Journal of the American Musicological Society

VOLUME 64 • NUMBER 2 • SUMMER 2011



Editorial: Music in Community, and the Interpretation of Evidence RALPH P. LOCKE	285
Articles	
The March as Musical Drama and the Spectacle of John Philip Sousa PATRICK WARFIELD	289
"Forward to Haydn!": Schenker's Politics and the German Revival of Haydn BRYAN PROKSCH	319
Musical Communities: Rethinking the Collective in Music KAY KAUFMAN SHELEMAY	349
Colloquy: Ecomusicology AARON S. ALLEN, Convenor	
Ecomusicology: Ecocriticism and Musicology	391
Music, Landscape, Attunement: Listening to Sibelius's <i>Tapiola</i> DANIEL M. GRIMLEY	394
American Women and the Nature of Identity DENISE VON GLAHN	399
Musical Ecologies of Place and Placelessness	404
HOLLY WATKINS Ecomusicology between Apocalypse and Nostalgia ALEXANDER REHDING	409
Prospects and Problems for Ecomusicology in Confronting a Crisis of Culture	414
aaron s. allen Works Cited	420

Colloquy

Ecomusicology: Ecocriticism and Musicology

AARON S. ALLEN

Since the 1970s, interest in the relationship between humanity and the natural environment has emerged throughout the academy. Today, professional societies and degree programs exist for environmental fields in biology, chemistry, economics, history, and literature, among many others. These fields have led to understanding the world we inhabit—and to remediating some of the mistakes we have inflicted on the planet. Consider just a few of their contributions: respect for the great webs of biodiversity, with the concomitant realization that much of life on earth is going extinct, quickly; new hybrid technologies and energies that can fuel civilization by the renewable power of the sun; accounting techniques that incorporate externalities, i.e., pollution, into life-cycle costs and the bottom line; connections between physical environments and cultures' past successes and failures; and stories that teach us about humanity's diverse places in nature. Environmental work has burgeoned in the sciences, but all academic fields have been greened, including the humanities.¹

At least since Ancient Greece, thought about music has considered relationships between music and nature. And as environmental awareness has become more widespread, an increasing number of musicological works have engaged with these subjects.² Some of the aims of this new (if not always explicitly named) ecomusicology resonate with concerns expressed in previous centuries—how art reflects, relates to, or relies on nature. Yet as we witness the impacts of climate change, species loss, deforestation, pollution, and resource exploitation, and as we see how so many other intellectual disciplines have contributed to both causes and solutions, we must ask:

- 1. See, for example, Parini, "Greening of the Humanities"; Collett and Karakashian, eds., *Greening the College Curriculum*; and Rosendale, *Greening of Literary Scholarship*. (For full references, see the combined list of Works Cited at the end of the Colloquy.)
- 2. Some are cited in the ensuing contributions, and many more are available via the online bibliography provided by the Ecocriticism Study Group (ESG) of the American Musicological Society, http://www.ams-esg.org. In 2007, the AMS approved the formation of the ESG, which has provided a forum for many, including all the authors in this colloquy, to engage with ecomusicology.

Journal of the American Musicological Society, Vol. 64, Number 2, pp. 391–424 ISSN 0003-0139, electronic ISSN 1547-3848. © 2011 by the American Musicological Society. All rights reserved. Please direct all requests for permission to photocopy or reproduce article content through the University of California Press's Rights and Permissions website, www.ucpressjournals.com/reprintInfo.asp. DOI: 10.1525/jams.2011.64.2.391.

- Is musicology part of the problem or part of the solution?
- What role does musicology play in the welfare and survival of humanity?
- How does nature inform music, and what can the study of music tell us about humans, other species, the built environment, the natural world, constructed "nature," and their connections?
- Does musicology adapt us better to life on earth, or does it sometimes estrange us from life?
- Does it contribute more to our survival than to our extinction?
- Is the environmental crisis relevant to music—and more importantly, is musicology relevant to solving it?³

Answers will vary with time, place, particular topics, individual scholars, and institutional predilections, but the contributors to this colloquy seek to engage in this discussion for the benefit of the entire musicological community. We cannot offer definitive answers to these questions, but we can clear some ground, provide some insights, and promote further dialogue.

I have been reluctant to define an emerging subfield as yet lacking in consensus, but we must start somewhere, acknowledging that disciplinary boundaries can be changed, redefined, and opened to multiple interpretations. As I explain in a forthcoming entry for the revised (2nd) edition of *The Grove Dictionary of American Music*, ecomusicology considers the relationships of music, culture, and nature; i.e., it is the study of musical and sonic issues, both textual and performative, as they relate to ecology and the environment.

The multivalent terms in the above definition provide possibilities for diverse interpretations and applications. Environment, ecology, and nature (and the scare-quoted "nature") are immensely complex words that are rich with contested meanings. For the purposes of this discussion consider the following: Environment is the nonhuman physical world, i.e., the natural world with all its living creatures and nonliving objects and natural processes (while useful, this conception can promote a problematic human–other duality). *Ecology*, on the other hand, is holistic, relating to the "eco-" prefix (from the Greek root oikos, "household"), and constituting the web of relationships of all living organisms, including humans, with their contextual physical environments. Related to both environment and ecology, architects and urban planners use built environment to refer to humans' manufactured world of dwellings, buildings, infrastructure, constructed landscapes, and urban social spaces, as well as the interactions of these places with each other and humans. In response to the question in the title of her book What is Nature?, Kate Soper distinguishes nature, i.e., the referent of nature-endorsing ecologists who emphasize the reality of the natural world, from scare-quoted "nature," i.e., the referent of the nature-skeptical postmodernists who emphasize the cultural

^{3.} With these questions, I am building on Glotfelty, "Introduction," xix and xxi, as well as Guy, "Flowing Down Taiwan's Tamsui River," 218–19 and 242–43, who in turn is building on Meeker, *Comedy of Survival*, 4.

construction of nature. Raymond Williams gives superlative status to both *nature* and *culture* as among the most complex words in the English language.⁴ Add further the equally complex and contested term *music*, and with ecomusicology as defined above we have the makings of either a philosophical quagmire—or, as I and others see it, a socially engaged musicology that seeks to understand not just music, musicians, and/or musical communities, but also their interconnections in the world, both natural and socially constructed.

Ecomusicology has not sprung forth fully formed from an intellectual vacuum. In addition to important past and continuing work by composers, acoustic ecologists, ethnomusicologists, and interdisciplinary scholars, a primary background is ecocriticism, or "ecological criticism." Ecocriticism is a field of literature studying cultural products (text, film, advertising, other media, etc.) that imagine and portray human–environment relationships variously from scholarly, political, and/or activist viewpoints. Thus, ecomusicology is not "ecological musicology" but rather "ecocritical musicology." Ecomusicology continues the trend of music scholarship drawing on literary methodologies: in decades past, philology; more recently, feminist studies.

As gender and sexuality studies have informed and even fundamentally changed the definition of musicology, so too can ecocriticism contribute to musicology.7 But such influences are not always uniform, mutual, or direct, nor should they be. The authors in this colloquy provide diverse perspectives on ecomusicology in general and on their own specific engagements with it. Daniel Grimley considers cultural geography and landscape studies to contextualize his ecomusicological reading of Sibelius's tone poem Tapiola. Denise Von Glahn engages with women composers' relationships with the natural world in the context of the complex history of power dynamics that characterize the construction of American national identities. Holly Watkins takes an ecological approach that considers how music intermeshes with imagination, place, and placelessness. Alexander Rehding encourages us to eschew the more typical crisis approach of environmental studies and instead to emphasize nostalgia, which he argues is better suited to music and musicological study. Finally, I consider the potential contributions of and challenges faced by ecomusicology in confronting the cultural problem underlying the environmental crisis. Each author adds his or her own particular research projects

- 4. Williams, Keywords, 87 and 219.
- 5. Such scholars include Steven Feld, François Bernard Mâche, R. Murray Schafer, Barry Truax, and Ellen Waterman, all of whom defy simplistic scholarly categorization.
- 6. An excellent introduction is Garrard, *Ecocriticism*. Ecocritics have only recently considered musical topics; the British journal *Green Letters: Studies in Ecocriticism* has a forthcoming special edition dedicated to music.
- 7. Compare the entry "Musicology" in the first and second editions of *New Grove Dictionary of Music and Musicians* (1980 and 2001, respectively); in the section "Disciplines of musicology," the subheading "Gender and sexual studies" (along with the subheadings "Sociomusicology" and "Psychology, hearing") replaced "Dance and dance history."

along the way, and, in addition to emphasizing the importance of place, all the contributions seek to bring out the critical and self-critical elements of ecocritical musicology. Together, we hope that the issues raised here encourage thoughtful scholarship in diverse areas, not only in the realm of a self-conscious ecomusicology as subfield but also as a tool in the greater musicological toolbox.

Music, Landscape, Attunement: Listening to Sibelius's *Tapiola*

DANIEL M. GRIMLEY

Ecocriticism unfolds a complex and variegated panorama of interrelated domains of academic research, critical literature, and political activism. My own ecocritical excursions have been stimulated by the work of cultural geographers and literary scholars, and further by a series of conversations and exchanges sponsored by the Landscape and Environment Programme of the Arts and Humanities Research Council (AHRC) in the U.K.¹ During such discussions, I have often felt like an outsider—an awkward and naive interloper, similar to the protagonist in E. M. Forster's 1911 short story "The Other Side of the Hedge." Forster's hero is a rambler (that characteristically English mode of tourism and cultural mobility), who abandons the main highway to discover a green space beyond where he becomes bewitched by "the magic song of nightingales, and the odour of invisible hay, and stars piercing the fading sky."² Forster's story is about class and social convention. But the field/hedge model also offers a good starting point for understanding interdisciplinary research of the kind demanded by ecocriticism: as a geometric pattern of interlocking fields of knowledge, seemingly traversed by a network of individual paths which tempt the unwary scholar toward greener pastures on the other side of the boundaries ("hedges") that separate disciplines.

The idea of landscape lies at the heart of ecocriticism, and hence is central to discussions about how an ecomusicology might be developed. I am acutely sensitive, however, to the ideological implications of my metaphor: the landscape of fields and hedges hymned by Forster refers to a specifically European tradition (principally English, but also the French "bocage," whose Old French root "bosc" means "wood"). Since the eighteenth century, this tradition has conceived of landscape as an essentially visual, scopic, regime—as something seen or surveyed. It is a scene or prospect onto which historical events or characters can be projected. As part of this spectacle—the patterned

^{1.} See particularly the seminal collection by Leyshon et al., *Place of Music*; for a more recent interdisciplinary account, see Sanders, *Cultural Geography of Early Modern Drama*. Details of the AHRC program are available at http://www.landscape.ac.uk (accessed 25 March 2011).

^{2.} Forster, "Other Side of the Hedge," 29.

play of figure and ground—music may be overheard (if it is not overlooked). Landscape here is representational—and also fundamentally constitutive. Its deceptive "second nature" (its sense of "naturalness" or "natural order") conceals a complex narrative of power relations, domination, and ownership.³ A fundamental task of ecomusicology is to unpack such narratives and expose the ideological basis, through historical study and analysis, upon which such conventional ideas of music and landscape are built.

