

# City Research Online

## City, University of London Institutional Repository

**Citation:** Browning, J. (2021). Sound and More-than-human Sociality in Catherine Clover's Oh! Ah ah pree trra trra. Organised Sound: an international journal of music and technology, 26(2), pp. 179-189. doi: 10.1017/s1355771821000352

This is the accepted version of the paper.

This version of the publication may differ from the final published version.

Permanent repository link: https://openaccess.city.ac.uk/id/eprint/25854/

Link to published version: https://doi.org/10.1017/s1355771821000352

**Copyright:** City Research Online aims to make research outputs of City, University of London available to a wider audience. Copyright and Moral Rights remain with the author(s) and/or copyright holders. URLs from City Research Online may be freely distributed and linked to.

**Reuse:** Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge. Provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way.

City Research Online: <a href="http://openaccess.city.ac.uk/">http://openaccess.city.ac.uk/</a> <a href="publications@city.ac.uk/">publications@city.ac.uk/</a>

## **ACCEPTED MANUSCRIPT**

## TITLE

Sound and More-than-human Sociality in Catherine Clover's Oh! Ah ah pree trra trra

#### **AUTHOR INFORMATION**

Joseph Browning

City, University of London

## **ABSTRACT**

This article transposes questions about socially engaged sound practices into a more-thanhuman register, turning an ear to the sounds of interspecies encounters. It takes its impetus
from a workshop aimed at forming a 'cross species choir' by the artist Catherine Clover, in
which participants tried to sing like, with and to birds in a London woodland. I describe how
Clover's speculative choir was informed by theoretical models drawn both from sound
studies and the environmental humanities, as well as a down-to-earth, humorous sensitivity
towards the limitations and absurdities of artistic practice. Where much theory associated
with sound art and experimental music sees sound as an ontological suture (Ochoa Gautier
2016) for repairing the fractured relationship between humans and nature, Clover's practice
offers a more ambivalent and, I argue, therefore more generative means of conceptualising
the role of sound within more-than-human social worlds. In particular, it uses sound to draw
attention to the apprehension of humans by other creatures and to various dynamics of

evasion, non-encounter and undecidability in our relationships with the more-than-human world. By amplifying this alternative way of understanding sound and listening, the article seeks to recast projects of social engagement through sound in more speculative and expansive terms.

## **MANUSCRIPT**

## 1. Introduction

Tower Hamlets Cemetery Park, East London. Not an obvious setting for an artistic experiment in interspecies relations. We met in a room of the Soanes Centre, an education charity building on the edge of the park. Greetings, introductions, small talk. The awkwardness that comes with meeting people to undertake an unknown and unconventional activity together. From the Café Oto website we knew that the workshop, led by multidisciplinary artist Catherine Clover and titled *Oh! Ah ah pree trra trra*, would seek 'to create a participatory, improvised cross species choir. It is a speculative attempt at considering language across species in the urban context, specifically between people and common wild birds.'

Just six of us: three women, three men, all white, probably middle-class, more than one PhD in the room. Let it be clear from the beginning then: our group did not reflect the ethnic

<sup>1</sup> The event was presented as part of the 'Musics and Other Living Creatures' series at Café Oto, in association with artist and curator Helen Frosi and as part of Sound *Fjord* and EnCOUnTErs, 'a multiarts project at the nexus of art, ecology and the sonic imagination'. See https://www.cafeoto.co.uk/events/musics-and-other-living-creatures-catherine-clover/

diversity of the London Borough of Tower Hamlets.<sup>2</sup> Marie Thompson has drawn attention to the racial dimensions of sound art's ontological turn, critiquing 'the role of white aurality in constituting a sonic materiality that can be cleanly distinguished as preceding sociality, discourse, meaning and power' (2017: 274). Thompson's theoretical critique has yet to be matched by much-needed empirical research into the demographics of the sound art scene, but, in my fieldwork on sound art and contemporary music in the UK, the majority of practitioners and listeners usually resemble me: white, middle-class, often artists or academics. The timing of the Oh! Ah ah pree trra trra workshop, on a weekday morning in July 2019, likely limited and skewed attendance towards white, relatively privileged participants with more leisure time or work flexibility. As Clover explained to me, a second workshop and performance, held at the weekend, were better attended and by a more diverse group of participants (I was unable to attend, so focus on the first workshop here).<sup>3</sup> Talking with Clover, it is also clear that she is aware of the often limited reach of sound art and concerned to make her own work as inclusive as possible. Holding the workshop in a park, rather than gallery or concert space, was one such attempt to make it more accessible. These efforts matter, but so does the bigger picture: a history of white privilege continues to structure participation in and access to sound art.

<sup>-</sup>

<sup>&</sup>lt;sup>2</sup> The 2011 Census found that over two thirds of residents were from minority ethnic groups. See https://www.towerhamlets.gov.uk/Documents/Borough\_statistics/Ward\_profiles/Census-2011/RB-Census2011-Ethnicity-2013-01.pdf

<sup>&</sup>lt;sup>3</sup> My account of *Oh! Ah ah pree trra trra* is based on my participation in the workshop and conversations with Clover about the project and her wider practice on several occasions in Melbourne and London, as well as a Skype interview on 31<sup>st</sup> July 2019.

I draw attention to these issues of human culture and sociality at the outset in part because my focus lies elsewhere: on questions of more-than-human sociality in sound art, as refracted through Clover's workshop. More precisely, my interest is in sonic art as a project of cross-species encounter *involving humans*, rather than in studying nonhuman sonic worlds in their own right (on zoomusicology, see Martinelli 2008).<sup>4</sup> For this reason, the make-up of our group needs to recognised early on, because, as I argue below, the human cultures surrounding sound art – whether Eurocentric and privileged or eco-feminist – and their attendant 'acoustic ontologies' (Ochoa Gautier 2016) structure the more-than-human socialities it can encounter and imagine.<sup>5</sup>

## 2. More-than-humanly Organised Sound

What kind of more-than-human world did the *Oh! Ah ah pree trra trra* workshop imagine? Introducing the workshop, Clover explained that it would centre on 'attentive listening and connection' within our group and with the park's animals, plants and microorganisms. We

<sup>&</sup>lt;sup>4</sup> My use of terminology in this article moves between 'more-than-human', 'nonhuman' and related terms. Like other authors, including several cited here, my use of 'nonhuman' is not intended to imply that other creatures are less-than-human. Instead, through this flexible use of terminology, I seek to recognise, on the one hand, the important differences between 'humans' and 'nonhumans', not least the existence of forms of sociality in which humans do not participate, and, on the other hand, the fact that such categories are mutually productive, not only conceptually, but materially, in that all beings are born of particular evolutionary and ecological entanglements. As Tsing argues, 'human nature is an interspecies relationship' (2012: 141).

