

# **Abstract Book**

# **Sound, Sight, Space and Play 2010**Postgraduate symposium for the creative sonic arts

2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> June 2010

Music, Technology and Innovation Research Centre De Montfort University, Leicester

Sound, Sight, Space and Play 2010 is supported by:

The Centre for Excellence in performance arts dance drama music technology









#### Introduction

A very warm welcome to Sound, Sight, Space and Play 2010. We are delighted to welcome you to Leicester, those of you from the UK and especially those of you who have travelled from other countries. We were overwhelmed to receive over 70 submissions from various places. Hopefully, these three days will be full of interesting talks and discussions, concerts and installations. We also hope that there will be enough time within this tight schedule for you to meet other postgraduate students, to chat about your academic and creative work and – of course – to have fun.

The aim of the conference – now in its third year – is to connect postgraduate and research students who are working in the sonic arts or related fields.

As in the previous year all submissions were subject to a double-blind peer-review procedure conducted by PhD students and post-doctoral students from different institutions representing the various sub-disciplines of sonic arts and related fields. SSSP has launched its own website this year, where we will publish the proceedings of this conference. http://www.sssp.org.uk

We would also like to thank those people who have supported us in organising this conference, especially

Prof. Leigh Landy (MTI)
Mark Williams (MTI)
Simon Smith (MTI)
Carol Nash (Finances)
Postgraduate Centre
Centre for Excellence in Performance Art (CEPA)
Music, Technology and Innovation Research Centre (MTI)

Andrew Hill, Motje Wolf and Benjamin Ramsay Conference Directors

# Committees

### Organising committee

Andrew Hill, Motje Wolf and Benjamin Ramsay PhD students at Music, Technology and Innovation Research Centre, De Montfort University Leicester

#### **Review committee**

Members of the Review Committee (in alphabetical order):

Ximena Arlacón. De Montfort University Leicester. UK Manuella Blackburn, University of Manchester, UK David Hindmarch, University of Birmingham, UK Robin Fencott, Queen Mary University London, UK Luca Forcucci, De Montfort University Leicester, UK John King, University of Ulster, UK Diana Salazar, Kingston University London, UK Andrea Santini, SARC, Queen's University Belfast, UK Alexander Schubert, Germany Ambrose Seddon, City University London, UK Sophy Smith, De Montfort University Leicester, UK Jan Thoben, Martin-Luther University, Halle-Wittenberg, Germany Nico Thom, Hochschule für Musik Franz-Liszt Weimar, Germany Erik Nyström, City University London, UK Andy Willy, Keele University, UK Dr. Rob Weale. De Montfort University Leicester. UK Ross Whyte, University of Aberdeen, UK

### Support team

Chloé Cutler Visa Kuoppala Andrew Johnson James Joslin Gez McCoy Steve Morgan Annelie Nederberg Neal Spowage Brian Trinh













# **Review procedure**

Sound, Sight, Space and Play is supported by a double-blind review committee consisting of PhD students and post-doctoral students (up to 5 years after completion) from all over the UK and Germany. Abstracts of papers and compositions were reviewed.

The process for reviewing was as followed:

#### Talks

Each abstract was reviewed by four members of the review committee. The rating scale ranged from 1=poor, 2=ok, 3=good to 4=excellent. An average of 2.0 was needed for talks to be accepted.

An abstract with average 3.5 or higher could be suggested for a keynote.

#### Composition/Installations

Each submission was reviewed by two members of the review committee. The rating scale ranged from 1=poor, 2=ok, 3=good to 4=excellent. An average of 2.0 was needed for compositions/installations to be accepted.

The final decisions about accepting abstracts/works were taken by the conference committee based on the comments of the review committee and technical requirements.

# Logo

The Logo of Sound, Sight, Space and Play was designed by Neal Spowage, De Montfort University Leicester. We thank Neal very much for his work.





## **Abstracts**

# **Keynotes**

Three keynote talks were chosen from all submissions, based on the rating of the review committee:

Michael Gatt (UK): The long-term preservation of acousmatic music within the CASPAR (Cultural, Artistic and Scientific knowledge for Preservation, Access and Retrieval) project.

Wednesday 2<sup>nd</sup> June, 2010, 10:30am

Marie Thompson (UK): Releasing the Inner Idiot: Noise Music, Marginality and Madness

Thursday, 3<sup>rd</sup> June, 2010, 10:30am

Erik Nyström (UK): Elemental Chemistry: Textons and the Vision of Space in Acousmatic Music.

Friday, 4<sup>th</sup> June, 2010, 10:30am





#### **Abstracts**

### Kevnote 1

Chair: Motie Wolf

The long-term preservation of acousmatic music within the CASPAR (Cultural, Artistic and Scientific knowledge for Preservation, Access and Retrieval) project

Michael Gatt.

De Montfort University & LEAST - Leicester ElectroAcoustic Sound Team, UK

The CASPAR [1] project was a three-year Integrated Project, co-financed by the European Union within the Sixth Framework Programme, which was formed to investigate the long-term preservation issues relating to digitally stored data. The main aim of the project was to implement, extend and validate the OAIS (Open Archival Information System) reference model by applying the framework to a number of use cases from different institutes within the scientific, cultural and artistic domain, INA-GRM (Institut national de l'audiovisuel - Groupe de Recherches Musicales) worked within the artistic testbed of this project and provided acousmatic [2] use cases, which tested this framework. Throughout the project INA-GRM have had to collect all the data relating to specific acousmatic pieces by a variety of different composers. The outcome of the project and INA-GRM's work is intended to aid future generations of composers, musicologists and right holders (publishers and commissioners).

The issue of preservation is not to conserve the audio files relating to a piece, as this task is simple to achieve by migrating to another format, or preserving the original playback machines. Instead the main concerns for INA-GRM was to ensure that:

- Adaptations of older works could be made in the future.
- An acousmatic work could be re-performed.

Both of these aims require that more information relating to a piece is gathered, maintained and that the information is intelligible to future generations.

This article and presentation will outline the work done within INA-GRM as part of the CASPAR project by explaining the procedures used to successfully archive an acousmatic piece, so that it could be accessed and understood by future generations. It will also present examples of the work undertaken and the various tools and systems used.