W. J. T. Mitchell and others have drawn attention strenuously to the ideological nature of landscape—the way in which it is intimately bound up with discourses of privilege, containment, and exclusion.4 Yet an alternative model is offered by a different etymology of the term: cultural geographer Kenneth Olwig shifts attention from the English scopic regime towards an older Scandinavian/northern European notion of landskab ("skabe" is the Danish verb "to work or create").5 Landskab refers to ground that is cultivated, shaped, furrowed, or grooved (like the surface of a gramophone record). "Field" here is understood not as a "field of vision" but a zone of activity, shaped and encoded through practices of occupation—it is more properly a phenomenological category (encompassing Martin Heidegger's mythic mode of being-in-the-world and Pierre Bourdieu's notion of "habitus") and a space of legal or political dominion. Music emerges as fundamentally performative—it refers to that which "takes place." Ecomusicology's revised task is to address the affective qualities of particular landscapes, to examine the physical and emotional responses that music induces in listeners and how they shape our view of the world (a paradigmatic example might be Stephen Feld's influential work on songpaths in the Papua New Guinean rainforest).6

This dynamic, phenomenologically engaged notion of landscape takes us far from the familiar homely images of the English Pastoral—the stereotypical (and misleading) image of cows leaning amiably over gates and composers rolling complacently in muddy fields. As Alexander Rehding argues in his contribution to this colloquy, a more compelling ecomusicological understanding of music's relationship with ideas of landscape and environment is characterized by a sense of imminent crisis and danger. In the late 1960s, the Lithuanian-born Australian wilderness photographer Olegas Truchanas toured village halls and town theaters in Tasmania, campaigning against

- 3. See Cosgrove and Daniels, eds., *Iconography of Landscape*; and Daniels, "Marxism, Culture, and the Duplicity of Landscape."
 - 4. Mitchell, Landscape and Power, vii-xiv.
 - 5. Olwig, "Danish Landscapes."
 - 6. Feld, Sound and Sentiment; and idem, "Waterfalls of Song."
- 7. A number of scholars have demonstrated exactly why this image, drawn from Hugh Allen's critical reception of Vaughan Williams's Third Symphony (1921–22), is misguided; see, for example, Saylor, "'It's Not Lambkins Frisking At All'"; and Grimley, "Landscape and Distance." It might be more appropriate, in the context of Vaughan Williams's powerfully war-torn work, to speak of an "ecology of memory."

government proposals to flood Lake Pedder, an environmentally unique inland freshwater lake bounded by a striking white quartzite beach in the southwest highlands, as part of the Gordon River Hydroelectric scheme. The campaign was ultimately unsuccessful; construction of the dam was completed in 1972, when the lake was permanently flooded. The same year, Truchanas was killed in a canoeing accident (a drama recast in Richard Flanagan's 1997 novel Death of a River Guide). But the campaign symbolically marked the birth of the environmental movement in Australia, and the strength of political opposition led to the creation of the Truchanas Huron Pine Reserve, which protects a small stand of ancient trees previously threatened by logging. Among Truchanas's activities to raise awareness among Tasmanian residents and politicians were slide shows of his photographs of Lake Pedder, accompanied with music by Sibelius and Delius. The choice of repertoire—principally, the finale of Sibelius's Fifth Symphony—is significant because of Truchanas's own Baltic/northern-European roots and the common association of Sibelius's music with ideas of landscape. Truchanas's slide shows offer a provocative series of readings in music and landscape: the ways in which a particular idea of landscape (the Northern European boreal forest) was exported (or, more figuratively, transplanted) to an Australian context; the ideological function of landscape and metaphors of wilderness; the role of landscape in Sibelius reception; and the significance of music and landscape in environmental activism—a process in which music frequently plays a central role.

Representations of landscape and nature are a celebrated, and profoundly problematic, characteristic of much early twentieth-century Nordic music. Commonly heard as exemplars of the picturesque, or as evocative local color, images of nature in Nordic music invite more radical interpretations that pose questions about the relationship between humans, sound, and nature. In this context, perhaps Sibelius's final tone poem, Tapiola, might have offered a better soundtrack for Truchanas's slide shows. Written in 1926 for Walther Damrosch and the New York Philharmonic, Tapiola has retrospectively gained a privileged position in Sibelius reception as his final large-scale orchestral work (the much-anticipated Eighth Symphony was never completed to the composer's satisfaction and the manuscript presumably burned). The famous quatrain printed at the head of the score, which tells of "wood sprites in the gloom" weaving "magic secrets," was most likely, as Tomi Mäkelä has argued, not penned by Sibelius himself, who strongly disliked such straightforwardly programmatic accounts of his music.8 Tapiola, according to Mäkelä, is more a Lisztian tone painting, a sound-portrait of the northern forest realm from the Finnish national epic, the Kalevala, which invokes notions of finality, blankness, and death. In this sense, the work belongs within an established cultural tradition: the idea of the forest as a mysterious twilight domain of primitive

folk custom and ritual sacrifice first promulgated in Tacitus's classical account of the Teutowald, *Germania*.9

Sibelius's tone poem offers a suitably bleak musical response to such patterns of representation. Opening with a characteristically Sibelian misfired cadence (an E⁷ sonority treated locally as an augmented sixth chord), swept aside by a sudden octatonic rush like a gust of wind (mm. 21-25), the work unfolds a series of austere timbral transformations of these initial measures. brooding upon a restricted range of modal collections and elliptical thematic gestures. But the storm sequence with which the piece concludes prompts a more ambivalent ecocritical reading, a form of immersive audition in which the landscape ultimately consumes the listener. 10 The storm serves as both telos, the summative return of an elementalized brass motif that underpins much of the score, and also as a point of no return, a moment of maximal dynamic and chromatic saturation. 11 And in the strangely anguished outcry that prefaces its final measures (mm. 586-587), Tapiola directs our attention upwards, from the ground beneath our feet toward the turbulent air through which the sound itself seemingly moves. In the silence to which the storm inexorably leads, Tapiola obliterates its perceiving subject.

It is this model of a radically decentered subject position within the landscape that has attracted anthropologist Tim Ingold. As Ingold argues, the act of listening is essentially a sign of presence, a mode of being-in-the-world: "No more with sound than with light does the physical impulse—in this case comprising vibrations in the medium—get inside the head. For sound, too, is a phenomenon of experience, another way of saying 'I can hear.' "12 For Ingold, it is precisely the intensity of this experience that is compelling: "The weather is dynamic, always unfolding, ever changing in its moods, currents, qualities of light and shade, and colours, alternately damp or dry, warm or cold, and so on." Listening, for Ingold, becomes a process of flux, one in which any sense of permanence, of a stable subject-object distinction, is dissolved: "Sensed as the generative current of a world-in-formation, weather engulfs landscape, as the sight of things is overwhelmed by the experience of light."13 Ingold thus proposes the idea of enwindment—the experience of being-in-the-weather, of the air passing over, around, and through the body as a more meaningful mode of environmental response. By extension, it is the

- 9. The significance of Tacitus in shaping later historical representations of the Teutowald is discussed in Schama, *Landscape and Memory*, 75–134.
- 10. The composition of *Tapiola* is contemporary with the publication of Granö's seminal study of the Finnish landscape, *Reine Geographie* (1929). Granö's development of "proximics" (the geographical study of the immediate environment) includes one of the earliest systematic auditory accounts of a particular locality, a soundscape study of Valosaari in eastern Finland.
 - 11. I have explored this idea further in my essay "Storms, Symphonies, Silence."
- 12. Ingold, "Eye of the Storm," 100. Later on this page, Ingold asks: "Is weather a part of the landscape or is it not? If it is not, does it swirl around *above* the landscape, or does it actually *encompass* the landscape, as the earth is encompassed by the great sphere of the sky?"
 - 13. Ibid., 103.

notion of ensoundment, or attunement, which is a corresponding model for understanding our relationship with the auditory world around us.

It is in its particular sensitivity to this process of attunement that *Tapiola* engages our sense of being-in-place. And in its underlying sense of unease and anxiety, Sibelius's music becomes an eloquent acoustic testimony for our current environmental concerns: the human degradation of the natural world once mourned by Truchanas in Tasmania. Tapiola can hence be heard as a landscape of failed territorial conquest and ambition, and, more powerfully, as a landscape of abstraction: as white noise. The tone poem can productively be imagined as a Schaefferian soundscape, and its rustling, scraping, roaring, and whistling simultaneously suggests a more disturbing acoustic vision: the nowfamiliar narrative of climate change. Yet the need to maintain a skeptical, questioning mode of response remains central in any account of the work. Subscribing uncritically to Ingold's more passive model of perceptual immersion risks downplaying our individual and collective sense of agency.¹⁴ The concluding storm is not simply transformative; we actively shape the weather around us just as it buffets and ultimately erases us. The idea of nature is always, in fundamental ways, an act of representation (both political and aesthetic): it is as much an epistemology, a critical practice or way of knowing, as the origin of a particular ecology or environment. Hence, ecomusicology must constantly struggle to negotiate and maintain a fragile balance. As Sibelius's tone poem vividly reveals, attuning our ears more closely to the often dissonant, unharmonizing sounds of the acoustic environment around us is a risky process, one that renders us vulnerable and that points unerringly to our own contingency, our transient and fleeting presence in the world. Yet resisting this process, turning our "auditory gaze" inwards away from landscape in search of a deceptive autonomy of enquiry, perception, or the musical work, is a far greater irresponsibility.

^{14.} Ingold himself recognizes the dangers of this position. In a more recent article ("Earth, Sky, Wind, and Weather," \$28), he has written: "[...] the open world that people inhabit is not prepared for them in advance. It is continually coming into being around them. It is world, that is, of formative and transformative *processes*. If such processes are of the essence of perception, then they are also of the essence of what is perceived. To understand how people can inhabit this world means attending to the dynamic processes of world-formation in which *both* perceivers *and the phenomena they perceive* are necessarily immersed." (My emphasis in the last sentence only.)

American Women and the Nature of Identity

DENISE VON GLAHN

My work in what has come to be called ecomusicology, and more specifically in the intersections between nature, women, and music composition, grows out of a decades-long engagement with American nature writing and a similarly long-lived curiosity regarding one of its most persistent conceits: that the American continent with its plenitude of natural endowments has a unique ability to shape individual character and national identity. America's nature, so the story goes, dictated its destiny.¹ But how was nature or the nation defined, and who got to define it? This is where my current project on women, nature, and music emerges.

In the nineteenth century, the idealized American place was most often envisioned as expansive and powerful. Whether it was the Hudson River, Niagara Falls, the Great Plains, the Grand Canyon, or the Rocky Mountains, America's nature was portrayed as large and majestic, and potentially daunting; its dangers were formidable, even if they were God's handiwork. Despite clichéd references to Mother Nature and Mother Earth it was no place for a lady, or so it would seem. While the earth could be gendered female, America, the nation-place, was decidedly male. In the early years of the twentieth century Teddy Roosevelt reinforced such a reading.

