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Deep listening the animal other: trash-foraging gulls at Ämmässuo waste treatment centre

Tanja Tiekso & Karoliina Lummaa

Abstract

For centuries, seeing has dominated other senses in Western thought. To a certain extent, this has also been the case in animal philosophy. In this article, animal otherness is examined through listening. We explore otherness in animals that share urban environments and utilise material surplus discarded by humans: gulls. Our fieldwork takes place at Ämmässuo, a waste treatment centre located in Espoo, Southern Finland. The method of listening is Deep Listening, a composer's sound practice developed by American composer Pauline Oliveros. In Deep Listening, listeners are connected with their environment and all its inhabitants through listening. What is heard is always changed by listening, and in turn, listening changes the listener. The article utilises the concept of *sonosphere* also created by Oliveros, as well as the concept of *atmosphere* as it has been described by Andrew Whitehouse. It proposes a method of *listening-with gulls* which acknowledges the diverse differences and similarities between species while also taking into account the agencies of infrastructures and machines affecting both human and nonhuman lives.

Keywords:

Deep listening; atmosphere; gulls; cultural studies; trash animals; animal philosophy

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Introduction

When visiting a waste treatment centre, one cannot avoid hearing and seeing gulls. In Finland, gull species typically found in waste treatment areas include Lesser black-backed gulls (*Larus fuscus*), European herring gulls (*Larus argentatus*) and Black-headed gulls (*Larus ridibundus*). The calls of these large, mainly grey and white or black and white birds are loud and relatively simple-structured to human ears: *gag-gag-gag*, *kee-aa*, *kiaow kiaow*, *ki-och-yoch-yoch-yoch* and *kyee-kyee-owkyowkyowk* of Lesser black-backed gulls, *kiöch-ki-och-ki-och*, *kyow kyow*, *kyow-kyow-gah-gah-gah* and *qua qua qua* of European herring gulls and, finally, *kek-kek*, *kree-ah*, *kuk*, *kwarr* and *kwup* of Black-headed gulls.¹ In Finnish, these calls are transcribed somewhat differently. The mating call of the European herring gull can be represented as *klaio kla kla*, and the warning calls include *ha*, *haha* and *au*. Black-headed gull has many types of contact calls, including *krreeer*, *krreeer*, *kek ke kek* and *rär rä grää*.² Social, noisy, courageous and urban as they are, gulls cause a range of reactions in humans, including an uncanny tension between strangeness and familiarity.

In this article, we examine the sonic and affective presence of gulls. We chose a waste treatment centre as our site of field work, as these places signify the continuous and expanding struggle that humans have against the surplus, the useless and the unwanted, including gulls and other nonhumans that thrive on human excess. Listening to gulls, and with gulls, in a place that expresses the material density and profligacy of our postindustrial cultures allows us to reflect on avian and human modes of being. We knew that listening at the site would be challenging. We knew that listening to gulls would be especially challenging. The experience would not only be pleasant and enjoyable, but something else. For this purpose, Deep Listening offers us practical tools.³

Deep Listening is a methodology, an artistic practice and a pedagogy of listening created by American composer Pauline Oliveros (1932–2016). It is a way to study and explore listening, to contemplate experience. Deep Listening is not anyhow measurable, as experiences generally are not, but it is, however, a means to develop one's own listening skills and habits. It is also a lifetime challenge, and will not offer instant answers. Our basic guideline in Deep Listening was the following exercise given by Oliveros: "Listen to everything until it all belongs together and you are part of it".⁴ This simple but very challenging task brings in question our experience concerning the sonic environment and our inevitable connection with it. It also calls in action the ecology of listening. As we listen to gulls we also practise "becoming worldly" with them.⁵

As the methods of observation, we use both field notes and listening journaling. Field notes are written during the listening exercise on site, and they serve as a raw material for more advanced observation and scrutiny. In listening journaling, the experience is contemplated further. The aim is to reflect and observe one's thoughts and emotions, and to explore the information that the body continually senses, records and delivers to the auditory cortex. That is, the feelings and sounds that are not usually consciously registered by the listener in constant, immediate listening activity. As Oliveros claims, the brain/body knows far more than our mind can process immediately. She writes:

Inclusive listening then opens us to all possibilities in the space/time continuum. Depending on our perspective or emotional arousal, or commitment to a goal or goals, we can enter the profound interplay of the universe through sounds. There may be a surprisingly strong relationship between the inner and outer experience of inclusive listening. Recording the

flow of sound through the space/time continuum like a journalist can promote a deeper understanding of your presence and meaning in the environment. There is always information in any sound that you perceive.⁶

