Research > COMPOSING WITH PROCESS: PERSPECTIVES ON GENERATIVE AND SYSTEMS MUSIC

Generative music is a term used to describe music which has been composed using a set of rules or system. This series of six episodes explores generative approaches (including algorithmic, systems-based, formalised and procedural) to composition and performance primarily in the context of experimental technologies and music practices of the latter part of the 20th Century and examines the use of determinacy and indeterminacy in music and how these relate to issues around control, automation and artistic intention.

Each episode of the series is accompanied by an additional programme, entitled ‘Exclusives’, featuring exclusive or unpublished sound pieces by leading sound artists and composers working in the field.

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Florian Hecker was born in 1975 in Kissing, Germany. Working in performance, studio and installation, he frequently collaborates with academic researchers in auditory perception and computer music, as well as with other artists such as Aphex Twin, Russell Haswell and Cerith Wyn Evans.

Solo exhibitions include: MMK, Museum für Moderne Kunst (Frankfurt am Main), IKON Gallery (Birmingham) and Chisenhale Gallery (London), all in 2010; Bawag Contemporary (Vienna) in 2009; Sadie Coles HQ (London) in 2008 and Galerie Neu (Berlin) in 2007. Some of the group exhibitions and projects Hecker has participated in include Push and Pull, MUMOK (Vienna) in 2010; Evento, Bordeaux, UBS Openings: Saturday Live: Characters, Figures and Signs, Tate Modern (London) and his most recent collaboration with Cerith Wyn Evans, No

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Exclusives

Each episode of this series is followed by a special accompaniment programme of exclusive music by some of the leading sound artists and composers working in the field. This show presents two contrasting generative works by German artist Florian Hecker and Japanese composer Ryoji Ikeda.

01. Playlist

02:29 Florian Hecker ‘Stereo F.A.N.N.’, 2010 (30 min 4 s)

‘Stereo F.A.N.N.’ is a recording originating from the research on a sound piece by Florian Hecker which is currently installed in the Hijmans van den Bergh-building, University of Utrecht, Netherlands. Hecker was invited by the artist Cerith Wyn Evans to contribute a work to accompany two of his own sculptures, also installed in the building.

A point of departure for this sound work were David Tudor’s Neural Synthesis recordings and also paraphernalia Hecker saw in the David Tudor archive at the Getty Research Library in Los Angeles. Hecker says: “What particularly fascinated me about the piece is the element of the so called neural network chip, which intervenes in Tudor’s otherwise rather virtuoso performance of his trademark electronic music and feedback boxes.”

The sound generation is created with a customized version of SuperCollider and builds on four particle synthesis / processing techniques including: Glissons, Pulsars, Granulation and Waveset Stretching. These are all controlled via two separate Game-of-Life cellular automata algorithms with circular boundary conditions. The neural network uses the state of automata as its input. Software development by Tommi R. Keränen. Florian Hecker is published by Mute Song, UK.

32:36 Ryoji Ikeda ‘untitled (for John Cage)’, 2005 (19:23 min)

‘untitled (for John Cage)’ was composed for an installation by Ryoji Ikeda for the ‘Playing John Cage’ exhibition at the Arnolfini Gallery in Bristol in 2005. The piece consists of 99 separate tracks of equal duration, designed to be played in shuffle mode on a CD player or iPod. These soundfiles consist of either a 12.5kHz sinewave or silence.

02. Biographies

Florian Hecker

Florian Hecker was born in 1975 in Kissing, Germany. Working in performance, studio and installation, he frequently collaborates with academic researchers in auditory perception and computer music, as well as with other artists such as Aphex Twin, Russell Haswell and Cerith Wyn Evans.

Solo exhibitions include: MMK, Museum für Moderne Kunst (Frankfurt am Main), IKON Gallery (Birmingham) and Chisenhale Gallery (London), all in 2010; Bawag Contemporary (Vienna) in 2009; Sadie Coles HQ (London) in 2008 and Galerie Neu (Berlin) in 2007. Some of the group exhibitions and projects Hecker has participated in include Push and Pull, MUMOK (Vienna) in 2010; Evento, Bordeaux, UBS Openings: Saturday Live: Characters, Figures and Signs, Tate Modern (London) and his most recent collaboration with Cerith Wyn Evans, No
night No day, was premiered at the Teatro Goldoni as part of Fare Mondi, 53rd Venice Biennial, all in 2009.

Hecker is also a regular performer and has an extensive discography with more than 25 releases including Haswell & Hecker, Blackest Ever Black (Warner Classics, 2007), Acid in the Style of David Tudor (Editions Mego, 2009) and NEU CD (Galerie Neu, 2010).

Ryoji Ikeda

Japan's leading electronic composer and visual artist, Ryoji Ikeda, focuses on the minutiae of ultrasonics, frequencies and the essential characteristics of sound itself. Fascinated by data, light and sound, he shapes music, time and space by mathematical methods and explores these phenomena as sensation, pulling apart their physical properties to reveal their relationships with human perception.

Since 1995, Ikeda has been intensely active through concerts, installations, and recordings, integrating sound, acoustics and sublime imagery. He has been hailed by critics as one of the most radical and innovative contemporary composers for his live performances, sound installations and album releases. His albums +/- (Touch, 1996), 0°C (Touch, 1998) and matrix (Touch, 2000) pioneered a new minimal world of electronic music, employing sine waves, electronic sounds, and white noise. Using computer and digital technologies to the utmost limit, his audiovisual concerts datamatics (2006 – present), C4I (2004 – 2007) and formula (2000 – 2006) suggest a unique orientation for our future multimedia environment and culture. Ikeda released his eighth solo album test pattern (raster-noton) in April 2008 to coincide with his first solo exhibition in Japan at the Yamaguchi Center for Arts and Media.

The versatile range of Ikeda’s research is demonstrated by his collaborations with Carsten Nicolai on the project cyclo and with choreographer William Forsythe (Frankfurt Ballet), artist Hiroshi Sugimoto, architect Toyo Ito and artist collective Dumb Type, among others.

In 2001, Ikeda was awarded the Ars Electronica Golden Nica prize in the digital music category and he was short-listed for a World Technology Award in 2003.

03. Related links

http://florianhecker.blogspot.com
http://en.wikipedia.org/wiki/Florian_Hecker
http://www.getty.edu/research/conducting_research/digitized_collections/davidthudor/
http://www.ryojiikeda.com
http://www.forma.org.uk/artists/represented/ryoji-ikeda
http://www.contemporary-magazines.com/music68.htm
http://www.myspace.com/ryojiikeda

04. Acknowledgements

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05. Copyright note

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