

# Against Listening

Brian House

*The practice of listening has been put forth as a corrective to humanity's ecological insensitivity, and the artistic use of recording technology has allowed us to experience nonhuman soundscapes. Yet such acoustic ecology warrants further critical attention. In this essay, I turn to Giorgio Agamben's notion of the sacred to show how the valorization of the listening subject can actually run contrary to ecological aims. In part, this has to do with an unresolved material politics that risks reifying old human/nature divides. To the extent that 'listening' has become a buzzword, I endeavour to hold on to the sonic ways of knowing implied by the term while calling for greater attention to the conditions of its practice.*

*Keywords:* Acoustic Ecology; Listening; Media Studies; Sound Studies

The sound artist asks that everyone close their eyes. Only then can we fully *listen* to a series of beautiful and strange sounds from the natural world. By doing so, our enhanced affinity with distant ecosystems will precipitate a greater political engagement with efforts to protect them.

I have enormously enjoyed countless listening sessions initiated by such a prompt, and they have inspired me to pick up a microphone and make my own field recordings in faraway places. But over the course of these experiences, I have become somewhat uneasy. The language of acoustic ecology—as a genre of sound art—is so deeply invested in the term *listening* that I wonder if this has impeded the critical evaluation of current practices. When we ask a listener to experience natural soundscapes that we have recorded elsewhere, playing them back via a speaker system or headphones, what is really going on?

This essay is one attempt to unpack such an encounter. My argument turns around the observation that acoustic ecology tends to sacralize listening. It transforms a basic human sense into a heightened, even esoteric practice. That in itself is no great revelation: aestheticizing the world is part and parcel of art. But such sacralization can run contrary, I argue, to the discipline's professed purpose of enhancing ecological affinity. Specifically, the listening subject is produced through the use of particular

technologies, without taking into account the political implications of that use. This works against what is the real potential for us, through sound, to gain experiential knowledge not delineated by the conventional bounds of the subject.

To be clear, I approach this with the utmost respect for acoustic ecology and its participating artists, and I do not exempt my own practice from critique along these lines. I am making a polemic argument. But I do think that there is a limit to how much mediatizing the natural world for an individually isolated listener can increase our collective sense of ecological interdependence, no matter how compelling the sounds. Furthermore, in the contemporary moment in which our social relationships are captured and capitalized by technological platforms, as artists, we must be vigilant about reproducing the same kinds of dynamics regarding our relationship to other forms of life.

Ultimately, this is more than just a matter of sound, as the enfolding of technology, aesthetics, and the politics of ecology plays itself out across our present situation. Acoustic ecology is in a good position to promote an expanded sense of *community*, a reach towards a political consciousness that includes the nonhuman. Pointing out some potential pitfalls along the way is done only in the hope of ultimately making that community more audible.

### Listening Material

At first glance, there is no more apropos resistance to our current media condition—overwhelming visual stimulation—than to shut it all out. With eyes closed, sound, which so often influences us subconsciously, is given our full attention, and it gives priority to our more liminal responses. In contemporary Western art practice, however, the idea of isolating this single sense implicitly references a (white, male) canon: John Cage's famous axiom 'let sounds be themselves' (1973, p. 10), the sound objects of Pierre Schaeffer (1966), or Schaeffer's and Michel Chion's concept of 'reduced' listening (1994, p. 31). What is emphasized in these concepts are the qualities of *sound itself*, sound that is separated from both its source and its meaning. Chion writes that '(t)he act of removing all our habitual references in listening is a *willed* and artificial act which allows us to clarify many phenomena implicit in our reception' (1994, p. 31, emphasis in the original). In Cage's case, this clarity approaches a spiritual experience, famously inspired as he was by the tenets of Indian philosophy and Zen Buddhism. For artist Francisco López, who typically passes out blindfolds before his performances, it is about a 'blind, profound and transcendental listening, freed from the imperatives of knowledge' (<http://www.franciscolopez.net/>).

