

Harnessing Feedback

Lecture (19h), concert (20h)

A lecture on feedback, musical cybernetics and composing with systems, followed by a concert with 3 feedback-based / cybernetic compositions by Stelios Manousakis; each piece is part of a different cycle of works, exploring feedback in a different type of system (analog electronic, hybrid acoustic, digital).

PROGRAM

Involuntary Cognition Faction (2011/13) 6'33"

For voltage-controlled analog electronics

Palpebla Resonoj #1 (2013) 20'

For feedback-augmented alto clarinet and real-time computer processing

Fantasia On A Single Number (2009) 25'

For digital feedback (live electronics)

PROGRAM NOTES

Involuntary Cognition Faction

Stelios Manousakis: composition, patches, in-studio performance

In 2011, I had a 2-week residency at the Insitute of Sonology's voltage-controlled studio in the Hague – a modular studio filled with various off-the-shelf and handmade devices made from the 1960s until now. One can control the studio via MIDI, but I decided to avoid using a computer. Instead I chose to treat the studio as a room-sized cybernetic instrument for live performance; to this extent, I designed several complex feedback-based patches in the course of the residency. The recordings from these performances generated enough material for a 60-80 minute surround sound suite, which is yet to be finished.

In 2013, I was asked to participate with a work in a project on 'sound as weapon', involving sonic artists, scholars and visual artists, partially inspired by Steve Goodman's book '*Sonic Warfare: Sound, Affect, and the Ecology of Fear*'. The result will be a series of one-sided 45" vinyls, with each piece accompanied by an essay. For this, I chose to re-work a section of the suite, working in stereo, and giving it an ending that turned it into a short standalone piece that can fit in a 45" vinyl, while making it fit best into my interpretation of the concept.

Involuntary Cognition Faction is at the same time rough and violent, but also pleasurable and – almost – catchy, shifting between extremes yet, hopefully, making the listener want more when it ends.

Palpebla Resonoj #1

Stelios Manousakis: composition, programming, alto clarinet, electronics

The piece *Palpebla Resonoj #1* is an open composition for feedback-augmented clarinet and real-time processing, taking its final form in performance. It explores hybrid acoustics through the resonances and dynamic behavior of a sonic chimera: a self-designed, self-constructed (and self-repaired) electro-acoustics alto clarinet, created from a 60+ year old, discarded instrument.

The clarinet is the central element of a compound hybrid sound synthesis system which involves acoustic, electric and digital sound paths, all interfering and interacting with one another. Its body is used at the same time as an acoustic instrument, an interactive acoustic filter, resonator and feedback chamber, a synthesis controller, and a sound diffuser.

The project forms part of long-term research in digital musical instrument design, sensing, haptics, acoustics, and non-standard digital sound synthesis and processing, and has gone through several iterations. *Palpebla Resonoj #1* features a sensor-less version of the instrument, using audio analysis to control and modulate electronic processes purely through the sound generated inside the instrument.

<http://modularbrains.net/palpeblaresonoj.html>

Fantasia On A Single Number

Stelios Manousakis: composition, programming, live electronics

Fantasia On A Single Number (pronounced /fantazía/) is both a live-set and an open composition. It takes its final form through live performance, growing from and expanding on the tradition of virtuosic, composed improvisation, transversing the continuum between these two poles (composition / improvisation). It is part of a cycle of works / suite titled Primeval Sonic Atoms, treating binary data as seeds for cosmogonic geneses, which will be released in 2014 by Inkilino Records. This project is a sonic exploration of the intrinsic nature of digital technology through the merging of vocabularies and approaches from different - often seemingly clashing - realms of electronic music: noise, no-input music and glitch, with electroacoustic composition, with improvisation, with the most vibrant underground hardcore tekno.

Fantasia On A Single Number is composed for a custom-built live-electronics instrument, designed as an open cybernetic system whose raw power the performer guides into states of equilibrium, oscillation, chaotic behavior, noise and silence. It is based on digital feedback, set in motion by the primeval atom of digital technology: a single bit, that draws from the guts of the machine an intense and visceral stream of bursts, rhythms, turbulences, drones and resonances. No other sound sources are used but hands-on, real-time manipulation of the bit's path within a synthetic space, thus revealing its emergent beauty as it creates and populates a constantly shifting digital universe out of nothing.

<http://modularbrains.net/fantasiaonasinglenumber.html>

Stelios Manousakis (Crete, Greece) is a composer, performer, sound artist and researcher. In these capacities he strives to develop new musical and artistic languages that are visceral and cerebral, communicating in a purely cognitive and experiential level while being complex and multilayered.

Stelios – a musician/composer, sonologist, linguist and digital artist by training – operates in the convergence zone between art and science and engineering, composition, performance, and installation, Western art and ‘digital folk’ idioms. In the core of his artistic philosophy lays the notion that compelling music and time-based art can be conceived and designed as a growing organism, an emergent ecosystem or a complex dynamical system, unearthing rich, complex and organic worlds through iterative processes. To this extent, he applies complexity science, cybernetic and biology-inspired models in software that he develops to generate novel musical systems, non-standard sound synthesis methods and interaction platforms, merging algorithmic finesse with the expressivity of improvisation or the immediacy of audience participation. This approach extends from live electronic or electro-instrumental open compositions, to interactive intermedia and sound art installations, to fixed medium pieces and film music. His work has been shown in various festivals and venues across Europe and the Americas. Besides his solo work, he is a founding member of several music ensembles and multimedia groups.

Stelios is currently in Vienna as a composer-in-residence with KulturKontakt Austria and the Federal Ministry for Education, the Arts and Culture, and is in the process of finishing a PhD in Visual and Performing Arts at the Center for Digital Arts and Experimental Media (DXARTS, University of Washington, Seattle, USA).

Website: www.modularbrains.net

Details zur Open CUBE Konzertreihe unter:

<http://iem.kug.ac.at/veranstaltungen/open-cube.html>