Listening to birds is a particular type of activity enriched with various academic and cultural contexts. For example, the relations between birdsong and music are topics of constant scholarly debates.⁷ Bird song structures and song acquisition have also raised interest among linguists who examine the similarities between avian song learning and human language learning.⁸ Further, literature scholars have studied the relations between textual elements (phrasing, rhythm, typography) and actual bird songs and calls.⁹ Another strand of research has focused on the meanings given to birds in different traditions, cultures and arts.¹⁰ Often these cultural meanings have been juxtaposed with the scientific (or proto-scientific) understanding of birds.¹¹ In this article, our task is to conceptualise birds, gulls specifically, as something other, or more, than mere objects of human knowledge or storytelling. We want to ask, what can we experience, learn, or understand about human-animal-relations and anthropogenic environmental change by listening to birds, or even, listening *with* birds? How does our perspective of listening to birds enable us to broaden our ways to understand ourselves as a species?

An important element in our listening practice is listening birds *in situ*, at a waste treatment centre. In other words, our listening is site-specific. Whereas the scientific research on bird vocalisations is often conducted in controlled environments, using specific technical equipment and quantitative methodologies,¹² for us sounds of birds are always sounds in place.¹³ This is also to say that we listen to birds in a certain *atmosphere*. Andrew Whitehouse describes atmospheres as “places that are inhabited, places where life happens and through living they come to be known by their inhabitants”. We find especially useful Whitehouse’s idea of an atmosphere as an ephemeral, temporal experience. According to him, the atmosphere is something that emerges through situated relations and needs to be understood both in terms of the ecologies of the phenomena encountered and the perceptual and meaning-making practices of those experiencing them.¹⁴ Therefore, when entering a specific site to listen, the listener also participates in the creation of a certain atmosphere. Sounds (such as bird vocalisations) are made in reaction to a specific place and its atmosphere, and sounds are also ways of affecting the surroundings – communication, territory acquisition, and so on.¹⁵ Our focus in this article lies on human participation and affective sharing of the environment with the birds, and we are aware of the obvious limitations of our task and the species differences relevant to it. We cannot hear what and how the gulls hear. However, a human–avian attunement to a shared atmosphere is a possibility too exciting to be rejected, especially in an environment such as the waste treatment centre, where human excess and order meets nonhuman resilience and resourcefulness. In line with this, our listening practice is informed by scholarly knowledge and philosophical remarks on birds, human–bird relations and the cultural aspects of waste and surplus.

Birding among waste

Waste has been the object of increasing scholarly interest within the social sciences and humanities during the last three decades. Fields such as waste studies and ecocriticism have developed approaches to study the social practices of managing unwanted matter, as well as arts, aesthetics and philosophies related to waste, trash, pollution and other types of surplus. Waste and the cultural phenomena around (or behind) it are often analysed in the context of

diverse social and societal power relations. In this line of thinking, the categories of waste, surplus and the unwanted are seen as historically contingent and related to other social categories such as class, race, sex, or species.¹⁶ Animals thriving on waste are subjected to violent categorisations and practices: “trash species” are easily deemed *killable*.¹⁷ It is also important to recognise the cultural agencies of “garbage birds” and other animals living with and from waste. With their foraging and breeding behaviour and the actual and assumed consequences of these to public health and infrastructure, “garbage birds” influence urban planning, modify soundscapes and cause diverse, conflicting emotions and responses in humans.



Figure 1. Ämmässuo waste treatment centre, a bird’s-eye view.

On 25 May 2019 11 am onwards we conducted our first three-hour long field trip to Ämmässuo waste treatment centre, which is the biggest of its kind in the Nordic countries. As a modern waste treatment centre, it does not include a vast open area for mixed waste that would attract birds. (See Figure 1.) Unlike landfills, the waste is quickly and efficiently organised into piles of different materials that are transported into incineration plants and other waste treatment facilities. The Ämmässuo centre manages waste produced by humans, and it operates with the intent to minimise any utilisation of that waste by nonhumans.¹⁸ Despite all efforts, the area still offers plenty of forage opportunities for gulls and other birds, which makes it a fascinating site for observing and listening to them and also to really think about them through what is heard.

On our first field trip we observed mainly gulls and corvids: Black-headed gulls, Common gulls, Lesser black-backed gulls, European herring gulls, European jackdaws (*Corvus monedula*), Hooded crows (*Corvus cornix*) and Common ravens (*Corvus corax*). In the nearby

forest protect zone we heard or saw Chaffinches (*Fringilla coelebs*), Great tits (*Parus major*), European jackdaws and Common ravens.

Forest protect zone: about seven ravens, or more, flying and “talking”
Finches, call of a great tit, a wagtail minding the traffic
Random jackdaws. Further away I see the “mill of gulls”, flying in circles above the piles of trash.
...
Black-headed gull, Common gull, Lesser black-backed gull, European herring gull, some jackdaws.
(Field notes, Karoliina Lummaa)

The species we found during the first field trip are common in Finland, both in urban environments and in waste treatment areas. Birds visiting Ämmässuo are regularly counted by the local ornithological association. The amounts of different species (primarily gulls and corvids but also predatory birds and songbirds such as starlings, *Sturnus vulgaris*) and individuals reflect changes in waste management practices. After the traditional landfills were closed and different types of waste started to be treated separately, the number of gulls has diminished notably. The general decline in the numbers of Black-headed gull and Lesser black-backed gull is clearly visible in the observation data.¹⁹ This is primarily due to the cut in available food: as biowaste (including food waste still excessively produced in Finnish households) is nowadays managed in closed facilities the birds no longer have access to it.

Many of the bird species regularly visiting waste management areas in Finland are actually classified as vulnerable (VU) or endangered (EN) in *the 2019 Red List of Finnish species*: Black-headed gull (VU), Herring gull (VU), Lesser black-backed gull (EN), Great black-backed gull (*Larus marinus*) (VU) and House sparrow (EN).²⁰ An interesting tension rises between the mental images of countless birds raiding urban environments and the actual decline of many of these species. Gulls are a special case in point since they are typical birds in waste treatment areas, and urban areas more generally, but at the same time their numbers are going down rapidly.

The gulls’ willing closeness to humans and waste might actually be the root cause for disdain. Gavan Watson writes about Ring-billed gulls (*Larus delawarensis*): “[o]ften observed as the most numerous species at landfill sites, ring-billed gulls are implicated, literally, as ‘garbage’ birds: they eat it, they excrete it, they are it”.²¹ Many scholars interested in “trash animals” (i.e. species thriving from or living with concrete trash or species associated with trash and therefore labelled trashy) emphasise the connection between loath for trash animals and human self-loath. “Animals that successfully inhabit new environments, alter landscapes, and disrupt ecosystems remind us, uncomfortably, of ourselves”, Nagy and Johnson state in their introduction to *Trash Animals*.²² In the same anthology, Gavan Watson reminds us that widely spread communities, resilience and ease of living with trash are something we humans share with the so-called trash animals. He laments our inability to recognise the similarity between ourselves and the nonhuman beings thriving on our excess.²³ Writing about starlings in *Trash Animals*, Charles Mitchell draws similar comparisons between humans and these social, urbanised birds that are able to mimic human speech.²⁴

The humanlike behaviour of urban birds makes them transcend the conceptual and ideological border between human and nonhuman in our imagination. Observing the conservation efforts on Hawaiian crows (*Corvus hawaiiensis*) and the human-centred values and assumptions behind these efforts, Thom van Dooren calls for a more *performative* understanding of species

identity, where identity formation is kept open for the crows themselves, beyond fixed anthropogenic conceptions of “wildness” or “authenticity”.²⁵ Trash-eating birds are particularly interesting in this sense, since trash is something that nature does not produce, as trash studies scholars have pointed out.²⁶ These birds do not only live in human-constructed buildings and environments, but they are also ready and able to utilise matter we have produced, consumed and discarded. In his essay “Flying Rats” about pigeons, Andrew Blechman notes the etymological roots of the biological term “commensal”: the Latin expression *com mensa* means sharing a table.²⁷ Interestingly, Donna Haraway draws from similar etymology when defining “companion species”: [*c*]ompanion comes from the Latin *cum panis*, “with bread”. Messmates at table are companions”.¹⁷ Birds met at waste treatment areas are a telling example of commensality and companion species, as they eat our excess and share our spaces. Birds visiting waste treatment areas are also easily associable with semiotic and material messes, ranging from the conceptual divides between nature and culture, clean and unclean, order and disorder, to the pungent smells of organic wastes and the reciprocal movements of avian, human and mechanical bodies.

The site and the presence of waste was something that Karoliina reflected both before the first field trip and during field work. In a planning document Karoliina asked: In what kind of settings is the waste collected and processed? How much waste is there? The depiction of movements: how do things typically move (birds, people, machines, waste) – what sounds emerge? In her field notes she states: to listen-as-a-bird is to listen to sounds made by the trucks carrying waste, to look at the trucks, to look at the shovel as it operates. However, on the same page she remarks: the gulls do not care about the shovel. There is an oscillation between assuming and observing what the gulls are doing in the waste treatment area. Expectations stemming from scientific literature support the importance of feeding-related behaviour (birds are only focused on trucks that bring more food), but this assumption is paired with observations that highlight the skills and attentiveness of the birds operating among the machinery and buildings (the birds move freely and somewhat fearlessly around the machines and people). In situ listening offered a perspective on gulls as agile agents accustomed to human-dominated environments, in a way that resonates with van Dooren’s idea of performative avian identity. The presence of waste, machinery and workers was a key factor in this discovery.

