

## Sound and Space: Performing Music for Organ and Electronics

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**Abstract.** This workshop will introduce the organ as an interface, and then explore its use in music for organ and live electronics. The workshop will be instructional for composers, introducing them to the instrument and its repertoire, and for those interested in extending the organ through technology. A second part of the workshop will be a 'lab' in which two pieces are explored and developed live, with a focus on the organ as a technology and its duet role in music for organ and live electronics by Alistair Zaldua and Thor Magnusson. In the final part of the workshop, Lauren Redhead and Alistair Zaldua will perform a selection of pieces from their repertoire that demonstrate the relationship of organ and live electronics in recent pieces.

**Keywords:** Organ and Electronics, Live Performance, Spatialised Sound, Post-electroacoustic, Acousmatic

### Background

Since 2010 Lauren Redhead has commissioned around 20 works for solo organ and for organ and electronics, with a further focus on contemporary experimental music and on graphic and extended notation for the organ. Working in a duo with Alistair Zaldua, she has toured these works throughout the UK and produced extensive CD and online documentation of the music. The duo has concentrated on exploring the live interface between the organ and electronics, sound and space. Their performances span the possibilities of the combination from organ with stereo fixed media sound, to organ with live diffusion, organ with live electronics and performances incorporating live notation. This has taken in collaborations with composers taking innovative approaches to technology including Jesse Ronneau (US/DE), Thor Magnusson (UK), Charles Céleste Hutchins (US/UK) and Rob Canning (IE/UK).

Whilst the sounds of the organ and of electronics have been rarely heard together in the late twentieth and twenty first centuries, they were also 'separated at birth'; as a combination they work extremely well, revealing interesting and unexpected things about the organ as an instrument and about the spaces in which the pieces are played. Redhead's and Zaldua's performance practice over the last five years has focused on pieces which explore this combination of organ and electronics/sound and space alongside contemporary solo organ works which also explore sound in space. Each performance is a new opportunity to explore the resonant possibilities of the spaces in which the organ is found. The organ and electronics work so well together because of the way that organs are built: they are installed in the space. The same is true of electronics, meaning it is possible to get a highly blended sound from the two, and have them sound with one voice. In many ways, the organ is the perfect instrument to team with electronics because it already works on a system of extending the sound through stops. Its sound doesn't come from a single source and its mechanistic method of sound production offers parallels with the creation of digital sound.

### Workshop Outline

**Introduction to the Organ and the Repertoire [90 minutes]** This workshop will begin as an introduction to the organ - as a live interface in and of itself - for composers and other interested parties. The links between the construction of organ sound and electronic sound will be brought out in this introduction. [30 minutes]

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The workshop will then explore some examples of composing and performing practices for the combination of organ and electronics, focusing on technical and notational solutions. In this part of the workshop issues of ensemble, rehearsal and duet performance and technology (including MIRA and networked performance) will also be discussed. This will be illustrated with specific examples from Redhead and Zaldua's repertoire, that they have performed multiple times and in multiple spaces. Particular focus will be given to the technical and aesthetic demands of the works, and to the collaborative elements of work with their composers. [45 minutes]

Despite the possibilities of this combination of sound and instruments, many performance issues are raised by this pairing. These issues are logistical, due to the unusual nature of some performance spaces, and also aesthetic, posing issues for the performer-as-collaborator. These aesthetic issues will also be presented and discussed. [15 minutes]

**Exploration of New Work [90 minutes]** This section of the workshop will explore two new works for the instrument.

The first focus will be on a new piece, created by Alistair Zaldua for the workshop, which explores the MIDI capabilities of the organ. The focus here will be on using MIDI to control the organ (electronics as an interface for the organ) and using the organ as a MIDI interface for the electronics (organ as an interface for the electronics), thus expanding the possibilities of the organ console itself. The composer will introduce the piece and its technology and lead a workshop exploring and refining its possibilities.

The second focus will be on the piece, *Fermata*, which uses the Threnoscope interface developed by Thor Magnusson. The composer will introduce the piece and the software, including a networked aspect of the performance for the organist. The possibilities of this combination will then be explored live.

