PROJECT MUSE®

Introduction: Leonardo Music Journal 29

Eduardo R. Miranda

Leonardo Music Journal, Volume 29, 2019, pp. 1-2 (Article)

Published by The MIT Press

➔ For additional information about this article

<https://muse.jhu.edu/article/745349>

Leonardo Music Journal 29

LEONARDO MUSIC JOURNAL had been publishing thematic issues for over 20 years. This is the second time in a row that this journal has been published without an overarching theme. I confess that I was not entirely convinced that nonthematic issues would be as exciting as the thematic ones had been. But I must admit: I am not at all disappointed. The previous one worked just fine. And the present one works really well too.

Our former editor-in-chief, Nicolas Collins, had an eye for spotting themes that were exciting, innovative and relevant. Nevertheless, I often wondered whether or not thematic issues were preventing potential authors from engaging with the journal more widely. Of course, both approaches have their advantage and disadvantages.

The variety of high-quality papers that were submitted for this issue is impressive. The volume covers a wide range of topics, some of which I was not even aware were being developed in such depth, from writings about *musique concrete* in Korean, to spiritualism and activism, to virtual reality musical instruments, genetic music and 3D music notation, to cite but six. It was a real treat to have had the opportunity to read these papers ahead of their publication.

I am delighted to have been invited to introduce this issue, which opens with Kat Austen's article addressing what is perhaps one of the most significant global issues of our time: climate change. Austen created compelling music using data collected at the Arctic, and I was excited to learn how she engaged with the data and repurposed the scientific equipment for measuring them. Also politically motivated is Aviva Rahmani's *Blued Trees* work. It combines concepts from music, acoustics, art and environmental policy. Hundreds of GPS-located trees in the path of proposed natural gas pipelines across the North American continent were painted with a sinewave symbol. Data from the GPS locations and interpretations of geographic features informed the composition.

Virtual Reality (VR) technology has been around for a while, and a number of musicians and artists have experimented with it. The article by Anıl Çamcı and John Granzow brings something innovative: they combine VR

and digital fabrication technology to design new musical instruments. And Kivanç Tatar, Mirjana Prpa and Philippe Pasquier introduce a piece based on a VR environment of their own design, where a performer interacts with an artificial agent though breathing. They employed multiagents combined with emotion recognition systems to control the parameters of the piece.

A note by David Kim-Boyle introduces an approach to notating music in three dimensions. He is interested in real-time notation of generative music and also dynamic visualizations of music. The author illustrates his ideas by means of examples and discusses the potential of his 3D notation methods for implementing immersive mixed-reality music notation systems.

The article by Yuan-Yi Fan explores sound spatialization techniques to harness listeners' experience in a given space. The author presents a framework to think about the interplay between moving listeners and moving sounds. The framework, consisting of object-based audio, indoor positioning system and algorithmic spatialization strategies, is demonstrated by means of a case study installation. Although not strictly connected to VR research per se, Fan's framework is bound to inspire the development of sophisticated systems for auditory immersion in VR environments.

The multimedia piece *Landscape: Home* by Chaz Underriner uses an electric guitar, video projections and a surround-sound system. Underriner's article articulates the representation of reality in art, which makes it possible to render the unreal familiar and the real unfamiliar. The author uncovers techniques for representing surreal realities in literature and compares them with well-established practices in electroacoustic music.

Audio feedback can generate fascinating sounds. It is often thought that filtering is caused only by the acoustic properties of a room. Lilac Atassi's note reminds us that the equipment (e.g. the speaker and microphone) also filters the sounds. She introduces her endeavors to reduce the effect of audio equipment's frequency-response on the sound.

Virtual reality and mixed reality are blurring the distinction between the real and surreal. Playing music with

unembodied intelligent agents in surreal worlds? Communicating emotions with these aliens through breathing? Interacting with unembodied auditory entities moving in space? Surreal realities mediated by electroacoustic music? Composing with harnessed room acoustics? Technologies and pieces such as these presented here make me ponder the extent to which new technologies are transforming us.

New technologies certainly are inspiring new ways of making music and this is well illustrated in this issue. While Alvaro Yanez introduces his method for generating rhythms out of DNA sequences, Daniel A. Walzer introduces his personal journey to compose *Boott Mill* (Lowell). This is a composition for percussion, strings, keyboards and field recordings of loom machines from the Boott Mill Museum in Lowell, Massachusetts, U.S.A. And while Alexis Kirke presents his method to compose music, whereby computational processes (e.g. logical gates) are conveyed as musical processes, Dave Payling's article introduces his approach to making audiovisuals from a musical perspective. Payling refers to this practice as visual music and contextualizes his work with respect to other approaches to making music with added visuals.

John R. Taylor and Andrew J. Milne introduce the robotic instrument *Rhythmotron*. Inspired by the pianola, the authors placed a number of percussion instruments and microcontrollers inside a stripped upright piano carcass. The authors also discuss the aesthetic implications of their work. By the same token, Matthew Ostrowski's robotic-like installation *Summerland* is inspired by the Spiritualist beliefs of the late nineteenth and early twentieth centuries, and the invention of the telegraph. The installation is for 24 computer-controlled telegraph units. His paper tells the installation's captivating backstory.

Somewhat connected to the theme of spiritualism, Jasna Jovicevic's paper introduces a musical experiment for chamber orchestra, referred to as *Flow Vertical*, which is inspired by yoga and Tantric tradition. The author used a multimedia biofeedback system including a headband, wrist and ankle straps furnished with electrodes. The biofeedback system enabled her to monitor its outputs over a number of days, and this informs the ways in which music is composed.

Seth Dominicus Thorn is a violin player who develops ways to augment the capabilities of the violin through digital technology, both hardware and software. His note introduces the usage of a custom sensor glove that tracks the

movements of the player to extract information to control sounds processing devices in real time. He also provides a glimpse of his unique approach to music informed by this research. Are we becoming human-machine hybrids? Transhumans?

The paper by Aurie Hsu and Steven Kemper on enacting sonic-cyborg performance touches upon the aforementioned questions. The authors discuss their sonic-cyborg performance approach and introduce the technology behind two performance pieces of their own. They developed a wearable wireless sensor interface that translates a dancer's movement into sonic output.

In an article published in *The Gentleman's Magazine* in 1892, Davenport Adams wrote that "great poets imitate and improve, whereas small ones steal and spoil." Artists such as Pablo Picasso and Igor Stravinsky expressed (stole?) similar thoughts; for instance, Stravinsky once wrote, "A good composer does not imitate; he steals." Juan Carlos Vasquez's article presents a short historical survey of appropriation and borrowing in the context of new electroacoustic music.

Nam June Paik is a celebrated video artist and a pioneer of interactive sound art who needs no introduction. What is less known, however, is that he studied the music of Schoenberg at the University of Tokyo and was fond of all the avant-garde movements that followed serialism, including electronic music and *musique concrète*. This should not be a surprise, given his numerous works involving collages of recorded sounds. Byeongwon Ha's article is a fine piece of musicology, where he reports on articles that Nam June Paik wrote in Korean on *musique concrète* and about his visit to Schaeffer's studio in Paris in 1958.

The inspiring endnote by Jürgen Claus revisits his 1960s idea of developing a Submarine Center composed of three sections: an audiovisual center, a center for theory and research and an experimental diving center. Claus tells us about his artistic experiences with underwater sound and imagines the underwater space of the sea as a huge concert hall.

I do hope you enjoy reading this issue of *Leonardo Music Journal* as much as I did.

EDUARDO R. MIRANDA

Editorial Board

Leonardo Music Journal

Email: eduardomiranda@plymouth.ac.uk