Listening-with gulls

When we first encountered the Ämmässuo waste treatment centre in May 2019 we were impressed by the visuality of the landscape. Different materials and colours were being sorted carefully in separate piles: light brown sand, terracotta bricks, grey gravel, green sewage and black soil. *This is a moonscape* Tanja wrote in her field notes. Certainly, the landscape was as much for the eyes as for the ears. As our field notes indicate, the movements, circulations of birds, wastes, machines and humans were a striking feature of the Ämmässuo environment, whereas the landfill itself offered a stage for these happenings. It was these movements that created the soundscape of the area. As Whitehouse notes, “listening is a multi-sensory experience that has sound as a focal point that gathers together a range of other elements”. According to him, it is this gathering that is usually described in the narratives concerning the listening experiences, the gathering of elements that can be defined as an atmosphere. Atmospheres are diverse mixtures and inherently more-than-human.²⁸ Likewise, the particularity of Ämmässuo as a listening site and as an atmosphere, was not constituted solely

of bird calls and songs, but also by the material intensities involved in waste management practices: infrastructure, vehicles and machines.

The sounds on different machines: combustion engines, the mechanisms in the trucks. No human voices. Everything happens effectively, orderly. 40 % of mixed waste still consists of food waste – plenty of food for seagulls. Circulations: trucks entering the site, trucks leaving the site, birds hovering above, quickly landing on the trash piles, taking flight again, landing somewhere near to observe. The noise fluctuates: as the trucks arrive the “air traffic” proliferates.

(Field notes, Karoliina Lummaa.)

We were observing the gulls next to the multi-coloured mixed waste dumping and baling area, indicated to us by the waste treatment centre’s public affairs manager. Continuous traffic noise, trash trucks moving in two directions. “Are the birds expecting these trucks, do they know that food is coming? The ravens don’t mind the noise”, Karoliina writes in her notes. The area was a stage for continuous events: rubbish vans bringing new loads of waste after another, excavators and pile machines collecting and packing the waste in capsules, birds flying back and forth around the machines. “There are three kinds of sounds: engines of rubbish vans, excavators, baling machines; wind when it hits different materials or our ears, birds”, Tanja wrote.

In Deep Listening, the listener is “listening in every possible way to everything possible to hear, regardless of what you are doing”, writes Pauline Oliveros.²⁹ The practice of intense listening includes the sounds of daily life, of nature, of one’s own thoughts as well as musical sounds. Deep Listening is a heightened state of awareness that connects the listener to all that there is, she describes. Unlike hearing, which is a primary sensory perception and happens involuntary, listening is an always active and voluntary process that requires a conscious decision to listen. Through training and experience listening also produces culture, argues Oliveros: “We hear in order to listen. We listen in order to interpret our world and experience meaning”. What is heard is always changed by listening, and in turn, listening changes the listener. This is what Oliveros calls “the listening effect”.³⁰

The concept of *sonosphere* created also by Oliveros clarifies the ecological character of listening. According to her, the sonosphere includes all sounds of a certain environment that can be perceived by humans, animals, birds, plants, trees and machines. Unlike soundscape, that only includes sounds that are heard by humans, sonosphere includes the complete field of sound plus the sounding vibrations that “begin at the core of the earth and radiate in ever increasing fractal connections vibrating sonically through and encircling the earth”.³¹ In Oliveros’ thought of Deep Listening, the audible world is a complex matrix of vibrating energy, matter and air. Even the listeners themselves are made of vibrations. Sounding vibrations connect the listener with all beings and things interdependently. Thus, listening may deepen consciousness and help to change or dissolve boundaries that limit experience.³² Therefore, one could say that Deep Listening is a form of ecological activism in which the listener is connected with the environment and all its inhabitants through listening: “Deep Listening involves going below the surface of what is heard, expanding to the whole field of sound while finding focus. This is the way to connect with the acoustic environment, all that inhabits it, and all that there is”, Oliveros summarises.³³

At Ämmässuo, as at any site, it felt necessary to keep in mind that the sonosphere is not a one-way sounding relationship only, but the sonosphere also listens to us. In other words, it is not only “we” who are listening when we enter the site, but the environment and its inhabitants are

also listening to “us”. According to Oliveros, all non-human animals are natural Deep Listeners: “When you enter an environment where there are birds, insects or animals, they are listening to you completely. You are received”. For the creatures of the environment, our presence may be the difference between life and death. They have to listen. “Listening is survival!”, Oliveros writes.³⁴

