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Maja Bjelica*

The Ethics of Deep Listening: A Practice for Environmental Awareness

Abstract

This paper is attuned to a frequency that searches for an embodied practice of an ethics of listening that considers the human other and other beings and things or environments, thus contributing to the ethical inhabiting of the more-than-human world. The paper presents the compositional and meditative practice of Pauline Oliveros, called Deep Listening, connecting it to the contemporary and emerging fields of sound research, such as acoustic ecology, acoustemology, and ecomusicologies, as echoing one another in the process of transforming the human attitude towards the environment into a more attentive sharing of our habitats and cohabitation in awareness.

Keywords

Ethics of Listening, Deep Listening, Pauline Oliveros, Environmental Humanities, Sound Studies

This article[1] further connects an emerging field, the ethics of listening, to flourishing research in the environmental humanities. As we will hear, several connections of this kind have already been established. Thinkers of listening as ethical gestures include in their research non-human entities. Meanwhile, ecologists, environmental sound researchers and artists are gradually including the activity of listening in the list of the possible attitudes

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* Science and Research Centre Koper, Institute for Philosophical Studies
Email: maja.bjelica@zrs-kp.si

towards the environment and its inhabitants that can bring a deeper connection between the listener and the listened-to. The following reflection on these themes offers another transdisciplinary encounter in these fields of knowing and sharing. I will show how the compositional meditative practice of Deep Listening, developed by the avantgarde musician Pauline Oliveros in the late 1980s, can widen the usually anthropocentric ethics of listening to ethics inclusive of other-than-human beings and environments as subjects, thus establishing an intersubjective cohabitation. To do so, I will first briefly introduce the significant reverberations from the ethics of listening, and from there, I will overview the intersections of research in environmental humanities and sound or music.

Listening as an Ethical Relation

> Raw listening, however, has no past or future. It is the roots of the moment. It has the potential of instantaneously changing the listener forever (Oliveros 2010, 7).

Ethics of listening establishes its importance in prompting intersubjective relations, in which nobody, nothing, is treated as an object but is considered one of the possible subjects. In the last decade, several scholars have explicitly adopted this field of research in their work,[2] and the ethical aspects of listening were also addressed by renowned philosophers, such as Emmanuel Levinas and Luce Irigaray. Reading Emmanuel Levinas (1979) can remind us that the ethical act of listening is grounded in openness to the radical other, that a caring response is primarily receptive rather than projective, and that difference does not allow for a totalised truth, a final one. On the other hand, Luce Irigaray (1996; 2008) addresses listening as offering silence and space to the other for their expression and being, without reducing them to the same, and as a respectful and recognising gesture of sharing.

One of the theoreticians exploring the realm of ethics of listening most extensively, Lisbeth Lipari (2014), introduced "listening otherwise," which focuses on providing attention, patient awareness, empathy, compassion. These give space to alterity, the unknown, the unthinkable, the unexpected.

[2] Due to lack of space, I will not go into details of the ethics of listening; however, I have written extensively on the topic in articles such as "Listening to Otherness: The Case of the Turkish Alevis," (Bjelica 2020) and "Listening: An Interdisciplinary Path towards Letting Things Be" (Bjelica 2021).

> [...] *listening otherwise* calls us to preserve our sense of the vulnerability of all beings, of the sense that everyone suffers without insisting that our sense of the other be rationally comprehensible or even imaginable to us. [...] *listening otherwise* takes us beyond the self and out into the groundlessness and ambiguity of the radical alterity of the other (Lipari 2014, 184).

In her book *Listening, Thinking, Being: Toward an Ethics of Attunement*, Lipari investigates "how listening brings humans into being" (Lipari 2014, 2). The author strives to raise awareness about the importance and meaning of listening, researches its complexity in the personal, cultural, and philosophical realms, and exposes listening as a mode of communication that allows for transformation. Lipari understands listening as a way of being in the world, as an ethical relation.

> [...] *thinking listening as a way of being* creates the possibility of an ethics driven neither by rules and obligations nor by outcomes and consequences, but rather, one that is drawn toward an ethics of attunement—an awareness of and attention to the harmonic interconnectivity of all beings and objects (Lipari 2014, 2-3).

Understanding listening as a way of being, a way of engaging with the world, and being intersubjective at its core, is crucial for discovering the possible ways of cohabitating not only in the realm of the inter-human but also on the inter-being level and even in the fields of inter-material, including all the objects, materials, environments, and world habitats.

Practices of Environmental Listening

> Listen to everything until all belongs together and you are part of it (Oliveros 2010, 7).

