



IRISH SOUND SCIENCE AND
TECHNOLOGY ASSOCIATION

TEMPORARY AUTONOMOUS ZONES

ISSTA 2016

*INTERNATIONAL FESTIVAL AND CONFERENCE ON
SOUND IN THE ARTS, SCIENCE & TECHNOLOGY*

SEPTEMBER 7TH-9TH 2016

*ULSTER UNIVERSITY, MAGEE CAMPUS AND PARTNER
VENUES IN DERRY/LONDONDERRY*

MUSIC | ART | PAPERS | WORKSHOPS



Festival/Conference Theme: Temporary Autonomous Zones

One of the reasons we value sound as a perceptual and phenomenological event is that it allows for the creation of new types of sensory engagement with space. Creative processes of sounding allow us to design different types of sound worlds: places which can become autonomous zones. Lefebvre, in his seminal text *The Production of Space*, alludes to the concept of autonomous zones or imagined spaces; places which are imagined and created by community.

The idea of how we create and respond to autonomous zones is the subject of this year's ISSTA festival as it comes to Northern Ireland for the first time, fostering a range of artistic, technological and academic interventions in Derry/Londonderry entitled *Temporary Autonomous Zones 2016*. A *Temporary Autonomous Zone* (TAZ), as defined by the poet and anarchist cultural theorist Hakim Bey, is more than just a distinct space; it is a space in control of itself, in that it does not recognise outside authority. Bey suggests that a festival or event has the potential to act as a moment of intense uprising and creative disruption, which allows for the creation of a TAZ, a guerrilla moment of positive revolutionary acts and art. In our present period of geopolitical and economic uncertainty, mass movements of people across territories are coinciding with the beginnings of exclusionary zones in Europe. It is in this context that this year's ISSTA festival seeks to create a series of Temporary Autonomous Zones—new unmapped and self-determining sonic, conceptual and social spaces—which assert, for a time, their independence from existing structures through discussions of creative and technological practices and research, and through the artistic works themselves.

The sixth annual Irish Sound, Science and Technology Festival and Conference (ISSTA 2016) will be held September 7th-9th 2016 at Ulster University, Derry/Londonderry and partner venues throughout the city.

About ISSTA

The Irish Sound, Science and Technology Association is an organisation that brings together practitioners integrating fields of music, art, sound, science and technology. It serves musicians, researchers, scientists, engineers and artists by promoting sound within the arts, science and technology, within Irish and international communities. Since 2010 ISSTA has hosted an annual conference, gathering researchers from around the globe to present papers, installations, concerts and workshops.

Founding President: Dr Kerry Hagan

Founding Vice-President: Dr Tony Langlois

ISSTA Board, 2015/2016:

Dr Linda O Keefe, President

Dr Brian Bridges, Vice-President

Dr Jacqueline Walker, Treasurer

Miriam Lohan, Secretary

Dr Tony Doyle, Web Manager

Richard Duckworth, PR

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ISSTA 2016 Keynotes and Headline Workshops

Professor Leigh Landy (De Montfort University and Editor, *Organised Sound*)

Dr. Liz Dobson (University of Huddersfield and Yorkshire Sound Women Network)

Headline Workshops: Gregory Taylor (Cycling 74: on Max and Gen) and Mark Henrickson (Jitter)

Headline Outreach Workshops: Nina Richards (Yorkshire Sound Women Network) and Gregory Taylor (Cycling 74)

ISSTA 2016 Organising Committee and Conference Team

Dr Linda O Keeffe (President, ISSTA)
Dr Brian Bridges (Vice-President, ISSTA; Chair, ISSTA 2016)
Dr Adam Melvin (Co-Chair of ISSTA 2016)
Chair of Papers/Posters: Dr Jacqueline Walker and Dr Ricky Graham
Chair of Workshops: Dr Tony Doyle and Dr Brendan McCloskey
Chair of Sound Art/Installations: Dr Linda O Keeffe and Dr Murat Akser
Chair of Music: Dr Adam Melvin and Dr Brian Bridges
Festival/conference Manager: Dr John King
Technical Manager: John Harding
Technical Support: Paddy Nixon
Administration: Sinéad Grant
PR and Social Media: Jennifer Aicken
Secretary of ISSTA: Miriam Lohan

Thanks to staff at the Faculty of Arts, Arts and Humanities Research Institute, Research Graduate School and School of Creative Arts who have supported this event.

ISSTA 2016 Partners



**School of Creative Arts and Technologies
Arts and Humanities Research Institute
Research Graduate School (Arts)**



FABLAB
NERVE CENTRE



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CITY
TRUST**



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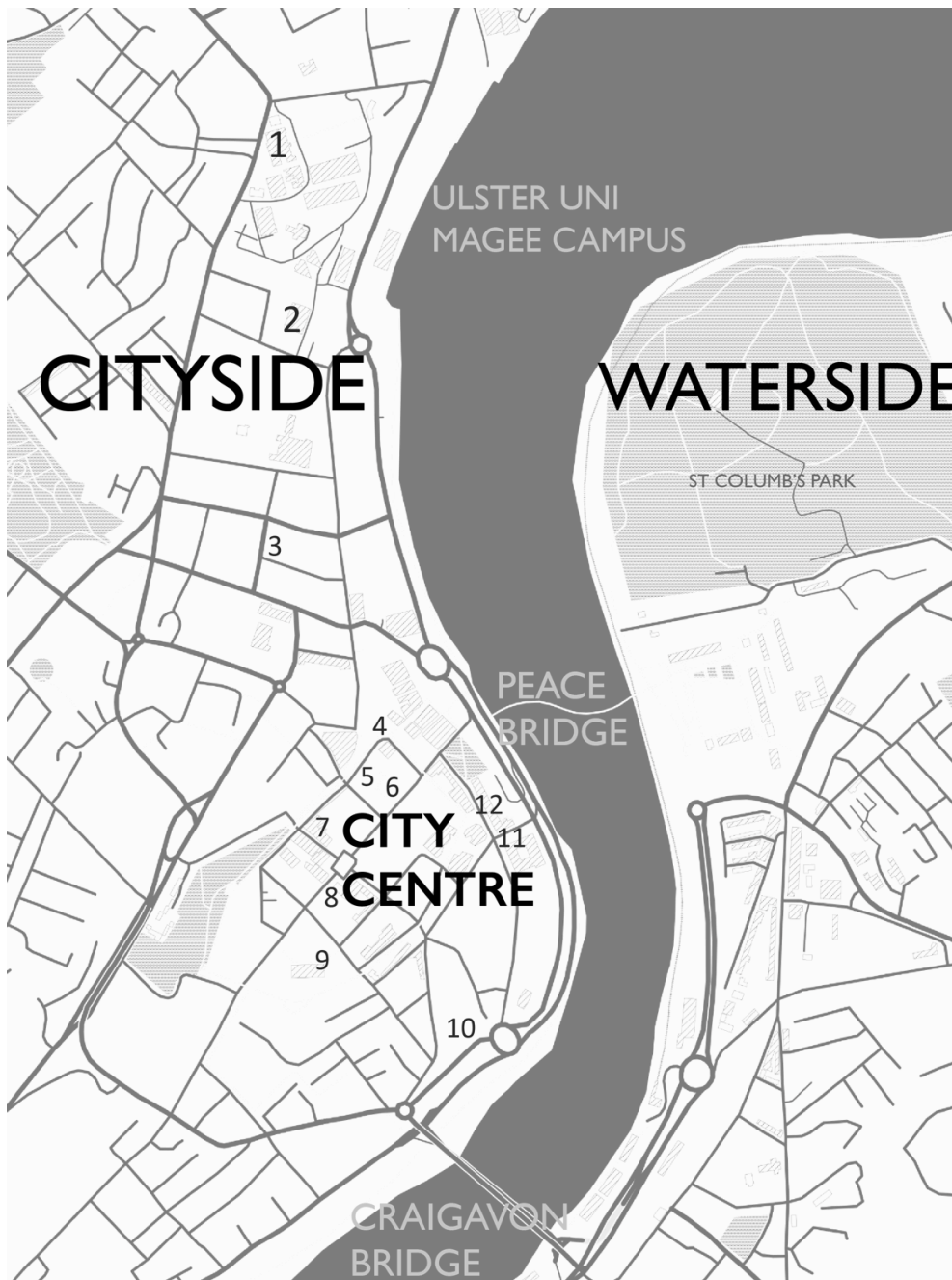
BENNIGANS



Saint Columb's Cathedral (1633)

Location, Maps and Orientation

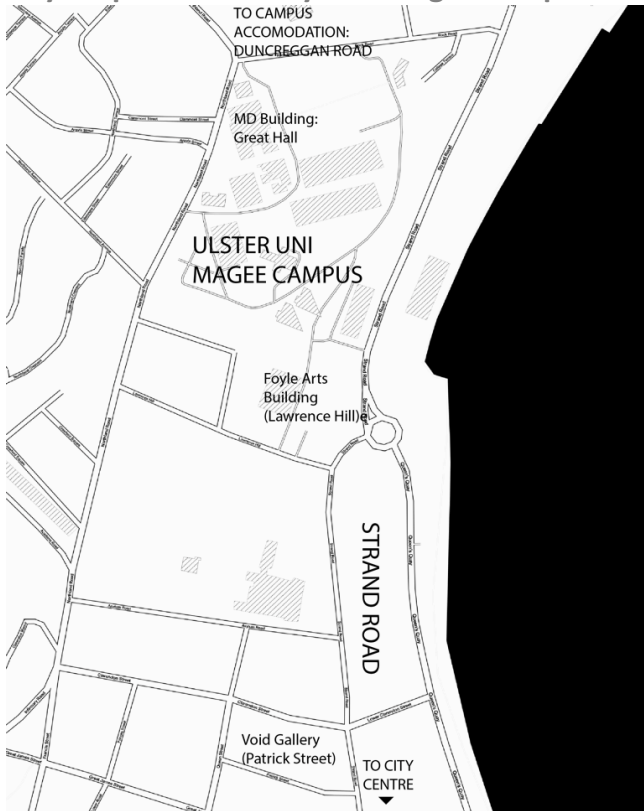
This year, ISSTA comes to Northern Ireland for the first time, to Derry/Londonderry.



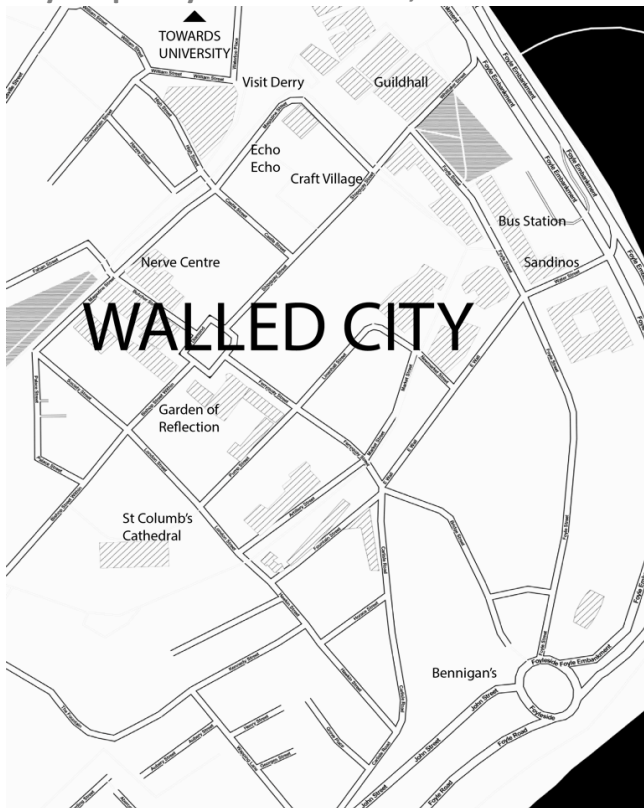
City Map: Overview of Venues

- 1: MD Building/Great Hall; 2: Foyle Arts Building
- 3: Void Gallery; 4: Visit Derry; 5: Echo Echo
- 6: Craft Village; 7: Nerve Centre; 8: Garden of Reflection
- 9: St Columba's Cathedral; 10: Bennigan's; 11: Sandinos
- 12: Bus Station, Foyle Street

City Map: Void Gallery and Magee campus



City Map: City Centre Venues, Landmarks



Map tiles above by [Stamen Design](#), under [CC BY 3.0](#). Data by [OpenStreetMap](#), under [ODbL](#).

The map illustrates the University of Ulster campus layout. Key features include:

- Legend:**
 - Parking: Represented by a circle with a number (1).
 - Disabled Parking: Represented by a circle with a number (1) and a dot.
 - Pavistations for Carparking: Represented by a triangle.
 - Footpaths: Represented by a line with a dot.
 - Road Access Blocked: Represented by a thick black line.
- Buildings and Areas:**
 - Halls of Residence (MN, MP, MJ, MY)
 - 3-G Pitch
 - Duncreggan Student Village Sports Pitches
 - Sports Pavillion
 - Duncreggan Student Village Entrance
 - Rock Road Entrance
 - Main Reception
 - Students' Union Sports Centre
 - St. Mary's (ME, MD, MC, MG, MA, MM, M, MH, MQ, MS)
 - Science Park
 - Lawrence Hill
 - City Centre
 - Queens Quay Roundabout
 - Strand Road Entrance
 - Coppin House (MV)
- Roads and Entrances:**
 - Northland Road
 - Duncreggan Road
 - Rock Road
 - Strand Road
 - Lawrence Hill
 - Meadowbank Avenue
 - A2
 - Lawrence Hill Entrance
 - Strand Road Entrance
 - Rock Road Entrance
 - Duncreggan Student Village Entrance
- Other Features:**
 - Northland Road Entrance
 - Science Park
 - City Centre
 - Queens Quay Roundabout
 - Strand Road Entrance
 - Coppin House
 - Meadowbank Avenue
 - A2
 - Lawrence Hill
 - Lawrence Hill Entrance
 - Strand Road Entrance
 - Rock Road Entrance
 - Duncreggan Student Village Entrance
- Scale and Orientation:**
 - Scale: 0, 100m, 200m
 - Approx. Scale
 - North Arrow (N)
- Copyright:** © University of Ulster 2008

Schedule Overview

ISSTA's programme of events takes place from 7th-9th September. This overview outlines the main tracks and 'blocks' of scheduled events, but please consult the detailed schedules to make sure you don't miss out!

TIME	DAY 1: WED 7TH	DAY 2: THURS 8TH
9 am	REGISTRATION (9.00) WELCOME (9.30) PAPER SESSION 1 (9.45)	BORDERS PROJECT (8.00 am, depart from FOYLE ARTS) PAPER SESSION 3 (from 9.30 am, GREAT HALL)
11 am	COFFEE BREAK (11.45)	COFFEE BREAK (11.30)
12 pm	KEYNOTE 1: DR LIZ DOBSON	KEYNOTE 2: PROF. LEIGH LANDY (11.45)
1 pm	LUNCH (FOYLE ARTS BUILDING)	POSTERS AND LUNCH (MD108)
2 pm	ARTWORKS TOUR/ARTWALK (VARIOUS VENUES, CITY CENTRE) PAPER SESSION 2 (3.45 pm, NERVE CENTRE)	ARTWORKS TOUR/ARTWALK (DEPART 1.45 pm, MD, to VARIOUS VENUES, CITY CENTRE)
4 pm		PANEL DISCUSSION (NERVE CENTRE)
5 pm	(5.20 pm: SOUNDWALK)	ISSTA AGM
6 pm	MAYOR'S RECEPTION (GUILDHALL)	FREE FOR DINNER
7 pm	BUFFET DINNER (7.15 pm, FOYLE ARTS BUILDING)	FREE FOR DINNER
8 pm	CONCERT 1 (GREAT HALL)	CONCERT 2 (8.30 pm, GREAT HALL)
9.30 pm	ISSTA 'LATE NIGHT' 1 (BENNIGAN'S)	ISSTA 'LATE NIGHT' 2 SANDINO'S, BACK BAR)

TIME	DAY 3: FRI 9TH: TRACK A: WORKSHOPS	DAY 3: FRI 9TH: TRACK B: PERFORMANCES AND ARTWORKS
9 am	ISSTA MEMBERS' WORKSHOPS 1 (FOYLE ARTS BUILDING: MQ219 and MQ226)	<i>BORDERS PROJECT</i> PERFORMANCE (DEPART FOYLE ARTS, 9 am, 10 am) or VISIT ARTWORKS
11 am		<i>BORDERS PROJECT</i> PERFORMANCE (DEPART FOYLE ARTS, 11 am) or VISIT ARTWORKS
12 pm	ISSTA MEMBERS' WORKSHOPS 2 (FOYLE ARTS: MQ219 AND MD BUILDING, GREAT HALL)	<i>BORDERS PROJECT</i> PERFORMANCE (DEPART FOYLE ARTS, 12 pm) or VISIT ARTWORKS
1 pm	LUNCH (12.45 pm, FOYLE ARTS BUILDING)	
2 pm	GREGORY TAYLOR WORKSHOP: MAX AND GEN (1.30 pm, MQ219, FOYLE ARTS)	PERFORMANCE: <i>REASSEMBLED, SLIGHTLY ASKEW</i> (FOYLE ARTS TOP FLOOR: DANCE STUDIO) or VISIT ARTWORKS
4 pm	MARK HENRICKSON WORKSHOP: JITTER (MQ219, FOYLE ARTS)	PERFORMANCE: <i>REASSEMBLED, SLIGHTLY ASKEW</i> or VISIT ARTWORKS
5 pm		PERFORMANCE: ECHO ECHO DANCE COMPANY WITH ROBIN PARMAR
6 pm	WORKSHOP TRACK ENDS	PERFORMANCE: <i>REASSEMBLED, SLIGHTLY ASKEW</i>
7 pm		ARTISTS' TALK: <i>REASSEMBLED, SLIGHTLY ASKEW</i> (7.30 pm, CAFE SPACE: MQ125, FOYLE ARTS, GROUND FLOOR)
8 pm		CLOSING RECEPTION (8.15 pm, CAFE SPACE: MQ125)

Food and Drink

We will be providing buffet lunch for delegates each day of the festival/conference; there will also be a buffet dinner on the first night of the festival. See below for coffee and restaurant options.

