

DANM 22 I

7U, 18 February 2010

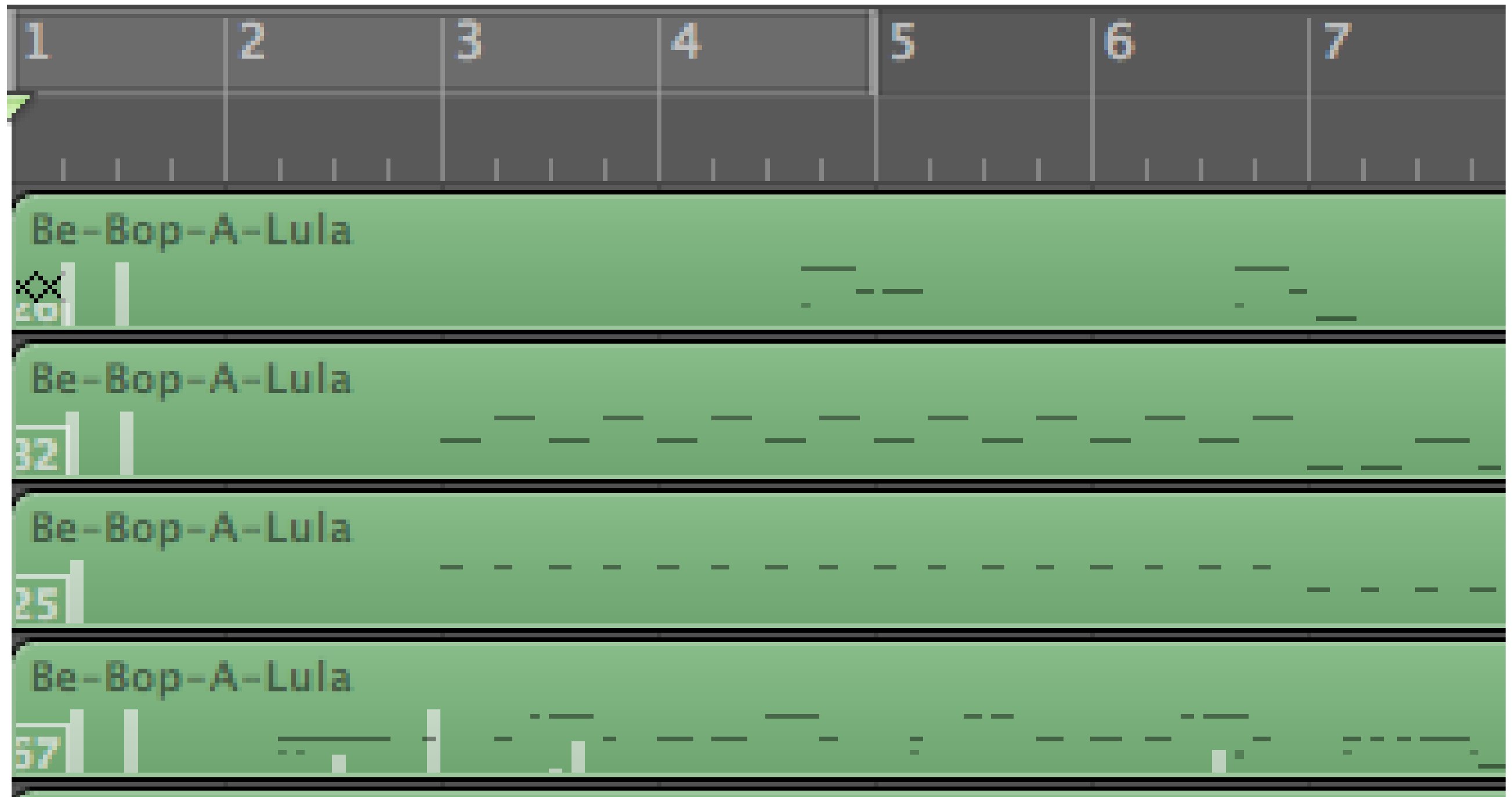
Patterns That Move

- 1D + time: friezes that move (music)
- 2D + time: wallpaper that moves (abstract animation)

