## Chapter 9. Meeting 9, Discussion and Workshop

#### 9.1. Announcements

- No class next Tuesday (Monday schedule)
- Make appointments to meet with me to talk about projects

#### 9.2. Tape Processes

- · Working with tape promoted procedural approaches to creating music
- Acoustical compositional practices of serialism, indeterminism, and minimalism suggested organizing principles

#### 9.3. Quiz

• 10 Minutes

#### 9.4. Workshop: Sound Sequencing and Layering

- Open Audacity or another DAW; create three tracks
- Mute the first audio track; place a few sound files in this track
- Select and copy regions of audio from this track to the second and third tracks
- Use changes in amplitude to fade and cross fade between these two tracks
- Repeat, edit, listen, compose

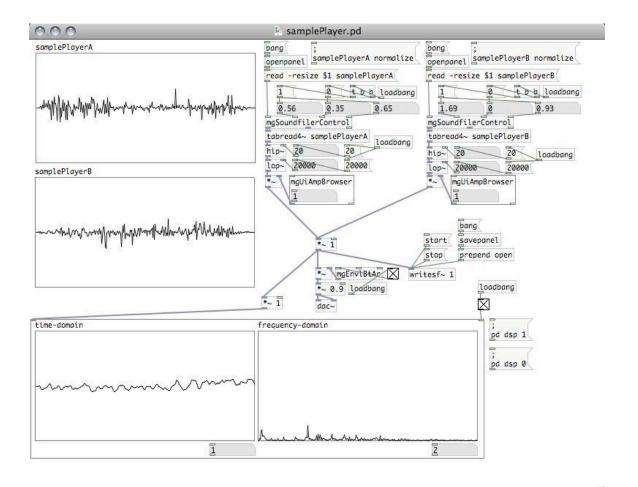
## 9.5. Listening: Cage

- John Cage (1912-1992)
- 1951: Cage, with grant form Paul Williams, *Project of Music for Magnetic Tape* in New York
- · Works with studio and equipment of Luis and Bebe Barron
- Composes *Imaginary Landscape No. 5*, employing audio from 42 records organized into multiple tape parts cut according to chance operations

- Cage commissions Barrons to create collection of field recordings
- Cage develops a system for selecting and organizing material using the I Ching
  - 8 Tapes assembled and played simultaneously
  - Toss three coins six times to generate a random number between 1 and 64
  - Random values used to select type of sound, track assignment, duration, and envelope and tape cut
  - 192 page score provides creative patterns for cutting and splicing tape (Homes 2008, p. 83)
  - Took over 9 months to compose
- Cage: "Williams Mix" (1952)

# 9.6. Workshop: Looping in PD

- Install Martingale, open PD
- · Open demo/samplePlayer.pd



- Press "bang" above two top most [openpanel] boxes; open "sampleFrench.aif" for both samplePlayerA and samplePlayerB
- Set start and end times for both samples at .25 and .27
- Set playback speeds for each player at 1 and .98
- Repeat, edit, listen, compose

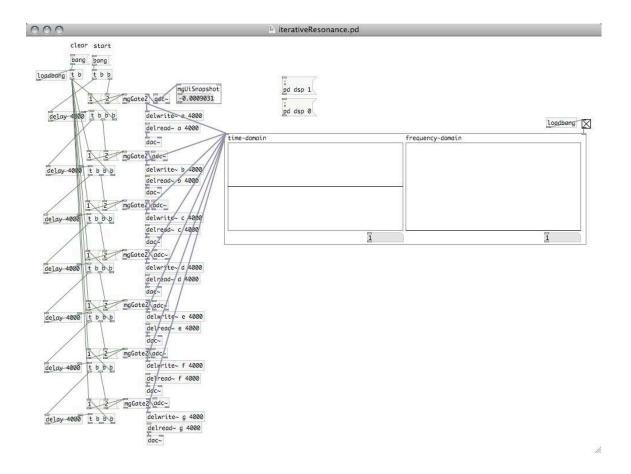
## 9.7. Listening: Reich

- Steve Reich (1936-)
- Influenced by techniques of minimalism based in part on music of Terry Riley, La Monte Young, and others
- Explored phasing, or phase-shifting, with tape loops: gradual changes in time alignment of loops

- Employed a recording of a Pentecostal preacher (Brother Walter) recorded in Union Square, San Francisco
- Up to eight tape loops of the same fragment of speech are layered
- Reich: "Its Gonna Rain" (1965)
- "Scorification" of a technological process for acoustic instruments
- Reich: "Piano Phase" (1967)

### 9.8. Listening: Lucier

- Alvin Lucier (1931-)
- "godfather of process music" (Holmes 2008, p. 395)
- Iterative re-resonance, employing filtering and noise from room, microphone, and speaker [demo/iterativeResonance.pd]



- Generations re-recorded (at least) 16 times
- Lucier: "I Am Sitting in a Room" (1969)

## 9.9. Workshop: The Techniques of Early Tape Music

- Install Martingale, open PD
- Open demo/samplePlayer.pd
- Load one or more samples
- · Manipulate playback speed and start and end loop points
- Adjust low and high pass filters to select regions of sound

- Record sounds by first pressing the "bang" above the [savepanel] object, then pressing [start] and [stop]
- Import these sounds into Audacity or another DAW, position and layer
- Repeat, edit, listen, compose

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21M.380 Music and Technology (Contemporary History and Aesthetics) Fall 2009

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