



Considering Non-anthropocentric Music

Robert Blatt

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»What is music when conceived for humans and nonhumans?« asks Robert Blatt in his essay »Considering Non-anthropocentric Music.« This raises ontological questions about our human-centered perspective in experimental music. Blatt's shift from anthropocentric to non-anthropocentric music presents the possibility for vast environmental receptivity that is inherent in experimental music, and the impact of anthropocentrism on human and nonhuman entities alike. Non-anthropocentrism suggests the experience of music as something beyond human perceptual limits, considering the diverse sensory experiences of different beings. Touching upon ethical considerations in environmental sound art, Blatt advocates for non-extractive practices and interdependence, and proposes an ecocentric approach to music. What is the *nature* of music when it is created for humans and nonhumans?

Frans Snyder, *Concert of Birds*, 1629–1630.
Source: Wikimedia Commons

He ~~has~~ [We have] not learned to ~~think~~ [make
music] like a mountain.¹

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The prevalence of silence and field recording, or for that matter sound walks, environmental installations, and site-specific performances in experimental music echoes the advancement of environmental sound and natural phenomena in experimental music in general. While these practices have been framed as expanding musical constraints by integrating non-musical sound and noise,² chance and the everyday,³ and deepening connections with a site,⁴ a less-discussed aspect are the implications of their radical receptivity to the environment – a responsiveness that challenges conventions of authorship, artwork, audience, and material; assumptions about the primacy of the human and a subsidiary treatment of the environment; and even any supposition of music as a human phenomenon. Nevertheless, a strong anthropocentric tendency in experimental music persists. Consider how the widespread practice of field recording involves capturing and repurposing the environment strictly for human listening. Akin to natural resource extraction, this process treats the environment as a resource to take, a postulation deeply rooted in an anthropocentric perspective. Such forms of extraction are seemingly incongruous with the implications of experimental music's environmental receptivity and encourage an expansive reconsideration of the environment's relationship to humanity in music, one that would seemingly necessitate a shift from centering the human, i.e., non-anthropocentric music.

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Anthropocentrism is a human-centered perspective that ethically valorizes humanity over nature. Non-anthropocentrism, in contrast, negates such human centrality and valorization, leaving undefined what, if anything, is centralized or valorized. Consequently, non-anthropocentric music represents an open aesthetic framework that encompasses different and diverse relationships with humanity and any and all elements of the environment beyond the anthropocentric paradigm.

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An outcome of anthropocentrism has been the widespread assumption that plants are noncognitive and incapable of perceiving their surroundings. Despite lacking a central nervous system and specialized

sense organs, studies have increasingly contested this assumption through experimental evidence of decision making, learning, and memory,⁵ as well as responses to light, chemical signatures, touch, temperature, electricity, and sound.⁶ Plant bioacoustics research has focused primarily on the agricultural benefits of exposing plants to specific sounds – electronically generated tones (ultrasonic and audible), noise, music, and environmental field recordings – demonstrating effects to germination rate, crop yield, and nutrient content, among others.⁷ A small fraction of plant bioacoustics studies have found evidence for sound perception in particular by identifying behavioral responses in plants to natural acoustic stimuli, demonstrating increased release of defense-related compounds in response to recordings made of caterpillar chewing played from transducers,⁸ higher sugar content in flower nectar when exposed to honey bee sounds from loudspeakers,⁹ and directional root growth in response to the live sound of flowing water through a physically isolated pipe.¹⁰ Moreover, plants also make sounds, including ultrasonic acoustic emissions from the release of tension in a tree's water-transport system. Some scientists have suggested these sounds are more complex than a mere mechanical byproduct of the plants' vascular system.¹¹ These developments challenge longstanding assumptions about plant cognition, audition, and sound production, while outlining actual prospects for exploring non-anthropocentric musical interactions. Furthermore, as plant bioacoustics significantly differs from that of humans or other animals, music that integrates these differences offers the possibility for a wholly other form of music.¹²

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... the distant lowing of some cow in the horizon
beyond the woods sounded sweet and
melodious and at first I would mistake it for the
voices of certain minstrels by whom I was sometimes
serenaded, who might be straying over hill
and dale; but soon I was not unpleasantly
disappointed when it was prolonged into the cheap
and natural music of the cow. I do not
mean to be satirical, but to express my appreciation
of those youths' singing, when I state that I
perceived clearly that it was akin to the music of the
cow, and they were at length one articulation
of Nature.¹³

