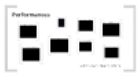

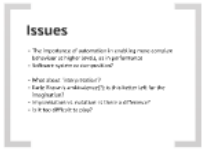

contact:
richard.hoadley@anglia.ac.uk
or
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this presentation is available at
http://rhoadley.net/presentations

Variations on a Theme by Earle Brown

INTIME
Coventry, October 2013

Richard Hoadley
Digital Performance Laboratory
Anglia Ruskin University

Three Streams

- algorithms (patterns)
- physical computing (microprocessors, etc.)
- notation/representation

Cross-domain mapping

these three streams are, while musical, cross-domain and interdisciplinary, and therefore well matched to synaesthetic links (term used with caution)

Performances

Gaggle @ HCI conference, Cambridge 2009

Gaggle v2

The Fluxus Tree, LIPAM, Leeds, September 2012

The Fluxus Tree, Intime Syposium, Coventry University, 2012

Museums, interfaces, spaces, technologies, 2010

Triggered, Kings Place, London, 2011

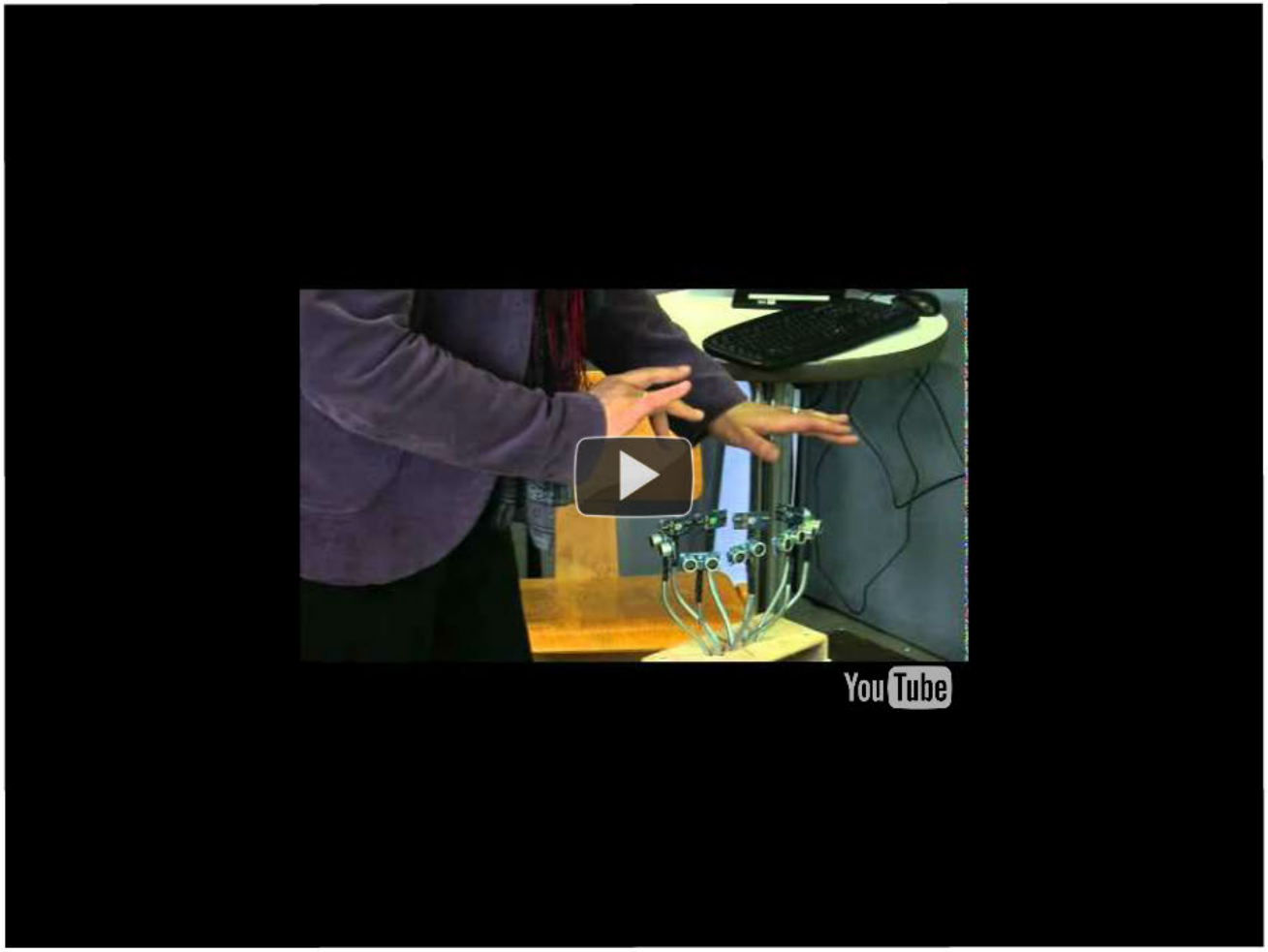
Public interactions with the Fluxus Tree at the Cambridge Festival of Ideas, October 2012