Bars are too numerous to mention, but our favourites are Sandinos (Water Street, a good spot most times of the day and night, and they have a coffee machine, too) and Bennigan's (John Street, open from late afternoon).

Coffee Shops

Derry has a lot of the usual chains, but here are some reliable independent coffee shop options.

RoCo Brew Bar, 114 Strand Road, Derry (by Foyle Marina)
The Coffee Tree, 49 Strand Road
The Scullery, 48 Waterloo Street
Warehouse No. 1 (LegenDerry Warehouse), 1-3 Guildhall St
Café Soul, 2 Shipquay Place, Guildhall Square
Café Nervosa (Nerve Centre), Magazine Street
St Jude Coffee, The Yellow Yard,
Primrose Café, 15 Carlisle Road, Palace Street (by Walls/Apprentice Boys' Hall)
Synge and Byrne, Foyleside Shopping Centre

Restaurants

Derry's restaurants are divided into a number of clusters rather than a single central district, so we've listed them by area. Listings are for completeness rather than for recommendation, so check out reviews online or drop in for a look! In busy periods, it might be advisable to book or phone ahead. Some smaller restaurants close on Sunday and Monday.

Queens Quay

Quaywest
The Wolf Shack Bar and Grill
Mama Masala (Indian)
Mandarin Palace (Chinese)

Clarendon Street

Saffron ('Modern Indian')
Danano (Italian)

Strand Road, towards city centre

Pier 59 (seafood)
Browns in Town
The Grand Central Bar: Food served Thurs–Sat 12–6pm

City Centre

The Exchange
Custom House Restaurant
The Gate Bistro and Coffee Bar, Magazine Street, 12–6pm; weekends open late
Badger's Bar, Orchard Street
The Bentley Bar, Stakehouse and Wine Bar, Market Street

Carlisle Road

Fitzroys (Steakhouse), top of Carlisle Road (exit from Foyleside Shopping Centre)
La Sosta (Authentic Italian)
Cedar (Lebanese): open Tues–Sat, booked out Thurs

Waterside

The Sooty Olive, 162 Spencer Road
Browns Restaurant and Champagne Lounge, 1 Bonds Hill
Walled City Brewery: Ebrington square, across Peace Bridge; (if you're looking for a new take on stout, try their Derry Milk chocolate milk stout!)
Ollies: Ebrington Square, across Peace Bridge

Getting Around

Derry/Londonderry city centre is pretty walkable (hills notwithstanding); there is an infrequent city bus service, but taxis are inexpensive, with most city centre journeys being around £3-4.

Taxis

Note that taxis cannot (officially) be hailed on the street; either pick up a taxi at a rank or (generally a better option) book one!

City Cabs (+44 28 7126 4466) is our preferred taxi company.

Other options can be found here: <http://www.visitderry.com/Taxi-Companies-A282>

Inter-city Bus

Inter-city/inter-regional bus services are operated by Translink (Northern Ireland) and Bus Éireann (Republic of Ireland); services to Dublin are operated jointly, services to Donegal, Sligo, Galway and the West are operated by Bus Éireann, NI-only services are operated by Translink. (*Note:* Translink departure times *are not* available on Google Transit, only on their site)

<http://buseireann.ie>

<http://www.translink.co.uk/Services/Goldline/>

Regional Cross-border Buses to Donegal

Bus services to Buncrana (the largest town on the Inishowen Peninsula in Co. Donegal) depart from beside the Guildhall. <http://www.mcgonaglebushire.com/time-table/>

Bus services to the northerly towns of Carndonagh and Malin depart from Patrick Street.

<http://www.foylecoaches.com/carn-derry.htm>

Train

Waterside Station (as it's known locally) is served by a rail link bus (noted at the bottom of the relevant train timetable) and connects with the scenic (but slightly slow) train line to Belfast.

<http://www.translink.co.uk/Services/NI-Railways/>

Belfast Airports

The Airporter service connects with the two Belfast airports (Belfast International and Belfast City) and departs from beside Da Vinci's Hotel. (You can obtain a **20% discount** by quoting the (memorable)

discount code /SSTA16.)

<http://airporter.co.uk/>

City of Derry Airport

Some local bus services pass by the airport, but if time is of the essence, a taxi may be a better idea!

Dublin Airport

All buses to Dublin stop at Dublin Airport, see inter-city buses above.

ISSTA 2016 Peer Review of Submitted Works

We were delighted to have approximately 100 submissions of work for ISSTA 2016 across our programme of music, art, academic papers and workshops. We are extremely grateful to all of those who submitted and reviewed work.

Cagla Alkan	Max Neupert
Marc Balbirnie	Rachel Ní Chuinn
Burcu Bayan	Isabel Nogueira
Rob Bentall	Gavin O'Brien
Manuella Blackburn	Michael Olson
Anil Camci	Dave O'Mahony
Oscar Colomina Bosch	Damian O'Riain
David Collier	Radek Przedpelski
Seth Cluett	Keiko Uenishi
Caro Churchill	Sean Reed
Gordon Delap	Loïc Reboursiere
Fergal Dowling	Judith Ring
Amanda Feery	Matthew Roddy
Mikael Fernstrom	Silvia Rosani
Michael Gatt	Dylan Rynhart
Niall Griffith	Margaret Schedel
Jonathan Grimes	Eser Selen
Kerry Hagan	Nikki Sheth
Lauren Hayes	Amble Skis
Anthony Kelly	Alexandra Spence
Steve Kemper	David Stalling
Jenn Kirby	Koray Tahiroglu
Tom Lane	Gregory Taylor
Jaime Oliver La Rosa	John Thompson
Eric Lyon	Giuseppe Torre
Michael Olson	Lucie Vagnerova
Hugh O'Neill	Themis Veleni
Rana Ozturk	Nicholas Ward
Michelle Macklem	Chapman Welch
Abdulhussain Mahdi	Lisa Whistlecroft
Bill Manaris	Anna Xambó
William Marley	
Hugh Mccarthy	
Brendan McCloskey	
Patrick McGlynn	
Scott McLaughlin	
Gurkan Michi	
Jonathan Nangle	

Outline Schedule: Day 1, Wed 7th

09.00 Registration (Upstairs, Great Hall Foyer, MD building)
09.30 Welcome (Great Hall, MD Building)
Dean of Arts, Prof. Jan Jędrzejewski, and Prof. Paul Moore, School of Creative Arts and Technologies
Dr Linda O Keeffe, President of ISSTA

09.45 Papers I (Great Hall) New Technologies and Their Implications

11.45 Coffee Break

12.00 Keynote 1: Dr Liz Dobson (MD108)
13.00 Buffet Lunch (Foyle Arts Building)

14.00 Depart for Artworks Tour/Artwalk (City Centre Venues)

15.45 Papers 2: Soundscape and Situated Models and Practices (Nerve Centre)

17.20 Lisa Hall: Walking with Crickets (soundwalk), departs Nerve Centre, for City Walls (counter-clockwise from Nerve Centre), ends Guildhall Square
18.00 Mayor's reception (Guildhall, Whittaker Suite)

19.15 Buffet Dinner (Foyle Arts Building)

20.00 Concert I (Great Hall)

21.00 Depart for Bennigan's

21.30 ISSTA 'Late Night' (Bennigan's): Film/Gig and *Let's Get Quizzical: ISSTA Edition*

Outline Schedule: Day 2, Thurs 8th

08.00 Preview *Borders Project* Performance
(BOOKING REQUIRED, see @issta_ie Twitter: depart from outside Foyle Arts Building)

09.30 Papers 3 (Great Hall) Track A: Performance and Gesture | (MD108) Track B: Sound Studies and Practices

11.30 Coffee (Great Hall)

11.45 Keynote 2: Prof. Leigh Landy (Great Hall)

12.45 Poster Session and Buffet Lunch (MD108)

13.45 Depart for Artworks Tour/Artwalk (City Centre Venues)

16.00 Conference Report and Panel Discussion: Scenes Between and Beyond Borders (Nerve Centre)

17.00 ISSTA AGM (Nerve Centre)

18.00 Attendees are free for dinner

20.30 Concert 2 (Great Hall)

21.30 Depart for Sandinos

21.45 ISSTA 'Late Night 2' (Sandinos, Back Bar (upstairs, accessible through bar entrance on Water Street)

Outline Schedule: Day 3, Fri 9th: ISSTA Members' Workshops Track (A)

9.00 Workshops for ISSTA members session 1 (Foyle Arts Building, Magee campus)

Ricky Graham (Stevens Institute of Technology): An Introduction to Audio Synthesis using Pure Data (Lab 1, MQ219)

10.30 am Coffee Break

11.00 am Workshops for ISSTA members session 2 (Foyle Arts Building and Great Hall)

Workshops for ISSTA members session 2

John King (Ulster University): Introduction to Supercollider (Lab 1, MQ219)

or

Enda Bates (Trinity College Dublin): Spatial Audio: Space Mapping (Great Hall)

12.45 lunch (MQ125, 'Café Space', Foyle Arts Building)

13.30 Headline Workshop 1: Gregory Taylor: *Max's Gen Environment* (Lab 1, MQ219)

15.30 Coffee Break

15.45 Headline Workshop 2: Mark Henrickson: *Introduction to Jitter, Max's Visual Environment* (Lab 1, MQ219)

17.45 Break, Workshop Track Ends

Closing Reception (Café Space/MQ125, Foyle Arts Building): 20.15

ISSTA Informal After-party (Sandinos, Ground Floor Bar, Water Street): c.21.00—some time later

Outline Schedule: Day 3, Fri 9th Performance and Art Track (B)

This track features work from an associated programme by Drama at Ulster University and the Research Graduate School (Faculty of Arts). Some events are taking place under the auspices of HEarts of STEM, a public engagement project which seeks to highlight connections between the arts, humanities and technology.

The HEarts of STEM @ ISSTA programme is curated by Dr Lisa Fitzpatrick (Drama, Ulster University, and Research Graduate School, Arts), with support from Prof. Paul Mc Kevitt (Acting Head, Research Graduate School, Arts)
<http://heartsofstem.wordpress.com/>

HEarts of STEM at ISSTA: Borders Project Performance: 9.00, 10.00, 11.00, 12.00

Booking required, please keep an eye on our @ISSTA_ie Twitter feed for the link!

Adrian O'Connell (PhD candidate, Ulster University)

This is a series of site-specific immersive performances which will take place at various locations around the Derry/Donegal (Northern Ireland/Republic of Ireland) border. Capacity is limited to 5 people per performance. Please note that this performance will involve blindfolding. Performances depart from outside the Foyle Arts Building at the times above.

ISSTA Artworks Display: 11.00 –17.00

Attendees are also invited to spend more time immersing themselves within the artworks and installations from our ISSTA Art Track, as covered in the previous two days' 'artwalks'.

Performance Options: afternoon

14.00, 16.00, 18.00, *Reassembled, Slightly Askew* (Foyle Arts Building, Magee campus)

17.00 Performance, Echo Echo Dance Theatre: *In that Place the Air was Very Different* (Robin Parmar) with Echo Echo Dance Company (Artistic Director, Steve Batts)

HEarts of STEM at ISSTA: *Reassembled, Slightly Askew* (performance): 14.00, 16.00, 18.00 (Dance Studio, Foyle Arts Building, top floor); Artists' Talk at 19.30 (Café Space/MQ125, Foyle Arts Building)

Booking required, please keep an eye on our @ISSTA_ie Twitter feed for the link!

Drama at Ulster University's School of Creative Arts and the Research Graduate School (Arts) are delighted to present *Reassembled, Slightly Askew* to ISSTA attendees.

Reassembled... is a mind-blowing autobiographical, audio-based performance about writer Shannon Sickels' (Yee's) experience of falling critically ill with a rare brain infection, her journey through rehabilitation and living with an acquired brain injury. Binaural audio techniques will allow you to experience her descent into coma, her brain surgeries, her early days of rehabilitation in hospital and her re-integration into the world with a hidden disability. <http://reassembled.co.uk/>

Closing Reception (Café Space/MQ125, Foyle Arts Building): 20.15

ISSTA Informal After-party (Sandinos, Ground Floor Bar, Water Street): c.21.00–some time later

You might find a few ISSTA attendees or organisers who can't quite admit it's over!

Outline Schedule: Day 3, Fri 9th: Outreach Workshops Track (C)

This year, for the first time, ISSTA is running a series of outreach workshops to connect with the wider community beyond its membership. We are grateful to the Garfield Weston Foundation for support of this strand, and to the presenters and facilitators who are giving so generously of their time. These outreach workshops are being delivered in association with the Nerve Centre on the morning of Friday 9th from 9.30 am to (approximately) 12.30 pm. **The following workshops are being hosted at ISSTA 2016:**

- **Nina Richards (UK): *Soldering and Sound-making***: Nerve Centre FabLab

- **Gregory Taylor (USA): *Introduction to Making Your Own Visual Processes with Vizzie***: Nerve Centre Music Lab
- **Linda O Keeffe (IRE/UK): *Sound Art with Your Smartphone and Tablet***: Nerve Centre FabLab Cinema Space

Gregory Taylor (USA) *Introduction to Making Your Own Visual Processes with Vizzie*.

Gregory works for Cycling 74 (USA), the makers of the leading media arts and customisable electronic music software.

He created Vizzie to help people learn how to code their own visual processes quickly using on-screen graphic boxes. We're delighted to welcome him back to Derry/Londonderry for the ISSTA festival.

Learn how to create your own video processes, make a quick VJ setup, and much more!

Linda O Keeffe (IRE/UK): *Sound Art with Smartphones*

Linda will teach you how to become a budding sound artist using your own smartphone or tablet.

Linda is a lecturer in sound art and President of the Irish Sound, Science and Technology Association. Apart from her work as a sound artist, she is a leading workshop facilitator.

Nina Richards (UK): *Hardware Sound Toys (for girls and women only)*

Nina will take participants through how to construct their first electronic sound-maker; no previous knowledge is necessary.

Nina has a passion for both electronics and music making. She designed the Stepper Acid sequencer synthesiser module, used by artists such as Trent Reznor (Nine Inch Nails), and hand-makes each module herself. She's currently using her own Stepper Acids to make music for Jason Scott's upcoming documentary, *Arcade*.

Nina is part of the Yorkshire Sound Women collective, a group dedicated to making technical skills more accessible to girls and women.

Detailed Schedule, Papers and Talks Track: Day 1, Wed 7th

09.00: Registration (Upstairs, Great Hall Foyer, MD building)

09.30: Welcome: Prof. GP Moore, and Dean of Arts, Prof. Jan Jędrzejewski (Ulster University) and Dr Linda O Keeffe (President, ISSTA) (Great Hall, MD Building)

09.45: Papers I (Great Hall) Soundscape and Situated Models and Practices

Paper Track introduction:

Dr Jacqueline Walker (University of Limerick, Co-Chair of Papers)

Chair: Dr Ricky Graham (Stevens Institute of Technology, Co-Chair of Papers)

Robin Parmar (De Montfort University) *A Brief History of Field Recording*

Alan Dormer and Stephen Roddy (University of Limerick and Trinity College Dublin) *Sound, Place and Multiplace*

Huw McGregor (Independent Artist and Researcher) *Conceptual Modes from Soundscape to Acousmatic*

Aidan Deery (Independent Artist and Researcher)
The Sonic Tourist: Field Recording and Composition on the Road

11.45 Coffee Break (Great Hall)

Papers 1: Abstracts and Bios

Robin Parmar (De Montfort University) A Brief History of Field Recording

Abstract

In Bremen on 5 March 1910, Karl Reich recorded "Song of a Nightingale". When issued as a 78 rpm gramophone disk, this became the first published field recording. In 1929 in Cornell, Albert Brand funded birdsong recordings with a fortune made on the stock market. The goal was to demonstrate the new technology of synchronized sound for the Hollywood movie industry. In 1934, Karl Koch released *The Wood Resounds* and soon became a popular figure on BBC Radio, championing the appreciation of bird song. Soon practitioners in Australia, France, and elsewhere joined in the challenging activity of recording sound in the field.

