically different ways. Danto focuses on examples of artworks, real and imaginary, that have indiscernible counterparts that are not artworks or are very different artworks.[5]

In a parallel way, we can easily note pairs of approximately similar sounds with very different effects on listeners, pairs of similar sounds—for instance, thunder vs. bombs—that are regarded and appreciated in very different ways. In such cases, two sets of sounds are roughly indistinguishable acoustically, yet most of us regard the sound events in entirely different ways. Moreover, there are many cases in which, although not indistinguishable, the properties of two sound events are quite similar in terms of time patterns, frequencies, and intensities, and yet we regard the man-made sounds as unattractive and the natural ones as attractive in context. Here are two examples.[6] (1) Approaching a roaring cataract in the mountains, we hear sounds that are often very similar to those of a middle-distance jet engine, yet the jet sound strikes us as unpleasant—even from a

distance—whereas the cataract sound strikes us as majestically powerful. (2) If you listen from above the mouth of a mountain canyon with both a highway and a river running through it, the traffic noise from the highway is often indistinguishable from the sounds of rushing water running through the canyon. (At some times of the year rushing water will predominate, at other times traffic will.) Yet one sound—the sound of a rushing mountain creek—strikes most people as a highly pleasing sound that blends well with other sounds to be heard in the area, such as the sounds of birds, insects, and wind. The other sound—rushing traffic noise—strikes most listeners as an unpleasant intrusion.

Call the distinction that we commonly make between phenomenally similar sounds the "natural-sound distinction"; call the accompanying value judgments the "natural-sound preference." Clearly, this preference does not extend to a general preference for sounds of nature over sounds of *music*, that is, sounds intentionally produced to be appreciated as sound. But we do have an entrenched preference for sounds of nature over most sorts of artifactual sounds. Even Kant noted a preference for nature's sounds:

> What do poets praise more highly than the nightingale's enchantingly beautiful song in a secluded thicket on a quiet summer evening in the soft light of the moon? And yet we have cases where some jovial innkeeper, unable to find such a songster, played a trick—received with greatest satisfaction [initially]—on the guests staying at his inn to enjoy the country air, by hiding in a bush a roguish youngster who (with a reed or rush in his mouth) knew how to copy that song in a way very similar to nature's. But as soon as one realizes that it is all deception, no one will long endure listening to this song that before he considered so charming; and that is how it is with the song of any bird. In order for us to be able to take a direct interest in the beautiful as such, it must be nature, or we must consider it so.[7]

Not only do we have a preference for nature's sounds over indiscernible counterpart artifactual sounds, but we also have a generally more favorable reaction to nature's sounds than we do to artifactual sounds as a class.[8] For example, we frequently regard the pervasive sounds of urban life as "noise" but hardly ever apply that term to the sounds we hear in nature.

Our regard for the sounds of nature, not surprisingly, parallels the so-called thesis of "positive aesthetics," the position that all untouched parts of nature are beautiful or have positive aesthetic qualities.[9] Nature's sounds are almost always good: the same sounds that on the basis of their description purely in phenomenal terms (i.e., purely in terms of the properties of the sounds considered apart from what they are sounds of) we would expect to regard as ugly—for example, the croaks of frogs, the guttural call of the Secretary bird, the howling of wolves, the nasal grunting of the

osprey—may well strike us as beautiful or as having special and positive aesthetic qualities in their natural context.

My goal in this essay is to account for this preference for nature's sounds.[10] In section II, I will briefly address the preliminary issue of how to conceptualize the objects of appreciation. In section III, I will address the coherence of the distinction underlying the natural-sound preference. In section IV, I will offer an explanation of why we have the preference. I argue that this explanation provides an adequate justification of our habitual application of the preference in our aesthetic responses to nature sounds. In section V, I explore two problematic consequences of the explanation I have given for the preference.

II. Nature's Sounds: The Objects of Appreciation

Since the objects of our aural attention in nature are not discrete and walled-off sound events (as in music), to characterize them we need to think, potentially at least, of the whole network of sounds that surround us. A useful starting point is the notion of a "soundscape," a term coined by R. Murray Schafer to refer to "the sonic environment"[11] (*any* sonic environment, not just a pure nature setting). This notion is somewhat ambiguous. It is certainly tied to a geographical or spatial environment: the inside of a train station, the tourist overlook at the Grand Canyon, Piazza San Marco, the water's edge at a point along the coast of Devon, and so forth. This environment might be particular (St. Peter's Square) or general (a forest in Maine).