Kim-Cohen (2009), among others, offers a forceful critique of such an approach. To bracket the meaning of what we hear is to erase its cultural context and hence to remove the possibility of meaningful response. He writes: 'The suggestion of an unadulterated, untainted purity of experience prior to linguistic capture seeks a return to a never-present, Romanticized, pre-Enlightenment *darkness* ... what are we to do with such experiences?' (2009, p. 112, emphasis mine). Critical theory and the political

stances it engenders would seem to require situating sound within an articulable discourse rather than ineffable experience. As Kim-Cohen points out, art is ‘a cultural activity with a tradition and conventions—an activity that does not perform in a vacuum, but that necessarily interacts with culture, politics, commerce, and sociality ... a vast meaning-making structure functioning in the manner of a text’ (2009, p. 115). From this perspective, Cage, for example, is best understood not as a proponent of sound itself, but as an intervener into the social structure that is musical performance—his works challenge performer/audience roles and ideas of authorship. They should be situated, furthermore, in relation to the Asian and African-American cultures from which he appropriates (Lewis, 2007).

Yet Kim-Cohen’s ejection of sound from semiotics is an elision that, given the medium, is particularly problematic. As Fred Moten writes, ‘Marvin Gaye’s phrasing reveals something to us about the erotics of time ... Marvin Gaye’s erotics are always also a politics’ (2003, pp. 224–225). Surely, the experiential effect—the affect—of sound on a listener cannot be so easily separated from its meaning as a text.

Such difficulty echoes our ambivalent relationship with nature, for which sound—especially in the case of acoustic ecology—is a ready proxy. Christoph Cox chalks the problem up to the limits of Kantian dualism that would divide the world into ‘a phenomenal domain of symbolic discourse that marks the limits of the knowable, and a noumenal domain of nature and materiality that excludes knowledge and intelligible discourse’ (2011, p. 148). Pure semiotics does not hear the politics of the voice behind the words, but to expect from sound itself some inherent value is also an attempt to bracket the body and the social impressions that shape the way we hear. Likewise, a conception of ‘nature’ as a physical reality apart from human thought is a linguistic divide that elides the real material interdependencies of our cultural activity with ecological systems. Neither fetishizing the intrinsic qualities of the natural world nor positioning it as a separate political entity which can be saved (and, hence, also exploited) fully expounds this actuality.

Cox suggests, however, that sound is better approached with less of a concern for its esoteric qualities or what it might represent, but instead with an ear to ‘what it does, how it operates, what changes it effectuates’ (2011, p. 157). This opens up a field of possibilities for thinking through—and listening to—political and social context in terms of sonic relations. Regarding nature, it then becomes a question of how listening practices orient us in respect to larger ecological systems of which we are already a part—and their extraordinary capacity to do so.

### **Acoustemology**

What is it, then, to listen? Steven Feld has notably called for a sonic epistemology, an *acoustemology* that echoes ‘how sounding and the sensual, bodily, experiencing of sound is a special kind of knowing, or put differently how sonic sensibility is basic to experiential truth’ (1994). Acoustemology is irreducible to language, and it elegantly expresses the non-dualistic concept of sound as a material becoming. But, I argue,

particular sensibilities are not universal—listening as a practice is culturally embodied. As an ethnomusicologist, Feld *studies* the acoustemology of cultures such as that of the Kaluli in Bosavi, Papua New Guinea, and the particular conditions that give rise to their way of listening. Additionally, as an artist, he has released (seminal) recordings crafted to *convey* the acoustemology of the Kaluli to Western consumers—recordings of ‘work, leisure, and ritual’ that contextualize these activities and the songs that accompany them in their vibrant rainforest environment. One practice of listening, in other words, has been translated into the heavily mediatized cultural milieu—record labels, music shops, CDs—of another.

Such an undertaking anticipates a provocation by Peter Szendy—‘Can one make a listening listened to?’ (2008, p. 5)—and it demonstrates how this is, to a considerable extent, a technological endeavour. Well aware of this, Feld explains in depth his process of capturing Kaluli music in the rainforest—he combines multiple portable-tape recordings with various microphone configurations into a single ‘hyperreal’ track. Though collaging sounds together from different times and places violates a certain documentary integrity, according to Feld this method fulfils ‘both technoaesthetic and ethnoaesthetic ideals’ (2005, p. 283). Kaluli people even participated in the mixing sessions, selecting the balance between human and animal sounds to match their aesthetic sense of what the forest sounds like. Feld acknowledges the potential for technofetishism in such a process, in which Western recordists are ‘reproducing their positions of privileged access and their ability to define just what kind of adventure may be had’ (2005, p. 284), but he judges the quality of the result—and the value of that result to the Kaluli in terms of cultural representation—to be well worth it.

