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## UniSSON - Unity Super Collider Sound Object Notation

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**IMR**  
**Notation for Improvisers One Day Conference**  
**Saturday 9th February 2019**  
**Court Room, Senate House, Russel Square, London**

**Timetable**

9:30-10:00	<b>Registration</b>	
<b>Session 1</b>		Chair: Lauren Redhead, Goldsmiths, University of London
10-10:15	Sarah Brand, Canterbury Christ Church University (CCCU)	Notation as a Tool for the Analysis of Improvised Music
10:15-10:30	Becky White, University of West England	Graphic Scores as Transcriptions in Qualitative Arts Based Research
10:30-10:45	Panos Ghikas, CCCU	Time Anatomies: Notating for the <i>Unreal-Time</i> Improviser/Transcribing <i>Unreal-Time</i> Audio
10:45-11:00	Julian Rawlinson, University of Edinburgh	UniSSON - Unity Super Collider Sound Object Notation
11:00-11:30	Q&A	
<b>11:30-12:00</b>	<b>Break</b>	<b>Tea, Coffee, Biscuits</b>
<b>Session 2</b>		Chair: Moss Freed University of Huddersfield
12:00-12:15	Tim Hodgkinson, independent researcher	Notation and Transcendence in 21st Century
12:15-12:30	Russel Wimbish, University of Edinburgh	Controlled Freedoms: How Graphic Score Composers Use Anomalous Notations To Shape Improvisational Performance
12:30-12:45	Clare Lesser, New York University	<i>...the play that links them amongst themselves...</i>
12:45-13:00	Floris Schuiling, Utrecht University	Music and Extended Agency: On Notation and Ent- textualisation in Improvised Music
13:00-13:30	Q&A	
<b>13:30-14:30</b>	<b>Lunch</b>	[not provided]

<b>Session 3</b>		Chair: Sarah Brand, CCCU
14:30-14:45	Martin Scheuregger, University of Lincoln	From Lace Pattern and Back Again: Integrating Visual Arts Approaches in Notation for Guided Improvisation
14:45-15:00	Moss Freed, University of Huddersfield	Between Practice and Piece: Real Time, Consensus Composition in Large Ensembles
15:00-15:15	Ingrid Plum	Documentation and Report on the <i>Taut</i> Album
15:15-15:30	Christopher Williams, independent researcher	On Perpetual (Musical) Peace? Notation as a Background Process for Collaboration With Improvisers
15:30-16:00	Q&A	
<b>16:00-16:30</b>	<b>Break</b>	
<b>Keynote</b>		Chair: Alistair Zaldua, independent researcher
16:30-17:30	Professor Matt Wright, CCCU	Paths Through Pasts: The Vinyl Record As Navigable Archive In Improvised Music
17:30-18:00	Questions and Discussion	
18:00	End of Conference	

## **Notation for Improvisers, IMR, Senate House, 9.02.2019**

### **Abstracts**

**Sarah Brand**

Canterbury Christ Church University

*Notation as a Tool for the Analysis of Improvised Music-*

*From PhD Practice Research: Ensemble Interrelationships and Their Impact on Improvised Music Performance.*

As a trombonist specialising in Improvised Music - or improvisation without 'stylistic or idiomatic commitment' (Bailey, 1992) - my practice-research PhD in Improvised Music and Interrelation examines how my performance practice is influenced by the relationships forged with improvising collaborators, using an analytical framework derived from my practice as a Music Therapist.

Improvised Music, although a relatively young genre, inspires scholarly investigation into its processes and methods. Practitioner-researchers have collectively defined an historical context of this music or undertaken practice-led investigations into praxis and technique.

Practitioner-authors Derek Bailey (1992), David Toop (2016), and Eddie Prevost (1995) offer insights into Improvised Music's political, philosophical and societal significance. There is, however, a dearth of writing considering the impact of the performers' relationships with each other on the music they improvise. Many practitioners feel that an examination of Improvised Music performance would undermine its orthodoxy. However, the development of a convincing set of approaches in which to examine complex performer relationships will encourage scholarly enquiry into the processes of Improvised Music performance without undermining the spontaneity of the form.