[to display, or not to display, the notation?]

Gaggle @ HCI conference, Cambridge 2009

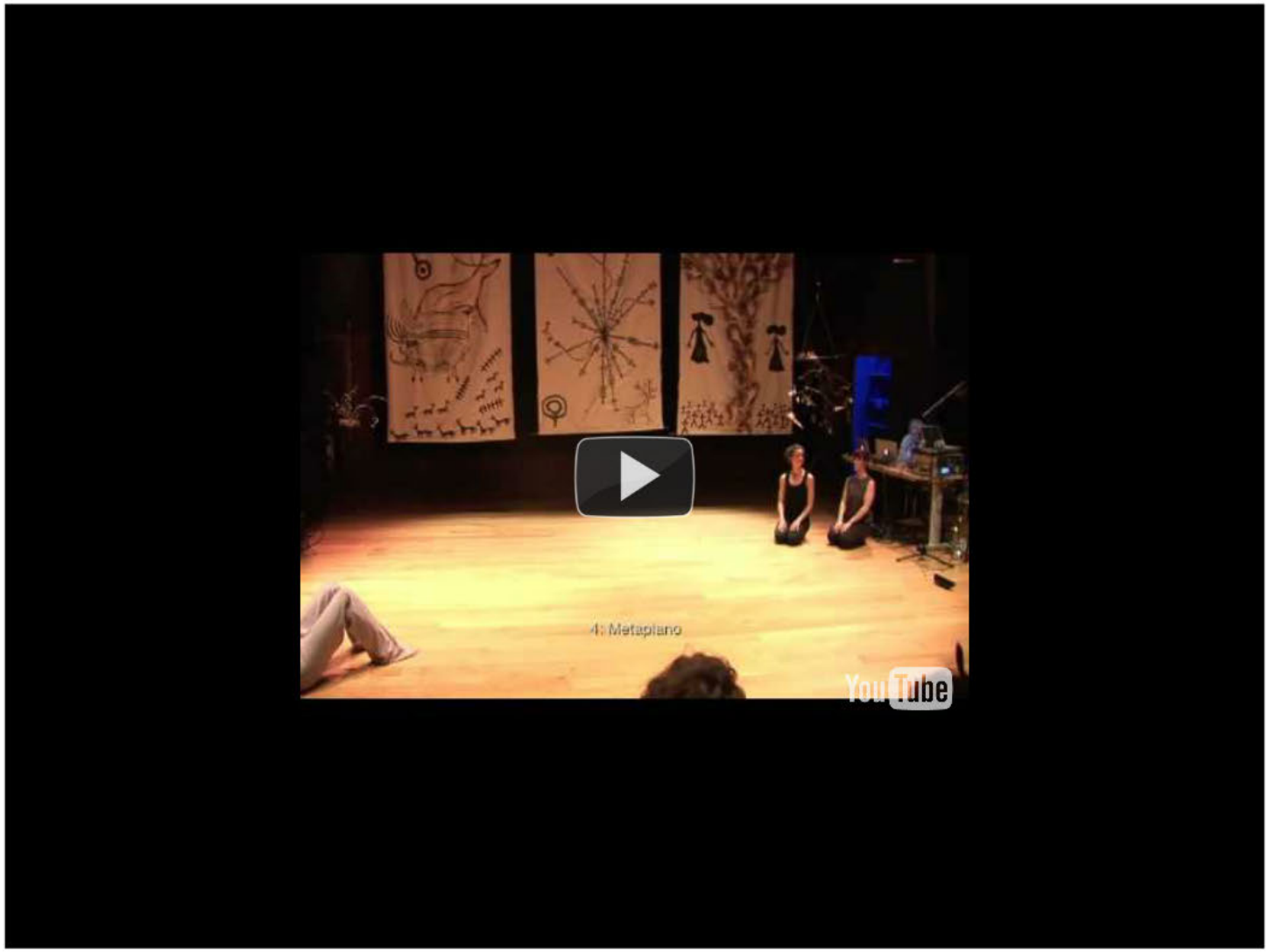
www.youtube.com/watch?v=_h98CGJG9Qw

Museums, interfaces, spaces, technologies, 2010



www.youtube.com/watch?v=FroFT1vHU0

Triggered, Kings Place, London, 2011



www.youtube.com/watch?v=W3vnuA3torc

The Fluxus Tree, LIPAM, Leeds, September 2012

www.youtube.com/watch?v=wH0mjb-jf8Q

Quantum², Sensations Festival, Empty Shop, Meadows Shopping Centre, Chelmsford, Saturday September 28th

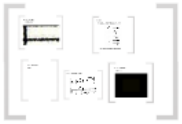
www.youtube.com/watch?v=-mq6ejdP0hg

Why?

- I have always felt that music in performance is highly visual: musical instruments are physical, visual entities; these and other references to and metaphors of music are commonly used in visual and graphic arts (Picasso, Matisse, Klee, Mondrian, Marclay, Maclaren)

