Musical Virtuosity and Live Notation

Virtuosity – An interdisciplinary symposium

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This presentation is available here: **http://rhoadley.net/presentations/virtuosity2016.pdf**
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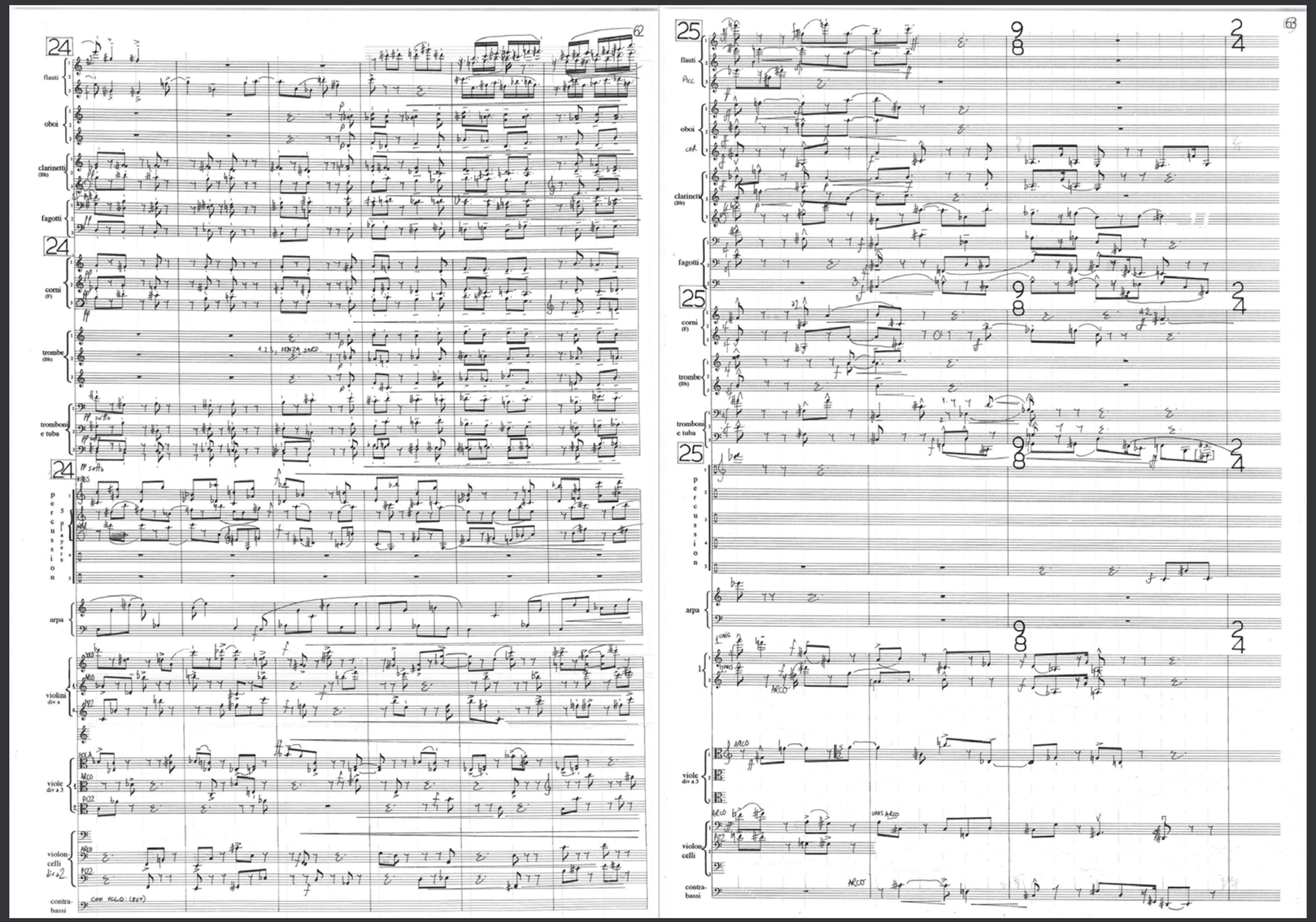
v0.01

Live (animated, dynamic) notation

- Composition (notated)

(I used to do this:


24
62
flauti
oboi
clarinetti (Bb)
fagotti
corni (F)
trombe (Bb)
trombone tuba
percussion 5 players
arpa
violini div a
viole div a 3
violoncelli div a 2
contrabassi
25
63
Picc
cor.
1.
NECO
UNIS

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

- Electronic Composition with electronics
- Live Composition with algorithms
- Performance
- Physical computing

Calder's Violin, SuperCollider Symposium, London 2012

http://rhoadley.net/presentations/virtuosity2016.pdf

Interdisciplinarity and cross-domain expression

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**.