How birds hear and listen is a different and complex question. The human hearing range varies between 20 and 20,000 Hz and is most sensitive between 2000–5000 Hz. The hearing range of birds is generally smaller, with higher or lower limits depending on the bird species. Most birds are able to hear sounds between 500 Hz and 6 000 Hz, and they are most sensitive to sounds in the region of 2 000–3 000 Hz.³⁵ The abilities connected to hearing and vocalisation vary greatly also between different bird species. Small birds are more sensitive to high-frequency sounds and larger birds, like gulls, to low-frequency sounds.³⁶ Studies suggest that the range of hearing in gulls might differ from 100 Hz to 10,000 Hz or from 100 Hz to 3 000 Hz, with highest sensitivity on sounds around 3 000 Hz or 500–800 Hz.³⁷ What the birds hear (or what and how they listen) is a question of its own. Scientists have mainly been interested in songbirds and in the study of vocalisations as part of territorial and mating behaviour.³⁸ The emphasis on behaviour is clear in the scientific study of gulls as well, and attentiveness to sounds is typically reflected as a behavioural trait related to feeding and breeding. While we acknowledge the importance of these scientific findings, we suggest that for the study of *relations* between humans and gulls, a more engaged research practice based on in situ observing and listening might offer valuable perspectives on how gulls and humans experience shared environments. In this type of multispecies ethnography, we hope, the ability of gulls to listen and make sense of place (and humans in it) becomes more apparent and debatable.

Excerpt from the listening journal based on notes written during the field trip at Ämmässuo on May 25th, 2019, Tanja Tiekso:

I gave myself a simple instruction: Listen to everything until it all belongs together and you are part of it. Then I turned towards the sonosphere. I first directed my attention to my stance, the position of my feet, the weight of my body, and all the small sudden sensations around my body rooting the experience to the listening site.

At first, listening was chaotic. A lot was happening in the landscape both visually and aurally. It was difficult to separate what I heard from what I saw. While I was standing still and listening, I saw rubbish vans continuously bringing more waste to the pile and excavators packing and organising it further. Vans and excavators changed their locations and birds followed their movements. Back and forth, back and forth.

I saw that the wings of gulls had the same rhythms as some of the machine engines. Maybe it was not a coincidence?

I tried to listen with my eyes closed. It was challenging, even frightening. The sounds of trash trucks coming and going were aggressive, the high-pitched sounds of reversing excavators and trucks distracting, and the continuous noise of the baling machine irritating. Constantly, wind hit my ears so that it was hard to discern the other sounds of the site. I had to struggle to hear the vocalisations and the calls of gulls and ravens. I noticed that to be able to actually hear them, I had to open my eyes and look at them, to follow their flying curves so I would know, from which direction the sound would emerge and when.

The listening experience itself was one of the strongest I had experienced in a while. A very loud, surprisingly noisy actually, and since connected to the almost apocalyptic landscape of the landfill, impressive. I was deeply touched, and had no words to describe the feeling.

As I continued listening, I started to feel more and more self-conscious. There I was. Listening and watching noisy, restless series of events. Me, an outside viewer, an intruder.

I was listening and watching other people working, gulls foraging trash, I had nothing to do with their duties. The events I saw, and the sounds I heard, were apart from me. What am I doing here? Suddenly, the wind revealed the secret for my nose: I smelled the waste, the scent of a human. It was me. I smelled myself. *I am the waste*, I wrote in the field notes. I remembered the instructions given to us by the manager of the landfill. He had told us that it was forbidden to take photos of the machines. He had also told us that it was forbidden to take photos of the people working with the waste. However, we were allowed to take photos of birds, plants, waste, buildings and the surroundings. Since he did not mention anything about sound recording, I recorded everything: the wind, the calls of birds, the movements and the calls of workers, the engines of the machines moving back and forth before the birds. The continuous hum. *Do I really have permission to listen?*, I thought.

Sound example 1: Soundscape at mixed waste dumping field. Recorded by Tanja Tiekso at Ämmässuo waste treatment centre on May 25th, 2019 [play supplementary sound 1: <https://doi.org/10.1080/20551940.2022.2062564>].

When concentrated listening occurs, when one consciously decides to listen, like we did on that day at Ämmässuo, one usually realises how powerful sense listening is. By solely looking, one could remain as an outsider, but while listening, one immediately becomes part of the site and its surroundings, the living and changing atmosphere. As Whitehouse describes, the bodily experience and the soundscape are never isolated from each other, but the sensations of one's body are focal to the listening experience as well as the perception of a certain site where listening occurs.³⁹

In her field notes, Tanja describes the moment, during which she realised that she had completed the task to “Listen to everything until it all belongs together and you are part of it”:

I listen, and suddenly I realise that gulls have changed their locations. I have been standing between their observation post and the mixed waste dumping field. Now some of the gulls are on the roof of a shelter next to the field, some on the top of the waste capsules. I realise that I have been seen. I have been heard.
(Field notes, Tanja Tiekso)

The sudden realisation of being seen and heard by gulls brings to mind the famous scene in philosopher Jacques Derrida's animal lectures, in which Derrida describes his own experience of standing in front of his cat, naked. (See Figure 2). The cat is watching his nude body and he feels embarrassed. Under the gaze of a cat, the question of the animal rises: “The animal looks at us, and we are naked before it. Thinking perhaps begins there”, he writes.⁴⁰ This scene in Derrida's lectures reminds us that our relationship with animals is never a one-way relationship only. It is not just us who are looking, but animals have their personal viewpoint on us as well, as also Oliveros emphasises in her concept of the sonosphere. It is not “we” who are listening when we enter a certain environment, but the environment and its inhabitants also listen to “us”.



Figure 2. Gull on the top of the waste capsule.

At Ämmässuo, the ethical aspect of encountering the gulls felt important. Not only because we were literally standing in front of our own waste, but because of the affective presence of gulls. As we saw the gulls looking and listening to us, we were touched by their gaze. As we heard the vocalisations of gulls, we were moved by them. As we saw their flying curves and motions performed with machines, we were impressed. It was an unbroken and elegant dance. “Gulls with their healthy bodies, strong wings and perfectly finished flying curves animate the landscape”, Tanja wrote in her fieldnotes. According to David Abrams, the body awareness of birds is “distributed sentience”, and their flight is the *thinking* of birds: “Flying is an uninterrupted improvisation with an unseen and wildly metaphoric partner”.⁴¹ Tanja’s field notes continue: “The gulls are directing their eyes and attention towards the growing pile of waste. It is the centre of this universe. Birds are free to go but they want to stay”. For that moment, it felt wondrous.

For Deep Listeners, as Oliveros suggests, listening may be a *healing* practice. For her one of the objectives of Deep Listening is to achieve and promote health not only for Deep Listeners but also for those with whom a Deep Listener may come in contact with.⁴² The practice of Deep Listening enhances environmental awareness and helps listeners to contemplate their relationship with companion species – in this case trash animals – to whom they have complex relationships. Through listening, “[n]ew fields of thought can be opened and the individual may be expanded and find opportunity to connect in new ways to communities of interest. Practice enhances openness”, Oliveros writes.⁴³ Listening is learning.

During our first field trip, as described, we learned an overall idea of the sonosphere of the waste treatment centre, and a lot about how birds behave in these environments. We also learned that gulls are used to the constant noises of the machines and that their movements are synchronised with the movements of machines. We learned that even though for us as listeners the atmosphere was chaotic it was actually perfectly organised, gulls seemed to know exactly what they were doing. Later we also learned that the atmosphere we had experienced during our first field trip had been unique. It was impossible to repeat the experience. Tanja returned to the site on September 5th, 2019, to make more recordings. But the sonosphere was different. First, the season was different, and the whole area looked completely different. But the number of birds was also smaller, and there were almost no gulls flying around. The baling work was in a different, more advanced phase, and there was less waste that attracts birds. However, the range of species was fairly similar with exception to the number of passerine birds: several House sparrows (*Passer domesticus*) and Tree sparrows (*Passer montanus*) were now spotted. Further, the gulls on the site were also less noisy than during the first field trip. The atmosphere was less lively, less chaotic. Tanja wrote in her field notes: “Where are the birds? Where are their flying curves? Where is the horrible noise of the machines? Where is the march of trucks? I miss that performance”.

Sound example 2. Soundscape at a mixed waste dumping field. Recorded by Teemu Korpipää at Ämmässuo waste treatment centre on September 5th, 2019 [play supplementary sound 2: <https://doi.org/10.1080/20551940.2022.2062564>].

Sensing noise, sensing garbage

When the human-animal relationship is considered, it is usually done by contemplating the way of looking, not the way of hearing.⁴⁴ This undoubtedly narrows our understanding of animals, especially our understanding of the noises they make, such as vocalisations and calls. Oliveros argues that when our awareness of sounds is too narrow, we are likely to be disconnected from our environment.⁴⁵ According to her, especially urban living causes narrow focus and disconnection. In the urban environment, there is either too much information, or the listening is narrowed only to sounds that seem to be of value. “All else is tuned out or discarded as garbage”, she writes.