Even so, the term "soundscape" can have two related but different referents: (a) the sounds to be met with in that particular (or particular type of) environment, or (b) the environment (space, landscape) in which the sounds are to be heard. Because "soundscape" is on the face of it analogous to "landscape," a term tied to a spatial location, I will use it to refer to the containing space of sounds, distinguishing it from the *soundscape events* that occur within the soundscape. The soundscape is the repository, and soundscape events are any set of sounds to be heard together in the soundscape over a given period of time.[12] These could include either the total set of sounds or various subsets of sounds to be heard over a period of time. I also understand soundscape events to include the sounds within a given environment *as they occur* spatially and temporally.[13]

Over the course of a day, soundscapes in nature change their appearance dramatically as various species of birds, insects, other animals, and weather events either begin to make sounds or cease to make them. Birds and the daily cycle of their sounds have a much greater impact on a soundscape than they do on the visual appearance of the associated landscape.[14] This is even more true of insects that go unseen, such as crickets and cicadas. Their stridulations create a complex sonic background for many soundscapes.

With these remarks as background, I now propose that the most appropriate objects for an aesthetics of nature sounds are soundscape events. The most significant alternative proposal would be to take the primary objects of appreciation to be the sounds of individual *kinds* of things: birds, crickets, wind, waterfalls, and so forth.[15] We have a concept of what *these* individual kinds of things sound like and could consider the type—for instance, the song of the Curve-billed Thrasher—as an object of appreciation. (One might, for example, admire the trills and warbles typically produced by the Curve-billed Thrasher.) However, I propose to set aside aesthetic attention directed to a bird or frog song type *abstracted* from any particular environment and moment in time in which it might occur. I do so because directing attention at the sound *type* would be to ignore how nature in its actuality sounds, how that bird song sounds in its actual instances. 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. Our aesthetic response to nonmusical sounds comes from sounds as actually heard, including background sounds.

A second reason for focusing on soundscape events rather than on sounds of kinds of things is that many sounds of nature, with the exception of animal calls and songs, are so variable that their instances cannot reasonably be amalgamated into one specific sound type. The sounds of ocean or rivers or weather events vary significantly from place to place, time to time, and with each instance. 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 complexity of nature sounds, but also to the inadequacy of thinking of the sounds of nature along the lines of a catalogue of the sounds of individual kinds of thing. The natural-sound preference can now be formulated as a preference for soundscape events that are natural over those that are artifactual.

III. The Coherence of the Natural-Sound Preference

The simplest explanation for our preference for nature's sounds is that they are intrinsically more attractive. Isn't the distinction that we make just obvious phenomenally? Think of the difference between a chain saw and a lark! But is it true that in general *in themselves* the sounds of nature are simply *intrinsically more attractive or beautiful*? Are (nonmusical) man-made sounds necessarily unattractive and nature sounds necessarily attractive? I do not believe so. Consider a list of "endangered" sounds compiled by Schafer: "milk bottles, steam whistles, bicycle bells, horseshoes being tossed against a metal spike"—these man-made sounds are often attractive. Conversely, as we have already noted, many nature sounds are not considered in themselves intrinsically attractive, for example, a howling wolf, a magpie cackle, thunder, a honking goose, and the like. Yet, the same sounds heard in the

context of other related soundscape sounds can contribute to enchanting overall sound events.

The distinction is thus quite puzzling considered from the perspective of the phenomenal view of hearing, that is, any view holding that what we hear is completely characterized by the properties of the sounds considered apart from what causes them. But is the phenomenal view right? Certainly, formalists in the classical-music tradition have long urged us to listen to music in this way, that is, to base our appreciation of a musical work solely on the phenomenal properties of its sounds and their structural relations without regard to their origins.

I believe that both formalists and phenomenalists have an inadequate account of the way we hear sounds. My hypothesis is that the natural-sound preference can be understood if we accept a different model of the way we in general hear things in the world, one based on the idea of causal or referential listening. We usually (not necessarily or always) hear a sound *as* the sound of something: a frog or a river or a magpie; *as* a chain saw or airplane or hammering or Bill speaking. We cannot understand our responses to the sounds of nature unless we incorporate this most natural mode of listening into our account of the way we hear these sounds.