This paper examines the varying imperatives — aesthetic, documentary, commercial, educational — that drove this early development of field recording. This history has largely been forgotten, invisible in our current culture of ubiquitous computing. Understanding this context provides valuable insights into the contemporary practice of composers and sound artists.

Bio

Robin Parmar explores the poetics of place and memory using improvisatory methods in composition, performance, text, and film. Works have appeared in Ireland, England, Portugal, Spain, Germany, Sweden, Slovenia, Canada, and the USA. His albums include "...between..." (Gruenrekorder, 2014) with David Colohan, and "The Drones" (Stolen Mirror, 2013). Recent papers have examined the "angst" of digital music, the "space" of Joy Division, and the hypermodern-as-science-fiction. Robin is currently researching the phenomenology of field recording for a doctorate at De Montfort University, Leicester. He lives in Limerick, Ireland.

Alan Dormer and Stephen Roddy (University of Limerick and Trinity College Dublin) Sound, Place and Multiplace

Abstract

While technology, particularly mobile and smart technology can be viewed as furthering the eradication of real and “authentic” place; the argument can also be made that these same technologies can also be instrumental in their recovery. This paper explores the concepts of placelessness and non-place as proposed by Relph and Augé respectively and contextualises them in terms of research in the field of Embodied Cognitive Science. It then explores the application of connected technologies to address these concepts in the context of site-specific sound art.

Bios

Stephen Roddy an Irish is a musician, composer and sound artist with a body of work that spans electroacoustic and data-driven music, sonification, guitar performance, dance, theatre and installation work. Stephen holds a PhD in Sonification and data-driven composition from Trinity College Dublin. His current focus is on the phenomenology of embodiment and how the relationship between body and mind shapes the audiences experience of a piece. This work often attempts to bridge artificial distinctions between digital and physical, electronic and acoustic that often act to limit sonic expression. His recent work has been performed as at the Venice Contemporary Art Biennale, National Concert Hall of Ireland and Dublin Dance Festival.

Clare-born Alan Dormer’s work with sound crosses multiple mediums including installation, film, dance, theatre, and field recording. Recently completing his Ph.D. in sound art at the University of Limerick, his research and practice, focuses on the relationship between sound, place, and memory. Recent work has also included, sonic interventionism in public space and sound design for screen dance and theatre. He is currently working on a series of works that explore the relationship between sound, place, and landscape through mediated mobile technologies.

Huw McGregor (Independent Artist and Researcher) Conceptual Modes from Soundscape to Acousmatic

Abstract

This paper addresses the way space is used within electroacoustic compositions, focusing particularly on the inclusion of soundscape/field recordings within such works. The implications of juxtaposing non-manipulated soundscape recordings with more esoteric or abstract Acousmatic material within a piece will be considered with reference to my recent compositions. To do this, the paper will examine varied listening approaches and behaviours that are psycho-acoustically linked to environment, memory, and chemical behaviour. The depth of phenology which becomes apparent in such an examination reveals the depth of our conceptual thinking when exploring some of the external boundaries of space and temporal space, both within a compositional framework and as observers of the world around us.

Bio

Huw McGregor (b’76) studied at the Welsh Collage of Music and Drama, Bangor University North Wales. An accomplished competition performer he was presented with the Grace Williams Memorial Award for composition. His work was broadcast nationally and was subsequently commissioned to write for Cecilia Smega. Recently he has had his works performed internationally in New York and Canada, and has recently returned from performing at the International Computer Music Conference in Athens. As one of the founding members of the Bangor New Music Festival (North Wales), he has had an active role in the community. Playing in-groups from free improvisation to popular music, as well as teaching ‘cello and Music Technology and Composition. Working as a sound engineer: recording

for Alexander Baillie, and festivals such as the Llangollen International Music Festival. He also performed live with the Duke Quartet and Robert MacKay in the UK premier of Stephen Montague's string quartet no1 (string quartet, live electronics and tape). He takes a deep interest in sonic research and through experimentation and exploration he explores this depth in Electroacoustic form. Through recording and listening to soundscapes, he finds concepts and processes which he then transfers into his compositions.

Aidan Deery (Independent Artist and Researcher) The Sonic Tourist: Field Recording and Composition on the Road

Abstract

During a recent period of travelling throughout Latin America, I made regular and numerous field recordings. This paper discusses the influence of these recordings on my compositional process from a practice-based perspective, and compares and contrasts previous recording sessions and their subsequent compositions.

Due to the transitory nature of travel, many of my recordings provided what could be described as 'audio snapshots' of place. This limited interaction with previously unknown locations perhaps created temporary autonomous listening zones whilst recording – momentarily tapping in to the soundscape of a particular space.

As the possibility of extending listening sessions or revisiting locations is reduced, a flexible approach to both recording and composing is therefore advocated. This is dependent on the available equipment, time and prior knowledge of place, as well as a shifting focus between extra-musical associations and acoustic qualities. The paper reflects on the relationship between the 'field' and the 'studio', and the changing level of reciprocity according to the method of listening and recording.

The paper also draws examples from my own field recording archive, previous and planned compositions, as well as relevant commentary and theory.

Bio

Aidan Deery is a Belfast-based composer and sound artist. Aidan completed a PhD in composition at the Sonic Arts Research Centre, Belfast, in 2014. Often making use of field recordings, Aidan's output has included fixed medium compositions, works for instrument with electronics, as well as installations, and has had regular performances at a range of international festivals. Aidan has also collaborated with various artists including arts collective Mak9, and works with Matilde Meireles to form the field recording duo *bunú*.

<http://aidandeery.wordpress.com> | <http://bunu.tk>

12.00 Keynote 1: Dr Liz Dobson (MD108) Sociocultural activism for girls and women in music technology

Introduction: Dr Linda O Keeffe (President, ISSTA, and Lancaster University)

Abstract

Since January 2015, Liz has been investigating the question of why there aren't more girls applying to study music technology courses in Higher Education. Following her PhD on the social psychology of education within a music technology situation she conducted interviews with women to understand more about their stories and experiences, then realised the potential value of bringing women together for knowledge sharing.

In her keynote she will explain how those interviews, sociocultural theory of learning, and Bourdieu's theory on cultural capital inspired her controversial decision to organise women only meetings. Interested in how social, cultural and economic barriers might be dissolved, Liz's work is showing early signs of finding one possible solution, albeit a controversial one, that inspires learning, informal apprenticeships, mentoring relationships and portals out into established communities.

Bio

Dr Elizabeth Dobson studied composition and music for media at Bangor University before retraining in social psychology of education and collaborative creativity with Open University. She is now a senior lecturer in computer music composition at The University of Huddersfield where she develops her work on collaborative creating within and beyond the music technology curriculum.

She has composed music for film, dance and theatre and from her experiences as a practitioner and educational social psychologist she founded CollabHub: a social enterprise that fosters multi-disciplinary collaboration.

More recently her attention has turned to providing pathways for girls and women to develop skills in music technology: In 2015 she began an ethnography of Berlin-based women working with technology for music and sound, initiated the EQ Network and then launched the Yorkshire Sound Women Network, which provides regular access and learning opportunities for girls and women interested in music and sound technology. Elizabeth has recently provided consultancy for Music and the Deaf, collaborated with The Georgia Technology Institute in Atlanta, and sits on the National Association for Music in Higher Education committee.

Websites

<https://hud.academia.edu/ElizabethDobson><https://hud.academia.edu/ElizabethDobson>

<https://www.hud.ac.uk/ourstaff/profile/index.php?staffid=431><https://www.hud.ac.uk/ourstaff/profile/index.php?staffid=431>

<https://yorkshiresoundwomen.wordpress.com/>

15.45 Papers 2: New Technologies and Their Implications (Nerve Centre)

Chair: Dr Kerry Hagan (University of Limerick)

John King (Ulster University) *Axis: Unlocking the Power of Conceptual Metaphor and Image Schematic Constructs in Designing an Alternate Paradigm for Loop-Based, Rhythmic Electronic Performance*

Enda Bates (Trinity College Dublin) *Spatial Music, Virtual Reality and 360 Media*

Robin Cox and Benjamin Smith (Indiana University–Purdue University, Indianapolis) *Big Tent: A Portable Immersive Intermedia Environment*

Papers 2: Abstracts and Bios

John King (Ulster University) *Axis: Unlocking the Power of Conceptual Metaphor and Image Schematic Constructs in Designing an Alternate Paradigm for Loop-Based, Rhythmic Electronic Performance*

Abstract

Within rhythmic electronic music, I contest that a fundamental mismatch exists between the tools commonly used in its creation, and the musical structures with which they are concerned. This paper interrogates the state of the art with regard to the rhythmic interface. I discuss how aesthetic technological determinism may be seen to affect artistic practice, and present different viewpoints on reconceptualising the rhythmic interface, beyond prevalent paradigms.

I detail my approach in developing ‘Axis’, an intuitive performance tool for manipulating rhythmic loops of audio. Axis has been created in an iterative and modular fashion using open source software. Core to my philosophy is the primacy of looped audio as a feature of contemporary rhythmic electronic music. Axis uses non-linear, continuous cyclic representations of looped audio objects, which reflect the user’s actions and the system’s behaviour through multi-modal feedback. My design framework has been guided by Lakoff and Johnson’s pervasive theories of conceptual metaphor and image schema, and by experientialist perspectives of embodied cognitive perception. I examine the overlapping areas of HCI and electronic/computer music research in considering the relevance of affordances and metaphor in design, with specific regard to the creation of technologically mediated musical performance systems. The design of my own system is based on an adaptable conceptual model for loop-based performance, closely informed by the demands of contemporary creative practice.

I aim to exploit the discernible features of looped audio through considered gestures afforded by a multi-touch tablet interface. In proposing a rethink of the rhythmic interface, I suggest Axis as one alternative that facilitates meaningful, multi-parametric control over the relationships between the actions, processes and structures of rhythmic electronic music.

Bio

John King completed his PhD (Ulster University, 2015), on digital musical instrument (DMI) design, focusing on multitouch technologies, affordances and rhythm-based electronic music. A graduate of the BSc Music Technology degree programme at Queen’s University Belfast (2006), he also completed his MA in Sonic Arts there (2007), at the Sonic Arts Research Centre. He was Lecturer in Music and Audio Technology at: SRC Banbridge (2007/2008), Ulster University (2009/2011), and at Dundalk Institute of Technology (2015/16). Currently Festival/Conference Manager for ISSTA, he is just about to start work with Sensum (www.sensum.co), a company exploring the art and science of emotions, with specific focus on applications related to affective computing.

Enda Bates (Trinity College Dublin) Spatial Music, Virtual Reality and 360 Media

Abstract

The following paper documents the composition, recording and post-production of multi-movement work of spatial music using a variety of 360 audio and video technologies.

Virtual Reality (VR) and the associated 360 audio and video technologies are in many ways ideally suited to the aesthetic of spatial music, in which the location and/or movement of sounds in space is a composed aspect of the work. Traditional concert performances in which all of the musicians are located in front on stage are in many ways not very well suited to this type of 360 medium in which the viewer can shift perspectives at will. However, spatial music, and in particular acoustic spatial music, is in contrast very well matched to this type of presentation as the viewer's ability to change perspective serves a real purpose in this type of aesthetic. Indeed, many composers of spatial music have in the past arranged the seating in the venue in spirals or circular arrangements so that no one direction is prioritized over another.

The following paper documents the compositional and aesthetic issues associated with the performance of orchestral and electroacoustic music for a large audience. Specifically, the paper discusses how techniques associated with spectral music, and composers such as Henry Brant [1913-2008] and Earle Brown [1926-2002] informed the composition of this multi-movement work. A variety of recording and processing techniques are presented, included those used to compose the soundscape movement, and the specific techniques used to capture a 360 recording of the concert. The relative performance of three different ambisonic microphones is assessed both in terms of the concert recording, and through the results of additional objective and subjective tests. The mixing strategy and different methods of combining additional spot microphones with this B-format recording are also evaluated, and some recommendations for the preparation of 360 audio for VR applications are presented. Finally, the custom 360 camera rig developed for this project is assessed and some recommendations on the shooting, editing and delivery of 360 content are presented.

Bio

Enda Bates is a composer, musician, producer and academic based in Dublin, Ireland. In 2010 he completed a PhD entitled *The Composition and Performance of Spatial Music* at Trinity College Dublin, where he now lectures.

He is a founder member of the Spatial Music Collective and is an active performer, both of his own work and with The Spook of the Thirteenth Lock, Miriam Ingram, Nina Hynes/Dancing Suns, amongst others. He has worked as a producer/engineer for a variety of artists and groups such as the Crash Ensemble, the Spook of the Thirteenth Lock, Mumbling Deaf Ro, and Conor Walsh.

Robin Cox and Benjamin Smith (Indiana University–Purdue University, Indianapolis) Big Tent: A Portable Immersive Intermedia Environment

Abstract

Big Tent, a large-scale portable environment for 360 degree immersive video and audio artistic presentation and research, is described and initial experiences are reported. Unlike other fully-surround environments of considerable size, Big Tent may be easily transported and setup in any space with adequate foot print, allowing immersive, interactive content to be brought to non-typical audiences and environments. Physically, Big Tent is a 12-foot high, 40-foot diameter, ring of 8 HD video projection screens, 8 channels of surround audio, and audio/visual software driven entirely by the efficiency and synchronization advantages in use of a single Mac Pro computer. Construction and implementation focused on maximizing portability by minimizing setup and tear down time, crew requirements, maintenance costs, and transport costs. Due to the stability and predictability of its, creations of Big Tent will be performable for years to come, and design expectations of taking multi-media immersive presentations into the community have already been evidenced by several public performance events and installations. From these investigations a variety of different performance and installation events are discussed, exploring the possibilities Big Tent presents to contemporary multi-media artistic creation.

Bio

Robin Cox addresses intersections of acoustic and electronic sound, collaborates with artists of other mediums, and researches new listening methods and environments. As an active violinist, he also pursues the composer/performer model, directing The Robin Cox Ensemble in over 170 performances, three CD productions, and numerous premieres of works by other artists. He has created the large scale community dance participation event HOURGLASS, co-invented an immersive audio/video performance venue called BIG TENT, produced mixed-media concerts as Director and Founder of Iridian Arts, and serves on faculty with the Music and Arts Technology Department at IUPUI.

www.robincox.net

Detailed Schedule, Papers and Talks Track: Day 2, Thurs 8th

9.30: Papers 3 (Great Hall) Sound in Exploratory Creative Practices

Chair: Dr Adam Melvin (Ulster University)

Daniel Walzer (University of Massachusetts Lowell) Deep Listening and Reflective Engagement: A Beginner's Guide to Planning and Executing a Multisite Sound Gathering Project

Massimo Vito Avantaggiato

(Conservatorio Verdi di Milano) *Orient/Occident: From Alternative Analyses to Live Performance*

Nuno Miguel Neves (University of Coimbra) *Sound Poetry: Somewhere Between Phonotopia and Technophonia*

Tiago Schwäbl (University of Coimbra) *Sound Poetry: The Voices that Create Language*

11.30 Coffee Break (Great Hall)

Papers 3: Abstracts and Bios

Daniel Walzer (University of Massachusetts Lowell) Deep Listening and Reflective Engagement: A Beginner's Guide to Planning and Executing a Multisite Sound Gathering Project

Abstract

This paper outlines the work-in-progress on a two-year project capturing sound on location across urban and rural sites throughout the northeastern region of the United States. For emerging composers, planning and executing a multisite soundscape project is both exciting and a bit daunting. Where does the sound artist start? Whom do they emulate for ideas and inspiration? Furthermore, what is the “end game” of the sound artist's creative work? Addressing these issues gives the practitioner a solid framework to build on and frees them to focus on the artistic aspects of the project.

As an original, practice-led study—this paper outlines some of the technical, production, and aesthetic details towards building a broad catalog of urban and rural sounds. With patience, anyone can hone a heightened sensitivity to sound, environment, and space. The result of these efforts is a practitioner that is fully engaged in a new type of sonic awareness—hearing sound through the persona. Finally, the author discusses approaches to make the sounds freely available for scholarly dissemination, remixing, and consumption using web-based platforms.

Bio

Daniel A. Walzer is an Assistant Professor of Composition for New Media at the University of Massachusetts Lowell, USA. Walzer received his MFA from Academy of Art University, his MM from the University of Cincinnati, and his BM from Bowling Green State University. Walzer's writings appear in *Leonardo Music Journal*, the *Journal of Music, Technology, & Education*, *TOPICS for Music Education Praxis*, *Music Educator's Journal*, and elsewhere. Walzer's New England Soundscape Project currently documents urban and rural sites across the northeast United States. Walzer is pursuing doctoral studies in education from the University of the Cumberland.

Massimo Vito Avantaggiato (Conservatorio Verdi di Milano) **Orient/Occident: From Alternative Analyses to Live Performance**

Abstract

This proposal provides some alternative analysis of *Orient/Occident*, commissioned by UNESCO as music for a film directed by E. Fulchignoni, which describes the development of civilizations. We've underlined some specific ideas of this composition, the composer's originality in the case of Xenakis' work, and in the history of electroacoustic music.