The nation's meaning derived in large part from its size and variety, but no less from the physical prowess required to confront, control, and conquer its nature: enter real-life frontiersman Daniel Boone; James Fenimore Cooper's fictional hero Natty Bumppo; explorers Meriwether Lewis and William Clark; and soldier, geologist, explorer John Wesley Powell. One need only think about the real and imagined exploits of these trailblazers, or recall any of hundreds of Hudson River School paintings, or the photographic images of Ansel Adams's West, or the breathtaking vistas captured in Ken Burns's 2009 sixpart television series paean *The National Parks: America's Best Idea* to appreciate the staying power of this monumental, masculinized reading of "America the Beautiful."

Befitting, perhaps, a nation that in its early decades had little by way of high-cultural institutions or hallowed traditions to anchor its identity, the United States promoted and celebrated its natural endowments and the men who made them yield.² Writers, photographers, and artists became participants in both formal and informal campaigns promoting America's nature; in the process they encouraged settlement and secured the continent. That a

^{1.} This theme was most eloquently articulated in Perry Miller's posthumous collection of essays, *Nature's Nation*. The *uniqueness* of the character-shaping abilities of nature in the U.S. is questionable, as any citizen of Canada, Iceland, Australia, or many other nations will attest.

^{2.} For one of the most celebrated studies of this topic, see Novak, Nature and Culture.

number of the nation's first art-music composers created symphonic works that celebrated large, powerful, iconographic "natural wonders" confirms the ubiquity of the collective (if not always coordinated) national project that gendered the United States, via its rugged, muscular, natural phenomena and the pioneer spirit it required, male. As with all other nineteenth-century art forms, Niagara Falls was the most oft-referenced natural wonder in music: it received symphonic treatment by Anthony Philip Heinrich, William Henry Fry, and George Frederick Bristow. In the twentieth century, Ferde Grofé composed his own Niagara Falls symphonic suite in addition to suites honoring the Mississippi River and the Grand Canyon. But it was not only the nation that was made male; the spokespersons for "nature's nation" were also male, even when they had a different take on the place.

While a large number of the nation's famous chroniclers and dime-novel authors focused on the conquering spirit required to subdue nature, not all of them insisted upon this storyline. William Bartram (1739-1823), Henry David Thoreau (1817–1862), and John Muir (1838–1914) provided alternative readings. But even their accounts, which focused less on dominating and controlling nature than on observing it, enjoyed a privileged position by simply being written by men. Individual encounters with large iconic sites, which were regularly available to male naturalists in the nineteenth century, were rare occurrences for females, whose access to nature echoed their access to much that was outside the domestic sphere: it was severely circumscribed. When given the opportunity to write, paint, or draw about nature, nineteenthcentury women looked to what they knew—the plants, flowers, trees, and birds found close to home; they wrote of their local environs. And this was true of Amy Beach (1867-1944), the first celebrated American woman composer who regularly turned to the natural world close by her as a source of inspiration.

Deprived of access to the kinds of nature that were at the core of the dominant national narrative and lacking the status accorded their male counterparts, women found their works easily dismissed—if they were noticed in the first place. As has become clear, there were additional ramifications and they went beyond gender. Recent environment- and nature-focused scholarship has pointed to the near complete "whiteness" of nineteenth-century constructions of American nature.³ Among the nation's pantheon of prominent nature writers, is there a single person of color? The writings of a number of African American women from the nineteenth and twentieth centuries, on the other hand, suggest that *observational* nature pieces—the types written by Thoreau and many white women—were mapped exclusively by neither gender nor race. It is the insistence on the unique value of the conquering narrative that

^{3.} See Buell, *Environmental Imagination*; Outka, *Race and Nature*; and Hultkrantz, *Belief and Worship in Native North America* for three studies that discuss racialized readings of America's idealized nature.

makes America's nature appear white and male. Charlotte Forten Grimké (1837–1914) and Margaret Walker (1915–1998), as well as Zora Neale Hurston (1891–1960) and Lucille Clifton (b. 1936), are just a few African American women whose prose and poetry share subjects and tone with their similarly observant white sisters.

The invisibility, until very recently, of nature writings by dozens of women, and most prominently of Susan Fenimore Cooper's 1850 book *Rural Hours*, speaks to the ways that even observational narratives, which were typical of females' accounts of nature, have come down to us in a man's voice. In *Rural Hours*, Cooper records a year's worth of nature study close by her upstate New York home. Charles Darwin referred to the book in a letter he wrote to the American botanist Asa Gray in 1862.⁴ That Thoreau knew Cooper's book, referred to it in his journal, and perhaps even used parts of it as models for *Walden*, which was published in 1854, raises questions about the apparent silence of female nature responses in literature, and for me, in musical composition.⁵

In 1991, Lorraine Anderson edited a collection of women's nature writings titled Sisters of the Earth. The 117 authors' entries, written between 1854 and 2000, recount an assortment of experiences with nature, which grow more varied and expansive as women ventured beyond their gardens and local environs. Though highly personal and idiosyncratic, the excerpts nonetheless revealed a common belief: the writers were part of nature. Whether spoken of as kinship or attunement to nature, the hundred-plus authors noted the symbiotic relationship at work between humans and the rest of the natural world. They did not, as a group, argue for a privileged, biological closeness between women and nature, but for recognition of the intimate web to which all humanity belonged. Here was a decidedly less confrontational approach to the physical world. Anderson's book left me wondering whose place had been described in the nature-conquering narratives; how the nation had been characterized and by what authority; whose identity had been foregrounded? Would I find similar patterns in nature-inspired works composed by women? Were there such works?

I set out to answer these questions in my new book project, "Skilful Listeners": American Women Composing Nature.⁶ My work presents neither

- 4. See Sweet, "Global Cooperstown," 550, for the passage of Darwin's letter to Gray that speaks of Cooper's book. Darwin can't help but patronize Cooper by referring to her work as "very innocent food," even though he praises her insights into weeds and the competition of indigenous and imported varieties.
- 5. See Branch, "Five Generations of Literary Coopers," 67–71. Cooper was a contemporary of Thoreau, living 1813–1894. Before *Walden* was published, *Rural Hours* appeared in six editions. Branch sees possible instances of Thoreau imitating Cooper in his discussions of loons and wild berries, the depth of the pond, and the breaking up of ice.
- 6. The phrase "Skilful Listeners" is an adaptation of the first line from an 1887 poem by John Vance Cheney, "The Skilful Listener." "Skilful" is his spelling.

an exhaustive study of the myriad reasons why women's accounts of nature remained hidden for so long, although I discuss various conditions that worked against their circulation, nor an argument that women, because of their biological ability to create life, are closer to nature and hence more credible spokespersons for the environment, which I do not believe is true. Instead, the book listens to what nine twentieth- and twenty-first-century composers, who are women, say about nature with their music. I consider twenty-five pieces written between 1921 and 2010 to learn how the composers conceptualized nature; saw themselves in relation to nature; and created music to express that relationship. Because the United States used nature in very particular ways to help create its identity, I confine my study to composers who are United States citizens, who grew up with that national narrative. I start with Amy Beach and work through nature-inspired pieces by Marion Bauer, Louise Talma, Pauline Oliveros, Joan Tower, Ellen Taaffe Zwilich, Victoria Bond, Libby Larsen, and Emily Doolittle to see what the music tells us about their responses to "nature," however they defined that term.

When Amy Beach wrote "A Hermit Thrush at Morn" in 1921, she made a detailed transcription of the bird's song as she had heard it at the MacDowell Colony and composed a character piece that sympathetically showcased the arpeggiated, flourish-filled melody. Transcribed without the benefit of any recording device, the piece is remarkable for its accuracy, as listening to the hermit thrush (recorded or live) makes clear; and Beach is proud to point out her accomplishment with a footnote prominently placed at the bottom of the first page of the score. Beach's bravura regarding her transcription skills places her among later nineteenth-century ornithologists and botanists who took enormous pride in their abilities to capture the finest details of their objects of study. Scientific exactitude was prized, and Beach understood that. In this regard, she was a woman of her post-Darwinian time.

Beach's focus on the hermit thrush, however, also tied her to the venerable tradition of romantic English and American poets and writers who praised this particular avian singer because of its exquisite musicality. Beach fit into a literary tradition that predated the more *modern* scientific mode, and she counted on the familiarity of the oft-romanticized bird when she toured on behalf of the MacDowell Colony and referred to the thrush as her personal talisman.⁷ At the same time, Beach cast the bird as a divine messenger, which tied her to an earlier Deist tradition that located God in nature. Her many writings that speak of nature as God-made-visible suggest her connections to that tradition and to American Transcendentalism. "A Hermit Thrush at Morn" thus reflects Beach's multivalent religious-romantic-scientific understanding of nature as the nation moved away from an identity focused upon agrarian life.

^{7.} There were clearly many "scientific" descriptions of nature predating Darwin. I believe it is unlikely that Beach would have drawn from any of them.

That she spotlighted birds and flowers in dozens of her songs and piano works also places Beach squarely in a nineteenth-century women's nature tradition.

Of the six living composers in my study, all have continued this female tradition of training their eyes on the smaller aspects of nature; they appreciate the intimate relationships that bind humanity and the greater natural world. However, as increased educational access has given women the tools to compose in larger forms and made musical expressions about big nature possible, and as women have experienced increasingly distant and diverse natural phenomena on their own and had meaningful personal experiences with all manner of nature, mountains, big skies, and giant marine mammals have become additional sources of inspiration for women's compositions.

Starting with the generation of composers born in the 1930s—Oliveros, Tower, Zwilich—and then continuing with Bond, Larsen, and Doolittle, one witnesses the effects of the gradual removal of experiential limits for women. Oliveros creates music from deep within a cistern thousands of miles away from her New York home; Tower contemplates a big sky while riding horseback in Bolivia, where she lived as a child; Zwilich recognizes the life-saving potential of specimens found within a nationally famous botanical garden and argues for their survival; Bond commandeers the title of Aldo Leopold's epiphanic essay to compose her own "Thinking Like a Mountain"; Larsen pilots her sailboat and knows firsthand the feel of the wind and rough seas; and Doolittle listens to whale sounds and responds with a composition that blurs the boundaries of what is human and what is not.

As Beach's piece reflected her time- and place-specific understanding of nature, so too do two dozen pieces by the other eight composers express personal and societal values regarding relationships between humans and nonhuman others. With works for virtuosic small chamber ensembles and large orchestras, electronically manipulated sounds and groups of listening amateurs, found instruments, traditional instruments and choral groups, and using texts by the famous and less so, these "Skilful Listeners" reveal much about our myriad relationships with intersecting musical, social, and political environments. Ecomusicology offers no comforting retreat for the tree-hugging "green"; it is not the domain of some latter-day "California Dreamers."8 Instead, I bring musicology into conversation with ecofeminism, feminist theology, and identity, environmental, and race studies. Ecomusicology explores relationships to the natural world and questions how those relationships imprint themselves on music and scholarship; who gets to articulate the relationships; and, in my particular study, how select composers understand the essential dynamic between humanity and the rest of nature.

^{8. &}quot;California Dreamin'" is the name of the 1965 hit made famous by the pop-rock group The Mamas and the Papas. California became synonymous with the idea of escape in the mid-1960s and especially after the "Human Be-In" at Golden Gate Park in San Francisco in January 1967.

