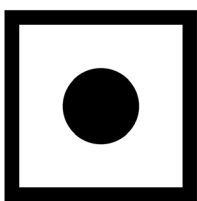


FASCINATING NOISE: SOUND IN ART AND SCIENCE



Wherever we are, what we hear is mostly noise. When we ignore it, it disturbs us.
When we listen to it, we find it fascinating.
—John Cage, *The Future of Music—Credo*

For the American experimental composer John Cage all the world is noise rather than the stage, and many scientists would agree with him. In an attempt to explain the inner workings of the universe, Renaissance astronomer J. Kepler wondered at the harmonious ‘music of the spheres,’ conceptualized at the crossroads of natural sciences, theology and art. Further developments in acoustics posited the new concept of sound as a wave, as was established in the ‘bell-in-vacuum’ experiment, most famously conducted by R. Boyle. The 19th century ushered in new research on vibration, as physicists such as E. Chladni experimented with vibrating plates, which by the end of the century led to the development of technologies that captured and recorded the invisible properties of sound, such as T. A. Edison’s phonograph and E. Berliner’s gramophone. Ever since then, the fascination with recording sound and music has continued to generate ever more advanced and compact technologies, all the way into the 21st century digitalization of sound.

Sound, vibration and noise turned out to be key for the aesthetics of 20th century artists, many of whom were influenced by the scientific discourses and developments in the field of vibration. The Futurists and Dada ‘bruitists’ made noise an essential part of their performances, and new perspectives on music can be seen in the work of composers such as J. Cage or E. Satie. At the same time, writers and poets sought new ways to convey sound in writing, such as the poets of the *zaum*, or J. Joyce who recorded the sounds of Dublin in his *Finnegans Wake*. The fascination with sound

and noise remains unyielding in the postmodern and digital era, as demonstrated by a profusion of artists who work with new media and digital technologies to create immersive and interactive, or experimental audio(visual) projects and installations, while the rise of the Internet has made music widely accessible through various online sharing platforms.

Important new critical approaches to sound and noise in the Anthropocene include ecocriticism, animal and plant studies, environmental studies or climatology, which focus on the detrimental effects of anthropogenic sound on the environment. Such ethical perspectives on sound can be found both in natural sciences and sound art, which attempt to address various ecological issues: climate change, extinction, non-human forms of hearing, plant sentience, etc.

The ninth volume of *Pulse*, entitled “Fascinating Noise: Sound in Art and Science,” showcases texts that explore different discourses and practices of sound and noise from various theoretical and disciplinary perspectives: media ecology and neuroscience, (zoo)musicology and sound studies, ethnography, history of art and literature, performance studies, and many others.

In the article entitled “The Birth of Performance from the Spirit of Noise: Punk and Performance Art in Croatia,” Ljubica Anđelković Džambić writes about sound and noise in the context of theatre and performance studies, focusing especially on the notion of ‘musical performance’ and its development within the realm of punk music in Croatia. Joseph Nechvatal’s “Opening Performance Orchestra’s Noise of Art” intersects with Anđelković Džambić’s text by providing a historical overview of the use of noise-generating instruments or ‘intonarumori,’ and focusing in detail on the work of the contemporary Czech ensemble called Opening Performance Orchestra. Another text that deals with noise, music and performing arts is Anamarija Žugić Borić’s “From Postdramatic Heterogeneity to New Reflections on Noise: The House of Extreme Music Theatre and *Schachtophonia Accenni for Kamov*,” in which she writes about noise in the work of the Croatian House of Extreme Music Theatre, discussing different methodologies used to study noise, and trying to establish how noise determines genre.

The texts in this volume that take up an ethical perspective by focusing on issues such as sound and ecology, animal life, or altering of consciousness include Diane Barbé’s piece entitled “I Call, You Respond? Game Calls, Hunting and Sound Mimicry in the Black Forest,” in which she discusses game calls as instruments located at the “intersection of interspecies communication and aesthetic creation.” Emre Sünter, on the other hand, decides to focus on human-microbe interaction in sound compositions, relying especially on the concept of “microbe-sounds.” His article “What Do We Hear When We Hear Microbe Sounds” illustrates these issues in relation to three different examples: the work of the *Interspecifics* bioart collective, *the dark side of the cell* by Anne Niemetz and Andrew Pelling, and Victoria Shennan’s *Anthropocene*. Dong Xia attempts to “contribute to the scarce literature on sound in ecocriticism and on natural soundscapes in the studies of acoustic ecology” in her article on Max Frisch’s *Man in the Holocene*. In her text “The Soundscape of *Man in the*

Holocene: An Exercise in Sensitisation,” Xia focuses on the issues of deep time, scale variance and human senses. Megan Phipps takes a turn towards media ecology in her work entitled “Soundscapes of Possible Minds: Meditational Cybernetics in Brian Eno’s Ambient Music.” She studies the genre of ambient music by focusing on cybernetics, neural plasticity and sensorial awareness, and drawing on various aspects of Brian Eno’s music and work.

The sounds of the mountains inspired two articles published in this volume of *Pulse*. Frederico Pessoa writes about the dire consequences of (neo)colonial economic practices in an attempt to draw a ‘sound cartography.’ In his paper “The Sounds of Melting Mountains: A Sound Cartography of Mining in Minas Gerais, Brazil,” he focuses on neo-extractivism in Brazil which results in an aggressive exploitation of natural resources. On the other hand, in “The Liminal: Lost and Found in the Field” Tomáš Roztočil draws on a research project on mountains in the Anthropocene, unpacking the concept of the ‘liminal’ with respect to sonic thinking and space.

“Don’t Think, Just Fart: Noise and the Comic Value of Flatulence” by Romulo Moraes takes up an unpopular topic in the field of ethnomusicology by writing about humor and flatulence. In his article, he draws on numerous examples from the history of literature, music and art to address the comic aspect of flatulence in Western culture.

The material aspect of sound and recording technologies is presented in the text “Phonograph as a Non-Philosophical Machine: From Representation to the Reproduction of the *Unimaginable Real*” by Mehmet Avci. Avci focuses on the phonograph as a recording technology by combining Laruelle’s non-philosophy and Kittler’s techno-materialism.

The articles are fruitfully complemented by book reviews which highlight new directions in the study of sound and noise. Colin Frank writes about *Sound, Media, Ecology* (eds. Milena Droumeva and Randolph Jordan, Palgrave Macmillan, 2019), which deals with acoustic ecology through a variety of frameworks, while Mahesh Sharma focuses on *Sound and Literature* (ed. Anna Snaith, Cambridge University Press, 2020), by providing an overview of the application of sound to literary texts. Malte Kobel introduces us to the fascinating, performative work by Eldrich Priest, *Earworm and Event: Music, Daydreams and Other Imaginary Refrains* (Duke University Press, 2022), while Marlo De Lara gives us an insight into Erika Fretwell’s *Psychophysics, Race and The Aesthetics of Feeling* (Duke University Press, 2022), which discusses the role of the 19th-century science of psychophysics in the formation of differences such as gender, race, or ability. Finally, Said Mentak takes up Mark C. Taylor’s book *Seeing Silence* which contributes to the discussion of sound and noise by addressing their antipode—silence.

We hope you will enjoy the engaging and diverse topics and texts of the ninth volume of *Pulse: the Journal of Science of Culture*. ▣

—Editors of Pulse