ADKINS, M and GATT, M. (2009) [60]Project: Conception, Composing and Archiving. In: ICMC 2009, Montreal, Canada. USA: ICMA, pp.137-140.

BATTIER, M. (2004) Electroacoustic music studies and the danger of loss. Organised Sound, 9 (1), pp. 47-53.

CONSULTATIVE COMMITTEE FOR SPACE DATA SYSTEMS (2002) Reference Model for an Open Archival Information System (OAIS). Washington: CCSDS Secretariat

EMMERSON, S. (2006) In what form can 'live electronic music' live on? Organised Sound. 11 (3), pp. 209-219.

ESPOSITO, N and GESLIN, Y. (2008) Long-term preservation of acousmatic works: Towards a generic model of description. In: Electrontechnical Conference.

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MELECON 2008. The 14th IEEE Mediterranean, Ajaccio, France, 2008, Compleane: Centre de Recherches, pp. 270-274.

GIARETTA, D. (2007) The CASPAR Approach to Digital Preservation. The International Journal of Digital Curation, 1 (2), pp. 113-121.

SCHAEFFER, P. (2007) Acousmatics. In: COX, C et al. Audio Culture: Readings in Modern Music, New York: Continuum, pp. 76-81.

TERUGGI, D. (2001) Preserving and Diffusing. Journal of New Music Research, 30 (4), pp. 403-405.

TERUGGI. D. (2004) Electroacoustic preservation projects; how to move forward. Organised Sound, 9 (1), pp. 55-62.

- [1] www.casparpreserves.eu
- [2] The concern within INA-GRM is not with real-time computer music (this was the work of IRCAM), but with fixed media music.

Michael Gatt is an acousmatic composer and sound installation designer who deals with site-specificity and site-type specific works. He studied in Leicester within De Montfort University and completed a degree in Music. Technology and Innovation and a Masters, which focused on site-specific sound installations. He has worked at the Groupe de Recherches Musicales (GRM), under the supervision of Yann Geslin, for a year as part of a European project (CASPAR) that investigated the long-term preservation of digital objects. Whilst at the GRM he became fascinated with musical projection and their tool for performance - the Acousmonium. This experience affected his appreciation of sonic arts and has had a clear impact on his compositions since then. He has also created a number of different site-specific compositions/installations for various places around the East Midlands.





# Session 1 - Composition and Analysis (morning)

Chair: Robin Fencott

### Investigating recurrences in Andrew Lewis' Penmon Point

Ambrose Seddon City University London (UK)

Previous conference papers (Seddon 2007; Seddon 2008) have introduced the concept of recurrence in acousmatic music, outlining the key issues of this approach to musical investigation and analysis. To briefly summarise, this concept provides a view of structuring processes in acousmatic composition in terms of the constituent sound materials and any perceived connections between them. It also stimulates the consideration of, and engagement with, issues and parameters of cross-referencing between sound materials, providing a view of the music's structure. Such an investigative approach aims to stimulate both analytical and creative strategies; existing works may be appraised in such terms, yet a heightened awareness of the various issues may usefully enrich the compositional process.

This paper will discuss issues of recurrence in Penmon Point by Andrew Lewis (2002-03), using this approach to investigate a single composition. The paper will briefly outline the recurrence concept in terms of sound identity, memory and what might constitute a recurrence. Then, key sound identities within Penmon Point will be introduced, and the musical significance of various recurrences will be discussed. Recurring and varying spatial perspectives and spatial shifts will also be appraised, evaluating their contribution to the sense of structure. Finally, more abstract recurrences and sound material connections will be explored, providing further avenues for musical contemplation.

#### References

Lewis, A. 2002-03. Penmon Point. Miroirs obscurs. YMX Média (SOCAN). IMED 0789. DVD-Audio.

Seddon, A. 2007 of Conference. Recurrence in Acousmatic Music: Creative and Analytical Possibilities. Electroacoustic Music Studies Network Conference, June 12 - 15, 2007, De Montfort University, Leicester, United Kingdom.

Seddon, A. 2008 of Conference. Approaches to Compositional Practice: Working with Recurrent Phenomena in Acousmatic Composition Practice. Royal Musical Association Research Students' Conference, January 3 - 5, 2008, University of Surrey, Guildford, United Kingdom.

#### Biography

Ambrose Seddon has a background in rock and electronic pop music. After graduating with a degree in music from Goldsmiths College, University of London, he spent a number of years teaching, while writing, producing and performing in various bands, with releases through a number of independent record labels. He completed a Masters degree in electroacoustic composition at City University in 2004, and now continues his studies at City University as a PhD student, supervised by Denis Smalley. His acousmatic piece Fouram (2005) received 1st prize in the 2006 Visiones Sonoras Electroacoustic Music Composition Competition, Mexico, and was awarded the European Composition Prize at the International Computer Music Conference, Copenhagen, 2007.

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#### Composing 'Low-bypass': abstract sound sources in Acousmatic music

Benjamin Ramsay, De Montfort University (UK)

This paper will discuss stylistic, compositional and technical approaches to the piece submitted for this conference. In addition to this, it will attempt to contextualise some of the practices and approaches used to compose the piece, with special focus on how the field recordings were selected, captured and further abstracted through close miking, transformation and processing. In addition to the 'technical' aspects of composition, the paper will incorporate a review of some perceived trends that are apparent within today's exploratory electronic music and how these trends have influenced the composition of the piece. Whilst particular attention will be paid to 'Low-bypass', the talk will also discuss wider factors which have directed compositional methods and diffusion practice.

#### Biography

Ben Ramsay graduated from Middlesex University, London, with a BA (Hons) in Sonic Arts in 2001, and is currently lecturing in Music Technology at Staffordshire University in the West Midlands, UK. His research is centred around acousmatic music composition and the exploration of social and sonic relationships that exist in modern forms of sound art. He is currently studying for a PhD in Electroacoustic composition at De Montfort University, Leicester, UK, under the supervision of Prof. Simon Emmerson.