Let us now listen to a movement into the research from another field of knowledge, which begins in acoustics, sound, or even music. Attention to connections between sound and the natural environment has risen, especially with Murray Schafer's work *The Soundscape: Our Sonic Environment and the Tuning of the World*, first published in 1977, in which he defined the term soundscape as "the sonic environment." This Canadian composer exposed the need for an "interdiscipline" named acoustic ecology, described as "the study of sounds in relationship to life and society" (Schafer 1994, 205).

> Ecology is the study of the relationship between living organisms and their environment. Acoustic ecology is thus the study of the effects of the acoustic environment or SOUNDSCAPE on the physical responses or behavioral characteristics of creatures living within it. Its particular aim is to draw attention to imbalances which may have unhealthy or inimical effects (Schafer 1994, 271).

The research field "ecoacoustics" is also related to acoustic ecology. The term began being used in the last decade to denote "the ecological investigation and interpretation of environmental sound" (Farina and Gage 2017, 1). This recently emerging science that studies sound and its role in the environment is an interdisciplinary field of inquiry that includes differing aspects of ecological research, such as populations, communities, biotic systems, and others.

> Ecoacoustics studies involve the investigation of sound as a subject to understand the properties of sound, its evolution, and its function in the environment. Ecoacoustics also considers sound as an ecological attribute that can be utilized to investigate a broad array of applications including the diversity, abundance, behavior, and dynamics of animals in the environment (Farina and Gage 2017, 1).

Another terminological development in the field of sonic research was proposed by Steven Feld,[3] an American anthropologist of sound, who coined the term "acoustemology" in 1992 as a response to the questions of contemporary social theory, about the multitude of "essences" and the relational constitution of the world. He defines this word in the frame of relational ontology: "Acoustemology joins acoustics to epistemology to investigate sounding and listening as a knowing-in-action: a knowing-with and knowing-through the audible" (Feld 2015, 12).

Another important developing field of sound research is ecomusicology, described as "[t]he study of music, culture, and nature in all the complexity of those terms. Ecomusicology considers musical and sonic issues both textual and performative, related to ecology and the natural environment" (Allen 2014). Due to its complexity, researchers stress the importance of understanding that this dynamic, critical, and multi-perspective field of research consists of e c o m u s i c o l o g i e s, rather than a n ecomusicology (Allen and Dawe 2017, 2).

[3] Steven Feld applies this theoretical frame in his work on researching sounds and music of the world, which can be followed through his web page "acoustemology, anthropology of sound, voice, image, sense & place" (accessible through the address www.stevenfeld.net).

Many more terms have emerged in the realm of researching connections between sounds and environments, such as acoustic diversity, anthrophony, bioacoustics, biophony, geophony, sound (or acoustic) commons, soundscape ecology, soundwalks, and others. These fields of research are mainly sound-oriented, investigating sound as their main subject (or even object) of inquiry. Here, sound becomes an informant, a source of knowledge, of revelation, but also a medium of connection, and a reminder of a shared world.

Only recently have these research fields stressed the importance of conscious and attentive listening as a method, an activity that enables a deeper and more informed experience of sound. As an example of this, I would like to bring to our attention a recently published double issue of *Cadernos de Arte e Antropologia*, a peer-reviewed journal that, in 2021, dedicated its focus on articles gathered under the title *A Sonic Anthropocene: Sound Practices in a Changing Environment*. In it, the contributors concentrate on practices of listening and aural documentation, recognising in them the potential for examining the increasing impact of human activity on the environment. The editors stress the need to cultivate a critical stance in acknowledging that

> the present socio-ecological changes equally require practices of listening and aural documentation that register the transformations of the acoustic landscapes of cities and natural environments as well as sounding out that which escapes sensorial immediacy and consciousness (Louro *et al.* 2021, 6).

The contributions emphasise the role of sound as a mediator between body and environment and the role of listening as allowing for connections of the listeners to nature and environmental change, being especially important in fostering awareness of micro-events (Louro *et al.* 2021, 8). The omnidirectionality of sound opens intersectional directions to explore the climate crisis. Eco-conscious sonic artists create through investigative art forms, community-based art and socially engaged practices that lead to the flourishing of plural expressions, aural diversity awareness, complexification of acoustic policies, and sensing hierarchies. Moreover, through listening, ecopedagogies have methods to broaden ecological consciousness.

