Greening the Curriculum: Beyond a Short Music History in Ecomusicology

By: Aaron S. Allen

Allen, Aaron S. "Greening the Curriculum: Beyond a Short Music History in Ecomusicology," *Journal of Music History Pedagogy* XIII, no. 1 (2017): 91-109.

Made available courtesy of the American Musicological Society: http://www.ams-net.org/ojs/index.php/jmhp/article/view/218

© 2017 Journal of Music History Pedagogy. Published under a Creative Commons Attribution 3.0 License (CC BY 3.0); https://creativecommons.org/licenses/by/3.0/

Abstract:

Most of the ecomusicology literature deals either with music of and, especially, after the nineteenth century or with music/sound of non-Western cultures. What about the historical music of the Western tradition before the nineteenth century? This essay provides a few tentative possibilities. After providing a conspectus of ecomusicology and a brief conspectus of work in this field, I emphasize the problem of this "short music history" in ecomusicology. After presenting a syllabus and overview of my own music and environment class, which represents that problem, I critique that class and propose ideas for revising it and for incorporating ecomusicology topics into a typical Western music history survey course. I conclude by reflecting on the place of ecomusicology in the general greening of the liberal arts curriculum.

Keywords: environment | sustainability | liberal arts

Article:

***Note: Full text of article below

Greening the Curriculum: Beyond a Short Music History in Ecomusicology

AARON S. ALLEN

n the 2011 Journal of the American Musicological Society colloquium on ecomusicology, I wrote that "work is needed on ecomusicology pedagogy." 1 I wanted to call attention to a lacuna within the discipline of musicology, but I was also acknowledging my own need to develop teaching materials and approaches for ecomusicology. My broader goal was to accentuate the importance of ecomusicology in the classroom—both to challenge teacher-scholars and to demonstrate the relevance of ecomusicology in the world. And so it is exciting that within just six years, we have pieces on teaching ecomusicology in the Ecomusicology Newsletter, the publication of the edited volume Current Directions in Ecomusicology (designed, in part, with pedagogical aims), and this special issue of the Journal of Music History Pedagogy.² Given the complexities inherent in this emerging field, it is important to continue to reflect on ecomusicology as it is increasingly incorporated into the classroom. In particular, my present aim is to advocate for greater connections between ecomusicology and music history, which I argue are not as well established as connections between ecomusicology and other areas of sound and music studies. After considering ecomusicology and providing a brief conspectus of work in this field, I emphasize the problem of limited pre-nineteenth-century materials in ecomusicology—what I call the "short music history" in ecomusicology. I then present my own music and environment class, which represents that problem; in response, I critique my class and propose ideas for revising it and for incorporating

- 1. Aaron S. Allen, Daniel M. Grimley, Alexander Rehding, Denise Von Glahn, and Holly Watkins, "Colloquy: Ecomusicology," *Journal of the American Musicological Society* 64, no. 2 (2011): 391–424, 416.
- 2. Pedagogical articles in the *Ecomusicology Newsletter* include Mark Pedelty & Melody Hoffman "Music, Place, People: An Audiovisual Learning Project," *Ecomusicology Newsletter* 3, no. 1 (April 2014): 20-22; Aaron S. Allen, "Active Listening via Soundwalks," *Ecomusicology Newsletter* 2, no. 2 (October 2013): 14-15; Sonia Downing, "A Survey of Ecomusicology-Related Courses," *Ecomusicology Newsletter* 2, no. 1 (March 2013): 8-11. Pedagogical aims are invoked in Aaron S. Allen and Kevin Dawe, eds., *Current Directions in Ecomusicology: Music, Culture, Nature* (New York: Routledge, 2016), 4; see also Jacob A. Cohen, "Review of *Current Directions in Ecomusicology: Music, Culture, Nature*," *Notes* 74, no. 1 (July 14, 2017): 83–86.

ecomusicology into a typical Western music history survey course. I conclude by reflecting on the larger aims of such a place for ecomusicology in the general greening of the curriculum.

Ecomusicologies

According to Jeff Titon, ecomusicology is "the study of music, culture, sound and nature in a period of environmental crisis." How is that any different from musicological inquiry of the late-twentieth and early twenty-first centuries? After all, the environmental crisis as such is a roughly synchronous phenomenon. 4 But Titon's definition introduces keywords that emphasize the important differences. Consider, for present heuristic purposes, a simplistic conflation of music history as musicology, which in turn could be reduced to the dyad "music + culture"—musicology considers music as culture, music in culture, or any such similar formulation. Ecomusicology expands that dyad into a triad: "music + culture + nature." The methods and approaches of (ethno)musicological research and teaching always involve music and/or sound in one or more disciplinary or interdisciplinary contexts relating to culture and/or society, from art and literature to politics and physics, from identity and history to sociology and anthropology. Hence, (ethno)musicology considers music/ sound in relation to human culture/society in some way. Musicological inquiry has rarely included the natural and social sciences that consider the physical environments and the natural contexts for those human activities and constructs; and those fields and studies have blossomed particularly in the latter part of the twentieth century along with the increased severity and awareness of environmental crises.

Ecomusicology distinguishes itself from the usual musicological dyad of music/sound + culture/society through the addition of nature/environment. The terms nature and environment—along with the related sustainability, which injects questions of social justice and responsible economics to foundational environmental concerns—are extraordinarily complex, resulting in a great variety of scholarly and pedagogical approaches.⁵ A comprehensive sur-