Now, formalists in musical aesthetics insist that this way of listening is not how we ought to listen to music.[16] But this seems wrong *even for music.* For the most part, the causes of musical sounds *are* relevant to their appreciation. As Jerrold Levinson has argued, it makes a difference, in terms of its identity and aesthetic properties, just who composed a sequence of sounds, and in what context. This ought properly to affect how we hear the musical work—for example, whether to hear it as a parody or not, whether to hear it as exciting (in context) or not, and so on. More directly, knowing the proximate cause of musical sounds, just who and what is producing the sound, makes a difference. Again, Levinson has argued in particular that instrumentation is an *essential* feature of most classical musical works written in the last three hundred years. The expressive properties of a musical passage are often affected by knowing the cause. Levinson notes, for example, that

> the aesthetic qualities of the *Hammerklavier* Sonata depend in part on the strain that its sound structures impose on the sonic capabilities of the piano; if we are not hearing its sound structure *as* produced by a piano, then we are not sensing this strain, and our assessment of the aesthetic content is altered. The closing passages of the *Hammerklavier* are awesome in part because we seem to hear the piano bursting at the seams. . . . On a ten-octave electronic synthesizer those passages do not have that quality, and a hearing of them with knowledge of source is an aesthetically different experience.[17]

Malcolm Budd argues for a general view of perception that parallels the notion of referential hearing. He says that "it is a general truth that we are

delighted or otherwise moved by states of affairs, processes, and so on under *certain concepts or descriptions*" (p. 211), and also that "your experience of an item is sensitive to what you experience it as, so that an experience of it under one description has a different phenomenology from that experience under an incompatible description" (p. 212). Budd's claim that one's very phenomenal experience is a function of the category under which something is perceived implies that, at best, the term "phenomenal view" is ambiguous. For how something sounds to us is a function of what we hear the sounds *as*. The type of phenomenal view that I claim is mistaken is the view that the phenomenology of hearing, were we to describe it strictly, would be limited to the characteristics of sounds considered in themselves apart from what they are taken to be sounds of. Now, it is sometimes possible to hear sounds this way (*only* as sounds as the acoustician might describe them), but such experience is unusual and, I would maintain, for most of us often impossible. The phenomenal view gets the phenomenology of hearing wrong, both for music and for nonmusical sounds.

IV. Value-Laden Listening

If my auditory experience of traffic is qualitatively different (because it is an experience of *traffic*) from my experience of a river (because it is an experience of a *river*), is that enough to dissolve the puzzle of our natural-sound preference? It might seem that it is not. Even granting Budd's claim that "the fact that we experience something as natural might be integral to the emotion we feel towards it" (p. 211), questions may still arise as to why we feel those positive emotions toward nature sounds and whether we are justified to so respond.

Robert Elliot suggests an account of the value of the natural that might explain the preference for the sounds of nature. Elliot proposes that the natural automatically functions to carry an evaluative dimension. In this respect it is like the beautiful: "To say that something is beautiful is, prima facie, to give a compelling reason for restoring it, protecting it, caring for it, and preserving it."[18] So, if "natural" is the opposite of "artifactual" and if by this very contrast value is produced, then we would have a sort of explanation for the preference for nature's sounds. But why does the natural carry value with it? Is this just a matter of the conventional meaning of "natural"? Elliot also suggests that the fact that "nature has value is, so to speak, a brute value fact."[19] Ultimately, this explanation may be the best we can do. However, Elliot's view appears most plausible when we think of nature as comprising *unique* objects (or species) and habitats, for instance, penguins, the saguaro cactus, and the Amazon river. It may seem just obvious that these natural objects are valuable. But the "brute value" view is less obvious in the case of indiscernible counterpart sounds, which involve comparing two sounds that have superficially similar sonic features.

We might attempt a more elaborate explanation based on another of Elliot's suggestions, namely, that "[t]he intrinsic value that wild nature exemplifies supervenes on other of its properties. Thus environmental ethicists have drawn attention, variously, to its beauty, diversity, richness, integrity, interconnectedness, variety, complexity, harmony, grandeur, intricacy and autonomy."[20] But while many of these properties are value adding or value laden, most of these properties—for instance, diversity, variety, complexity, intricacy—could be ascribed to artifactual sounds as well as to nature sounds.[21] Moreover, others—beauty, grandeur, richness, integrity—appear simply to beg the question concerning why we have the natural-sound preference.