To this end, I will present work- in- progress, taken from my research, of an audio-graphic digital documentation programme that allows a user to view notation and analysis simultaneously with recordings of my own Improvised Music performances. Central to the programme's design is the development of a notation vocabulary which can document the more abstract and gestural material of this music. It is using notation as a tool for understanding interaction in improvisation and a method to discursively interrogate Improvised Music.

A subjective study of my artistic practice with collaborators intends to inform the comprehension of performer interrelation on Improvised Music performance. Moreover, it is necessary to pursue such explorations if Improvised Music is to remain accessible and relevant to future practitioners and educators.

## **Moss Freed**

Huddersfield University

### *Between Practice and Piece: Real-Time, Consensus Composition in Large Ensembles*

This talk will present a newly developed approach to collaborative composition, with improvisation and sociality at its core. Underpinned by an ethos of invitation (as opposed to direction), it allows larger numbers of improvisers (8+) to maintain individual freedoms, whilst enabling modes of collective synchronicity that are virtually unheard in large ensemble free improvisation. The backbone of the methodology is a collection of compositional and structural mechanisms (e.g. personnel groupings, roles, orchestration changes), available to all players at all times. Ensemble members are free to improvise, with options to direct the group, or sub-ensembles within it, towards these mechanisms, using hand signals. Within this 'practice', players have further capabilities to refer the group to specified materials, which are pre-grouped into 'pieces'. In this way, the group, en masse, can construct versions of each piece in real time, with compositional powers moving freely and visibly around the group as desired. The notation is comprised of physical gestures, text, standard notation and graphics, most of which rely on individual interpretation.

This work will be contextualised amongst current musicological developments and several important hybrid approaches for improvising ensembles, such as those of John Zorn, Anthony Braxton, and Butch Morris. I will discuss how fixed timelines/groupings, and conductors can be problematic for free improvisers in this context, and how I have attempted to bypass both whilst striving to maintain some level of compositional integrity within each piece. I will specify the ways in which this system attempts to balance various composer/performer controls, and how its ontology can be understood in multiple ways. I will detail the ongoing reflexive and iterative process of working with a new ensemble formed specifically for the task, and how the system has evolved by addressing unforeseen needs and difficulties brought up in practice.

## **Panos Ghikas**

Canterbury Christ Church University

### *Time-Anatomies: Notating for the Unreal-time Improviser / Transcribing Unreal-Time Audio*

The *Unreal-time* improviser invents audio-collages formed of multiple time-resolutions, utilizing a specially designed live-sampling instrument (Max, physical controllers). This out-of-time process creates results that appear beyond the scope of an acoustic improviser's real-time recall of physically-stored mechanical gestures or a composer's invention in suspended time. From a navigational perspective, the performer is simultaneously afforded three different time-resolutions (buffer, segment, micro-division), allowing for 'anatomical' exploration of material within audio-timelines. The *Unreal-time* improviser learns how to enact these techniques and performs the learning in actual time, by simulating the extratemporal ('out-of-time') process in which a composer interprets material and develops notated gestures through fragmentation, contraction/expansion and reordering.

The presentation will introduce two compositions, which are outcomes of this practice-based project, and will address the challenges arising from employing notation to reflect various processes of 'anatomical' time-exploration of material. As *Unreal-time* embodies both the learning of audio gestures and their reformation into new syntactical relationships, should a notational system aim towards fixity or fluidity of representation? Is it possible to spur a learning process of embodiment, using notational forms of spatiotemporal indeterminacy, in which the performer can model the behaviour of the *Unreal-time* interface? From a reverse perspective, can a fixed-notation transcription of an *Unreal-time* audio composition reveal compositional forms that are mutable and externally applicable?