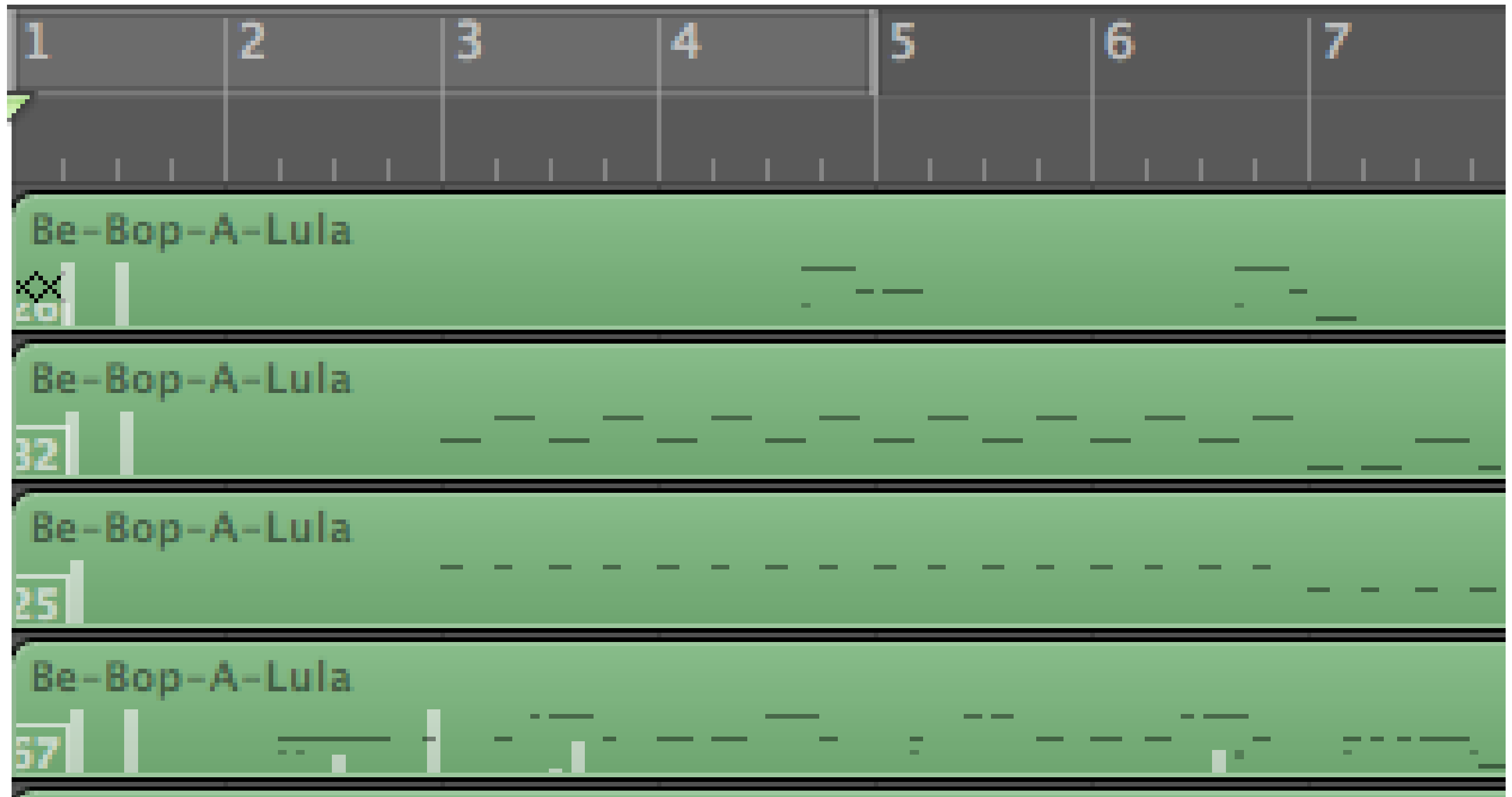
Visual Representations of Music

- Staff notation
- Player piano rolls
- Midi sequencers