More promising is Bernard Williams's view that it is its very "otherness" that gives nature its value.[22] As Elliot puts the view:

> Wild nature is raw . . . in that it is relatively unshaped by, relatively unmarked by, human intentions and human designs. What we see in nature that impresses and moves us is something that is there independently of the actions of creatures of our kind. . . . When we view nature we do not find unordered chaos. We find patterns, dynamic relationships and processes, shapes that please us and inspire us, but these features are there independently of the actions of any creatures such as ourselves.[23]

This may appear to be another circular explanation if used to explain a preference for nature sounds over similar artifactual sounds. But it is not necessarily such—although it is certainly a negative explanation. It says that we find nature and natural things valuable just because they are not us or made by us. As long as we can supply negative (i.e., value-subtracting) content to what we are and do—at least for the case of artifactual sounds that are not products of intention or direct design—we can conclude that part at least of the value of nature's sounds is that they are not artifactual. But what is wrong with nonmusical artifactual sounds? Are they not rich, diverse, complex? Perhaps they are not harmonious? But can we specify a sense in which nature's sounds are harmonious, but artifactual sounds are not?[24]

Rather than pursue this question head-on, I propose to return to the point we saw in the previous section. In the case of music we saw that our experience is determined in part by our cognitive stance. Moreover, we saw that value elements are consequences of our cognitive stance: we value positively or negatively what we hear on the basis of our belief about what we are hearing (recall the awesome quality of a piano navigating the last measures of the *Hammerklavier*). For example, hearing sounds as humanly produced to be appreciated as sounds allows us to hear them as expressive communication. And this is inherently valuable. Why *is* this sort of aesthetic sense-making valuable to us? Here one's spade really does turn. Moreover, hearing sounds as being played on a piano, we can hear them as

virtuosic, as exhibiting an especially high degree of technical ability.[25] Why is this valuable? In part, it just seems to be a natural tendency of human psychology to value virtuosity.[26]

Do similar mechanisms apply to the sounds of nature? Are there properties that sounds have just because they are produced by elements of nature? There is at least the negative point that, in so far as we simply value nature (Elliot's point), we have good reason to find human-made sounds an *intrusion* on nature. I believe that there are also positive reasons. Consider such examples as icebergs breaking off glaciers or thunderstorms. Both processes produce powerful sounds like bombs detonating. We can see why, on the one hand, we disvalue the bomb sound. But why value the very similar nature sound? I propose that, being aware of its origin, we hear it as a powerful and richly complex sound, and one caused by processes that, in being natural, are regarded by many of us as both *right* (they naturally belong) and *inevitable*—two aspects of "natural." The rightness or appropriateness of nature's sounds may be part of what some might mean by nature's "interconnectedness" or "harmony." The sounds are made by creatures and processes that are themselves interconnected through evolutionary and geological processes. They are "'harmonious" in the sense that the things and processes making the sounds are harmoniously related to one another through their joint and interconnected evolution. This is the reason that we hear these sounds as belonging together.

Water provides endless instances of sounds that are created by the natural process of falling, as in falls and surf. (Compare the charm of wind-driven chimes and aeolian harps.) And (Elliot's point again) we value those *things* that make the sounds: streams, rivers, and oceans—they are "right," and their sounds are "right." This explanation in terms of objects and processes accounts, I think, for the way that sounds of nature relate together to form compelling wholes, even though the component sounds are in themselves (that is, disregarding their origin) not attractive. The whole soundscape ensemble is regarded as right and also irresistible; this contrasts sharply with the often exciting willfulness of musical sounds and their sense of being *imposed* on and thus abstractable from a given soundscape. Just as important, *soundscape* events in nature don't just belong together. They also belong *where* they are, they *belong to* the land. We hear them as belonging to their environment in a way that music is not meant to. And also in a way that artifactual sounds never do. The sound of a jet plane over a jungle or canyon clearly does not fit, does not belong. But doesn't the same sound belong at the airport, at least? Yes, it does. But the airport itself isn't experienced as natural; fundamentally, it is an imposition on the landscape—it is something we have made—a very different sort of entity than the plains or marshes that surround it and that it displaces.

Turning back to the "otherness" strategy, can we also propose that another potentially important quality of these sounds is that they are *beyond* us (since they are not produced by intentional and understandable human activities)? Budd says of birdsong, for example, that

> you delight in the seemingly endless and effortless variety of a song thrush's song—variations in pitch, timbre, dynamics, rhythm and vocal attack, for example . . . [the] phrases succeed one another but never seem to reach a final goal, a final ending; instead, they continue for an indefinite time in a way that does not appear to be meaningful overall. In other words, you hear the song as an unpredictable, apparently random mélange of phrases.[27]

