

Pervade the Space

1. PROGRAM NOTES

Pervade the Space is a multichannel sound performance which creates an original relationship between the input of the physical gesture of the performer, the derived artistic output and its spatial distribution. It is an exploration of the capabilities of a prototype of musical instrument — the **HexApp** — a digital processing engine developed to transform the sound of multichannel acoustic input in real-time. This instrumental & live-electronics performance is a solo set in which the performer interacts in a balanced relationship with the computer in the process of decision making providing memorable spatial sonic experience for the listener. It explores unconventional instrumental approaches as well as compositional strategies applied in real-time improvisatory domain. Furthermore, the performance delves into the magnetic properties of the hexaphonic pickup used as a sound source — multichannel input of the real-time processing system.

The sound transformations occupy a broad spectrum of musical expressivity ranging from immersive slowly unfolding and evolving textures to emerging sharply articulated grainy sonic entities. **HexApp** is an instrument which could be described as a hybrid, acoustic - digital, naturally - artificial, traditionally - innovative hybrid of six independently depending on each other, unpredictably predictable constituents of a dynamically - motionless soundscape.

2. PROJECT DESCRIPTION

The project aims to explore a variety of possibilities for digital processing of acoustic sound in real-time and their application as means of composing and performing music. The performance is an exploration of the **HexApp** — an originally built system for live-electronics performance. This prototype of a hybrid acoustic - digital instrument is based on the properties of the six-channel (hexaphonic) pickup to capture the signal of each string of the guitar on a separate audio channel. Recent capabilities for multi-channel digital sound processing hold powerful potential for creating complex sonic textures which can distance the guitar from its recognizable sonic ontology of a melodic and harmonic instrument and position it on another level of sound expression – the one of a complex moving sonic textures with continuous or grained quality, dense or transparent. It is the desire for achieving original sonic quality distinct from the traditionally recognizable sound of an acoustic or electric guitar which has driven the research in this direction.

The **HexApp** uses the *Max/MSP/Jitter* environment for processing the multichannel input. The project implements custom built modules based on processes such as ring modulation, delay, transposition, flanging, granulation,

feedback and any combination between them. The control over processes is both manual through a MIDI controller and automated through a limited randomness provided through the digital environment itself.

3. PERFORMANCE NOTES

Duration of the performance: 6' – 10'

Provided by the organisers:

Multichannel PA system –
8 x full range speaker setup,
1 to 4 subwoofer speakers (desirable);
Mixer (according to the number of speakers) - up to 8 I/O;
3 x power plugs on stage;
Cables;
Chair on stage;

Provided by me:

Instrument;
Computer;
Software;
Audio interface;

4. MEDIA LINK(S)

- Video: <https://youtu.be/K8yfK8Ok17Q> , <https://youtu.be/mSSHa74S6B8> , <https://youtu.be/Ze6VFPcZ-S4>
- Audio: <https://artefact1.bandcamp.com/track/pervade-the-space>

ETHICAL STANDARDS

The work described here has been self-funded by the author. It did not involve the participation of any other human subjects. I have no conflicts of interest to report.