# Session 1 – Composition and Analysis (afternoon)

Chair: Benjamin Ramsay

#### Composing Heart Sutra: a Phenomenological Approach

Frederico Macedo, Lancaster University

In this presentation I intend to use ideas of phenomenology applied to the musical experience, as conceived by Schutz (1976), Smith (1979), Clifton (1983) and Ferrara (1984) to describe the process of composition of the piece *Heart Sutra* (Introduction). Because phenomenology recognizes the essential role of perception, experience and the subjectivity of the knower in the process of knowledge, it can offer an appropriate theoretical framework to describe the process of composition. The three levels proposed by Ferrara for the musical analysis – syntactical, semantic and ontological – offered the basic structure to organize the different levels of meaning and information I am working with.

To talk about the syntactic aspects of the piece I will use concepts proposed by Denis Smalley – spectromorphology – and Trevor Wishart for the description of the materials, structure and spatial design. For the description of the semantic aspects, I will introduce the text used in the composition and describe its general structure and meanings. For the ontological aspects I will introduce the discussion of the concept of space using references both from contemporary physics and Buddhism. This piece is the result of my research about space in music and here I intend to explain why the text was chosen and the way in which it relates to the conception of space which is emerging from my research work.

In the conclusion of the presentation, I intend to highlight which aspects of phenomenology are useful for the description of the compositional process and how they could also be used by other composers in the description of their compositional experience.

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#### **Biography**

Frederico Macedo was born in Brazil and completed a Masters Degree in Composition in State University of Goias (Brazil). He is living since 2008 in Lancaster, and is now in the second year of his PhD studies in composition under the supervision of Alan Marsden, Antti Saario and Felipe Otondo. His research topic is space in electroacoustic music.

# The voice and the vehicle: integrating live broadcast radio into automated live electronic works

Adam Jansch, University of Huddersfield, UK

The use of live broadcast radio as material in music composition was made prominent by John Cage in Imaginary Landscape No. 4 (1951). As a sonic medium which is almost omnipresent, carrying up-to-the-minute information and accessible through widely available demodulation technology, radio has intrinsic features that make its integration into musical works aesthetically and conceptually desirable.

As part of my wider research aims — the investigation of distributable open outcome music — I have approached live broadcast radio as a material to integrate into a suite of automated live electronic works. Pieces in this suite include multi-channel electroacoustic and video works, and a prototype for a distributable hardware-based open outcome pop song. Focussing on radio as voice and as a vehicle the pieces explore a number of creative uses for such material, including environment generation, listening mode modulation and time/locality disruption. The deployment of stations across radio networks emphasising a listener's geographical location, and the radio stream as a perpetually occurring current event will also be discussed, as will technical details and issues regarding the implementations of radio employed in the pieces.

#### **Biography**

Adam Jansch is a sonic artist currently studying PhD in music composition at the University of Huddersfield. His research explores the use of electronic frameworks for the creation and dissemination of open outcome music, the results including pieces in various media – thus far multi-speaker live electronic, visual installation, downloadable open outcome piece and conceptual software are present. His near future looks to be leading him toward designing open outcome works for the iPhone platform.

Adam has had pieces performed in London, Huddersfield and at the Fylkingen Institute in Stockholm, and also performs live as a member of the HELO.pg laptop ensemble run by Scott Hewitt.

For more information on his work go to http://www.adamjansch.co.uk/music-undefined.

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### Exploring the reality-abstraction continuum in composition

Visa Kuoppala, Sibelius-Academy Helsinki, Finland De Montfort University Leicester, UK (exchange)

I will present my newest piece Rakeita (working title) and discuss what kind of path it weaves through different continuums fundamental to sound-based music composition. The most important of these for the piece are the continuums between 1.) reality and abstraction, 2.) bottom-up and top-down composition and 3.) indefinite and definite pitch.

Reality-abstraction —continuum describes the ranges of listening approaches a composer can take to sound material from reduced spectromorphological listening viewing the sound as abstract timbral material - to referential everyday listening modes popular in soundscape composition. A composer can guide the listening modes the audience is likely to employ, and a key element of the discourse of Rakeita is to oscillate between these listening modes.

Bottom-up composition refers to an approach where the piece is constructed from materials upwards by following closely what the materials suggest, whereas top-down composition describes a more formalistic approach where a conceptual compositional plan precedes the selection of materials. In a more abstracted sense this can be seen as a continuum between following a non-verbalisable, primal intuition to working with pre-planned ideas and schemes. This consideration has had great impact on my working approaches with the piece.

Finally, using sounds with definable pitch is an attractive prospect from a purely timbral point of view, but these sounds tend to bring with them a baggage of western classical pitch-theory. Rakeita attempts to use these sounds purely timbrally without composing their pitch-relationships. Finally, I will consider how all these considerations have affected the structural shape and flow of the piece.

#### Biography

Visa Kuoppala (born in 1986) is an electroacoustic music composer from Helsinki, Finland. After completing his bachelor degree at the department of music technology in Sibelius Academy, Finland, he is currently studying at De Montfort University's Music, Technology and Innovation department as an exchange student. After years of working with projects balancing between popular music and avant-garde, he now concentrates his energy especially on acousmatic music, but also on different forms of free improvisation (electroacoustic improvisation in particular) and sound-installations. He studies composition under John Young; his previous composition teachers have been Tapio Nevanlinna and Otto Romanovski.





#### Keynote 2

Chair: Motje Wolf

### Releasing the Inner Idiot: Noise Music, Marginality and Madness

Marie Thompson, Newcastle University, UK

In the Lars Von Trier film, Idioterne (1998) a group of intelligent, middle-class, adults seek to confront the established social orders and 'uncreative' modes of thinking by pretending to be mentally retarded, both in private and in public. By putting on the mask of the social 'Other', 'the idiots' are thought to engage in an act of genuine self-expression; the face of non-reason becomes the enlightened subject by seeing the world from outside the dominant social structures.

I would like to suggest that a similar project is at play within noise music; that noise practitioners too are, in part, releasing their 'inner idiot'. Using the concepts of abjection, the sublime and the Lacanian Objet Petit a, I will examine the ways in which noise can be conceived as the limits of signification; a sonic reflection of the space beyond reason. Subsequently, I will suggest that noise music encapsulates a symbol of the Other, that is, a symbol of noise, madness, the abject, the meaningless and so on in order to maintain the ontological paradox from which noise music's signification arises. However, as with 'the Idiots' rebellion against normative social structures, this symbol of Otherness is always relative to that which it opposes. Using Jacques Derrida's critique of Michel Foucault's Civilisation and Madness, I will thus are used to the positions of reason, music, meaning, convention and so on.