In so far as this is not just an appeal to the negative point that the bird's song is heard as *not* controlled by human intentionality, it suggests that the sounds have an attraction precisely because they are not fully predictable and understandable by us. While this is, I think, an important characteristic of the way we hear nature's sounds, I am disinclined to think this adds a decisive element to our explanation of our preference for nature's sounds. The reason is that artifactual sounds, even though caused by human activities, are often beyond us in similar ways: we don't understand exactly how they are produced, they are unpredictable in any detail, they continue indefinitely and are not meaningful.[28] You could, for example, substitute for birdsong in the above quote "the sound of a busy industrial port" or "the sounds of a car race," and the description would all be true except for the fact that we usually don't delight in the endless and unpredictable variety of the sounds![29]

The explanation I have sketched, I suggest, adequately deals with the problem of justifying our natural-sound preference. This is because my spade turns at the same level as it does for musical sound. In each case we can see that because sounds are music or because they are the result of a natural process, and heard as such, they are heard, however unreflectively, as exemplifying certain further nonacoustic properties that we value, such as interconnected belonging. We need only add, as I have, that artifactual sounds lack the relevant properties to make our natural-sound preference coherent and plausible. Whether we value these further properties innately—because as creatures that have evolved in natural environments, we find our deepest sense of belonging in relation to nature sounds—or whether our valuing them is culturally determined, are questions for speculative biology[30] and anthropology. The explanation for our valuing such qualities, whatever it might be, need not be insisted upon in order to find our preference reasonable. I do not believe that we can offer a deeper "justification" of our love of music than this explanation offers of our preference for nature's sounds.

The philosophical problem is to understand whether the distinction we make between nature sounds and human-made sounds is arbitrary. We

have seen that it is not. When we then connect the distinction with values that we have, we have done all we need to do to deal with the justification question. What was bothersome was to understand why and how we could make a sharp distinction between phenomenally similar sounds and apply a preference in such cases. Those problems are solved when we invoke referential listening and connect the distinction to an experiential difference that is grounded in widespread human values.

V. Consequences/Complications

It will clarify the explanation I have suggested if we conclude by considering two problems.

A. *What is natural?* The form of explanation I have offered is this: we hear sounds as the sounds of various items, and when these items are items of nature—and especially when they are interrelated in a natural soundscape—and heard as such, we hear them as having further characteristics that we appreciate in a positive way. This explanation might seem to be hostage, therefore, to problems about defining what is truly natural or what is nature as opposed to artifact. If we are tempted to define nature as what has not been causally influenced by human activity, it might seem that there is little pure nature left in the world. Not only are some animals (domesticated animals) and landscapes (parks) products of intentional human activities, but most ecosystems have been causally affected by human actions. So, if we thrill to the sounds of wolves in Yellowstone National Park (where they have been reintroduced from Canada), are we making some sort of mistake? Should we regard their howls as in the same category as a snowmobile's whine?

The sceptic concerning the natural-sound preference may thus argue that our favorable responses to nature's sounds are based on false beliefs. Moreover, if we had more accurate beliefs, we would not prefer what we now think of as nature's sounds. He may say, once we know the wolves have been introduced by people, we *should* not hear their sounds any more favorably than we hear barking dogs in a national park.

I concede the sceptic's premise that there is little in nature that is completely unaffected by human activity. But the sceptic's conclusions do not follow. For one thing, even though the distinction between nature and artifact is not sharp and is subject to revision, it is not plausible to deny that there is a viable and important distinction to be made. Nor is it to be made on the ground that what is natural is only what has not been causally affected by human activity in some way or other. Surely rain is still rain, even if caused by El Niño and even if El Niño is caused by global warming. Wolves are still legitimately regarded as a part of nature even if they have been transported around by us. Moreover, wolves *do* belong in the Yellowstone ecosystem, and this is the main reason for trying to reintroduce them. Their extermination by humans led to an overabundance of

coyotes, which negatively impacted the Yellowstone ecosystem. So, in the 1980s if you heard an abundance of eerie coyote yipping and howling at night in Yellowstone, *that* was equally artifactual in the sense that it was an indirect effect of human activity. However, it is surely better not to try to understand what we regard as natural simply on the basis of what humans do not causally affect.

Besides, our ears do not operate on the basis of the most abstract and philosophical principles. What is the principle that our ears do follow? Clearly, we are generous. Do we hear the human influence in the sounds? If not, then the sounds are natural and good to that extent. On the other hand, if we do hear the human influence, then the issue becomes more complicated.[31] We may either not appreciate the sounds as much, or we may appreciate them in a different way. I am not claiming that nonnatural sounds are necessarily bad or even valueless. Nor do I think that the naturalness of sounds is the only characteristic that matters to our appreciation of them. I have only noted that we habitually respond to natural sounds in a more favorable way than we do to similar sounds not heard as natural.