This is a good reminder when focusing on our relationship with trash animals. The vocalisations of gulls, as the creatures themselves, could also be considered trash. The calls of gulls do not remind us of music. This presents a contrast with the usual appreciation of bird vocalisations. Often birds are listened to because of their capabilities to produce sounds that humans may hear as “musical”. Gulls, instead, are usually experienced as irritatingly loud and

their vocalisations ugly. Rather than music or communication, their voices are noise to us. This experience of animal noise creates another allusion to excess and surplus – the overload and incomprehensibility of sounds.⁴⁶ The gulls that feed on our trash are also a source of noise pollution. They are often regarded as too loud and their loudness does not make sense for humans. This brings forth a challenge: by voluntarily exposing ourselves to unwanted and incomprehensible sounds, we are able to contemplate our relationship with the (sounding) surplus, and our own agencies in it.⁴⁷

In his article about birds and the Anthropocene, Whitehouse writes about *anxious semiotics* which refers to perceptual and affective human responses to the changing avian soundscapes in the Anthropocene. Anxious semiotics highlights the heightened acknowledgement and perception of Anthropogenic agency and the obvious separation of humans from the rest of life. The anxiety caused by anthropogenic environmental changes is connected to manifold changes in the ranges of specific species, in the unexpectedness of these changes and also in human culpability. Whitehouse emphasises the importance of territorial functions in avian vocalisations and the meanings and values these territorial vocalisations have for humans as they make sense and connect with their own surroundings. As a counterpoint to semiotic (and acoustic) anxiety, Whitehouse notes the importance of *resonance*, an experience of affinity and association between human activities and avian sound-making.⁴⁸

Although we recognise the meaning and importance of birds and their vocalisations to humans, we also want to highlight the particularity of gulls as “trash birds”: following this tensional and paradoxical imaginary, gulls are transgressive and liminal creatures, surpassing material and conceptual borders and divisions between urban and natural, clean and filthy, tame and wild, common and rare, and so on. Watching and listening to gulls may lead to experiences of immersion, especially when they fly, forage and vocalise in flocks. Gulls point to the massive material affluence of Western consumerist lifestyle and force us to reflect on our wastefulness. Simultaneously, they test our senses and comprehension with movements and sounds that will always stay incomprehensible to us.

The question of understanding, of making sense, is important when confronting the vocal otherness of animals. Philosopher Levi R. Bryant has written about wilderness as an ontological concept denoting the plurality of agencies and beings, and of humans’ status among these, not hierarchically above them. There is a sense of risk and vulnerability in wilderness ontology, and Bryant describes this risk using auditory expressions: “in the wilderness I find myself regarded by beings other than humans – the wolves, bears, birds, and so on – and in a field of languages and signs that I scarcely understand. What does the howl I hear off yonder signify? Should I be alarmed by the hoot of that owl? Why did the forest suddenly grow quiet? What caused that branch to snap?”⁴⁹ With wilderness Bryant does not intend to fortify any conceptual divide between nature and culture but rather, to position humans in a philosophical terrain that is not and cannot be dominated or even thoroughly understood by human intellect and capabilities. To get back to our field study and our experiences of vocal wilderness, what is so interesting about waste treatment centres is that these places are at the same time utterly anthropogenic (made by humans, filled by humans, managed by humans) and powered with nonhuman machinic, microbial and animal agencies. The constant noises of vehicles, the pungent smells of the growing piles and lines of biowaste composts, and the constant presence of gulls and other animals with and without wings are an elemental part of Ämmässuo.

Our framework for studying the gulls of Ämmässuo has combined immediate listening experience with perspectives that highlight the affective and thought-provoking presence of

animals. The key concept for us has been *animal otherness*. Philosophically, otherness refers to both the ethical awareness of the other, and to the total, uncanny otherness of the other. Observing waste-scavenging gulls orients our attention back to ourselves and to humanity at large. Animal otherness is also agential as it denotes the material and worldly abilities of animals (and in our case, gulls in Ämmässuo) to affect and alter environments and human experiences with their vocalisations and other behaviour. The gulls lend us an avian perspective to our sonic environments, which are becoming more and more transformed by humans. Listening-with gulls is a practice that variates, or indeed vibrates between sounds, meanings and feelings that are of human and nonhuman origin. Experimenting with this type of listening will have diverse intellectual and affective results, depending on the site of practice. By choosing a waste treatment area, we discovered the commensality and agility of gulls, and by listening with them, we discovered possibilities of sharing – not just waste and waste-related infrastructure but also the atmospheres sensed around them.