Finally, by analysing two musical exemplars; Dimanda Galás's aptly named 'Wild Women with Steaknives' and the work of Australian performance artist Justice Yeldham, I will examine the ways in which noise music puts on a 'mask of madness', which is created by and furthermore, enacts a violence towards that which it opposes.

#### **Biography**

Marie Thompson is currently a first year PhD musicology student at Newcastle University, under the supervision of lan Biddle and David Clarke. She has previously studied at the University of Liverpool, where she completed a BA in Music and Popular Music in 2008 and a Masters of Music in 2009. Her current research is based around the construction and perception of signification in noise music. This project draws from the philosophical approaches of the French poststructuralists (primarily the work of Jacques Derrida) as well as various other philosophical, cultural and psychoanalytic paradigms. Her studies are funded by the Arts and Humanities Research Council.

Marie is also a keen composer and performer. She is currently involved with a free improvisation group, as well as a number of noise based collectives and projects, in which she plays oboe, bass guitar and a collection of circuit bent toys.

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#### Session 2 - Listening

Chair: Andy Willy

#### Teaching listening skills – a way to enhance appreciation?

Motie Wolf.

De Montfort University Leicester, UK

Being able to listen to electroacoustic music is one of the key skills which can help listeners to appreciate it. Although this may be the case for all types of music, electroacoustic music seems to be more challenging having in mind that the listener has just entered a completely new sound world. While Leigh Landy (2004 and 2007) argues that something-to-hold-on-to-factors are important for the reception of electroacoustic music, there must be also a strategy of discovering these factors as Voegelin states: "If the artist's work exists too far away from a recognisable expression this chasm between recognition and unfamiliarity is too wide to be overcome by the listening activity. The listener feels alienated and abandons his/her engagement." (Voegelin 2004)

In my PhD project "pedagogical ElectroAcoustic Resource Site" (EARS II) I have developed a curriculum to teach inexperienced listeners (11-14 years old) electroacoustic music. The EARS II curriculum provides the necessary guidance in explaining the key concepts of electroacoustic music on the basis of sound with the aim to enhance appreciation. In this way the learner will be enabled to develop the skills and master the tools needed for finding their way in the sound world of electroacoustic music. Case studies with school classes have been run which indicate that the development of listening skills plays a much greater role than originally thought.

The curriculum focuses on two listening strategies, reduced listening and its antithesis referential listening. Although participants were familiar with some of these listening modes it still seemed to be new to most participants to engage with sounds in this way. In questionnaires and interviews after the case studies participants stated that their listening abilities have changed during the course.

In my talk I will introduce the teaching methods used to teach the development of new listening strategies as well as the case studies in more detail. Furthermore, I will discuss the hypothesis that teaching listening skills is a way to enhance the appreciation of electroacoustic music as being able to listen enables the listener to orientate within a complete new world of sounds.

Landy, L. (2007). Understanding the Art of Sound Organization. Cambridge, Mass.: MIT Press.

Landy, L. (1994). 'The "something to hold on to factor" in timbral composition', Contemporary Music Review, 10(2), pp. 49-60.

Voegelin, S. (2004). How Can You Hear It When You Don't Know What You Are Listening for? – The Need for a Critical Context of Listening. Diffusion 17/03/04. (As not available on the Web anymore referenced after: Landy 2007a, p. 105).

#### Biography

Motje Wolf studied musicology and dramatics at the University of Leipzig (Germany) and Karl-Franzens-University (Graz, Austria) completing her Master's Degree in 2007. Her research focuses on music education and electroacoustic music, contemporary music as well as on communication theories applied to (electroacoustic) music.

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Since 2008 she has been studying for a PhD at Music, Technology, Innovation Research Centre (De Montfort University, Leicester), where she is working on the EARS II project. For her PhD she investigates the hypothesis that appreciation of electroacoustic music can be enhanced for inexperienced listeners (e.g., children) through explanation of the key concepts of this music. Her PhD research is funded by the Institute of Creative Technologies (DMU).

Motje is also a freelance musician, works regularly with different choirs in Germany and the UK and is member of DMU's Dirty Electronics Ensemble. She currently holds a Choral Scholarship at Leicester Cathedral.

Motje is on the organising board of Sound, Sight, Space and Play, Postgraduate Symposium for the Creative Sonic Arts and has published several articles as well as three conference proceedings.

http://www.motiewolf.de

#### Interactivity puts a focus on listening

Laura Maes.

University College Ghent & Ghent University, Belgium

Sound art, a hybrid of plastic art and music, is a young trend in art that has embraced interactivity as a notable component of its form. Sounds are no longer only placed in time, but also in space and the time structure is in most cases no longer narrative. Therefore, the attention of the listener has to be aroused in a different way. It is no coincidence that many sound works refer to man's amazement and interact with their environment.

We can make a distinction between activation and interaction. The participation of the audience is often limited to pressing a button, turning a switch or triggering a motion detector to activate the work of art. Once the work has been activated a preprogrammed process that can not be interrupted or influenced by actions of the audience is executed. On the other hand, the role of the visitor is no longer restricted to that of a spectator. A two-way interaction is necessary for the operation of the work. In this context interaction stands for essential qualities of the work, the course of the work and the perception of the visitor that depend on the acts of that same visitor. The visitor is inclined to listen, to analyse the effect of his actions and to master the system.

Interaction, with or without the use of technology, forces the visitor to listen and provokes him to fathom the sound producing system and to control it. Interaction does not only have an influence on the course of the work, but also on the perception of the work.

In my lecture I will analyse and discuss several interactive sound works that utilize different methods to induce listening.

#### Biography

Laura Maes was born in 1978 in Ghent, Belgium. She completed her studies as 'Master in Music' at the 'Royal Conservatory' in Ghent in 2001 with high distinction. In 2002 she received a degree for 'Master in Marketing Management', with distinction at the 'Vlerick Leuven Ghent Management School'.