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Music canonically occurs within the narrow band of human perceptual and cognitive limits. In contrast, non-anthropocentrism challenges or discards such boundaries. Sounds in music need not be limited to the frequency and dynamic range of human hearing. However, as music is more than just sound, a non-anthropocentric perspective compels a reconsideration of the entire wave propagation spectrum inherent to music – acoustic and electromagnetic – as well as encouraging consideration for entirely other sensory possibilities. This includes animal hearing and vision range differences, as well as nonhuman sensory systems like magnetoreception, found in migratory birds, or electroreception, found in fish and amphibians. As experimental music already incorporates human imperceptible phenomena, like radio waves and other forms of electromagnetic radiation, it is only a matter of reconsidering how and for whom these phenomena are used.¹⁴ Music's temporal and spatial qualities may also be all the more strange, occurring beyond that associated with human habitat and perception, even interacting with processes on ecological, planetary, or quantum scales. Additionally, an openness to what musicality can be for other life forms is essential. Harmony, rhythm, and/or melody may be entirely different or carry no relevance, whereas other attributes, possibly yet to be understood or conceived, may be needed, considered, and composed. These qualities will likely not be found by human imagination alone but through interaction and investigation. Ecological psychology studies behavioral responses to sound for survival purposes in biological organisms, providing approaches and findings which a non-anthropocentric musical practice may gain insight from. But music also demands such explorations across aesthetic experiences. This begs the question: Could we recognize such a thing, and if so, how?

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As an increasingly dominant ethical and political response to anthropocentrism, ecocentrism advocates for equality of intrinsic value across all of nature, living and nonliving, and its systemic interrelations. An ecocentric approach to music would be system-informed and, to a degree, nonhierarchical: decentralizing aesthetic and experiential value across the environment, with interdependence and coexistence treated as primary. As ecological systems exhibit diverse coexistence qualities, from mutualism to parasitism, such music could occupy a variety of exchange qualities. It would

be formally manifold in its possible interactions with an environment's individuals and systems, as well as cognizant of its own emergent systemic properties. Therefore, it would not reflect one relational approach but an attitude toward relations, emphasizing interconnectedness within complex systems. Experimental music, known for fostering interdependence between performers, instruments, and listeners alike through strategies like improvisation, open notation, interaction, networks, and conceptual approaches to social relations, has a foundation for considering interdependent approaches across the environment and its relations – a somewhat germane starting point for non-anthropocentric musical work.

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Birdsong has a longstanding history in music through vocal and instrumental imitation and transcription, and more recently with sound recordings, in otherwise conventional performance contexts.¹⁵ A few instances, however, express some non-anthropocentric tendencies: In a 1924 BBC radio broadcast, Beatrice Harrison performed cello works by Edward Elgar, Antonín Dvořák, and an arrangement of »Londonderry Air« in her garden to the accompaniment of nightingales.¹⁶ Ric Cupples and David Dunn's »Mimus Polyglottos« (1976) is an interactive composition for mockingbird and tape playback system with electronic sounds suggestive of the rhythmic and timbral characteristics of mockingbird songs.¹⁷ Wendy Reid's »Ambient Bird series« (2018–ongoing) creates an interacting environmental soundscape with improvising musicians guided by scores alongside one or more parrots and, particularly in its outdoor realizations, any fortuitous environmental occurrences – a flock of birds, dogs, rustling leaves, etc.¹⁸

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... he entered into the field, and began to preach to the birds that were on the ground. And suddenly, those that were in the trees came around him ... all the multitude of these birds opened their beaks, and stretched out their necks, and opened their wings ... and thereupon all those birds arose in the air, with wonderful singing ...¹⁹

...