## Concert

The workshop will close with a performance of works from Redhead and Zaldua's repertoire. The pieces chosen take an innovative stance to technology as well as the organ:

*The Cathedral and the Sea* (2010) - Mesias Maiguashca - 6'

*Immrama* (2014) - Charles Céleste Hutchins - 5'

*Nemo's Organ* (1972-1990) - Mesias Maiguashca - 20'

*ijereja* (2015) - Lauren Redhead - 5'

*Diapason* (2012) - Jesse Ronneau - 12'

## Programme Notes

### **The Cathedral and the Sea** (2010)

Prelude to a Prelude for Organ and Sea Noises

In the piano prelude *La Cathédrale Engloutie* Debussy describes a curious landscape: a Cathedral, moreover, a whole region appears covered by the sea. Time seems still, it is stretched to infinity. The legend of the engulfed City of Ys gives a clue for the origin of this landscape. In my composition *The Cathedral and the Sea* time is active, things happen: the sea, symbol of astronomic time devours (in five minutes, the duration of the composition of Debussy) a cathedral, symbol of human time. Time devours time. (Mesias Maiguashca)

### **Immrama** (2014)

The notation for *Immrama* is created in real time via a process which collages various elements that can often be found in graphical scores – geometric shapes, de-contextualised and transformed bits of notation, and phrases of written text. The text is taken from the program that generates the notation, so that the program examines and uses its own source code. The result is intended to be a query into the elements that make notation musical. (Charles Celeste Hutchins)

## **Nemo's Organ (1972-1990)**

Every time I re-read the book *20,000 Leagues Under the Sea* by J. Verne I was always fascinated by the question of how Captain Nemo's organ, on board the Nautilus, must have sounded. In the summer of 1971, whilst listening to my piece ÜBUNGEN for tape (1971, with sounds generated from an electronic organ and synthesizer) I believed myself to have come near to this sound. The mixture of ÜBUNGEN with sounds of a real organ created a mixture which is both unique and bizarre, and suggestive of the sound of the Nautilus. The main parameters of ÜBUNGEN are timbre and continuity. The timbre moves between sine-like tones and white noise, through a very carefully thought-out scheme where continuity is the main criteria. The same rules control the organ part. It clearly moves according to its own scheme. The paths of the organ part and the tape part meet, they cross over and accompany themselves and therefore create a labyrinth: a labyrinth that represents the curious structure of psychic meandering conceived by J. Verne.

Nemo's Organ was written for S. Szathmary and was premiered at the Metz Festival in 1990. (Mesias Maiguashca, trans. Alistair Zaldua)

## **ijereja (2015)**

ijereja is a transliteration of the transliteration of the Mycenaean Greek word for 'priestess' in the Cretan-Minoan script known as Linear B. This project draws on materials including real and fictional maps, sound poetry, Linear B and its (mis)translations, recorded improvisations and strategies for performing and responding. These materials enable their live interpretation and reinterpretations as a multi-layered, open and 'digital' opera. ijereja is interested in the interrogation of the potentially liminal space between performance, voice, speech, language, text, writing and notation. (Lauren Redhead)

## **Diapason (2012)**

Diapason

1. A full, rich outpouring of harmonious sound.
2. The entire range of an instrument or voice.
3. Either of the two principal stops on a pipe organ that form the tonal basis for the entire scale of the instrument.
4. The interval and the consonance of an octave.
5. A standard indication of pitch.
6. A tuning fork. (Jesse Ronneau)

## **Additional Information**

### **Composer Biographies**

**Charles Céleste Hutchins** was born in San Jose, California in 1976. Growing up in Silicon Valley, he started programming at a young age and has continued to do so, even after leaving dot coms to peruse music composition – obtaining an MA from Wesleyan University in 2005 and a PhD from the University of Birmingham in 2012. His recent work has focussed on gendered labour and AI.