B. *Appreciation of mixed soundscapes?* Just as most ecosystems have been impacted by human activity, most soundscapes are a mixture of nature and artifactual sounds. Consider two cases: (1) You are by a stream in a forest when you hear the sound of a distant train whistle. (2) You are in a hilltop village in Europe. In the evening flocks of birds whistle around the stone buildings and spires of the churches while the bells in the spires ring. In both of these cases the overall soundscape events may strike you as attractive. Yet in both cases we have a mixture of natural and artifactual sounds.

Does the explanation I have given of referential hearing and of the preference for natural sounds raise a problem for the possibility of appreciating mixed soundscape events? It might seem that it does, either because it might seem to predict that we do not appreciate mixed soundscape events or, worse, that we cannot appreciate them. However, in the cases described the artifactual sounds are quasi-musical; not only are these sounds designed to be attractive and to fit into their environments, but they are also sounds, in the case of church bells, that are partially produced by natural processes and materials, so their divergence from the surrounding sounds of nature is not as great as would be the sound of (say) a piano.

But there may be some hearers (Murray Schafer, perhaps) who also appreciate mixtures of soundscape events where the artifactual sounds are genuinely just by-products of other activities. For example, imagine another small European village and an electric milk cart accelerating and decelerating down a quiet lane as it delivers clinking milk bottles in the morning, while in the background there are sheep bleating in nearby fields, birds chirping, and wind blowing the leaves in trees by the road. Does my explanation exclude appreciation of this ensemble? If it does, should it?

One point to make is that we can and often do appreciate subsets of soundscape events, mentally setting them apart from others. We can appreciate a birdsong as it occurs in the city park, while ignoring the traffic in the distance.[32] This capacity also allows us to appreciate soundscape events separately and additively, as perhaps we might appreciate a Bach cello suite played in the woods and also appreciate the birds singing at the same time, but not appreciate them as related to each other. But, a proponent of John Cagian nonjudgmentalness may say, can we not also appreciate both as related to each other?

Well, do we ever appreciate them in this way? If there seems to be a barrier to holistic appreciation, it is because the reason for valuing nature's sounds appears to make them immiscible, so to speak, with artifactual sounds.[33] Since one can occasionally appreciate nonmusical artifactual sounds, one option, as already noted, is simply to appreciate the ensemble additively, that is, as the unrelated addition of the component elements. Those who pay attention to artifactual sounds—so far a very small group—surely sometimes appreciate them in this way, that is, as the unrelated but simultaneous sounds of clinking milk bottles *and* chirping birds. However, it may be *possible* to appreciate a mixed ensemble on the basis of listening to the sounds in the acoustic phenomenal way. This abstractive acoustic way is capable of superficially relating mixed sounds together, but the price of this way of hearing is not regarding the sounds as the sounds of particular types of things. We step back and listen to the sounds in themselves.[34]

Neither of the two ways I have suggested as possible ways of listening to the totality of mixed soundscapes—additively (nonholistically) or phenomenally (holistically, but merely as acoustic sounds)—is ruled out by my explanation of the natural-sound preference. I have not said that one could not appreciate sounds differently from the way we customarily do, nor have I argued that our normal way of hearing is the right one in an absolute sense, independent of human psychology and values. I have argued only that it is in fact how we hear things and that the value-laden picture underlying this way of hearing is plausible and coherent. Until we cease valuing nature and experiencing it in the way that we do, we will continue to hear natural sounds as in a category of their own.

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NOTES

1. Quoted in John Haldane, "Admiring the High Mountains," *Environmental Values* 3 (1994): 104.
2. This visual orientation can be found in almost all recent theorists of environmental/nature aesthetics. I hasten to add, however, that my claim is not true of

naturalist writing or nature literature. Nature poems from all eras (and cultures) frequently contain descriptions of sounds.