Musical Ecologies of Place and Placelessness

HOLLY WATKINS

Robert Schumann's celebrated review of Schubert's Symphony in C contains a remarkable tribute to music in place. Written in 1840, the review recounts Schumann's discovery of the symphony at the home of Schubert's brother, whom he visited during a six-month stay in Vienna. Though Schumann chided the Viennese public for allowing such works to fall into obscurity, he admitted that the city offers especially "fertile terrain" for a composer's imagination. About to describe the symphony's "wealth of ideas," Schumann instead lists off the Austrian capital's distinctive sights: "Vienna, with its Cathedral of St. Stephen, its lovely women, its public pageantry, its Danube that decks it with countless silvery ribbons," and so on. Musical ideas, in other words, immediately call to mind more expansive vistas. "On hearing Schubert's symphony and its bright, flowery, romantic life," Schumann proclaimed, "the city crystallizes before me, and I realize why such works could be born in these very surroundings." The review suggests that knowing something about music's place of origin—or better, actually visiting that place—enhances musical understanding. The understanding that results is, in a word, ecological.

The typically Schumannian notion of a synergy between landscapes earthly and musical resonates with current research on music and place. Over the last twenty years, scholars have explored how music both shapes and is shaped by local environments, a preoccupation that has spread from ethnomusicology and popular-music studies to musicology and the emerging field of sound studies. Murray Forman describes this "new paradigm" as one that "seeks to explain social and cultural phenomena in relation to various human, institutional, and natural geographies."2 This paradigm informs studies ranging from Forman's investigation of locality in rap and hip-hop, analyses of music in diasporic and migrant communities, and surveys of local music scenes, to reconstructions of the metropolitan contexts of nineteenth-century opera, inquiries into the portrayal of landscape in American art music, and my own consideration of urban space and the music of Schoenberg.³ By contrast, Celia Applegate has noted the dearth of place-related studies of the Austro-German canon—a situation traceable to the music's reputation for autonomy—but she also demonstrates that this repertory offers plenty of "fertile terrain" for research.4

- 1. Schumann, On Music and Musicians, 109-10.
- 2. Forman, The 'Hood Comes First, 2.
- 3. In addition to Forman's *The 'Hood Comes First*, see, for example, Biddle and Knights, *Music, National Identity and the Politics of Location*; Whiteley, Bennett, and Hawkins, *Music, Space and Place*; Connell and Gibson, *Sound Tracks*; Bennett, *Popular Music and Youth Culture*; Bennett and Peterson, *Music Scenes*; Gerhard, *Urbanization of Opera*; Von Glahn, *Sounds of Place*; Levy, *Frontier Figures*; and Watkins, "Schoenberg's Interior Designs."
 - 4. Applegate, "Music in Place."

This essay situates the growing body of research on music and place under the rubric of musical ecology, a term that encourages exploration of music's many modes of being in place as well as how music constitutes a virtual environment related in subtle or overt ways to actual environments.⁵ Examples of the latter include music that patently engages in the imagination of place. From the musical nationalisms of the late nineteenth century to contemporary popular music, from Bedřich Smetana's Ma Vlast (My Country) to John Denver's "Take Me Home, Country Roads," composers and performing artists have forged "narratives of locality" using manifold poetic and musical means.⁶ The repertoire of European and American art music is replete with devices of pastoral signification as well as borrowings or imitations of folk music, which metonymically allude to specific places by transposing the sonic traces of people who live (or lived) there into musical works. Andy Bennett's observations regarding the fictional dimension of discourses about locality apply equally well to music that refers directly or indirectly to places: such music fictionalizes those places to create many-layered musical environments.⁷ As ecocritics and scholars of musical exoticism are keenly aware, musical fictionalizations of place encode historically shifting attitudes about humanity, nature, and their interaction—attitudes that demand and deserve careful study.

Music of all sorts takes place in place, so to speak, and it also takes part in place. But music also *is* a place of sorts, replete with its own metaphorical locations, types of motion, departures, arrivals, and returns. In a study of Norwegian composer Edvard Grieg, Daniel Grimley observes that music is "a more broadly environmental discourse" because it creates "the sense of being within a particular time and space." Grimley's comments converge with work on the ecology of perception, a field that, as Eric Clarke explains, interprets sounds (including musical sounds) in terms of "the relationship between a perceiver and its environment." From the standpoint of perceptual ecology, argues Clarke, "musical sounds may specify the objects and events of a *virtual* environment" different from but not alien to the realm of the "everyday." In contrast to cognitivist descriptions of listening, perceptual ecology does not impose any strict distinctions between sound, musical material, and meaning—each is experienced as "immediately" as the next. Part of what

- 5. To my mind, the phrase "musical ecology" conveys a holism similar to that implied by "acoustic ecology," a degree of breadth not immediately evident in the disciplinary moniker "ecomusicology."
- 6. I borrow "narratives of locality" from Bennett, who applies it not to musical works but to young people's narrativization of place, in which music often plays a role; *Popular Music and Youth Culture*, 66.
 - 7. Ibid., 63.
 - 8. Grimley, Grieg: Music, Landscape and Norwegian Identity, 57.
 - 9. Clarke, Ways of Listening, 5.
- 10. Ibid., 69. The vocabulary of virtuality overlaps with semiotic studies that frame musical experience as an encounter with virtual agents. See, for example, Hatten, "Musical Agency as Implied by Gesture and Emotion."

406

makes perceptual ecology so attractive is that it dramatically expands the range of experiences thought to play a role in the perception and interpretation of music. For example, the motion of objects in my everyday perceptual field (people on a crowded sidewalk, passing cars, swaying branches, leaves in the wind), along with the various kinds of motion I have experienced (walking, dancing, driving, swimming, airplane takeoffs, riding a roller coaster or Ferris wheel), may feed into my physiological and interpretive responses to musical motion. This perspective differs from a semiotic one in that the perceptual contexts which contribute to the meaning of musical sounds are not necessarily the subjects of explicit reference. That is, someone listening to the cascading violin figures which enter a few minutes into the overture of Wagner's *Tannhäuser* need not hear the figures as "representing" a body alternately rising and falling in the air for some such perceptual analogy to inform musical hearing. These analogies correspond to a field of possible associations rather than a compendium of referents.

This field of associations is not simply physiological but cultural and historical. Take any rapid, polyphonic piece of music—say, the finale of Haydn's Symphony No. 103. The range of possible analogues to "a bunch of things moving really fast" (to put it crudely) would have been quite different for someone in 1795 compared to someone today. In 1795, the most readily available analogues to turbulent motion were found in nature and human activities like dancing or warfare. W. H. Wackenroder's famous paean to instrumental music, for instance, describes a symphonic subject plunging into "foaming flood-tides" and "wilder labyrinths," after which the "armies of misfortune" arrive "like a cloudburst" and pile upon each other "like a mountain range," inspiring "whirlwinds of despair." 11 While listeners today may have recourse to similar perceptual analogies, they are probably at least as likely to draw on accumulated encounters with mechanized motion. The same is true of composers: by the early twentieth century, a whole new realm of kinetic phenomena had become available for musical virtualization. Examples range from the obvious (such as Honegger's Pacific 231 or Prokofiev's ballet Le pas d'acier [The Steel Step]) to the oblique—think of the music that accompanies the arrival of Air Force One in John Adams's Nixon in China. Not only has the rhythmic profile of contemporary music changed along with the sonic environment at large, but the regions of experience available for listeners' (mostly unconscious) analogical perceptions of music have multiplied as well. Construing music as a virtual environment allows these developments, however difficult they may be to quantify, to assume a more central place in historical research.

Theories of musical space, like theories of musical motion, would benefit from a similar broadening of scope. In his essay "Music and the Soundscape," composer R. Murray Schafer proposes that "classical music of Europe during

the era of colonial expansion was a music of departures and conquests, exciting openings and exultant conclusions."12 Such impressions are poorly accommodated by the mathematical models of musical space currently popular among music theorists. The ecological alternative would be to cast the "space" of the symphony, with its multiple harmonic regions and paths joining them, as a virtual environment that grapples with "real" space, even if in an idealized or fictional manner (after all, what colonial conquest resolved its inherent tensions as definitively as the first movement of Beethoven's Eroica resolves its famous C#?). Rethinking musical space as a virtualization of social and natural spaces—the two are always connected—helps to further understanding of music's richly textured social and ideological fabric. My study of Schoenberg, for example, explores correspondences between the composer's handling of musical space (in both the "depthless" atonal pieces and the "multidimensional" twelve-tone works) and strategies for coping with increasingly chaotic urban environments, as evinced by early twentieth-century psychology and architecture.13

Treating music as a virtual environment has the potential to inform ecomusicological studies of how music negotiates the conceptual and material nexus where nature and culture meet. In an article on American composer Stephen Albert's Symphony: RiverRun, I argue that the symphony both simulates a natural environment through mimetic and associative techniques and points beyond itself toward "real" nature, whose conceptualization is nonetheless culturally constrained.¹⁴ But what happens when we take into account the environment of which the symphony aspires to be part? Concerts of Western art music generally strive to create a hermetically sealed environment for music, one which compels (but never fully achieves) the complete suppression of "normal" environmental sound. Works on the program require a buffer zone of silence to mark them as "other" to everyday sounds. Yet, long before John Cage urged us to listen to silence (or, rather, the absence of music) musically, composers have tried to efface that buffer zone through, among other things, the manipulation of dynamics. In an attempt to suppress its artificial origins, the prelude to Wagner's Das Rheingold begins with almost inaudible tones deep in the basses and bassoons which, together, create the interval of a fifth. Like the springs that feed the Rhine, the music seems to emerge from underground, slowly building in volume and texture to mimic the burgeoning waters of the river. Wagner's prelude, seamlessly integrated into the silence that precedes it and obsessed with the "natural" intervals of the E-flat-major triad, seeks to render its own social environment—even the entire ritual of attending the Ring—as natural. By the end of Götterdämmerung, however, the illusion of naturalness can no longer be sustained: the opera closes not with a gradual

^{12.} Schafer, "Music and the Soundscape," 59.

^{13.} See Watkins, "Schoenberg's Interior Designs."

^{14.} Watkins, "The Pastoral After Environmentalism."

return to silence but with a conventional sustained chord, as if the meddling of human (and, in the *Ring*'s case, nonhuman) hands in nature can never be undone, no matter how much fire or water is summoned to the scene.