<sup>&</sup>lt;sup>5</sup> For a related, although more far-reaching, discussion, see Goh's Haraway-inspired article on the 'natureculture of sound' (2017: 283).

were to 'think of ourselves as part of the park' and would be attempting to communicate with other species. But she also touched upon ideas that I had not encountered before in my fieldwork. First, an acknowledgement of the strangeness and incongruity of the activity, and that we might find it funny: 'There is an absurdity and humour to this experience so if you want to laugh, do! It's a great response.' (Not only was this a relief to hear, it also has conceptual significance, as I outline below.) Second, a suggestion about our relationship with the park and its inhabitants: 'we are not just listening and observing but we are also being observed, our presence is being noted.'

Clover's introduction to the workshop encapsulates the issues I hope to explore in this article. On the one hand, it presents a familiar a paradigm: *sound and listening as relation*. As I demonstrate below, this paradigm is central to much writing on sound art, especially where it engages with environmental issues, but it is also part of what Ana María Ochoa Gautier argues is 'a prevailing Euro-American ontology of music, sound, and listening [that] has emerged [in the second half of the twentieth century] in which these are understood politically as that which sutures torn relationships either between humans and the environment or among humans' (2016: 127). On the other hand, Clover's introduction gestured towards an alternative paradigm through her hint that the park was observing us, whether we knew it or not. This paradigm – what I call *sound and listening as undecidable* (non)relation<sup>6</sup> – became more apparent as the workshop progressed. This is not the 'other' of *sound as relation* – not *sound as non-relation* – but an attempt to recognise the undecidability inherent in what Haraway calls 'otherness-in-relation' (2003: 50).<sup>7</sup> One central aim of this

<sup>&</sup>lt;sup>6</sup> The awkward formulation demonstrates both the difficulty and importance of naming this paradigm within Western conceptual frameworks.

<sup>&</sup>lt;sup>7</sup> Derrida (2008) is another foundational text here.

article is to amplify the latter paradigm to enrich our understanding of the role of sound in more-than-human social formations. By bringing sound studies into dialogue with animal studies and the environmental humanities, I extend moves to interrogate the recent emphasis on sound's relationality (see Steingo 2018: 555-6; also Browning 2020b), advocating greater recognition of sonic ontologies in which relations are more fragile, contested or open to question. Writing about 'technological accidents and failures' in electronic music in Soweto, Gavin Steingo calls for 'a framework capable of accounting for both relationality and the non-relational perdurance of autonomous objects' (2018: 554, 556). With Clover's workshop in mind, we likewise need a framework attentive both to relationality and the undecidable, sometimes purposefully evasive, lives of autonomous beings.

In developing this argument, I approach Clover's workshop primarily *as theory* or, put differently, I stage an encounter (see Steingo 2018: 555) between the situated theory of Clover's workshop and other theories at play in writing on sound art. Alongside joining moves to question theory's status as the prerogative of the academy (Stokes 2013: 826, Western 2020: 305), this approach responds to sound art's status as a hybrid artistic-academic field, in which many practitioners are also scholars (Clover has a practice-based PhD from RMIT University). Clover's workshop also leavened its theoretical implications with a humorous and down-to-earth attitude towards sonic practice. Accordingly, this article argues for closer attention to how theory is translated into culturally-situated sonic practice and offers a corrective to much writing on (environmentalist) sound art, namely that only by *deescalating* claims about its power and politics can we understand its significance.

-

<sup>&</sup>lt;sup>8</sup> Georgina Born's discussion of 'nonhuman sound' (2019) represents another important contribution to this debate – one that, although focussed on 'sound as relation', resonates with my argument through its radically expanded, Whitehead-inspired theorisation of 'relation'.

The article does not seek to make the case for a more-than-human account of sociality; that idea is already fully-fledged in the environmental humanities and has long been growing in ethnomusicology (see Feld 2017, Silvers 2020). As Anna Tsing writes, 'How could it have ever occurred to anyone that living things other than humans are not social? ....If social means "made in entangling relations with significant others," clearly living beings other than humans are fully social—with or without humans' (2013: 27). Taking this as given, I pursue some narrower disciplinary implications, concerned with how sound and listening feature in theorisations of more-than-human sociality. Much ethnomusicological work has focussed on such issues in indigenous cultures around the world (e.g. Ramnarine 2009, Brabec de Mori and Seeger 2013, Simonett 2015, Feld 2017, and, for a bird's-eye view, see Silvers 2020). By contrast, my focus is on what we can, for want of a better term, call Western cultures, with Western Europe and settler-colonial Australia particularly at issue.

The article can also be read as entailing a playful rereading of the title of this journal, intended to reframe the notion of 'organised sound'. Although *Organised Sound* takes its name from Edgar Varèse's coining of the phrase (Varèse and Chou 1966: 18; see Risset 2015) and 'concentrates upon the impact which the application of technology is having upon music in a variety of genres', <sup>10</sup> ethnomusicologists would be hard put not to think of John Blacking's much-quoted characterisation of music as 'humanly organised sound' (1973: 3). The journal's implied topic of 'technologically organised sound' thus propels Blacking's characterisation into long-standing debates about techne, tool-use, and prosthesis as definitive both of human nature and its extension. The etymology of 'organised' is of course suggestive

-

<sup>&</sup>lt;sup>9</sup> On why more-than-human sociality has been so long neglected and how we might study it, see Tsing (2013).

<sup>&</sup>lt;sup>10</sup> https://www.cambridge.org/core/journals/organised-sound

here: from the Greek órganon (tool, instrument) to the proliferating senses of 'organ' (musical instrument, body part), 'organism' (living being) and 'organisation' (social system). Technology, life and sociality are interwoven in this term, and, etymology aside, the question of *who or what* is involved in organising sound is very much at issue in this journal as it was in Clover's workshop. This article advocates greater attention to *more-than-humanly* 'organised sound'.

## 3. Theory in the Woods

With Clover's introductory explanation in mind we began a 'listening walk', moving slowly and silently through the woodland cemetery for around 15 minutes. This brought us to a small glade, with rough tree-stumps for seats, where the main workshop took place. After briefly discussing which birds we could hear, and before any 'voicing' (Clover's preferred term; she rarely mentioned 'singing'), Clover explained that she would read several texts to help 'expand' our sense of how we might relate to animals through sound. A discussion of human-animal (and especially human-pigeon) relations from Donna Haraway's *Staying with the Trouble: Making Kin in the Chthulucene* (2016). Passages from Salomé Voegelin's *The Political Possibility of Sound: Fragments of Listening* (2019). And excerpts from an article by anthropologist Deborah Bird Rose about the 'philosophical animism' of Val Plumwood (2013). Each was a few pages, read aloud.