Non-anthropocentric music raises questions about the extent to which the diversity of the nonhuman can authentically experience music. Can aesthetic

experiences occur across the diversity of the environment? Can an aesthetic experience take different shapes for the different elements of the environment? Is an aesthetic experience even essential for music? Panpsychism, a philosophical theory discussed since antiquity and experiencing renewed interest as a possible solution to the so-called hard problem of consciousness, postulates that mentality is fundamental and ubiquitous across the natural world. In its contemporary manifestations, panpsychism advocates for some form of panexperientialism, where conscious experience is fundamental and ubiquitous; it is only the degree of its richness and complexity that varies across different beings.²⁰ This seemingly non-anthropocentric extension of mind provides a perspective for how some form of aesthetic experience might unfold at likewise varying degrees of richness and complexity throughout the natural world. Perhaps in the same manner that a trained musician has a different qualitative experience when listening to music than someone with little to no musical background – such as perceiving intervallic relationships or historical references – yet both still have genuine aesthetic experiences, so too may such a musical continuum of experience exist to nonhumans. A similar analogy could be made for those with different cultures, ages, or life experiences, which beckons one even more to consider how the prospect of differing experiences of music across nature need not be thought of as superior or inferior, just different.

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Premised on the idea that nature resides outside human culture and at scales beyond human perception, Stan Godlovitch has proposed an acentric aesthetic – a *nil* perspective from which to valorize nothing – to experience nature on its own inaccessible, alien terms. Godlovitch presents three potential approaches for how this may be realized: through the removed objectivity of science, an affective-reverential view of nature that transcends human interest, and an attitude of aesthetic aloofness and sense of insignificance toward nature as mystery.²¹ As an aesthetic experience of nature readily emerges when considering music from a non-anthropocentric perspective, these approaches add insight for how one might realize such music, particularly when confronting the imperceptible, unknown, and seemingly unknowable qualities of nature. Additionally, Godlovitch advocates for nature from the perspective of terrain rather

than habitat to avoid the centrist position that habitat holds as defined by the beings that use it. Therefore, let us rewrite the statement: »*Habitat* [Habitat music] is unavoidably hitched to a centric outlook. *Terrain* [Terrain music] is outside all this desperate fuss.«²² This adaptation shifts the framework for considering music not as a practice defined and sustained by human use, but instead acentrically as an open, nonhierarchical framework across the environment. However, in contrast to Godlovitch's premise, a non-anthropocentric perspective to music inherently questions a distinction between culture and nature. It intertwines the two practically and aesthetically, challenging the validity of a dialectical tension between them and suggesting a deeper connection where both are entangled.²³ This underscores consideration of the environment, not just nature, in the context of non-anthropocentric music to embrace the ambiguous reality between natural and built environments. For in the era of the Anthropocene, distinguishing between the two becomes increasingly complex.²⁴ Furthermore, non-anthropocentrism's extension to the nonhuman would seemingly also extend to technology, such as artificial intelligence. Thus, a non-anthropocentric approach to music could express an acentric aesthetic terrain where culture and nature, or the natural and artificial, are intricately entwined.

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A prerequisite for exploring non-anthropocentrism in music involves understanding relationships between human-generated sound and the environment. For instance, the effects of anthropogenic noise on animals is well studied, encompassing reductions in mating, breeding, and foraging, as well as changes in vocalization structure, frequency, amplitude, and timing.²⁵ Moreover, studies have revealed an inverse correlation between anthropophony and biophony across urban and rural environmental gradients.²⁶ These studies contribute to a sensitivity that is needed toward the ethical considerations of human-derived sound. In environmental or Land Art, ethical debate has developed concerning the ecological, moral, and aesthetic impacts artworks have on the environment – harmful, neutral, or beneficial.²⁷ Such concerns have arguably influenced the development of ecologically conscious, social practice environmental art as a reaction to the questionably deleterious approaches of early Land Art practitioners. These concerns have been framed from the perspective of visual art practice, yet with

little consideration directed to the effects of sound, even though works of environmental sound art have existed for decades. Alternatively, experimental music, inclusive of environmental sound art and non-anthropocentric approaches, is in a ubiquitous position to contend with such ethical environmental considerations of the sonic – across the human and nonhuman, individual and system, culture and nature.