Feld, of course, is primarily interested in human ethnography, and so the idea of nature he is concerned with is that as understood by the Kaluli in the spiritual context of their songs. But his recordings are an important precedent for much subsequent acoustic ecology, which ultimately distinguishes itself as the use of recording technology to convey a particular way of listening to the world, particularly a nonhuman one. Unlike with Feld, this is not necessarily rooted in ethnomusicological research. Contemporary sound artists—now armed with far cheaper and more reliable sound-recording gear—employ microphones and mixing boards to craft our auditory experience of nature even when human music-making is not present. What, then, is the acoustemological sensibility that is expressed in these recordings?

In some cases, artists still claim affinity with the philosophies of indigenous people apart from indigenous sound practices per se. Garth Paine provides one such example—by listening to the Australian landscape through high-tech, Ambisonic surround-sound microphones, he crafts a hyperreality which he believes is akin to an Aboriginal Australian ‘dreaming ceremony’ (2016, p. 364). He calls this ‘somatic listening’ to express how the body is ‘to directly experience the materiality of sound’ in a way that accesses the ‘flowing and vibrating field’ of aboriginal cosmology (Paine, 2016, pp. 363–364). Paine’s somatic framing invokes the affective turn in contemporary cultural theory as developed by Sedgwick (2003), Massumi (2002), and others who are

concerned with bodily sense, and he implicitly links this to indigenous peoples' presumably less destructive ways of being.

This is slippery territory, of course, given how closely it skirts the colonial idea that non-Western bodies have a greater connection to a material nature, an essentialization that ends up putting certain people in the category of the exploitable. There is also the question of whether Aboriginal listeners would agree that Ambisonics reveal a familiar alternative reality. But Paine is not alone in the desire to learn from indigenous approaches while hopefully avoiding such pitfalls. Latour (1993), for example, identifies the need for non-modern sensitivities precisely at the time they are most threatened by globalization and degradation of the environment. That said, the use of such highly engineered sound recording technology to achieve an indigenous acoustemology remains curious. There is dissonance between the kinds of experiences the technology supposedly enables—that is, a direct connection to nature associated with indigenous beliefs—and the relations surrounding the technology itself that presumably have nothing to do with such a cosmology.

Questions of technological mediation similarly arise with *Rainforest Listening* (2014) by artist Leah Barclay (see also her contribution in this issue). In this project, the soundscape of the Amazon rainforest is brought to the listener via earbuds and a smartphone app—these sounds are triggered as one walks around one's local surroundings that are virtually mapped to the geography of the wilderness. Barclay maintains that

if we can bring ... the sounds of the natural world to humans who would otherwise never think about them, they might be motivated and inspired to alter their habits enough to take action and respond to the ramifications of climate change . (<http://www.rainforestlistening.com/rainforest-listening.html>)

Technology is thereby a means of educating epistemically disadvantaged humans (but, given the iPhone, people who are also economically advantaged), casting the field recordist as, perhaps, an acoustemologist for the nonhuman.

But what is it for someone to *bring* sounds from somewhere else? The artist-recordist can attract the aura of a heroic explorer headed off into the wilderness to capture nature as such—Lawrence English's recordings of Antarctic winds (<http://emporium.room40.org/products/540303-lawrence-english-viento>), for example, or Chris Watson's sounds of various volcanos (<http://chriswatson.net/2011/04/06/bbc-radio-4-14th-april-2011/>)—a romanticism that has the scientific overtones of fieldwork with its specialized instruments of observation. With the remarkable acoustemological impact cultivated by these artists, however, their work goes further than just collecting and classifying. The implicit assertion is that hearing these sounds counts as a direct experience of nature by the listening audience. It at once accepts that the artist is able to conjure up such experiences on our behalf, and that the iPhone on the other end, for instance, is a neutral given (or at least a necessary and discountable compromise).