<sup>&</sup>lt;sup>11</sup> As captured in Stiegler's concept of 'general organology' (2014: 5).

<sup>&</sup>lt;sup>12</sup> That Voegelin's book appeared both in Clover's workshop and in the call for papers for this special issue of *Organised Sound* demonstrates the small world of sound art theory and practice.

What should we make of this burst of academic theory on a summer day in a London park? Clearly it demands something other than a standard academic deployment of scholarly theory to explain worldly practice. The mobilisation of theory in much contemporary art (Halsall 2016) requires, I suggest, renewed empirical attention to how theory is practiced: where, when, how, why, by whom and what theory is being used? In Clover's workshop, theory was, amongst other things, importantly oral-aural: reading aloud is important to her artistic practice and, here, it re-emphasised the act of listening and brought a heightened sense of a pedagogical moment that was also intended to feel inclusive – as Clover commented, being read to is a common childhood experience. It was also clearly gendered: all the texts were by women who belong to various traditions of feminist thought. And it was theory practiced outdoors: we listened to the words surrounded by exuberant mid-summer growth of nettles and saplings, hearing birdsong, in the heat and bright-dappled light, touching rough wooden seats, our feet on tarmacked ground covered with dry leaves and traces of litter.

I dwell in detail on only one of Clover's chosen readings here, in part so as not to overdetermine the workshop's theoretical stakes, which are not simply reducible to these texts. The reading I found most striking was from Rose's article 'Val Plumwood's Philosophical Animism: Attentive Inter-actions in the Sentient World' (a choice that traced a genealogy of feminist reading from Plumwood to Rose to Clover). The excerpts expanded on the idea, mentioned during the workshop introduction, that we were situated in what we might call an *ecology of attention*: as humans we both apprehend and are constantly apprehended by the more-than-human world in a rich variety of ways; sometimes we are aware that other creatures are aware of us, but equally – and key to the workshop and my argument here – we might be unaware of other creatures actively concealing themselves from

<sup>&</sup>lt;sup>13</sup> Clover, Skype interview with the author, 31 July 2019.

us. Rose develops 'an enlarged account of active listening', illustrating her argument with creatures associated with Plumwood (famously the survivor of a crocodile attack) and with Rose's fieldwork with Aboriginal Australians:

I am proposing that listening, and more broadly, paying attention, should also be considered an active verb; indeed in multispecies creature communities, it must be so considered.... Consider the crocodile: its silent and concealed attentiveness is very far from passive! Often it exercises its intelligence precisely by *paying attention without drawing attention*. Good hunters (nonhumans and humans) do this: they know others are paying attention, they know the ways in which others pay attention, and *they find ways to circumvent that attention*. The exercise of agency calls for both communication and attention; one is not so much an actor as an inter-actor or participant. Let us think that to participate is to be attentive, to be knowledgeable, to act on knowledge, or *to refrain from acting* (which is also a form of intelligence)....

Successful inter-action, for an echidna who is being hunted, is to elude the hunter.

That too, *that capacity to remain hidden, is a form of action*. (Rose 2013: 102-3; my emphases)

As Clover read from Rose's text, I became acutely aware of the potential un-sensed presences in the trees and tangle of concealing undergrowth surrounding us. Perhaps the woodland setting helped, rendering the academic theory more tangible and making nearby creatures, paradoxically, somehow more theoretically pertinent and proximate, despite their hiddenness. It is easy to pay lip service to the dynamism of an environment yet still paint ourselves out of the picture; Rose's text made clear that we might be at stake too. Hearing the theory in situ primed us to recognise the ecology of attention into which we would sing.

## 4. Sound, Sociality and Difference

How does the situated theory of Clover's workshop speak to wider theories of more-thanhuman sociality or human-environment relations within the sonic arts? Before addressing that
question, I should note a dilemma: I want to sustain the politics of citation evident in Clover's
workshop, and so am wary of diffusing her broadly eco-feminist theoretical standpoint by
outlining a proliferation of other scholarly positions and contributions. <sup>14</sup> It does not, however,
require a searching study of the sound art literature to demonstrate the considerable distance
between, on the one hand, those aspects of Clover's practice informed by Rose and
Plumwood's work, and, on the other hand, treatment of sound in writing on environmental
sound art, where the paradigm of *sound as relation* predominates. Take, for example, an
important article by Jonathan Gilmurray, which identifies the recent upsurge in what he calls
'ecological sound art'. As well as foregrounding 'the principle of interconnectedness',
variations on the theme of relationship underly four of the five 'core approaches' that
Gilmurray provisionally outlines as characteristic of ecological sound art: 'Enacting
metaphors which facilitate a personal connection with environmental issues', 'Articulating

<sup>&</sup>lt;sup>14</sup> I am grateful to an anonymous reviewer for highlighting one such relevant contribution: Bernie Krause's 'acoustic niche hypothesis' (see Krause 1993), which suggests that organisms adjust the frequency and timing of their vocalisations in response to other sound-making within their ecosystem, such that different individuals and species occupy separate acoustic 'territory' (1993: n.p.). In fact, Clover mentioned her interest in Krause's ideas to me, but noted that she chose to foreground other writers in her workshop, rather than Krause, in part because his work is so widely known. Parts of my discussion here could well be understood in terms of our human vocal transgression into, or inability to access, other organisms' acoustic niches, and the question of how silent yet attentive creatures figure in Krause's hypothesis, but Clover did not highlight such topics and I focus on other dimensions of the relationship between her practice and the wider literature.

the harmonious coexistence of humans, technology and the natural world', 'Allowing us to experience normally inaccessible aspects of the environment' and 'Facilitating community engagement with ecological issues' (2017: 34, 35, 37). Sound connects, mediates coexistence, gives access and engages – all approaches within the *sound as relation* paradigm and in contrast to some aspects of Clover's practice.