3. The first sentence of a news release from the Boundary Waters Canoe Area Wilderness (http://www.gis.umn.edu/snf/info/brochures/bwguide.html) emphasizes the sounds to be heard: "The sound of a paddle dipping into the water, the splash of a beaver tail, the echoing call of a loon."
4. Carol Kaesuk Yoon, "Eerie Quiet of Frogs and Toads Isn't Part of Normal Cycle, Study Says," *The New York Times*, April 30, 1996, p. B6.
5. See Arthur Danto, *The Transfiguration of the Commonplace: A Philosophy of Art* (Cambridge Mass.: Harvard University Press, 1981). Versions of the same problem play prominent roles in the work of many other philosophers of art, such as Jerrold Levinson, Gregory Currie, and Kendall Walton. For an analysis of the nature and significance of the problem, → John Andrew Fisher, "Is There a Problem of Indiscernible Counterparts?" *The Journal of Philosophy* 92, no. 9 (1995): 467-84.
6. These are meant to be familiar examples. Many exotic examples exist. Here is one: some lava flows consist of a surface crust of basaltic magma (a silicate) that forms and falls off the flow as it moves along, producing the tinkling sound of breaking glass. Thus, these lava flows produce sounds that are similar to garbage trucks dumping loads of trash full of bottles. Cf. the CD in Jim Metzner, *The Pulse of the Planet: Extraordinary Sounds of the Natural World* (Berkeley Calif.: The Nature Company, 1994).
7. Kant, *Critique of Judgment*, trans. Werner S. Pluhar (Indianapolis: Hackett, 1987), p. 169. As long as we have this preference, as Kant's remarks show, we could not adequately replace lost natural sounds by artificially generated sounds. For example, if we constructed a theme park on what had been an undeveloped wilderness area, we could not replace the sounds of birds by scattering mechanical "birds" around to produce artificial bird sounds. See Robert Elliot, *Faking Nature: The Ethics of Environmental Restoration* (London: Routledge, 1997).
8. This is, of course, a rough-and-ready generalization. Moreover, in particular cases a listener may have nonaesthetic reasons to welcome artifactual sounds (e.g., the sounds of a motorboat when one is lost in the forest) or to find nature sounds unpleasant (e.g., the sounds of birds that will eat the seeds we have planted).
9. See Allen Carlson, "Nature and Positive Aesthetics," *Environmental Ethics* 6 (1984): 5-34.
10. I have addressed the problems surrounding the aesthetic appreciation of nature's sounds in much greater detai → John Andrew Fisher, "What the Hills Are Alive With—In Defense of the Sounds of Nature," *Journal of Aesthetics and Art Criticism* 56, no. 2 (1998): 167-79.
11. R. Murray Schafer, *The Tuning of the World* (New York: Alfred Knopf, 1977), p. 274; also 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*, ed. John Paynter, Tim Howell, Richard Orton, and Peter Seymour (London: Routledge, 1992).
12. This definition applies only to a standard human listener. There are other sound events that could be discovered in a particular setting or landscape—see the caveats discussed in note 13—but these are not, I think, the ones that should be taken into account in an aesthetics of nature's sounds (though they might become part of an art form of recorded sounds). This last point is a substantive one, but I cannot argue it here.
13. Even so specified there are still ambiguities. Presumably, we need to focus on the actual sounds that humans hear in an environment. This rules out sounds we sometimes (loosely) say we hear, such as those we "hear" through electronic manipulation when they are speeded up or otherwise altered, such as earthquakes and whale songs. There are also questions of scale and point of view. If sounds are amplified, we can hear the sounds of ants chewing on leaves or

digging in the dirt (as in the movie *Microcosmos*); if multiple points of hearing are allowed, we can then hear overlapping sounds (as in sound sculptor Bill Fontana's recordings from eight spaced microphones of train whistles and horns as they approach and recede at a busy set of level crossings.) These are not sounds one normal human listener can hear in an environment, but these are "sounds" in the physicist's sense that exist in an environment, and we can hear an analogue version of them. We should further note that analogue sounds of non-sound waves, such as the "sound" of the cosmic background radiation, are no more the sounds of "sounds" than the hum from an audio amplifier is the sound of electronic events in the amplifier's wiring.

