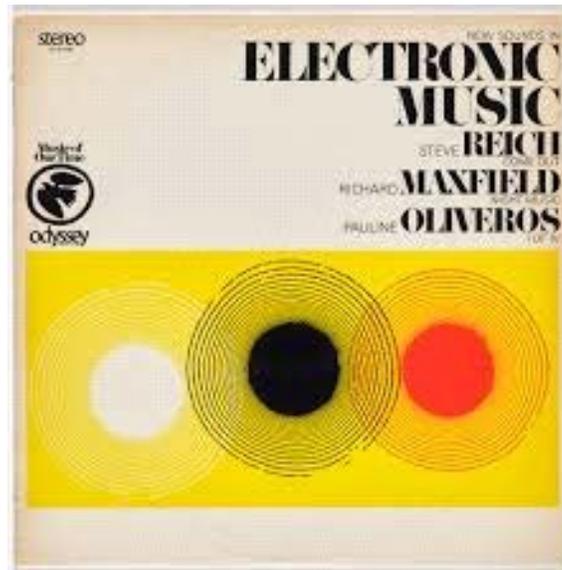


“New Sounds in Electronic Music”--Steve Reich, Richard Maxfield, Pauline Oliveros (1967)

Added to the National Registry: 2017

Essay by Ted Gordon (guest post)*



The liner notes to Columbia Odyssey's 1967 "New Sounds in Electronic Music" LP begin:

Less than twenty years have elapsed since the advent of electronic music. The early novelty of the medium has now worn off, and an entire generation has grown up with the sound of amplified guitars, reverb, tape delay and electronic synthesizers in its ears. Today, the number of electronic music studios has grown to nearly one hundred, and the number of electronic compositions made all over the world, both "live" and "taped," is in the thousands. With so many composers now at work in the new medium, the question of whether one likes electronic music is giving way to that of which composers one prefers.

Although the author of these notes dates the advent of electronic music to sometime in the 1940s, musicians (and engineers) had been experimenting with electricity and music for nearly two hundred years--well before it was considered a "medium." What did emerge from the 1940s was a set of historical and technological circumstances that would transform the scale, availability, and affordances of what came to be called "electronic music" in America: namely, the national surplus of continuously obsolescing radio and communications equipment (much of it from America's war efforts), the widespread commercial marketing of magnetic tape recorders (also a wartime technology stolen from the German military and championed by Bing Crosby), and the consolidation and rapid rise of new industries centered on the sale of this "new medium" in America's post-war economy.

"New Sounds in Electronic Music," a 1967 LP released on Columbia's Odyssey record label, is emblematic of the rapid development of this new cultural phenomenon. By 1967, the Columbia

Broadcasting System, Inc.--one of America's largest media conglomerates--had gone all in on electronics, not only in radio, television, and their own LP disc format, but also in electronic musical instruments. And under the leadership of Goddard Lieberson, as youth culture drove commercial demand for new music throughout the 1960s, Columbia Records hired a young composer named David Behrman to produce albums of experimental, avant-garde music in the hopes that something fresh and electric might just be the next big thing.

Behrman was uniquely suited for the job. He was a composer deeply embedded in a growing community of experimentalists, often working in this "new electronic medium"; with Alvin Lucier, Gordon Mumma, and Robert Ashley, he formed the Sonic Arts Group (later the Sonic Arts Union), a supergroup of American experimental composers. In 1967, Behrman moved to the Gate Hill Cooperative in Stony Point, NY, a community of composers, artists, writers, and thinkers that emerged out of the shuttered Black Mountain College in 1954. At Gate Hill, Behrman's fellow residents included John Cage, David Tudor, and Stan VanDerBeek, and the community hosted visiting artists from around the world.

Behrman continued to champion the works of his generation through his position at Columbia, producing several albums within the first few months on the job, including "Extended Voices" and David Tudor's "A Second Wind for Organ," both released in early 1967 in the "Music of Our Time" series. "New Sounds in Electronic Music," which followed these early releases, was the first album that Behrman produced comprising entirely of "tape works" created by the composers themselves in their studios. Indeed, this album contained works that would be impossible to perform "live;" the works themselves existed exclusively within the "new medium" of electronic music.

Despite their technological novelty, all three of the works on "New Sounds in Electronic Music" were created by composers whose knowledge of electrical engineering was nearly entirely autodidactic. Richard Maxfield's "Night Music" (1960), for example, was created well before the availability of any commercial equipment for the synthesis of electronic sound. Maxfield had studied serial composition at Princeton with Milton Babbitt, had participated in the Darmstadt Summer Course with David Tudor in 1956, and later apprenticed with Bruno Maderna at the Studio di Fonologia in Milan before returning to New York. By 1960, he had taken over John Cage's seminar at the New School for Social Research, teaching electronic and experimental music to a new generation of young artists including La Monte Young and George Maciunas, early founders of the Fluxus movement. Maxfield's work involved both the electronic generation of "pure" sound, such as in his 1958 work "Sine Music"; it also explored the audiotape montage techniques of *musique concrète*, such as in his 1959 piece "Cough Music," edited together from spliced-out coughs from live concert recordings of other works.

"Night Music" reflects Maxfield's interest in exploring the unforeseen possibilities of electronic sound production: it was created by intermodulating supersonic electrical waves from an oscilloscope with the supersonic bias signal printed on magnetic audio tape. This modulated signal was further modulated by sub-audio signals from a separate oscillator, and re-routed to the synchronizing input of the oscilloscope. By misusing laboratory test equipment in this complex, non-linear fashion, Maxfield created tapes of unpredictable warbling and chirping sounds that he likened to the insects and birds he heard walking at night in New York's Riverside Park.