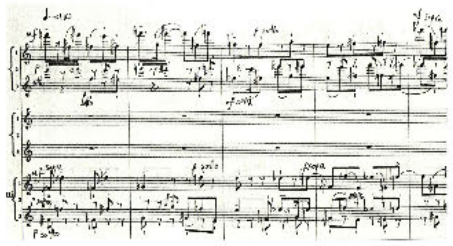
- Music scores are intriguing graphically (or intriguingly graphic); many musicians (Satie, Cardew) and artists (Kandinsky) have exploited this

- Musical instruments are finite pieces of technology. Those who are skilled at playing have something solid to push against (unlike computers); this physicality implies a physical form, the style and functionality of which has an aesthetic, sculptural perspective.



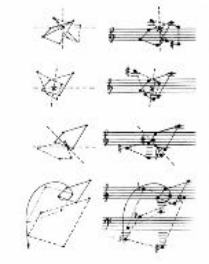
Richard Hoadley

Four Archetypes, 1995



Kagel

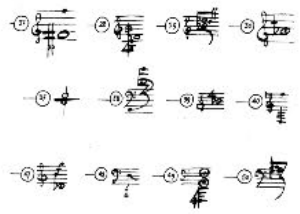
From Kagel's essay 'Translation-Rotation', Die Reihe - 7 (xxxx)



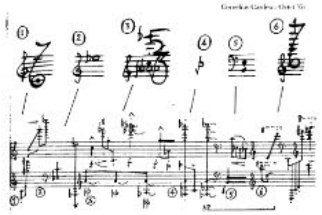
http://www.softsynth.com/jsyn/examples/pinwheel.php

