Chapter 17. Meeting 17, Practices: Approaches to Composing Improvisations

17.1. Announcements

- Due today: Controller/Interface/Instrument Design 2 Proposal
- Quiz on Monday
- Due Wednesday 13 April: Performance Frameworks Draft
- Please test and practice Work II for next Wednesday

17.2. Approaches to Composing Improvisations

- Scripts: partitioned sections (scenes) with verbal instructions
- Games: encouraging interaction through play, desire to win
- Graphic Scores: directly or indirectly represent or suggest musical parameters

17.3. Approaches to Composing Improvisations: Scripts

- Problem of using natural language
- John Cage: 4'33"
Cover page of John Cage's 4' 33" (Tacet, any instrument or combination of instruments) removed due to copyright restrictions.
Paragraph of text instructions to performers from John Cage's 4' 33" (Tacet, any instrument or combination of instruments) removed due to copyright restrictions.
17.4. Approaches to Composing Improvisations: Games

• Iannis Xenakis
  
  • Works using game theory
  
  • Duel (1958-59): Two conductors and two orchestras, with each conductor facing the other
    6 categories of events, where certain combinations from each group produce quality scores
    Event types are given to each orchestra without the other’s knowledge
    An orchestra wins by playing the best strategy
  
  • Strategie (1962): two orchestras with conductors back to back
    6 classes of textures
17.5. Approaches to Composing Improvisations: Graphic Scores

- What would a graphic score of the first two sections of Work II look like?
- Common assumptions about time and pitch: horizontal and vertical space
- Christian Wolff: For six players
• Morton Feldman: Projection IV
Cardew (1936-81): Treatise (1963-67)

Assistant to Stockhausen at WDR Cologne from 1958 to 1960

Joined AMM in 1966

Stated that space does not correspond to sound; stated that goal was musicalness in the notating

Score is 193 pages
17.6. Reading: Dennis, Cardew’s Treatise

• What are the main elements of the score to Treatise?
• What elements from standard western notation are maintained?
• What criteria did Cardew look for in people performing this work?
• Listening: Cornelius Cardew, Treatise
  
  Audio: http://ubu.artmob.ca/sound/cardew_cornelius/memorial_concert/Cardew-Cornelius_Memorial-Concert_1-03_Treatise.mp3

17.7. Listening: Cardew

• Listening: Cornelius Cardew, “Paragraph 2,” The Great Learning, 2000

• Scratch orchestra formed in 1968: a large, experimental improvisatory ensemble for interpreting The Great Learning
• Great Learning score
17.8. Quantizing a Real-Time Pulse Stream

- [mgQuantizeEventFloat]
• [mgQuantizeEventList]
• [mgHwDualAnalogButtonQuantize]
• Example: quantizingTriggers.pd
17.9. Dynamic Stochastic Synthesis

- Technique of algorithmic waveform construction developed by Xenakis
- [mgSynthStochWave_v]
• [mgSynthStochWave]
17.10. Producing a Monophonic Instrument

- Efficiency of using a single oscillator
- Challenge of triggering
- ![NonZeroFilter][mgNonZeroFilter]
• [mgNonZeroMonoTrigger4]