



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Each episode of the series is accompanied by an additional programme, entitled 'Exclusives', featuring exclusive or unpublished sound pieces by leading sound artists and composers working in the field.

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Written and edited by Mark Fell and Joe Gilmore. Narrated by Connie Treanor. Exclusives by Stephan Mathieu and Russell Haswell.

Mark Fell is a Sheffield (UK) based artist and musician. He has performed and exhibited extensively at major international festivals and institutions. In 2000 he was awarded an honorary mention at the prestigious ARS Electronica, and in 2004 was nominated for the Quartz award for research in digital music. He also completed a major commission for Thyssen-Bornemisza Art Contemporary, Vienna which premiered at Youiverse, International Biennial of Contemporary Arts, Sevilla. www.markfell.com/wiki

Joe Gilmore is an artist and graphic designer based in Leeds (UK). His work has been exhibited at various digital art festivals and galleries. His recorded works have been published internationally on several record labels including: 12k/Line (New York), Entr'acte (London), Cut (Zürich), Fällt (Belfast) and Leonardo Music Journal (San Francisco). Joe is currently a part-time lecturer in the department of Graphic Design at Leeds College of Art & Design. He is also a founder of rand()%, an Internet radio station which streamed generative music. joe.qubik.com

**COMPOSING WITH PROCESS:
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SYSTEMS MUSIC #6.2**

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 process-led works by German composer Stephan Mathieu and British multidisciplinary artist Russell Haswell.

01. Playlist

01:12 Stephan Mathieu 'Untitled Consort Music (Excerpt)' (15' 35")

'Untitled Consort Music' is a piece commissioned by the Groupe de Recherches Musicales (GRM) and was recorded live during their 'Rétro Actif – Machines Anciennes/Musiques d'Aujourd'hui' showcase at La Gaîté Lyrique, in Paris on November 12, 2011.

For this occasion I wrote a string quartet based on binary code, to be performed by four mechanical-acoustic gramophones. Individual voices, played and recorded by myself using a treble, alto and tenor viol as well as a da gamba, where cut in 32 fragments onto four 78 RPM mono dubplates to be played back *ad lib*, creating a constantly changing stream of strings which can be played for an infinite time. During the premiere performance on GRM's classic Acousmonium, a 30-channel setup for this occasion, I have sent the gramophones through a computer for spectral processing, this signal was then mixed with the acoustic strings and diffused in the space. The concept for 'Untitled Consort Music' is based on an unfinished oratorio for phonographs, gramophones and live processing I'd been working on between 2006 and 2008.

The dubplates were cut by Andreas Lupo Lupich at D&M Berlin. Thanks to François Bonnet and Christian Zanési.

Stephan Mathieu, May 2012

17:52 Russell Haswell 'Oscillographics: the search for unusual images on a Stereo-Phase Scope', 2012 (20')

As a child, in the seventies, I spotted oscilloscopes in the background during sci-fi film and television programs. But it wasn't until the late eighties that I first had the pleasure to attend both vinyl and compact disc mastering sessions. It was during these sessions that I first witnessed the use of a Stereo-Phase Scope or X-Y Oscilloscope. The Stereo-Phase Scope is a visual aid for the mastering engineer; it displays both the phase, DC offset and the stereo width of a two channel audio signal. The constantly shifting images displayed on the scope are also referred to as *lissajous patterns*. It's like an oscilloscope (which displays the side elevation of a wave-shape) but imagine, looking at two wave-shapes front-on!

Cut to the mid nineties, long before iTunes, there was a Mac based audio player called SoundJam MP (Jeff Robbin and Bill Kincaid) which allowed the use of TechRTA™ (www.channld.com) a Stereo-Phase Scope Plug-in – as a result of this, I have always watched a scope, when listening to my sound library.

Most music is quite narrow in the stereo field, almost to the point of becoming mono (represented by a vertical line on the scope). This helps when cutting vinyl records or for mono compatible radio playback. Part of my ongoing research is to find different ways to create and control, in real-time, new and interesting shapes and images with only two channels of audio plus Stereo-Phase Scope visualisation. During 2011, I released the CD *ACID nO!se Synthesis* (Editions Mego), that documents some of my experiments in this field.



['Untitled Consort Music' dubplate]

The work I contribute here is an unrehearsed (Toshiji Mikawa of the Incapacitants, once instructed me, that a 'noise-ician' should never rehearse), raw and unedited demonstration of a device from a 1975 issue of *Practical Electronics*, that Tom Bugs kindly built and assembled, upon my request in late 2011. To maximise your enjoyment of this podcast, I recommend that you use Audiofile-Engineering's Spectre (www.audiofile-engineering.com/spectre/) for a vector based Lissajous Pattern accompaniment, or just feed the two audio signals into a X-Y oscilloscope.