Studying the mutual inflections of music and place is assuredly salutary as a means of combating both the abstraction endemic to the idea of musical autonomy and accounts of musical meaning that posit a single trajectory leading from work to listener. But Wagner's fictionalization of events on the banks of the Rhine brings me to a final point, which, begging the reader's indulgence, might be stated as follows: whose Rhine is it anyway? Wagner's? The nineteenth century's? Each and every listener's, mediated by the imaginative resources of his or her time? Not even Wagner could ensure a singular answer to the question of how music relates to place—witness his failure to restrict performances of Parsifal to Bayreuth. By extension, researchers interested in musical ecology should take care to acknowledge the dialectics of place and placelessness evident in most musical phenomena today. From the earliest notated chants to wandering minstrels to mp3 files, music has been caught in a continuous cycle of displacement and re-placement for as long as its history can be reconstructed. Music may even work to transform concrete places into more abstract spaces. 15 For example, the use of the same music in the same stores in malls all over the country creates a homogenized consumer space that is largely indifferent to the dynamics of any specific locale. "Music-asenvironment," remarks composer Hildegard Westerkamp, "determines the tone of commodity exchange."16 Less ominously, globally distributed music affords some of its listeners a sense of liberation in comparison to the local traditions in which they are embedded.¹⁷

While music emplaces us through its sheer physical impact on our bodies, it also transports us into alternative realities, into virtual environments of its and our own synergistic making. Schumann's review of the Symphony in C claimed that Schubert's piece lures listeners "into regions which, to our best recollection, we had never before explored." The "regions" in question are regions of the imagination, and they may be only loosely tethered to the environment in which the music originated—it would be dogmatic, *pace* Schumann, to insist that the proper understanding of Viennese music requires a visit to Vienna. Music by Viennese composers carries the trace of that locale but also sends listeners on imaginative journeys of their own. Place nurtures music, and music nurtures place, but music just as easily flees the roost, consigning its place of origin to a distant memory. The mobility of music should not discourage place-oriented research, but it does serve as a reminder that, in two perhaps not unrelated senses, music is forever moving in place.

^{15.} On the range of distinctions critics have made between place and space, see Forman, 'Hood Comes First, 25–31; and Agnew, "Space: Place."

^{16.} Westerkamp, "Speaking from Inside the Soundscape," 147.

^{17.} On this point, see Bennett, Popular Music and Youth Culture, 56.

^{18.} Schumann, On Music and Musicians, 110.

Ecomusicology between Apocalypse and Nostalgia

ALEXANDER REHDING

In the early 1990s, an age that was as conscious about the environment as it was thrilled about the coming millennium, a literature professor of mine pronounced that twenty-first-century literature was going to be about the environment, in the same way as twentieth-century literature had been "about" psychoanalysis. At the time this seemed like a wildly unlikely assertion, even from a professor who was not known for letting subtlety get in the way of a snappy pronouncement. But looking at the direction in which more recent literary and cultural developments are pointing, perhaps his comment was not so far off the mark.

Ecologically oriented literature occupies an ever-increasing sector of main-stream literary production. Award-winning authors such as Margaret Atwood and Ian McEwan have turned toward environmental disasters in their recent novels; Barbara Kingsolver's writings, in a less alarmist mode, have long displayed a particular concern for ecology, community, and landscape. Among this literature, however, it is particularly eco-thrillers, widely hailed as the next generation of science-fiction stories, that have managed to capture the general public's imagination. Some publications, such as Frank Schätzing's pageturner *Der Schwarm* (*The Swarm*, 2004), have managed to top the international bestsellers lists for months. To be sure, we are still waiting for the ecological Proust or James Joyce, but the twenty-first century is still in its early stages.

Hollywood has been quick to jump on the bandwagon as well, with "The Day After Tomorrow" (2004), "Wall-E" (2008), "Avatar" (2010), and notably Al Gore's Oscar-winning documentary "An Inconvenient Truth" (2006). This active literary and cinematic production is paralleled by a vibrant movement in literary ecocriticism, which supports the undertaking with a critical discourse and furnishes a language within which to couch the critical terms of the debate. Renewed topicality can even be discovered in the old masters: in the context of ecocriticism, the curious episode on land reclamation from Goethe's *Faust II* emerges as a harbinger of looming ecological disaster. How can such critical insights be transferred to the musical sphere? Better yet, how can tools be forged that serve the specific needs of music?

What is common to the current interest in ecological topics is a pronounced sense of acute crisis—whether expressed in the earnest urgency of Gore's political mission or in the more sensationalist thrills of spectacular Hollywood special effects. This apocalyptic strain is far from being the only one in the environmental imagination; a second prominent strand—to which

^{1.} For a critical appraisal of eco-thrillers, see, for instance, McKie, "Read All about the End of the World."

we will return later—takes a more romantic line, which operates with what can broadly be understood as invocations of a sense of nostalgia. Nonetheless, commentators have given clear preference to the apocalyptic mode, hailing it as the "master metaphor" of the environmental imagination.² This orientation toward crisis makes sense, as it endows the literary products with political relevance, powerful realism, and—in a very literal sense—sublime terror. The earth needs to be saved, *right now*.

The critical issue that ecomusicology will have to wrestle with is how to implement this sense of crisis, or—if there is no adequate equivalent—what can replace it. Will this be stagings of Antoine Brumel's Missa *Et ecce terrae moto*, Wagner's *Der Ring des Nibelungen*, Britten's *Noye's Fludd*, or perhaps Andriessen's *Writing to Vermeer*? It appears that the narrative arts have an obvious advantage over music in this regard. As so often, the complexities of the materiality and the modes of representation of music make it difficult to adapt the same sense of crisis to the musical sphere.

But despite these challenges, ecomusicology may represent a genuine departure from general musicological practice: while themes and methodologies are still in flux, the field derives much of its relevance and topicality from a sense of urgency and from an inherent bent toward awareness-raising, praxis (in the Marxian sense), and activism. These political aspects, to be sure, are not always followed up in practice, but they are distinguishing marks in a discipline that is often reluctant to make political commitments.³ The task of the immediate future is for ecomusicology not only to hone its guiding questions, but also to work out its political leanings and define the nature of the tasks that it hopes to pursue.

In musicology, one major impulse for ecological questions has been broadly channeled via the idea of nature in the context of musical culture.⁴ These studies have been primarily interested in the use of conceptions of nature as an epistemological or musical wellspring. The Marxist literary critic Raymond Williams reminds us of the multivalence of "nature," a term that he famously called "perhaps the most complex word in the language."⁵ Following Williams, nature can relate to (1) the essential quality of something, (2) the inherent force that directs either the world or humans, and (3) the material world itself (including or excluding human beings). The various deconstructive movements of the 1990s have particularly latched on the interaction between these various functional definitions of nature (or rather, "nature") and shown exhaustively how concepts of nature have been employed to exer-

- 2. Buell, Environmental Imagination, 285.
- 3. Ecocriticism is sometimes compared to Marxism and feminism, in that both describe fields of inquiry that go beyond the usual academic boundaries and encourage a political commitment. See Garrard, *Ecocriticism*, 3–15 and 23–30; and Glotfelty, "Introduction," xviii–xxiv.
- 4. I am thinking here, for instance, of de la Motte-Haber, *Musik und Natur*; Schleuning, *Die Sprache der Natur*; and Schmenner, *Die Pastorale*. I reviewed these books in "Eco-musicology."
 - 5. Williams, Keywords, 219.

cise argumentative and rhetorical authority. To invoke but the most obvious example of how musical nature has been employed in the service of an authoritative argument, the "chord of nature" (based on the harmonic series, usually in truncated form) was wielded by conservative music theorists and critics as an argumentative cudgel to demonstrate why nontonal music is misguided and unviable—in a word, that it would "fly in the face of nature." In this universalizing context, which conflates Williams's three categories, nature functions as a delegitimizing strategy that simply allows no objection.

For a more benign use of such a rhetorical concept of nature, take the Swiss geographer Albert Heim, who measured the sounds of waterfalls in a scientific study of 1873. He found that the sound—a C-major chord with an added F—corresponded precisely to the sonority Beethoven had used at the beginning of the final movement of the Pastoral Symphony, following the musical depiction of a thunderstorm.⁷ "It seems," Heim concluded, "that Beethoven had got this chord from listening—consciously or unconsciously—to the sound of water, which flowed away in large swaths after his storm." Heim, too, effectively drew on a suggestive conflation of Williams's categories of nature in order to valorize Beethoven's music. With this series of experiments, whose veracity and scientific value are distinctly dubious, Heim drew attention to Beethoven's compositional genius. His observations effectively served to show that in the Pastoral Symphony, Beethoven had quite literally given "nature's rule to art," as the Kantian genius concept famously demanded.

While the deconstructive movement has greatly advanced our understanding of rhetoric and authority surrounding the term nature, it is often in direct conflict with specific ecological aims. From its skeptical post-structuralist vantage point, which centers on language as a site of conflict, it is all too easy to dismiss "nature" as a discursive construct: "nature"—in the scariest of scarequotes—here emerges as yet another grand narrative that is in need of deconstruction. In such deconstructive maneuvers, the step from identifying nature as a cultural construct to dismissing it as "just" a cultural construct is but a small one. There is thus a genuine danger that the deconstructive approach may enter into contradiction with the very real urgency of the issues expressed by the ecological movement. In the face of these complications, the feminist philosopher Kate Soper—who is acutely aware of both strengths and limitations of deconstruction—sighed in exasperation: "It is not language that has a hole in its ozone layer." 10

- 7. Heim, "Töne der Wasserfälle," 209-14.
- 8. Ibid., 213.
- 9. See Coates, Nature, 184-86.

^{6.} This is obviously just a crude reductionist form of this argument. The essays in Clark and Rehding, eds., *Music Theory and Natural Order* explore wider-ranging conceptions of nature within the discourses of music theory.

^{10.} Soper, What is Nature?, 151. The ecological movement has always had an ambivalent relationship with science. While the scientific revolution brought about the "death" of nature as a

These limitations of academic activism are quite closely related to the challenges that ecomusicology faces. For the uses of "nature" in which these recent studies have been primarily interested tend to range from the obviously ideological, as in our first example, which falsely universalized the "chord of nature," to well-intentioned attempts to gild the lily, such as we encountered in the second example. Both examples are in urgent need of deconstruction—which, however, will likely undermine any sense of real-world crisis that we may hope to engender with such work. The biggest challenge ecomusicology will have to address is how to bridge that gap. How can music studies respond to the sense of crisis in a way that would be comparable to the other arts? Or, to invoke Daniel Grimley's felicitous expression, how do you articulate the exhortation "Listen, or else . . ." most effectively?¹¹ Quite possibly an answer will be forthcoming from a widening outlook on the objects under discussion, starting with a critical examination not only of what we mean by "nature" but also of what we mean by "music."¹²

Non-Western musical traditions and sound art, in a post-Cagean universe, hold considerable potential in this regard, as does the pioneering work in sound studies that has exploded traditional notions of music and musicological enterprise. I am thinking here particularly of Stephen Feld's approach to soundscapes and Suzanne Cusick's important work on music and torture, as instructive examples of how musicology and raising awareness can be brought together productively. While the contents of these researches are not immediately related to ecocritical concerns, important parallels can be made to the wider social and political intervention that such a project facilitates.

But if the apocalyptic vision is perhaps not the straightest arrow in ecomusicology's quiver, what about other ways to approach ecological topics in music? One fruitful dimension is to appeal to the power of memory, which is one area in which music is known to excel. The nostalgic imagination has always been a large part of the appeal of the environmental movement: on the political level, Green parties were long difficult to classify on the traditional left-right spectrum, since despite their progressive politics, a conservative streak—in all senses—often ran through them, which was fed by a romantic idea of a simpler, holistic past.¹³

supernatural, feminine figure, and exposed her body to the scientist's gaze, as Merchant has argued in *The Death of Nature*, the urgency of climate change has forged a new alliance between the two sides.