Another important recent contribution is the presentation of the Coastal Futures Conservatory (CFC), a transdisciplinary environmental humanities laboratory, founded by the University of Virginia, devoted to collaborative inquiry and public engagement around various forms of listening. The article's author, William Jenkins, professor of ethics, co-directs the conservatory with ecoacoustic composer Matthew Burtner. Jenkins talks about a "broader

intellectual turn to listening" and describes that conservatory visitors who engage in "the reorienting experience of attentive listening seemed to open intellectual space for listening across disciplines and for reorienting attention to the living shore" (Jenkins 2021, 204).

The CFC was established to deepen ecological understanding, cultural imagination, and ethical response to environmental changes in the Virginia Coastal Reserve, where climate change caused sea levels to rise and therefore the need to think of preserving and conserving this habitat and investigate "coastal futures" arose. Researchers, educators and sound artists develop and propose different materials for listening: field recordings, sonifying data, and designed listening stations,[4] which are offered to human listeners when they visit and rediscover their existence through attentive listening, also by returning to them. "Sensing coastal futures happens most aptly from participation in processes of becoming—by listening and responding" (Jenkins 2021, 219).

William Jenkins (2021, 203-215) recognises four different forms of listening according to their function or "consequences" that they elicit through their engagement. Listening as (a) an embodied art of attentiveness that might be enacted through listening exercises or visits to listening stations, allows for a meaningful response, immersion in relations, renewing curiosity and empathy, and acknowledgment of responsibility, including the realm of the challenges of climate change. Listening can be engaged with as a (b) metaphor of environmental knowledge that, especially through participatory engagement in aurality, can contribute to reorienting epistemic models and to an openness to the environment's total presence. This is relevant also for (c) listening to science, when monitoring life through soundscape, but also to present it transdisciplinarily through the arts, through a shared auditory space. In addition, listening is also a (d) political relation that encourages dialogue, encounters with experiences of vulnerability, and acknowledgement of human accountability.

A very important aspect of listening exposed by Jenkins is its transformative potential. Listening can connect the scientific to the ethical and political realms. This can be achieved by listening to material and spiritual stories,

[4] Due to lack of space, I cannot present the fascinating offerings in listening and other activities of the conservatory in detail. I would suggest that anyone interested in environmental sounds visit their web page, where a lot of field recordings and sonified data are made available to listen to: ocean waves, waves on shore gravel, humpback whales, oyster reef, crab flutes and others. Accessible through the address https://coastalconservatory.org/listen.

understanding the land as "a sacred text": "Incorporating ecological meditation or other arts of attentiveness into the process of forming research questions can open unseen pathways of investigation" (Jenkins 2021, 218). Spiritual openness can broaden scientific research, but mainly it allows for a deeper understanding. It allows for listening across disciplines and participation in processes of becoming, through listening and responding, allowing for careful making of the futures, made by all engaged relations.

Pauline Oliveros' Deep Listening

> Deep Listening is a heightened state of awareness and connects the listener to all there is (Oliveros 2010, 73).

Searching for a way to enact or embody these intersubjective, ethical, attentive, transformative, and "other-wise"[5] modes of listening when approaching the more-than-human world, I remembered my co-incidental encounter with the practice of D e e p L i s t e n i n g, coined and formulated by Pauline Oliveros. She was a musician, composer, and professor who elaborated methods of music creation and this compositional practice to teach her students how to listen deeply, raise sound awareness, and attend to sound. Her practice was inspired by her childhood obsession with listening to her environment. After recording the sounds from her apartment room in 1953, when she received her first tape recorder, she realised how many sounds she had missed, despite her attentive listening while recording. Since then, she has been following her life-time meditation: "Listen to everything all the time and remind yourself when you are not listening" (Oliveros 2010, 28). The author claims the chosen ways of listening, be it everyday sounds or music, significantly affect the quality of one's life experience (Oliveros 2010, 6).

Oliveros developed unconventional strategies for sound-oriented composition, conceived as guidelines for listening and responding to sounds of others and the environment, allowing for sharing the creation of interactive

[5] I am using the notion of an "other-wise" mode of listening partly in reference to Lipari's (2014) "listening otherwise" (see above) but also deriving from the "other-wise" approach employed by Shé Mackenzie Hawke (2012) in her cross-cultural research on pedagogy, sustainability and human rights, that is based on "a critical need for understanding the greater properties and meanings" (Hawke 2012, 235). Moreover, taking in consideration a larger scale echo, this notion can also be understood in the realm of ethics, where "knowing other-wise" is a response to the call for "another way of knowing, a way of knowing 'the other,' a knowing other-wise" (Olthuis 1997, 1), a non-oppressive knowing, not limited by reason.