We've investigated into some aspects of correspondence among the constituent sound materials, illuminating the temporal relationships existing among them, exploring sound identity correspondences and variations and providing a taxonomy of recurrent phenomena to help to rationalize compositional structuring processes.

We've tried to point out the relationship between microstructure and macroform by underlining the progressive aggregation process. This main objective has also been achieved coordinating the Genetic Analysis based on the composer's sketches with a listening analysis, by following different musicological approaches: Schaeffer's, Thoresen's and Bayle's approach; Smalley's approach, i.e. spectromorphology; Functional Analysis; T.S.U.; Clarke's paradigmatic approach; perceptual and cognitive studies (Sloboda, McAdams).

For each technique we made some graphic representations and we coordinated them, creating layers of sonograms: we divided the work into sections, characterised by a certain timbral and dynamic profiles homogeneity. Other goals of the research consisted in coordinating all the analysis to have a full understatement of possible strategies for a live performance on Acousmonium (A.Vande Gorne).

Bio

Massimo Avantaggiato is an Italian sound engineer and composer. Since his mid-teens he has concentrated on expanding his musical landscape using electronics, unusual recording techniques and computer-based technology, all of which help him to develop his idea of sound and composition. He took a degree in Electroacoustic Composition with honours at the G.Verdi Conservatoire in Milan and a degree as a Sound Engineer (Regione Lombardia). He has recorded several CDs for various Italian and foreign labels. He has also been a finalist in some composition and video competitions, recently participating in NYCEMF 2016; Sound Thought 2016; the Csound Conference 2015; LAC 2015, and ICMC 2015.

Nuno Miguel Neves (University of Coimbra) Sound Poetry: Somewhere Between Phonotopia and Technophonia

Abstract

Interviewed on August 1974, before the performance of “Empty Words”, John Cage quoted Norman O. Brown: “Syntax, which is what makes things understandable, is the army, is the arrangement of the army (...) What we are doing when we make language understandable is we’re demilitarizing it.” The words echo on the practice of sound poetry and on its deconstruction of language and promotion of Steve McCaffery’s “rumble beneath the word”. The carnival instantiated by sound poetry performances can be thought as an actualization of Temporary Autonomous Zones during which syntax and grammar protocols are suspended thus providing space and time for the development of a wide set of rhizomatic possibilities leading to a linguistic Doxa reprogramming. Even though closely connected to the avant-garde movements, a theory of the politics of sound poetry, grounded in emancipatory theories that allow the reframing of literary and artistic phenomenon, is still to be made. Drawing on examples from Henri Chopin, and on his use of technological tools and processes, we will look into Bey’s idea that “(...) language can create freedom out of semantic tyranny’s confusion and decay” as a way into the political ethos of a countercultural and marginal art form.

Bio

Holds a degree in Social and Cultural Anthropology, by the University of Coimbra and have a postgraduate diploma in Art Studies from the same university. Currently he is FCT doctoral fellow at the PhD Program in *Materialities of Literature* at the School of Arts and Humanities at the University of Coimbra. His research interests focus mainly on issues of voice, sound poetry, noise, and avant-garde movements.

Tiago Schwäbl (University of Coimbra) Sound Poetry: The Voices that Create Language

Abstract

It is not entirely clear if sound poetry is a gesture for the community, but in its irruption there is an attempt to interfere with the familiar sounds that surround us in everyday life. The place is the voice, and new auditory spaces will have to be opened up.

In sound processing, the known codes of a language will be processed so that the listener will have to decode them again in order to confront them with the learned codes of her/his own life. So, the breaking of a language is in itself the creation and codification of another one in an odd loop of changes. This communication will further question the processes in which the oral becomes aural, distant of the written word (although the visual word can be used), and will furthermore analyse the emphasis on the voice, nurtured by the power of the body, namely of the phonatory mechanism of the body. Along with theory, the discussion will seek to take sound practices as point of departure, namely the voices of Alessandra Eramo, Maja Jantar or Américo Rodrigues.

Bio

Tiago Schwäbl was born in Coimbra (1985), Portugal, and grew up in the Azores. After graduating in flute performance at the ESMAE, Porto, he began his Master’s degree in Poetry and Poetics at the University of Coimbra in 2009. He continued his studies at the F.U. Berlin as an Erasmus Student and stayed in the city to participate in contemporary music and theatre-dance projects. Currently, he is developing a project about notation in sound poetry at the PhD Program *Materialities of Literature* at Coimbra University.

<http://www.voxmedia.uc.pt/>

12.15 Keynote 2: Prof. Leigh Landy (Great Hall) On communities, spaces and a few other things in terms of the lot of sound-based music

Introduction: Dr Brian Bridges (Vice-President, ISSTA, and Ulster University)

Abstract

I believe it is desirable, when asked to give a keynote talk, to take into account your host's request, part of which reads:

‘anything relating to your perspective on where [sound-based] music and art is at in some of the international contexts you've experienced, how creative various zones have come to be defined and/or how they may cross-pollinate with other influences ... it's also about how sometimes—marginalised art forms such as sound-based work (and the artists who create them) find their way “between the cracks” of various systems, national/international economies, cultures, subcultures, etc.’.

Currently writing a book with my Dirty Electronics colleague, John Richards on ‘The 21st Century Sonic Musician’, I am trying to come to grips with tendencies in sonic creativity, particularly within sampling and DIY cultures, that relate to where and how musical experimentation and innovation are taking place and how these tendencies might affect tomorrow's musical landscape.

Some key foci include: new means of production and dissemination as well as more participation-orientated and inclusive communities of interest (including the value of workshop approaches to collaboration). Coming closer to the conference theme, there are a number of significations of the word space that are related to these issues: where music is made, presented, disseminated including virtual spaces; content-based and abstract musical spaces; traditional and alternative performance spaces; and so on. This talk will address a number of these topics in attempting to situate some of new music making's exciting developments within the ‘between the cracks’ labyrinth in which many of us are situated.

Bio

Prof. Leigh Landy (www.mti.dmu.ac.uk/~llandy) holds a Research Chair at De Montfort University (Leicester, UK) where he directs the Music, Technology and Innovation Research Centre. His scholarship is divided between creative and musicological work. His compositions include several for video, dance and theatre and have been performed around the globe. He has worked extensively with the late playwright, Heiner Müller, the new media artist, Michel Jaffrennou and the composer-performer, Jos Zwaanenburg and was composer in residence for the Dutch National Theatre during its first years of existence. Currently he is artistic director of Idée Fixe – Experimental Sound and Movement Theatre. His publications focus on the studies of electroacoustic music, including the notion of musical dramaturgy, contemporary music in a cross-arts context, access and the contemporary time-based arts, and devising practices in the performing arts.

He is editor of *Organised Sound: an international journal of music technology* (CUP) and author of eight books including *What's the Matter with Today's Experimental Music?*, *Understanding the Art of Sound Organization* (MIT Press) and *The Music of Sounds* (Routledge, 2012). More recently his ebook, *Compose Your Words* was published (Intelligent Arts, 2014) and the co-edited book (with Simon Emmerson), *Expanding the Horizon of Electroacoustic Music Analysis* (Cambridge University Press, 2016). He directs the ElectroAcoustic Resource Site (EARS) projects and is a founding director of the Electroacoustic Music Studies Network (EMS).

13.00 Poster Session and Buffet Lunch (MD108)

Introduction: Dr Jacqueline Walker (University of Limerick/Co-chair of Papers)

Jack Sheridan & Malachy Ronan (University of Limerick) The Effect of Analogue Radio Processing on Listener Preference

Abstract

Music signals broadcast from analogue radio stations incorporate substantial processing in an effort to develop a 'house sound'. This broadcast sound quality deviates significantly from the original sound source. The assumption is that the resulting sound quality is preferred by the station's target audience. However, this assumption has not been substantiated. To address this dearth of empirical evidence, a listening experiment was conducted. A monophonic sample of popular music was captured from five Irish radio stations comprising: Beat, South East Radio, Spin South West, Today FM, and 2FM. Thirty-five participants completed a full factorial two-alternative forced-choice preference test using a custom interface.

Bios

Jack Sheridan is a recent graduate from the University of Limerick with a Bachelor of Science (Honours) degree in Music, Media and Performance Technology. Major modules studied during the four year programme include digital audio fundamentals and advanced audio production. Mr Sheridan also completed a six-month internship at Newstalk Radio working on The Tom Dunne Show as a researcher. It was during this time the Mr Sheridan decided to further explore and pursue a career in radio. Hopes for the future are to become a published academic author and to find a job in some capacity in radio and broadcast production.

Malachy Ronan is a freelance audio engineer and adjunct lecturer of Audio Production at the University of Limerick. He holds an MSc in Music Technology and a PhD from this university. Research interests include perceived sound quality and the development of novel audio post-production workflows. His PhD thesis identified the perceptual constituents influencing listener judgements of hyper-compressed music.

Massimo Vito Avantaggiato (Conservatorio Verdi di Milano) Multiphonics on clarinet in contemporary music: some analysis with Linux-based software

Abstract

The sound of a multiphonic is familiar to all clarinet players that can remember their own early attempts to play high notes. The clarinet is capable of producing a huge variety of multiphonics: standard complex; beating or emerging; double harmonics; and metamorphic multiphonics. We mainly focused on "double harmonics" as described by G.Garbarino in his "Method for Clarinet" (Ricordi/Universal Edition). These kinds of 'multiphonic' pitches vary in degrees of intensity: bands of pronounced energy give the impression of multiple complex tones with fundamental as the lowest pitch and "harmonics" that vary considerably in shape, size, and timing. These kind of multiphonics were used in many pieces: excerpts from some contemporary music pieces are analysed. We have sought to represent the phenomenon of harmonics by using linux - based softwares: Audiosculpt/Spear for detailed sonograms; Open Music/ PWGL for alternative chord representations. We have tried to compare conventional notation - probably clearer and more practical - even though it does not specify the exact intonation, dynamic balance, timbre, or complexity - with new chords representations that seem to be more useful for a clear understatement of this phenomenon and from a compositional point of view.

Bio: *Please see full bio under Paper Session 3.*

Lamounier & Ferreira (Portuguese Catholic University) The Body As Space; Transition Relations and Expressive Gesture Design: a brief motion analysis in the context of development of a digital musical instrument (DMI), the DIGITAL SOCK

Abstract

The body analysis as transitory space of relations is inserted into the study and development of a digital musical instrument, called Digital Sock, where feet movement controls the sound.

The aim of this research is reduce possible discomfort during manipulation of the gestural interface, ensuring a better action of the instrument during a performance, and understand the gesture formation without sound intention. The methodology used was:

MOVEMENTS CAPTURE: The activity was held in the MOCAP laboratory of the School of Arts (Portuguese Catholic University), with the participation of a group of thirteen volunteers.

INTERPRETATION OF DATA: biomechanics and psychological analysis (report of the experience).

ERGONOMIC ANALYSIS: based on ergonomic evaluation criteria (Bastien & Scapin, 1993).

This study allows us to conclude that:

- a) The expressive gesture is presented in two basic levels: a) intentional (when performing a predetermined action); b) meaningful (when carries itself the memory and the personal identity).
- b) When designing the gesture, the body is organized by inner attitude (intention), psychological attitude (action) and dialogic attitude (interaction).
- c) When designing the prototype instrument, we must be aware of body anatomy and how the gesture is designed, thus ensuring the flexibility of use and the instrument's usability.

Bios

Slavisa Lamounier is a dancer, choreographer, journalist and specialist in media education. As a researcher, her main field is the analysis of expressive and musical gestures during interaction processes, artistic performances, pedagogical practices and / or motor rehabilitation therapies. She is currently enrolled on the PhD Programme in Science and Technology of Arts at the School of Arts (Portuguese Catholic University) and CITAR, having been awarded a scholarship by the Foundation for Science and Technology – FCT with the project DIGITAL SOCK: study and development of digital musical instruments with an emphasis on Gestural Interface, Motion Analysis and Interactivity.

Paulo Ferreira-Lopes studied composition in Lisbon (1988 -1991)with Constança Capdeville.

Between 1995 and 1997 studied in Paris composition with Emmanuel Nunes, Antoine Bonnet and Computer Music with Curtis Roads.

- Master's in Composition - University of Paris VIII (1996).
- Further studies in composition with Karlheinz Stockhausen at the "Internationale Ferienkurse für Neue Musik" Darmstadt.
- Doctoral degree in Computer Music - University of Paris VIII (2004) under advice of Horacio Vaggione. Founder and Director of the Summer Workshops - olhAres de Outono at Portuguese Catholic University (2000). Founder and Director from the Research Centre for Science and Technology in Art CITAR (2004-2007)
- Since 2000, Professor at Portuguese Catholic University.
- Director of the Music Department - Portuguese Catholic University (2010-2013). Invited Professor at Karlsruhe Music University.

16.00 Conference Report and Panel Discussion: Scenes Between and Beyond Borders (Nerve Centre)

Chair: Dr Brian Bridges (Ulster University)

Conference Report: MusTWork16, Roisín Loughran and James McDermott (University College Dublin)

Upcoming Conference Notification: Sounding Out the Space: an International Conference on the Spatiality of Sound, Adrian Smith (Dublin Institute of Technology)

Panel Discussion: *Scenes Between and Beyond Borders (Creativity and Research; National and International Scenes)*

Panel:

Prof. Leigh Landy (Editor of *Organised Sound*, De Montfort University)

Gregory Taylor (Cycling 74 Software)

Dr Kerry Hagan (Founding President of ISSTA, University of Limerick)

Dr Linda O Keeffe (President of ISSTA, Lancaster University)

Dr Jacqueline Walker (Co–Chair of Papers, ISSTA 2016, University of Limerick)

Dr Roisín Loughran and Dr James McDermott (University College Dublin)

We are extremely lucky to have delegates and organisers from a number of institutions and countries and look forward to hearing their views also (within our time constraints)!

17.00 ISSTA AGM (Nerve Centre)

All attendees are members of ISSTA (unless they specifically expressed wishes not to become members) and are invited to take part in discussions and votes at our AGM.

Detailed Schedule, Music Track: Day 1, Wed 7th

20.00 Concert I (Great Hall, MD Building, Ulster University, Magee campus)

Kerry Hagan: *s/d* (7 mins) 8-channel real-time Pd composition

Gintas Kraptavicius: *Message in a Bottle* (12 mins) live electronics

Huw McGregor: *Metronic* (11 mins)

John McLachlan: *Sparša* (6 mins)

Enda Bates: *Of Town and Gown* (12 mins) 8-channel

Concert I: Programme Notes and Bios

Kerry Hagan: *s/d*

s/d is a real-time Pd composition that continues previous threads of musical exploration while introducing new sound synthesis methods. The composer works with “textural composition,” an aesthetic that relies entirely on large, static sound masses consisting of inner details rather than perceptible sound objects. Similarly, spatialisation techniques suggest high degree of sonic motility with little to no perceptible spatial trajectories or paths of sounds.

s/d utilizes an algorithm designed in collaboration with Miller Puckette, first used in *Cubic Zirconia* (2014). These processes are dealt with in depth in Miller’s paper, ‘Maximally uniform sequences from stochastic processes.’ (SEAMUS 2015). *s/d* also uses a new synthesis method developed by Miller Puckette: coupled oscillators created through non-linear feedback. By sending impulses into the oscillators, complex and rich sonorities can emerge. *s/d* uses 12 crafted timbres from the oscillators, which are triggered by the 12 outputs and impulse chains.

The piece follows a fixed form, where larger shapes are the unchanging scaffolding. However, random and stochastic processes make moment-to-moment decisions, meaning that each performance of the piece is unique while retaining a consistent musical identity.

Bio

Kerry Hagan is a composer who works in both acoustic and computer media. She develops real-time methods for spatialisation and stochastic algorithms for musical practice. Her work endeavours to achieve aesthetic and philosophical aims while taking inspiration from mathematical and natural processes. In this way, each work combines art with science and technology from various domains.

Currently, Kerry is a Lecturer at the University of Limerick in the Digital Media and Arts Research Centre. She is the Principal Investigator for the Spatialization and Auditory Display Environment (SpADE). She was the President of the Irish Sound, Science and Technology Association in 2011-2015.

Gintas Kraptavicius: *Message in a Bottle*

Created in 2015...Description: Granules, small melodies, noises, memories...

Bio

Gintas Kraptavičius a.k.a. Gintas K, is a sound artist / composer living and working in Lithuania. As an active part of the Lithuanian experimental music scene since 1994, Gintas now works in the field of digital experimental and electroacoustic music. His compositions are based on granulated sounds, new hard digital computer music, small melodies and memories. He has released numerous records on labels such as Crónica, Baskaru, Con-v, m/OAR, Copy for Your Records, Bôlt, Creative Sources and others. Gintas K also makes music for films, theaters, sound installations, and has participated in various international festivals as Transmediale.05, Transmediale.07, and ISEA2015. In 2010 he was a winner of the II International Sound-Art Contest "Broadcasting Art 2010" in Spain. Since 2011 he has been a member of the Lithuanian Composers Union.

