

INScore workshop: live notations

Centre Clignancourt
Paris-Sorbonne University

Thursday 28th May 2015

Richard Hoadley

Digital Performance Laboratory, Anglia Ruskin University, Cambridge UK

This presentation is available at [**http://rheadley.net/presentations/tenor_inscore-s.pdf**](http://rheadley.net/presentations/tenor_inscore-s.pdf)

This research has been subsidised by Anglia Ruskin University and Arts Council England

v0.03

8th Feb 1963

Notation is a way of making people move. If you lack others, like aggression or persuasion. The notation should do it. This is the most rewarding aspect of work on a notation. Trouble is: Just as you find your sounds are too alien, intended 'for a different culture', you make the same discovery about your beautiful notation: no-one is willing to understand it. No-one moves.

Cornelius Cardew, from **Treatise Handbook**, 1971

A handwritten musical score for a tenor instrument, likely a saxophone. The score is written on a page with a large, empty oval shape at the top right. The notation includes several staves with various clefs (treble and bass), key signatures (one flat), and time signatures (9/8). The music features complex rhythmic patterns, including triplets and sixteenth notes, and is heavily annotated with slurs, ties, and dynamic markings. A large, empty oval shape is drawn at the top right of the page. The score is written in black ink on a white background.

Three research streams

- algorithms (patterning)
- physical computing
- notation/representation

These can be linked by cross-domain expression and interpretation

Cross-domain expression?

The **expressive domains** involved in this work include **music** (audio and notation), **movement** (dance) and **text** (poetry)

Music is already internally cross-domain (as are all the arts): it is formed of **physical/mental action** utilised to create patterns of music, text or graphic notations

Live notation

*We consider real-time music notation to be **any notation**, either traditional or graphic, **which is created or transformed during an actual musical performance**. However, the term has not been standardized, and various articles in this issue refer to real-time music notation using other terms, such as dynamic music notation, live scoring, virtual scoring, and reactive notation.*

Contemporary Music Review, Vol. 29, No. 1, February 2010, p. 1, Preface: Virtual Scores and Real-Time Playing, Arthur Clay and Jason Freeman

Tool or technique?

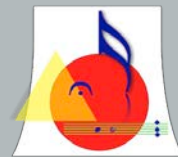
Composing can be the exploration of a system as well as the ideas that can exist within the system. In this sense, creative means are tools or systems.

However, because this is a system involving programming the exploration of the system is domain specific. In *this* sense the work is itself a creative act and so more of a technique.

Generally it seems unlikely that any single person could invent their own unique system that is entirely satisfying to others.

The tools

- provide a structure for the generation of music and/or common practice notation as well as many arbitrary graphical elements
- facilitate communication between SuperCollider and INScore
- offer the beginnings of a more standard interface for physical mapping



and are located...

- <https://github.com/supercollider/supercollider>
- <http://inscore.sourceforge.net/>
- <http://rheadley.net/inscore> (currently on request)

Performances: **Calder's Violin**, SuperCollider Symposium,
London 2012



The Fluxus Tree, LIPAM, Leeds UK, September 2012



Quantum Canticorum, Museum of Modern Art, Barcelona, June 2014



System Demonstration, Natural History Museum, June 2014



Semaphore, Cambridge, October 2014



4:38 scene 2; 7:06 dress; 8:30 transition to poem

How To Play the Piano, (Hoadley/Norman) Cambridge, May 2015, piano: Philip Mead



2:50 poem

Peer comment and criticism

- implementation of methods of **biofeedback** and use of data from musician's physical performance (I'm sceptical)
- the possibilities of **machine musicianship and listening** (an obsession with some researchers) as a compelling reason for using real-time notation (a triumph of imagination over reality in my opinion)
- concern over possible difficulties of **locating** one's place in the score

- the feasibility of obtaining an **accurate** and structured rendition due to lack of rehearsal
- the **fetishisation** of the notation (when displayed)
- the dancer being **caged** by the **cone of the Kinect** (MSphobia?)
- the **conservative** nature of the music (old fashioned modernism? a reasonable point, maybe, and there are no stylistic predicates with the technology)

The Future: projection as notation? Apparition HD scenes - Klaus Obermaier and Ars Electronica Futurelab