music. She wrote one of her earliest collections of such compositions, *Sonic Meditations* (Oliveros 1974), in 1971, after many trials with oral instructions when she was performing and researching them with the ♀ Ensemble. Instructions include general open statements and reassurances, such as: "Anything goes if and only you are listening" (Oliveros 2010, 8). Pieces include nonverbal sounds, allow expressing emotions and exploring the unknown, and consequently provoke a sense of release after attending such performances (Oliveros 2010, 7). Instructions such as "to start an attentional process within a participant and among a group" (Oliveros 2010, 5) are more generally called "text scores," since they are written mainly in prose. Describing these compositions, she explains that they were often dismissed, since they were not suited to be judged, reflected upon in the frames of conventional aesthetics of Western artistic thought, due to their lack of notation, specifications of pitches or rhythms, melodies or harmonies. With her work centred on listening, she has redefined the responsibilities of the composer, the performer, and the listener (Oliveros 2010, 6).

The term D e e p L i s t e n i n g was coined by Oliveros, Stuart Dempster, and Panaiotis as a play on words after these musicians went to record in and "play with" the underground cistern in 1988, which was followed by an album release of the Deep Listening ensemble the following year. From there Deep Listening emerged as Oliveros' compositional and lifelong practice that continues to evolve.

> The more I listen, the more I learn to listen. 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 2010, 77).

The exercises in Deep Listening practice consist of energy work, bodywork and dreamwork, breathing and vocalisations. It is cultivated through repetition, practice, and discussion. Being a specific form of sonic meditation, it stresses the importance of the interplay between the focal and global listening modes[6] to sounds, which are not limited to music or speech but in-

[6] According to the direction of attention of one's listening, Oliveros (2010, 29) differentiates two modes of listening. F o c a l listening is directed to one specific sound, which the concentration of the listener is narrowed down to, listening for detail. G l o b a l listening is an open receptive state, in which the listener concentrates their awareness to including all the possible sounds to listen to, listening for context. Besides the ones they actually hear, listeners try to auralise the sounds that are present in that moment but are not heard. Oliveros interprets these two modes as contraction and expansion between a t t e n t i o n and a w a r e n e s s, and the balance between them allows for a connection with all existence (Oliveros 2010, 74).

clude all perceptible vibrations. "The relationship of all perceptible sounds is important" (Oliveros 2005, xxiv). Responses from the participants in the Deep Listening practice resonate with being. This is due to the practice's inclusiveness, involving imagination, researching meaning and memory immersion. The practice allows for a myriad of possibilities of growth and change, but also of interpretation, when travelling below consciousness through heightened listening (Oliveros 2010, 78). "Deep Listening comes from noticing my listening or listening to my listening and discerning the effects on my bodymind continuum, from listening to others, to art and to life" (Oliveros 2005, xxiv). Oliveros differentiates between hearing and listening, the first being a primary sensory perception and involuntary, while the second is a voluntary process that through training and experience produces culture (Oliveros 2010, 73). Listening directs attention, spreads awareness, interprets meaning, and encourages action.

> We hear in order to listen.
> We listen in order to interpret our world and experience meaning. Our world is a complex matter of vibrating energy, matter and air just as we are made of vibrations. Vibration connects us to all things interdependently (Oliveros 2010, 78).

Being connected "to all things interdependently" can be experienced precisely through listening, realising that everything is included in the world's soundscape. As Schafer presents it, "We are simultaneously its audience, its performers and its composers" (Schafer 1994, 205). Through listening, we can become aware of our own impact on the soundscape, and consequently also on the world, and we are able to identify "destructive sounds" and can be encouraged to act upon them. Here, Oliveros and Schafer listen parallelly, despite coming from different backgrounds. However, Deep Listening, being a composition practice, is a great supplement in developing the acoustic design advocated by Schafer, which is "a matter of the retrieval of a *significant aural culture*, and that is a task for everyone" (Schafer 1994, 206). Through practices of Deep Listening, everyone can contribute to design such culture, and therefore this practice is of great importance to the scientific fields of sound studies, including ecoacoustics or acoustic ecology.

Oliveros' work is considered in scientific discussions mainly as music composition, an artistic product;[7] sporadically it is considered from the perspectives of sociology and gender studies;[8] however, Oliveros' Deep Listen-

[7] See for example "The Theory of Sonic Awareness in the Greeting by Pauline Oliveros" (von Gunden 1981) or "Music with Roots in the Aether" (Osterreich 1977).