Notes

1. Bevis, *Aaaaw to zzzzzd*, 88, 91–92, 94–96.
2. Cajander, *Lintu ja ääni*, 33, 88. The vowel “ä” in Finnish is pronounced similarly as the letter “a” in words “that” and “hat”.
3. This article is part of Tanja Tiekso’s artistic/practice based research project “Experimental composition after the silence” (2019–2022) which explores musical subjectivities in the context of posthuman theory and feminism. The main task of the research project is to explore ways to use Deep Listening as a tool for artistic exploration. Other parts of the project include, for example, sound performances and workshops. Tiekso gained Deep Listening “certificate” at Rensselaer Polytechnic Institute in 2018. In 2019, Tanja invited Karoliina Lummaa to participate in the first part of the project in which she aimed to listen to birds in a waste treatment centre. Lummaa has studied bird vocalisations and waste in contemporary poetry and art and Tiekso has no previous experience of bird studies. Ämmässuo was a natural choice as the site of the exploration, since it is the biggest waste treatment centre in Nordic countries and is located in an app. 15 km from Helsinki, where Tanja lives. Also, the bird species at Ämmässuo are regularly counted, which offered valuable background information for the study. Lummaa’s focus in her previous research has been on the cultural and poetic agencies of birds and waste. She has no scientific training on ornithology nor is she an active birder, but her research methodology includes careful comparisons between scientific and artistic discourses and knowledge of birds and human-bird-relations.
4. Oliveros, *Deep Listening*, 7.
5. The concept of “becoming worldly” has been borrowed from Donna Haraway’s *When Species Meet*, 3, 95.
6. Oliveros, *Deep Listening*, 18–19.
7. See Rothenberg, *Why Birds Sing*.
8. Bolhuis & Everaert, *Birdsong, Speech, and Language*.
9. Mason, *Ornithologies of Desire*; Moe, *Zoopoetics*.
10. Feld, *Sound and Sentiment*.
11. Birkhead, *The Wisdom of Birds*; Mynott, *Birdscapes*.
12. E.g. Bolhuis & Everaert, *Birdsong, Speech, and Language*.
13. Whitehouse, “Listening to Birds”.

14. Whitehouse, "Senses of being", 63.
15. Whitehouse, "Listening to Birds", 58.
16. Strasser, *Waste and Want*; Bauman, *Wasted Lives*; O'Brien, *A Crisis of Waste*.
17. Nagy & Johnson, "Introduction"; Blechman, "Flying Rats"; Haraway, *When Species Meet*, 78–82; Derrida, *The Animal That Therefore I Am*, 78–9.
18. The Ämmässuo Waste Treatment Centre in Espoo manages the municipal wastes of people living in Helsinki (the capital of Finland) and the densely populated nearby areas. In addition, Ämmässuo also treats the wastes of over 50,000 companies. The main activities in the Ämmässuo centre include biowaste treatment, treating of ash and slug from the local waste-to-energy plant, collecting and utilising landfill gases, and waste sorting services for private citizens, communal actors and companies. In total, the Ämmässuo waste management area expands over two square kilometres, covering the old Ämmässuo landfill.
19. Holmström, *Ämmässuon jätteenkäsittelykeskuksen*.
20. Hyvärinen & al., *The 2019 Red List of Finnish Species*.
21. Watson, "See Gull", 34.
22. Nagy & Johnson, "Introduction", 25.
23. Watson, "See Gull", 36.
24. Mitchell, "The Bard's Bird", 179.
25. van Dooren, "Authentic Crows".
26. Nagy & Johnson, "Introduction", 7–8, 21; Strasser, *Waste and Want*, 4–7.
27. Blechman, "Flying Rats".
28. Whitehouse, "Senses of being", 63; Ingold, *The Life of Lines*, 72.
29. Oliveros, *Sounding the Margins*, 73.
30. Ibid., 73–4.
31. Ibid., 23.
32. Ibid., 78–9.
33. Ibid., 77.
34. Oliveros, *Deep Listening*, xxv.
35. Birkhead, *Bird Sense*, 49; Lederer, *The Hearing of Birds*.
36. Birkhead, *Bird Sense*, 42–48, 54.
37. Beason, "What Can Birds Hear", 93.
38. Marler & Slabbekoorn, *Nature's Music*.
39. Whitehouse, "Senses of being": Ingold, *The Life of Lines*, 136–39.
40. Derrida, *The Animal that Therefore I Am*, 23.
41. Abram, *Becoming Animal*, 190–91; Lummaa, *Kui trittitii*, 90.
42. Oliveros, *Deep Listening*, xii.
43. Oliveros, *Deep Listening*, xxv.
44. See Lummaa, *Kui trittitii*, 71.
45. Oliveros, *Deep Listening*, xxv.
46. Goddard, Halligan & Hegarty, "Introduction".
47. See Nechvatal, *Immersion Into Noise*; Thompson, *Beyond Unwanted Sound*.
48. Nagy & Johnson, "Introduction", 55, 62–64, 70.
49. Bryant, "Wilderness Ontology", 21.

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