She is currently working as a researcher at the University College Ghent, Faculty of Music. Her PhD in arts focuses on new and existing modes of expression within sound art. She presented her research project at, amongst others, the University of Edinburgh, Orpheus Institute in Ghent, the City University of New York and at the Portuguese Catholic University. In 2009 she received the Gribbon award to present her research during the 38th Annual AMIS Meeting at the University of Michigan.

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She performed together with Nico Parlevliet, Roel Meelkop, Claus Van Bebber, Noise-Maker's Fifes, Pierre Berthet, Logos Foundation, Q-O2 & Black Jackets Company and released records on C.U.E. records, Cling Film, MSBR-records, Denshi Zatsuon & Flenix.

Her installations were presented at Bruges 2002, Happy New Ears Kortrijk, Re:New Kopenhagen and arts centre Vooruit.

#### Session 3 - Interactivity

Chair: Dylan Menzies

#### **Computers in Support of Group Music-Making**

Robin Fencott.

Queen Mary University of London, UK

The creation, performance and enjoyment of music has always been a social activity: people make music in groups, perform in front of audiences and dance together at concerts. However, computer based music-making is often a solitary activity. This is partially because many existing computer music tools are designed for single user operation, while the field of multi-user computer supported musical interaction is still a relatively uncharted research area.

Furthermore, digital technologies can potentially facilitate new kinds of group musical interaction which differ from conventional face-to-face music-making. For instance a collaborative music application could provide musicians with varying levels of privacy, multiple workspaces, or additional channels of communication. Unfortunately computer based interaction also excludes much of the rich, multi-modal, and extramusical information which musicians use to co-ordinate their actions, such as gesture, bodily orientation and verbal communication. This defect may in turn compromise the awareness that individuals have of each another's activities, potentially causing confusion or a lack of coherence within the group.

Our challenge is therefore to create new collaborative tools which exploit the potential of digital technologies, while supporting the natural, creative and engaging interaction that musicians experience when working face-to-face. This talk will outline our current research, which explores the issues of privacy, awerness and engagement in computer supported group music making. We will review and critique related work from within the computer music community and the field of HCI. We will then discuss our methodological approaches, before summarising the qualitative and quantitative findings of a study whereby we present nine groups of co-located musicians with three different interface designs, to explore the effects of varying the levels of computer mediated privacy and awareness during a group composition activity.

#### Biography

Robin Fencott is a PhD candidate at Queen Mary University of London, where he is a member of the Centre for Digital Music and the Interaction, Media and Communication research groups. His PhD research concerns the design and evaluation of multi-user interactive music systems. Robin holds a BSc in Sonic Arts, and his previous academic work encompasses generative music, interaction design, sound synthesis and physical computing. In addition to research, Robin teaches Java and graphical user interface programming at Masters and Undergraduate level, and is currently advising several undergraduate projects concerned with multi-touch technology.

Robin has worked as a freelance programmer for a number of new-media companies including Coda Arts and Big Dog Interactive, and has collaborated with Proboscis on

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Sensory Threads, a project which combines pervasive gaming, urban sensing and interactive data sonification. Robin's interactive installations have been presented at club and festival events, as well as London's Science Museum and the 2009 Newcastle Maker Faire. Robin is also a performing musician who has played at venues across London, while his electroacoustic compositions have been played internationally at concerts and on the air.

# 'Subtle Objects' - Exploring the Interaction between the Audible and the Physical

Mike Blow.

Sound Art Research Unit, Oxford Brookes University, UK

This paper describes an ongoing project, 'Subtle Objects', which is one element of my research into the perceptual interaction between what we hear and what we see; between audio objects and physical ones. Subtle Objects are items that are recontextualised or that have extra layers or readings added using sound.

A found object or sculpture is fitted with a tilt sensor and presented to the visitor, who can control the volumes of six audio clips by picking up the object and tilting it. Each audio clip brings its own reading to the object being held, and interacts with the experiences of the person holding the object to create a unique personal narrative. Furthermore the sounds fade up and down in volume and can be mixed together, creating new combinations. An example is Calvino's book 'Invisible Cities' which I have partnered with field recordings from London, Hamburg, Venice and New York; another plays on the symbolism of everyday objects, using a basketball shoe which controls sounds of sweatshop manufacture, Chinese dialog, a street basketball game, adverts for the brand, applause. Other versions will use abstract sculptural forms and sounds to focus on form and material.

Drawing on the work of Robert Morris (especially 'Box with the Sound of its own Making'), Michael Chion's writing on audio/visual relationships, and work by Bill Fontana and Christian Boltanski in aural memory, the piece relies on our tendency to try and create a gestalt experience by connecting disparate information streams in order to draw some more-or-less logical conclusion. A new imaginary object/truth is created, which will be unique for each visitor and which exists somewhere between the object that is held, and the object that is heard. In this paper I will present the work and examine some of the parameters involved in the audio/visual interaction.

#### **Biography**

Mike Blow is an artist and arts technologist currently undertaking PhD research at Oxford Brookes University. His solo work is concerned with the relationship between sound, space and the imaginary. He is interested in the presentation of sound as a medium, its relationship to physical and non-physical objects, and its power to engage us in an emotional way through memory or by evocation.

Recent performances and installations include 'Trouble Tune' at the Royal Festival Hall (22/11/09), 'Fortune Factory' white nights event at the Phoenix Gallery Brighton (24/10/09), 'Tilt: Light and Colour' at Bash Creations London (09/10/09 - 11/10/09), 'POD' at Shunt London (05/08/09 - 09/08/09), and 'Hinterlands', Trafalgar Works Gallery Portslade (12/07/09 - 09/08/09).

Mike curated the sound art show 'Sonic Art' in the Brighton Festival Fringe (May 2009), and lectures in digital and interactive art at the University of Brighton. www.evolutionaryart.co.uk

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#### VIVO (Video Interactive VST Orchestra)

Fabio Paolizzo University of Kent. UK

The research is drawn across the fields of musicology, composition and software development with the aim of achieving a collective intelligence and self-awareness through self-reflection in interactive music.