- 3. Jeff Todd Titon, "The Nature of Ecomusicology," Música e Cultura 8, no. 1 (2013): 8–18, 1.
- 4. Regarding this understanding of the environmental (or ecological) crisis, elaborated in any introductory environmental studies or sustainability textbook, see particularly David W. Orr, "The Problem of Sustainability," in Hope Is an Imperative: The Essential David Orr (Washington, D.C: Island Press, 2010), 73-92.
- 5. I explore these terms further in Allen et al., "Colloquy," pp. 392-393; Aaron Allen and Kevin Dawe, "Ecomusicologies," in Current Directions in Ecomusicology, 1-2 and 8-10; and in Aaron S. Allen, Jeff Todd Titon, and Denise Von Glahn, "Sustainability and Sound: Ecomusicology Inside and Outside the University," Music and Politics VIII, no. 2 (2014). I also make the case for aesthetics as a component of sustainability in "Sounding Sustainable; or,

vey is impossible here, but as a result of various ways and (inter)disciplinary conventions of incorporating the diverse meanings of nature/environment, it should be no surprise that ecomusicological perspectives range the gamut from the political and practical (activist and applied) to the poetic and intellectual (reflective).6 Ecomusicology is part of institutionalized ethnomusicology and musicology (as indicated by an entry in Grove as well as the Ecomusicology Special Interest Group of the Society for Ethnomusicology and the Ecocriticism Study Group of the American Musicological Society), but it also connects with acoustic ecology and sound studies, and even beyond with soundscape ecology (biology), ecocriticism (literary studies), environmental history, and interdisciplinary environmental studies.⁷ In making the case for ecomusicology as a multiperspectival "field" where many disciplines come together (rather than a "new" discipline or sub-discipline), Kevin Dawe and I concluded that, "Ecomusicology is not musicological or ethnomusicological; rather, it is both and more.... [A] useful and productive way to conceptualize the field of ecomusicology is as ecomusicologies."8

The complexity and discipline-spanning nature of ecomusicology may have impeded its incorporation into the traditional music history curriculum. Yet the fact that the term has such deep and diverse historical roots would seem to offer myriad ways to integrate ecomusicological approaches into historical narratives. The term "ecomusicology" was used for the first time (as far as I have determined) in a 1972 discussion of music, ecology, and the soundscape

the Challenge of Sustainability," in Cultural Sustainabilities, edited by Timothy J. Cooley and Gregory Barz (forthcoming from University of Illinois Press).

- 6. See the literature review and case studies in Aaron S. Allen, "Ecomusicology from Poetic to Practical," in Handbook of Ecocriticism and Cultural Ecology, ed. Hubert Zapf (Berlin, Boston: De Gruyter, 2016), 644-663.
- 7. See especially Margaret Q. Guyette and Jennifer C. Post, "Ecomusicology, Ethnomusicology, and Soundscape Ecology: Scientific and Musical Responses to Sound Study," in Current Directions in Ecomusicology, 40-56. See also John Herron, "Nature Sounds: Anthony Philip Heinrich and the Music of the American Environment," Environmental History 21, no. 4 (October 1, 2016): 614-637; David Ingram, The Jukebox in the Garden: Ecocriticism and American Popular Music Since 1960 (Amsterdam, New York: Rodopi, 2010); and Kate Turner and Bill Freedman, "Music and Environmental Studies," Journal of Environmental Education 36, no. 1 (Fall 2004): 45-52.

According to the U.S. Department of Education's National Center for Education Statistics (https://nces.ed.gov/ipeds/cipcode/), an academic "environmental studies" program is one "that focuses on environment-related issues using scientific, social scientific, or humanistic approaches or a combination. Includes instruction in the basic principles of ecology and environmental science and related subjects such as policy, politics, law, economics, social aspects, planning, pollution control, natural resources, and the interactions of human beings and nature" (CIP Code 03.0103, revised 2000).

8. Allen and Dawe, "Ecomusicologies," 2 (see also 10-12).

work of R. Murray Schafer. But even if the term itself is a relatively recent one, ecomusicological ideas can be traced further back and more broadly: in late-nineteenth-century opera criticism, in a curious early-nineteenth-century book, in the millennia-long music-cultural discourses of the Ancient Greek "Harmony of the Spheres," and in many other places and contexts. 10

Given these historical roots, one might expect scholars to make ecomusicological contributions on Western historical materials, which could in turn be incorporated into teaching. Indeed, a body of relevant literature exists from scholars identified primarily with North American institutional musicology / music history.¹¹ There is also an overlapping circle of scholars who move between musicology and fields such as music theory, ethnomusicology, composition, and/or sound studies. 12 Ecocritics, anthropologists, sound studies scholars, and composers have also written important books on ecomusicological subjects.¹³ In parallel with the "greening of the curriculum" (increasing

- 9. Malcolm Troup, ed., Guildhall School of Music and Drama Review (London, 1972). In a brief editorial note above the table of contents, Troup said: "The aim of this year's Review is to propose Ecomusicology—the specific study of our sonic environment—as an ear to Ecology's eye, just as Ethnomusicology is to Ethnology." The issue included essays by Troup ("All Work and No Play: Music in an Industrial Age"), Schafer ("The Music of the Environment"), Roger Payne ("Deep Harmony: The Song of the Humpback Whale"), Charles Dodge and Bruce Boller ("Earth's Magnetic Field"), and E. J. Wells ("Nuclear Music"), among others. I have been unable to trace any earlier documented use of the term, although I do not doubt there could have been earlier ones. A use of the "ecology of music" from 1964 developed the idea of the ecological metaphor for music study, although there was no reference to "ecomusicology" or even significant environmental/nature issues; William Kay Archer, "On the Ecology of Music," Ethnomusicology 8, no. 1 (1964): 28-33.
- 10. Aaron S. Allen, "New Directions: Ecological Imaginations, Soundscapes, and Italian Opera," in Current Directions in Ecomusicology, 273-285; William Gardiner, The Music of Nature, Or, an Attempt to Prove That What Is Passionate and Pleasing in the Art of Singing, Speaking, and Performing Upon Musical Instruments, Is Derived from the Sounds of the Animated World (Boston: O. Ditson, 1832; reprint, Cambridge University Press, 2009); Allen and Dawe, "Ecomusicologies," 3; David Rothenberg and Marta Ulvaeus, eds., The Book of Music and Nature: An Anthology of Sounds, Words, Thoughts (Middletown: Wesleyan University Press, 2001).
- 11. A selection includes Michael Beckerman, Robert Fallon, Sabine Feisst, Daniel Grimley, Julian Johnson, Elizabeth Le Guin, Stephen Meyer, Mitchell Morris, Thomas Peattie, Helena Spencer, Maja Trochimczyk, Denise Von Glahn, Holly Watkins, inter alia.
- 12. A selection includes William Bares, Suzannah Clark, Nathan Currier, Christopher DeLaurenti, Kate Galloway, Nancy Guy, John Z. McKay, Rachel Mundy, Alexander Rehding, Jessica Schwartz, Travis Stimmeling, Joshua Tucker, inter alia.
- 13. A selection includes: John Luther Adams, The Place Where You Go to Listen: In Search of an Ecology of Music (Middletown, CT.: Wesleyan University Press, 2009); Ingram, The Jukebox in the Garden; Helmi Järviluoma et al., eds., Acoustic Environments in Change & Five Village Soundscapes (Joensuu, Finland: Tampereen ammattikorkeakoulu, 2009); Bernard L. Krause, The Great Animal Orchestra: Finding the Origins of Music in the World's Wild Places (New York: Little, Brown, 2012); Mark Pedelty, A Song to Save the Salish Sea: Musical Performance as Environmental Activism (Bloomington and Indianapolis: Indiana University Press, 2016); idem, Ecomusicology: Rock, Folk, and the Environment (Philadelphia: Temple University Press, 2012);