[8] Contributions such as "The Politics of Collaborative Performance in the Music of Pauline Oliveros" (Lange 2008) or "The Gendered Construction of the Musical Self: The Music of Pauline Oliveros" (Taylor 1993).

ing practice is not addressed much from the realm of ethics—one could guess due to its unconventional ground and unscientific approach. An example of dismissal can be found in the critique of Nina Dragičević (2022), who in her research engages with listening as a method of sociological inquiry in the sounding of bureaucracy. Dragičević recognises elements of essentialism in Oliveros' belief about listening being a primordial perceptual human condition—from which a person is gradually distanced, but which one can eventually and expediently re-access, as if listening were not under the influence of reduction of experiential perception nor conditioned by language (Dragičević 2022).[9] I am exposing here Dragičević's critique as an acknowledgement of the drawbacks one might have when encountering the practice of Deep Listening. To Dragičević's critique, I would add that Oliveros' Deep Listening practice is generally conceived as a performative practice—collaborators engage in it mainly to produce sounds or music in a communal way. However, Oliveros' main intention was not directed only to this goal; the performative aspect of this practice is not so much in the performance itself, performance understood as staged and arranged, a show with a public, an audience. Rather, the focus is on performing, as doing, creating, being in a listening space, shared with others, humans and non-humans, the environment itself.

John Luther Adams, in the "Foreword" to Oliveros' third collected writings (Oliveros 2010), presents her as someone who "believes that music has the power to transform human consciousness and society;" someone who explores the borders of music and is still "always at the centre of experience;" and someone who "makes music in and with the larger-than-human world" (Oliveros 2010, iv–v). The latter, namely, that Oliveros does not conceive of her practice of Deep Listening in anthropocentric terms, is evident in some of her guidelines for music making, such as "Three Strategic Options," where the instructions are to sound before, after, or with another performer. To this, she adds: "If performing as a soloist, substitute sound from the environment for another performer" (Oliveros 2010, 5). Sounding before, after or with the environment requires an attentive listening to it and acknowledging its presence through offering space to its sounds. Here, the listener-performer approaches the environment as a collaborative entity and helps

[9] Moreover, Dragičević presents Oliveros' notion of listening as affected by the *new age* paradigm of the 20th century and new waves of feminism looking out for "authenticity." To these categorisations John Luther Adams, when introducing Oliveros' work, has a ready answer: "But anyone who would dismiss her as a sort of New Age guru is missing the fierce intellect that burns within the woman and her work" (Oliveros 2010, iii-iv).

to understand the ecological roles of sounds, and therefore contributes to the deepening of the sphere of ecoacoustics as the "new science" that investigates sound as a subject (Farina and Gage 2017, 1). Farina and Gage (2017, 2-3) expose animals that use sounds of the environment as a signal for survival, but also stress the role of listening to their sounds as a study of species communication. Similarly, Oliveros (2005, xxv) claims that all animals are deep listeners: when we enter their environment, they receive us listening completely, since listening conditions survival. When flooded with sounds of urban life, human ears adapt to selective listening or narrow focus, disconnecting us from our environment. Listening allows one to reconnect, discover, and explore; it is always relational. "As you listen, the particles of sound (phonons) decide to be heard. Listening affects what is sounding. The relationship is symbiotic" (Oliveros 2005, 40).

In her works, Oliveros raises awareness about the increasing loudness of sounds brought by the industrialisation of society. She notes that many machines could be silent, but the usage of the loud ones gives a sense of power and control. Oliveros points out that urban sound levels keep rising. "No part of the planet is untouched by machine sound." She calls upon human responsibility to consider noise regulation that would not be damaging to humans, animals, and the planet (Oliveros 2010, 81). This is something, as already mentioned, Murray R. Schafer did with his acoustic ecology and design that should eliminate destructive sounds (1994, 205). This tendency is being developed further in contemporary directions of sound studies and ecology, as presented in the volume *A Sonic Anthropocene*. As Louro *et al.* (2021, 8) argue, listening to the environment allows for an awareness of its microevents, which relates to Deep Listening's direction in fostering attention and awareness. It connects to Oliveros' thought further on, since listening in giving awareness changes and affects the subject that one listens to (Oliveros 2005, 40). Contemporary sound studies, such as acoustic ecology, bioacoustics, or soundscape ecology, strive toward the transformation of the "listened to," through documentation of its sound, which allows the examination of the (human) impact on it and the cultivation of a critical stance about it (Louro *et al.* 2021, 4-6). This surely connects directly to Feld's notion of acoustemology, where through listening one discovers, knows, and acts critically (Feld 2015).