The present study is particularly important as it recognizes that for a collective self-awareness to occur through self-reflection in music, specific structures of interrelation have to be adopted, which may enhance the human agent's awareness of the own self as related to the machine. These structures are then implemented in a piece of software. Specific art projects are designed along the investigation to finally test/improve the framework through art practice. The art works spanned the disciplines of music, dance, theatre/performance, film making, net-art, sport/music interactive public art

The implementations include: a module for adaptive video tracking that is derived from the feedback loop of action/perception (Vaggione, 2001); an adaptive graphic score which is designed upon a previous multi-modal comparative analysis (Impett, 2001); a dynamic host for audio software, where the concept of open content is merged within the dynamic orchestration model.(Paine, 2004)

The piece of software, which provides outcomes that are informed by these structures, is VIVO. This software musical instrument is able to generate an adaptive musical answer to reflect the agents' behaviour by controlling external audio-plug-ins (VST, DirectX, AU).

The paper illustrates its main features, the theories behind the implementations and the partial evidence that was gathered from tests, which are still in progress, within specific art projects.



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Fabio Paolizzo is a composer, musicologist and software developer. In the last six years, he focused both his practical and theoretic research on interactive arts and computer musical systems and researched, organized and/or participated various academic activities related to these areas. He is currently a Ph.D. researcher and GTA in the School of Arts at the University of Kent, UK and formerly taught and studied in Italy at the Department of History, Humanities and Philosophy at the University of Rome Tor Vergata. He regularly performs and exhibits his artwork in Europe, often collaborating with artists from other disciplines. http://www.fabiopaolizzo.com/

# The Serendiptichord: Balancing Predictable Control With Chance Discovery in a Wearable Instrument for Dancers

Tim Murray Browne. Queen Mary University of London, UK

The differences between instrument, controller and interactive soundscape have blurred in recent years providing their creators with some often contradictory demands, in particular balancing control and repeatability with complexity and the serendipitous [1]. When an instrument is built for non-musicians, addressing this is crucial to avoid a dichotomy between the player's expressive autonomy and a musical result.

When designing the Serendiptichord, a wearable instrument for dancers, we approached this issue by creating a consistent and intuitive mapping metaphor. which operates within a generative scene. Within the instrument four motion sensors are embedded: two noisemakers, the intensifier, and the trunk. A scene is created stochastically through selection from a bank of sound objects, which are randomly assigned to specific orientations of the noisemakers and triggered when the dancer 'hits' these orientations (see [2] for more detail). Further musical autonomy is provided by allowing the dancer to intensify sounds and frequency shift the entire soundscape with the other sensors, and request a new scene by freezing their pose for two seconds.

By embodying a metaphor of percussion, the mapping model is quickly made clear to the audience, and naturally draws upon the expressive movement of dance by translating speed into volume and gesture into sequences of sounds. Keeping generative aspects within a scene that is explicitly explored allows the dancer's control of the instrument to be conveyed whilst retaining a serendipitous outcome.

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Furthermore, the use of sound objects introduces a composer with control over uniquely musical aspects whilst letting the dancer produce complex arrangements of sounds that suit the structure and dynamics of their performance.

#### References

- [1] J. Drummond, "Understanding interactive systems," Organised Sound, 2009, p.
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#### Biography

Tim Murray Browne is a PhD researcher at the Centre for Digital Music, Queen Mary University of London, Having completed a Masters in Maths and Computer Science at Oxford University, he is now researching how long-term narratives may be implemented within interactive music systems. Tim is also a composer and sound installation artist and his work has been shown at venues including Berkeley Art Museum in the USA and Kinetica Art Fair, the Barbican and Shunt, London,

A hands-on choreography of fashion, technology and performance, Di Mainstone creates interactive adornments that playfully explore human behaviour. Trained in fashion design at Central Saint Martins College of Art. Di has collaborated with a range of artistic institutions, including Banff New Media Institute, XS Labs Montreal, V2 , Institute for the Unstable Media in Rotterdam and most recently Eyebeam in New York City. Di has guest lectured at The Royal College of Art. Central Saint Martins College of Art, NYU, Parsons, Pratt, Willem de Kooning, Emily Carr and Concordia University. Exhibitions include: SIGGRAPH Los Angeles, Future Fashion Event in Pisa, Seamless in Boston, Social Fabrics in Dallas, Re(A)ctor 3 in Liverpool, I-Machine in Germany and 5 Days Off in Amsterdam.





#### Session 4 - Installations

Chair: Ximena Arlacón

# Developing a Practice-Led Research Strategy for Investigating the Relationship Between Environmental sound and Language.

Marcus Leadley, University Of Wolverhampton, UK

Interdisciplinary research has led me to a hypothesis which proposes that without sound binding us in a dialogic relationship with our environment human beings would not have been able to develop inter-human sounds (i.e., language) in order to function as social beings. My reading further suggests that this relationship remains a primary force in the way that individuals, societies and cultures continue to evolve. While evidence for these observations is drawn from the literature of soundscape studies, ecological acoustics, philosophy, linguistics, ethnography and psychology, a practical strategy is required to test existing perspectives and deliver new research materials for further interpretation. Key to my inquiry is the interrogation of questions which seek to identify the nature of information that may usefully be extracted from environmental acoustic content and how mediation, manipulation and combination may serve to enhance or occlude our understanding.

This paper outlines and explores a three part practice-led strategy which includes:

- the development of wireless headphone installation techniques which use custom software to re-present treated field recordings at the same location where they were made – in order to influence participant's aural perception and explore the experience in terms of the rendering of objects, agents and processes into language;
- participatory sound making events which employ role play, score/scripts and site-sound manipulation – to encourage new forms of listening and centres of reflection;
- an adaption of the medium of opera in which the soundscape is generated entirely through the interaction of the performers' voices with recorded materials and the live sound from the performance arena – in order to explore the dialogic relationship between performers, audiences and the soundscape in an imaginary and emotional context.

## **Biography**

Marcus Leadley is a PhD researcher based at the Centre for Art and Design Research and Experimentation (CADRE) at the University of Wolverhampton, he completed his MMus (studio based composition) at Goldsmith College, University of London in 2008. As well as an ongoing interest in phonography and soundscape composition he has a background in music performance and has composed work for physical theatre, film and public spectacle, most notable Icarus Ablaze, an exploration of ancient Greek mythology which toured internationally between 2000-2004. In April 2008 he curated the soundscape event Worlds Collide at Tate Modern as part of the Art, Lifestyle and Globalisation symposium organised by PVA Media Lab. Prior to taking up his current position Marcus spent eight years as the editor of the IPC Media magazine Guitar & Bass.