the environmental and ecological content of various disciplines) and with the "greening of the campus" (increasing attention on how physical campuses in higher education "teach" both good and bad habits regarding sustainability), we might be tempted to claim that the "greening of musicology" is under way. 14 However, while music historians are represented in ecomusicology, scholars from other disciplines (especially ethnomusicology) are the majority.

Furthermore, ecomusicological writings in Western music history have been limited almost exclusively to the period of and after the nineteenth century. Relevant books are primarily on post-1800 content (although there are a few notable exceptions, which I address further below).15 Current Directions in Ecomusicology includes popular music studies, musics of the twentieth and twenty-first centuries (especially American musics), and even music theory (which has a longstanding interest in nature). 16 Of the nineteen chapters in that volume, however, only a single one is on a subject from before the twentieth century.17

David Rothenberg, Sudden Music: Improvisation, Sound, Nature (Athens: University of Georgia Press, 2002); Rothenberg and Ulvaeus, The Book of Music and Nature; Hollis Taylor, Is Birdsong Music? Outback Encounters With an Australian Songbird (Bloomington and Indianapolis: Indiana University Press, 2017).

- 14. Regarding the greening of the curriculum, see Allen et al. "Colloquy: Ecomusicology," 391; regarding the greening of the campus, see David W. Orr, "The Liberal Arts, the Campus, & the Biosphere," in Hope Is an Imperative, 270-281.
- 15. Post-1800 subjects are addressed in the following books: Daniel M. Grimley, Grieg: Music, Landscape and Norwegian Identity (Woodbridge: Boydell Press, 2006); Julian Johnson, Webern and the Transformation of Nature (Cambridge: Cambridge University Press, 1999); Roland Schmenner, Die Pastorale: Beethoven, das Gewitter und der Blitzableiter (Kassel: Bärenreiter, 1998); Emanuele Senici, Landscape and Gender in Italian Opera: The Alpine Virgin from Bellini to Puccini (New York: Cambridge University Press, 2005); Denise Von Glahn, The Sounds of Place: Music and the American Cultural Landscape (Boston: Northeastern University Press, 2003); and idem, Music and the Skillful Listener: American Women Compose the Natural World (Bloomington and Indianapolis: Indiana University Press, 2013). Ecomusicological articles and chapters on post-1800 subjects are too numerous to begin listing, but some exceptions—i.e. pre-1800 subjects—are in the following articles and books: Emily Doolittle, "Crickets in the Concert Hall: A History of Animals in Western Music," TRANS: Revista Transcultural de Música/Transcultural Music Review 12 (July 2008), http://www.sibetrans.com/ trans/trans12/art09.htm; François Bernard Mâche, Music, Myth, and Nature, or, the Dolphins of Arion (Philadelphia: Harwood Academic Publishers, 1992); Suzannah Clark and Alexander Rehding, eds., Music Theory and Natural Order from the Renaissance to the Early Twentieth Century (New York: Cambridge University Press, 2001); and Elizabeth Eva Leach, Sung Birds: Music, Nature, and Poetry in the Later Middle Ages (Ithaca: Cornell University Press, 2007).
- 16. In addition to the table of contents in CDE, see the four section introductions that Allen and Dawe provide, which also provide further bibliographies of related sources. Regarding popular music, see Pedelty, Ecomusicology; idem., "Ecomusicology, Music Studies, and IASPM: Beyond 'Epistemic Inertia," IASPM@Journal 3, no. 2 (February 3, 2013): 33-47. Regarding American music, see Von Glahn, The Sounds of Place; idem, Music and the Skillful Listener. Regarding music theory, see Clark and Rehding, Music Theory and Natural Order.
 - 17. Allen, "New Directions."

Overall, when considering the modest past and current literature of ecomusicology, the field is dominated by approaches from sound studies, ethnomusicology, and musicological studies of the nineteenth, twentieth, and twenty-first centuries.¹⁸ Indeed, even this special issue of *JMHP* reflects this lack of pre-nineteenth-century material: all of the contributions deal more with current centuries rather than with centuries past. Part of the issue here may have to do with shifting terminology. Music historians might discuss relevant ecomusicological issues in the repertoire of earlier periods using topoi such as the pastoral or the exotic, so we should be attentive to such diversity and changes in language use. 19 Or the issue may be simply the relative lack of maturity of the field of ecomusicology. Consider a parallel situation in environmental history, which began in the 1960s and 1970s as a subdiscipline focusing on the United States but soon expanded. By the early twentieth century, environmental histories were being written about much longer time frames and farther flung places.²⁰ With so little music historical scholarship on ecomusicological subjects from prior to the nineteenth century, there exists what I will call a "short music history" in ecomusicology—which is in turn reflected in the teaching of music history. If there is a greening of musicology and, by extension, the broader expanse of the Western music history curriculum, then it is a rather light shade of green.