Born in Quito, Ecuador, the 24th of December, 1938, **Mesias Maiguashca** studied at the Conservatorio de Quito, the Eastman School of Music (Rochester, N.Y.), the Instituto di Tella (Buenos Aires) and at the Musikhochschule in Cologne. Productions in the Studio for Electronic Music WDR (Cologne), the Centre Européen pour la Recherche Musicale (Metz), IRCAM (Paris), Acroe (Grenoble) and ZKM (Karlsruhe). He has taught in Metz, Stuttgart, Karlsruhe, Basel, Sofía, Quito, Cuenca, Buenos Aires, Bogotá, Madrid, Barcelona, Győr y Szombathely (Hungary), Seoul (Corea). His work has been performed at the most important European festivals. He was professor for electronic music at the Musikhochschule Freiburg from 1990 until his retirement in 2004. Together with Roland Breitenfeld, he founded the K.O. Studio Freiburg in 1998, a private initiative for the practice of experimental music. He lives in Freiburg since 1996.

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**Jesse Ronneau** originally from Chicago, is a composer and improviser. His works have been performed by Ensemble Sur Plus, the h2 Quartet, ensemble cross.art, Carin Levine, Ian Pace, Pascal Gallois and many others throughout the EU, the USA; in Thailand, South Africa and Australia. He was a lecturer of Composition in Ireland for 7 years and now lives in Berlin.

## Performer Biographies

**Dr Alistair Zaldua** is a composer and conductor of contemporary and experimental music and currently teaches at Canterbury Christ Church University (aesthetics, composition, and conducting). His work has been performed both internationally and in the UK: Huddersfield Festival (2014), Sampler Series Barcelona (2014), Borealis (Bergen, Norway, 2014), Leeds New Music Festival (2013), UsineSonore (Malleray-Bevilard, Switzerland, 2012), Quantensprünge ZKM (Karlsruhe, 2007 & 2008), Música Nova (Sao Paolo, 2006). Alistair currently works with Lauren Redhead in performances for organ and live electronics, and improvises in a duet with film maker Adam Hodgkins (violin and live electronics).

**Dr Lauren Redhead** is a composer of experimental music, a performer of music for organ and electronics, and musicologist who focuses on the aesthetics as socio-semiotics of music. Lauren's music has been performed by international artists such as Ian Pace, the Nieuw Ensemble, Trio Atem, Philip Thomas, BLINDMAN ensemble and rarescale, and she has received commissions from Yorkshire Forward, the Huddersfield Contemporary Music Festival, Making Music and the PRSF for Music, Octopus Collective with the Arts Council of England and most recently from TRANSIT festival. Lauren's music has been performed at Huddersfield Contemporary Music Festival, Gaudeamus Muziekweek, the London Ear Festival, London Contemporary Music Festival, Firenze Suona Contemporanea, Composer's Marathon V (Vienna), Full of Noises Festival, the New York City Electroacoustic Music Festival, and many locations throughout the UK and Europe. A CD of Lauren's chamber works entitled *tactile figures* was released on the engraved glass label in 2012. She has since released two albums with the pan y rosas discos experimental music label (Chicago) and her work 'concerto' featured on the debut album of the Vocal Constructivists, 'Walking Still' (Innova). As an organ performer Lauren is actively involved in promoting and commissioning new works for organ and electronics and graphic and open notation works for the organ. She co-curates the 'Automatronic' concert series for organ and electronics with Huw Morgan and Michael Bonaventure. In 2015 she released a duet organ and electronics album with Alistair Zaldua on the sfz music label.

## Links to Work

CD: *Diapason: Music for Organ and Electronics*: <https://automatronic.bandcamp.com/releases>  
Collective, 'Automatronic': <http://automatronic.co.uk>

Further audio links:

<https://laurenredhead.bandcamp.com/album/organ-electronics-tour-some-highlights>  
<https://laurenredhead.bandcamp.com/album/sound-image-resonance>  
<https://soundcloud.com/laurenredhead/rob-canning-dislocated-spaces>  
<https://soundcloud.com/laurenredhead/mic-spencer-clstrfck>