Russell Haswell, February 7, 2012

02. Biographies

Stephan Mathieu

Stephan Mathieu is a self taught composer and performer of his own music, working in the fields of electroacoustics and abstract digitalia. His sound is largely based on early instruments, environmental sound and obsolete media, which are recorded and transformed by means of experimental microphony, re-editing techniques and software processes involving spectral analysis and convolution; it has been compared to the landscape paintings of Caspar David Friedrich, the work of Colorfield artists Mark Rothko, Barnett Newman and Ellsworth Kelly.

During the last decade Stephan's music has been released on 30 CDs and vinyl records. Apart from refining his solo work he currently collaborates with Sylvain Chauveau, Robert Hampson/Main, Taylor Deupree, Jozef van Wissem and David Sylvian in live and studio projects.

Stephan Mathieu is also a collector of 78 RPM records from the 1910s and twenties, the era of acoustic and early electronic audio recording and loves 'the way they transport sound'.

Russell Haswell

Russell Haswell is an artist from Coventry, England. Lives and works in Suffolk, UK.

He has exhibited visual artwork at Sadie Coles HQ, London; TN Probe, Tokyo; Galerie Rudolfinum, Prague; Kunsthalle, Vienna; Stedelijk Museum, Amsterdam; Centre Regional d'Art Contemporain, Sète; Bricks & Kicks Gallery, Vienna; Galerie Poo Poo, London; Musée d'Art Moderne, Paris; Anthony d'Offay Gallery, London; Kate Bernard Gallery, London; Independent Art Space, London, and Institute of Contemporary Arts, London.

A second edition of the eight track compact disc catalogue *Live Salvage 1997 – 2000* (Honorable Mention, Digital Musics, Prix Ars Electronica) has been reissued by Mego. In 2008 a second volume *Second Live Salvage* was also released by Editions Mego as a double 12" vinyl set. In 2011 a third volume *IV IT: Immersive Live Salvage* was also release by Editions Mego as a Surround sound DVD (DTS & Dolby 5.1) and vinyl LP (UHQ Ambisonic format) set. Haswell also released the CD *Wild Tracks* (Editions Mego) in 2009, a collection of raw recordings, originally intended for film and other media projects. And a double CD, *Value + Bonus* was released by No Fun Productions in mid 2010.

An ongoing collaboration (2003 +) with Florian Hecker working on Iannis Xenakis' graphic-input UPIC Music Composing System, and the recorded results have been presented in the form of multi channel electroacoustic diffusion sessions, for example for the Frieze Art Fair. These events use surround sound and laser lighting to create an immersive multi-sensory environment. Mego, Warner Classical, and Warp Records have released Haswell & Hecker recordings. Other collaborations include *satanstornade* with Masami Akita, which was published by Warp Records on CD and vinyl and awarded 'Record cover of the month' in Vice UK, and *MiniDisc* by Gescom (Distinction, Digital Musics, Prix Ars



[Visualisation of 'Oscillographics: the search for unusual images on a Stereo-Phase Scope', by Russell Haswell. Photo: © Russell Haswell, December 2011]

Electronica), the world's first independent label released MiniDisc, reissued by OR on CD in 2007, which was a collaboration between Russell Haswell, Rob Brown and Sean Booth of Autechre.

Haswell has also curated exhibitions and events at P.S.1/MOMA, Contemporary Art Centre, New York, for two London based All Tomorrow's Parties club events, entitled *Easy to Swallow*, the *Listen* show at Aldeburgh Snape Maltings Concert House with Chris Watson, Bernie Krause and Tony Myatt, presenting their works on a 360° 'high-order' ambisonic surround sound system. He also curated part of the audio program for *The Morning Line Istanbul 2010* project, commissioned by Thyssen-Bornemisza Art Contemporary (TBA21), working with artists/composers Carl Michael von Hausswolff, Peter Zinovieff, Jana Winderen, and Yasunao Tone.

Haswell has contributed to *Frieze Magazine* articles on Japanese noise, computer music software and Peter Halley.

03. Related links

Stephan Mathieu
www.bitsteam.de

Russell Haswell
haswellstudio.com

GRM Showcase at La Gaîté Lyrique, Paris, 12 November, 2011
www.gaite-lyrique.net/en/programmation/theme/grm-groupe-de-recherches-musicales

A Sunday at Casa de Serralves
www.bitsteam.de/wp/?p=111

Spectre software
www.audiofile-engineering.com/spectre/

Stephan Mathieu's 'Process'
www.bitsteam.de/wp/?page_id=316

04. Acknowledgements

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05. Copyright note

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