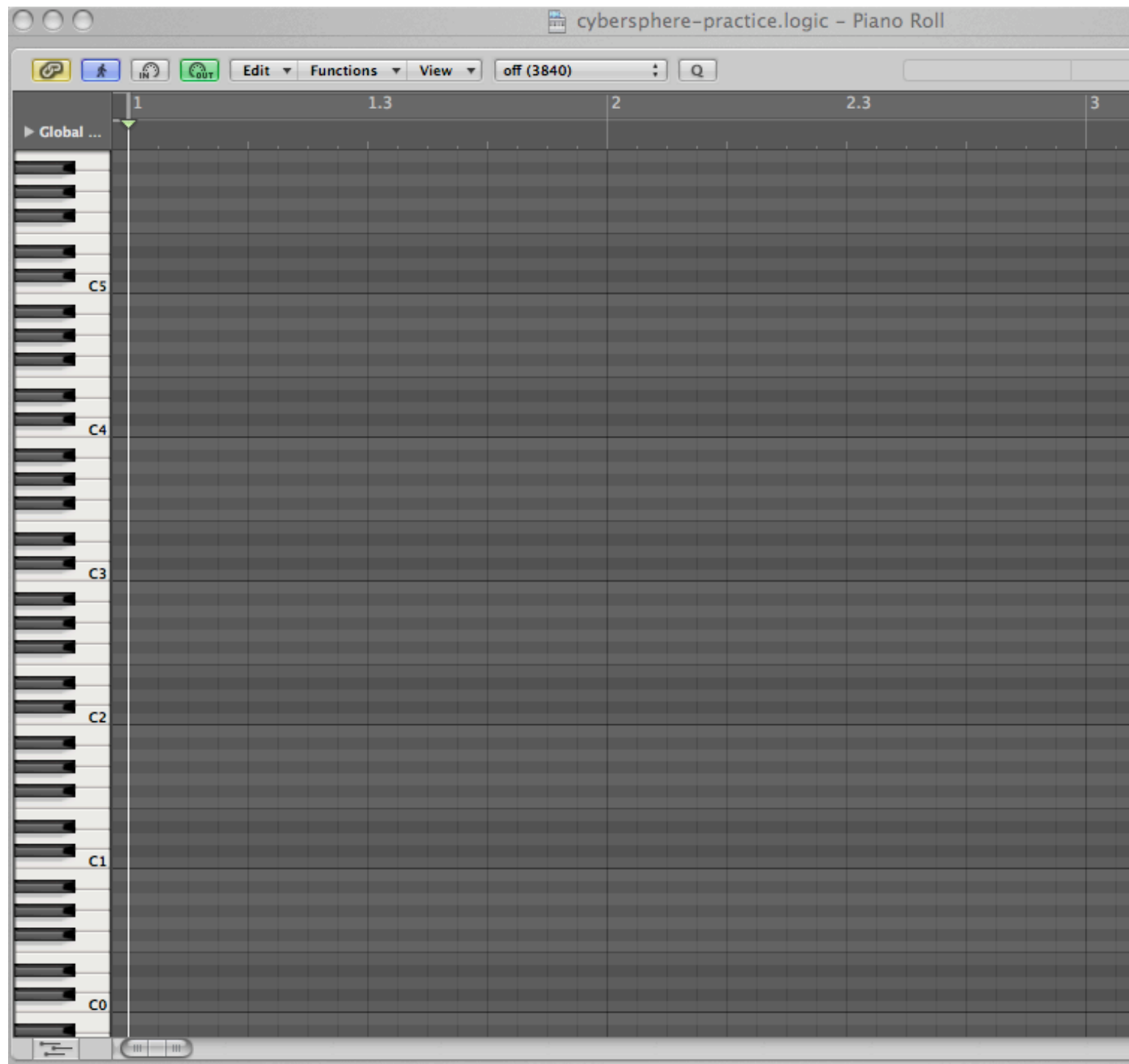
Midi Sequence



Midi Sequence



Piano Roll Option



Symmetries of Music (Western)