<http://gintask.puslapiai.lt>

Huw McGregor: *Metronic*

'Metronic' is the soundscape of the Metro in Athens in 2014. The soundscape is an unusual *Athraphonic* lattice, which requires no treatment to express its sonic diversity. How we go from one different conceptual space in sound to another can be an obstacle in composition, and using soundscape recordings the issue becomes highly complex. The work demonstrates some methods of these issues. To explore this as a study in my theory, I selected two sine waves for left and right speaker, which would express their gestural signatures in the acousmatic field of the performance space. The sine waves, give no more impression than exactly what they portray, pulsating sonic entities that explore a given space or a synthesised voice performed in abstract and crystallised within the sound field of the performance space. The soundscape of the metro sits within distal space, within proximity, and do not explore the depths of the observable space, but are within an enclosed environment of perception. However, the recording acquires another depth as the sound travels to a from the tunnels, and as the sound is received and perceived, we are most certainly exploring the depths of the observable space as the train moves down the tunnel.

These parameters demonstrate the opportunity to showcase the depth, from the sound that resonated in mind space to the barely audible at its furthest distance. This was achieved with the sound of the train sliding up in frequency and more ferocity, the soundscape, then, would be subtly taken over by the sine wave as the train would begin to glissando downward. Fading out the soundscape toward the end of this process, leaving the sine wave in its simplest form and at its peak. Thus completing the transcending mode from *observable space* to *mind space*.

Bio

See full bio under Paper Session 1.

John McLachlan: *Sparsá*

Sparsá is a Sanskrit word for something akin to 'contact'; as in, 'sense impression'. In the composer's possibly off-kilter understanding of this idea from Buddhism, it is the moment of perception where the brain registers a thing, before 'interpreting' it with notions of 'taste'; which are, after all, coming from somewhere in the brain and not from outside. These notions change the perception by looking for context. So when you hear a new challenging piece of music—or even a one-off sound—the brain scrambles to tell you it is like such-and-such.

We clearly can't completely stop ourselves from doing this. But in the ideal situation we might strive to let the sounds themselves come to us for as long as possible hearing them for what they are and not for what they are like.

This relates to the concept of a temporary autonomous zone within the mind of the listener. If the listener can temporarily seal him/herself off from the instinctual striving for context and labelling of sound-types, a new kind of listening can emerge. This is only possible if we admit that some of our typical listening habits are negative. We must remember that instinct is always in a hurry to assess things, that it has a huge array of pattern-recognition equipment at work all the time, and that part of its work is to look for shorthand ways of handling large amounts of raw information. For music, this can mean unconsciously augmenting the importance of even momentary 'recognition', and downplaying the engagement with the unfamiliar, ultimately leading to uneven and poor attention. In short, it is not a friend to new experience. By recognising this and developing listening techniques that stay open for longer, we can get a lot more out of challenging music. This has particular implications for electro-acoustic music, but would also help with moving from one Mozart piece to another.

To this end I wrote a piece where all the time I was very conscious to choose sounds that are difficult to place in the real world, and also do not sound too processed either. That's a very slim border area, and all we have to go on is our ear. As the piece goes on it does wander either side of the border into more clearly 'electronic' and 'sample of real action' sounds. By that stage of the piece—hopefully—this recognisability has become a fresh dimension.

Bio

John McLachlan was born in Dublin where he studied music at the DIT Conservatory of Music, the Royal Irish Academy of Music and Trinity College Dublin. As well as piano and musicology, he studied composition with Joseph Grocock, William York, Hormoz Farhat, Robert Hanson and Kevin Volans. His works have been performed in The U.S.A., South Africa, Japan, Peru, Britain, France, Germany, Italy, Holland, Switzerland, Finland, Denmark, Portugal, Spain, Romania, Moldova, Slovenia, Croatia, Poland and around Ireland, with broadcasts in several of these countries. They range from solo instrumental to orchestral music, and have been performed by (among others) the National Symphony Orchestra of Ireland, Opera Theatre Company, the National Chamber Choir, the Degani Quartet, Vox21, Concorde, Sequenza, Traject, Archaeus, Pro Arte, Sepia Ensemble, Antipodes, Ensemble Nordlys, The Fidelio Trio, The ConTempo Quartet and Trio Arbos as well as many prominent soloists including Ian Pace, John Feeley, Darragh Morgan and David Adams.

Career highlights include being a featured composer in the National Symphony Orchestra's Horizons series (2003 and 2008), the National Concert Hall's Composer's Choice series (2004), and representing Ireland at the International Society for Contemporary Music Festivals in Slovenia (2003) and Croatia (2005), the National Arts Festival, South Africa (2006) and the Musica Viva festival, Portugal. (2008). Commissioners include the RTE National Symphony Orchestra, Music Network, Lyric fm (for the 2006 AXA Dublin International Piano Competition), the Musica Viva Festival and the National Concert Hall. In 2007 he was elected to Aosdána, the state-sponsored academy of the creative arts.

Enda Bates: *Of Town and Gown*

Upon entering the campus of Trinity College Dublin, it is striking how much the character of the ambient sound changes, as the din of traffic and pedestrians which dominates outside the college walls recedes into the background as you emerge from the narrow passageway of the front gate. This sense of liminality and of passing through a threshold into an entirely different space is the focus of this tape piece entitled *Of Town and Gown*.

This soundscape composition is constructed from field recordings made around the outskirts of the campus, which are then manipulated, processed and combined with a sound from the heart of the University, namely the commons bell located in the campanile. In this way the piece explores the relationship between the university and the rest of the city (between town and gown) through the blending and relating of these different sounds from both inside and outside the college walls.

Bio

See full bio under Paper Session 2

21.30 ISSTA 'Late Night' (Bennigan's): Film/Gig and *Let's Get Quizzical*

Bennigan's Film Club, in association with ISSTA 2016, presents *Sorcerer* (dir. Friedkin, 1977): the film will play in the garden area from c. 9.45 pm

In this psychological thriller, accompanied by a pioneering electronic soundtrack from krautrock/electronic band Tangerine Dream, four unfortunate men from different parts of the globe agree to risk their lives transporting gallons of nitroglycerin across dangerous South American jungle...

Gig (Bar/Venue area), from c. 9.45 pm

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A collaborative DJ set exploring the darker end of the rhythmic electronic musical spectrum. Utilising traditional techniques (vinyl manipulation + hardware effects) in conjunction with contemporary digital signal processing/generative synthesis methods.

Let's Get Quizzical: ISSTA edition, from 11.45 pm

Fresh from the Edinburgh Fringe, Les Ismore hosts a game show/meltdown in which three randomly chosen contestants compete for the Star prize AND the chance to become Quizzical Champion!!! Tonight's event will be a special ISSTA edition, featuring even more obscure challenges than normal, some more-than-tangentially related to experimental sound and electronic music! *Let's Get Quizzical* is created and performed by Rory Mc Swiggan, Caoimhe Sweeney, John Leighton and Matthew Mc Devitt and is a regular Wednesday night fixture of Bennigans, Derry.

Detailed Schedule, Music Track: Day 2, Thurs 8th

20.30 Concert 2 (Great Hall, MD Building, Ulster University, Magee campus)

Leigh Landy: *Radio-aktiv* (9 mins) 8-channel sound with projected translation, ZKM commission

Neil O'Connor: *Erstwhile* (9 mins)

Nikos Stavropoulos: *Topophilia* (8 mins)

Brian Connolly: *Chase* (9 mins) electronics and piano

Concert 2: Programme Notes and Bios

Leigh Landy: *Radio-aktiv*

Radio-aktiv (2011, commissioned by ZKM) is the third work in the composer's radio series and is based on materials from German radio. The piece will be introduced by the composer.

Bio

Prof. Leigh Landy is a composer and musicologist of Dutch and American citizenship. He holds a Research Chair at De Montfort University where he directs the Music, Technology and Innovation Research Centre.

Prof. Landy is one of our keynotes for ISSTA 2016; see the entry for his keynote for a more complete bio.

Neil O'Connor: *Erstwhile*

When composing, two paradigms become evident concerning the desired degree of 'Textuality' (interactivity, pre-determined, linear) or 'Interactivity' (highly autonomous systems) that appear. Many works fall within a continuum (transformative, generative or sequenced) between these two extremes, hosting a combination of fusion, conflict, continuity and contrast that help present various planes of sound. These landscapes are articulated through processing, the compositional processes and techniques such as the acceleration/deceleration of tempo and the increasing/decreasing of density. These processes help develop the idea of 'Planes of Invention' that this composer seeks to find through electro-acoustic composition.

Bio

Composer and Performer Neil O Connor has been involved in experimental, electronic and electro-acoustic music for the past 20 years and has toured extensively in Ireland, Europe, Australia, Asia and the US. His work has been shown/performed at Resonances Festival @ IRCAM Paris, Kunsthalle Berlin, Massachusetts Museum of Modern Art, Institute of Contemporary Art, London and has held residencies at the Massachusetts Museum of Modern Art, USA and EMS – Swedish Institute of Electro-Acoustic Music, Stockholm, Sweden. As a Composer, Neil has written for solo, duo, string quartet, large ensemble and orchestra along with mixed media projects and has recently worked with the Bang on a Can Ensemble and David Crowell (Phillip Glass Ensemble).

Nikos Stavropoulos: *Topophilia*

Topophilia is a multichannel acousmatic composition which deals with the attraction or affinity to place. The work is an attempt to construct an autonomous, meaningful, intimate aural space, where texture and spatially defined figures have a broader capacity for action due to their multichannel nature. The recordings of source materials form the beginning of an investigation into capturing and working with spatiality in micro-space using bespoke hardware.

Bio

Nikos Stavropoulos studied piano, harmony and counterpoint at the National School of Music and Nakas conservatoire in Greece. In 2000 he graduated from the Music Department of the University of Wales, Bangor where he was awarded an MMus in electroacoustic composition studying with Dr Andrew Lewis. In 2005 he completed a PhD at the University of Sheffield Sound Studios with Dr Adrian Moore specializing in tape composition in stereo and multi channel formats, as well as music for video and live electronics.

His work ranges from instrumental to tape and mixed media. He has composed music for video and dance and his music has been awarded mentions and prizes at international competitions. He joined the Music, Sound and Performance Group at our University in 2006 and is a founding member of the Echochroma New Music Research Group.

Brian Connolly: *Chase*

Chase is a work influenced by minimalist piano repertoire. The live electronics in this work seek to remove it from any aesthetic similarity to more familiar minimalist piano music through the application of auditory beating and spectral masking techniques which exploit the biomechanical processes within the listener's ears by turning them into physical instruments in the realisation of this evocative piece. In the first section of this intense and demanding work the pianist varies between two themes which constantly evolve throughout with the employment of inversions and clusters which support the masking and beating techniques of the live electronics. Two sine waves chase the piano parts in from its extremities towards the centre of the instrument where its sound falls deep into a pit of filtered noise before emerging once again and being forced to stretch out as before. The second section is strikingly different to the first as the pianist battles to keep the ever-expanding timbral colour alive throughout. The extremities of the piano part are now vigorously chasing the sine waves back out from the middle of the instrument towards where they began in the opening of the piece.

Bio

Brian Connolly is a PhD student at Maynooth University with research interests in the application of psychoacoustic phenomena concerning the non-linearities of the inner ear within composition. Brian has composed the music for Keith Barry's *The Dark Side* tour and has written and presented the RTÉ lyric fm documentary *Why Music Can't Stay Still*. The composer's research into the ear as an instrument has been included in programs with Music Current, SMC and ISTCC (Ireland), Sonorities and NI Science Festival (Northern Ireland), TIES (Canada), SSC, INTIME and BEAST FEaST (England), ASA and FEaST Fest (USA), MUSLAB (Mexico) and NAA (China).

21.45 ISSTA 'Late Night' (Sandinos, Back Bar): Gig

Approximate Start times:

22.00 Kristina Warren, *Is There Time* (vocal performance/ extended technique and electronics)

22.30 Robin Cox, *START* (electric violin and electronics)

23.00 Ricky Graham, Gregory Taylor and Mark Henrickson (guitar, laptop and visualization)

23.45 Robin Fencott, *Datafile-n* (laptop/sampling)

ISSTA 'Late Night' Performance Details and Bios

Kristina Warren: *Is There Time* (vocal performance and electronics)

Is There Time (2016) is a work for voice and live digital processing composed and performed by Kristina Warren. Several layers of performance comprise this piece. First, my vocal performance consists of both noisy extended techniques and more traditional vocal sounds. Second, digital processing of my vocal signal occurs in Max/MSP and includes techniques such as transposition, spectral shifting, rhythmic sculpting, and granulation. Finally, I use a novel performance interface called the Abacus, which incorporates an Arduino Teensy. In combination with feature extraction on my voice, the Abacus routes control data to allow parametric control of vocal processing. In short, the Abacus unites my dual performance practices as vocalist and laptop musician. *Is There Time* asks listeners to join me in exploring the expressive power of non-normative vocal sounds, and in imagining mouth and technology as extensions of each other in the temporary autonomous zone of digital-vocal performance.

Bio

Kristina Warren (kmwarren.org) is an electroacoustic composer, experimental vocalist, and improviser based in Liverpool, UK. Her music explores communication and indeterminacy. Warren's compositions have been performed at events such as the International Computer Music Conference (ICMC) and the New York City Electroacoustic Music Festival (NYCEMF), and by ensembles including JACK Quartet, loadbang, and Sō Percussion. She has been selected as a PEO Scholar Award recipient (2016) and a finalist in the American Composers Forum National Composition Contest (2014). Warren is a PhD candidate in Composition & Computer Technologies (University of Virginia), and holds a BA in Music Composition (Duke University).

Robin Cox: *START* and other works (electric violin and electronics)

Relying upon the performer's use of bone conduction click track monitoring to execute tightly integrated relationships with electronic playback, *START* comes close, but never quite settles into stable rhythmic patterns between live acoustic and electronic elements. It places upon the amplified violinist any temporal grounding or structural foundation sensed in relation to very quick, fleeting, and highly syncopated rhythmic gestures of the electronic parts.

Bio

See full bio under Paper Session 2.

Ricky Graham, Gregory Taylor and Mark Henrickson (guitar, laptop and visualization)

Ricky Graham (N. Ireland) is a guitarist and computer musician based in the United States. He received his Ph.D. in Music Technology from Ulster University in 2012 and is now an Assistant Professor of Music and Technology at Stevens Institute of Technology in Hoboken, New Jersey. Compositions from his most recent album, "Nascent," have been performed at the New York City Electroacoustic Music Festival, International Computer Music Conference, and the Society for Electro-Acoustic Music in the United States conference. Graham was an artist-in-residence at STEIM in 2010 and at EMS in 2016.

Gregory Taylor's 'day job' is sometimes described as 'Education R&D' and 'Content Creation' for Cycling 74 software in California, the makers of Max, a leading media arts and digital audio programming platform. But he is also a prolific, globe-trotting digital musician who has collaborated with artists including Brad Garton, Darwin Grosse, Tom Hamer, Mark Henrickson, Jeff Kaiser and Terry Pender.

Mark Henrickson is an improvising visualist based in San Francisco California. His work uses realtime processing of concrete video clips as an accompaniment to musical performance. His work has been exhibited at the Spark Festival, MUTEK, DAT conference and a large number of other festivals and events. His primary tool for video is jitter, the extension of Max/MSP which focuses on video playback and OpenGL.

Robin Fencott: *Datafile-n* (laptop/sampling)

The free-party/rave culture of the 1990s is frequently discussed as a manifestation of Hakim Bey's theory of TAZ - viewing illegal parties as spontaneous, temporary, self-organising and self-policing expressions of alternative culture, anti-establishment anger and anti-capitalist ideals. Also at this point in the history of electronic music, the reduced cost of digital sampling allowed musicians to re-appropriate the back catalog of recorded music from around the world, for instance transforming funk breakbeats into frenetic dance music.

As a direct consequence of the sampling revolution, the 'Sample Pack' was born. Sample Packs are curated collections of pre-processed sounds made commercially available for electronic music producers. A primal example is Zero-G Datafile-1, created by Ed Stratton. Sample packs such as these often included copyrighted material and were traded as audio CDs via classified ads in magazines and online electronic music forums.

The sounds of *Datafile-n* are derived entirely from the 'Future Music Magazine Sample CD #1' (circa 1993), which was itself a compilation of various early sample packs. Through extensive audio manipulation of these sounds, *Datafile-n* comments on the themes of piracy, freedom of information exchange, reappropriation and reinvention, all of which are central to a discussion of the TAZ.

Bio

Robin Fencott is a London-based musician and freelance computer programmer. He holds a PhD in computer music from Queen Mary University of London, and as an independent artist/researcher is often engaged in collaborations connecting art, music, and technology. He co-organises an electronic music club night/record label called Towards Collapse, which focuses on genres such as dark ambient, doom-electronics, glitch and industrial. Robin releases and frequently performs his own electronic music under the Metalogue alias, where he combines cinematic sound design with elements, IDM, ambient, breakcore and other experimental electronic sub-genres.

metalogue.bandcamp.com

www.robinfencott.com

Detailed Schedule, Music Track: Ongoing: *Radio Free ISSTA*

Streaming of the following works from our selection, inspired by the historic pirate radio station of the Civil Rights era, Radio Free Derry!