## **Tim Hodgkinson**

Independent Researcher

### *Notation and Transcendence in 21st Century Music*

The Romanian school centred around Avram and Dumitrescu works directly with spectrally interesting sound material, rather than abstracting structure from spectra as a basis for composition. This involves choosing sound that is dynamic and unstable, and

seeking out the vectors of its inner transformation: these vectors then become the guiding principles for a sustained work. But how to notate this? We have no way to notate a sound transformation in such a way that it would be visibly understandable from the score. Their solution was to develop a hybrid notation in a dialectical relation with the interpretative skills of musicians. For this they used an ensemble formed specially to play their music, and capable of growing an interpretative tradition that would be inherited by incoming new members. Given that classical notation is already hybrid, diagrammatic, and dependent on cultures of interpretation, the most salient aspect of Avram and Dumitrescu's notation is not its hybridity but that it constitutes a rupture not only with other interpretative cultures but also with any kind of habitual deployment of skill in response to familiar components of a text. Of course the presence of composer as conductor means that the composer's role in interpreting the score is potentially vastly expanded. The corporeal, visual, gestural language of the conductor channels the score towards a unique sonorous outcome. The score is a performance score for the conductor as much as for the musicians. Every performance aims to register the unique conflux of energies occurring in its time and place: paradoxically it is only through this attention that it can hope to transcend its circumstance.

I will discuss this interpretation tradition and its convergence with, and divergence from, improvisation. In particular I will address the question of how presence and absence, articulation and non-articulation, in notation can open space for psychological factors eclipsed by the cognitive pressures of standard reading approaches to complex scores.

**Clare Lesser**

New York University

*...the play that links them amongst themselves...*

*Plato's Pharmacy - Jacques Derrida*

Whether given willingly (or knowingly) or not, there is always a collaborative space left between the composer and performer, where each allows the other the agency to create. This is the space where the sign, the mark on the paper (or screen) is subject to the endless *play* of substitution, of choice, where the mute mark has the possibility to become an audible action – whether musical or not. So how does this notation operate, and in particular, how does non-standard notation, with its supplementary and frequently linguistically 'fluid' glossaries and pages of instructions, work; where we have the *play* in

language, the *play* of the mark, and the *play* of the body (in its role as interpreter), in combination? As a totalising, organising principle which limits the *play* of the structure or the audible event that is produced, or as a means to allow the full *play* of substitution, of *supplementarity* between performer and composer in a kind of *myth* of notation that by its very nature must try to resist totalisation?

Using concepts drawn from the work of Jacques Derrida, with particular reference to *Structure, Sign and Play in the Discourse of the Human Sciences* (2001), this presentation will consider the implications of Derrida's work for non-standard notation in Hans-Joachim Hespos' *Weißschatten* (2017), John Cage's *Four*<sup>6</sup> (1992) and Karlheinz Stockhausen's *Pole* (1969), and how the relationship between the composer and performer is in a constant state of flux, forming a mobile hierarchy; where collaboration, although fully present, is always performed at a remove; where improvisation is not only possible, but unavoidable, and where the element of surprise, for both composer and performer, is key.

### **Ingrid Plum**

Independent Researcher

#### *Documentation and Report on the Taut Album*

In this presentation I will identify the challenges and successes found in exploring the different collaborative processes and documentation of Taut through a residency, a performance recorded for the 75-minute live album, a book of scores (also featuring interviews with all the artists discussing their process), a gallery exhibition and a documentary short film. <http://www.ingridplum.com/taut/>

### **Julian Rawlinson**

Edinburgh College of Art, University of Edinburgh

#### *UniSSON - Unity Super Collider Sound Object Notation*

The main output from this research is a suite of software tools piloting frameworks for analysis and visualisation (UniSSON, Unity Super Collider Sound Object Notation) in



multiplayer improvisation. The main successes of the analysis and visualisation tools are in presenting a multitemporal and multiresolution view of sonic data allowing the simultaneous display of 'instant', 'recent' and 'long-term' data across a number of important sound-based parameters in accessible ways, which contributes to audience engagement and collaborative performance. The project builds on existing strands of work in creative computing, computer music and musicology but seeks to make newly playful use of these techniques whilst also addressing accessibility issues by working with both widely adopted and open source software.

