Dynamic cross-domain expression:

notation, interpretation, technology and performance

INTIME

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v0.03

Interdisciplinarity

All of us (Katharine, Philip and myself) have an interest in **interdisciplinarity**, **collaboration** and **cross-domain expression**.

I'm particularly interested in **live notation** which has a unique effect on musical composition - joining **dots** with **signals** and **fixed, written performance** in the classical western tradition with **improvisation**.

Wright & Van 't Hoog Video 'Orpheus Trio' Philip Mead Piano Improvisation Six Iterations

Artists **Michael Wright** & **Henriëtte Van 't Hoog** Video *Orpheus Trio* with **Philip Mead** *piano improvisation*.

Orpheus trio was created from short video clips of every day phenomena orchestrated to create a concrete art animation (of seven minutes duration). Philip Mead generated six improvised iterations responding to the artwork, each one exploiting a different potential of the piano.

online

http://rhoadley.net/presentations/intime2015-s.pdf
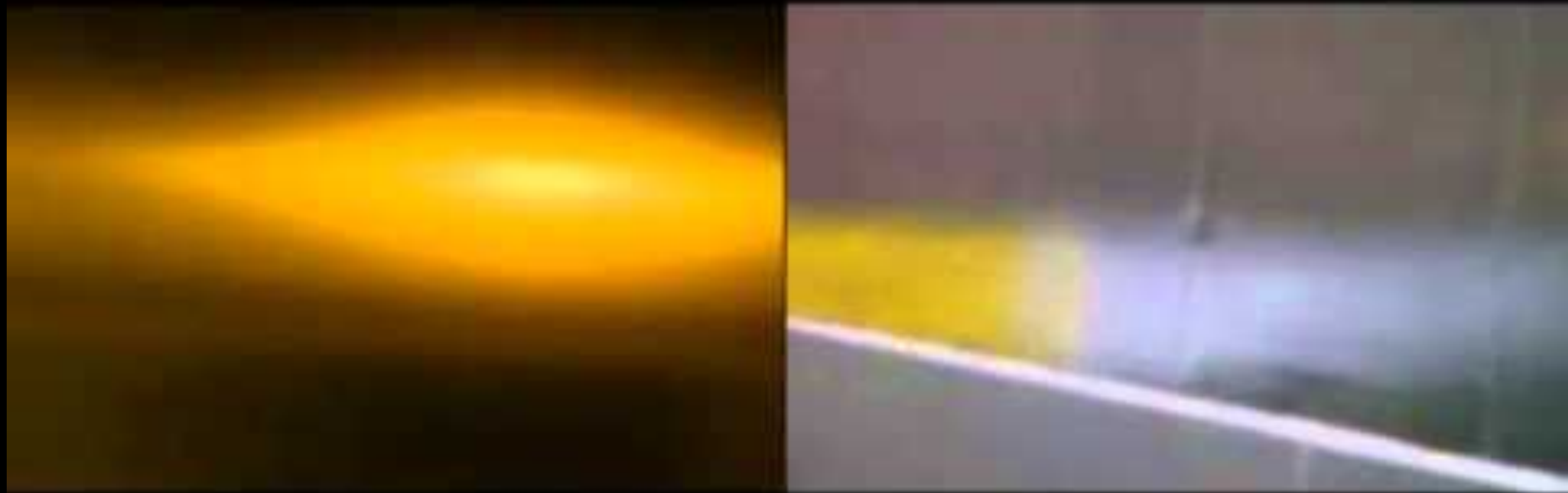
Katharine Norman

- Making Place to be performed – a unique mixture of text, music and performance.

- It would be great to try *How To Play* with a live reading, but I'm rather lazy and cowardly.

What are expressive domains?

This presentation demonstrates one aspect of **practice-led** research which seeks to **translate** between **expressive domains** using **technology**. An expressive domain is a form of artistic expression such as **music**, **dance**, **text**, or **images and patterns**. Information is taken from one domain and translated into another in **real-time** allowing **synchronous** performance. Music is **already cross-domain**: it is formed of **physical action** to create **patterns**.