Throughout the 1960s, Maxfield used tapes of this “Night Music” material to accompany dance performances by Aileen Passloff in multiple configurations, often using multiple tape machines and speakers placed throughout performance venues. For “New Sounds in Electronic Music,” Maxfield worked with David Tudor and George Engfer (Columbia’s engineer) to create a new version of “Night Music” in two-channel stereo, cutting and splicing his material in Columbia’s studios, where he worked part-time as a union night engineer.

Steve Reich’s “Come Out” (1966) was created for a benefit concert for the “Harlem Six,” a group of young African-American men who were on trial for murder stemming from an event during Harlem’s 1964 riots. “Come Out” is constructed from a tape loop containing the voice of Daniel Hamm, one of the Harlem Six, saying, “I had to, like, open the bruise up, and let some of the bruise blood come out to show them,” a narration of Hamm’s experience of proving to police that he had been beaten in jail. With Hamm’s voice recorded and duplicated on two loops of magnetic audio tape in different machines, Reich slowly de-synchronized their playback speed, producing his signature “phasing” technique in two channels hard panned in stereo. Reich further split this loop into four and eventually eight channels repeating the phrase “come out to show them,” editing together a final work that increases dramatically in complexity. The result is an early example of what Reich called “music as a gradual process,” full of emergent psychoacoustic phenomena and complex rhythmic patterns that Reich would continue to explore throughout his career.

Pauline Oliveros’s “I of IV” (1966) is the longest work on this record, and unlike Maxfield’s and Reich’s work, is one of the earliest examples of what Oliveros and David Tudor would come to call “live electronic music”: electronic music made without any tape editing. Oliveros, an early champion of improvisation, had developed a system for making “live electronic music” in 1965 at the San Francisco Tape Music Center by intermodulating the signals of two supersonic oscillators with the supersonic bias signal printed on magnetic tape, and routing the resulting signal through multiple tape recorders to create different stages of reiterative delay--in her own words, a “very unstable nonlinear music-making system.” Improvising with this system in 1965, Oliveros made such early works such as the “Mnemonics” series and “Bye Bye, Butterfly,” which was later championed by the “New York Times” critic John Rockwell.

In the summer of 1966, Oliveros traveled to the University of Toronto Electronic Music Studio (UTEMS) to study and work with Hugh Le Caine, Lowell Cross, and Anthony Gnazzo. At UTEMS, Oliveros augmented her “very unstable nonlinear music-making system” with ten supersonic oscillators, one subsonic oscillator, and additional tape delay units, all controlled by a modified keyboard designed by Le Caine. This extended the possibilities for what she called “real time studio performance composition,” allowing her to compose and perform her music without any asynchronous tape manipulation or splicing. “I of IV” is a wild, noisy celebration of improvisatory sonic exploration and experimentation, full of wide-band sweeps and unpredictably delayed reiterations; though it differs aesthetically from much of her later work, Oliveros would bring the ethos she developed in this early work to her “Sonic Meditations” in the 1970s and her “Expanded Instrument System,” which she continually developed from the mid-1980s until her passing in 2016.

In 1967, few recordings of this kind of experimental electronic music were available beyond the tapes privately circulated among composers. Curious listeners would only be able to glimpse this emerging sonic world if they were lucky enough to hear a tape played at an occasional concert. “New Sounds in Electronic Music” was a landmark release for Columbia, putting experimental electronic music into hundreds of record shops across the nation. Though it was commercially overshadowed the following year by Wendy Carlos’s 1968 “Switched-On Bach” (released on Columbia Masterworks) and the adoption of experimental electronic instruments by rock, folk, and pop musicians (such as Buffy Sainte-Marie, the Byrds, and even George Harrison), “New Sounds in Electronic Music” brought the experimental sound of three foundational avant-garde composers into the living rooms of thousands of Americans curious about the radical possibilities of electronic music.

Ted Gordon is a musician and musicologist whose research explores histories of music, science, and technology. He received a Ph.D. in the History and Theory of Music from the University of Chicago in 2018, after which he served as a Mellon Postdoctoral Fellow at Columbia University; he began an appointment as Assistant Professor of Music at Baruch College in 2020. He is currently working on a book about cybernetics and instrumentality in post-war American experimental music.

Bibliography

Behrman, David. Interview by Theodore Gordon, April 30, 2020.

Gopinath, Sumanth. “The Problem of the Political in Steve Reich’s Come Out.” In *Sound Commitments: Avant-Garde Music and the Sixties*, by Robert Adlington. Oxford University Press, 2009.

Gordon, Theodore. “Bay Area Experimentalism: Music and Technology in the Long 1960s.” Ph.D. Dissertation, University of Chicago, 2018.

Hartnett, Gerald. “Recorded Objects: Time-Based Technologically Reproducible Art, 1954-1964.” Ph.D. Dissertation, Stony Brook University, 2017.

Pymm, John. “Steve Reich’s Dramatic Sound Collage for the Harlem Six: Toward a Prehistory of Come Out.” In *Rethinking Reich*. Oxford University Press, 2019.

Steve Reich / Richard Maxfield / Pauline Oliveros. *New Sounds In Electronic Music* (“Come Out” / “Night Music” / “I Of IV”). LP. Vol. 32 16 0160. Music of Our Time. Odyssey, 1967.

Tudor, David. *A Second Wind for Organ*. Music of Our Time. Odyssey 32 16 0158, 1967.

Various. *Extended Voices*. LP. Music of Our Time. Odyssey 32 16 0156, 1967.

*The views expressed in this essay are those of the author and may not reflect those of the Library of Congress.