Cornelius Cardew

Octet 61



Cornelius Cardew Octet 61

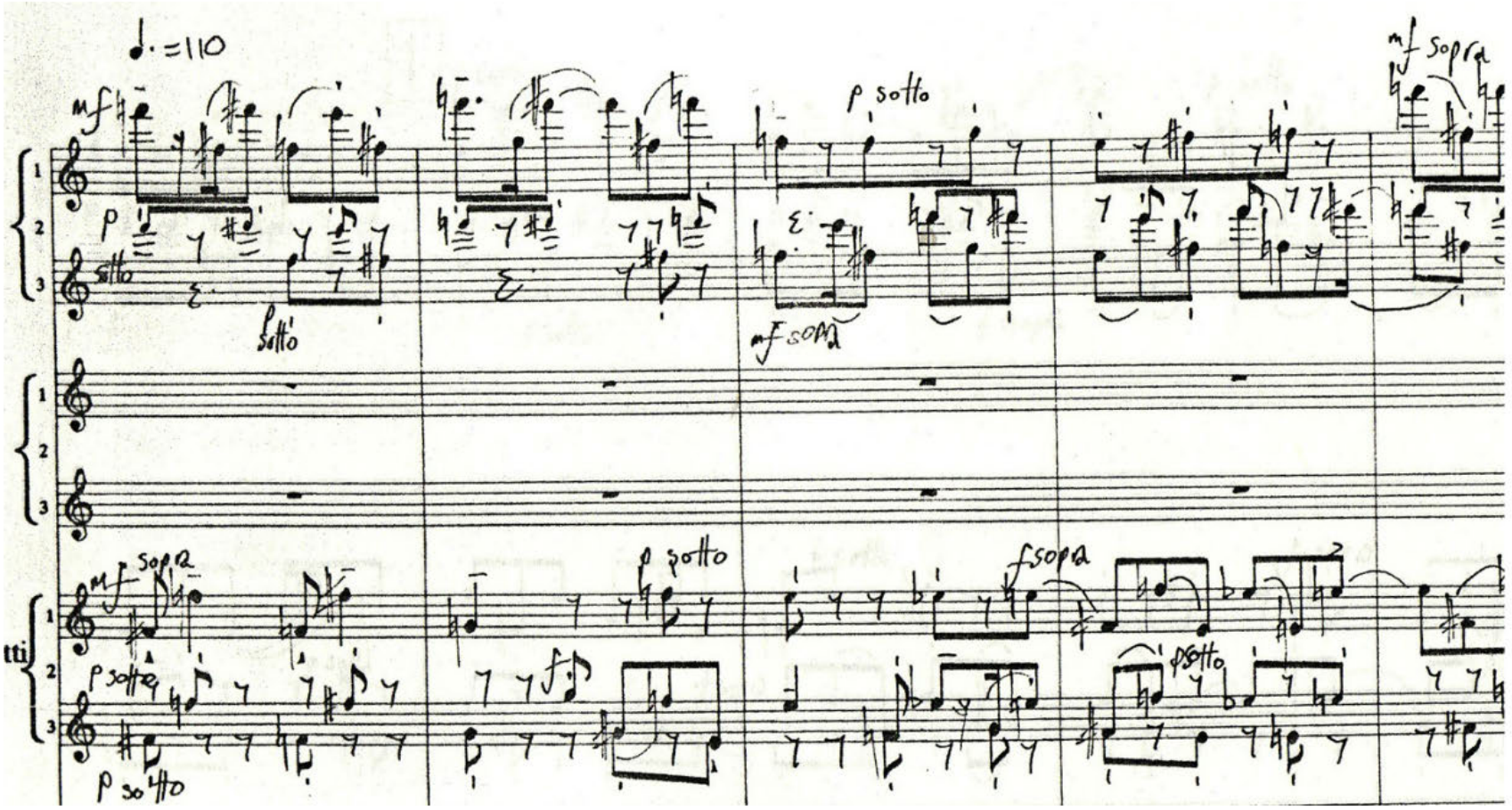


Cornelius Cardew

Treatise (1963-67)