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# L'ex: An exploration of light, sound and electricity by means of a multimedia installation.

Robyn Farah, Queen's University Belfast, UK

\*\*\* Robyn would like everyone to see the installation without any prior knowledge. \*\*\*

### Biography

Robyn Farah is South African composer and interactive sound installation artist. She did her Masters in Sonic Arts at SARC, and her Undergraduate in Music and CMT at Anglia Ruskin University.





#### Keynote 3

Chair: Andrew Hill

### Elemental Chemistry: Textons and a Vision of Space in Acousmatic Music.

Erik Nyström.

City University London, UK

The electroacoustic work Elemental Chemistry was realised as part of the author's research in spatial texture, a subject dealing with the perceived modes of organization and patterning among textural morphologies in perceived space. This paper offers an insight into the aesthetic concerns that guided the process of composing this work, while simultaneously introducing some key theoretical aspects of the research.

With Denis Smalley's theoretical framework of space-form (2007) as a point of departure, the research introduces some approaches towards textural scale in spatial percepts of electroacoustic music. This involves the concept of textons, invented in visual texture perception research by experimental psychologist and neuroscientist Bela Julesz (1983). Based on the conjecture that spatial aspects of acousmatic music often have a synaesthetic effect on the listening experience, the notion of textons is here extrapolated into the domain of music. Textons can be thought of as the quasi-visual, "perceptual atoms" of spatial texture and are described here in terms of shapes, locality and propagation through time.

The discussion puts the research topic into the perspective of Elemental Chemistry as a work exploring these ideas, and reflects on the degree to which it is successful in doing so.

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SMALLEY, D. (1997) Spectromorphology: Explaining Sound Shapes. Organised Sound 2 (2), pp. 107-126.

#### Biography

Erik Nyström is an electroacoustic composer born in Sweden and based in London. His educational background includes a BA (Hons.) in Audio Engineering from SAE in London and courses in Computer Music at CCMIX in Paris, with Gerard Pape and others. In 2008 he completed an MA in electroacoustic composition at City University, supervised by Denis Smalley and awarded with distinction. Currently, Erik Nyström is undertaking a PhD research concerning spatial texture in electroacoustic music at City University, also supervised by Smalley. Further preoccupations include acousmatic music in the context of choreography, which has led him to write works for contemporary dance performances and video. His works have been performed and broadcast in Brazil, France, Germany, Hungary, Argentina and the UK.

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#### Session 5 - Miscellaneous

Chair: Andy Willy

#### Spatialisation and the use of the Electric Guitar with live electronics.

Gez McCov.

De Montfort University Leicester, UK

This paper will examine the use of the electric guitar and live electronics within a spatial environment and cover my own practical approach for the development of a modular system to enhance the live performance of the electric guitar in a multi speaker setting.

Since its electrification, guitarists from Albert Collins and Jimi Hendrix to more recent performers such as Matt Bellamy and Jonny Greenwood have embraced both analogue and digital technology to intensify their performance and generate unorthodox sounds from their instruments. A brief examination of these technological improvements and their significance to the spatial distribution of the guitars' sound, during performance, will be undertaken.

Despite the fact that the electric guitar has certain limitations in relation to spatial imaging, being a monophonic instrument, I have developed a multi-pickup instrument capable of outputting the sound source from individual strings to compensate for this shortcoming.

Central to this discussion will be my current research into DIY electronics and spatial audio software and its use in combination with the multi-pickup guitar to enhance my composition and performance technique. I will also examine the work of contemporaries such as Enda Bates, Christian Frisson and Loic Reboursiere and their research into polyphonic and multi-modal guitars for spatial music performance. It is my aim to conclude the presentation, prior to the question and answers session with a brief demonstration of the equipment I have developed to date while highlighting any future developments I feel are necessary to supplement the project.

#### References

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DERMOT FURLONG, ENDA BATES, & DONNACHA DENNEHY. ADAPTING POLYPHONIC PICKUP TECHNOLOGY FOR SPATIAL MUSIC PERFORMANCE. Ann Arbor, MI: Scholarly Publishing Office, University of Michigan Library.

Frisson, C & Loic Reboursiere. Enterface'09: Multimodal Guitar: Performance Toolkit and Study Workbench. Digital Art Technologies, Universite catholique de Louvain, Belgium.

#### Biography

Gez McCoy is a vocalist, guitarist and producer of Alternative, Experimental and Popular music who has worked professionally as a musician and audio engineer with acts such as 'Faceshaper', 'The Nigel Clark Band' and the dub collective 'Munch Break'.

In recent years he has completed a HND in Popular Music Studies at South Birmingham College before successfully completing a BA(Hons) in Popular Music Production at Derby University, where he designed and built a multi-pickup, surround sound, lap slide guitar.

As a postgraduate at DMU, studying a Masters in Music Technology he is exploring electroacoustic music in order to integrate his experimental guitar and live electronics in a spatial sound environment.







#### What is audio-visual music?

Andrew Hill, De Montfort University Leicester, UK

Electroacoustic audio-visual music works explore the possibilities that the combination of their two time-based media (sound and moving image) allow. Discussion of sound and image interaction is not new, the Ancient Greeks discussed it, Newton had a theory on the subject and numerous people devoted their lives to the development of colour organs in the 18th and 19th century in an attempt to realise an art form that brought together sound and light.

The most liberating technical development for the genre was the invention of tools to capture sound and image, and most importantly, to play them back again alongside one another.

The development, and recent affordability, of digital technology has encouraged this genre to expand rapidly with VJ performances in clubs becoming regular and visualisation software on music media players being almost ubiquitous. While there has been an explosion in the prevalence of audio-visual media and visuals to accompany sound there is still a fairly limited selection of theoretical texts analysing the subject field.

Many different techniques and styles are employed in the composition and association of sound and image. I will discuss my own compositional process used in creating audio-visual works and how the triangulation of concept, audio material and visual material inspire the creation of the final composition and how this separates audio-visual music from other single media art forms.