^{11.} From the discussion at the 2008 AMS panel "Ecocriticism and Musicology" (transcript available at www.ams-esg.org). In *The Book of Music and Nature*, editors David Rothenberg and Martha Ulvaeus aim to develop an ecological notion of listening.

^{12.} Allen expands the purview of musicological inquiry significantly in "'Fatto di Fiemme,'" in which he pursues the material basis of instrument making and its environmental costs.

^{13.} Prince Charles may be the most prominent proponent of such ideas.

In this domain, no work has been more influential than Simon Schama's Landscape and Memory (1996). It is not for nothing that Schama opens his monumental reflection on the cultural and epistemological significance of landscape with a childhood reflection. Schama and others have noted the irony that landscapes require human interference in the form of constant maintenance in order to be able to exude their iconic appearance of autonomy, timelessness, and purity. ¹⁴ But Schama urges us not to stop there:

It is not to deny the seriousness of our ecological predicament, nor to dismiss the urgency with which it needs repair and redress, to wonder whether, in fact, a new set of myths are what the doctor should order as a cure for our ills. What about the old ones? For notwithstanding the assumption, commonly asserted in these texts, that Western culture has evolved by sloughing off its nature myths, they have, in fact, never gone away. For if, as we have seen, our entire landscape tradition is the product of shared culture, it is by the same token a tradition built from a rich deposit of myths, memories, and obsessions. The cults which we are told to seek in other native cultures—of the primitive forest, of the river of life, of the sacred mountain—are in fact alive and well and all about us if only we know where to look for them.¹⁵

Schama does not set nature and culture in opposition but regards them as building on one another. In this way, Schama productively harnesses a sense of nostalgia, and ultimately of cultural memory, under an ecological banner. His project is best understood as an adaptation of the complex temporality of cultural memory, carried out with immaculate logic, whereby we remember the greatness of the past with an urgent ethical imperative to preserve and perpetuate it for future generations. ¹⁶ In Schama's adaptation, in marveling at land-scapes as an integral part of our cultural identities, we begin to understand how much else we stand to lose if those landscapes disappear.

Music scholars have explored the significance of soundscapes in the formation of cultural identities.¹⁷ Among ecological topics, nostalgia is the quieter sister of the attention-seeking apocalypse. Adaptations of such models, which enlist the commemorative and community-building powers of music in the service of ecological approaches, offer exciting prospects.¹⁸ To be sure, there is

- 14. See, for instance, Radkau, "Wordy Worship of Nature."
- 15. Schama, Landscape and Memory, 14.
- 16. Nora's enormously influential concept of the *lieu de mémoire* (site of memory) must be mentioned here. See his "Between Memory and History."
- 17. Originally coined by R. Murray Schafer in the 1960s (see his *New Soundscape*), the notion of soundscape has proved very productive in musicological scholarship. Initially explored by ethnomusicologists and anthropologists, above all Steven Feld, this concept is now meeting with increased interest in historical musicology. See for instance, Von Glahn, *Sounds of Place*; Toliver, "Eco-ing in the Canyon"; and Grimley, *Grieg*.
- 18. See for instance, Ingram, "'My Dirty Stream'"; and Pedelty, "Woody Guthrie and the Columbia River." Moreover, a group of interdisciplinary researchers has recently added a historical dimension to the notion of the soundscape, under the title of *Acoustic Environments in Change*, by Järviluoma et al.

a certain danger of regressing into sentimentalizing and romantic natureworship. This can probably best be held at bay by not keeping the critical and political angles of ecomusicology out of sight for too long.

In his famous *Essay on the Origin of Languages* Rousseau adopted a Montesquieu-inspired approach to cultures as based on climate, and argued that northern languages arose out of a sense of harsh necessity, whereas southern languages emerged from a sense of love and abundance. Rousseau coined a pair of soundbites to contrast their respective essences: *Aidez-moi* (help me!) vs. *Aimez-moi* (love me!). With the two fundamentally different approaches—alarmist, dystopian apocalypse vs. nostalgic, utopian cultural memory—it seems that Rousseau unwittingly described the two fundamental ways in which we envoice the environment in ecocritical studies. Many in the narrative arts have taken the attention-grabbing apocalyptic route to raise awareness by instilling a sense of acute crisis in its audiences. It is quite possible that the most productive way forward for ecomusicology will be to follow the alternative route.

Prospects and Problems for Ecomusicology in Confronting a Crisis of Culture

AARON S. ALLEN

The environmental crisis is not only the fault of failed engineering, bad science, ecological misunderstanding, poor accounting, and bitter politics. It is also a failure of holistic problem solving, interpersonal relations, ethics, imagination, and creativity. In short, the environmental crisis is a failure of culture. Humanist academics (particularly philosophers, literary scholars, and historians) work to understand the people, cultures, and ethical situations that created, perpetuate, attempt to solve, and face this crisis. In that context, musicologists have perspectives and insights to offer, especially because of the ubiquity of music, the importance that most people accord to it, and the communicative and emotional powers associated with music and the communities who make, enjoy, and consume it. There are good prospects for ecomusicology to contribute to the larger humanistic endeavor of understanding and addressing this crisis of culture, but such possibilities are tempered by problems and challenges. Although a longer list deserves to be enumerated, and

1. Donald Worster was an early exponent of this now largely common understanding. He acknowledges the many accomplishments of science in understanding the scope and problems of the environmental crisis (*Wealth of Nature*, 27), but goes on to say that scientists have failed to understand the "why" questions, which are rooted in culture: "Natural science cannot by itself fathom the sources of the crisis it has identified, for the sources lie not in the nature that scientists study but in the *human nature* and, especially, in the *human culture* that historians and other humanists have made their study."

numerous examples and lacunae could be proffered, I will outline just a half dozen items.

The primary aspect of most scholarly endeavors is *understanding*. Musicologists can provide insight on how composers, musicians, and others react to and communicate about environmental problems in their works, performances, and communal music making; and we can consider how listeners and audiences react and respond to such experiences. Furthermore, we are particularly well equipped to study how sound worlds and musical practices can reflect, inform, create, and structure societies.² Embarking on such research needs to happen in effective and sustained ways; a further challenge is communicating it beyond disciplinary boundaries.

Second, out of scholarly considerations come practical applications, and for most musicologists this means classroom teaching specifically or, more generally, *education*. A generation of students is being brought up reducing, reusing, and recycling; questioning modern consumer practices; and working to reconnect with the natural world. And this generation is musically engaged.³ National organizations such as the Association for the Advancement of Sustainability in Higher Education and Second Nature have long advocated for the teaching of sustainability and environmental awareness throughout the curriculum, not just in balkanized departments of environmental studies. David W. Orr's many writings on ecological literacy elaborate on the cultural-environmental crisis that education both causes and should address: "The crisis we face is first and foremost one of mind, perception, and values; hence, it is a challenge to those institutions presuming to shape minds, perceptions, and values."

Ecomusicological topics in the classroom have the potential to reach both music and liberal arts students interested in environmental issues as well as environmental sciences/studies students interested in music. Potential topics range the gamut from popular and non-Western musics and soundscapes, to medieval and Renaissance works with pastoral texts or imitations of birds, and to instrumental evocations of nature in the common practice and modern periods of Western art music, not to mention the texts and contexts of all the above. The challenges with such education are multifarious: carving out space

- 2. In addition to the accompanying contributions to this colloquy and the online bibliography at www.ams-esg.org, see the heuristic example provided by the analysis of the preservation/conservation divide in early twentieth-century American environmentalism in Toliver, "Eco-ing in the Canyon." Pedelty's forthcoming *Popular Music as Environmental Communication* explores the complex and often contradictory environmental messages conveyed in popular music; see also his "Woody Guthrie and the Columbia River."
- 3. Amidst the permaculture garden and wood paneling made from harvested campus trees at the EcoDorm of Warren Wilson College, one student resident says, "The same people who are interested in living in a building with solar panels and composting toilets like to play [acoustic music]"; Wilson, "When Your Dorm Goes Green and Local." Furthermore, as Holly Watkins reported in this colloquy, narrativization of place is important in the music of young people.
 - 4. Orr, Earth in Mind, 27; see also his Ecological Literacy and Hope Is an Imperative.

in an already full musicology curriculum, creating new syllabi amidst busy schedules, obtaining curricular approval for interdisciplinary courses that combine fields that may be poorly understood, linking responsibly studies of sound/music to issues environmental and ecological, developing instructor competence and confidence in ecomusicology, and finding appropriate teaching materials. I am aware of a modest handful of academics who teach modules within classes or dedicated courses on ecomusicology (I do both). These concerns are not insuperable, depending on the institution, student body, course design, and instructor. In addition, work is needed on ecomusicological pedagogy, not only regarding materials such as texts and course materials but also regarding interdisciplinary and collaborative teaching methods that can help break out of the binary of either specialized courses (i.e., for majors) or cursory appreciation classes.

Third, interdisciplinarity has long been fundamental to musicology, and it is no different with ecomusicology. Diverse fields contribute to musicological scholarship: paleography and archival studies, organology and lutherie, music theory and performance, history and politics, literature and poetry, and many others. In addition to the reliance on literary studies and environmental history, as well as related fields such as cultural geography and gender and sexuality studies, ecomusicological approaches include biomusic, zoomusicology, and acoustic ecology.⁵ These fields draw on subjects not normally represented in music scholarship, and as such, they are excellent examples of bridging the dichotomized "two cultures" of the sciences and humanities that C. P. Snow reified a half century ago and that his respondents have problematized since.⁶ Interdisciplinarity is no end in itself; rather, it is a means to improved depth, connections, methodologies, and understandings, as well as to effective education and diverse forums of communication. Ecomusicology stands to create a more relevant musicology both by engaging with the concerns of diverse audiences and by reaching out to other disciplines rather than just drawing on them. At the same time, however, institutional structures, professional (read: specialized) training, disciplinary silos, and the very real intellectual hurdles involved with synthetic and truly interdisciplinary work all present challenges. Climate scientists refer to "anthropogenic variables" as a large swath of cultural factors that contribute to climate change but are difficult to quantify;

^{5.} Biomusic is a longstanding research collaboration between neurologists, biologists, anthropologists, and music researchers in cognition, education and performance, among other areas; see Gray et al., "Music of Nature and the Nature of Music." Zoomusicology is the musicology of animals, or "the aesthetic use of sound communication among animals"; see Martinelli, "Introduction (To the Issue and to Zoomusicology)." Acoustic ecology is a melting pot of composers, ecologists, and ethnographers who both make and study soundscapes, the art and study of which, according to Cummings and Miller ("Editorial," 1–2), are intended "to make explicit the patterns and changes in our sounding world, and to raise awareness about the state of the world, as revealed through sound."

^{6.} Snow, Two Cultures.

opening up dialogues between the arts, humanities, and sciences can play a role in understanding that black box.

The methods and objectives of science have led scientists to couch their own findings and critiques in tentative terms that typically downplay the urgency and danger of the environmental crisis; essentially, they seek to maintain their objectivity and try not to come across as activist, with the unintended result that nonscientists misconstrue their arguments. Whether or not musicologists are actual environmental, social, or political activists, ecomusicology is likely to be perceived as such (if for no other reason than because of the connotations associated with prefix "eco"). This leads me to my fourth and fifth items: activism and perceptions.