Another earlier example—R. Murray Schafer’s ‘soundscape’ project of the 1970s—is foundational to the imbrication of sound art and environmentalism. Schafer was deeply sceptical of audio recordings, and used the neologism ‘schizophonia’ to denote ‘the splitting of an original sound and its electroacoustic reproduction’, complaining that ‘modern life has been ventriloquized’ (1986, p. 139). And yet, Schafer later proposed a ‘radical radio’ in which he would put

microphones in remote locations *uninhabited by humans* ... to broadcast whatever might be happening out there; the sounds of wind and rain, the cries of bird and animals—all the uneventful events of the natural soundscape transmitted *without editing* into the hearts of the cities. (1993, p. 210, emphasis mine)

In this proposition, Schafer sidesteps the effect that such an intervention would have on the environment. The material and social infrastructure that would be necessary for such a broadcast certainly constitutes inhabiting these locations and shaping their representations (i.e. editing). At the time of writing, artist Charles Lindsay has made progress towards realizing a similar vision with his *OSA EARS*, a ‘networked array of microphones’ in Costa Rica designed to let the public listen in and monitor the ecology through its soundscape—the ambition is similarly latent in many other projects (<http://www.osa-ears.org/>). In this way, the evolution of Schafer’s thinking towards deferring the strong sense of human agency present in his earlier work anticipates the broader contemporary embrace of materialist approaches. But in presuming that such systems result in a direct connection to nature, how technology mediates that connection is masked, and the role of the sound artist/technologist in engineering it is mystified.

My own difficulty contextualizing the use of technology is apparent in *A Hundred Thousand*, which premiered at Brown University’s ‘Earth, Itself: Atmospheres’ conference in April 2016. Audio material for this piece came from a recording which I made in the Okavango Delta of Botswana, where I spent six weeks as part of a National Geographic-funded scientific survey (<http://www.nationalgeographic.org/projects/okavango/>). Comprising an evening-scape dense with biophonic relations, I added my heartbeats to the mix (which I had been monitoring continuously throughout the expedition) in an effort to situate the recording. In the resulting four-channel installation, listeners entered a dark room and were surrounded by audio playing at high-volume, which I hoped would establish a visceral relationship between them and the pulse of reed frogs, insects, and the occasional large mammal. Yet, instead of standing in the centre of the room as I had anticipated (and which was necessary to perceive the surround-sound effect), listeners tended to circumnavigate the space, intently concentrating on each speaker in turn. This at once frustrated my attempt to guide them into an essentially passive experience, revealed the artificiality of that attempt, and demonstrated an acculturated fixation on audio equipment in lack of other cues. The piece also left unanswered why exactly sounds from Africa needed to be extracted and instrumentalized to create



such an ‘immediate’ sonic environment, while great effort was spent minimizing the contingencies of the actual space.

In considering these various cases, it is evident that the attempt by acoustic ecologists to undo the division between listener and nature by providing a direct experience is compromised by the positioning of technology. The intended acoustemology might be associated, on the one hand, with imagined indigenous sensibilities that are assumed to be closer to nature and more intrinsically somatic—on the other, with a romanticized scientific objectivism. Neither fully acknowledges how technology structures the material practices in which the listener is enmeshed. Nonetheless, it has a significant impact on the acoustic knowledge—and concept of nature—that is imparted. Arguably, the somatic experience that results has as much to do with adapting our listening to technological mediation as it does with the value of the recorded sounds.

### A Sacred Apparatus

Such adaptation is a matter of political orientation. If we experience sound as a special kind of knowing, acoustic ecology constitutes what Michel Foucault calls an ‘apparatus’ (1980)—‘a set of strategies of the relations of forces supporting, and supported by, certain types of knowledge’ (Agamben, 2009, p. 2). Giorgio Agamben elaborates that an apparatus is ‘literally anything that has in some way the capacity to capture, orient, determine, intercept, model, control, or secure the gestures, behaviors, opinions, or discourses of living beings’ (2009, p. 14)—this might include such things as ‘the pen, writing, literature, philosophy, agriculture, cigarettes, navigation, computers, cellular telephones’, and presumably audio recorders and headphones as well. Apparatuses are both material technology and the social practices that surround them, and both Foucault and Agamben are particularly interested in the power relations to which such practices give rise. This is because knowledge and power together also ‘always imply a process of subjectification, that is to say, they must produce their subject’ (Agamben, 2009, p. 11).

Entangled in speakers, headphones, or VR headsets, the subject who is continually interpellated in acoustic ecology is the *listener*—eyes closed, head bowed, immobile, contemplative, concentrating, bored, or dreaming. This listener is both individual and universal, as reduced listening has erased all specificity. No matter how ‘actively’ the listener is asked to engage with the audio, they at least in part physically manifest this subjectification.