This short music history is bound up with the fact that contemporary ecomusicology is in many ways a response to our current environmental crisis itself a manifestation of cultural activities exploiting nature (e.g. the industrial revolution) that began in earnest in the nineteenth century.²¹ That crisis precipitated the late-twentieth century rise of environmentalism and academic environmental studies, which have informed many disciplines and attuned students, scholars, bureaucrats, and the public alike to sustainability challenges. Those challenges in turn have resulted in increased eco-cultural products (music,

- 18. For further resources on scholarly and popular literature in or relevant to ecomusicology, see Aaron S. Allen and Miranda S. Freeman, "The Ecomusicology Bibliography via Zotero: A Dynamic and Emerging Scholarly Resource," Ecomusicology Newsletter I, no. 1 (2012): 6-9.
- 19. As one recent big data research project has shown, there are hundreds of terms and phrases associated with "sustainability" as a follow up to "environmentalism" in the early decades of the twenty-first century. See Malcolm L. McCallum, et al., "Changes in United States' Citizens' Interest in Sustainability (2004 - 2014)," Life: The Excitement of Biology 4, no. 3 (2016): 138–164.
- 20. J. Donald Hughes, What Is Environmental History? (Cambridge: Polity, 2006). A brief selection of recent environmental histories of the medieval and Renaissance / early modern periods includes: John Aberth, An Environmental History of the Middle Ages: The Crucible of Nature (New York: Routledge, 2013); Richard C. Hoffmann, An Environmental History of Medieval Europe (New York: Cambridge University Press, 2014); James H. McGregor, Back to the Garden: Nature and the Mediterranean World from Prehistory to the Present (New Haven: Yale University Press, 2015).
- 21. See Orr, Hope is an Imperative; and Paul J. Crutzen, "Geology of Mankind," Nature 415, no. 6867 (January 3, 2002): 23-23.

literature, film, art, etc.) and the inevitable criticism via fields such as ecocriticism and ecomusicology. The development of ecomusicology simply represents one aspect of contemporaneous cultural shifts regarding the environmental crisis. The orientation of ecomusicology, in this sense, is towards the present and the future rather than the past. Although understandable, this orientation does a disservice to the lessons of history that can be brought to bear on the multifarious connections of music/sound, culture/society, and nature/environment. As I have argued elsewhere, ecomusicology matters because it helps us both to understand the crisis of culture that has precipitated the environmental crisis and to address those crises through integrative, creative critical thinking. ²² Historical dimensions in general and of ecomusicology in particular are therefore crucial. Refining the challenge that I laid out in 2011, I would elaborate it by saying that work is needed on ecomusicology pedagogy that moves beyond the short music history in ecomusicology. In order to begin addressing this challenge in more detail, I turn to my own experience in the classroom—first presenting and critiquing a class I offered and then outlining ideas for greening the music history survey—before concluding with some broader reflections on ecomusicology in the liberal arts.

An Ecomusicology Class Critiqued

The syllabus for my spring 2015 "Music and Environment" course (see Appendix) is illustrative of the short music history in ecomusicology: the majority of the readings and activities emphasize late-twentieth and twenty-first century ideas, sounds, and musics. The course is also indicative of the problem I imagine many of us face: finding a place in already full curricula to include yet another approach to the study of music history, particularly as textbooks get longer, more material is available, and curricular allocations for music history get ever shorter. Because most of the degree programs in my institution's School of Music are pre-professional (rather than liberal arts) and have completely full curricula with virtually no room for electives, I had to apply to teach my course as a seminar for first and second year students in the honors program. As such, I was required to meet general education requirements and to provide a setting that introduced a relatively small class (seventeen) of non-majors to challenging, seminar-style discourse. I would have structured the class differently for a larger, non-major, non-honors course (by doing fewer readings/discussions and more lectures with frameworks and discussions), I would have changed it

22. Allen in Allen et al. "Colloquy: Ecomusicology," 391-393 and 414-419, especially at 414; Aaron S. Allen, "Ecomusicology: Bridging the Sciences, Arts, and Humanities," in Environmental Leadership: A Reference Handbook, ed. Deborah Rigling Gallagher, vol. 2 (Thousand Oaks, CA: Sage Publications, 2012), 373-381.

for a class of music majors (by incorporating more technical readings, sound recordings, and/or performance exercises). And as is common in looking over a class retrospectively, I see its problems more clearly—especially in regard to this short music history in ecomusicology. I do not claim this course as a model for teaching ecomusicology, for I believe that there are many ways to teach ecomusicology, just as there are many ecomusicologies; such diversity is a strength.²³ With this particular class, I taught advanced undergraduates in a seminar rather than a class on foundational knowledge in ecomusicology; thus, I emphasized civil discourse, critical thinking, writing, and the place of ecomusicology in a liberal arts education for non-majors who were not required to have any previous musical experience.

I structured the semester to begin with a two-week introduction during which I led discussions, followed by units on soundscapes and ecocriticism during which the students (mostly) led discussions. After an interlude and spring break, we returned for a unit on ecomusicology, during which the students again led discussions. The final unit was dedicated to a single composer, Philip Glass, who happened to be visiting our institution for a performance of his opera *Kepler* as part of a campus-wide event. The trajectory after the introduction from soundscapes through ecocriticism to ecomusicology followed by an in-depth case study was, I felt, generally productive. At the same time, if I were to offer the class again, I would likely elect to spend the final unit on a variety of ecomusicological articles (e.g. from *Current Directions in Ecomusicology*) and/or to spend more time on each of the previous units (rather than spend a unit on a single composer). In addition, I would want to incorporate throughout more historical case studies.

The introductory unit did include two historically-oriented topics (the liberal arts and materiality) in addition to covering definitions and doing a case study of a contemporary singer-songwriter (Bruce Cockburn).²⁴ I included a number of my own writings at the outset, in part to break-down the student-professor barrier (because I encourage the students to critique the readings, a practice I model for them) and in part to create a more relaxed atmosphere for their writing later in the semester (as I say to them: "If I get to read and critique your writing, then you should get to read and critique my writing too!"). My article on ecomusicology and education provides a brief history of the liberal arts and a series of case studies—but only a few references were to issues or musics prior to the twentieth century.²⁵ I framed the course in terms of a liberal arts education in part because the students were from all different

^{23.} Allen and Dawe, "Ecomusicologies," 6-8.

^{24.} Aaron S. Allen, "Bruce Cockburn: Canadian, Christian, Conservationist," in *Political Rock*, ed. Mark Pedelty and Kristine Weglarz (Burlington, VT: Ashgate, 2013), 65–90.

^{25.} Allen, "Ecomusicology: Bridging the Sciences, Arts, and Humanities."

majors receiving such an education (in contrast to being music majors, most of whom at my institution receive a pre-professional, non-liberal arts degree). This framing is also a part of my larger idea for ecomusicology in a liberal arts education, which I will discuss further below.

The second historical topic of the introductory unit is materiality, by which I mean the natural resources—animals, plants, minerals, energy, etc.—necessary to provide physical objects (especially those useful for musical instruments or playback). For this section, I used my article "Fatto di Fiemme," in which I consider the medieval history of the Italian Val di Fiemme and the ecology of the area, the history and (literal physical) foundations of Venice and shipbuilding there, the seventeeth- and eighteenth-century rise of the violin, and the colonial history of Brazil. These ideas are connected with contemporary issues of habitat loss, forest stewardship, natural resource management, cultural preservation, and the roles and aesthetics of violins in musical and material cultural. In addition to the reading, I provide a lecture that integrates substantial visual material from historical sources and my own travels. I also pair this essay with the film Musicwood (2013), a documentary about contemporary guitar makers and the tonewoods they need and players want.26 The film focuses on woods from the Tongas National Forest in southeast Alaska, which is logged in destructive ways, raising a complex set of questions concerning ethics and aesthetics as well as economics, equity, and the environment (elements of sustainability that I present in a lecture). My article brings up similar issues with regard to the manufacture of violins and their bows—although, in my experience in this and other classes, the film elicits much more ire, passion, and engagement from students. All periods and all places that rely on material for music—from accordions to zurnas, rosewood to ivory, parchment to iPods—can be considered from such a material ecomusicological perspective.²⁷ (I discuss materiality and the liberal arts further below when I expand my consideration to the general music history curriculum and the broader role of ecomusicology in education, respectively.)

While the soundscape unit also offered some general historical material, the class otherwise engaged entirely with twentieth and twenty-first century

^{26.} Maxine Trump, Musicwood (2013), http://musicwoodthefilm.com. See also the review by Jeannette Catsoulis, "Musicwood' Looks at a Threat to Instrument Makers," The New York Times, October 31, 2013.

^{27.} See also Kevin Dawe, "Materials Matter: Towards a Political Ecology of Musical Instrument Making," in Current Directions in Ecomusicology, 109-121; Kyle Devine, "Decomposed: A Political Ecology of Music," Popular Music 34, no. 3 (2015): 367-389; Robin Ann Ryan, "Didgeri-Doos' and 'Didgeri-Don'ts': Confronting Sustainability Issues," Journal of Music Research Online 6 (August 29, 2015), http://www.jmro.org.au/index.php/mca2/article/ view/121; and Alex Smith, "New Musical Contexts for More Sustainably-Made Marimbas," Percussive Notes Online Research Edition 1 (December 2016): 32-42.

musics. Schafer's Soundscapes book touches on history throughout, usually to help inform sonic awareness in the present (which we activated through listening exercises such as soundwalks).28 Ingram's Jukebox in the Garden focused on twentieth-century America (although this post-1960s popular music was, for the students, "historical"). In his guest lecture, Torvinen discussed environmental themes in contemporary Nordic heavy metal.²⁹ The great majority of the students' first program notes assignments included twenty-first century popular music (all of which they chose). Afterwards, we worked through Pedelty's engaging exploration of twentieth and twenty-first century folk and pop music (and Pedelty joined us via video conference for a discussion).³⁰ The students then did their second program notes for the public screenings of operas and films with music by Philip Glass. Their final research papers also engaged with Glass's concert, operatic, or film music.

The class overwhelmingly focused on contemporary musics, sounds, and issues. Yet as a historian, I cannot help but want to do more with even deeper historical materials to broaden the students' purview of human-nature relationships as manifested in music and to diversify the musical material, ideas, and cultures under consideration. I would like, in other words, not only to move beyond the short music history of ecomusicology but also to move beyond the relatively narrow focus on musics of Europe and North America. While we moved from classic rock to Disney and from minimalism to hiphop with relative ease, there was an absence of global and historical materials that could have been brought into the discussion. I am aware of and confident about including the many global, non-Western, and non-elite musics, as well as more general concepts of sound, all of which are increasingly discussed in eco-ethno-musicology / environmental ethnomusicology / ecomusicology. But it is the pre-nineteenth-century historical materials—be they Western, elite, subaltern, obscure, common, non-Western, canonical, or otherwise—that are being left out of the discussion and classroom. Of course, I am referring to my own classroom, but I find that to be the result of the dearth of relevant materials in the broader literature.

- 28. R. Murray Schafer, The Soundscape: Our Sonic Environment and the Tuning of the World (Rochester, VT: Destiny Books, 1994). One potentially interesting avenue for expanding this section would be to incorporate elements of Järviluoma, Acoustic Environments in Change.
- 29. While most of his relevant publications are in Finnish, see Torvinen's research project website (http://www.utu.fi/mnec) and the following interview with him: Sini Mononen, "Experiencing Environmental Crises Through Music," Ecomusicology Review 4 (2016), http:// www.ecomusicology.info/experiencing-environmental-crises-through-music/.
- 30. Pedelty, Ecomusicology. Given its greater diversity of musical examples and an inclusion of "applied ecomusicology," I would substitute the Ecomusicology monograph with his more recent A Song to Save the Salish Sea.

Ecomusicology and the Music History Survey

An individual ecomusicology class, such as my "Music and Environment" seminar discussed and critiqued above, is one way to green the music curriculum. Another avenue would be to incorporate ecomusicological issues or modules into the general music history survey. Doing so presents at least three challenges.

First, the music history survey is already overflowing with material, so how could we add yet more? Textbooks only seem to get longer. Moreover, I have already crafted a set of materials (topics, lectures, readings, assignments) that I enjoy and employ in my music history survey. At the same time, the history sequence at my institution has been truncated from three to two semesters. I imagine others are in similar situations in regard to feeling overwhelmed by the volume of material, to having already developed well-prepared materials, and to struggling for curricular space. However, I am not suggesting we add new materials or new classes; rather, I suggest that we build on or contextualize further the existing materials.

A second challenge is regarding the apparent objectivity of music history. If we were to "ecomusicologize" the survey, would that be an inappropriate use of our power as teachers, a sort of political activism? Perhaps, but humans write and teach history, and it is not an objective science. (Even the so-called objective sciences are informed by human ideology.³¹) We have been down this road before with the continual efforts to improve the representation of gender, sexuality, race, and difference in the music history survey. Scholarship is inherently activist in that it seeks to support a claim or argument; we do it with the facts available and do our best to reflect the reality as we understand it-but even avoiding something is itself a political act.³² As human societies have dealt with issues of gender, sexuality, race, and difference, so too have they dealt with complex relationships with nature and the environment. Music history is one lens to examine and experience such issues.

The third challenge involves the status of "the music itself." Music history contextualizes musical works; it does not present them as New Critical abstractions subject only to analysis as disconnected from everything else. But does connecting our musical "canon" to nature, environment, and the pastoral—in short, to the real, dirty, base world—somehow threaten the status of these works? In other words, would ecomusicological interpretations serve to

- 31. For a classic example in environmental studies, see Lynn White, "The Historical Roots of Our Ecologic Crisis," Science 155, no. 3767, New Series (March 10, 1967): 1203-1207. White's seminal article has been widely discussed and debated; see, for example, Timothy C. Weiskel's selected bibliography (through 1997), "The Environmental Crisis and Western Civilization: The Lynn White Controversy," http://ecoethics.net/bib/1997/enca-001.htm.
- 32. Philip V. Bohlman, "Musicology as a Political Act," The Journal of Musicology 11, no. 4 (Fall 1993): 411-436; see also Allen et al., "Sustainability and Sound."

destabilize the pedestals on which these monuments are placed? For some in a university setting, ecomusicological focus on these broad concepts might be understood to detract from the focus on "the music itself": doing so might undermine teaching, threaten beliefs about the autonomy of art, de-emphasize the importance of performance repertoire, and/or chip away at the music school business model. In all honesty, the activist in me would welcome such a shake up, but I am not so convinced that ecomusicology has the power to break down—or even cause cracks in—the established order (I would be glad to be shown otherwise). Nevertheless, greening music history could also provide a relevant outlet for making the world better via studying and creating meaningful art, connecting human social worlds, encouraging environmental responsibility and sustainability, and understanding humanity's fundamental connections to nature.

These challenges (whether real or perceived) add to the existing challenges of a music history curriculum already burdened with too much material to cover meaningfully, with the need to incorporate issues of identity, and with the necessity of important diachronic subjects of technology, aesthetics, and the mechanics of musical style. Nevertheless, we can begin to green the music history curriculum by starting with a few moments in the survey. Greening the survey from Romanticism to the present should be relatively straight forward, so in the following I focus on a few materials relevant to pre-1800 music history. Broadly, I propose considering two general ideas: materiality and the idea of nature.33

By materiality, I am not referencing emerging trends in the philosophy of materialism, but referring (as I did above) to studies that consider the actual natural resources needed to create artifacts. Surveys of Western art music often begin with Ancient Greece in part because we can associate musical ideas with surviving artifacts, such as books, papyri, vases, architecture, stones, etc. These artifacts are an ideal beginning point to introduce the idea of materiality that can provide a basis for ecomusicological modules in later periods. Medieval manuscripts are another opportunity: parchment and vellum come from

33. Another approach might be animals, which would be an interesting way to begin a de-centering of the human in a traditionally human-focused discipline, thus furthering efforts of posthumanism in the environmental humanities; see especially part two of Ursula K. Heise, Jon Christensen, and Michelle Niemann, eds., The Routledge Companion to the Environmental Humanities (New York: Routledge, 2017). For more specific (eco)musicological ideas for such an approach, see especially section three of Doolittle, "Crickets in the Concert Hall." Zoomusicology is explored further in that volume of TRANS as well as in Dario Martinelli, Of Birds, Whales, and Other Musicians: An Introduction to Zoomusicology (Scranton, PA: University of Scranton Press, 2009). See also Rachel Mundy, "Birdsong and the Image of Evolution," Society and Animals 17, no. 3 (2009): 206-223.

animals, and paper comes from plants and trees.³⁴ The human voice is part of the body that is a product of nature, but instruments are perhaps a better opportunity to bring in materiality regarding the plants (reeds, trees), metals, and animal parts necessary to make (and recreate) them.³⁵ In the music history survey, instruments are discussed with regard to Ancient Greek and Roman music and again in medieval and Renaissance units, but instruments receive particular attention in the Baroque, especially with regard to the development of violins (and keyboards). In this context, then, it is worth considering both the negative and, remarkably, the positive impacts on forests resulting from the aesthetic powers and cultural positions of the violin, particularly Antonio Stradivari's instruments.³⁶ (Although a later phenomenon, the democratization of the piano, often seen in such positive light for Occidental music culture, had profoundly negative impacts on elephants.³⁷)

The idea of nature often comes up in relation to texts/lyrics, but broader philosophical ideas are also relevant. Late Medieval musicians and theorists discussed the validity of birds as models and of singing like birds.³⁸ Italian Renaissance poets and musicians used the pastoral to represent their elite patrons as important members of society.³⁹ Nature was an important source for secular music in sixteenth- and-seventeenth-century England. For centuries,

- 34. In my experience, most musicological examinations of manuscripts begin with the copying or writing down of staves, music, and text; compositional processes is also of interest, as with Jessie Ann Owens, Composers at Work: The Craft of Musical Composition 1450-1600 (New York: Oxford University Press, 1997). However, the first stage of understanding a manuscript should be to consider the materials. Rather than beginning with writing, we should be beginning with slaughtering animals and preparing their hides as parchment; gathering minerals, plants, and animal extracts to make ink and paint; crafting writing implements from bird feathers, wood, metal, or other natural materials; and using recycled materials and wood to bind the books. The Fitzwilliam Museum of the University of Cambridge provides an animated illustration of the process of creating a book, beginning with the slaughter of animals (http:// www.fitzmuseum.cam.ac.uk/pharos/sections/making_art/manuscript.html). See also the illustrated lecture (in video and transcript) by Sally Dormer, "The Making of Medieval Illuminated Manuscripts," Museum of London, 2012, http://www.gresham.ac.uk/lectures-and-events/ the-making-of-medieval-illuminated-manuscripts.
- 35. See Aaron S. Allen and Laurence Libin, "Sustainability," Grove Dictionary of Musical Instruments (New York: Oxford University Press, 2014).
 - 36. Allen, "Fatto di Fiemme."
- 37. Christopher Joyce, "Elephant Slaughter, African Slavery and America's Pianos," National Public Radio, August 18, 2014, http://www.npr.org/2014/08/18/338989248/elephant-slaughter-african-slavery-and-americas-pianos. Continuing into the twentieth and twenty-first centuries, consider also Daniel J. Wakin, "For More Pianos, Last Note Is Thud in the Dump," The New York Times, July 29, 2012.
 - 38. Leach, Sung Birds.
- 39. Giuseppe Gerbino, Music and the Myth of Arcadia in Renaissance Italy (New York: Cambridge University Press, 2009).
- 40. Linda Phyllis Austern, "Nature, Culture, Myth, and the Musician in Early Modern England," Journal of the American Musicological Society 51, no. 1 (1998): 1-47.

music theorists appealed to nature to justify their ideas. 41 Opera topoi in the eighteenth and nineteenth centuries often represented exotic locales and symbolic landscapes. 42 And the seemingly abstract genre of the symphony engaged with the pastoral beginning in the eighteenth century.⁴³

While these and other subjects do have secondary sources available, they are still ripe for further ecomusicological considerations. The quantity of the existing scholarly literature may be relatively small compared to post-nineteenth-century subjects, but the limited character of this material is no reason to assume that there is no "there there"—i.e., that there is nothing ecomusicological about pre-nineteenth-century music history. Scholars in ecocriticism (literary studies) and environmental history, fields closely related to music history, have recently been producing increasing numbers of pre-nineteenth-century subjects.44 The areas outlined above are starting points for greening the music history survey—and for lengthening that short music history in ecomusicology.

Ecomusicology and the Liberal Arts

In considering the development of a stand-alone ecomusicology course or the addition of ecomusicology to the music history survey, we are still left with the question, why ecomusicology? I am of the opinion that, as with the idea of "ecomusicologies," there are a variety of responses to that question. Of course, one can ask "why?" as a fundamental query of relevance for any subject. In this case, we might re-phrase the inquiry as follows: Why is it important to green the music history curriculum? And as a corollary: Why do we need a longer music history in ecomusicology?

The rise of environmentalism in the twentieth century (in response to centuries of known and unknown missteps), the subsequent greening of a plethora of academic disciplines, the concomitant increase in relevant cultural products regarding questions of environment and of justice, and the contemporary and ecomusicologically prominent field-based methods of ethnomusicology—all

- 41. Clark and Rehding, Music Theory and Natural Order.
- 42. Consider, e.g., Jean-Philippe Rameau's ballet héroïque Les Indes galantes (1735). See also Senici, Landscape and Gender in Italian Opera.
- 43. Aaron S. Allen, "Symphonic Pastorals Redux," in Extending Ecocriticism: Collaborative and Cross-Disciplinary Approaches, ed. Peter Barry and William Welstead (forthcoming from University of Manchester Press; rev. rpr. of "Symphonic Pastorals," Green Letters 15 (2011): 22-42).
- 44. A selection includes Aberth, An Environmental History of the Middle Ages; Lynne Dickson Bruckner, Ecocritical Shakespeare (Burlington, Vt.: Ashgate, 2011); Hoffmann, An Environmental History of Medieval Europe; Tom MacFaul, Shakespeare and the Natural World (Cambridge: Cambridge University Press, 2015); McGregor, Back to the Garden; Gillian Rudd, Greenery: Ecocritical Readings of Late Medieval English Literature (Manchester: Manchester University Press, 2007).

these seem to imply an insignificant role for music history in ecomusicology. However, there is ample relevance to and opportunity for the coordinated efforts of historical study, environmental studies, and music and sound studies. I believe it is important to green the music history curriculum, and by extension to lengthen the short music history in ecomusicology, for at least three reasons.

First, ecomusicology in the music history classroom could lead to meaningful experiences for instructors and students. Instructors may find an outlet for connecting multiple interests, such as the outdoors and sound, environmentalism and music, or animal rights and instruments. Students may find tangible examples of the power of music to do good and/or bad in the world, to ground in materiality something that is otherwise so ethereal, and to give relevance and meaning to what they are studying. Together, both students and instructors may forge relationships over shared passions, synthetic insights, the excitement of discovery, and the capacity to make a difference. Music history is not unique in this regard, but the music history classroom can be an unusual point of contact for such engagement.

Second, ecomusicology helps in examining and experiencing human entanglements with nature, and thus it helps in understanding the crisis of culture that is at the root of the environmental crisis. Major environmental problems are the result of human actions arising from disconnects between culture and nature; these are manifest especially in social, economic, technological, and scientific realms, but the solutions are not unique to those same realms. Rather, they are to be found in the connections and conflicts between culture and nature.⁴⁵ Music straddles these realms and can productively blur them; ecomusicology can make such relationships explicit and relevant, thus offering a context for and practice in the creative critical thinking necessary to recognize, analyze, and confront the greater challenges facing humanity and the planet. Thus, lengthening music history in ecomusicology parallels other historical disciplinary approaches that aim to open our minds and ears to the past and to inform understandings of human entanglements with nature and the crisis of culture.46

Third, the inherent interdisciplinarity and creative critical thinking that ecomusicology provides means that it can find a place both in the specifics of

45. Many contributors to Current Directions in Ecomusicology engage with the problem of the nature-culture binary (see the index, page 309), which is a common focus in ecocriticism, environmental history, and environmental studies. See also Allen et al., "Colloquy: Ecomusicology"; Jill K. Conway, Kenneth Keniston, and Leo Marx, Earth, Air, Fire, Water: Humanistic Studies of the Environment (Amherst: University of Massachusetts Press, 1999); and Donald Worster, The Wealth of Nature: Environmental History and the Ecological Imagination (New York: Oxford University Press, 1993).

46. Hughes, What Is Environmental History?; Mark Smith, Sensing the Past: Seeing, Hearing, Smelling, Tasting, and Touching in History (Berkeley: University of California Press, 2007).

the music history curriculum and beyond in the more general liberal arts. I believe that this connection between ecomusicology and the liberal arts makes the most compelling case for the importance of ecomusicology in general and for the lengthening of its short music history in particular. From ancient Greek learning, the liberal arts were the basis of the medieval university, where they were organized into two multi-fold paths to wisdom: the trivium (grammar, logic, and rhetoric) and the quadrivium (arithmetic, geometry, astronomy, and music). As speculative inquiry, music was philosophical and mathematical, not practical or performative. Music was important because it engaged mind, spirit, and body through intellectual stimulation, religious worship, and earthly pleasures. Music was part of the scientific quadrivium rather than the literary trivium, lending some logic to the origin of musicology as "music science"— Musikwissenschaft. Ecomusicology makes this origin more pronounced by bridging the arts and humanities and the natural, physical and social sciences through the cultural study of music and sound in relation to the study of nature and the environment.47

That bridging makes ecomusicology an ideal component of the liberal arts. Yet ecomusicology is no panacea: it cannot provide ultimate solutions to the major ecological problems and planetary crises we face. Ecomusicology is but one component among many in the diverse ecosystem of thought, learning, and action needed to address those crises from cultural, political, technological, and scientific perspectives. More than ever, those perspectives need to be connected in a rigorous liberal arts context with historical depth.⁴⁸

A liberal education involves the "development of the whole person." ⁴⁹ Such an education is not vocational or pre-professional. Moreover, it is not a "great books" curriculum, which itself is a vestige of an old approach that "was shaped around the goal of extending the human dominion over the earth to its fullest extent"-a dominion that resulted in the nature-culture divide that is at the root of modern environmental problems.⁵⁰ Since the last few decades of the

- 47. Allen, "Ecomusicology: Bridging the Sciences, Arts, and Humanities."
- 48. Scholars and public forums from both the humanities and sciences are making such arguments. See Ursula K. Heise, "The Environmental Humanities and the Futures of the Human," New German Critique 43, no. 2 128 (August 1, 2016): 21-31; Sverker Sörlin, "Environmental Humanities: Why Should Biologists Interested in the Environment Take the Humanities Seriously?," BioScience 62, no. 9 (September 2012): 788-789; and The Editors, "STEM Education Is Vital—but Not at the Expense of the Humanities," Scientific American (October 2016).
- 49. David Orr, "The Liberal Arts, the Campus, & the Biosphere," in Hope is an Imperative, 273.
- 50. David W. Orr, "Reinventing Higher Education," in Greening the College Curriculum: A Guide to Environmental Teaching in the Liberal Arts, ed. Jonathan Collett and Stephen Karakashian (Washington D.C.: Island Press, 1996), 19. See also White, "The Historical Roots of Our Ecologic Crisis."

twentieth century, scholars have worked to green various disciplines, resulting in a new, more ecologically holistic approach to the liberal arts. David Orr has been one of the most passionate advocates of this new liberal arts curriculum, which, he argues, "must be organized around the need to develop the analytic abilities, ecological wisdom, and practical wherewithal essential to making things that fit in a world of microbes, plants, animals, and entropy: what can be called the 'ecological design arts." 51 Ecomusicology can offer the type of sensitive, creative, connected analysis and thinking that this new liberal arts approach requires. Orr outlines four components of a liberal arts education that aid in confronting environmental challenges. First, we must connect "the analytic mind with feelings" (that is, facts with emotions, the objective with the subjective). Second, we must connect otherwise disparate subjects. Third, we need to "provide a sober view of the world, but without inducing despair." And fourth, we must "equip a person to live well in a place."52

Studies of music and sound, particularly when connected with environmental studies, are well positioned to contribute to this effort by 1) engaging simultaneously emotion with rationality, 2) connecting disparate subjects, 3) providing hope and excitement together with that sober view, and 3) relating music and sound to place. These contributions could indeed be made with only a short music history in ecomusicology. However, with a longer music history, ecomusicology is poised to make more diverse and substantial contributions to the broader greening of the liberal arts curriculum.

^{51.} Orr, "Reinventing Higher Education," 19.

^{52.} Orr, "The Liberal Arts, the Campus, & the Biosphere," 274-6.

Appendix

"Music and Environment" (Spring 2015)

Dr. Aaron S. Allen

UNIT ONE: Introductions

Week 1:

Tue. Allen, "Ecomusicology," in Grove.

Allen, "Ecomusicology: Bridging the Sciences, Arts, and Humanities."

Thur. Trump, Musicwood.

Week 2:

Tue. Allen, "Fatto di Fiemme."

Thur. Allen, "Bruce Cockburn: Canadian, Christian, Conservationist."

UNIT TWO: Soundscapes

Week 3:

Tue. Schafer, *The Soundscape*, introduction and chapters 1-4.

Thur. Schafer, chapters 5-7.

Week 4:

Tue. Schafer, chapters 8-13 (students sign-up to present individual chapters).

Thur. Schafer, chapters 14-19 and epilogue (students sign-up to present individu-

al chapters).

UNIT THREE: Ecocriticism

Week 5:

Tue. Ingram, *Jukebox in the Garden*, introduction and chapters 1-2.

Thur. Ingram, chapters 3-4.

Week 6:

Tue. Ingram, chapters 5-12 (students sign-up to present individual chapters).

Thur. Ingram, continued.

INTERLUDE

Week 7:

Tue. Conclude Ingram discussion.

Thur. Guest, Dr. Juha Torvinen.

Week 8:

Tue. Informal class presentations on first program notes assignment.

Thur. Submit first program notes assignment.

Week 9: SPRING BREAK

UNIT FOUR: Ecomusicology

Week 10:

Tue. Pedelty, *Ecomusicology*, chapters 1-2.

Thur. Pedelty, chapter 3.(? at ASEH)

Week 11:

Tue. Pedelty, chapter 4. Thur. Pedelty, conclusion.

Week 12:

Tue. Guest, Dr. Mark Pedelty, via Skype.

Conclude Pedelty discussion. Thur.

Strickland and Alburger, "Glass, Philip," in Grove.

Discuss second program notes assignment, organize groups.

<u>UNIT FIVE: Philip Glass</u> <u>Week 13:</u>

Tue. Anima Mundi (1992); A Crude Awakening (2006); Kepler (2009); and Koyaanisqatsi (1983), Powaqqatsi (1988), & Naqoyqatsi (2002).

Thur. Submit second program notes assignment (to review and discuss in class).

Week 14:

No class meetings. Participate in events related to campus visit of Philip Glass.

Week 15:

DUE: Research paper (last day of class) and reflective essay (scheduled exam date).