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

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

Semaphore, Cambridge, October 2014

Other work in Live Notation/ Live Coding

- Technically and aesthetically, this presentation also focuses on **live notation**, its **possibilities** and **difficulties**.
- The development of **live notation** 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), the use of **Lilypond** (a code-based notation language) 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).

Central Features of Live Notation

- importance of exploitation of performer's instrumental **virtuosity** and the speed of learned response
- balance between fixed notated performance and **improvisation**: guided improvisation within a more formal, (though possibly generative) structure
- These factors mean that the pieces create **portraits** of the performer - the music that's *in their hands* provides the material - a performer's reaction relies very much on their understanding of and relationship with the variety of notations used.
-
- **synchronisation** with multi-domain live performance including text, images and movement

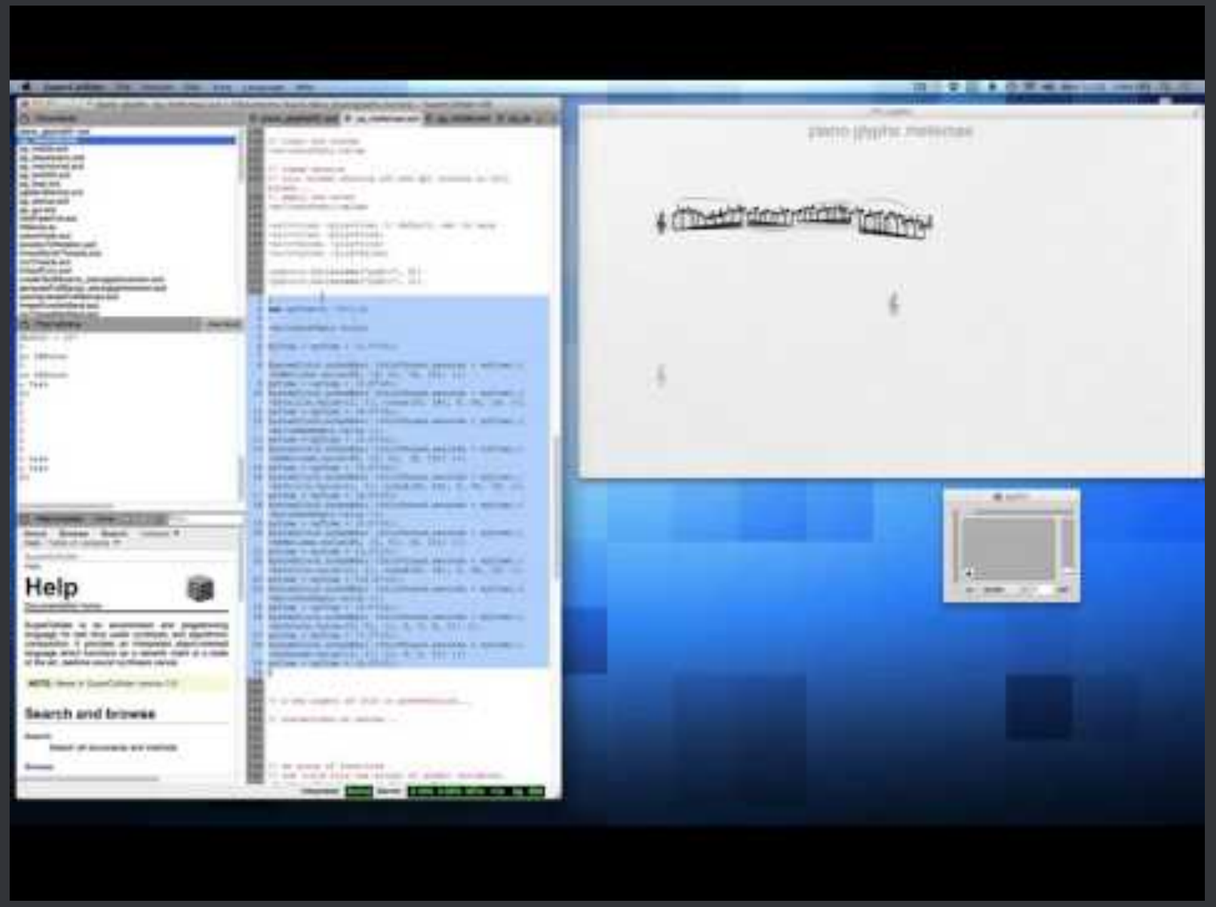
Other Features of Live Notation

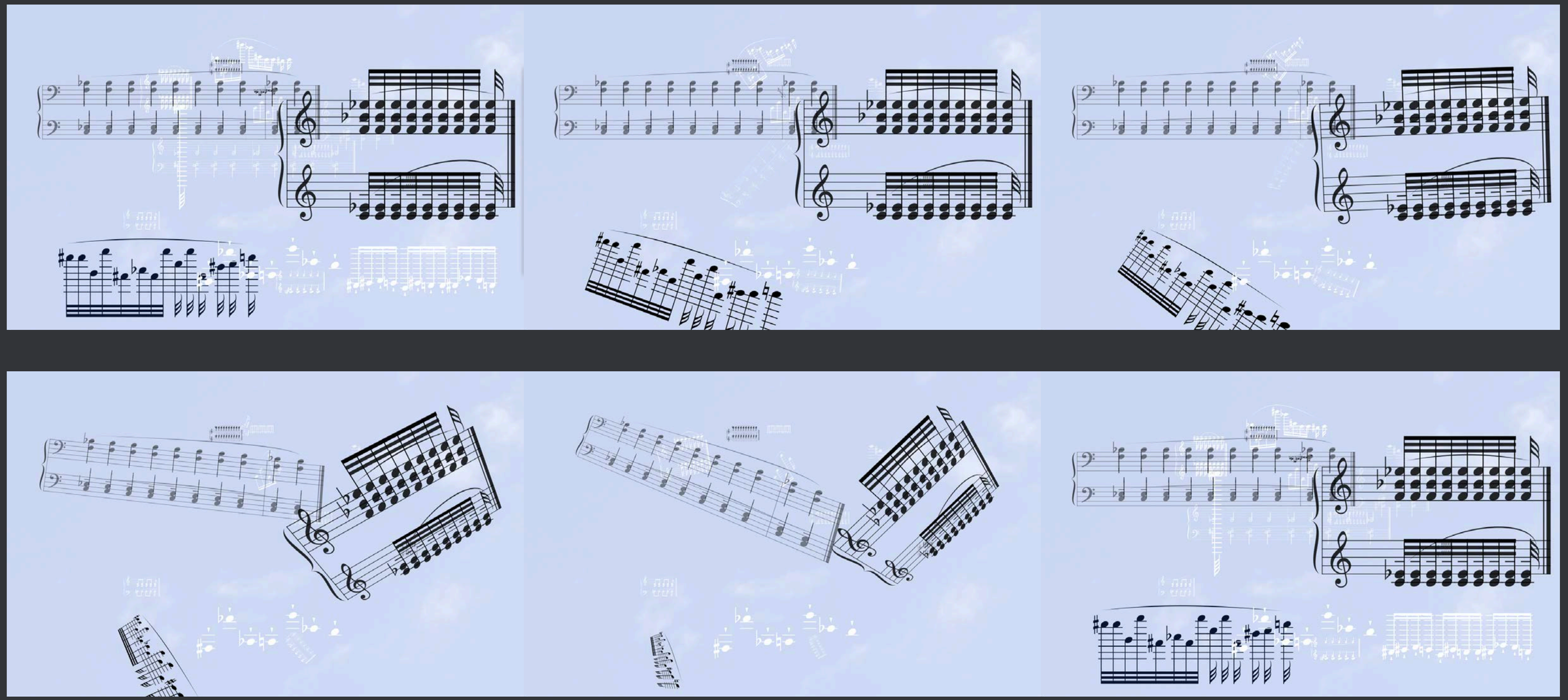
- you can use **novel** forms of notation; these are no longer **fixed** on the page
- the results don't have to be **all one way** or another, you can mix precise, pre-composed music with **graphics** and **text**.
- it is straightforward to add or remove elements - the 'live' score can itself be **finalised** or **fluid**.