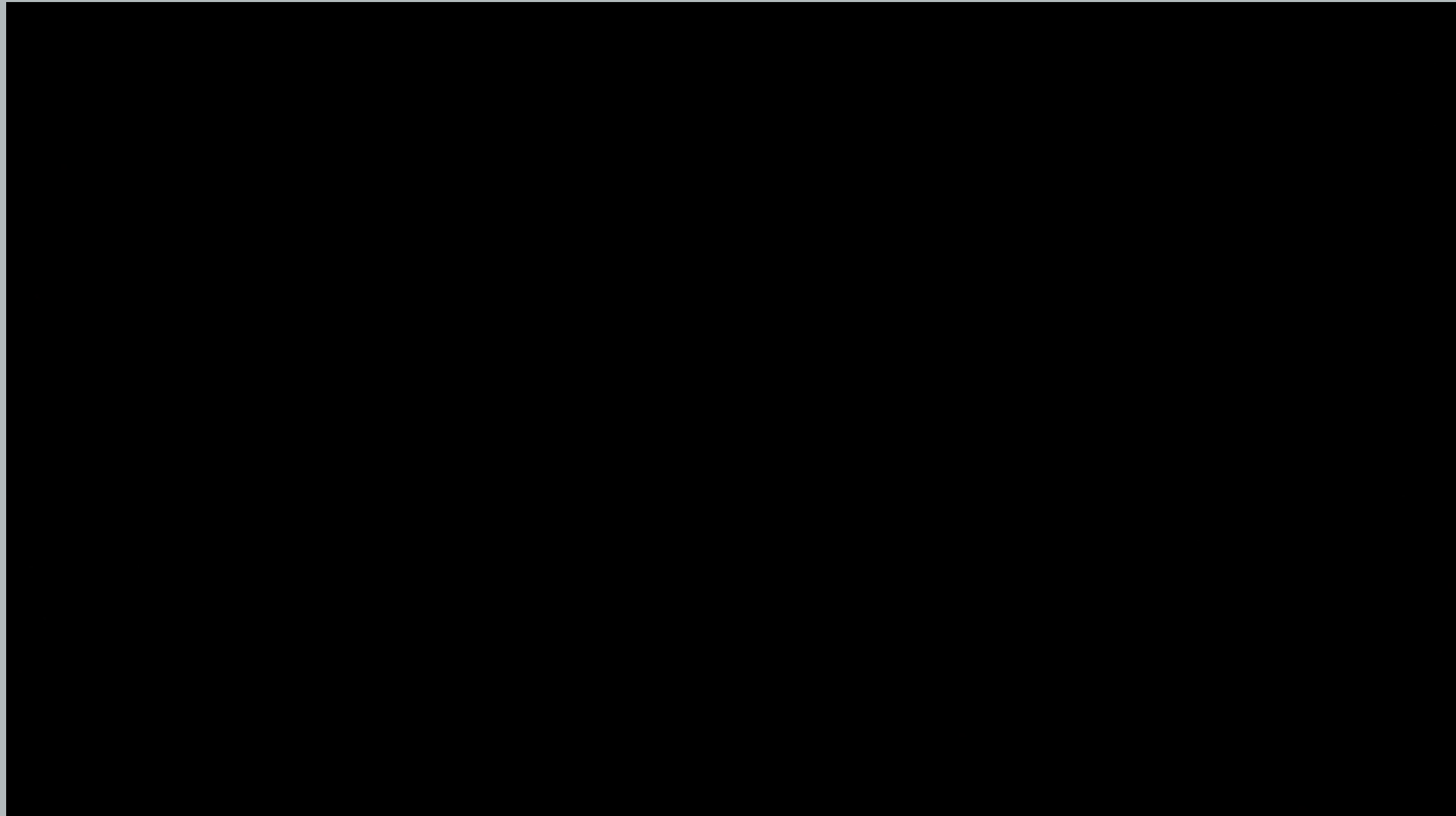


URBANSCREEN - 320° Light



"The age of the screen is coming to an end. Digital interfaces will dissolve and merge into the social space"

Christian Marclay: Surround Sounds 2015



Thoughts as notation?

Work in music therapy based on EEG and improvisation: what electrical signals are generated during improvisation. Is this another, new form of notation - in the brain?

Forthcoming events

- *INScore Notation Workshop*, 1:30-5:30pm, 28th May, Centre Clignancourt, Paris-Sorbonne University, Paris, France
- *'Semaphore - cross-domain expressive mapping with live notation'* (presentation), 12:10 29th May, first international conference on Technology for Music Notation and Representation (TENOR), Paris, France

- *Performance of 'How To Play the Piano in 88 Notes' by Philip Mead, Music as Process Conference, Goldsmiths, London, 6th June 2015*
- *Performance of 'Semaphore' for dancers and musicians, 9th July, M.A.D.E., Cardiff*
- **Semaphore** plus **new piece**, workshop and demo at Festival of Ideas, October 2015, then at the following venues:
 - Cardiff Contemporary Festival
 - New Cut Arts, Halesworth, Suffolk
 - Colchester Arts Centre
 - WestAcre Theatre, Norfolk
 - Conway Hall, Holborn

Book chapter on cross-domain expression for **New Thoughts on Piano Performance**

TENOR 2016 in Cambridge!

video recordings of past performances are at **rhoadley.net/**
youtube and
rhoadley.net/vimeo

Thank you

any questions?

contact:

research@rheadley.net

this presentation is available at

http://rheadley.net/presentations/tenor_inscore-s.pdf

Workshop demonstration

Just in case:

