Wolf Listeners
An Introduction to the Acoustemological Politics and Poetics of Isle Royale National Park

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Listening to wolf howls as both material object and socially constructed metaphor highlights the contested relationship between nature and culture. The author conducted field research on Isle Royale National Park from 2011 to 2015, from which data he offers a narrative wherein citizen-scientists who listen for the howl literally “lend their ears” to a wolf biologist who has led the longest continuous predator-prey study in the world. The theoretical framework of this essay extends acoustic ecology, first theorized by R. Murray Schafer, to include environmental history and cultural theory, which problematizes definitions of “nature” and “natural.” Ultimately, this introduction describes a nuanced form of participatory, situational environmental music that plays out in the everyday lives of those listening on this remote, roadless island on Lake Superior.

THE ICONIC HOWL

About 20 years ago I brought a Boy Scout troop up here. We were at the center of the island, and we heard two wolf packs howling at each other. For an hour we sat and listened to wolf calls. I see some of those scouts today—they are approaching middle age—and they still say, “Do you remember that night we listened to wolves?”

—ISLE ROYALE NATIONAL PARK VISITOR [1]

Humans have long had a special interest in wolves [2]. Wolves are the subject of myth and legend, folklore and fairy tale [3]. They have been both persecuted and protected. From birth on, wolves are socially vocal. They make short- and long-range sounds that are both harmonic and noisy; they moan, whine, squeak, yelp, scream, snarl, bark, growl and yawn. With each type of sound, wolves convey mood and meaning. A particularly illuminative example is the woof, which is used to communicate a need for defense: Pups respond to adult woofs by returning to the den, whereas nearby adults are alerted to defend [4]. But perhaps the sound most known by humans is the wolf howl. This lower-pitched, harmonically simple sound acts as their primary long-distance communication to carry messages [5].

QUASI-OBJECT

As characterized by geographer Neil Smith, nature is as much a material object as it is a spiritual force—at once a gift of god and a product of its own evolution [6]. Likewise, the howling message of a wolf is both a material object and a socially constructed metaphor that is infinitely interpretable and ideologically malleable, ultimately depending on the hearer’s own values and biases [7]. As anthropologist David Harvey explains, “the framework of interpreting nature is given in the metaphor rather than in the evidence” [8]. For example, the Oxford English Dictionary uses the words “mournful cry” to describe the howl—representing the sound as melancholic [9]. However, wolves are not “crying.” rather they howl to socially bond, to rally or to mark territory. Western society’s interpretation of the wolf howl is directly tied to “ways of seeing landscape,” a sonification of nature that assigns meaning in a method similar to scenery or religious monuments [10].

Bifurcations of the landscape into the practical and the aesthetic can be traced back to the creation of 18th-century English landscape parks by a wealthy class of landowners. This division separated the observer from the land, implying a sense of both ownership and control. The postmodernist approach to the landscape—which maintains that nature is something “other” than human culture—has been linked to Greek and Roman history, where the human mind was viewed as something superior to any other in nature [11]. After nature was placed “out there,” individuals and groups continued to spend time trying to decide how, where, when and what should be done with it. Rather than trying to uncover the inherent nature of nature, so to speak, all one can do is represent it and accept that our representations are both politically influenced and culturally biased.

The concept of “wilderness”—which is both a place and a mental state, a material and an idea, ultimately rooted in...
the frontier myth and the sublime—is a powerful example of the trouble with the nature/culture dualism. Environmental historian William Cronon observes:

The removal of Indians to create an “uninhabited wilderness” reminds us just how invented, just how constructed, the American wilderness really is. . . . There is nothing natural about the concept of wilderness. Indeed, one of the most striking proofs of the cultural invention of wilderness is its thoroughgoing erasure of the history from which it sprang [12].

If there is one iconic place in the United States where individuals and the state attempt to define nature, it is in the National Park Service (NPS). And Isle Royale National Park—99 percent of which is designated under the Wilderness Act of 1964—is a place where the nature/culture dualism is audible. On this roadless island in the northern section of Lake Superior, wolves howl and people listen.

**CITIZEN SCIENCE IN SOUND**

Wolf biologist Rolf Peterson leads the longest continuous predator-prey study in the world—the 58-year-long Wolf-Moose Project. He and his team seek to understand the wolf/moose, predator/prey system on this island microcosm. Listening is a big part of their research methodology. For instance, they use radio telemetry to track wolves. A small collar transmitter worn by a wolf emits radio waves in the form of beeps that are picked up by a receiver. By listening to volume fluctuations in these beeps, Peterson can plot coordinates, triangulate and determine very specific spatial information. I was invited to the island as a Park Service social science researcher to research the listening practices of Peterson, his partner/wife Candy, park visitors and park employees.