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When species meet, the question of how to inherit histories is pressing, and how to get on together is at stake ... I am drawn into the multispecies knots that they are tied into and that they retie by their reciprocal action.²⁸

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Anthropocentric perspectives are deeply rooted in the intellectual history of Western culture. Judeo-Christian scripture describes humanity as uniquely formed in God's image, and Aristotle philosophized nature as a system of hierarchical relationships.²⁹ These ideas have had long-lasting impacts, from the Neoplatonic and medieval Christian Great Chain of Being to numerous dominant philosophical systems perpetuated into the modern era.³⁰ This anthropocentric worldview has undoubtedly influenced Western society's treatment of nature, with subsequent maleffects that we grapple with today. This was not always the case. In pre-Socratic societies, humankind's unity with the environment was a widely held view that changed with the development of agriculture and cities.³¹ Simultaneously, non-anthropocentric worldviews have increasingly resurfaced, finding early expression in Maimonides and Saint Francis of Assisi.³² Yet, it is scientific developments since the Age of Enlightenment that have most steadily attenuated anthropocentrism's long-standing hegemony – including the heliocentric to acentric expanding universe, the theory of evolution, and the development of ecology as a natural science – which in turn influenced and ran parallel with sympathetic philosophical and ethical systems – from Spinoza, Arthur Schopenhauer, and Alfred North Whitehead to ecosophy, environmental ethics, and the so-called greening of the humanities.³³ Additionally, non-anthropocentric perspectives from religious and philosophical systems outside the Western tradition have exerted profound impacts on Western thought in the last century. Dominant critiques of anthropocentrism currently exist throughout intellectual discourse.

As such, experimental music's radical receptivity to the environment is just a reflection of a more far-reaching non-anthropocentric arc that can be seen throughout the arts, such as in environmental art, nature writing, and ecocinema – for which non-anthropocentric music is merely another development.

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The plant acoustic frequency technology generator, manufactured by the Qingdao Physical Agricultural Engineering Research Center in China, produces electroacoustic sound demonstrated to enhance agricultural plant yield. This solar-powered device has variable frequency (60 to 2,000 hertz) and sound pressure levels (50 to 120 decibels) that can change according to air temperature and humidity, covering a distance of approximately 50 to 100 meters.³⁴ While conceived from a resource-focused anthropocentric framework, one is compelled to ask what the implications are for repurposing the device as a non-anthropocentric musical instrument.

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Some unusual ontological questions are raised by taking a non-anthropocentric musical perspective: What is music when conceived for humans and nonhumans? How and in what ways can nonhumans be composers, performers, and/or listeners? What constitutes nonhuman music? Is it distinct from human music? Is it even possible? Such questions inevitably lead to the more fundamental query, what is music, as to determine if and how such non-anthropocentric extensions even are music. Definitions for music based on sonic characteristics always seem to fail as other musical practices contradict or supersede them. Music rather evolves and is redefined between individuals and groups as a dynamic cultural phenomenon. As such, the feasibility of non-anthropocentrism in music appears in question. How can music, an apparently human cultural phenomenon, occur within a nonhuman context? Is this not an absurd proposition? Perhaps not when viewed from two different directions: [1] If music is an evolving phenomenon, non-anthropocentric music may be its natural progression, particularly with experimental music as its harbinger.³⁵ [2] Who are we to assume that the elusive activity of music does not or cannot exist for nonhumans? Clearly nonhuman species make complex music-like sounds; zoomusicology studies this phenomenon and sustains contested positions on the matter.³⁶ David Dunn has noted the

structural similarities between cetacean speech, early language play acquisition, and music to suggest a shared phenomenon,³⁷ and Marcello Sorce Keller has demonstrated that annual changes in humpback whale songs share the same transformational qualities expressed in oral music traditions studied in ethnomusicology.³⁸ Moreover, artificial intelligence, a completely other kind of nonhuman, has created music of increasing complexity for decades.³⁹ It appears that at least something akin to music is occurring outside of humanity, and if we turn the question around, is it clearer that such articulations are non-music? Must we even have a shared understanding of music across species – it hardly exists across our own? Ultimately, this all may stay veiled, hidden within perspectives we,

as humans, can never fully transcend. Non-anthropocentrism provides a perspective to engage such questions, but it also compels humility that the answers may remain to some degree unknowable.

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Some animals started avoiding human beings.

Others were concerned because they liked the human people and enjoyed being near them for their funny ways. Bears sort of cared.