- rhythmic modes
- isorhythms
- canons
- piano-roll symmetries (7 frieze groups)
or other (eg, Nancarrow)

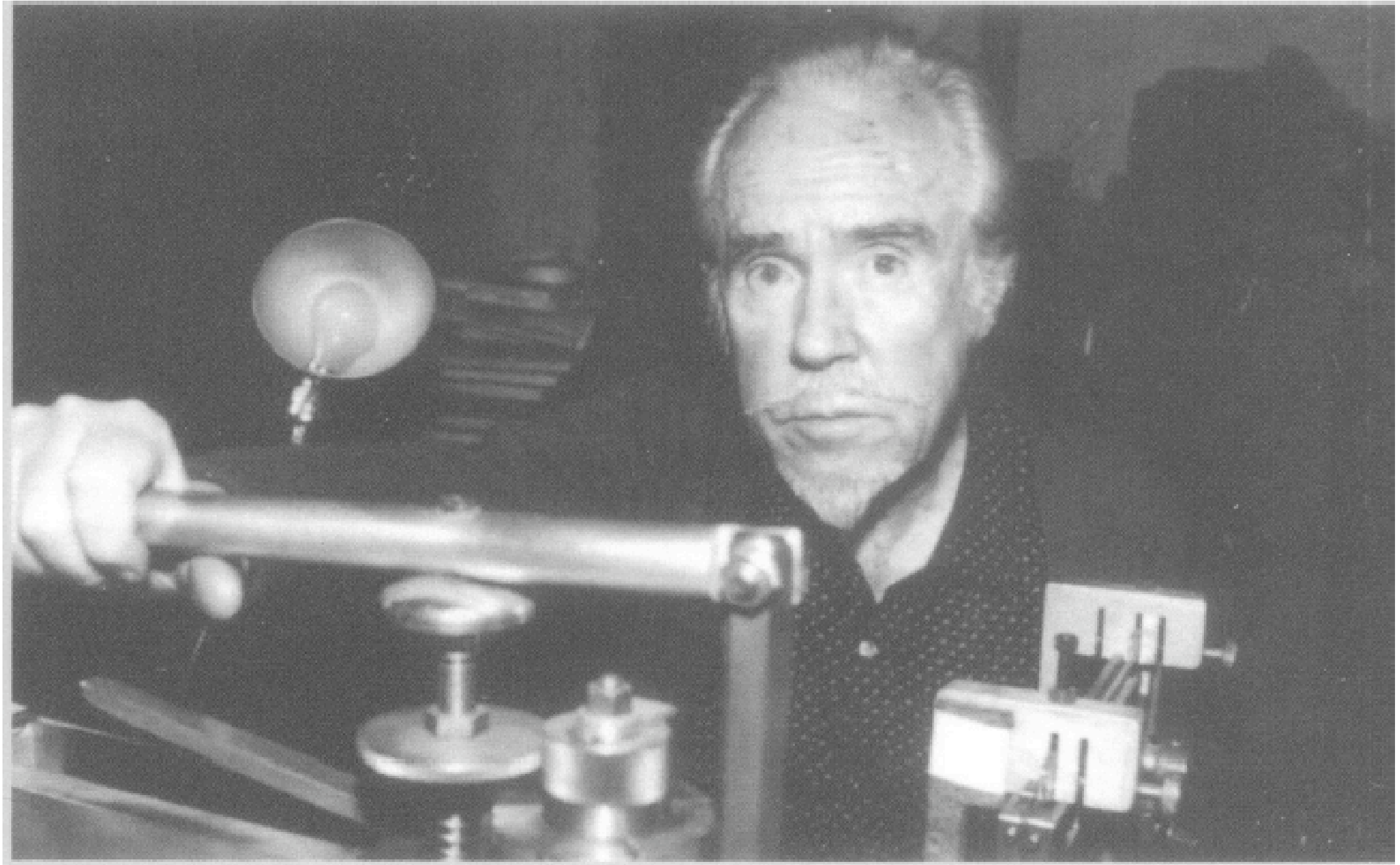
Nancarrow Chronology

- 1912, born, Texarkana, AR
- 1932, BA Music, Cincinnati
- 1937, Spanish Civil War
- 1939, new-music, New York City
- 1940, read Henry Cowell, *New Musical Resources* (re player piano)

- 1942, fled to Mexico City
- 1947, obtained a player piano punch
- 1948, Rhythm Study #3 ...
- 1993, Study #5 I
- 1997, died



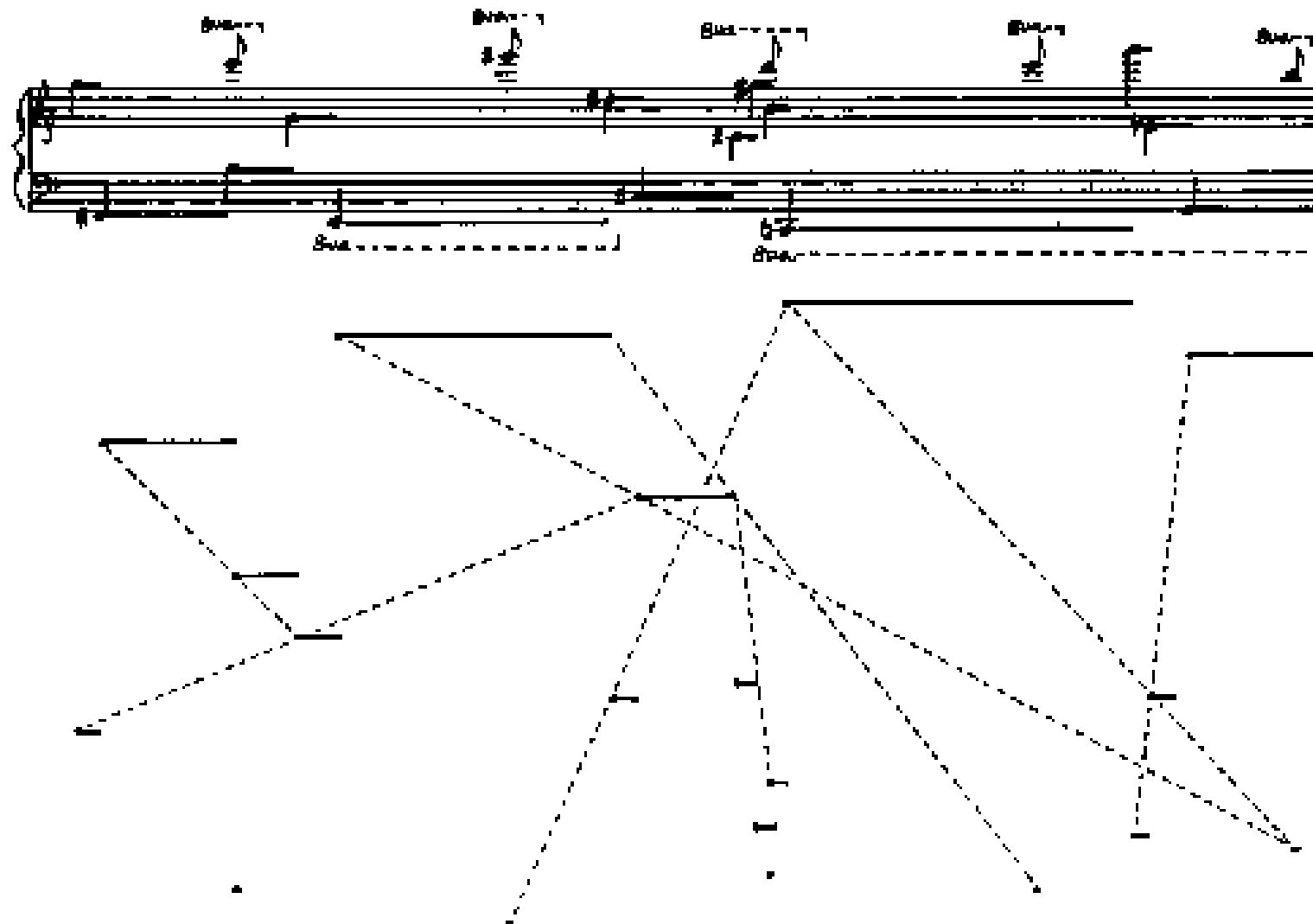
Gann, front cover



Gann, back cover

Study #23

ca 1950, 4 min 33 sec



Example VI-5. Study No. 23, systems 54-55.

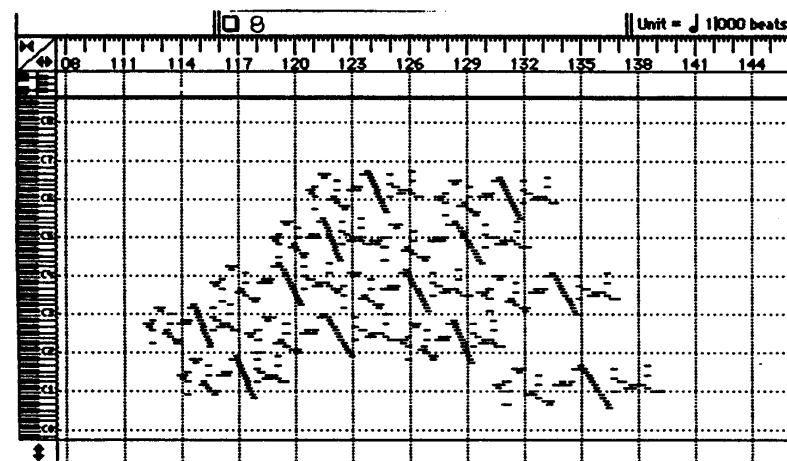
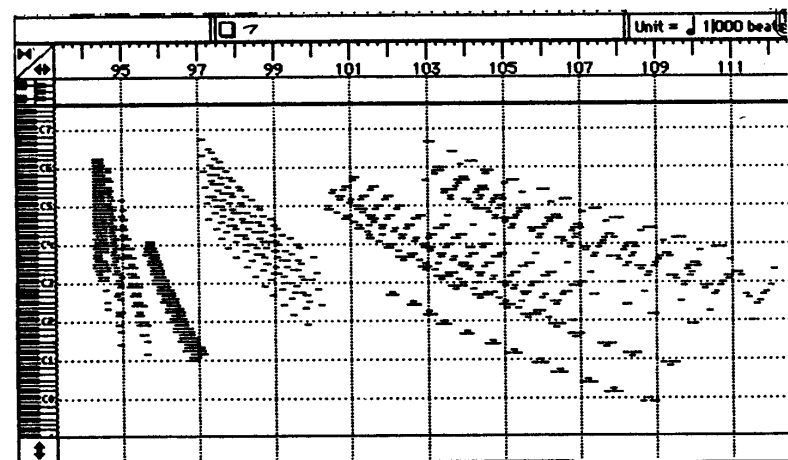
on
63

Study #37

ca 1969, 10 min 42 sec

Beyond counterpoint: the sound-mass canons

Example 8.23 Study No. 37, Trimpin's MIDI diagram of canons 7 and 8



The End