In her writings, Oliveros (2010, 22-25, 80) also stresses that in the tradition of Western culture the visual is privileged, which is also evident in the vocabulary we use when referring to musical and sound creation. Similarly, the developing and emerging scientific fields of sound studies stress the

importance of acknowledging the ocularcentrism of Western culture (Louro *et al.* 2021, 8). Through changing the vocabulary we use, Oliveros claims that we could allow for a shift in attention. With this in mind, she proposes a list of auditory terms that would foster this shift when speaking of sound and audition, which include such terms as aurality, auralization, phonation, resounding, reverberating, silentness, transonic, unhearable, or sonosphere, and some of these terms can be found in the aforementioned emerging sciences in sound research (cf. Allen 2014; Farina and Gage 2017; and Louro *et al.* 2021). Taking into consideration the terms Oliveros proposes, we can see, for example, that the term s o n o s p h e r e hints at the fact that Oliveros' listening practice is understood beyond the human: "*The Sonosphere is the sonorous or sonic envelope of the earth.* […] *All cells of the earth and body vibrate*" (Oliveros 2010, 22). And further: "The *sonosphere* includes all sounds that can be perceived by humans, animals, birds, plants, trees and machines" (Oliveros 2010, 22-23). At this point, she omits minerals, stones, or water from perceiving sounds, but we might extend Oliveros' Deep Listening to those as well once we search throughout her compositional work. Her piece "Echoes from the Moon," which she and her collaborators were performing in the late 1990s, included making music "with the moon as a delay line" (Oliveros 2010, 60), which was enabled by the use of a ham radio signal that was sending recorded sounds "to the moon" and receiving them back from her as an echo. Surely, we cannot claim that the moon was performing, but while attending to the performance, performers and listeners could interpret the sounds coming back from her as they were listened to.

In her compositional and performative work, Oliveros includes the environment as the co-creator, co-listener in the process. In her piece from 1998, "In Consideration of the Earth" (for solo brass or wind instrument), the guidelines are given in six lines: "Listen in all directions" (Oliveros 2013, 31). In her first call she obviously invites towards global listening, encompassing all sounds around the listener, sounder. She continues: "Turn and play only to the North (interacting with sounds perceived or imagined)." Here, directionality is given as a line to follow when producing sound based on an interplay with the sound coming from the same direction. Then, the instructions guide the listener to other directions of the Earth, east, south, and west, as in a clockwise rotation. Finally, Oliveros turns the listener to the centre, playing to it and interacting with it. She directs the listener directly to the core of the Earth, the planet, their home. In performing this piece, the listener encounters Earth, its physicality, its relation to themselves, its unknown. Through the act of listening, they are bound to respond to Earths'

sounds and calls. This brings us to the responsibility toward the unknown as basics of the ethics of listening, or listening otherwise, introduced by Lipari (2014), which allows attention and awareness, similar to Oliveros' Deep Listening practice, towards the unfamiliar, the non-human. It allows for interconnectivity with more-than-human beings and objects, matters, entities: "*listening otherwise* [...] suspends the wilfulness of self- and foreknowledge in order to receive the singularities of the alterity of the other" (Lipari 2014, 185). This is one of the aspects of listening otherwise that resembles the Deep Listening approach towards the non-human that through listening allows for an ethical encounter with the environment as an irreducible subject, to co-habit with. This listening and responding to the listened-to relates to Jenkins (2021) participation in becoming, as co-habitation, co-being. The practice of Deep Listening coincides with Jenkins' modes of listening (2021, 203-215), since it fosters attention to any sounds; therefore it includes any environmental sound and allows for the environment to be met and discovered in an alternative way: by participating in sounding, the listener's epistemic models are reoriented toward unconventional ones that allow openness, which brings the listening subject to the realm of ethics. As an ethics of listening, Deep Listening also encourages dialogue through sounds and allows for (environmental) vulnerability and (human) accountability to be acknowledged.

Another Oliveros' piece, incorporating the environment and fostering interconnectivity, is "The River Meditation" from 1976.

> By a river or stream, listen for the key notes in the rushing waters. Allow your voice to blend with the sounds that you hear (Oliveros 2013, 46).

As in the piece presented previously, the listener interacts with their environment, in this case with a river or stream. Not only do they respond to their sound, they try to blend with it. For that, an increased amount of attentive listening is required to blend with the sound of the water as much as possible. In doing so, the listener is in close proximity to the water body, they are levelled with each other, they interact. One could say, they are performing a duet. In this practice, again, awareness of the environment comes to the fore.

