

Dual-function Interfaces: the traditional musical instrument and/as samplers

Jamie Howell

PhD, University of Southampton, UK
jdh16@soton.ac.uk

Oliver Sellwood

Lecturer, University of the Arts London, UK
o.sellwood@lcc.arts.ac.uk

Overview

1. Introduction to the project
1. Background
1. Analysis of works-in-progress
1. Reflections on challenges and future development
1. Performance of both works-in-progress
1. Q & A

Compositional Questions

- How do we retain the highly developed relationship between instrument and instrumentalist in hybrid performance environments?
- How can we give performers control of digital systems without disrupting this relationship?
- How can we shape listeners' experience of these hybrid environments?

Introduction to the project

- Instrumentalists sample one another in real time
- Sample recording and playback is facilitated by additions and extensions to the instruments
- These additions and extensions should have as little impact as possible on the playing of the instrument

BACKGROUND





IDENTICAL

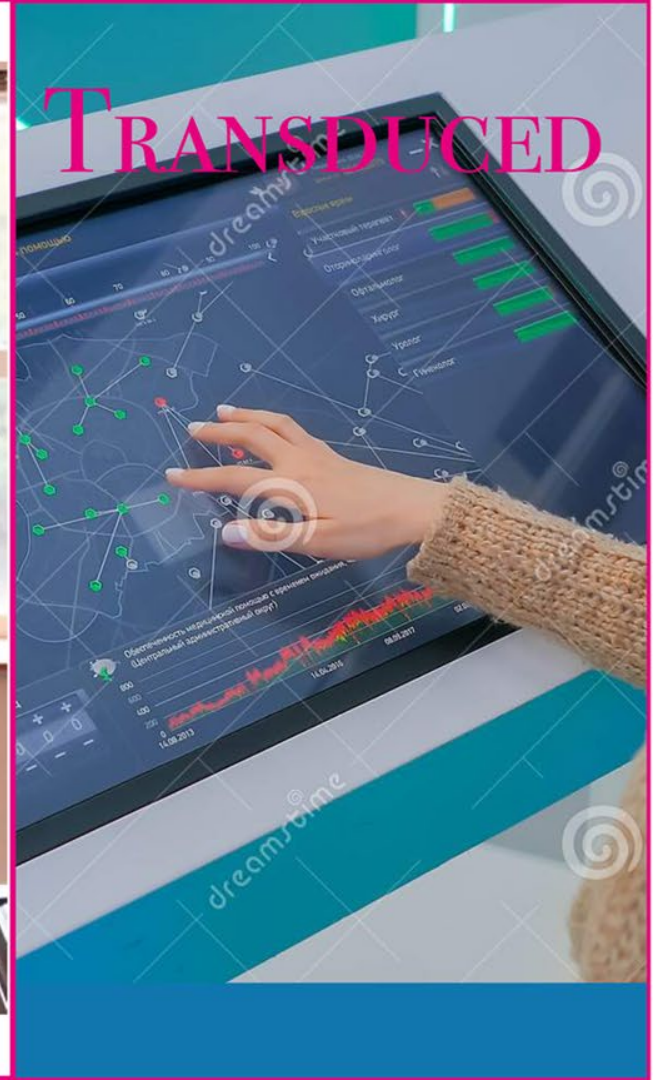


Thor Magnusson, "Ergodynamics
and a Semiotics of Instrumental
Composition," *Tempo* 73, no.
287 (2018): 44
[Image by presenters]

DIVERGENT



TRANSDUCED



“For Merleau-Ponty, technology—be this musical-instrumental technology or any other kind—was always entangled with the ways it was used, and in the ways in which certain types of use became naturalised, habitualised, and automatic for the user...This habitualisation as such goes beyond the automatic, going so far as to make that piece of technology—momentarily at least—fade out of view.”

Samuel Wilson, “Building an Instrument, Building an Instrumentalist: Helmut Lachenmann's *Serynade*,” *Contemporary Music Review* 32, no. 5 (2013): 429

STREAMS (2024)

Streams

OP 0033 [2024-06-13 150054] R

Sample Controls MPE

Classic
1-Shot

0:00 0:02 0:04 0:06 0:08 0:10 0:12

Gain 0.0 dB TRIGGER GATE Slice By Transient Sensitivity 76 % Playback Mono

WARP as 8 Bars Beats :2 *2

Filter Clean 12 24 Frequency Res 22.0 kHz 0.0 % LFO 1.00 Hz Hz

Fade In 262 ms Fade Out 275 ms Transp 0 st Vol < Vel 35 % Volume 0.00 dB

Streams

5

CAPTURE

improvise using these phrases as starting points
all notes still use swells; more textural than melodic

5

6

short sawing
action

pno

long

CAPTURE

play chords with 4th drum sound

8

Streams

3

a little quicker

pno sample pno

CAPTURE

each chord sounds immediately as the reverse piano sample ends

The musical score consists of three staves. The top staff is a piano track with a treble clef, showing three chords with dynamic markings and performance instructions. The middle staff is a capture track with a treble clef, labeled 'CAPTURE'. The bottom staff is a piano track with a bass clef, showing three chords. The score is marked '3' and 'a little quicker'.

DESIGNATE (2024)

Excerpt from *Designate*

8

repeat until drum cue, slowing down with the drums throughout

Pno.