It is hard not to observe that this physical posture is remarkably congruent with that of prayer. At first, this seems to be about that spiritual connection to nature, a state of meditation on immanence that is often explicitly prompted during listening sessions. But consider Agamben’s formulation of the sacred that is derived from a transcendental eschatology. For Agamben (2009), that which is sacred is that which has been removed from its normal relations to a separate sphere. He presents this as a model for what the apparatus does in religious and secular contexts alike—the apparatus ‘captures’ some aspect of being, something that was previously spontaneous and free, and

reserves it for its own use. The fetishistic use of the term *listening* indicates that this is what has happened here. Listening, clearly, is something we do all the time. It is inherent in everyday life. But by capturing listening, the listener is explicitly cut off from actual relations with the world and is enveloped in this sacred space.

In this sense, acoustic ecology—as experienced by the listener away from the site of the recording—is more transcendent in character than it is immanent. Despite the intent to ‘immerse’ one in environmental sound, the relentless positioning of the listener (via earbuds, closed eyes, dark room with multichannel speakers, no talking!, VR helmet, etc.) produces a withdrawal of the subject from its environment. Listening is implicitly presented as something *beyond* these relations, something elsewhere, something out of time, for which in fact *abandoning* the body and its present material entanglements is the condition for experiencing. The technologies of sound, the mixing boards and speakers, although they materially constitute the listening apparatus, must be ignored. They are, rather, reserved for the use of the artist, ritual objects that make such a sacralization possible.

Furthermore, the experience in the concert hall does not necessarily stay there. Even in the case where we are alone listening in the woods, if we have been conditioned as listeners, the apparatus is still present—much as a sunset might remind one of a movie or a certain architecture might invoke a video game, we hear through the conventions to which we have adapted. As Walter Benjamin put it, ‘human sense perception ... is determined not only by nature but by historical circumstances as well’ (1969, p. 5). Acoustic ecology trains us how to listen to nature. And the question then becomes: does this way of listening, this acoustemology, match the purpose of enhancing our ecological affinities?

We have to entertain the suspicion, I think, that it does not, depending, of course, on our idea of what ecology is. The transcendentalism that is a product of using headphones, microphones, and closed eyes to experience a nature that is elsewhere clearly enforces a nature/culture divide. It is more closely akin, perhaps, to the listening environments for which the technology was originally designed—the concert hall, the movie theatre, and the home stereo. In the case of the latter, we can imagine how the high-fidelity audio system popularized in baby-boomer America matched the escapism of suburbia. The living room, here, might be presumed to be a neutral space in which the seated and motionless listener—with proper sophistication—could appreciate the fine differences in the quality of music reproduced by superior equipment. In this case, the situation of listening itself and the conditions that engender it are conceived of as separate from the object of listening proper, even if they are anything but innocuous, charged as they are with racial, gendered, and class-based determinations (such as the historically masculine culture of the fetishized stereo). The suburban conception of nature as essentially toothless and manageable is thus to some extent built in when we hear environmental sounds through such speakers—a system explicitly designed to create aesthetic experiences while bracketing material entanglements.

To be sure, to equate all acoustic ecology practices with such an arrangement is vastly overstating the case. One could argue, furthermore, that the use of audio to



spread ecological awareness and thus to work against environmental degradation means such complaints are moot. But this is a delicate operation. Agamben writes:

If a certain process of subjectification ... corresponds to every apparatus, then it is impossible for the subject of an apparatus to use it 'in the right way.' Those who continue to promote similar arguments are, for their part, the product of the media apparatus in which they are captured. (2009, p. 21)

Whatever the content, our listening practices carry a political valence—and one that is specific to the culture in which it is situated.

