# Chapter 13. Meeting 13, Workshop: Performance and Improvisation

#### 13.1. Announcements

- Download the most recent martingale
- Due Wednesday, 16 March: Controller/Interface/Instrument Design 1 Report

Will accept by midnight Friday, 18 March

Must submit code and report

See syllabus for report details

## 13.2. Reading: Collins, Handmade Electronic Music

- Collins, N. 2009. *Handmade Electronic Music: The Art of Hardware Hacking.* 2nd ed. New York: Routledge.
- Electromagnetic induction: using telephone coils, guitar pickups, wrapped wire to find unconventional sounds in the air
- Using radios to pick up noise, or feedback
- Driving a speaker with a direct current; modulating driving current with feedback (The Victorian Synthesizer)
- · Speakers as microphones and vice versa
- · Motors as oscillators: The Telharmonium
- · Reading magnetic data: using tape heads and card readers to sonify data
- Piezoelectric elements as microphones and drivers; Rainforest

## 13.3. Quiz 2

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#### 13.4. The Performance Interface

Load: arizaWork02-performance\*.test.pd

martingale/comopositions/arixaWork02/arizaWork02-performance\*.test.pd

- Select and provide controller number to right inlet of [arizaWork02-performance\*]
- Enter a part file, e.g., arizaWork02-partA.txt
- Advance to scene 1

### 13.5. Exercise: Pass-the-Gesture Solo

- Load: arizaWork02-performance\*.test.pd
  martingale/comopositions/arixaWork02/arizaWork02-performance\*.test.pd
- Performer A, instrument 4: Create a memorable musical gesture, lasting between 5 and 15 seconds
- Performer B, instrument 4: Re-create the musical gesture of Performer A, not necessarily using the same sound source, but maintaining temporal and spectral outline.
- Continue process from performer to performer, moving around in a circle
- Variation: Performer B responds to A not in similarity, but maximal contrast, producing the opposite idea

#### 13.6. Exercise: Pass-the-Gesture Ensemble

- Load: arizaWork02-performance\*.test.pd
  martingale/comopositions/arixaWork02/arizaWork02-performance\*.test.pd
- Ensemble, instrument 1: Create a subtle, low frequency background texture, contributing a small bit to the total sound
  - Performer A: Create a memorable musical gesture, lasting between 5 and 15 seconds; repeat it twice, with variable space in-between gestures.
- Performer B: Re-create the musical gesture of Performer A, not necessarily using the same sound source, but maintaining temporal and spectral outline.

Ensemble: Continue

- Continue process from performer to performer, moving around in a circle
- Variation: Performers A and B selected in pairs: A and B in a dialog or argument

• Variation: Performer B responds to A not in similarity, but maximal contrast, producing the opposite idea

## 13.7. Work II

- Three part form
- 18 scenes
- Focus on texture and heterophony

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