91

mf

Ped.

repeat until around half speed.
Slowing down with the piano throughout

Dr.

p

mf

“To the extent that they are expected to convey liveness in performance, musicians must also communicate connections between physical gestures and resultant sounds to their audiences.”

Mark J. Butler, *Playing with Something That Runs: Technology, Improvisation, and Composition in DJ and Laptop Performance*. (Oxford: Oxford University Press, 2014), 99.

Thor Magnusson, *Sonic Writing: Technologies of Material, Symbolic and Signal Inscriptions*, (London: Bloomsbury Academic, 2019), 36.

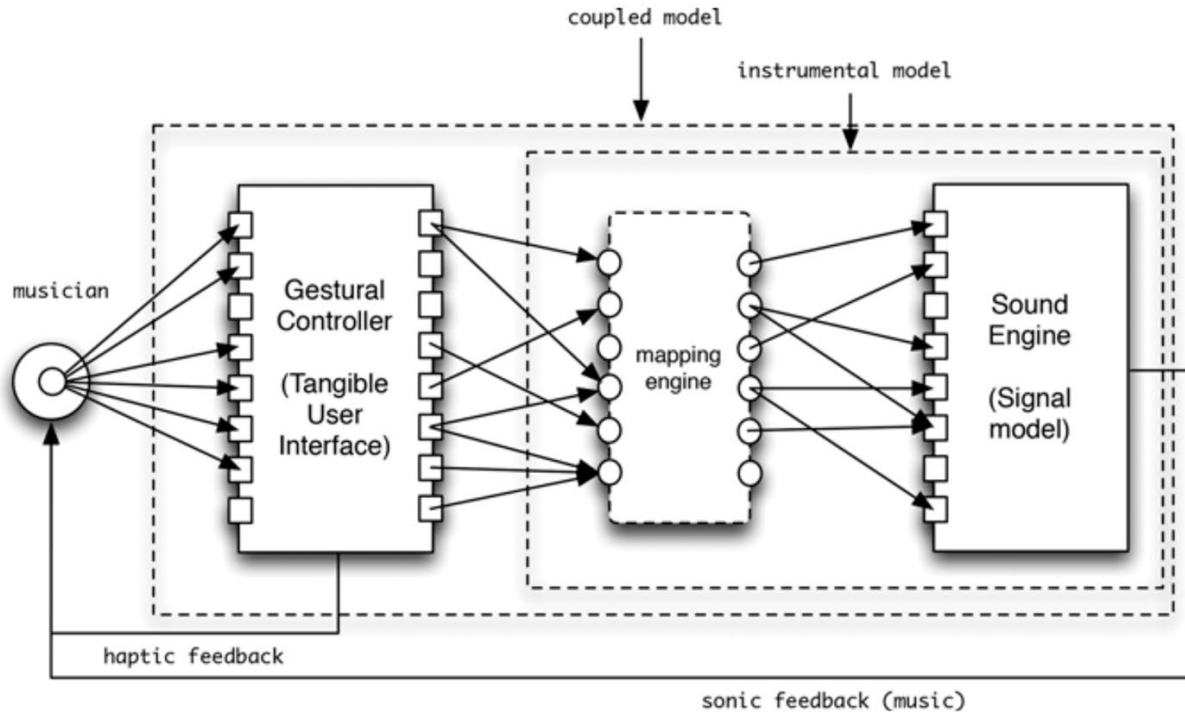


Figure 2.1 A typical explanatory model of an electronic musical instrument (see Wanderley 2000; Leman 2008; Wessel and Wright 2001). New musical instruments typically consist of these three elements. © Thor Magnusson.

REFLECTIONS

Excerpt from the instruction page of *Streams*

	Begin capture	Stop capture <i>[can be pressed in quick succession]</i>
Drummer <i>(sampling piano)</i>	G	G# - A - A#
Guitarist <i>(sampling drums)</i>	C	C# - D - D#

Excerpt from *Designate*

3

32

Pno.

The image shows a musical score for Piano (Pno.) and Drums (Dr.). The Piano part consists of two staves: a treble clef staff and a bass clef staff. The treble staff begins with a measure of rest, followed by a series of eighth-note chords and a triplet of eighth notes. The bass staff begins with a measure of rest, followed by a triplet of eighth notes and a dotted quarter note. The Drums part is on a single staff with a drum set icon. It features a 'press pedal' instruction with a plus sign and a cross symbol. The drum part includes a triplet of eighth notes and a dotted quarter note. The score is marked with a '3' in a box at the top, a '32' at the beginning, and 'p' (piano) dynamics. Pedal markings 'Ped.' are present under the piano part. The key signature has two flats.

Dr.

press pedal

p

Ped.

Performance

Designate (2024) - Olly Sellwood

Piano: Frankie Dyson Reilly

Drumkit: Jamie Howell

Run time approx. 5 minutes

Streams (2024) - Jamie Howell

Piano: Frankie Dyson Reilly

Drumkit: Jamie Howell

Guitar: Notto Johannes Windju The lle

Run time approx. 6 minutes

References

Butler, Mark J. *Playing with Something That Runs: Technology, Improvisation, and Composition in DJ and Laptop Performance*. Oxford: Oxford University Press, 2014.

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