This leads to concern with how the listener as subject relates to the contemporary media condition. In the Western, neoliberal construction of late capitalism, attention is entirely on the individual as capital. This is reflected in the structure of online social media, which, though ostensibly about community, always addresses us in the singular. As Wendy Hui Kyong Chun puts it,

The subject of social media always remains distinguishable ... This YOU is relentless ... Whether or not YOU respond, YOU constantly register and are registered—YOUR actions are captured and YOUR silence is made statistically significant through the actions of others 'like YOU'. (2016, p. 23)

Chun dubs the capitalization of the individual 'YOU's value', which is what it is to extract value from the connections between captured subjects by reserving for itself the previously lived fact that we are always already connected. Facebook, of course, is a preeminent example, in that it attempts to co-opt friendship into a technologically mediated act. And though listening to music, in all its myriad cultural forms, has always been social, iTunes, Pandora, and Spotify assert a 'you' through accounts, playlists, skips, and advertisements that accompany every listening session, whether in the living room or through earbuds. The listening subject of the app and the internet is the individualized (and individualizing) successor to the suburban hi-fi, and now perhaps the most popular way to listen to music in the affluent West and beyond.

Acoustic ecology obviously has very different aims from social media and activates a very different set of social relations. But there remains an isomorphism between the two, given the listener who is isolated by the technological apparatus. The artist is to some extent also choosing to mystify our inherent ecological entanglements with a particular aesthetic experience that addresses 'YOU', the listener. In both cases, the transcendence offered by these platforms depends on the technology being thought separately from the experiences that it enables—we are presented with fantastic instruments that seamlessly transport and connect us. While I absolutely value the perspective on nature that I have been granted through mediated listening, that the apparatus employed bears this resemblance to capitalist strategies gives me pause.

### The Singular Plural

Is such destructive subjectification avoidable? When it comes to artistic practices, I think it requires thinking through what is meant by ecology and how that ontology relates to the kinds of experiences we construct. Agamben writes '(a)t the root of each apparatus lies an all-too-human desire for happiness. The capture and subjectification of this desire in a separate sphere constitutes the specific power of the apparatus' (2009, p. 17). Such desire motivates the individual, but is never fully contained within any concept of what the individual is, *listener* included—we have an inherent sense of something larger than ourselves that we are always seeking to realize. It is tempting to reify this as nature and to find in it an escape from the apparatuses that constrain our daily lives. But such a formulation is left lacking when it comes to the politics of engaging with the world. Ultimately, it surrenders to an essentialist view of nature as an other that is itself bound by constructed power relationships.

Consider instead the philosophy of Jean-Luc Nancy. As he puts it,

*Being singular plural* means the essence of Being is only as co-essence ... if Being is being-with, then it is, in its being-with, the 'with' that constitutes Being; the with is not simply an addition ... instead, the 'with' is at the heart of Being. (2000, p. 30, emphasis in the original)

Nancy does not reserve for the human individual a status prior to its relations, nor does he allow the individual to be subsumed into the collective. To me, this is a powerful ecological statement, because it asks us to examine the qualities of that *with*. In Agamben's terms, the *with* belongs to the *living being* that exceeds any subject produced via apparatuses. Agamben speaks of subjectification as a struggle, and the *with* here should also not be taken as an easy relation. It speaks of what it is to be in contact with one another and how to make sense of that contact. Nancy continues by arguing that 'what is shared is also what shares, what is structurally constituted by sharing ... The ontology of being-with can only be "materialist", in the sense that "matter" does not designate a substance or a subject' (2000, p. 83). This seems remarkably compatible with the acoustemology of Feld or Cox. Or, as Brandon Labelle describes it, '(s)ound is intrinsically and unignorably relational: it emanates, propagates, communicates, vibrates, and agitates; it leaves a body and enters others; it binds and unhinges, harmonizes and traumatizes; it sends the body moving' (2006, p. ix). Sound is precisely about the *with*, and there need not be anything esoteric about such intensely somatic relationships. This is, in fact, a basis for ecological thinking, because it ensures attention to the qualities of contact.

What is required, however, is a refusal to sacralize ecological interdependence into a relationship of a subject with nature. Or, as Agamben puts it, we must '(liberate) that which remains captured and separated by means of apparatuses, in order to bring it back to a possible common use' (2009, p. 17). This is why I have titled this essay with the polemic that I have—not to suggest that we should remain oblivious to the world, but that we engage it with all our faculties intact, eyes open, and stop



Lucia Monge, *Micrófono* (2015). Courtesy of the artist.

working so hard to rarify listening as something apart. Rather, how can a sonic sensibility make audible the natures that are immediate in our everyday lives? How can it visceralize the contingencies of technological control to which we are constantly subjected? And how can it sound out apparatuses of power that result in the degradation of nonhuman life? These should be the questions of acoustic ecology.