Robert Zanata: *Nero ipogeo*

Aidan Deery; *Corridor*

Georgios Varoutsos *Elongation*

Stephen Roddy: *Symmetric Relations and Hidden Rotations*

Omar Peracha: *You Can Run*

Davide Wang: *Unfolding*

Streaming available at designated exhibition listening posts and at the following URL:

<https://soundcloud.com/radiofreeissta>

Radio Free ISSTA: Programme Notes and Bios

Robert Zanata: *Nero ipogeo*

"Nero ipogeo" (2016) is the third of my acousmatic cycle of compositions dedicated to the colour "nero" (the first one "Nero metropolitano" [2014] and the second "Nero siderale" [2015] are published on a CD edited by "Taukay Edizioni Musicali"). It is mainly designed with the open source software Supercollider. The sources of "Nero ipogeo" are audio gestures of high frequencies (not dissimilar to the whistle) and underground sounds on the verge of audibility or inaudibility. The principle of the compositional fragmentation and of the compositional reduction is taken to the absolute extreme. I sculpted a kind of sub-atomic composition that pick up the sounds from the crevices between one quantum event and the next one. The intention is to lead the listener to the most attentive and perceptive kind of listening.

Bio

Roberto Zanata born in Cagliari, Italy where he also graduated in Philosophy. A composer, musician and musicologist in electronic music, he studied and graduated in composition and electronic music at the Conservatory of Cagliari. He wrote chamber music, music for theatre, computer music, electroacoustic and acousmatic music as well as multimedia works. His music is published by Audiomat, Taukay and Vacuamoenia.

In International competitions his works have been awarded Grands Prix Internationaux de Musique Electroacoustique (Bourges), Interference Festival (Poland), Sonom Festival (Mexico) and more. He teaches Electronic Music at the Conservatory of Bolzano (Italy).

Aidan Deery: *Corridor*

Corridor (2014) blends and drifts between real and imagined soundscapes extracted from waterside areas of Stockholm, Sweden. Delicate shifts and movements create momentum, and additional layers cause further ambiguity with passing time. The piece attempts to capture something of the experience of listening to a new place for the first time, and re-imagines this first encounter through disembodied field recordings and subtle interventions.

Corridor was composed in EMS Studios, Stockholm, July 2014.

Bio

Please see full bio under Paper Session 1.

Georgios Varoutsos: *Elongation*

An exploration piece from the personal recordings conducted over the month of November, 2015. After recording fifty-six different types of instruments, the project was intended to project the capabilities and characteristics of the recorded sounds. The sounds needed to abide by a project ruling which consisted of having every sound subjected to one and/or two initial sound modifications before alternative transformations. The conceptualization of this piece was to begin exploring alternate resources for sound material, my interest was moving away from digital source material and begin practising my recording skills at the same time. This led to my piece deriving only from my own work and relying on my skills to be presented in every aspect of the piece.

Bio

Georgios Varoutsos is an undergraduate student studying Electroacoustic Studies at Concordia University in Montreal, Canada. He explores the field of sound with the wide range of projects he's created. He's been twice selected for 60x60, as well as CLOrk. He's born and raised in Montreal and continues to live there for the remainder of his studies. His audio creations derive from different inspirations such as field recordings, digital audio processing, synthesis, and experimentation of processing techniques. His signature works encompass an unorthodox depiction of audio processing with the intention of creating tension and emotional reactions.

Stephen Roddy: *Symmetric Relations and Hidden Rotations*

Symmetric Relations and Hidden Rotations explores the power of music to transform a listeners sense of place.

The piece opens on the recording of an abandoned public space. An ominous looming musical narrative appears and merges with the sounds of the space to create a single unified musical movement. As the piece continues music and place become increasingly intertwined, with place taking on a musical role.

This development continues until the ending crescendo where the music makes one final and decisive statement before departing to leave only the sounds of the abandoned space in its wake. The piece was formed and composed before, during, and in response to the excellent 2015 Irish Sound Science and Technology Convocation in Limerick.

Bio

Please see full bio under Paper Session 1

Omar Peracha: *You Can Run*

You Can Run deals with the topic of addiction, and the different sections needed to capture the ups, downs and other moods typically associated with the subject. The piece explores the application of timbrally-derived harmonic and structural frameworks in an electroacoustic context. Spectral information from a spoken phrase, namely 'you can run, but you can't hide', was used to generate material for the piece.

The words in this phrase were analysed individually using a patch programmed in Pure Data, and spectral snapshots from the beginning, middle and end of each were taken. These data, alongwith other perceivable qualities of each word, such as their envelopes, were used to define the course of the music, with one word being used as the material for each section. The phrase as a whole, and its meaning, was used to guide the piece's overall form and generate some rhythmic material.

Bio

Omar Peracha (b.1993) is a composer based in London. He has studied in London with Sinan Savaşkan and Alejandro Viñao, and in York with Thomas Simaku, Martin Suckling and Ambrose Field. His work has been performed around the UK and in Italy, featuring in festivals such as York Spring Festival of New Music, Scarborough Coastival, Leeds iFIMPac and soundSCAPE in Maccagno. Omar performs and arranges for London-based vocal ensembles, Vox and Roundhouse Choir, and has produced soundtracks for several theatre productions. He has performed at events including the BBC Proms, EFG London Jazz Festival and BBC Radio 2 Folk Music Awards.

Davide Wang: *Unfolding*

Unfolding is an acousmatic music piece based on a transforming image. Generally in music and even more in the electro-acoustic music, it is often very difficult to understand what the composer wants to express through just the listening. This makes it even more interesting the acousmatic experience, because every person filters through its being what it is listening, creating an infinite number of different meanings, that in most cases are totally opposed to each other. The title helps to understand the meaning of the composition, but is at the same time misleading, because the word unfolding has several meanings totally opposed to each other.

Bio

Davide Wang is an Italian-Chinese cellist and composer, born in Bari (Italy) in 1997. He studied electroacoustic composition with Nicola Monopoli, Franco Degrossi and Alba Battista, cello with Francesco Montaruli and composition with Daniele Bravi. Currently, he is attending his bachelor degree in Electronic Music at Conservatory "Umberto Giordano" in Foggia. He attended masterclasses with several national and international composers like Giorgio Nottoli, Michael Oliva, Alvin Curran, Mauro Lanza and Denis Dufour. His works have been selected in international contests and music festivals including "Art & Science Days – Music and Light 2015" in Bourges (France) and "Electroacoustic Music Week 2015" in Shanghai.

ISSTA 2016 Art Track: Introduction

A number of artworks from our international selection will be on display at various venues in the city centre throughout the festival.

We will also conduct a guided tour/artwalk, at two designated times in the schedule, introduced by our President, Dr Linda O Keeffe.

Attendees are invited to take the time to explore the works in more detail after they have experienced them on the guided tour. We are grateful to all featured artists for the time they have taken to craft these experiences.

Venue opening times (check ISSTA Facebook and @issta_ie Twitter for details):

Void Gallery (Patrick Street): 11 am – 5pm

Visit Derry (Waterloo Place): 1pm–5 pm

Echo Echo (Magazine Street, on City Walls): 12–6 pm (performance Fri at 5 pm)

St Columb's Cathedral (London Street): piece on display Thurs 8th 2–5 pm and Fri 9th, 12–2 pm

Garden of Reflection (Bishop Street): 10am –4 pm

Thatched Cottage and Craft Village (entrances on Magazine Street and Shipquay Street): 2–4 pm (Wed 8th, Thurs 9th), 11–1 pm (Friday)

Detailed Schedule, Art Track: Day 1, Wed 7th

14.00 Artworks Tour/Artwalk I (City Centre Venues): Depart from Foyle Arts Building

14.10 Void Gallery (Patrick Street)

Richard Carr: *Mountain*

Adam and Mark Melvin: *Monument (Three Sisters)*

Chris Malloy: *Operation Deep Pockets*

14.40 Visit Derry Exhibition Space (Waterloo Place)

Manoli Moriarty: *Symbiosis*

Simone Pappalardo: *Col corpo fare ritorno (to return with the body)*

Aidan Deery and Matilde Meireles: *Lough Foyle*

Bernadette Comac: *The Singing Bot* (performance)

Listening post: Omar Peracha: *You Can Run*

Listening post: *Radio Free ISSTA*

15.10 Garden of Reflection Gallery (Bishop Street)

John. F. Barber: *Remembering the Dead*

Robert Curgenven: *Climata*

15.35 Tour finishes, to Nerve Centre (Magazine Street) for Paper Session

17.20 Soundwalk: Lisa Hall, *Walking with Crickets* (City Walls)

Detailed Schedule, Art Track: Day 2, Thurs 8th

13.45 Artworks Tour/Artwalk II (City Centre Venues): Depart from MD Building

14.15 Craft Village Square (off Magazine Street/Shipquay Street)

Alan Dormer and Stephen Roddy: *Terminus Dei*

14.35 Craft Village, Thatched Cottage

Invited installation: Joe McLaughlin and Brian Bridges: *Anthem and Icon*

14.50 Echo Echo Dance Studio (Magazine Street)

Robin Parmar: *In that Place, the Air was Very Different: a Chorosonic Study*

15.10 St Columb's Cathedral (London Street)

Cat McEvoy: *AXIOMATIC – Two States of a Kaleidoscope – St. Columb's*

15.30 Tour finishes, to Nerve Centre for Panel Discussion and AGM

ISSTA Panel discussion and AGM, see Paper and Talks Track

ISSTA 2016 Artworks: Programme Notes and Bios (By Venue)

Void Gallery (Patrick Street)

Richard Carr: *Mountain*

Sound Installation (Audio-Spotlights Systems, Sound, Timber, Mp3 Players), 2013

MOUNTAIN is a sound installation that was recorded at the border crossing from Turkey to the Greek Island of Samos in the EU. The sound you hear is the sonic landscape that exists at this point including a contribution via my voice as you sit and look towards the EU. At this time, this border was a regularly permeable border with thousands of people crossing from one place to the other annually. Within a contemporary context this invisible space (border) has become much more visible and concrete.

Utilising Audio-Spotlight systems, *MOUNTAIN* when exhibited exists as an invisible but sonic triangular structure/border protruding from the gallery floor. It enquires into the very notion of borders as temporary autonomous zones; an invisible but active space, one that can simultaneously embrace but also isolate and separate. Therefore *MOUNTAIN* invites the audience to enter and pass through its invisible sonic structure/border, engaging in the notion of these shifting spaces via a listening rather than visual sensibility.

Through the utilisation of the Audio-Spotlight Systems, *MOUNTAIN* as an installation exists as a temporary autonomous zone in and of itself. It is consistently producing sound in its triangular structure but remains virtually inaudible unless immersed inside of it.

<http://www.richardcarr.ie/mountain>

Bio

Richard Carr currently lives and works in both Dublin and Wexford. He has firmly established himself as one of Ireland's prominent young artists exhibiting alongside leading practitioners such as; Bill Viola, Dorothy Cross, Alice Maher, John Wynne, Gerard Byrne, Yann Novak, Salomé Voegelin, Eva Rothschild among others. His work was recently selected for the finalists' exhibition for the Hotron Prize at VISUAL, Carlow and the F15 Festival in association with IMMA, Dublin. He was also longlisted for the Celeste international art prize and shortlisted for the Emerging Visual Artist Award, Ireland. He graduated with his MFA (2013) from NCAD, Dublin.

Adam and Mark Melvin: *Monument (Three Sisters)*

The basic premise of *Monument* is that of a 'virtual' vocal trio. Three ultrasonic, speakers act as vertical audio 'spotlights' to diffuse individual voices/parts of pre-composed music against the backdrop of a more conventionally diffused sound installation. As a result of the restricted audio field of each speaker, the audience is prevented from hearing the three voices simultaneously.

Set to fragments of text drawn from eavesdropped conversations - all of which were themselves experienced in transitory spaces - the musical material of each voice seems both familiar and elusive. While each 'singer' seems to present a self-contained, intimate yet somewhat incomplete performance at times, it is also as if each voice is singing part of the same musical work. Existing in a concurrent state of flux and stasis, the piece becomes a monument to memory, evanescence and even to itself. The audience is compelled to navigate the installation and decipher their own meanings through their individual perception and memory

Monument represents the second collaboration between Adam and Mark Melvin and the Juice vocal trio following 2006's *Three Glimpses* (sound, live vocals and screen) and in many ways can be considered that particular work's counterpart. Once again seemingly fleeting prompts via the vehicle of the (female) vocal trio are used to explore the manipulation of time and space and the collaborative relationship between site and sound, to engage with notions of locality, identity, illusion, memory and co-existence.

Bios

Melvin + Melvin

Adam and Mark Melvin are a UK/Ireland-based duo who have received wide acclaim for their collaborative work exploring the relationship between music and the visual arts. Their pieces to date are *Speak*, *Three Glimpses* and *By-Product*, (all incorporating live musicians, electronic sound and video) along with the video installation, *Tomorrow Remember Yesterday* (Pair of Jacks) recently exhibited at Huis Marseille Museum voor fotografie (Netherlands) and London's Saatchi Gallery. Their most recent piece, *Fulgurite Chamber* is a large-scale work for quarter-tone flute, electronic sound and light installation commissioned by the Arts Council of Ireland and premiered by London-based ensemble, Rarescale in Derry~Londonderry, 2014. Their work has also been performed/exhibited at Sassoon Gallery, Cob Gallery, Duke's Hall and Cargo (all London), Manchester's Royal Exchange, York University, MMU Axis Arts Centre, Crewe, Mondavi Center and CNMAT, California, (USA), Galerie Sherin Najjar (Berlin), CESTA, Tábor, (Czech Republic) Karnatic Lab, Amsterdam (Netherlands), Theater Kikker, Utrecht (Netherlands) and Tokyo Wonder Site, Hongo, (Japan).

Their collaborations often focus on the meeting points between the various media they employ, playing on the audience's perception of the visual or musical, live or synthetic. Such considerations are carried forward to their individual work as composer and artist respectively - any musical performance is treated as an installation, any visual work, a performance.

Chris Malloy: *Operation Deep Pockets*

Operation Deep Pockets is a multimedia contemplation of decision-making and detachment. In August of 1964, U.S. President Lyndon Baines Johnson made a series of phone calls to direct airstrikes in Vietnam, and to order trousers. In *Operation Deep Pockets*, we hear audio derived from those phone calls, while wartime images punctuate the president's dialogue with Secretary of Defence Robert McNamara.

Bio

Chris Malloy is a composer in Denver, Colorado, USA. His music has been performed throughout Asia, Europe, and the Americas. His PhD is from Brandeis University, where his principal teacher was Martin Boykan. He chairs the Composition Department at the University of Denver, and also has taught at Brandeis University, the University of Surrey, and the New England Conservatory at Walnut Hill. His scores and recordings are published by Cadenza Music (cadenza-music.com).

Visit Derry exhibition space (Waterloo Place)

Manoli Moriarty: *Symbiosis*

Video of Dance/Performance piece (Dancer: Frances Kay)

Symbiosis is a collaborative performance, engaging practitioners of discrete art forms within a technologically unifying context. Exploiting a diverse range of emerging and traditional technologies, performers operate within a feedback loop where sound and motion are continuously influencing one another.

Named in reference to the biological phenomenon of symbiosis, which describes close and persistent interspecies associations, Symbiosis aims to highlight the emergent properties of collaboration by presenting an outcome greater than the sum of its parts; that is the fusion of two autonomous performers of sound and motion, whose mediums constantly merge in and out of contact with each other. The resulting performance involves live electronics, gesture recognition, and tactile control of sound, with both fixed and improvised material.

Bio

Manoli Moriarty is a sound artist, performer, and researcher. His practice explores indeterminism, ephemerality and repetitiveness through misuse of technology, transliterations of inaudible patterns, and connections among unlikely partners. His work ranges a wide spectrum of cross-disciplinary performances, generative sound installations, self-made noise systems, and multi-spatial acousmatic compositions. An Athens-born adoptee of Manchester since the late '90s, he largely neglected studying architecture in favour of the local EDM scene, travelling and performing with techno soundsystems as far as Eastern Europe. He established two of Manchester's most popular EDM nights, Illuminaughty and HitnRun, where he hosted and performed alongside world renowned artists. More recently, he completed music technology and composition degrees at the University of Salford, receiving BA under Phil Brissenden, and MA under Craig Vear and Stephen Davismoon.

Simone Pappalardo: *Col corpo fare ritorno (to return with the body)*

Video of performance piece

A composition for flutes and self-designed instruments build with objects left by the sea's undertow. Dedicated to all migrants of Sicily.

Composition and instruments: *Simone Pappalardo*

Performance: *Gianni Trovalusci*

Video: *Walter Paradiso*

Self-designed wind instruments made from recycled materials left by the undertow; field recordings made with various techniques, underwater and along the coasts of southern Sicily.

This composition, through these elements, paints the soundscape of a world on the verge of drowning. The sounds of games on the beach, of disco parties, of vendors' malfunctioning megaphones, are given meter and punctuated by the tones of ambulances working to recover the few migrants who've managed to reach the coasts of this miserable (and golden) promised land.

The title comes from a poem by Ibn Hamdis, a Sicilian–Arab poet born in Syracuse in 1056. The composition is built around an improvisation by Gianni Trovalusci.

Bios

Simone Pappalardo

Graduated in Electronic Music at the Santa Cecilia Conservatory in Rome, Simone Pappalardo creates electronic compositions, sound art installations and augmented musical instruments. He teaches Electroacoustic Music at the *Conservatory of L'Aquila* and Sound Synthesis at the *Conservatory of Latina*. With the composition "*Hyde; piano augmented by electromagnetic pulses*" he won a special mention at the Italian National Arts Award (now Claudio Abbado Award).

His works have been performed and showed in many international festivals such as: the *Huddersfield contemporary music festival*, the *Musicacoustica festivals* at the Beijing Conservatory, the *Romanian Academy*, the *American Academy* in Rome during several editions of the *Nuova Consonanza music festival*, the *Macro Museum* of Contemporary art in Rome, the *Globe Theater* of Buenos Aires, the *ArteFiera* in Bologna, the *Cinque Giornate festival* in Milan, the *Collection Manzù Museum* in Ardea, the *Auditorium parco della musica* in Rome, the *Young Mediterranean artists festival* in Athens, the *Open Museum Open City* at the MAXXI in Rome, the *Digital Life Festival* by the foundation Romaeuropa, the *New York City Electroacoustic Music Festival* (NYCEMF), the *Musica Verticale Festival*, the *Officine Sintetiche festival* at the University of Turin, SMC in Hamburg, Ars Electronica and more.

Gianni Trovalusci

Graduated in Flute at the "Santa Cecilia" Conservatoire, he specialized in the contemporary repertoire with Pierre-Yves Artaud in Paris and in the Performing Practices of Early Music with Jesper Christensen and Traversiere with Oskar Peter at the Schola Cantorum Basileensis. Since the 70s he has been active in the field of contemporary and ancient music, in music theatre and avant-garde performance. He has worked with artists like Evan Parker, Dagmar Krause, Tim Hodgkinson, Hubert Howe, Ian Mitchell, John Tilbury, Simon Allen, Walter Branchi, Paul Lytton, Wolfgang Fuchs, Studio Azzurro video production, Ars Ludi, Giorgio Battistelli, Michelangelo Lupone, Walter Prati, Giancarlo Schiaffini, Salvatore Sciarrino, Anna Clementi, Alvise Vidolin, Alvin Curran, David Ryan, Christian Wolff, Marcello Panni, Luca Pfaff, Marco Angius, Giorgio Nottoli, Simone Pappalardo, Ivo Nilsson, Tania Chen, Sonia Bergamasco and many others.

Aidan Deery and Matilde Meireles (bunú): *Lough Foyle*

In 2013, we were commissioned to create a one-hour radio piece to mark the Capital of Culture celebrations in Derry/Londonderry. The resulting work, *Lough Foyle*, is a one-hour composition and features field recordings from both sides of the lough as well as from the city. Various recording techniques were used to capture urban and rural environments that contribute to an evolving portrait of the area. This border region acts as a place of transition, and the recordings reflect the diversity of spaces and sonic environments around the lough. *Lough Foyle* was first broadcast on Resonance FM during their residency at Void Gallery, but thus far the piece has not been performed or installed in the area, and ISSTA 2016 provides a perfect opportunity to return the recordings to their origin.

Recordings featured in the composition include those made in the following locations: Greencastle; Quigley's Point; Ballykelly Forest; recordings from the Peace Bridge and outside pubs in the city centre of Derry/Londonderry. We also had a chance encounter with a local fisherman who was kind enough to take us out onto the lough in his boat, from where we also made some recordings that are included in the piece.

Bio

bunú is Aidan Deery and Matilde Meireles: sound artists and field recordists. We are interested in using field recording to explore particular places through extended listening – capturing the soundscape in order to reveal details of social, cultural and environmental significance, whilst concurrently paying attention to the physical characteristics of a given sonic environment. Previous projects have resulted in long-form compositions focused on particular areas, including the Lagan meadows in Belfast and *Lough Foyle*. More recently, we completed 'Slieve Gullion', an extended composition based on the soundscape of the famous County Armagh mountain (funded by the Arts Council of Northern Ireland).

Bernadette Comac: *The Singing Bot* (performance, see schedule)

The Singing Bot is a work created for an iPad controlled telepresence robot, or, as some people call it 'Skype on wheels'. The robot works using live teleconferencing software and is mobile thanks to a combination of gyroscope and accelerometer sensors. The Bot is controlled using a smartphone and laptop.

I was interested in exploring the creative possibilities of a telepresence robot in a sound work and came up with the idea of the 'singing bot'. I liked the fact that the Bot could be controlled from a remote location and had the ability to move around and interact with its environment. In this project I have created a work which explores the possibilities of combining contemporary operatic gestures and vocalise singing with new cutting-edge mobile technologies as a way of presenting new music in extended performance environments.

During the event the robot will move around the space, interacting with observers and its environment as it plays newly recorded material specially written for the performance. The software on my phone and laptop will allow me to control it remotely to direct its movement and allow it to move within the space and interact with audience members.

Bio

Bernadette Comac is a composer and sonic artist living in Northern Ireland. She studied music at Queen's University, Belfast and continued her studies in composition at postgraduate level. She incorporates the use of digital technologies and elements of performance art in her work. Recent projects incorporated the use of a virtual performer in a holographic performance by Sarmen Almond at the Sonorities Festival in 2012 and the Beal Festival in Dublin. She has won a number of awards for her work and is a member of the Association of Irish Composers and is represented by the Contemporary Music Centre, Dublin.

Omar Peracha: *You Can Run*

You Can Run deals with the topic of addiction, and the different sections needed to capture the ups, downs and other moods typically associated with the subject. The piece explores the application of timbrally-derived harmonic and structural frameworks in an electroacoustic context. Spectral information from a spoken phrase, namely 'you can run, but you can't hide', was used to generate material for the piece.

The words in this phrase were analysed individually using a patch programmed in Pure Data, and spectral snapshots from the beginning, middle and end of each were taken. These data, along with other perceivable qualities of each word, such as their envelopes, were used to define the course of the music, with one word being used as the material for each section. The phrase as a whole, and its meaning, was used to guide the piece's overall form and generate some rhythmic material.

Bio

Please see full bio under Radio Free ISSTA, above

Garden of Reflection Gallery (Bishop Street)

John. F. Barber: *Remembering the Dead*

Remembering the Dead is a sound art installation that memorializes victims of gun homicides in America by displaying and speaking their names. The work is contextualized in a wooden kiosk, reminiscent of both a bullet and a tombstone. This kiosk supports a computer and a monitor. The computer displays victims' names, ages, date and place of death on the monitor. Using text-to-speech technology, the name of each victim is spoken and heard via an embedded speaker. The monitor rests in a bed of empty bullet casings.

Bio

John F. Barber teaches in the Creative Media & Digital Culture program at Washington State University Vancouver, Washington, USA. His radio+sound art work has been broadcast internationally, and featured in juried exhibitions in America, Canada, Germany, Portugal, Macedonia, and Northern Ireland. He developed and maintains Radio Nospace (www.radionospace.net), a curated listening gallery/virtual museum and a practice-based research and creative space. Both are inspired by the radio medium with its emphasis on sound as the basis for narrative and storytelling.

Robert Curgenvan: *Climata*

Installation of an album recorded one note at a time in 9 countries & 15 specific locations. No studio overdubs or effects. The recording was undertaken in consultation with American artist James Turrell and the cooperation of the owners of 15 Skyspaces. Spanning contemporary art centres, private collections, national galleries and museums of modern art, the locations are spread across 9 countries in Europe, UK & Australia.

A Skyspace is an architectural light installation by James Turrell comprising a specifically proportioned chamber with a round, oval or square aperture in the ceiling open to the sky and outside world. *Climata's* unique recording process uses the aperture to allow us to hear the interaction of the Skyspace's interior and exterior spaces plus - crucially - making the air in these spaces audible. Recorded entirely in 15 of Turrell's Skyspaces, the 200 site-specific microtonal recordings capture the Skyspace as an audible filter & resonant instrument.

Using the slightest of means (two custom oscillators and a portable speaker), Curgenven's recording process uses two quiet tones tuned to the space to move the volume of air in the Skyspace through the aperture – bringing the space inside and outside the Skyspace into oscillation via the subtle physicality of sound. Through this process he tunes the air in the Skyspace relative to the meteorological conditions and the specific local sound outside - creating an interplay between the weather and the sound's movement through these adjacent spaces.

The air oscillating through the ceiling aperture creates an audible phasing sound like a whooshing or fluttering - we can literally hear the air move. This sound is as loud as the sound outside the Skyspace and the quiet tones that cause this movement. The inside of each Skyspace becomes like a single pipe of a pipe organ, a moving column of air, but rather than ranks inside a church these oscillating volumes of air are distributed throughout the world. The album layers these individual, unprocessed recordings together and we hear the movement of each volume of air as a space in a specific location: together creating a sounding of the world.

The term "Climata" itself refers to the ancient divisions used to map the inhabitable world, from latitude to the length of days. This mapping of the inhabited world is reflected in the selection of the specific 15 Skyspace locations recorded on *Climata* from 87 Skyspaces throughout the world. *Climata*'s Skyspace locations encompass far-flung rural idylls to the Swiss Alps and cities in both Hemispheres.

Bio

Robert Curgenven is an Ireland-based Australian composer employing sound as a physical field of perception. His work encourages us to consider our physical experience of sound: how it shapes our understanding of our embodiment; what it tells us about this embodiment and of how we inhabit space, both individually and collectively as an audience; and how the auditory shapes our perception of time and duration. For him sound is weather and his work entreats us to feel and hear air. His live performances, installations and album releases span pipe organ through to feedback, immersive resonances via turntables and custom-made vinyl, as well as carefully detailed field recordings from remote areas in Australia where he lived for many years. *The Wire* surmises that "behind the music—to these ears at any rate—lurk such [disparate] presences as Alvin Lucier, King Tubby, Murray Schafer and Eliane Radigue."

From beginnings 35 years ago as a classically trained organist to a teenage inauguration into radio, the past ten years have seen him release work on labels such as LINE, The Tapeworm, Winds Measure and his own Recorded Fields Editions. Curgenven has performed extensively across Australia and Europe, including Today's Art festival (Den Haag/NL), Ultrahang Festival (Budapest), Sonic Acts (Amsterdam), Cork Film Festival, Lausanne Underground Film & Music Festival, Laznia Centre for Contemporary Art (Gdansk), Leipzig Gallery for Contemporary Art, Northern Territory Centre for Contemporary Art (Darwin) as well as residencies in Milan (O'), Venice (C32/Forte Marghera), Rotterdam (Worm), Berlin (Transit Lounge) and Alice Springs (Art/Land/Culture). He has presented sound, audiovisual and sculptural work in group exhibitions for Transmediale (Berlin), 10 Years of Microsound (Diapason Gallery, New York), National Film & Sound Archive (Australia) as well as galleries throughout Australia, Italy, France, UK, Germany including National Gallery of Australia (Canberra) and a solo exhibition at the Centre for Contemporary Art, Torun (Poland).

Craft Village Square (off Magazine Street/Shipquay Street)

Alan Dormer and Stephen Roddy: *Terminus Dei*

In a globalised and connected society, the 'flow' of people, markets, finance, ideas, and identities; question both our understanding and ability to define and contain traditional concepts of zones, territory, and place.

Digital networked mobile technology affords us a means of layering or infusing physical space with transparent digital space. These new digital 'zones,' real, representational, and imagined realities, create a disjunction between the present and the presented, connecting us to both everywhere and nowhere. The proposed work, presented through a combination of a networked infrastructure and supporting smartphone/device application, is to be considered as being both an interactive and augmented mediated sound art installation. Reacting to both the listeners' proximity and movement through unseen sonic zones, within a defined physical environment, the work encourages both engagement and exploration through fragile and shifting sonic space. Within this context the work will address the current geopolitical climate relating to the movement of people, borders, and territory. This is a collaborative work between sonic artists/technologists that both combines and aligns modes of inquiry and interest.

Bios

Please see full bios under Paper Session 1

Craft Village, Thatched Cottage

Invited installation: Joe McLaughlin and Brian Bridges: *Anthem and Icon*

An icon inside an icon; one imagined space framed by another; marked by an anniversary.

Bios

Joe McLaughlin is a musician, installation artist, creative technologist and creative hacker from Liverpool who recently graduated from Ulster University's BSc in Creative Technologies. He has performed widely with bands including Kling Klang, The Left Hand and Part Chimp and currently divides his time between Derry, Liverpool and New York.

Brian Bridges is a composer, electronic musician and researcher from Dublin. He's been based in Derry since 2008 and lectures on the music and creative technologies degrees at Ulster University, Magee. He has had his compositions performed at festivals in Europe, the Americas and China and is a co-founder of the Dublin-based Spatial Music Collective, a group supporting the performance of new electronic and acoustic works by Irish and international composers. Brian is currently Vice-President of ISSTA.

Echo Echo Dance Studio (Magazine Street, on City Walls)

Robin Parmar: *In that Place, the Air was Very Different: a Chorosonic Study*

Ancient Greek philosophers had three approaches to place. We are today familiar with the geographic and topographic, since these conform to dominant activities of measurement and classification. The third approach, the chorographic, has largely been marginalised. This method describes place in terms of overlapping zones of difference and similarity.

In that place, the air was very different reconfigures sounds from Derry and elsewhere, creating an imaginary sonic place, responsive to each listener. This environment expresses our embedded situation in a matrix of connections and flows. As such, it is a chorosonic study.

Bio: *Please see full bio under paper session 1*

St Columb's Cathedral (London Street)

Cat McEvoy: *AXIOMATIC – Two States of a Kaleidoscope – St. Columb's*

"The soul employs reverie to apprehend the poetic image. In this state of reverie the participant in a work of Light and Space slowly lets go of the irrational, structured reality and slips into an altogether different perceptual state." (Bachelard, 1958)

In this sense, St. Columb's creates an intangible and transcendent space, and light plays such a central role. The history of the building and its characteristics will be explored within the space itself through the creation of live field recordings and pre-recorded material.

*If stones could speake
then London's prayse
should sound who
built this church and
cittie from the grounde*
(Inscription - 1633 by William Parrot)

The gothic architectural features are similar the patterns you would see within a kaleidoscope, and it is through recent research I have been working on ideas of projecting kaleidoscopic patterns through the use of open source software called GEM/PD to use in real-time within the space. The push-and-pull between the material and immaterial is explored through the diffusion of images and sound in the space. Fluxus artist Nam June Paik's *Zen for Film* creates similar phenomenological experiences for the visitor to the work. In the same way, the projections and projector become molded and shaped into the body of this piece.

Bio

Cat McEvoy BEd (Hons) Music, MA, is a sound artist / composer and lecturer in Popular Music at Leeds College of Music. She studied at undergraduate level under the direction of Pete Stollery in Aberdeen (founding member of BEAST (Birmingham Electro-Acoustic Sound Theatre, Chair of Sonic Arts Network from 1985 to 2003) before commencing studies at Masters Degree level at Bretton Hall College (University of Leeds) with Professor Leigh Landy (editor of the Cambridge University Press journal) specialising in composition. As a freelance creative practitioner at The Hepworth Gallery she delivers workshops based on the exhibitions exploring concepts and processes of sculptural form as related to sound and acoustics, space, and place. Her PhD *Sound Bound / Bound Sound - Enfolding and Unfolding Sound Art in Time / Space and Place* is in final stages of submission at The University of Sheffield. She is actively involved in sound art projects through concerts, installations, electro-acoustic composition and research projects, and collaborative projects for dance, theatre, and other visual media, and site-specific works.

Nerve Centre FabLab (departure point) and City Walls

Lisa Hall: *Walking with Crickets* (soundwalk)

Walking with Crickets is a sound walk and a method to explore the city - carrying recordings of cricket song while walking through the local area, to investigate boundaries of sound, audibility and relationships in space and of self.

The sound walk is a digital re-enactment of an old audio trend that originated in China in around 900AD - a fashion for carrying live crickets concealed in one's clothing for enjoyment of the cricket song. This audio practice can be seen as an early form of a mobile music player, one that creates a sound zone around the wearer that is to be heard in accompaniment with one's surroundings. The cricket song becomes a sonic lens and measure through which we can investigate our relationships with our surroundings, others and ourselves. For this activity, participants are invited to experience and contemplate the act of carrying cricket song through the immediate environs of Derry / Londonderry on a 30 minute sound walk. The activity will include a short talk introducing the history of the practice and the proposition for the cricket song as a tool of investigation, the session will end with a short discussion to share experiences.

Bio

Lisa Hall is a sound artist based in London. Her works take the form of urban sound interventions, installations, performances and prints & books. Focused on spaces, places and how we move through them, her works explore the sonority of the built environment and the body through the push and pull of sound.

Lisa has exhibited and contributed to a wide range of arts events and exhibitions including at the V&A Museum, Folkestone Triennial, Lisbon Architecture Triennale, Cafe Oto, Resonance Fm, Whitechapel Gallery, the Royal Academy and Whitstable Biennale. Lisa is a member of the Bicrophonic Research Institute and a research administrator at CRiSAP.

www.lisa--hall.co.uk

Detailed Schedule, Workshops Track, Day 3, Fri 9th September

09.00 Workshops for ISSTA members session 1 (Foyle Arts Building, Magee campus)

Richard Graham (Stevens Institute of Technology, USA): An Introduction to Audio Synthesis using Pure Data (Lab 1, MQ219)

Abstract

This workshop will introduce fundamental synthesis concepts in electronic music through the use of the open-source visual programming language, Pure Data (Pd). Participants will learn basic programming concepts and build their own synthesis modules to generate their own musical materials. The workshop will also focus on the portability of Pd patches to other formats through the online platform, Heavy, which allows Pd users to port their patches to VSTs, Unity plugins, and C++ code. The workshop is open to all, regardless of experience. Complete beginners are especially encouraged to enrol in the course. All participants must bring their own laptop, headphones, and should install Pd Vanilla 0.47-1 ahead of time (a limited number of lab machines with Pd may be available). MIDI controllers are also encouraged (controllers will be available in the lab).

Bio

Richard Graham (N. Ireland) is a guitarist and computer musician based in the United States. Graham's academic research is centred around computer-assisted music composition and instrumental performance. He received his PhD in Music Technology from Ulster University in 2012 and is now an Assistant Professor of Music and Technology at Stevens Institute of Technology in Hoboken, New Jersey. His research has featured at NIME, Electroacoustic Music Studies Network, Toronto International Electroacoustic Symposium, and the Irish Sound, Science, and Technology Association's annual conference. Compositions from his most recent album, "Nascent", have been performed at the New York City Electroacoustic Music Festival, International Computer Music Conference, and the Society for Electro-Acoustic Music in the United States conference. Graham was an artist-in-residence at STEIM in 2010 and at EMS in 2016. His most recent research projects focusing on performance systems design and audio for virtual and augmented reality will feature at the Korean Electro-Acoustic Music Society conference and the Audio Engineering Society International Conference in late 2016.

10.30 Coffee Break

11.00 Workshops for ISSTA members session 2 (Foyle Arts Building and Great Hall); *choose one of two options*

(a) John King (Ulster University): Introduction to Supercollider (Lab 1, MQ219)

Abstract

An introduction to the **Supercollider** software environment for sound synthesis/sampling. This workshop will present the principal concepts and modes of operation: in doing so we will create some interesting sounds/noises along the way. Ideally participants should bring their own laptops with Supercollider pre-installed (version 3.7.2) available from <https://github.com/supercollider/supercollider/releases>. A limited number of lab machines with pre-installed Supercollider may also be available.

Topics to include:

- Why use Supercollider?
- What can it do?
- Using the language
- Navigating help resources
- Basic UGens
- Basic synthesis techniques
- Using functions
- Using many functions (via Arrays)
- Using Routines to generate musical ideas (& if there is time...)
- Using the powerful 'Patterns' framework
- Basic GUI design

Bio: *Please see full bio under Paper Session 2, above.*

(b) Enda Bates (Trinity College Dublin): Authoring, Designing & Composing Space Maps (Great Hall)

Abstract

Spatial audio panning tools frequently use a graphical interface which mirrors the physical layout of the loudspeaker array. Manifold-Interface Amplitude Panning or MIAP (pronounced “meeap”) is one example of a new design paradigm in which the graphical representation of the interface can be arranged in numerous ways which do not necessarily mirror the physical layout of the array. While standard panner interfaces can be created using MIAP, entirely abstract graphical interfaces can also be used, and these can be mapped to arbitrary numbers and arrangements of loudspeakers or effects, in any configuration. The interface can therefore be explicitly abstract, and so perhaps avoid some of the pitfalls of overtly graphical notions of spatial sound and of course, spatial music. In addition, SpaceMaps can also be used in reverse as a highly configurable control mechanism for mapping sounds to movements in real space captured using sensors, smartphones, or other hardware controllers. This workshop will demonstrate how to author SpaceMaps using Meyer Sounds free authoring tool Cue Station, and how these can be used with the MIAP objects in either Max MSP or Pure Data for spatialization over loudspeakers and headphones, audio synthesis, and in conjunction with sensors and other interfaces.

Participant Requirements:

While it is expected that this will largely be a demonstration, participants can also author their own SpaceMaps and try them out during the workshop. To do this, they would need a Mac (OSX 10.7 or later) or GNU/Linux (built on Ubuntu 14.04.1-desktop) machine with Max MSP (v5 or later) or Pure Data (v0.40-0 or later) installed. Participants will also need to download the following two free applications; MIAP externals for Max/MSP and Pd

<http://www.zacharyseldess.com/miap/downloads/>

Meyer Sound’s SpaceMap Application (CueStation software):

<http://meyersound.com/products/d-mitri/cuestation/register/index.htm>

Bio: *Please see full bio under Paper Session 2, above*

12.45 lunch (MQ125, ‘Café Space’, Foyle Arts Building)

13.30 Headline Workshop 1: Gregory Taylor: Max's Gen Environment (Lab 1, MQ219)

Abstract

This workshop will focus on introducing Max's new Gen environment. Gen is an advanced environment for creating highly efficient code from visual graphs and textual expressions. In short: the same interface you're used to in Max, but with results that run much, much faster. In Max 6, you could use Gen modules but not edit new ones without buying Gen as an add-on feature. In Max 7, we've included Gen editing for everyone.

If Max is for people who've hit the limits of conventional prefabricated software, Gen is in many ways for people who've hit the limits of Max. In both audio and image processing, Gen permits you to create highly optimized low-level modules; it essentially gives you the ability to create new Max objects, but without the need to use C++ or shader languages.

With Max 7 and Gen, you can feel confident you have an environment without limits.

Bio

Gregory Taylor's business card currently includes 'Education R&D' and 'Content Creation' for Cycling 74 software in California, the makers of Max, a leading media arts and digital audio programming platform. He has delivered workshops on this language all over the world and also authored Vizzie, a set of introductory modules for visual processing within Max. This is all in addition to his 'other' lives as a laptop performer and host of RTQE, a programme which features electronic/classical/ experimental /ambient music from around the world. He has collaborated with artists including Brad Garton, Darwin Grosse, , Tom Hamer, Mark Henrickson, Jeff Kaiser and Terry Pender.

<https://cycling74.com/author/53/>

<http://rtqe.net/>

15.30 Coffee Break

15.45 Headline Workshop 2: Mark Henrickson: Introduction to Jitter, Max's Visual Environment (Lab 1, MQ219)

Mark Henrickson is an improvising visualist based in San Francisco California. His work uses realtime processing of concrete video clips as an accompaniment to musical performance. His work has been exhibited at the Spark Festival, MUTEK, DAT conference and a large number of other festivals and events. His primary tool for video is Jitter, the extension of Max/MSP which focuses on video playback and OpenGL.

<https://vimeo.com/markhenrickson> | <https://cycling74.com/2016/01/26/an-interview-with-mark-henrickson/>

17.45 Break, Workshop Track Ends

See 'Performance' track for more events! Or come back for our closing reception at 20.15 (MQ125).

Detailed Schedule, Associated Performances Track, Day 3, Fri 9th September

HEarts of STEM at ISSTA: *Borders Project* Performances: 9.00, 10.00, 11.00, 12.00, Adrian O’Connell (PhD candidate, Ulster University)

Booking required, please keep an eye on our @ISSTA_ie Twitter feed for the link!

This is a series of site-specific immersive performances which will take place at various locations around the Derry/Donegal (Northern Ireland/Republic of Ireland) border. Capacity is limited to 5 people per performance. Please note that this performance will involve blindfolding. Performances depart from outside the Foyle Arts Building at the times above.

HEarts of STEM at ISSTA: *Reassembled, Slightly Askew* (performance): 14.00, 16.00, 18.00 (Dance Studio, Foyle Arts Building); Artists’ Talk at 19.30 (Café Space/MQ125, Foyle Arts Building)

Booking required, please keep an eye on our @ISSTA_ie Twitter feed for the link!

Venue: Dance Studio, top floor of Foyle Arts Building

Drama at Ulster University’s School of Creative Arts and the Research Graduate School (Arts) are delighted to present *Reassembled, Slightly Askew* to ISSTA attendees.

Reassembled... is a mind-blowing autobiographical, audio-based performance about writer Shannon Sickels’ (Yee’s) experience of falling critically ill with a rare brain infection, her journey through rehabilitation and living with an acquired brain injury. Binaural audio techniques will allow you to experience her descent into coma, her brain surgeries, her early days of rehabilitation in hospital and her re-integration into the world with a hidden disability.

Artistic Team:

Shannon Yee (Sickels), Writer
Paul Stapleton, Composer/Sonic Artist
Anna Newell, Director
Hanna Slättne, Dramaturg
Stevie Prickett, Choreographer
Matilde Meireles, Project Support

Production Team:

Shannon Sickels (Yee), Producer

Performers (in order of appearance)

Shannon Sickels, Mary Moulds, Dorieann McKenna, Miche Doherty, Matilde Meireles, Anna Newell, Mary Jordan, Rosie McClelland, Dermott Hickson, Hanna Slättne, Paul

Andrea Montgomery, Project Evaluator
Stephen Beggs, Performer/Ni Tour Manager
Richard Lavery, Video Production

Biomedical Advisory Team:

Mr Roy McConnell, Consultant Neurosurgeon, Royal Victoria Hospital
Colin Williamson, Head Injury Liaison Nurse, Belfast HSCT

Stapleton, Paddy Buchanan, Maria Connolly, Matt Faris, Maggie Cronin, Stevie Prickett, Shaun Blaney, Isobel Anderson, Katharine Phillipa Holland

Reassembled was made possible with support from The Wellcome Trust, Arts & Disability Award Ireland, Belfast’s Metropolitan Arts Centre (MAC), and SARC. The project began development in 2010, with a draft of the first section having been shown at the MAC and the Arts & Disability Forum Gallery in 2012. The final version was launched at the MAC in 2015, followed by a tour of arts centres in Northern Ireland.

Artists’ talk at 19.30 introduced by Dr Lisa Fitzpatrick (Ulster University)

17.00 Performance, Echo Echo Dance Theatre: *In that Place the Air was Very Different* (Robin Parmar) with Echo Echo Dance Company

Echo Echo Dance Company, under the creative directorship of Steve Batts, will perform alongside Robin Parmar’s sound installation with a panoramic view of the city as backdrop.

ISSTA Local Organising Team

Festival/conference Manager: Dr John King
Technical Manager: John Harding
Workshops manager/Local co-chair of workshops: Dr Brendan McCloskey
Performance Technical Manager: (Drama/Research Graduate School events): Adrian O’Connell
Technical Support: Paddy Nixon
Technical and Logistical Support: James McSparron
Administration: Sinéad Grant
PR and Social Media: Jennifer Aicken
Programme copy-editing: Dr John King, Dr Linda O Keeffe, Dr Brian Bridges
Videography by Pillarpix
Photography: Ruairí Drayne (event photography on Thursday)
Photography: Johnny Delaney (all other photography)
Cover and Poster Design by FifthLimbDesign
Printing: Bill Murray at Cathedral Graphics
Live Visuals and Projection: Conor McCarron

Venue lead partners:

Matt McDevitt, Bennigan’s
Steve Batts, Echo Echo Dance Theatre Company
Eamon Durey, FabLab NI/Nerve Centre
Blane O’Donnell, Inner City Trust and Garden of Reflection Gallery
Aoife McHale, Visit Derry
Sally Murphy, Void Gallery
The Very Revd Dean William Morton, St Columb’s Cathedral

Volunteer team (students and graduates of the BSc in Creative Technologies) including the following early supporters:

Johnny Delaney
Jamie Hunter
Colm Mullan
Laura Russell
Paddy Storey
Aaron McGlinchey
Damien Walsh
Rory Cooke

Upcoming Calls for Submissions

SOUNDING OUT THE SPACE

AN INTERNATIONAL CONFERENCE ON THE SPATIALITY OF SOUND

Date: 2–4 November 2017

Location: Dublin School of Creative Arts, Grangegorman Campus

Sound is an inherently spatial phenomenon. No matter what its point of origin be it a musical instrument, a voice, an audio speaker, or another sound-producing entity, sound must navigate space before reaching our ears. On this journey it enters into a complex relational dynamic with the surrounding environment: it may be amplified, distorted, reverberated, dissipated and subject to a multitude of transformations which modify it in different ways. While this dynamic is an intrinsic part of any sonic event, certain artistic endeavours have sought to exploit this spatial aspect of sound as a distinct parameter in its own right. Though spatial experiments have a long history in western music stretching back centuries, the search for novel means of expression in the twentieth century led to an unprecedented investigation into the spatiality of sound as an integral component of the work. In the discipline of sound art, auditory dialogues with the surrounding space have been the defining feature of sound installations while recent innovations in communication and digital technologies have created virtual networks, redefining our conception of space and presenting new possibilities for music, sound art and visual art.

Although substantial research on the spatiality of sound has been carried out within the disciplines of musicology, sound art, and visual art studies, much of this work has remained separate, enclosed within these specialised fields of research. This conference aims to address this imbalance, acknowledging the fluid exchange of ideas between these spheres in actual practice and fostering an interdisciplinary spirit amongst researchers and practitioners. The conference committee thus invites presentations from sound artists, visual artists, composers, academics, and post-graduate researchers which consider the spatiality of sound in all its diverse forms.

The deadline for submissions is 31 March 2017. For further details please see the conference website www.soundingout2017.com.

Enquires may also be emailed to soundingout2017@gmail.com

Keynote Speakers

Brandon LaBelle – author of *Background Noise: Perspectives on Sound Art* (2015; 2006)

Bill Fontana – pioneering American composer and sound artist

This conference is hosted by the DIT Conservatory of Music and Drama, the Dublin School of Creative Arts and GradCAM.

INTERFERENCE: A JOURNAL OF AUDIO CULTURE

Interference is a peer-reviewed journal supported by Trinity College Dublin and Ulster University's Arts and Humanities Research Institute. It is an open-access forum on the role of sound in cultural practices, providing a trans-disciplinary platform for the presentation of research and practice in areas such as acoustic ecology, sensory anthropology, sonic arts, musicology, technology studies and philosophy. The journal seeks to balance its content between scholarly writing, accounts of creative practice, and an active engagement with current research topics in audio culture.

Interference accepts papers on an ongoing basis as well as distributing calls for papers for special issues. If you are unsure if your submission is suitable for the journal please contact the editor:

editor@interferencejournal.com | <http://www.interferencejournal.com>

Acknowledgements and Thanks

A first acknowledgement and tribute is to the work and example of our late colleague, Dr Paul Devlin (Drama, Ulster University). Paul was due to work with us on bringing ISSTA to Derry before his untimely death, just over a year ago. His site-specific work around our local border inspired our choice of this year's theme and the Borders Project performances, which some of you may have had the chance to experience.

We have been overwhelmed with the generosity of individuals and institutions in helping us get this festival and conference up and running. Below is a list of just some of those who have helped us with this year's ISSTA.

Ulster University:

Dean of Arts, Prof. Jan Jędrzejewski

Prof. Paul Moore, Head of School, Creative Arts and Technologies

Prof. Frank Lyons, Head of Arts and Humanities Research Institute

Dr Tom Maguire, Cluster Coordinator, Creative Arts and Technologies Research

Dr Lisa Fitzpatrick: Head of Research Graduate School, Arts

Prof. Paul Mc Kevitt: Acting Head of School, Research Graduate School (Arts)

John Harding: Technical Coordinator

Sinéad Grant: Arts and Humanities Research Institute Secretary, for coordination of numerous bookings and orders

The Garfield Weston Foundation:

Ronnie Millar: Ulster University representative

Nerve Centre and FabLab NI:

Eamon Durey, Mik O'Connell and Marty McGill

Void Gallery:

Maoliosa Boyle, Director

Sally Murphy, Head of Access and Participation

Aisling Bradley, Press & Marketing Co-ordinator

Inner City Trust and Garden of Reflection Gallery:

Blane O'Donnell

Echo Echo Dance Theatre Company:

Steve Batts, Artistic Director

Barry Davis, Technical Director

Bennigan's:

Matt McDevitt and all at Bennigan's

Visit Derry:

Aoife McHale

St Columb's Cathedral:

The Very Reverend Dean William Morton and Ian Bartlett

All at Sandinos

Bill Murray at Cathedral Graphics

Brian Bridges would like to note: 'a big personal thanks to my wife, Michelle Towey, who assisted with the event production in various ways, including contacting partners for outreach workshops, PR, and catering, helping with scheduling...too much to mention!'



Garfield Weston
FOUNDATION

ISSTA outreach activities supported by the Garfield Weston Foundation

WWW.ISSTA.IE