Wolf pups start making distinct sounds in July. The frequency of howls drops from an average of 1,100 Hz at two weeks of age to 350 Hz by six months of age. Until then, the higher pitch and shorter duration of the pup’s howl—occurring within pack choruses—provides metainformation that can reveal the age of a pup [13]. As field research scientists, the Petersens have become attuned to these high-pitched sounds, which they listen for each summer in order to estimate the number of new pups in a pack. But how do they survey the roadless, off-the-grid island for this sound? The famed wolf biologist Dave Mech, who worked on the island in the 1950s, played a 45-RPM record of a howl via a battery-powered player to elicit response howling. The Petersens actually used to howl through megaphones themselves to evoke responses, but they stopped because it was deemed to be unethical as it disturbed wolf behavior. Instead of projecting their own voices into the environment as pseudo-wolves, they now rely on “hearing aids”—a community of human listeners roaming the island.

Citizen science is “scientific work undertaken by members of the general public” that leads to both data collection and public education [14]. A citizen-science network that the Petersens have cultivated serves as their “hearing aid.” The Petersens tap into park visitors’ and employees’ listening experiences for clues about wolf reproduction. They ask, “Was it really just one wolf howl? What pitch did you hear? Was it like a coyote?” The Petersens “keep their antennas [ears] open” [15] for any information that comes through this human sound surveillance. When a promising report emerges they go investigate.

The Isle Royale National Park visitors whom I spoke with on the trail system mainly come to the island to get away from technology and to be seeped in solitude. The search for solitude is a component of the sublime, a concept that can be traced back to the cultural roots among the Biblical Desert Fathers who gave all their possessions to the poor and retreated to the desert. Even today, this search for solitude—to be in the “complete absence of” [16]—is a state of mind that many people seek [17]. A component of solitude for Isle Royale visitors is to be in the complete absence of familiar sounds. Within this silence, park visitors experience a noted switch from passive hearing to active listening [18]:

> “Getting off the trail heightens my awareness and my listening becomes more acute.” . . . “We notice every airplane that flies overhead. We don’t normally notice this at home.”
> “Juan heard the wings of a dragonfly” . . . “Here on Isle Royale, the silence is noisier than noise” [19].

Individuals on Isle Royale are actively listening, and they hear the wolves. When they do, most get excited and report their experiences back to park officials for validation. These observations of wolf howling make it to the Petersens through a variety of outlets: at Candy Peterson’s biweekly evening presentation, at the Petersens’ research cabin or through wolf howling reports that can be filled out at ranger stations. These exchanges form an acoustic “imagined” community [20] where the voice—the howl—creates an intimate sphere around it that includes all its hearers, limited in both time and space. Communities of many types—often united through sound: engines [21], bells [22] or amplified calls to prayer [23]—form different contextually rich webs of meaning with competing interests and voices.

Rolf and Candy Peterson nurture the embodied human experience of listening for the howl, an emergent property of a listening relationship between wolves and humans [24]. This relationship is about aesthetics—awareness and responsiveness to connecting patterns [25]. For Isle Royale acoustemologies, “a knowing—with and knowing through the audible” [26], human communication with the nonhuman is achieved not by means of dualistic Cartesian thinking but rather through an appreciation for humans’ place within nature. This type of interspecies communication is about identifying the differences and similarities between humans and nonhumans—leading to a critical, politicized awareness of environmental issues that is not external to the human agent.

**ECHO OF THE PAST**

The density of howling has declined along with wolf reproduction. The year 2012 was the first in which no wolf reproduction was documented by the Wolf/Moose Project, and by 2016 there were just two wolves roaming the island.
Isle Royale National Park officials are considering how to proceed, and their process reveals some old-world views of “nature,” distilled to this basic dilemma: to intervene or to “let nature take its course.” Their decision in this case, as articulated by the Isle Royale National Park superintendent among others, will more broadly set precedent in NPS mandates as they inevitably begin to adapt to global climate change. The document that will determine the fate of wolves on the island is the NPS’s Moose-Wolf-Vegetation Management Plan and Environmental Impact Statement (plan/EIS); it is not projected to be complete until 2017.