### Acknowledgements

Thank you to Lenore Manderson and Ed Osborn for the *Earth, Itself: Atmospheres* programming, to the Okavango Wilderness Project for supporting audio research, and to Lenore Manderson for assistance preparing this manuscript.

### Disclosure Statement

No potential conflict of interest was reported by the author.

### Notes on contributor

**Brian House's** artistic and academic work traverses sound and new media. He is currently a doctoral candidate at Brown University in the Department of Music and holds previous degrees in media studies, art, and computer science. As an artist, his work has been shown by MoMA in New York, MOCA in Los Angeles, Ars Electronica, Transmediale, Cincinnati Contemporary Arts Center, and Eyebeam.

**References**

- Agamben, G. (2009). What is an apparatus? In *What is an apparatus? And other essays* (pp. 1–24). (D. Kishik and S. Pedatella, Trans.). Stanford, CA: Stanford University Press.
- Benjamin, W. (1969). The work of art in the age of mechanical reproduction. In H. Arendt (Ed.), *Illuminations* (pp. 214–218). (H. Zohn, Trans.). London: Fontana.
- Cage, J. (1973). Experimental music. In *Silence: Lectures and writings by John Cage* (pp. 7–13). Hanover, NH: Wesleyan University Press.
- Chion, M. (1994). The three listening modes. In *Audio/Vision: Sound on screen* (pp. 25–34). New York, NY: Columbia University Press.
- Chun, W. (2016). *Updating to remain the same: Habitual new media*. Cambridge, MA: MIT Press.
- Cox, C. (2011). Beyond representation and signification: Toward a sonic materialism. *Journal of Visual Culture*, 10(2), 145–161.
- Feld, S. (1994). From ethnomusicology to echo-muse-ecology. *The Soundscape Newsletter*, 8. Retrieved from <https://www.acousticecology.org/writings/echomuseecology.html>
- Feld, S. (2005). From schizophonia to schismogenesis: On the discourses and commodification practices of ‘World Music’ and ‘World Beat’. In S. Feld & C. Keil (Eds.), *Music grooves* (pp. 257–289). Chicago, IL: University of Chicago Press.
- Foucault, M. (1980). The confession of the flesh. In C. Gordon (Ed.), *Power/knowledge selected interviews and other writings* (pp. 194–228). New York, NY: Pantheon.
- Kim-Cohen, S. (2009). *In the blink of an ear: Toward a non-cochlear sonic art*. New York, NY: Continuum.
- Labelle, B. (2006). *Background noise: Perspectives on sound art*. London: Bloomsbury Academic.
- Latour, B. (1993). *We have never been modern*. (C. Porter, Trans.). Cambridge, MA: Harvard University Press.
- Lewis, G. (2007). Improvising tomorrow’s bodies: The politics of transduction. *E-misférica*, 4(2). Retrieved from [http://www.hemi.nyu.edu/journal/4.2/eng/en42\\_pg\\_lewis.html](http://www.hemi.nyu.edu/journal/4.2/eng/en42_pg_lewis.html)
- Massumi, B. (2002). *Parables for the virtual: Movement, affect, sensation*. Durham, NC: Duke University Press.
- Moten, F. (2003). *In the break: The aesthetics of the black radical tradition*. Minneapolis, MN: University of Minnesota Press.
- Nancy, J.-L. (2000). *Being singular plural*. (R. Richardson and A. O’Byrne, Trans.). Stanford, CA: Stanford University Press.
- Paine, G. (2016). Ecologies of listening and presence: Perspectives from a practitioner. *Contemporary Music Review*, 35(3), 362–371.
- Schaeffer, P. (1966). *Traité des objets musicaux*. Paris: Editions du Seuil.
- Schafer, R. M. (1986). *The thinking ear*. Toronto, ON: Arcana Editions.
- Schafer, R. M. (1993). Radical radio. *Semiotext(e)16: Radiotext(e)*, 6, 291–298.
- Sedgwick, E. K. (2003). *Touching feeling: Affect, pedagogy, performativity*. Durham, NC: Duke University Press.
- Szendy, P., Nancy, J.-L., & Mandell, C. (2008). *Listen: A history of our ears*. New York, NY: Fordham University Press.