The aims of this research were to develop a framework for graphical representations of multiplayer sonic/musical interactions in audio-visual performance, explore data visualisation and machine listening/learning tactics for sharing musical gestures in performance, design creative user interfaces for analysis of multiplayer digital sound/music, devise collaborative strategies for integrated and embedded audio-visual performance and the release of software utilities for multiplayer experimentation. The research investigates ways of exploring productively the tension between legibility and co-agency in performance. Real-time video display of visualised sonic data both reveals and structures collective and individual activity through the capture, transformation, and re-presentation of interactions. Explorations of visual form and graphic mapping provide new opportunities for performers and audiences to engage with provocation and process in immersive audio-visual performance.

**Martin Scheueregger**

University of Lincoln

*From Lace Pattern to Notation and Back Again: Integrating Visual Arts Approaches in Notation for Guided Improvisation*

Visual artist Danica Maier and composer Martin Scheueregger have been collaborating on an ACE-funded project which takes lace patterns from the Nottingham Lace Archive as the starting point for new live and installation-based visual-musical works. This paper explores the notational strategies used in some of the work created as part of the project. Ideas of transcribing, encoding and re-encoding are explored through work which has seen the original 'data' of the lace patterns first transcribed 'naively' into lines, then inscribed as punch-cards to be used with programmable music boxes; the musical results have furthermore been transcribed into traditional notation before further graphic

renditions are created. This iterative, re-encoding process has resulted in a variety of pieces, each with differing levels of improvisation yet all stemming from the same source. For these, notational and graphic elements have been used to generate notation which guides the players towards a range of potential musical 'solutions' that strive – in a variety of ways – to imitate the original source(s).

This paper illustrates the variety of approaches taken, focussing on issues of transcription, accuracy and intention. Furthermore, the particular role of the physical score as 'text' will be explored, as will issues relating to the collaborative process and the intersection of fine art and musical disciplinary norms. Context is given through reference to musical composition where the relationship between processes of notation and the act of composition are complex, in particular in the of composition/inscription process used in the composition of player piano works by Conlon Nancarrow. The resulting picture is one of a dialogue between art forms (visual arts and composition), and between composition, notation-driven performance and improvisation.

**Florian Schuiling**

Utrecht University

*Music as Extended Agency: On Notation and Entextualization in Improvised Music*

This paper presents results from fieldwork with two groups of improvisers using different forms of notation or symbolic representation of music in their creative practice. The Genetic Choir uses certain rules and concepts to practice and reflect on methods of improvisation in their workshops and performances; Kobranie is a method of conducted improvisation taught to students at the Utrecht conservatory.

Such practices raise fundamental questions about the relation of notation to performance, and the understanding of the creative agency of the performer within this relation. The learning and performance of jazz and improvised music have frequently been described as oral and immediate. Highlighting the importance of community and social interaction for the process of improvisation, this sociality is often opposed to the "centralized planning" and subservience to the score supposedly found in the performance of pre-composed music.

Drawing on theories of entextualization in linguistic anthropology, I argue that, contrary to many arguments for a performative understanding of music, performance is partly about creating something that has an identifiable existence, transcending space and time. The notations and compositional systems used by improvisers are a means of achieving this entextualization of their musical utterances. One of the main findings of my fieldwork was that improvisers frequently speak of acting “in service of the music”, a phrase commonly associated with composition-centred musical discourse. Drawing on the work of anthropologists Karin Barber and Alfred Gell, I argue that this idea represents a process of entextualization that is not a negation of performers’ creative agency, but an extension of it.

**Becky White**

The University of the West of England

*Graphic Scores as Transcriptions of Improvisations in Qualitative Arts Based Research*

This paper will examine the process of creating ten hand drawn graphic scores. In a qualitative Arts Based PhD study investigating learning experiences in improvisation, ten post-graduate music and music therapy students took part in semi-structured interviews, combined with duet improvisations. The interviews were transcribed and analysed using Interpretational Phenomenological Analysis (Smith, Flowers and Larkin, 2009). Music data was transcribed through a series of hand-drawn graphic scores (Bergstrøm-Nielson, 2010; Skylarkarts, 2018). In a member checking process visual transcriptions were passed back to participants together with audio recordings, to listen and make any further comments, (Colaizzi, 1978). Over the course of the project the graphic scores transformed from semantic representations, into increasingly abstract and visual interpretations of the improvised duets between researcher and participant. In addition through the constant drawing of the scores, a visual language began to emerge, reflecting the synesthesia tendencies and reflexive thinking of the researcher (Cytowic, 2002; Etherington, 2004). Future plans for dissemination of the research scores include performance and exhibition.

