

“Once-in-a-lifetime Experience of Mind-body Transformation” with Live Electronics

Sachi TANIHARA

Tokyo University of the Arts

sachitnhr@yahoo.co.jp

Abstract

To deepen the relation between electroacoustic music and happiness, it will be meaningful to explore the possibilities of Live Electronics as a once-in-a-lifetime experience that metamorphoses the mind and body into the best. Our minds, even our ways of life are changed by others' words and this amazing agent of transformation is transmitted to others by vocalizing and is received as dynamic force through their bodies and souls. I believe that this enchanted sonic power can be further developed with electroacoustic music and that Live Electronics will be able to realize the profound “here and now” experience of self-reform. AI-generated music and artificial voice will progress at an accelerated pace, and in such a period, it will be significant for future humankind to pursue the music with “the one and only voice in the world” that is absolutely rooted in and produced from one's irreplaceable own body. Therefore, it is vital to create spatial music that can “enchant ourselves by chanting” with our own voices, aiming at the mind-body transforming experience “Voice Metamorphosis” in which vocalization unifies body, mind, sound and space. This sort of electroacoustic music could also re-harmonize human voice with great nature sound, like Pygmy's polyphony music harmonized with forest sounds. In future, electronic music may play a role in bringing people back to the healthy and harmonious mind/body/sound world, giving us the power to live.

1. Electroacoustic Music and Happiness

1.1. Live Electronics as a once-in-a-lifetime experience

Do the electroacoustic music technologies bring true happiness into our lives? To answer this question, it will be meaningful for both musicologists and composers to explore the possibilities of Live Electronics as a once-in-a-lifetime experience that metamorphoses the mind and body into the best. Our minds, even our ways of life are changed by others' words and this amazing agent of transformation is transmitted to others by vocalizing and is received as dynamic force through their bodies and souls. When we read words aloud, we directly feel energies of the words while listening to the voice. I believe that the physical effects of this enchanted sonic power can be further developed with electroacoustic music, therefore, I have created spatial music that can “enchant ourselves by chanting” with our own voices, aiming at the physical and mental experience “Voice Metamorphosis” in which vocalization unifies body/mind/sound/space and encourages us to share the powerful words.

Related with this approach, Karlheinz Stockhausen's *Gesang der Jünglinge* (1956) was originally conceived as Mass of electronic music with biblical text. He intended to create not only the harmonized electronic sound with voice but also religious experience through electroacoustic music. Pauline Oliveros, an advocate of "Deep Listening", initiated "Sonic Meditations" emphasizing live experience that we deeply listen to the connection between voice and environmental sound. This group work presents an open music style in that anyone, not just musicians, can directly experience the transformation of mind and body while making a sound. Jonathan Harvey expressed "emptiness" with voice in his live electronic music *One Evening...* (1994) after he composed *Forms of Emptiness* (1986) for chorus based on Heart Sutra. I think such ideas can be even more evolved for Live Electronics as a ceremonial physical experience for reforming oneself.

1.2. Power of Enchanted Words

Heart Sutra, which has been giving people the sonic power for more than a thousand years, was born as a spell in which this power works directly on human vitality. Chanting the essence of words that summarize 600 volumes of scripture into 262 characters, we are led to the state where the ego disappears, and the body/mind/universe become one. Zeami, the master of Noh (a traditional Japanese performing art), also embodied the visionary universe with the acoustics that connected this world with another world by deriving the power of mantra-like refrains. I believe that today's electroacoustic technologies, expanding the resonance and spatiality of sound, can lead us to such an overall experience which transforms body-mind and integrates into the space. My idea is that Live Electronics will be able to realize a profound corporeal and spiritual "here and now" experience with the power of enchanted words, as if reciting the mantra and doing "shinjin datsuraku" (casting off of body-mind, a state of enlightenment that is completely free from the restraint of the body and mind) developed by Dogen (the Japanese Zen priest and the founder of the Soto sect) made us become "Śūnyatā" (emptiness).

1.3. Between Song/Spell/Poetry

Regarding poetry with the strength of words condensed like a mantra, we can feel not only the word meanings but also the sound energy when we read it aloud. I believe that with poetry reading, we can pass on the word power through one body and another body beyond eras, thus I have explored new ways of poetry that we appreciate spatially the sound world of poetry through our whole bodies, employing the spatial music. It would be worthwhile to cultivate the acoustic world of poetry reading that is distinct from songs and spoken voice and that transcends the framework of vocal solo and chorus, while inheriting the best essence of the musical history of songs like German Lied that reached to express the inner part of poetry. Moreover, I have tried to cross over the boundary between song/spell/poetry, respecting the explorations of voice like Schoenberg's Sprechstimme, between singing and speaking, Kurt Schwitters' Sound Poetry, between sound and words.

If we evolve this further, with electroacoustic music, the moment of being encouraged by vocalizing powerful words may be made into the once-in-a-lifetime occasion that brings a

long-lasting sense of well-being. I think such interactive vocal music has the potential to strengthen the relationship between electroacoustic music and happiness.