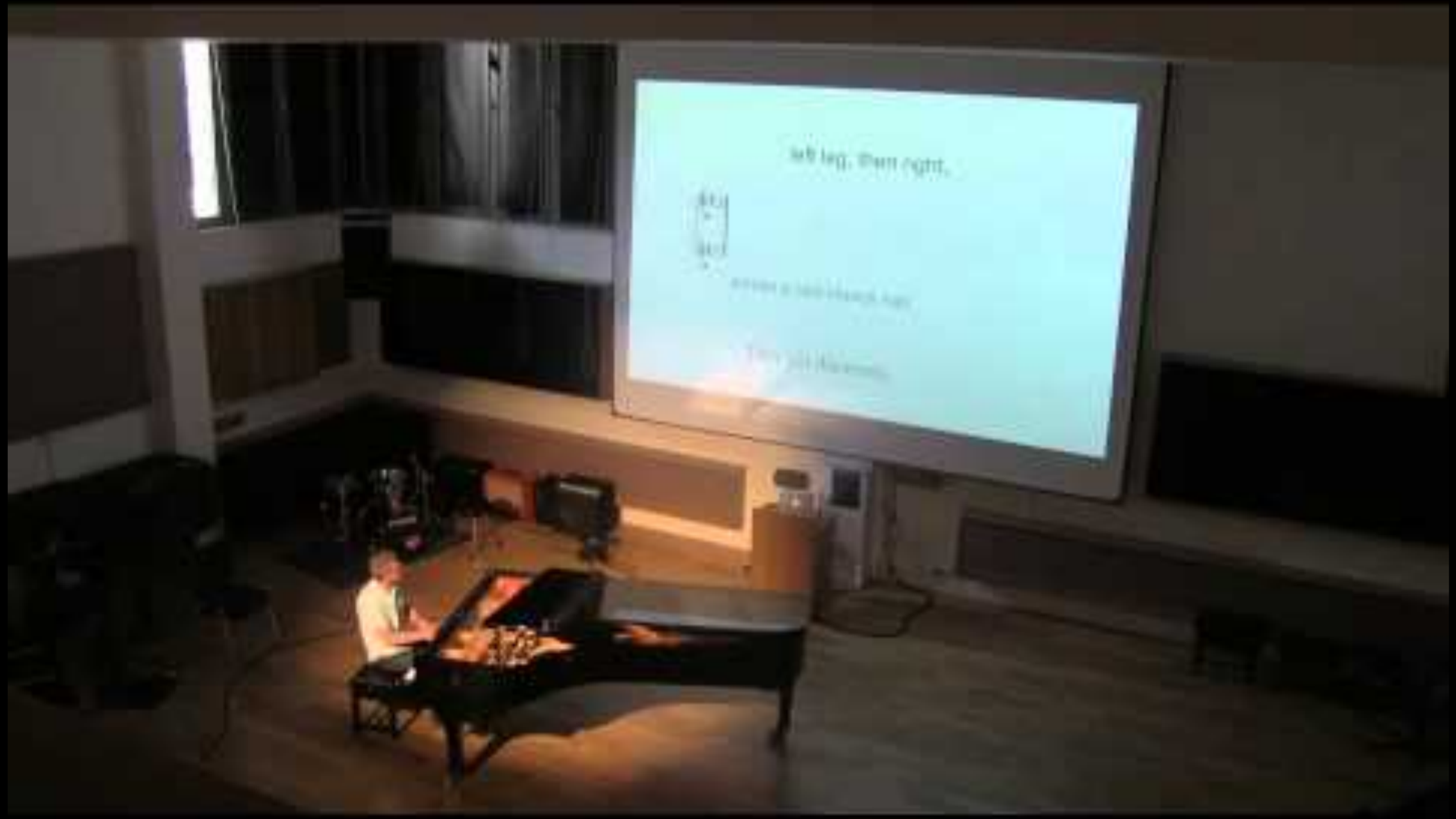
Virtuosity

- Here, I mean a smooth, (almost) unconscious link between senses and motor reactions: the ability to create performance our of these notations which are (usually) familiar musically but new in detail.
- I have worked with a number of musicians now - responses are very different - the practice tends to create portraits of the performers involved. In particular I'd like to mention the Piano and computer piece *How To Play the Piano*:

How To Play the Piano

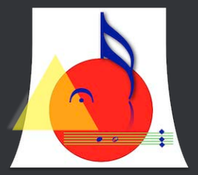





left leg, then right.

The tools

- provide a structure for the **generation** of music and/or common practice **notation** as well as text and **graphical** elements (including raster and vector images).
- 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)

Forthcoming events

- **Semaphore/Choreograms** Early Dance Circle Biennial Conference, High Wycombe, 8th April 2016 - involves rudimentary dance notation
- **Choreograms** Recital Hall, Anglia Ruskin University, Cambridge, Saturday April 23rd
- **Edge Violations** Ian Mitchell, clarinet, Recital Hall, Anglia Ruskin University, 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

any questions?

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this presentation is available at
http://rhoadley.net/presentations
as **virtuosity2016.pdf**

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

Lost in translation - problems and questions?

- The score is designed to be what it is: **leave it alone!**
- It amplifies the importance of **automation** in enabling more complex behaviour at higher levels, as in performance.
- **Tool**, **technique** or **composition**?
- What about **interpretation** of musical detail?
- Live notation: is it too **difficult** to play?

Lost in translation - problems and questions?

- x, y and z maps to pitch, duration, amplitude, chordal complexity, timbre? Is this all too **simplistic**? (Yes)
- technicalities: how best to implement **rotation** (e.g. Earle Brown's *December 1952* and display the resulting 'live' notation.