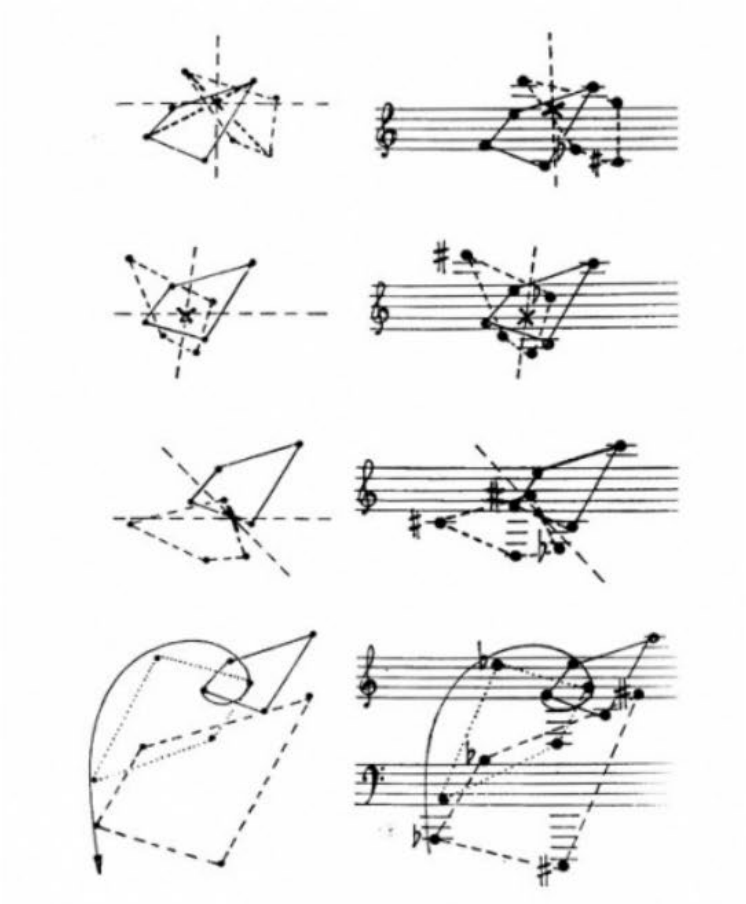
Richard Hoadley

Four Archetypes, 1995



Kagel

From Kagel's essay 'Translation-Rotation', Die Reihe - 7 (xxxx)