" I haven't practiced dancing, I just copy the music**"**

Three research streams

1. algorithms (patterning)

2. physical computing (real world interaction)

3. notation/representation (and therefore performance and interpretation)

Live Notation

- This presentation focuses on **live notation**, its **possibilities** and **difficulties**.

- Live notation's development has gained in momentum over the last few years as associated technologies have improved.

- **MaxScore** (Didkovsky), **Bach Project** (Aghostini and Ghisi)(both **MaxMSP** based and in part CAC systems), **Lilypond** and other more bespoke systems. I use **SuperCollider** and **INScore** (Fober).

- There is currently **no** widely accepted solution, (although there is more work being undertaken in the area).

Features of Live Notation

- importance of exploitation of performers instrumental **virtuosity** and learned response

- balance between fixed notated performance and **improvisation**

- **synchronisation** with multi-domain live performance

Features of Live Notation

- **novel** forms of notation, no longer **fixed** on the page, (although this has its own issues).

- the results don't have to be **all one way** or another, you can mix precise, pre-composed music with **graphics** and **text**.

- it is straightforward to add or remove elements - the 'live' score can itself be **finalised** or **fluid**.

Particular features

- The difference between fixed and dynamic scores. I used to do this:

http://rhoadley.net/presentations/intime2015-s.pdf

- but at the moment I don't particularly want to any more.

The nature of notated music

- Lydia Goehr quotes a letter from Beethoven:

- "I have never [revised my compositions] because even the slightest change alters the character of the composition"

- (Letter (in French) of 1813, in Letters of Beethoven, ed., E Anderson (3 vols.; New York, 1961), i. 405). Quoted in Goehr 1992 rev 2007, The Imaginary Museum of Musical Works, p222)

Other aspects

- Improvising with the performer with live code;

- Improvising is possible without notation?

- This allows detailed synchronisation

- It also allows pre-composition, but I haven't wanted to do this yer.

The tools

- provide a structure for the **generation** of music and/or common practice **notation** as well as **graphical** elements

- facilitate communication between **SuperCollider** and **INScore**

- offer the beginnings of a more standard interface for **physical mapping** and **live notation**

which are located...

- https://github.com/supercollider/supercollider

- http://inscore.sourceforge.net/
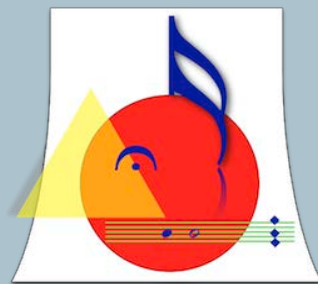
- http://rhoadley.net/inscore (on request)

Performances: **System Demonstration**, Natural History Museum, London, June 2014

In particular see little girl in centre frame at 5:45

http://rhoadley.net/presentations/intime2015-s.pdf

Semaphore, Cambridge, October 2014

http://rhoadley.net/presentations/intime2015-s.pdf

Lost in translation - problems and questions?

- The score is designed to be what it is: **leave it alone!**

- The importance of **automation** in enabling more complex behaviour at higher levels, as in performance.

- Is this a **tool** - or a **composition**?

- What about **interpretation**?

- Live notation: is it too **difficult** to play?

- x, y and z maps to pitch, duration, amplitude, chordal complexity, timbre? Is this all too **simplistic**? (Yes)

- technicalities: how best to implement **rotation** and display the resulting 'live' notation.

- How do I feel about **losing control**: what about if I 'come across' a particularly **beautiful version**. Can I save it? (Currently no, except for taking a screen shot). Should I be able to?

Forthcoming events

- **Semaphore Workshop** Cambridge Festival of Ideas, ARU, Saturday October 31st, 3:00pm

- **Semaphore/Selfies** Mumford Theatre, Cambridge, Saturday October 31st, 5:30pm

- **Three Screens** Ian Mitchell, clarinet, Cambridge, April 2016

- **TENOR** (Technologies for Music Notation and Representation), May 2016, Cambridge - deadline for submissions November 16th 2015. More information at http://tenor2016.tenor-conference.org

Thank you and demonstration

any questions?

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this presentation is available at
http://rhoadley.net/presentations
as **intime.pdf**

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