Only 'some aspects' however: as I have noted, Clover's practice partakes of both paradigms and the same is true of other artists, authors and literatures. Thus Gilmurray quotes Voegelin - 'We do not hear entities but relationships, the commingling of things which generate a sonic world' (2014: 162) – and in more recent writing, which Clover read in her workshop, Voegelin continues to describe an 'aesthetic of interconnectedness' and 'ethics of participation' (2019: 57, 58), while also emphasising the contingency of 'encounters and misses' (2019: 86). Not a stark binary then, but an imbalance in current thinking on ecological sound art and the sonic arts in general. Regarding the latter, take the first line of Brandon LaBelle's *Background Noise*: 'Sound is intrinsically and unignorably relational' (2015: xi). Will Schrimshaw questions this 'primacy of relations' as part of a wider critique of the 'new orthodoxy' of immersion in sound art and associated writing (2015: 163-4, 155), drawing examples from prominent texts by LaBelle, Voegelin and others (Spencer 2019 offers a related critique of Voegelin's 'sonic materialism'). This orthodoxy is allied with the prevailing Euro-American view, identified by Ochoa Gautier, of sound as ontological suture between humans and environment (2016: 127). Similarly, David Ingram critiques a reliance in theoretical writing and various musical traditions on tropes of 'eco-listening' and 'oceanic' immersion, whereby 'the sense of hearing overcomes the limitations of sight by enacting the fundamental ecological principle of holistic interconnectedness' (2010: 59). Ingram turns, like Clover, to Plumwood to demonstrate the limitations of this paradigm: as Plumwood observes, the 'analysis of humans as metaphysically unified with the cosmic whole will be

equally true whatever relation humans stand in with nature', whether conservationist or exploitative, so instead, 'We need to recognise not only our human continuity with the natural world but also its distinctness and independence from us and the distinctness of the needs of things in nature from ours' (1993: 177-8; cited in Ingram 2010: 64). It is better recognition of this difference, and attendant social dynamics of evasion, hiddenness and non-encounter, that I want to encourage here.<sup>15</sup>

## 5. Translating Acoustic Ontologies

Clover's use of Rose's text also raises questions about how theory is translated as it moves between settings. No theory is left unchanged by its mobilisation. Shifts here include the movement from indigenous thought to anthropology to art; from Australia to Britain; from rural livelihood practices such as hunting and travelling to an urban artistic practice; and a shift in ecologies, substituting echidnas and crocodiles with blackbirds and pigeons. This question of translation is complex, however, as acknowledged in Rose's text: 'rather than mimic or appropriate indigenous animisms she [Plumwood] was developing a foundation that could be argued from within western philosophy' (Rose 2013: 93). Furthermore, as Rose and Plumwood argue, the idea of a 'hyperseparation' between indigenous and Western thought is part of 'the structure of dominance that drives western binaries, including nature/culture, female/male, matter/mind, savage/civilised' (2013: 94) and fuels colonialism and environmental destruction. So, more accurately, Clover's workshop participates in a complex

<sup>&</sup>lt;sup>15</sup> DeLuca offers a complementary critique of 'environmental sonic art', likewise advocating greater recognition of nature's 'autonomy' (2018: 71).

field of translations, resonances and differences between indigenous thought and Western eco-feminist philosophy.<sup>16</sup>

This complex inheritance places Clover's workshop 'inside yet sometimes out of alignment with' (Browning 2019: 23) the dominant Euro-American 'acoustic ontology' identified by Ocho Gautier. It suggests an acoustic ontology in which alterity and the apprehension of the human by the nonhuman are conditions for more-than-human sociality and cross-species communication (see Ochoa Gautier 201: 139). As Clover put it, 'It's like removing ourselves from the centre of our world.... We're always looking from our point of view, but if we suddenly think "Hang on...I'm being listened to, I'm being observed", then it explodes our sense of self'. To be sure, this is no full-blown cosmology, no fundamental rewriting of Western nature-culture binaries. But it does suggest that, while music scholars have typically looked to indigenous cultures for alternative acoustic ontologies, we need also to study attempts, however rare or fleeting, to experiment with current ontological and epistemological settlements in Western sonic cultures.

## 6. Humanising More-than-human Theory

The listening walk and readings were the first steps towards the 'cross species choir'. Next Clover turned attention to our bodies and voices. Standing, we began with breathing exercises: first breathing silently, then with a voiceless, horse-like exhalation through our

<sup>&</sup>lt;sup>16</sup> In her own writing, Clover (2020a, 2020b) has explored the relationship between her artistic practice and Aboriginal Australian language about birds within the wider context of settler-colonialism and its impacts on Aboriginal people and nonhumans.

<sup>&</sup>lt;sup>17</sup> Catherine Clover, Skype interview with the author, 31 July 2019.

lips, then low- and high-pitched hums on the outbreath. Next, whistling and animal imitations – woofs, miaows, moos – provoking laughter and the mild exhilaration of half-chosen public embarrassment. These exercises warmed us up, vocally and psychologically, while also preparing us for later exercises via hybrids of human-animal voicing, whether the stylised, child-like imitations of farmyard animals or, later, when Clover asked us to try to woof or miaow in a whisper, shout, yodel, grunt, or hum, filtering our imitations through human vocal conventions. This highly scaffolded approach was intended to ameliorate the unfamiliar and potentially confronting prospect of cross species voicing.

I was struck at the time by the contrast between the highly conceptual, sometimes rhapsodic, style of much writing on sound art, including those texts mentioned above, and the experience of these voicing exercises as disarmingly humorous and slightly absurd. I remain convinced that there is an important lesson in that disjuncture, namely to puncture any assumptions about the relation between theory and practice in the sonic arts. For all that sound art practices are often highly indebted to theory, much theoretical writing is remote from the lived realities of such practices, not least because they often feel bizarrely at odds with wider cultural conventions. By making such incongruity part of the workshop, Clover acknowledged something that is too often ignored.

The incongruity of our experiments in cross-species communication was modulated by Clover's tendency to play down her own creative and pedagogical authority. Several times she commented not only that the point of the workshop was not to be accurate, but also that she was not a trained singer or an especially good mimic. Her general disposition, although occasionally directive (e.g. asking us to turn off our phones), was one of encouraging experimentation and collaboration, rather than artistic vision or accomplishment. Her humour likewise served to questioning her status as leader or author of the project. All this helped to humanise the workshop, grounding more-than-human theory in mundane practice, personal

fallibility, and a sense of collective and culturally incongruous endeavour. It gently conveyed not only her own non-mastery of the practice we were all attempting, but also that this practice was not best understood as something that anyone could master: our mimesis was intrinsically experimental, absurd, and speculative (see Taussig 2020).

## 7. Singing like/with/to/for Nonhumans

After the voicing exercises, Clover introduced us to the material that would form the basis of our cross-species choir, handing out printed scores headed with the names of eight common wild birds including swift, blackbird, wren, and pigeon. The simplicity of these text-scores belies a range of prior creative decisions. They are onomatopoeic renderings of bird sounds in mostly word-like groupings, written in italicised, lower case, roman lettering, often patched with blank space. They have a distinct aesthetic and point in certain, albeit relatively broad, technical directions: towards, for example, the liberal use of silence and patterns of repetition or variation. They rely on broadly English-language conventions for the textual representation of bird calls (while introducing the scores, Clover handed out 1970s bird guides with similar renderings). The texts ranged from the intricate and highly varied scores for the blackbird and wren to the swift scores, consisting entirely of long-held 'eeeeeeee' sounds. Born of a culturally specific and artistically idiosyncratic transcription process, the scores ambiguously render bird communication in terms of human communicative norms. After reminding us not to worry about accuracy, Clover led us through the scores, explaining a little about each bird and their calls and attempting each one herself before we tried as a group. It is worth noting that Clover framed her renditions not as 'demonstrations' or even 'examples', but 'attempts', in keeping with the emphasis on non-mastery throughout the workshop. Nonetheless, they played an important pedagogical role, conveying helpful

information about pitch, volume, timbre and timing that was not present or at least only nascent in the scores. The herring gull score – starting: *ahhhh ah ah ah* – initially seemed opaque to me, but when she voiced it, I immediately realised that I was in fact familiar with this loud and keening call.

These pedagogical materials and mimetic experiments contributed to the indeterminate forms of sociality the workshop explored. The scores partially oriented the workshop towards the conventions of Western art music, yet Clover's comments undercut any straightforward treatment of the scores as authoritative texts demanding faithful performance. She explained that the scores could be voiced 'word for word' (not equivalent to mimetic accuracy, as we shall see) or used for improvisation, and that we could 'try out' different birds. There was no fixed way of interpreting the scores, and no fixed score for individuals or the choir, but rather a flexible set of materials, reminiscent of various avant-garde and experimental music practices. Nonetheless, the scores were pedagogically important and did incorporate an important appeal to fidelity, not of performance, but transcription: Clover explained that all the birds represented in the scores could be heard in the park (she had undertaken a prior visit to survey the space). As both documents of the park's sounds and instructions for soundmaking, they straddled Seeger's classic (1958), and subsequently destabilised (Nettl 2010: 77-80), distinction between descriptive and prescriptive notation. All these points made the scores an ambivalent, and therefore generative, pedagogical material. They both afforded creative activity and foregrounded the choices and uncertainties involved.

As we tried each score, it quickly became apparent that some birds were much easier to imitate than others. Crow and wood pigeon calls fall within the human vocal range, and are slow, simple and familiar enough to allow serious attempts at faithful imitation – at least, as Clover mentioned, to our human ears. Wren and blackbird songs are, by contrast, high, varied, rapid and very hard to imitate. This disjuncture between different types of bird sound,

and the sheer difficulty of accurate imitation in some cases (notwithstanding exceptionally skilled bird imitation in some cultures), helps to foreground the 'speculative' dimensions of our attempts to form an interspecies choir. It demonstrates a field of mimetic possibilities stretching away from the human voice; mimesis is not simply accurate or inaccurate, possible or impossible, but a varied, fallible yet fertile, learnable, expandable practice. It also forces us to confront questions about the 'speculative' purpose of the exercise – if accuracy is not only not the point, but in some cases laughably out of reach, then what is the aim of the workshop and what communicative possibilities exist?

As I discuss further below, one possibility is that speculative practice allows us to try on dimensions of other creatures' subjectivity. The wren score, for example, is a transcription of an almost un-hearably rapid song; voicing it 'word for word' results in sounds nothing like the original birdsong. This disjuncture between original and copy might, however, be suggestive of the bird's different experience of time, impossible perhaps to inhabit, but available to be imagined. Framing the workshop as speculative also prompts a rethinking of our theories and practices of communication and expressivity. The academic texts that Clover read aloud provide some impetus for this reworking. Voegelin's book is concerned with a very broad sense of sonic 'possibility' (2019) and Rose's article highlights, more narrowly, that nonhuman communications 'do not always require an audience: march flies will do what they will do whether anyone is paying attention or not, and so will swifts and cicadas and many others. Their way of living is communicative, but it is not necessarily targeted at anyone in particular' (2013: 104). Thus for the Aboriginal people with whom Rose worked, march flies are 'tellers' that indicate when it is time to dig for crocodile eggs. She notes that this idea helps to defuse Westerners' 'discomfort around the idea that any nonhuman being really gives a darn about me and my projects, outside of the obvious contexts of, say, hunting' (ibid.), instead shifting attention on to the availability of information and the

possibility of response. Something similar applied in the workshop setting: if we understand birdsong not as directed at specific individuals, but as available to anyone prepared to listen (birds in nearby territory, predators, interested humans), this shifts our concern away from targeted communicative acts and towards the question of human apprehension of already-communicating 'creature-languages' (2013: 103-4, after Boyle 2006; see also Kohn 2013).

As well as loosening assumptions about the necessity of intention and attention to communication, the workshop also unsettled the roles and relationships involved. After trying each bird, we made several attempts at the interspecies choir: as Clover instructed, we chose a bird and then spent 5 minutes voicing the bird, while moving freely around the space, listening both to each other and to any birds nearby. In one sense, the workshop presented a familiar kind of socially-engaged, collaborative or participatory art. Clover has a selfdescribed interest in creating 'artworks [that] are social in nature'. <sup>18</sup> As attendees, we were practically engaged in art-making and over the course of the listening walk and voicing exercises we took on a variety of roles such as listener, learner, collaborator, improviser and sound-maker. In another sense, the workshop went further than much sound art or experimental music in troubling conventional roles such as 'performer' and 'audience member' (and the conventionalised split between the two), as well as the particular idea of a 'choir' as a collective of singers. Clover did not discuss the term 'cross species choir' in detail, even as it served as a central organising concept for the workshop, and so it only ambiguously delineated our socio-sonic formation. This left unresolved not only the issue of whether our vocalisations were 'song', but also the question of whether surrounding birds and other organisms could be part of the choir and, if so, on what terms they could be understood to participate or perform (actively/passively, intentionally/unintentionally and so on). Such

\_

<sup>18</sup> http://www.ciclover.com/bio.html

ambiguities are entirely in keeping with Clover's ideas about the contingency of interspecies 'communication' and 'collaboration' discussed below. Similar uncertainty attended questions of reception: as other people passed by, walking dogs or talking loudly into mobile phones, they traced an uncomfortable boundary position somewhere between audience, eavesdropper, and intruder. If we were performing to anyone, if we had an audience, it was more likely the woodland's often-hidden nonhuman inhabitants (even while some of those nonhumans might be singing alongside us).

How might we theorise the role of sound and listening in this deeply ambiguous more-than-human social formation? Building on Rose's work, I suggest that, while sound mediates social relationships, it also entails dynamics of non-encounter, withdrawal and undecidability. These dynamics mean that we (humans) cannot know if we are being heard (or otherwise sensed) by unknown nonhuman others and so cannot know if we are in relationship or not. This takes us beyond the paradigm of *sound as relation*, or even *sound as non-relation*, towards a more indeterminate proposition: *sound and listening as undecidable (non)relation*. This is not simply at issue when nonhumans evade human senses. Such undecidability also patterns known human relations with known nonhumans: in the workshop, even when it was clear that we were being heard by, or singing at the same time as, the birdlife around us, the implications were far from straightforward.

As I argue elsewhere (Browning 2020a: 206), Eve Kosofsky Sedgwick's notion of 'periperformativity' valuably complicates our theorisation of such sonic practices: rather than simply seeing birds as our co-performers or audience, our workshop vocalisations can instead be understood as happening *alongside* birdsong, at once evading and dramatizing the normal conditions of performance and reception (2003: 67–92; 2011: 55–7). In the workshop, Clover made it clear that cross-species communication was far from guaranteed and, as she commented to me later, she avoids talking about her work in terms of interspecies

'collaboration'. Rather our voicings were undecidably polyvalent: with birds, like birds, to birds, and for birds. We sang alongside birds, sharing a space of more-than-human sociality (not least in that the birds were listening to each other), while remaining unsure why they were singing; we sang like them, attempting to enter into more-than-human communicative registers by mimicking their own sound-making; we sang with a sense of birds as a potentially receptive, yet far from guaranteed audience. Although this approach was anticipated in Clover's readings, the transition from theory to practice should not be taken for granted; we need to theorise this movement too. My suggestion is that doing more-than-human theory in practice involves both escalation and de-escalation. Undecidability made the stakes of our speculative exercise both more immediate and more remote, bringing performative intensity, mundanity and awareness that we were no doubt unaware of much that was going on around us. When things did start to happen, 'speculation' became more than simply theoretical: it was propelled by experiences of encounter as creatures chose to enter into relation, revealing themselves, approaching us, and making sounds themselves.

## 8. Three Encounters: Fox, Crows, Robins

During one of our 'voicings' of the scores, a fox padded out of the undergrowth, looked straight at us, then disappeared. Putting questions of nonhuman motivation aside for now, consider instead our human reactions to the fox: we pointed, exchanged glances, but said nothing and continued to voice our birds or briefly fell silent, only discussing it afterwards. This turn to the language of physical gesture perhaps signals a reluctance to interrupt the performative act or an awareness that speech might have spooked the fox, but here it is notable mainly for the unfamiliarity, the mundane strangeness, of the human social situation

that arose because of our speculative choir. It prompted a refusal of human language and made our interpersonal dynamic strange.

For another 'voicing', several of us decided to make crow sounds and so, by chance, our small choir became dominated by 'cawing'. After a few minutes, several crows appeared, flying in the canopy high above us, uttered a few 'caws' of their own, then flew off. Talking afterwards, the momentary interaction clearly provoked a delightful and lasting sense of encounter. We felt that the crows had come to us and that we had called them through our mimicry. Had the crows heard us as a territorial threat or as a signal that other crows had found food? Such possibilities assume that the crows temporarily heard us humans as crows, but our imitations were not especially faithful and so perhaps the crows were curious about, rather than fooled by, our singing. Thom van Dooren describes how, historically, humans have 'tak[en] advantage of [crow's] curiosity by imitating their calls to attract and shoot them' (2014: 128; after Marzluff 2005, Walters 2006). Similarly, it is not clear whether the crows themselves were 'cawing' to us or about us. In short, the encounter prompted speculation about crow perceptual faculties, crow motivations, crow socialities, and so produced an undecidable multiplicity of interpretations (Morton 2010: 74; Browning and Lim forthcoming). Navigating this multiplicity necessarily involved attempts, however mundane, to try out other creatures' subjectivities, all the while looking back at ourselves as human subjects. It involved recognising other creatures as, in Rose's astute phrase, 'always mysterious, but never mindless' (2013: 94). It also offered a rare sense of being acknowledged by wild animals when many of us – city-dwellers both privileged and precarious in much of the global north – are, at most, only habituated to the attentions of domesticated animals. Importantly, this short-circuiting of habituation may work both ways: although crows (and foxes) might respond relatively predictably to normal human behaviour, they are not habituated to experimental vocal mimesis of animal sounds. Sound, in this

situation, allowed for more emergent interspecies encounters than everyday life typically offers.

Another encounter. To expand our sonic resources, and as an option for participants who were less comfortable with vocalising, Clover handed out Audubon bird calls, small devices that produce high-pitched, bird-like squeaks by turning a metal plug inside a rosined wooden casing. Whenever someone used these devices, a robin would almost always appear at the edge of our glade, keeping its distance, yet clearly intent on the source of the sound. I was vaguely aware of the controversy around Audubon calls<sup>19</sup> and the consistency of the effect, dampening the birds' normal caution, made me uneasy (perhaps too much mastery in a workshop committed to non-mastery). Whatever the actual ethics of this encounter (low stakes by any account), it demonstrated that sound can give control over other species.

I briefly sketch these three encounters and their often-ambiguous implications in order to highlight still other uncertainties that attend the exploration of more-than-human sociality through sound. Sound can cause or even force interspecies encounters, subtly estrange human social relations, and prompt speculation about the undecidable yet attentive experiences of

<sup>&</sup>lt;sup>19</sup> Audubon calls, 'pishing' (vocalising sounds like 'pish' to attract birds) and, more recently, the digital playback of recorded bird calls through smartphone apps raise complex ethical issues: such techniques and devices may habituate, distress or otherwise harm birds, but they are also important for conservation and may help to minimise human disturbance of birds' habitats. Research on this topic is limited, but see Whitehouse (2011) and Watson, Znidersic and Craig (2018). Such issues are perhaps usefully understood in relation to scholarly discussions of the technological mediation of nature in sound recordings and sonic art (see, for example, Michael 2011), which can, in turn, be situated within much broader, long-standing debates around ethical relationships between nature and technology (see, for example, Szerszynski 2005).

other creatures. This only compounds our sense of the power dynamics, epistemic uncertainties, and malleable subjectivities, at stake in (non)relation.

## 9. Conclusion: Theorising the 'Attempt'

Sonic experiments in cross-species communication present a paradox to our understanding of socially-engaged sonic practices. On the one hand, they entail a massively expanded field of sociality, reaching beyond human culture into all sorts of more-than-human worlds. On the other hand, they entail variously and variably occluded, tenuous, ephemeral or otherwise uncertain forms of sociality. The wider this field of sociality, the less we know of it. And this uncertainty is two-fold: first, our social and communicative relationships with nonhuman others are often undecidable, in the ways described above; second, vast swathes of these social and communicative worlds are simply not for us: they represent social formations in which humans are not only not central, but not even necessary participants. Sound comes as an intimation from these larger social worlds not as a message sent with intention, but as information to which we might attend.

This paradox only extends problematics, extensively discussed elsewhere, associated with human-centred participatory art, including around miscommunication, coercion, exclusion, and the question of whether participation (or 'engagement') is an ethical 'good' or something much more ambivalent (Bishop 2012, Reason 2015, Barney, Coleman, Ross, Sterne and Tembeck 2016, Sedgman 2017, Browning 2020a: 219-20). If consideration of more-than-human sociality can add anything to these debates it is perhaps by foregrounding the contingent and speculative dimension of socially-engaged art, indeed of sociality in general. Arguably central to *Oh! Ah ah pree trra trra* was the idea that relations are not guaranteed or given in advance, but open to question and open to attempts to relate otherwise. Renewed

attention to questions of 'otherness-in-relation' (Haraway 2003: 50) might likewise prompt a re-evaluation of human-centred socially-engaged sonic practices.

As I have argued, the more-than-human sociality of sonic art is partially constituted by human cultural practices, both hegemonic and subversive. Our cross-species choir was absurd and comic not because of any intrinsic qualities, but because it was out of step with a wider, broadly Euro-American, culture in which sonic art and experimental music are, to put it mildly, relatively obscure, privileged and eccentric cultural forms, and in which encounters with wild animals are relatively rare, poorly understood and peripheral to everyday concerns in late capitalism (albeit with important exceptions). Our choir was shaped not only by the asymmetry of certain human-animal relationships, but also by differentials in human access and engagement that structure who can participate in sonic arts projects, often along ethnic, class and gender lines. At the same time, human culture enables specific forms of more-thanhuman sociality: Clover's workshop was possible because of its participation in artistic and academic subcultures centred around eco-feminist philosophy and sonic art, which provided the conceptual tools for speculating about more-than-human worlds. Finally, all this relied on a much narrower cultural form – Clover's artistic practice – that mobilised these broad cultural norms and theoretical traditions (and the absurd tension between them) within a specific pedagogical framework and a particular site.

The paradoxical scope and uncertainty of sound art that engages with more-than-human sociality, and its imbrication with human culture, prompt, I suggest, a rethinking of its power and politics. Sound art is often theorised in terms of its political power and promise, as a radical intervention into the world or privileged expression of ecological interconnection (see

Browning 2020b; Ochoa Gautier 2016: 128-9).<sup>20</sup> Gilmurray, for example, describes ecological sound art as 'a powerful ecological art form' (2017: 32). Voegelin 'tries to grasp the radical promise of a sonic possibility and to articulate, beyond the expected, the power of the invisible' (2019: 4). For LaBelle, sound 'seemingly eludes definition, while having profound effect' (2015: xi). One of my aims here is to de-escalate scholarly claims about the power of sound art and argue, instead, for careful attention to its uncertainties and ambivalences. By overstating the power of sound art (often without empirical evidence) such theorisations fail to recognise its real potential. Accordingly, my argument is not that Clover's workshop enabled a profoundly meaningful access to the more-than-human world. Rather, what is remarkable is that it was able to intervene at all in the engrained and seemingly unshakable Euro-American acoustic ontology Ochoa Gautier describes. Strong, idealised and abstract claims about sound art's significance, in which 'potentialities are prefigured as actualizations' (Ochoa Gautier 2016: 129), counterintuitively rob it of its potential, because theorists' pronouncements make us miss the small surprises, doubts, novel yet ephemeral socialities, and other moments of minor leverage within the normal order of things that represent sound art's actual power (as is arguably the case for much art and culture). The idea that sound art could fail, lack political significance or even make things worse is bizarrely absent from most writing on the subject. Clover's practice reminds us, instead, to laugh at our own uncertainties and absurdities, even as we attempt to navigate them. It is here that we see the value of theorising sonic engagements with more-than-human sociality in terms of the 'attempt'. Rather than sound art's efficacy or power, guaranteed by the immanent relationality of sound and listening, it is instead sound art's contingency,

<sup>&</sup>lt;sup>20</sup> This is not the place for further discussion, but there are clear disciplinary and professional reasons why many of us feel compelled to advocate for sound's power and potential.

animated by the uncertain relationality of sound and listening, that means it opens onto vast speculative worlds.

## Acknowledgements

I am grateful to Catherine Clover for insightful conversations about her work and to the two anonymous reviewers for helpful comments on this article. Thanks too to Samantha Dieckmann for reading an early draft and to Tullis Rennie, as editor of this special issue, for advice and encouragement. This work was supported by a British Academy Postdoctoral Fellowship, grant number PF170021.

## **BIBLIOGRAPHY**

Barney, D., Coleman, G., Ross, C., Sterne, J. and Tembeck, T. (eds.). 2016. <u>The Participatory</u>

<u>Condition in the Digital Age.</u> Minneapolis, MN: University of Minnesota Press.

Bishop, C. 2012. <u>Artificial Hells: Participatory Art and the Politics of Spectatorship.</u> London: Verso.

Blacking, J. 1973. How Musical Is Man? Seattle, WA: University of Washington Press.

Born, G. 2019. On Nonhuman Sound—Sound as Relation. In J. A. Steintrager and R. Chow (eds.) <u>Sound Objects</u>. Durham, NC: Duke University Press, 185–208.

Boyle, P. 2006. Travelling in a Caravan. <u>Australian Humanities Review</u> 39–40.

Brabec de Mori, B. and Seeger, A. 2013. Introduction: Considering Music, Humans, and Non-humans. Ethnomusicology Forum 22(3): 269–86.

Browning, J. 2019. Remaking Classical Music: Cultures of Creativity in Pleasure Garden.

<u>Twentieth-Century Music</u> 17(1): 23–61.

Browning, J. 2020a. Involving Experiences: Audiencing and Co-reception in Pleasure Garden. <u>Journal of the Royal Musical Association</u> 145(1): 191–227.

Browning, J. 2020b. Meeting the Garden Halfway: Ethnographic Encounters with a Sound Installation Microculture. <u>Ethnomusicology</u> 64(3): 498–526.

Browning, J. and Lim, L. A Musical Bestiary: Sonic Figurations for the Anthropocene.

Journal of the Royal Musical Association. Under review.

Clover, C. 2020a. Untie the Tongue. <u>Unlikely: Journal for Creative Arts</u> 6. https://unlikely.net.au/issue-06/untie-the-tongue

Clover, C. 2020b. Writing the Birds: Barrawarn. <u>Inscription: The Journal of Material Text</u> 1: 33–48.

DeLuca, E. 2018. Selling Nature to Save It: Approaching Self-critical Environmental Sonic Art. Organised Sound 23(1): 71–79.

Derrida, J. 2008. The Animal That Therefore I Am. New York: Fordham University Press.

Feld, S. 2017. On Post-ethnomusicology Alternatives: Acoustemology. In F. Giannattasio and G. Giuriati (eds.) <u>Perspectives on a 21st Century Comparative Musicology:</u>
Ethnomusicology or Transcultural Musicology? Udine: Nota, 82–98.

Gilmurray, J. 2017. Ecological Sound Art: Steps towards a new field. <u>Organised Sound</u> 22(1): 32–41.

Goh, A. 2017. Sounding Situated Knowledges: Echo in Archaeoacoustics. <u>Parallax</u> 23(3): 283–304.

Halsall, F. 2016. Actor-Network Aesthetics: The Conceptual Rhymes of Bruno Latour and Contemporary Art. New Literary History 47: 439–461.

Haraway, D. 2003. <u>The Companion Species Manifesto: Dogs, People, and Significant Otherness</u>. Chicago: Prickly Paradigm Press.

Haraway, D. 2016. <u>Staying with the Trouble: Making Kin in the Chthulucene.</u> Durham, NC: Duke University Press.

Ingram, D. 2010. <u>The Jukebox in the Garden: Ecocriticism and Popular Music Since 1960.</u>
Amsterdam: Rodopi.

Kohn, E. 2013. <u>How Forests Think: Toward an Anthropology Beyond the Human.</u> Berkeley: University of California Press.

Krause, Bernard L. 1993. The Niche Hypothesis: A Virtual Symphony of Animal Sounds, the Origins of Musical Expression and the Health of Habitats. <u>The Soundscape Newsletter</u> 6 June 1993.

LaBelle, B. 2015. <u>Background Noise: Perspectives on Sound Art.</u> London: Bloomsbury.

Martinelli, D (ed.). 2008. <u>Revista Transcultural de Música</u> 12. Special issue on zoomusicology.

Marzluff, J. M. 2005. <u>In the Company of Crows and Ravens.</u> New Haven, Conn.: Yale University Press.

Michael, David. 2011. Toward a Dark Nature Recording. Organised Sound 16(3): 206–210.

Morton, T. 2010. The Ecological Thought. Cambridge, MA: Harvard University Press.

Nettl, B. 2010. <u>The Study of Ethnomusicology: Thirty-one Issues and Concepts</u>. Urbana: University of Illinois Press.

Ochoa Gautier, A. M. Acoustic Multinaturalism, the Value of Nature, and the Nature of Music in Ecomusicology. <u>boundary 2</u> 43(1): 107–141.

Plumwood, V. 1993. Feminism and the Mastery of Nature. London: Routledge.

Ramnarine, T. K. 2009. Acoustemology, Indigeneity, and Joik in Valkeapää's Symphonic Activism: Views from Europe's Arctic Fringes for Environmental Ethnomusicology.

<u>Ethnomusicology</u> 53(2): 187–217.

Reason, M. 2015. Participations on Participation: Researching the 'Active' Theatre Audience.

Participations: Journal of Audience and Reception Studies 12(1) 271–80.

Risset, J. 2015. Recollections and Reflections on Organised Sound. <u>Organised Sound</u> 20(1): 15–22.

Rose, D. B. 2013. Val Plumwood's Philosophical Animism: Attentive Inter-actions in the Sentient World. <u>Environmental Humanities</u> 3: 93–109.

Schrimshaw, W. 2015. Exit immersion. Sound Studies 1(1): 155–170.

Sedgman, K. 2017. Ladies and Gentlemen Follow Me, Please Put on Your Beards: Risk, Rules, and Audience Reception in National Theatre Wales. <u>Contemporary Theatre Review</u> 27(2): 158–76.

Sedgwick, E. K. 2003. <u>Touching Feeling: Affect, Pedagogy, Performativity.</u> Durham, NC: Duke University Press.

Sedgwick, E. K. 2011. The Weather in Proust. Durham, NC: Duke University Press.

Seeger, C. 1958. Prescriptive and Descriptive Music Writing. <u>Musical Quarterly</u> 44: 184–95.

Silvers, M. 2010. Attending to the Nightingale: On a Multispecies Ethnomusicology. <u>Ethnomusicology</u> 64(2): 199–224.

Simonett, H. 2015. "Of Human and Non-human Birds: Indigenous Music Making and Sentient Ecology in Northwestern Mexico." In A. Allen and K. Dawe <u>Current Directions in</u> Ecomusicology: Music, Culture, Nature. New York: Routledge, 99–108.

Spencer, E. K. 2019. The Fairy Tale of Sonic Materialism: A Provocation Written in Response to The Political Possibility of Sound by Salomé Voegelin. Paper for 'Acoustic Materiality and Immateriality', Faculty of Music, University of Oxford, 3rd April 2019.

Steingo, G. 2018. Actors and Accidents in South African Electronic Music: An Essay on Multiple Ontologies. <u>Contemporary Music Review</u> 37(5–6): 554–574.

Stiegler, B. 2014. <u>Symbolic Misery, Volume 1: The Hyper-Industrial Epoch</u>. Cambridge: Polity Press.

Stokes, M. 2013. Afterword: A Worldly Musicology? In P. V. Bohlman (ed.) <u>The Cambridge</u> <u>History of World Music</u>. Cambridge: Cambridge University Press, 826–842.

Szerszynski, B. 2005. Nature, Technology and the Sacred. Blackwell: Oxford.

Taussig, M. 2020. <u>The Mastery of Non-Mastery in the Age of Meltdown</u>. Chicago: University of Chicago Press.

Thompson, M. 2017. Whiteness and the Ontological Turn in Sound Studies. <u>Parallax</u> 23(3): 266–282.

Tsing, A. 2012. Unruly Edges: Mushrooms as Companion Species. <u>Environmental Humanities</u> 1: 141–154.

Tsing. A. 2013. More-than-human Sociality: A Call for Critical Description. In K. Hastrup (ed.) Anthropology and Nature. London: Routledge, 27–42.

Van Dooren, T. 2014. <u>Flight Ways: Life and Loss at the Edge of Extinction</u>. New York: Columbia University Press.

Varèse, E and Chou, W. 1966. The Liberation of Sound. <u>Perspectives of New Music</u> 5(1): 11–19.

Voegelin, S. 2014. <u>Sonic Possible Worlds: Hearing the Continuum of Sound</u>. London: Bloomsbury.

Voegelin, S. 2019. <u>The Political Possibility of Sound: Fragments of Listening</u>. London: Bloomsbury.

Walters, M. J. 2006. <u>Seeking the Sacred Raven: Politics and Extinction on a Hawaiian Island</u>. Washington, D.C.: Island Press.

Watson, D. M., Znidersic, E. and Craig, M. D. 2018. Ethical Birding Call Playback and Conservation. Conservation Biology 33(2): 469–471.

Western, T. 2020. Listening with Displacement: Sound, Citizenship, and Disruptive Representations of Migration. <u>Migration and Society: Advances in Research</u> 3: 294–309.

Whitehouse, Andrew. 2011. The Language of Sound: Exploring the Interaction between People and Birds. Paper delivered at the University of Manchester Department of Anthropology Research Seminar, 14<sup>th</sup> February 2011.