The paper will be presented utilising quotes, musical extracts and examples from the graphic scores.

## **Christopher Williams**

Independent Researcher

### *On Perpetual (Musical) Peace? Notation as a Background Process for Collaboration with Improvisers*

Here I will attempt to unpack the role of notation in the workflow of \*On Perpetual (Musical) Peace?\* (PMP), a series of experiments in musical cohabitation led by myself for improvising ensembles of diverse membership. To date, the ensembles Liminar (Mexico City) and SuperMusique (Montreal) have each hosted a version of the project.

PMP's conceptual springboard is Immanuel Kant's 1795 essay "On Perpetual Peace. A Philosophical Sketch" (1795), a proposal for perpetually warring nations to achieve lasting peace through an international federation of states. (It later influenced the writers of the UN Charter and EU Constitution.) PMP embraces Kant's emphasis on hospitality, publicity (transparency), and perpetuality (sustainability) -- and the often contentious work it takes to maintain them. The project takes them as bedrock conditions for life in which there is room for everyone and everything.

Rather than providing my own scores, materials, or aesthetic for the ensemble to unite around, as "the composer" I act as a sympathetic agitator. Over the course of several rehearsals, I propose exercises, discussions, and graphic and verbal scores by a variety of artists (including the musicians themselves). These are meant to provoke difference in and reflection on what the players (some of whom do not gravitate toward notation per se) do already. In turn, the musicians find new collective resources which they fold back into the work process en route to a kind of perpetual musical piece/peace.

The initial concept for the project revolved around notation. Kant's text resonated with my own research on notation for improvisers (see [www.tactilepaths.net](http://www.tactilepaths.net)) in the ways it frames text as a primary tool for shaping community interactions. In practice, however, notation has played a surprisingly minor role. Rather than shaping interaction in performance directly, it has shaped musicians' sense of how to be(come) a group in rehearsals; once emerged, this sense has itself become the basis for the musical results of the project, above and beyond notation. This experience suggests that composers collaborating with groups of improvisers might do well to think about notation's potential for interpersonal negotiation and instigation in the background, over compositional aesthetics, in order to engage musicians' unique resources \*qua\* improvisers.

## **Russell Wimbish**

University of Edinburgh

### *Controlled Freedoms: How Graphic Score Composers use Anomalous Notations to Shape Improvisational Performance*

This research explores ways in which graphic score composers utilise idiosyncratic notations to influence improvisational performance. Since its origination in the 1950's, graphic composition has come to embody concepts of collaborative music making. Whilst the composer originates the compositional framework, it is the oft improvisational interpretation strategies of the performer that determine the specifics of a work's sounding properties. However, current research indicates that this interpretive freedom is not absolute. Romantic ideals of the composer as the aesthetic and performative authority of a piece remain prevalent in modern musical communities. As such, the performer is expected to respect the directives and aesthetics of the score as well as function as a creative contributor. How then do graphic score composers seek to affect the improvisational processes necessary for performance? Likewise, what directives on improvisation does the performer perceive from the notation of the score? Looking at composer and performer perspectives, this study examines how the unique notations and para-notations of the composer explicitly and implicitly influence improvisations within graphic score performance.

The data for this study derives from a series of interviews with professional musicians acknowledged as being exemplary practitioners of contemporary music. For methodology, I use interpretive phenomenological analysis to analyse the participants' experiences with graphic notation. By phenomenologically investigating how participants construct personal meaning from direct experience, this research uncovers methods of graphic composition and performance used in praxis by present-day musical communities.