I will then introduce my language cube developed for the classification of different types of audio-visual music and demonstrate its use with a few examples. And finally I shall outline how all of these branches of research are unified in my main research project 'investigating audience reception of electroacoustic audio-visual music'.

#### Biography

Andrew Hill is a composer and sonic artist from the UK. He studied electroacoustic music and music technology at Keele and De Montfort Universities electing to focus his studies upon audio-visual compositions. He is currently conducting PhD research investigating audience reception of electroacoustic audio-visual music at the Music, Technology and Innovation Research Centre. De Montfort University, Leicester.

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#### Session 6 - Popular Music and Sonic Arts

Chair: Benjamin Ramsay

#### Electronic Dance Music and Sonic Art: Genre. Culture and Turntables

Eoin Smith, NUI Maynooth, Ireland

Found sound' has become a more prominent element in electronic dance music in recent years. Artists such as Mum, Fourtet, Squarepusher, Aphex Twin, Luke Vibert and Boards of Canada include elements from the world of 'found sound' into their music, either as full sound art compositions or minute gradients of field recordings incorporated into more rhythmic based tracks. This leads to a blurring of genres and sound worlds; however, an interesting anomaly is that while these artists seem to embrace this blurring of genres, it is my belief that the same cannot be said for the more academic side of sonic art. Within academic institutes who cater for the sonic arts, the influence of electronic dance music is not always noticeable. An instrument which seems to have transcended genre is the turntable. It is now accessible in both the world of sonic art and electronic music culture. But how is this so? What I intend to look at in this paper is why this dichotomy of sound worlds exists, concluding with a look at how the turntable could act as an intrinsic element of performance and composition but also as a milestone instrument in the fusing of genres and cultures.

#### **Biography**

Eoin Smith is a PhD student at NUI Maynooth, Ireland. His area of research is concerned with incorporating turntable technology into the field of sonic art, building and developing interactive computer music tools for composition and performance.

# Hybridising Popular and Electroacoustic Music: Object-Based and Structure-Based Approaches.

Thomas Shave, Keele University, UK

My practice involves addressing the hybridisation of popular and electroacoustic music. Research into music as a generically determined communicative process (leading to 'Communicative Contract Analysis.' Organised Sound 13(1)) led to the hypothesis of evocation as a vital aspect of hybridism; to represent something exterior to the expectations of the 'parent' or 'dominant' genre. Here my practice began, using compositional methodologies to approach the (illusory?) idea of 'sympathetic hybridism' - one does not represent but rather both genres maintain an equality. This paper will discuss the ways I have approached this thus far.

The first method was 'object based'. Sound objects, I.e. a sound or sound structure that could be considered unitary and referential - thus the sound of a drum, a drum beat, a single note, a melody etc. - common to (indicative of) one genre were subjected to compositional techniques common to (indicative of) the other genre. This led to the album Individuum, submitted for my Masters. The second approach was 'structure based' wherein formal features of a work were used as opportunities for organising and elaborating hybridism. Two works in particular will be discussed; Take It All Away, and Happy Robot. Take It All Away uses the structural properties of the popular song to express hybridism. The chorus (home) is a relatively traditional chorus albeit whereas the verse (away) investigates material from the chorus as





electroacoustic sonority. Happy Robot uses programmatic form to express particular mappings of musical phenomena onto aspects of a narrative.

Whilst sympathetic hybridism may be an illusion, its use is as a theoretical goal against which to measure and theorise my progress. Thus the techniques outlined above are not unproblematic, particularly in terms of the idea of intended audience, expectations of arenas of consumption and so forth. My current practice, currently in progress, investigates the ways in which I can transform the practice using different zones of consumption, audiences and methods of creation.

### **Biography**

I attended the University of York to study music, specialising in composition (studying with Roger Marsh, John Stringer and Bill Brooks) and aspects of postmodernity, After the completion of the degree. I spent the next two years working on popular music with the electro-pop band Cats in the Alley, as songwriter, keyboard player, engineer and producer. I undertook a Masters degree under the supervision of Professor Raimil Fischman, researching the composition of hybrid forms combining popular and electroacoustic music, for which I received a distinction. During this time my paper Communicative Contract Analysis: An Approach to Popular Music Analysis was published in Organised Sound 13:1, and was given at Keele Postgraduate Symposium 2008, De Montfort SSSP 2008 and the International Conference on Music since Nineteen Hundred 2009. I have talked about my practice at Keele Postgraduate Symposium 2009 and the North West and North Wales Music Postgraduate Conference 2009, and had my work played at De Montfort SSSP 2009, Keele Electroacoustic Series 2009 and shortlisted for the International Conference on Music since Nineteen Hundred 2009. I am currently continuing my research with a PhD with Professor Raimil Fischman, made possible by an ACORN grant.

# **Concert Programmes**

#### Concert #1

Wednesday 2nd June, 2010, 7pm, PACE studio 1

Matt Walch: Memoirs of Phoenix Altair (2ch) Jake Rundall: ...in tatters (5.1ch) Scott Barton: Breeding in Pieces (2ch) Ben Ramsay: Low-bypass (8ch) Nick Del'Nero: Data Fracture (2ch)

Matthew Dotson: SongCycle (av/2ch) David Hindmarch: Jetsam-Sounding (2ch) Jonas Förster: Transmutation (4ch) Manuella Blackburn: Karita (2ch)

#### Concert #2

Thursday 3rd June, 2010, 7pm, PACE studio 1

Hannah Gilmour: Ode to a Cricket (2ch)

Matthew Barnard: Closely Observed Trains (2ch)

Frederico Marcedo: Heart Sutra (4ch)

Edgar Barroso: ACU (8ch)

Erik Nyström: Elemental Chemistry (2ch)

Madjid Tahriri: Schweigeminute (4ch) Lee Fraser: Instantia Crucis (2ch) Fabio Paolizzo: Crescendo (live/4ch)

# Installations

Samantha Horseman: Dis:ORDER2 (PACE, side studio), throughout the conference Marcus Leadley: Urban Sounding (Magazine Square), Wednesday 2nd PM only Robyn Farah: L'EX (PACE, studio 2), throughout the conference