Some musicologists and ecocritics have acknowledged an important facet of intellectual work: that all scholarship is inherently activist. As Philip Bohlman argued in 1993, musicology's historic resistance to politicization was itself a political act; by not grappling with music other than the Western European canon, musicologists made implicit statements about the value and relevance of other musics and the superiority of classical art musics.⁷ Ignoring the cultural/environmental crisis in musicology would send a similar message: we would fiddle while the earth burned. How different is advocating for sustainable forestry in the harvest of musical-instrument wood from advocating for faster tempos in Renaissance motets? Both involve activism, which is to say well-founded scholarship that argues a point based on facts and evidence (which are, by and large, "objective") and aesthetics and values (which are more often "subjective," even when there is evidence of such opinions from others). Explicitly activist are all initiatives to broaden the scope of musical materials and contexts worthy of musicological study, including the incorporation of music of women, minorities, and other cultures beyond the confines of contemporary and historical Western traditions. That ecomusicological scholarship, or its practitioners, may advocate certain contested positions within and/or beyond the musicological community should be no different from such other musicological, or even general scholarly, activist sentiments. Concomitantly, of course, ecomusicology should not be excused from high standards of scholarship; in fact, ecomusicological work must be good scholarship in order to make meaningful contributions and not be accused of intellectualism de rigueur.

The perception issue is a communication problem at its root: ecomusicological arguments must convince audiences of all kinds (lay, academic, scientific, humanistic, musical) that the approach is worthwhile and not just

^{7.} Bohlman, "Musicology as a Political Act." Other scholars who have recognized this situation include the musicologists Philip Brett and Nancy Guy and the ecocritics Greg Garrard and Jonathan Bate. Alex Rehding also discusses this issue in this colloquy. Recent musicological scholarship on and in politically charged areas has proliferated, as evidenced by the journal *Music and Politics* and work in related fields, such as applied ethnomusicology; for a recent example see Van Buren, "Applied Ethnomusicology and HIV and AIDS."

new-age tree hugging or "green-musico-philia." The term "ecomusicology" can conjure skepticism (I myself have been publicly critical of the now useful moniker), but so can "musicology." How often do colleagues in other disciplines react quizzically, even with hostility, when they hear you are a musicologist and you do not conduct an ensemble or teach an instrument or perform with the orchestra or front a band, even if many of us do those things? Why is it that there is no dance-ology or theater-ology or art-ology but yet there is a musicology, even as many musicologists are in schools or colleges that combine those visual and performing arts subjects? While these perceptions beyond the musicological community deserve to be addressed, I cannot address them here. Yet given such views from without, there are still those musicologists who sneer at the very idea of ecomusicology.8 In response, I shrug and say: So be it. We must carry on and do good work. Observe a lesson from social organizing: don't be zealous, but instead use the powers of research, reason, and communication to build a solid case and convince those who are willing and open. Don't worry about the navsayers' sneers. But at the same time, don't settle for facile connections between sounds/music and environment/nature; push further for sophisticated models that are supported with good arguments and communicated eloquently.

Finally, regardless of whether you believe that art imitates life or life imitates art (or both), ecomusicological approaches have the possibility to offer new *social critiques* about the intersections of music, culture, and nature—and, in general, about the world around us. Debates about the roles and relevance of literary criticism have long characterized that field (musicology is no stranger to such debates either); one recent public dialogue reaffirmed that literary criticism can provide insights on and reflections of society. Ecomusicological criticism must bridge media, sound, and text, and add the complicating element of nature—essentially using words to critique and explain sounds about and influenced by actual nature and symbolic nature, all of which are infused with subjective emotions and contextualized in time, place, and power structures. The challenges are not only intellectual and theoretical but communicative as well; they involve pushing musicology beyond the comfortable confines of the concert hall and library and into an often messy, definitely polluted, world of existential threats and complexities.

One of my current research projects illustrates the dual nature of the prospects and problems for ecomusicology. The violin family is fundamental to the sound of Western art music in its most elite traditions: string quartets, operas,

^{8.} Gore, in *Our Choice*, argues that the climate crisis threatens the status quo in many ways. Does an ecomusicology that engages with such crises threaten musicology?

^{9.} See the collection of articles on the state of literary criticism in the book review section of the *New York Times*, 2 January 2011.

symphonies, etc. Considering the material construction of such instruments provides insights about sustainability and the influences and impacts of musical cultures. Western art music, itself seen as a threatened heritage in need of sustaining, contributes to both threatening and sustaining the unique resources on which it depends.

Professional instruments of the violin family require two endemic natural resources: Brazilian pernambuco and Italian spruce. Bows are made from wild pernambuco, also known as pau brasil, which grows only in Brazil's Atlantic Coastal Forest. Once an abundant and fundamental resource to native and colonial peoples (the country was named after the tree), today pau brasil is nearly extinct due to many ecological pressures. 10 Archetiers have made valiant efforts to find alternatives and to use the resource responsibly, yet professional players continue to insist on expensive—and ecologically destructive pernambuco bows. The red spruce growing in the unique alpine microclimate of the Val di Fiemme's Paneveggio Forest has fared better. This species of tree is widely distributed, but a special microclimate in the Paneveggio provides for excellent spruce resonance wood for musical instrument soundboards. Antonio Stradivari used Paneveggian spruce, and his creations have contributed to the renown of that forest; myths abound regarding his jaunts through the Paneveggio seeking out the most musical trees. Such associations led to this region's nickname: the "forest of violins." The Venetian Republic wanted Paneveggio's tall, strong trees for their navy, but along with unique topological features, Fiemmesi traditions of conservation since the twelfth century thwarted such threats. Today, more trees grow in the Paneveggio than loggers harvest, thanks in part to those traditions but also to the fame of the musical wood from the forest of violins. 11

The values accorded to individual tree species (spruce and pernambuco) and to the cultural commodities dependent on them (violins and bows) together create a ripple effect that reverberates globally. While the Western art music tradition that relies on those instruments may be elite, and while record and ticket sales may be declining (with corresponding efforts to preserve and sustain the culture), the impacts—negative and positive—are still felt well beyond the ephemeral sounds of the privileged space of the concert hall. And while musicology may be misunderstood in the academy and may seem marginal to confronting environmental problems, with the proper focus, quality efforts, analytical insights, scholarly rigor, and necessary communication savvy, ecomusicology may still contribute to understanding and averting, or at least attenuating, the crises before us.

^{10.} For more on pernambuco, see Wilder, Conservation, Restoration, and Repair of Stringed Instruments.

^{11.} Allen, "'Fatto di Fiemme.'"

^{12.} The concept of cultural commodities is from Appadurai, Social Life of Things.

Works Cited

- Agnew, John. "Space: Place." In *Spaces of Geographical Thought*, edited by Paul Cloke and Ron Johnston, 81–96. London: Sage Publications, 2005.
- Allen, Aaron S. "'Fatto di Fiemme': Stradivari's Violins and the Musical Trees of the Paneveggio." In Arboreal Values: Trees and Forests in Europe, North America, and the Caribbean, 1660–1830, edited by Laura Auricchio, Elizabeth Heckendorn Cook, and Giulia Pacini. Forthcoming.
- Anderson, Lorraine. Women's Prose and Poetry about Nature. New York: Vintage Books, 1991.
- Appadurai, Arjun, ed. *The Social Life of Things: Commodities in Cultural Perspective.* New York: Cambridge University Press, 1986.
- Applegate, Celia. "Music in Place: Perspectives on Art Culture in Nineteenth-Century Germany." In Localism, Landscape, and the Ambiguities of Place: German-Speaking Central Europe, 1860–1930, edited by David Blackbourn and James Retallack, 39–59. German and European Studies. Toronto: University of Toronto Press, 2007.
- Bennett, Andy. *Popular Music and Youth Culture: Music, Identity, and Place.* New York: Palgrave, 2000.
- Bennett, Andy, and Richard A. Peterson, eds. *Music Scenes: Local, Translocal and Virtual.* Nashville, TN: Vanderbilt University Press, 2004.
- Biddle, Ian, and Vanessa Knights, eds. *Music, National Identity and the Politics of Location: Between the Global and the Local.* Ashgate Popular and Folk Music Series. Aldershot, UK, and Burlington, VT: Ashgate, 2007.
- Bohlman, Philip V. "Musicology as a Political Act." *Journal of Musicology* 11 (1993): 411–36
- Branch, Michael P. "Five Generations of Literary Coopers: Intergenerational Valuations of the American Frontier." In *Susan Fenimore Cooper: New Essays on Rural Hours and Other Works*, edited by Rochelle Johnson and Daniel Patterson, 61–80. Athens: University of Georgia Press, 2001.
- Buell, Lawrence. The Environmental Imagination: Thoreau, Nature Writing, and the Formation of American Culture. Cambridge, MA: Belknap Press of Harvard University Press, 1995.
- Cheney, John Vance. "The Skilful Listener." In An American Anthology, 1787–1900: Selections Illustrating the Editor's Critical Review of American Poetry in the Nineteenth Century, edited by Edmund Clarence Stedman, 516. Boston: Houghton Mifflin, 1900.
- Clark, Suzannah, and Alexander Rehding, eds. *Music Theory and Natural Order from the Renaissance to the Early Twentieth Century.* Cambridge: Cambridge University Press, 2001.
- Clarke, Eric F. Ways of Listening: An Ecological Approach to the Perception of Musical Meaning. New York: Oxford University Press, 2005.
- Coates, Peter. Nature: Western Attitudes since Ancient Times. Berkeley and Los Angeles, University of California Press, 1998.
- Collett, Jonathan, and Stephen Karakashian, eds. Greening the College Curriculum: A Guide to Environmental Teaching in the Liberal Arts; A Project of the Rainforest Alliance. Washington, DC: Island Press, 1996.

