Press Release

Title	Nam June Paik Art Center 2019 Random Access Vol.4 Park Seungsoon *Neurospace*	
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Release	16 July 2019	4 pages

2019 Random Access Vol.4
Park Seungsoon

Neurospace

■ Overview

◦ **Exhibition Title**: 2019 Random Access Vol.4 Park Seungsoon – *Neurospace*
◦ **Period**: 18 July 2019 – 22 September 2019
　　* There is no opening ceremony for the exhibition on 18 July.
◦ **Venue**: Nam June Paik Art Center Eum-Space, 1F Mezzanine Space
◦ **Artists**: Park Seungsoon
◦ **Organized and Hosted by** Nam June Paik Art Center, Gyeonggi Cultural Foundation
◦ **Supported by** Sandoll Cloud

■ Performance: Imaginary Soundscape

An electronic music performance in which automatically extracted sounds to match the landscape images of the city and nature using 'NEUROSCAPE,' an AI soundscape algorithm, are played in real time in the form of sound montage.

- Date and Time : 20 July 2019, 2:00 p.m.
- Venue: Nam June Paik Art Center, Lobby
- Reservation via NJPAC website (www.njpartcenter.kr)

■ 2019 Random Access Project

Nam June Paik Art Center presents the Random Access Project aimed at introducing promising artists who share Nam June Paik's experimental artistic spirit and at understanding contemporary media art. This year's project will take a different form from the previous group exhibition in 2015; random accesses to young artists are available in multiple places of the Nam June Paik Art Center.

■ Introduction

We see and perceive the world based on our own experience while storing and recalling memories in the context of overall experience of various senses. When we incorporate a series of processes of deriving sounds and images inherent in our memories into machines, what will be the landscape we remember and imagine and that of machines like?

The Nam June Paik Art Center presents an exhibition *Neurospace* by Park Seungsoon from July 18, 2019 for the first part of the 2019 Random Access Project. Many soundscapes that we face in our daily life are never the same even for a single moment and are interpreted differently depending on our own memories and experiences. How would you hear the landscape and describe the sound? The exhibition *Neurosapce* by Park Seungsoon highlights the correlation between sound and cognition, the difference in hearing and perceiving the landscape as well as the mechanism in which humans and computers recognize the landscape of sound in their own ways. It embodies what the artist has constantly explored with regard to sound recognition and traces the flow of works. Each work on exhibit presents a landscape as a 'neuro space' to look deep into one's own thoughts on humans and machines, sound and cognition as well as senses and memories, while the senses and perceptions of humans and machines slip, collide and fall out with each other.

■ About Works

1. *NEUROSCAPE V1*

2017-2018, Video Installation

'NEUROSCAPE' is a compound word combining 'neuro' with landscape,' meaning memory-landscape restructured by artificial neural networks. Landscape images that visitors capture and transmit are analyzed through a deep learning algorithm and come up with keywords. A computational algorithm maps the sound corresponding to this image keyword in the categories of 'audio/image data set' and outputs it to the speaker or monitor. In this way, a kind of audio/visual collage soundscape is created in real time. Soundscapes created by NEUROSCAPE show differences between the landscape images that audiences imagine and those AI perceives, and between the sounds we conceive and those AI detects. The work brings up a fundamental question of "How can humans see and use technology?" by revealing a number of errors caused by a deep learning algorithm as well as human senses and cognition.

**NEUROSCAPE: An artificial intelligence system developed by the artist Park Seungsoon and the algorithm developer Lee Jongpil that automatically maps and connects to corresponding sounds and images by analyzing landscape images.

2. *Test of Soundscape Cognitive Ability*
2017-2019, Online Survey

This is a 'Sound/Landscape Cognitive Ability Test' that examines how well people distinguish the sounds of certain places. The work in a survey format is intended to distinguish artificial soundscapes and real soundscapes generated by a deep learning algorithm using the D-CASE and Google audio data set. Visitors participating in this work (survey) recognize a point that blurs the distinction between artificial soundscapes and real soundscapes. If the distinction between these two is vague, how can we define and understand sound?

3. *Taxonomy of Sound*
2017, single channel video, 2 channel sound

We do not separate a process of remembering a landscape into individual elements such as visual, auditory and linguistic ones. Instead, we feel and perceive all of them in a

comprehensive context. This 'perception' is much influenced by individual experiences and the memories of these experiences. *Taxonomy of Sound* shows a rearrangement of landscape images and sounds that we face in our daily life based on the standards of ecological sound classification. What kind of sound does the video present? It is not easy to recognize the slip of images and sounds in the video. In this work, urban and natural landscape images and sounds are divided into three to five-second units according to the categories classified by environmental sound experts. The videos including landscape images used in this work are purchasable and such videos usually have no sound. However, it is not easy for visitors to notice that these images and sounds are combined like a chimera. Artificially created soundscapes are not much different from daily sounds and landscapes that we are familiar with. The work poses the question of what real sounds and artificial sounds are.

4. *Artificial Soundscape*

2017-2019, 3 channel video, 6 channel sound

The '*Artificial Soundscape*' project is intended to compare differences between original soundscapes and artificial ones by adding the sounds from the final sound library to the existing video after collecting the landscape images of nature and of the cities at home and abroad and retrieving relevant images, sounds and texts using the 'NEUROSCAPE' system. This exhibition presents a new production of *Artificial Soundscape* that invites visitors to participate. If the switch is turned to the right, one can hear the real sound and turned to the left, the sound that AI detects. Controlling the switch, the visitors observe that soundscapes that feel more realistic are mapped instead of soundscapes that were originally collected. Given the reality that even with 'sound,' the artificial sound feels more realistic than the real one, could we distinguish real from virtual?

5. *Tell Me What You See*

2018-2019, single channel video, 2 channel sound, NEUROSCAPE(AI Soundscape) system
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The work explores how the AI system 'NEUROSCAPE' sees this world and observes its responses. The artist shows five images to the AI. Then it generates sounds corresponding to these images after analyzing them and defining them as sentences. *Tell Me What You See* addresses to what extent the AI can think today with an image given to it. Visitors imagine what kind of soundscape it is, reading text (keywords) and sound created by NEUROSCAPE. And then the NEUROSCAPE shows the landscape images 'it' has seen. How will it be different from the one I imagine? The images of landscape we imagine based on the text we read and the sound we heard together with our memory and experience are different from those that the AI remembers and categorizes. Then, what will be the 'memory' that we need to make together with machines that cannot feel for the coexistence of humans and machines?

■ About Artist

Park Seungsoon who mainly works with music and sound has explored the way humans interact with nature or the universe. The artist has created a variety of works on the correlation between hearing and perception, the possible errors caused by AI and the mechanism in which humans and computers perceive landscapes of sound in different ways using a deep learning algorithm.