2. Enchant Ourselves by Chanting

2.1. How to Create “Voice Metamorphosis”

Then, how can body-mind transformation with Vocal Live Electronics “Voice Metamorphosis” be created with electroacoustic technologies? To make us step-wisely immerse ourselves into the poetic world, it is effective to change the parameter values of reverberation such as reverb time, space size, late reverberation and low-pass filter within the time for one phrase or stanza. At the stage of recording, editing and programming, the reverberation can be accumulated, and on this multiple reverberation, we can superpose acoustic special phenomena such as long reverberation/echo/sound concentration in the natural world. What is more, creating reflected sounds from the side speakers increases apparent source width (ASW) and listener envelopment (LEV). These reflected sounds can be breathing sounds with rhythm, and such sounds enable the reader to enhance the physicality more. The progressive increase of embodiment is also brought by doubling the voice part one after another, adding a chorus based on the frequency of the reader's voice.

Using an automatic voice tracking system like IRCAM's VoiceFollower, real-time recording/playback accompanied by this “chorus like alter ego” with spatial movement can make us feel the expansion of ourselves “here now”. With excessively high-speed change of direction/speed/acceleration beyond human perception for the sound source localization, spatial sound movements like random motion appeal to bodily sensation rather than rational aspect. Circular motion around the reader with more than one vocal sound source enhances the feeling of being surrounded by power of wisdom. Furthermore, cross synthesis between the reader's voice and the poetic sound allows us to be gradually transformed into the sonic universe itself of the poem.

In this manner, the reader surrounded by multiple speakers experiences transformation of the self, while listening to his/her own voice that is constantly doubled to the polyphonic part and is diffused into the space, with the sound of words/word meanings/background all moving between the speakers.

2.2. Traveling the History of Chorus with Live Electronics

Maturing these ideas, we can feel from head to foot the driving force of words with our own voices, as if we were traveling across the history of chorus. Firstly, the unison of Greek chorus should be mentioned. Then, Gregorian chant was aware of space and reverberation as a second voice, and adding voice to this monophonic chant, choral polyphony Organum appeared. The effects of spatiality in cathedrals generated the Notre Dame school and then Ars Nova, and reached the Renaissance's spatial polyphony music like Alessandro Striggio's *Missa sopra Ecco sì beato giorno*, the Mass song with 60-voice counterpoint. In the 20th century, a 16-voice micro-polyphony was found in Ligeti's *Lux Aeterna* (1966), used for *2001: A Space Odyssey* (1968). Apart from this stream of sacred choral polyphony, we also have great histories of polyphony in other countries such as Georgian polyphonic singing. Combining today's electroacoustic technologies with the essence of these purely vocal arts of

all times and places, we will be able to experience our own choral monophony/unison/polyphony with our own voices in real-time. This “unison-polyphony by one’s own voice” can achieve the expanding voice and physicality.

2.3. Voice and Electroacoustic Mind-body Transformation

Choral symphony like Beethoven's *Symphony No.9* (1824) will also be applied to the electroacoustic mind-body transformation, as the symphonic sound of words and the reader’s voice interrelate with the universe and the self. As examples of the border between sound and word meaning, we have Alvin Lucier's *I am Sitting in a Room* (1969) in which voice gradually becomes non-vocal sound, and there are poet's approaches such as Henri Chopin, who evolved Sound Poetry using tape recorders. Regarding the quests for voice and Live Electronics, Luigi Nono, who created an unconventional opera *Prometeo* (1984), combining space with texts of myth, Luciano Berio and Joji Yuasa advanced it in the early days of electronic music. Dieter Schnebel especially pursued musical embodiment with voice, and Simon Emmerson has tackled it as both a composer and an author of books on Live Electronics. Voice performers such as Laurie Anderson, Joan La Barbara collaborated with Morton Subotnick, and Tomomi Adachi have also developed electronic music and physicality, sometimes with improvisation.

In this way, electroacoustic vocal music has been promoted with various approaches. Taking over their quests, what we can aim at is the physical and mental experience itself with Live Electronics and voice, therefore, we need to work on the system that can be either performance art or sound art that anyone can experience. Moreover, this electroacoustic mind-body transformation can be experienced by two or more people together and it will double the sense of sharing words simultaneously.

3. Conclusion and Future Prospect

AI-generated music and artificial voices such as VOCALOID will progress at an accelerated pace, and in such a period, it will be even more significant for future humankind to pursue the music with “the one and only voice in the world” that is absolutely rooted in and produced from one's irreplaceable own body. It may be the time that electronic music looked further into the mind-body experience after experimenting music with novelty of technologies. The experience that the inner mind space, outer space, and body become one can be realized by vocalizing toward the sky and the horizon. Like Pygmy’s polyphony music harmonized with forest sounds, this electroacoustic music could re-harmonize human voice with nature as the sound that blends into the sound world of great nature, such as seas and wild animals. Such a harmonized voice could stabilize the rootless mind and body of contemporary people and may be developed as music therapy. In future, electronic music may play a role in bringing people back to the healthy mind/body/sound world, giving us the power to live, as countless people have been saved by the word power since ancient times.

4. References

DOGEN, MASUTANI Fumio (trans.), *Shōbō genzō I*, Kodansha, 2004

DOWNES Michael, *Jonathan Harvey: Song Offerings and White as Jasmine*, Routledge, 2017

EMMERSON Simon, *Living Electronic Music*, Routledge, 2007

HEILE Björn (edit.), WILSON Charles (edit.), *The Routledge Research Companion to Modernism in Music*, Routledge, 2020

NAKAMURA Hajime (trans.), KINO Kazuyoshi (trans.), *Hannya shingyō / Kongō hannyakyō*, Iwanami Shoten, 1960

OLIVEROS Pauline, *Software for People: Collected Writings 1963-80*, Smith Publications, 1984

OLIVEROS Pauline, *Sonic Meditations*, Smith Publications, 1974