They still wanted to be seen by people, to surprise them sometimes, even to be caught or killed by them, so they might go inside the houses and hear their music.⁴⁰

Robert Blatt (b. 1984 in Anaheim, California) is a composer, artist, performer, and writer. His practice is rooted in explorations of expanded situations that seek to reevaluate sound and listening through environment, community, and language. Recent projects include the publication *The Free Air* on Andromache Records (C84 cassette tape with field recordings and voice, and book with the work's score and the essay »Music and the Weather«); *Works on Paper: Experiments in Language and Sound*, a three-month project organized with poet David Abel at Passages Bookshop in Portland, Oregon, featuring realizations from Blatt's text score collection *How to Read a Book*; and the sound/score for the film *Luz, Clarão, Fulgor–Augúrios para um enquadramento não hierárquico e venturoso* by Sílvia das Fadas, with collaborative expanded cinema performances at 2220 Arts + Archives and Miragem–Arte Cinemática na Paisagem, and a publication by Rotations / Poetic Research Bureau Editions with scores from the film. He lives in the San Francisco Bay Area.

1 Aldo Leopold: *A Sand County Almanac: And Sketches Here and There*. Oxford 1949, p. 132.

2 Douglas Kahn: *Noise, Water, Meat: A History of Sound in the Arts*. Cambridge, MA 1999.

3 John Cage: *Silence*. Middletown, CT 1961.

4 Jennie Gottschalk: *Experimental Music since 1970*. New York 2016.

5 Miguel Segundo-Ortín and Paco Calvo: »Consciousness and Cognition in Plants,« in: *Wiley Interdisciplinary Reviews: Cognitive Science* 13, no. 2 (2022), <https://doi.org/10.1002/wcs.1578>.

6 Richard Karban: »The Language of Plant Communication (and How It Compares to Animal Communication),« in: *The Language of Plants*, eds. Monica Gagliano, John C. Ryan, and Patricia Vieira. Minneapolis 2017, pp. 3–26.

7 See Abhishek Bhandawat and Kuldip Jayaswall: »Biological Relevance of Sound in Plants: Advances and Prospects in Plant Acoustics,« in: *Environmental and Experimental Botany* 200 (2022), <https://doi.org/10.1016/j.envexpbot.2022.104919>; Anindita Roy Chowdhury and Anshu Gupta: »Effect of Music on Plants – An Overview,« in: *International Journal of Integrative Sciences, Innovation and Technology* 4, no. 6 (2015), pp. 30–34.

8 Heidi M. Appel and Reginald B. Cocroft: »Plants Respond to Leaf Vibrations Caused by Insect Herbivore Chewing,« in: *Oecologia* 175, no. 4 (2014), pp. 1257–66.

9 Marine Veits et al.: »Flowers Respond to Pollinator Sound within Minutes by Increasing Nectar Sugar Concentration,« in: *Ecology Letters* 22, no. 9 (2019), pp. 1483–92.

10 Monica Gagliano et al.: »Tuned In: Plant Roots use Sound to Locate Water,« in: *Oecologia* 184, no. 1 (2017), pp. 151–60.

11 Monica Gagliano, Stefano Mancuso, and Daniel Robert: »Towards Understanding Plant Bioacoustics,« in: *Trends in Plant Science* 17, no. 6 (2012), pp. 323–5.

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13 Henry David Thoreau: »Walden,« in: *Walden and Other Writings*, ed. William Howarth. New York 1981 (1854), p. 112.

14 See, among others, Christina Kubisch: *Electrical Walks*, 2003–; Alvin Lucier: *Music on a Long Thin Wire*, 1977; Max Neuhaus: *Drive-In Music*, 1967–68.

15 Within classical music, see, among others, *Sumer is icumen in*, mid-thirteenth century; Ludwig van Beethoven: *Symphony No. 6 (Pastorale)*, 1808; Olivier Messiaen: *Catalogue d'oiseaux*, 1956–58; Jean-Philippe Rameau: *La Poule*, 1728; Ottorino Respighi: *Pini di Roma*, 1924; Antonio Vivaldi: *Le quattro stagioni*, 1720.

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17 Ric Cupples and David Dunn: *Mimus Polyglottos* (self-published 1976).

18 *Ambient Bird—Live Oak 2023*, composed by Wendy Reid, performed by sfSound and The Bird Ensemble, Live Oak Park, Berkeley, September 22, 2023; »Catalogue of Works and Selected Performance 1979–2017.« Online at <https://treepieces.net/works-performances> (accessed January 28, 2024).

19 *The Little Flowers of Saint Francis of Assisi*, late fourteenth century, reiss., London 1905, pp. 51–53.