There are other, more complex pieces fostering an awareness of the environment and attention to it and its' sounds, and listening interaction with it, such as "Environmental Dialogue" from 1997 (revised in 2008; Oliveros 2013, 117-118), "Earth Ears" from 1989 (Oliveros 2013, 87-91), and "Collec-

tive Environmental" from 1975 (revised in 1996; Oliveros 2013, 168). But at this point I would like to turn to a text that is more poetic and was written in 1992 as "A Composer's Guide in Deep Listening" as noted under the title "The Earthworm also Sings" (Oliveros 2013, 1-12). Here is the opening of the text (Oliveros 2013, 1-2):

> I hear
> I am
> I receive what is
> Listening
> No argument
> My body is sound
> Listening guides my body
> Sound is the fiber of my being and of all sentient beings without exception
> Is sound intelligence?
> The earth is also sound
> guided by sound
> and so are all things of the earth

Oliveros starts with "I," with her experience, her being through hearing and receiving through listening, which guides her body that is sound; sound being the fibre of her being. The author here introduces the reader to listening and sound through her own experience of it, through her embodiment of the experience of listening, of being sound. Through this presented experiential knowledge, she applies it to all the things on earth, claiming that they and earth are also sound, and guided by it. She continues to describe the earth and her returning to her, establishing a relationship, connection through vibrations (Oliveros 2013, 2-3):

> Rocks are her ears recording all of her events from the beginning
> My earth body returns to hers
> where the earthworm also sings
> Inside/outside vibrations
> My bones resonate
> My stomach, spleen, liver, kidneys, lungs and heart resonate
> These organs are sound
> contain sound
> The rhythms of my bodily life
> encoded in the theater of my mother's womb
> I listened from the beginning
> universal process
> cellular language familiar to all sentient beings without exception

From connection to earth, Oliveros returns twice to herself: returning to earth and returning to her bodily experience through vibrations, resonating, sounding. From there, she comes back to the "universal process" of listening from the beginning, common to all as a "cellular language." Also, she returns to the beginning, which is also the end, as one might notice in the lines following these, where she includes in her connecting to the earth also death, which she also perceives as sound, listening: "listening to death / returning to home in the earth / where the earthworm also sings" (Oliveros 2013, 4). Her thoughts on life and death connect the two together, avoiding any morbid tone that might appear in otherwise addressing death. Through returning to earth, she comes home, to life, through death, taking another form that is always sounding. Sound, being a shared element, shared experience, shared pleasure (Oliveros 2013, 6):

> Primary pleasure of one's own sounds and of other's sounds
> One's own inside/outside/space/silence
> Pleasure shared by all sentient beings without exception
> throughout space and time
> even if I have forgotten to listen
> Ear is always open
> even if in my filtering moments I am not open to receiving
> I hear if I remember.
> I hear more if I remember to remember

Here, Oliveros alludes to the fact that the ear, as a perceiving body part, is always active, ready to receive, since it is always open. Yet, if not ready to receive, it can miss sounds if it is not listening. However, Oliveros keeps reminding us to "remember to remember": that we can listen to something while remembering it, even if we missed it. Remembering to listen adds to the regular perception of sounds those of them that we would have missed if we had forgotten to remind ourselves to listen.

In the quoted lines, Oliveros mentions three times "all sentient beings without exception" in terms of her connection to them (these sentient beings), of having something in common or sharing something—sound. She deeply feels that sound is the connecting element of everything, of all sentient beings: sound is our fibre, the sound of cellular language connects us all to the beginning, and moreover, it is a pleasure shared by all. Here the author establishes a connection that is not human-centered but levelled to the perception of sound in all its forms. Unfortunately, Oliveros does not explic-

itly state who and what she has in mind while addressing "all sentient beings,"[10] but through reading her works, we can state that she would include among us also beings beyond the animal and plant worlds, such as water, wind, the moon, rocks, machines, and others. A reason for not stating in detail what she means could be found in the fact that she strives toward the openness that listening allows, in the fact that she is aware that she cannot know what might be included by "all sentient beings" and that, therefore, one should always leave space or silence for the unknown to emerge (Oliveros 2013, 10-11):

> Returning to where the earthworm also sings, deepest listening is for that which has not yet sounded
> Receiving that which is most unfamiliar
> learning its space time sound silence dance
> Interacting with that which is most familiar
> Listening until the newest is learned
> Making space for the yet unborn through stillness

The unheard, the unsounded, need our deepest listening in order to emerge. Stillness, allowing for silence and no vibrations, allows other vibrations, still unknown, to spring and slowly be recognised, familiarised, interacted with. And here is where Oliveros definitely steps into the realm of ethical thought, the ethics of listening, which can be reinforced with the help of the practice of Oliveros' Deep Listening. "We need to be listening in all possible modes to meet the challenges of the unknown–the unexpected" (Oliveros 2010, 80).