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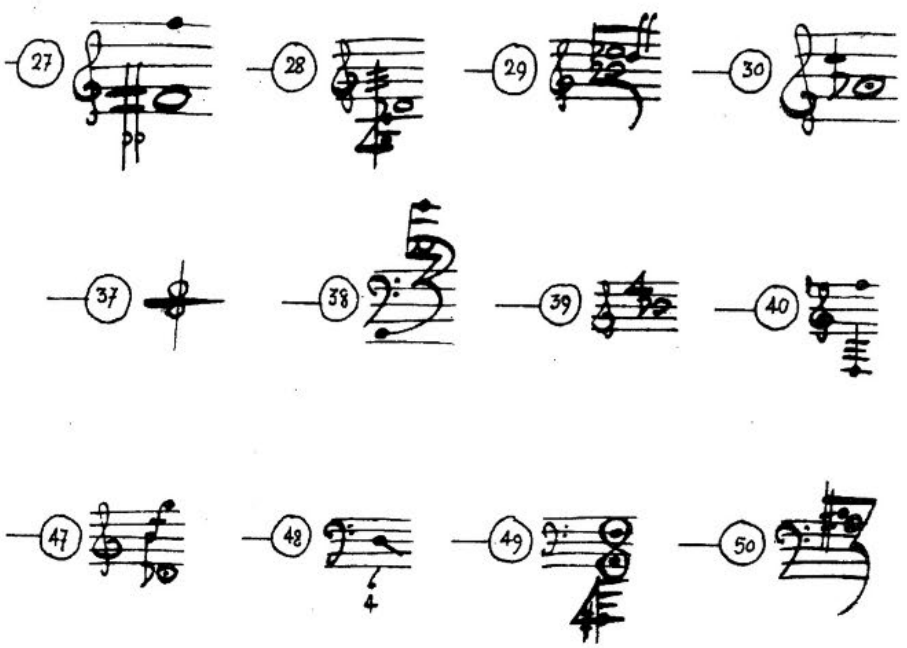
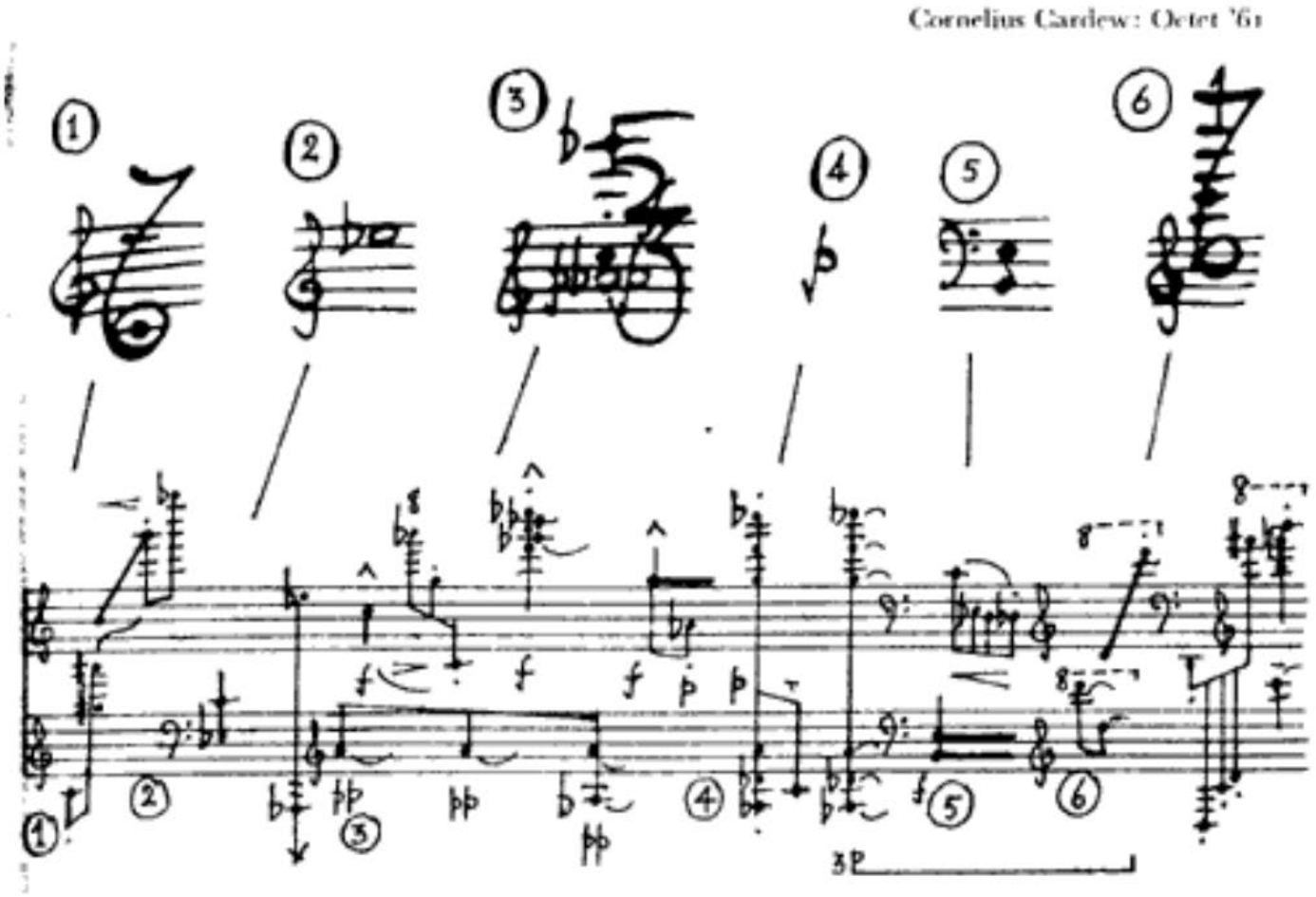
Cornelius Cardew