The lecture concludes with a solo performance of selections from Cornelius Cardew's graphic work, *Treatise* (1967). Performing on the double bass, I demonstrate how my research influences interpretational and performative approach. As *Treatise* is intentionally (and notoriously) ambiguous as to composer intent, it presents a unique challenge in demonstrating how one may derive imperatives for performance through its notation.

## **Keynote:**

**Professor Matt Wright**

Canterbury Christ Church University

### *Paths Through Pasts: the Vinyl Record as a Navigable Archive in Improvised Music*

With the critical discussion of turntable-based performance growing since the 1990s, there is now a well-worn argument that distinguishes the turntablist from the DJ: a musician capable of working within, alongside, in playful or in antagonistic relationship with DJ Culture. In this sense, avant turntablism can be seen as part of a broader development of what we could term post DJ musics: those post 1990 sonic practices that use assemblages of DJ technology (turntables, scratch mixers and controllers, CDJs, laptops running loop-based or sampling software and dub-influenced sound systems) to search for 21st century approaches beyond those prescribed by the 20th century nightclub.

One concept fundamental to the notion of post-DJ thinking is an expanded grasp of the continuum between temporal locatedness - the sense of this happening 'here and now' - and temporal dislocation - the sense of the music happening 'out there' or 'then'. My solo performances, called Fracture Mixes, explore the elasticity of this continuum and specifically how vinyl records, often featuring the recordings of *dead* performers, might be considered a kind of *ghost notation* for future improvisations.

## **Professor Matt Wright**

Matt Wright works as a composer, improviser and sound artist at the edges of concert and club culture, his output stretching from scores for early music ensembles and contemporary chamber groups to digital improvisation, experimental hip hop and turntablism, website installations, and large events combining DJs, new music performers and digital media. As a performer he works with turntables, laptops and surround sound installations to create post-DJ, multichannel music embracing hip hop, avant garde and freely improvised traditions.

He works closely with Evan Parker in their live/studio project Trance Map and Trance Map+ (featuring guests such as Toma Gouband, Peter Evans, Spring Heel Jack and Mark Nauseef); with Ensemble Klang in The Hague (including the albums 'Music at the Edge of Collapse' and 'Cold Highlife'), with the Brussels-based BI!ndman ensemble and

composer Eric Sleichim (including NETWORK, directed by Ivo van Hove and starring Bryan Cranston, as well as Beyond/Behind with soprano Claron McFadden); with Champ D'Action in Antwerp (including the LABO international arts residency); with The Six Tones in Stockholm and Hanoi; with Ensemble Offspring in Sydney; with CEPROMusic in Mexico City and as guest with the Alexander Hawkins Ensemble (on the record 'Unit[e]'), as well as experimental duo projects with Keir Neuringer, Roger Redgate, Robert Stillman and Panos Ghikas.

His work has been presented at the Sydney Opera House, Le Poisson Rouge (New York), the Muziekcentrum an 't IJ (Amsterdam), The Kim Ma Theatre (Vietnam) and Abbey Road Studios, Tate Britain and Tate Modern. He has been commissioned by organisations such as The Huddersfield Contemporary Music Festival and the MATA Festival (New York) and his work has been broadcast on TV across Europe, and on radio globally, including a two-hour focus on his work on the ABC Network in Australia. Reviews of his work have appeared in the New York Times, the Sydney Morning Herald, Vietnam Today and the Financial Times. In 2014, he remixed Robert Wyatt's 'Cuckooland' album into a concert-length collaboration with Elaine Mitchener, Tony Hymas and the Brodsky Quartet. In 2015 'Totem for Den Haag' was selected to represent UK new music in the UK/Mexico dual year.

Matt is a Professor of Composition and Sonic Art at Canterbury Christ Church University. He studied Composition with Richard Steinitz and with Christopher Fox at the University of Huddersfield; with Louis Andriessen, Martijn Padding and Richard Ayres at The Royal Conservatory of the Netherlands and with Roger Redgate at Goldsmiths College, London. He also had formative lessons and workshop experience with Steve Reich, Steve Martland, Howard Skempton and Wajahat Kahn.