[10] I am thankful to the anonymous reviewer who pointed to the fact that the term "all sentient beings" is commonly referred to as understood in Buddhism (from early scriptures of the Pāli Canon), namely, all conscious beings, subject to illusion, suffering and rebirth, including divinities, humans, animal, spirits (Getz 2004, 760). Being a practicing Buddhist (Miles 2008, 7), Oliveros surely came from this background of understanding, but we can follow her thought in going beyond this definition of the term, especially through her practice that is inclusive of plants, objects and other matters.

Listening: The Transformative Process Towards an Ethical Attunement

> Yes, Deep Listening is the foundation for a radically transformed social matrix in which compassion and love are the core motivating principles guiding creative decision making and our actions in the world (Oliveros 2010, 90).

In this paper, we followed a reflection on ways to foster environmental awareness, through connecting it to environmental (sound) studies, attentive listening, and ethical conduct. Allowing ourselves to be inspired by the immersive practice of Deep Listening, offered to the world by Pauline Oliveros, we can facilitate our entering to the world of the ethics of listening, where we can acknowledge and secure the request for silence that allows the unknown and unexpected to appear through paying attention to sounds.

As Oliveros reminds us, listening is a lifelong process, and is also a transformative process. "What is heard is changed by listening and it, in turn, changes the listener" (Oliveros 2010, 74). We may observe the transformative force of listening also in the activities presented by William Jenkins (2021) who recognises in the turn towards listening a meaningful possibility of connecting the scientific, political, and ethical realms in order to approach our shared future with responsibility and care. This is evident also in the realm of contemporary scientific attempts to expose sound, encountered through attentive listening, as an informative element for understanding the environment and for an ethical transformation of the human relationship towards it. The Deep Listening practice, combining attention and awareness, also encourages scientific research in acoustic ecology that is inclined to place "sound at the centre of an interdisciplinary conversation about the economic, social, cultural, political and ecological processes that underlie the currently ongoing planetary transformations" (Louro *et al.* 2021, 12-13). The centrality of sound and listening in Oliveros' creative practice was recognised by Heidi von Gunden (1981) before the artist coined the term Deep Listening; von Gunden defined it theoretically as "sonic awareness" that is "characterized by a continual alertness to sound and an inclination to be always listening" (von Gunden 1981, 409). It is specifically this environmental sonic awareness, emerged through listening, that allows for a transformation of the listener and their relation to the listened to. This is encouraged primarily by Oliveros' inclination towards "ritualism, healing and humanism" that allow us to go beyond the Western aesthetic and the dichotomy

between art and nature (von Gunden 1981, 411). Further, Oliveros' work proves that there is no such phenomenon as an isolated subject; in contrast, insisting in the experiential mode of creation, it emphasises its intersubjective dimension, fostering individual and collective agency (Miles 2008, 6).

The perspectives of Deep Listening also coincide with acoustemology, which "is grounded in the basic assumption that life is shared with others-in-relation, with numerous sources of action […] that are variously human, nonhuman, living, nonliving, organic, or technological" (Feld 2015, 15). Analogically, Lisbeth Lipari exposes listening as an essential communicative practice with a great "potential for social, personal and political transformation" (Lipari 2014, 3). To this, we can add the possibility of transformation of our awareness of the environment and our (human) interconnection to it. Furthermore, Lipari stresses the importance of listening for an ethical attunement to each other, to life, to the world of which we are unavoidably part: "*listening otherwise* calls us to preserve our sense of vulnerability of all beings" (Lipari 2014, 184). This stance is something to which Pauline Oliveros' Deep Listening is deeply attuned.

To conclude this reflection, let us dedicate our attention to the words recently written by Annea Lockwood (2020, 1), an artistic peer to Oliveros, who with other collaborators engaging in environmentally conscious artistic activism created a collection entitled *A little guidebook for home listening*. These opening words are a vivid example of how listening can bring us closer to the unknown, to the not yet explored, to the world we inhabit and affect. Let them be a reminder of our responsibility for attentiveness and awareness of our present and future engagement in ethical care.

> Listening with…
> listening with the neighborhood
> at midnight, or at dawn, indoors or outside.
> Listening with an awareness that all around you are other life-forms simultaneously listening and sensing with you – plant roots, owls, centipedes, cicadas – mutually intertwined within the web of vibrations which animate and surround our planet.
> Listening to feel that 'I am one with all these phenomena. Can I know it?' I listen to know it.
> What we are at one with, we cannot harm.

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