Octet 61



Cornelius Cardew Octet 61



Cornelius Cardew

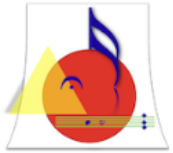
Treatise (1963-67)

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

- http://supercollider.sourceforge.net/



- http://inscore.sourceforge.net/

- http://rhoadley.net/inscore (from April 2014)

- eventually, maybe, offer the beginnings of a more standard interface for physical mapping

Earle Brown
December 1952

Earle Brown

- I have an interest in cross domain work, image and graphic manipulation in particular: December 1952 is visually appealing. I saw a version of it done where the notation was created by tracking the objects onto the lines....

- I'm not a musicologist, and really no particular fan of Earle Brown; this interests me as a way of using these tools and techniques in a musicological setting;

- but it's an interesting opportunity creatively: 'variations' on a form that's already so vague provides some interesting possibilities.

- Most people can 'see' that this might be a score and other cross-domain links;

- the work provides some interesting insights into notation, performance and performers: how does provided notation effect the performance? How is it different from truly improvised performances? How might it aid coordination of many instruments?

- Still some interesting challenges ahead regarding how and when to present notation;

- Earle Brown himself provides an interesting and not entirely positive prompt

On December 1952

Brown, E., On December 1952, American Music Vol 26 No 1, Spring 2008, pp. 1-12, University of Illinois Press

Under the influence of Calder, I considered this kind of thing to be a mobility, which is to say a score that was mobile - a score that had more than one potential of form and performance realization (page 1)

the notebook has many, many sketches of kinds of scores I thought of that would allow for multiple realizations of a sonic image and so also deal with new notational possibilities and flexibility, as well as higher degrees of spontaneity in the performance. (page 2)

...this was an attempt at correlating my own conception with an extremely rapid way of "composing, " which was, I have said, almost liKE improvising myself - in other words, realizing a graphic drawing in my own way. (page 2)

“

In my notebooks at this time I have a sketch for a physical object, a three-dimensional box in which there would be motorized elements - horizontal and vertical, as the elements in December are on the paper. But the original conception was that it would be a box which would sit on top of the piano and these things would be motorized, in different gearings and different speeds, and so forth, so that the vertical and horizontal elements would actually physically be moving in front of elements as they approached each other, crossed in front of and behind each other, and obscured each other. I had a real idea that there would be a possibility of the performer playing very spontaneously, but still very closely connected to the physical movement of these objects in this three-dimensional motorized box. This again was somewhat of an influence from Calder: some of Calder's earliest mobiles were motorized and I was quite influenced by that and hoped that I could construct a motorized box of elements that also would continually change their relationships for the sake of the performer and his various readings of this mechanical mobile. I never did realize this idea, not being able to get motors and not really being all that interested in constructing it. (page 3)

this sphere would float in water and the performer, by gently blowing on it, would make it revolve and turn. The sphere on the water could turn on any of its axes, and therefore each thing that appeared on the face of the sphere directly in front of the performer would be what he played at that moment. There would be completely composed material on those strips that made up the sphere. But each time, each performance, different elements would appear. (page 4)

”

Issues

- The importance of automation in enabling more complex behaviour at higher levels, as in performance
- Software system or composition?

- What about 'interpretation'?
- Earle Brown's ambivalence(?): is this better left for the imagination?
- Improvisation vs. notation: is there a difference?
- Is it too difficult to play?

'Translations'

- x, y and z coordinates to pitch, duration, amplitude, chordal complexity, timbre?
- rotation: see Earle Brown quote, but what about the depth of objects?
- also, how to best display the 'live' notation taken from these translations?

Demonstration

- INScore/SC (digiphone)
- Variations
- Rotations

Forthcoming Performances

Calder's Violin
INTIME Symposium, Coventry
1600 20th October 2013

Quantum^2
Ruskin Gallery, Cambridge Festival of Ideas
1930 27th October 2013

Thank you

any questions?

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or
research@rhoadley.net

this presentation is available at
http://rhoadley.net/presentations