Under government law, the NPS includes sound as a constituent part in their “resource management” [27]. Each park individually identifies the “resources” [28] that they value. If the wolf howl—an icon and emblem of the soundscape in the NPS—is on the brink of vanishing, what responsibility do they have in preserving and protecting this feature of the “resource”? It became clear to me that Isle Royale National Park visitors value the wolf howl, but whether this will be considered in the plan/EIS is at the heart of the complex, and contradictory, relationship the NPS has with nature.

RETHINKING SONIC ENVIRONMENTALISM

One could view everyday life itself as theatre.

—JOHN CAGE [19]

This introduction to my ethnography of listening [30] has at its foundation my own past as a composer who made music and sound art with environmental themes. My work fell within the realm of environmental art that uses sound and other “natural” objects framed as artistic forms of environmental activism. But this pursuit can in fact perpetuate the nature/culture dualism. Much of this environmental art—from 15th-century landscape paintings to poems by the Transcendentalists and 1960s land art—falls within the tradition of “wilderness” as a construction, by presenting art objects as the best antidote to our human selves—a tradition of “wilderness” as a construction, by presenting the Transcendentalists and 1960s land art—falls within the realm of environmental art that uses sound and other “natural” objects framed as artistic forms of environmental activism. But this pursuit can in fact perpetuate the nature/culture dualism. Much of this environmental art—from 15th-century landscape paintings to poems by the Transcendentalists and 1960s land art—falls within the tradition of “wilderness” as a construction, by presenting art objects as the best antidote to our human selves—a refuge from which to understand how to save the planet [31]. Pulitzer Prize-winning composer John Luther Adams has clearly articulated this position: “By deepening our awareness of our connections to the earth, music can provide a sounding model for the renewal of human consciousness and culture” [32].

As Cronon counters, however, in fact this art, like wilderness, “quietly expresses and reproduces the very values its devotees seek to reject” [33]. Like “virtual reality” [34], environmental music acts as an illusion where individuals get the sense that nature can be manipulated and controlled, separate from the history from which it emerged. Existing within “realist assumptions and primitivist fantasies” [35] environmental music tends to lack the critical reflexivity it seeks out and ends up as a commodity—a product that can be bought, sold and capitalized upon.

As a “rethinking” [36] of environmental aesthetics as art in the Anthropocene [37], I propose that this Isle Royale acoustemology—a politicized, socioesthetic citizen science in sound—is a nuanced form of participatory, situational [38] environmental music playing out in everyday life; a (de)composition wherein the nature/culture dialectic (as opposed to a dualism) is critically engaged [39].

The moment I returned home from the island in 2015, I received this report from Rolf Peterson:

At least two wolves are still alive on Isle Royale. I just heard them howling, 9PM on 29 September. One was just west of Daisy Farm, the other one much farther away, maybe on the Greenstone above Angleworm. The wolves had just ceased howling when a saw-whet owl commenced its repetitive call. After the free-form of a wolf howl, the saw-whet sounds almost electronic [40].

Like this symbolic description of sound, this essay describes a location—a “common middle ground” [41]—where nature can be art and art can be nature. It hopes to create a place where music as environmental activism is not only an objectification of the very nature it seeks to protect but also an act of listening through an ongoing dialogue with humans and their relationship with “nature” through sound.

References and Notes

1 Isle Royale National Park visitor, personal interview, 2013.
2 For insight on the wolf from an animal studies perspective, see Garry Marvin’s Wolf (2012), The Oxford Handbook of Animal Studies (2014) and Animal Studies at MSU’s extensive online bibliography <www.animalstudies.msu.edu/bibliography.php>, including substantive categories such as: Animals as Entertainment and Spectacle; Animals as Symbols; Animals in Literature; Art and Popular Culture, and Conservation; and Wildlife and Human/Animal Conflict.
9 OED Online, howl (Oxford Univ. Press, September 2015).
in Western Thought from Ancient Times to the End of the Eighteenth Century (Berkeley: University of California Press, 1967).


14 OED Online, citizen science (Oxford Univ. Press, September 2015).

15 Rolf Peterson, personal interview, 2013.

16 OED Online, solitude (Oxford Univ. Press, September 2015).


19 Isle Royale National Park visitors, personal interviews, 2013.


34 Cronon [12] p. 46.


39 For an introduction to the emerging field of ecomusicology, please see Marc Perlman’s “Ecology and Ethnomusicology: The Metaphorical, the Representational, and the Literal” <http://ethnomusicologyreview.ucla.edu/content/ecology-and-ethnomusicology-metaphorical-representational-and-literall>.

40 Rolf Peterson, personal correspondence, 2015.


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Manuscript received 1 January 2016.
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