20 Philip Goff, William Seager, and Sean Allen-Hermanson: »Panpsychism,« in: *Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta. Online at <https://plato.stanford.edu/archives/sum2022/entries/panpsychism/> (accessed March 10, 2024).

21 Stan Godlovitch: »Icebreakers: Environmentalism and Natural Aesthetics,« in: *Journal of Applied Philosophy* 11, no. 1 (1994), pp. 15–30.

22 *Ibid.*, p. 27.

23 For a related discussion on the aesthetic intersection of nature and the artifactual, see Donald Crawford: »Nature and Art: Some Dialectical Relationships,« in: *The Journal of Aesthetics and Art Criticism* 42, no. 1 (1983), pp. 49–58.

24 For a related critique of the distinction between nature and culture, see Steven Vogel: *Thinking Like a Mall: Environmental Philosophy after the End of Nature*. Cambridge, MA 2016.

25 Paola Laiolo: »The Emerging Significance of Bioacoustics in Animal Species Conservation,« in: *Biological Conservation* 143, no. 7 (2010), pp. 1635–45.

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27 See Allen Carlson: »Is Environmental Art an Aesthetic Affront to Nature?« in: *Aesthetics and the Environment: The Appreciation of Nature, Art and Architecture*. London 2000, pp. 151–64; Peter Humphrey: »The Ethics of Earthworks,« in: *Environmental Ethics* 7, no. 1 (1985), pp. 5–22; Sheila Lintott: »Ethically Evaluating Land Art: Is It Worth It?« in: *Ethics, Place & Environment* 10, no. 3 (2007), pp. 263–77.

28 Donna J. Haraway: *When Species Meet*. Minneapolis 2008, p. 35.

29 Aristotle: *Politics*. Book 1.

30 For instance, George Sessions traced this history through Bacon, Descartes, Leibniz, and the influence of Renaissance humanism in »the fifteenth-century pronouncements of Pico della Mirandola, and in Erasmus and Montaigne, and was to continue with the Enlightenment philosophers, and on into the twentieth century with Karl Marx, John Dewey, and the humanistic existentialism of Jean-Paul Sartre.« See George Sessions: »Ecocentrism and the Anthropocentric Detour,« in: *Deep Ecology for the Twenty-First Century*, ed. George Sessions. Boston 1995, pp. 156–83; Gilbert F. LaFreniere: *The Decline of Nature: Environmental History and the Western Worldview*. Palo Alto 2008; Lynn White, Jr., »Historical Roots of Our Ecological Crisis,« in: *Science* 155, no. 3767 (1967), pp. 1203–7.

31 Max Oelschlaeger: *The Idea of Wilderness: From Prehistory to the Age of Ecology*. New Haven 1993.

32 Sessions: »Ecocentrism,« p. 160.

33 See, among others, Oelschlaeger: *The Idea of Wilderness*; Donald Worster: *Nature's Economy: A History of Ecological Ideas*, 2nd ed. Cambridge 1994; Michael E. Zimmerman et al., eds.: *Environmental Philosophy: From Animal Rights to Radical Ecology*. Upper Saddle River, NJ 2005.

34 Reda H E Hassanien et al.: »Advances in Effects of Sound Waves on Plants,« in: *Journal of Integrative Agriculture* 13, no. 2 (2014), pp. 335–48.

35 See, among others, Peter Ablinger: *Das Arboretum Seitelschlag*, 2008; Raven Chacon: *Compass*, 2021; Max Eastley: *Aeolian Installations*, 1973–; Franz Kamin: *7 Dog W*; Miya Masaoka: *Pieces for Plants*, 2000–12; Michael Parsons: *Echo Piece at Muddusjarvi*, 1976; Manfred Werder: *2005(1)*, 2005.

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39 See Miguel Civit et al.: »A Systematic Review of Artificial Intelligence-Based Music Generation: Scope, Applications, and Future Trends,« in: *Expert Systems with Applications* 209 (2022), <https://doi.org/10.1016/j.eswa.2022.118190>; David Cope: *Computer Models of Musical Creativity*. Cambridge, MA 2005; Curtis Roads, ed.: *Computer Music Journal: Artificial Intelligence and Music* 4, nos. 2–3 (1980).

40 Gary Snyder: »The Woman Who Married a Bear,« in: *The Practice of the Wild: Essays by Gary Snyder*. San Francisco 1990, p. 163.