- Connell, John, and Chris Gibson. Sound Tracks: Popular Music, Identity and Place. London and New York: Routledge, 2003.
- Cooper, Susan Fenimore. *Rural Hours*, By a Lady. New York: G. P. Putnam; London: Putnam's American Agency, 1850.
- Cosgrove, Denis, and Stephen Daniels, eds. *The Iconography of Landscape: Essays on the Symbolic Representation, Design, and Use of Past Landscapes.* Cambridge Studies in Historical Geography. Cambridge: Cambridge University Press, 1988.
- Cummings, Jim, and Steven Miller. "Editorial." Soundscape 7, no. 1 (2007): 1–2.
- Daniels, Stephen. "Marxism, Culture, and the Duplicity of Landscape." In *New Models in Geography: The Political-Economy Perspective*, edited by Richard Peet and Nigel Thrift. 2 vols., 2:196–220. London: Unwin Hyman, 1989.
- De la Motte-Haber, Helga. Musik und Natur: Naturanschauung und musikalische Poetik. Laaber, Germany: Laaber, 2000.
- Ecocriticism Study Group of the American Musicological Society. www.ams-esg.org (accessed 25 March 2011).
- Feld, Steven. Sound and Sentiment: Birds, Weeping, Poetics and Song in Kaluli Expression. 2nd ed. Philadelphia: University of Pennsylvania Press, 1990.
- ——. "Waterfalls of Song: An Acoustemology of Place Resounding in Bosavi, Papua New Guinea." In *Senses of Place*, edited by Steven Feld and Keith H. Basso, 91–135. Santa Fe, NM: School of American Research Press, 1996.
- Forman, Murray. *The 'Hood Comes First: Race, Space, and Place in Rap and Hip-Hop.* Music/Culture. Middletown, CT: Wesleyan University Press: 2002.
- Forster, E. M. "The Other Side of the Hedge." In *Selected Stories*, edited by David Leavitt and Mark Mitchell. London: Penguin, 2001, 24–29.
- Garrard, Greg. Ecocriticism. New Critical Idiom. New York: Routledge, 2004.
- Gerhard, Anselm. *The Urbanization of Opera: Music Theater in Paris in the Nineteenth Century.* Translated by Mary Whittall. Chicago: University of Chicago Press, 1998.
- Glotfelty, Cheryll. "Introduction: Literary Studies in an Age of Environmental Crisis." In *The Ecocriticism Reader: Landmarks in Literary Ecology*, edited by Cheryll Glotfelty and Harold Fromm, xv–xxxvii. Athens: University of Georgia Press, 1996.
- Gore, Al. Our Choice: A Plan to Solve the Climate Crisis. Emmaus, PA: Rodale Books, 2009.
- Granö, Johannes Gabriel. *Reine Geographie*. 1929. Translated by Malcolm Hicks as *Pure Geography*. Edited by Olavi Granö and Anssi Paasi. Baltimore: John Hopkins University Press, 1997.
- Gray, Patricia M., et al. "The Music of Nature and the Nature of Music." *Science* 291, no. 5501 (5 January 2001): 52–54.
- Grimley, Daniel M. Grieg: Music, Landscape and Norwegian Identity. Woodbridge, UK, and Rochester, NY: Boydell, 2006.
- ——. "Landscape and Distance: Vaughan Williams, Modernism and the Symphonic Pastoral." In *British Music and Modernism*, 1895–1960, edited by Matthew Riley, 147–74. Farnham, UK, and Burlington, VT: Ashgate, 2010.
- ——. "Storms, Symphonies, Silence: Sibelius's Tempest Music and the Invention of Late Style." In *Sibelius and His World*, edited by Grimley, 186–226. Princeton, NJ: Princeton University Press, 2011.
- Guy, Nancy. "Flowing Down Taiwan's Tamsui River: Towards an Ecomusicology of the Environmental Imagination." *Ethnomusicology* 53 (2009): 218–48.

- Hatten, Robert S. "Musical Agency as Implied by Gesture and Emotion: Its Consequences for Listeners' Experiencing of Musical Emotion." In Semiotics 2009: Proceedings of the Annual Meeting of the Semiotic Society of America, edited by Karen Haworth, Jason Hogue, and Leonard Sbrocchi, 162–69. New York: Legas, 2010.
- Heim, Albert. "Töne der Wasserfälle." Verhandlungen der schweizerischen naturforschenden Gesellschaft, Jahresbericht 1872–73 56 (1874): 209–14.
- Hultkrantz, Åke. *Belief and Worship in Native North America*. Edited, with an introduction by Christopher Vecsey. Syracuse, NY: Syracuse University Press, 1981.
- Ingold, Tim. "Earth, Sky, Wind, and Weather." *Journal of the Royal Anthropological Institute* 13, supplement s1 (2007): S19–S38.
- —. "The Eye of the Storm: Visual Perception and the Weather." Visual Studies 20, no. 2 (2005): 97–104.
- Ingram, David. "'My Dirty Stream': Pete Seeger, American Folk Music, and Environmental Protest." *Popular Music and Society* 31 (2008): 21–36.
- Järviluoma, Helmi, et al., eds. Acoustic Environments in Change and Five Village Soundscapes. Tampere, Finland: TAMK University of Applied Sciences, 2009.
- Landscape and Environment Programme of the Arts and Humanities Research Council. www.landscape.ac.uk (accessed 25 March 2011).
- Levy, Beth E. Frontier Figures: American Music and the Mythology of the American West. Berkeley and Los Angeles: University of California Press, forthcoming.
- Leyshon, Andrew, David Matless, and George Revill. *The Place of Music.* New York: Guilford, 1998.
- Mäkelä, Tomi. "Poesie in der Luft": Jean Sibelius; Studien zu Leben und Werk. Wiesbaden: Breitkopf & Härtel, 2007.
- Martinelli, Dario. "Introduction (To the Issue and to Zoomusicology)." *TRANS: Transcultural Music Review* 12 (2008), http://www.sibetrans.com/trans/trans12/art08.htm (accessed 25 March 2011).
- McKie, Robin. "Read All about the End of the World." Observer, 16 August 2009.
- Meeker, Joseph W. *The Comedy of Survival: Literary Ecology and a Play Ethic.* 3rd ed. Tucson: University of Arizona Press, 1997.
- Merchant, Carolyn. The Death of Nature: Women, Ecology, and the Scientific Revolution. New York: HarperOne, 1990.
- Miller, Perry. Nature's Nation. Cambridge, MA: Belknap Press of Harvard University Press, 1967.
- Mitchell, W. J. T., ed. Landscape and Power. 2nd ed. Chicago: University of Chicago Press, 2002.
- Nora, Pierre. "Between Memory and History: Les lieux de mémoire." Representations, no. 26 (Spring 1989): 7–24.
- Novak, Barbara. *Nature and Culture: American Landscape and Painting, 1825–1875.* New York: Oxford University Press, 2007.
- Olwig, Kenneth. "Danish Landscapes." In Nordic Landscapes: Region and Belonging on the Northern Edge of Europe, edited by Michael Jones and Kenneth Olwig, 3–11. Minneapolis: University of Minnesota Press, 2008.
- Orr, David W. Earth in Mind: On Education, Environment, and the Human Prospect. Washington, DC: Island Press. 1994. Revised ed. 2004.
- Ecological Literacy: Education and the Transition to a Postmodern World. SUNY Series in Constructive Postmodern Thought. Albany: State University of New York Press, 1992.

- ------. Hope Is an Imperative: The Essential David Orr. Washington, DC: Island Press, 2011.
- Outka, Paul. Race and Nature from Transcendentalism to the Harlem Renaissance. Signs of Race. New York: Palgrave MacMillan, 2008.
- Parini, Jay. "The Greening of the Humanities." New York Times, 29 October 1995.
- Pedelty, Mark. *Popular Music as Environmental Communication*. Philadelphia: Temple University Press, forthcoming.
- ——. "Woody Guthrie and the Columbia River: Propaganda, Art, and Irony." *Popular Music & Society* 31 (2008): 329–55.
- Radkau, Joachim. "The Wordy Worship of Nature and the Tacit Feeling for Nature in the History of German Forestry." In *Nature and Society in Historical Context*, edited by Mikuláš Teich, Roy Porter, and Bo Gustafsson, 228–39. Cambridge: Cambridge University Press, 1997.
- Rehding, Alexander. "Eco-musicology." *Journal of the Royal Musical Association* 127 (2002): 305–20.
- Rosendale, Steven, ed. *The Greening of Literary Scholarship: Literature, Theory, and the Environment.* Iowa City: University of Iowa Press, 2002.
- Rothenberg, David, and Marta Ulvaeus, eds. *The Book of Music and Nature: An Anthology of Sounds, Words, Thoughts.* Music/Culture. Middletown, CT: Wesleyan University Press, 2001.
- Sanders, Julie. *The Cultural Geography of Early Modern Drama*, 1620–1650. Cambridge: Cambridge University Press, 2011.
- Saylor, Eric. "'It's Not Lambkins Frisking At All': English Pastoral Music and the Great War." *Musical Quarterly* 91 (2008): 39–59.
- Schafer, R. Murray. "Music and the Soundscape." In Rothenberg and Ulvaeus, *The Book of Music and Nature: An Anthology of Sounds, Words, Thoughts*, 58–68.
- ——. The New Soundscape: A Handbook for the Modern Music Teacher. Toronto: Berandol, 1969.
- Schama, Simon. Landscape and Memory. New York: Knopf, 1995.
- Schleuning, Peter. Die Sprache der Natur: Natur in der Musik des 18. Jahrhunderts. Stuttgart: Metzler, 1998.
- Schmenner, Roland. *Die Pastorale: Beethoven, das Gewitter und der Blitzableiter.* Kassel: Bärenreiter, 1998.
- Schumann, Robert. On Music and Musicians. Edited by Konrad Wolff. Translated by Paul Rosenfeld. 1946. Reprint, Berkeley and Los Angeles: University of California Press, 1983.
- Snow, Charles Percy. *The Two Cultures and the Scientific Revolution*. The Rede Lecture, 1959. New York: Cambridge University Press, 1959.
- Soper, Kate. What Is Nature? Culture, Politics, and the Non-Human. Oxford: Blackwell, 1995.
- Sweet, Timothy. "Global Cooperstown: Taxonomy, Biogeography, and Sense of Place in Susan Fenimore Cooper's *Rural Hours*." *Interdisciplinary Studies in Literature and Environment* 17 (Summer 2010): 541–66.
- Toliver, Brooks. "Eco-ing in the Canyon: Ferde Grofé's *Grand Canyon Suite* and the Transformation of Wilderness." This **Journal** 57 (2004): 325–67.
- Van Buren, Kathleen J. "Applied Ethnomusicology and HIV and AIDS: Responsibility, Ability, and Action," *Ethnomusicology* 54 (2010): 202–23.
- Von Glahn, Denise. *The Sounds of Place: Music and the American Cultural Landscape.* Boston: Northeastern University Press, 2003.

- Wackenroder, Wilhelm Heinrich. "The Characteristic Inner Nature of the Musical Art and the Psychology of Today's Instrumental Music." In Confessions and Fantasies, translated by Mary Hurst Schubert. University Park: Pennsylvania State University Press, 1971, 188–94.
- Watkins, Holly. "The Pastoral After Environmentalism: Nature and Culture in Stephen Albert's *Symphony: RiverRun.*" *Current Musicology* 84 (2007): 7–24.
- -----. "Schoenberg's Interior Designs." This Journal 61 (2008): 123–206.
- Westerkamp, Hildegard. "Speaking from Inside the Soundscape." In Rothenberg and Ulvaeus, *The Book of Music and Nature: An Anthology of Sounds, Words, Thoughts*, 143–52.
- Whiteley, Sheila, Andy Bennett, and Stan Hawkins, eds. Music, Space and Place: Popular Music and Cultural Identity. Aldershot, UK, and Burlington, VT: Ashgate, 2004.
- Wilder, Tom, ed. The Conservation, Restoration, and Repair of Stringed Instruments and Their Bows. 3 vols. Montreal: IPCI-Canada, 2010.
- Williams, Raymond. Keywords: A Vocabulary of Culture and Society. London: Fontana Press, 1976.
- Wilson, Charles. "When Your Dorm Goes Green and Local." New York Times, 27 September 2009.
- Worster, Donald. The Wealth of Nature: Environmental History and the Ecological Imagination. New York: Oxford University Press, 1993.