14. As a consequence, it is arguable that the aesthetic importance of birds resides not in their beautiful visual forms but primarily in the fundamental contribution they make to most soundscapes of nature (and those of urban life too). Without birds the world as experienced would be greatly impoverished. This point is even more forceful in the case of crickets, frogs, and cicadas, in short, sounding creatures that we seldom see at all.
15. Malcolm Budd, "The Aesthetic Appreciation of Nature," *British Journal of Aesthetics* 36, no. 3 (July 1996), asks: "Is aesthetic appreciation of nature confined to individuals (and individuals as related to each other) or does it extend to kinds?" (p. 209). Parenthetical page numbers in the text are to this article.
16. See Peter Kivy, "Platonism in Music: Another Kind of Defense," *American Philosophical Quarterly* 24 (1987): 245-52; and Peter Kivy, *Music Alone: Philosophical Reflections on the Purely Musical Experience* (Ithaca, N.Y.: Cornell University Press, 1990).
17. Jerrold Levinson, "What a Musical Work Is," reprinted in his *Music, Art, & Metaphysics* (Ithaca, N.Y.: Cornell University Press, 1990), p. 76f.
18. Elliot, *Faking Nature*, p. 116.
19. Ibid., p. 157.
20. Ibid., p. 58f.
21. One needs only to be reminded of artifactual sounds in all their complexity. Consider Humphrey Burton's brief description of the sounds of a city in India: "Cars and cows, bikes and buses, all proceed straight towards each other and miss by milli-fractions, only because they never cease to honk their hooters," *BBC Music Magazine*, May 1998, p. 19.
22. See Bernard Williams, "Must a Concern for the Environment Be Centered on Human Beings?" in *Ethics and the Environment*, ed. C. C. W. Taylor (Oxford: Oxford University Press, 1992).
23. Elliot, *Faking Nature*, p. 59.
24. Surely, nature's sounds are not harmonious in the sense required in various systems of musical harmony. And, in other senses, artifactual sounds may be just as harmonious. Traffic sounds, for example, have similar and interacting causes that lead to various patterns. Aren't the sounds inside a large and busy restaurant harmonious in the same way?
25. Levinson, "What a Musical Work Is," points out that Paganini's Caprice op. 1, no. 17, would not be *virtuosic* executed by a violin-sounding computer.
26. Which is not to deny that someone could attempt to give a further explanation of this psychological fact, for example, by speculating that physical virtuosity proved valuable over the course of evolution. But this is surely an empirical question of evolutionary psychology that we are currently in little position to answer.
27. Budd, "The Aesthetic Appreciation of Nature," p. 212.
28. It may be that unpredictability is value adding when a property of sounds that have the other features I have suggested (interconnected belonging, irresistibleness), but is not necessarily valuable (or even value subtracting) when a property of artifactual sounds that lack these qualities.
29. It is a mistake to think that we understand the results and causal consequences of human activities just because we understand the activities themselves (why they are done, the intentions behind them, and so on).

30. Consider, for example, the thesis of "Biophilia," described by biologist E. O. Wilson as the hypothesis that there is an "innately emotional affiliation of human beings to other living organisms" (E. O. Wilson, "Biophilia and the Conservation Ethic," in *The Biophilia Hypothesis*, ed. S. R. Kellert and E. O. Wilson [Washington D.C.: Island Press, 1993]). The Biophilia hypothesis postulates a biological basis for our responses to nature; it imputes to us an innate need to experience a variety of organisms and nature settings.
31. An example of a more complicated situation is that of the sounds of wild animals in zoos. Here we have sounds of nature in a very unnatural situation. When the sounds are a part of zoo soundscape events, I believe we hear them in a different and less appreciative way than we would were we to hear the sounds in their natural habitat soundscapes. On my theory this is entirely understandable and appropriate.
32. I see no reason to deny that in most mixed cases we appropriately follow the strategy of simply ignoring the artifactual sounds. This is the same listening strategy that we constantly apply when listening to music, in spite of John Cage.
33. There are also intermediate cases of quasi-artifactual sounds that are the result of an interaction of natural processes and human artifacts. Consider cases such as wind flapping sails, water splashing from oars, the crackling of a cooking fire, raindrops hitting the tin roof of a cabin in the woods. In these sorts of cases sounds may be regarded favorably because they have to a certain degree the same properties of naturalness (belonging, inevitability) that pure nature sounds have.
34. I suspect that the possibility of this way of listening reflects the ubiquitousness of the activity of listening to recordings.

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Appreciating Natural Beauty as Natural

Scholars who write about natural beauty are fond of reminding us that nature must be appreciated as *natural*. By this they generally mean that the canons and categories of appreciation we normally use in taking the measure of beauty in man-made objects—especially artworks—are out of place in the world of natural things. After all, they argue, mountains, marmots, and monsoons are not intentional objects; their meaning is not measured against the purposes of any (mortal) creator. The aesthetic concepts we apply to paintings, plays, and poems, whose nature and value are tightly tied to the purposes organizing their creation, do not apply to them. Mountains just are what they are, the evolved products of ages-old geophysical forces predating and indifferent to human life. It is precisely because paintings of mountains, as opposed to mountains themselves, are products of human will that we can regard them as well or ill composed, belonging to this or that style, sentimental, idealized, ironic, morbid, and so on.

Clearly there is a great deal of merit in this view. It is no less foolish and distortive to look at a mountain landscape as though it really were a painting—faulting it or admiring it for its compositional balance, say—than it is