

A reading score

for the electronic music composition

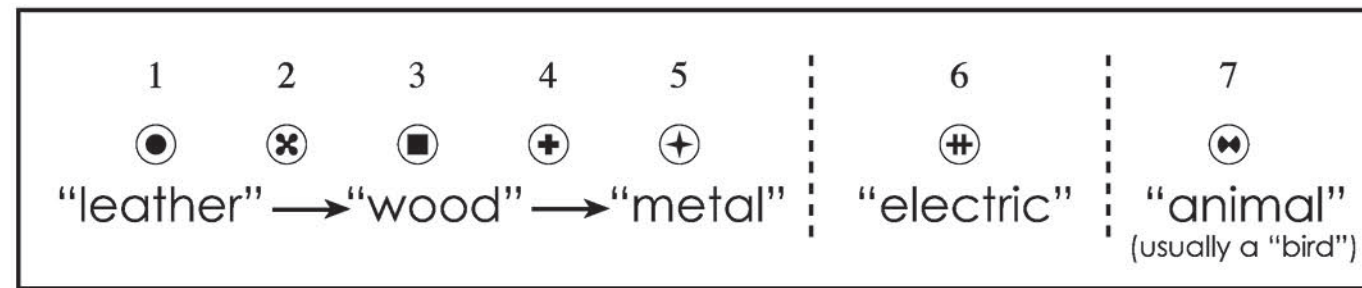
Sonal atoms (part I of Half-life) by Curtis Roads

Transcription by James Ingram

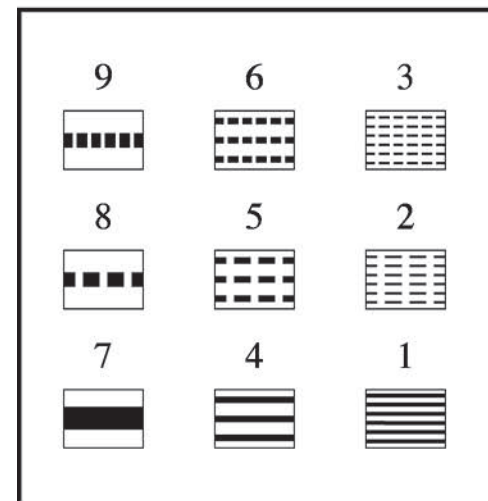
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Legend

Points (pitchless)

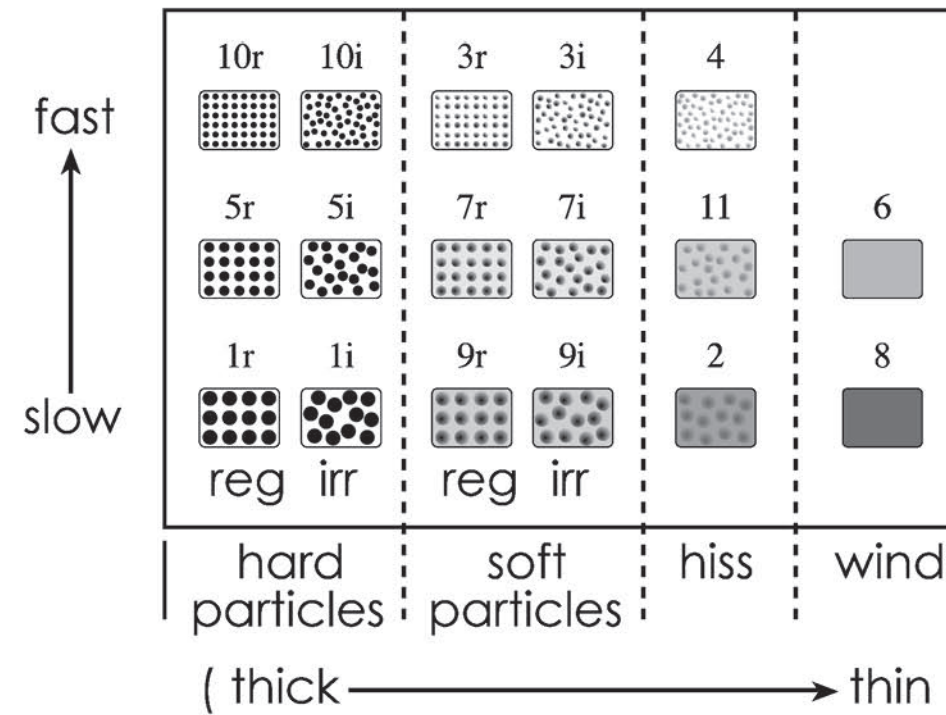


Lines (pitched)



thick → thin

Clouds (pitchless)



fast ↑
↓ slow

Other symbols

continuation

When used in conjunction with a timbre icon, this means that the sound is the same for each event. Successive timbres may however sound different even though they have the same timbre class. This is would be notated with a separate timbre icon for each event.

operator

x

Used to describe a combination of two Cloud timbres. The operation itself is not further specified. It could be some form of modulation or filtering. The clouds between 165 and 170 look as if they have been created by smudging the sonogram by hand...

cautionary

()

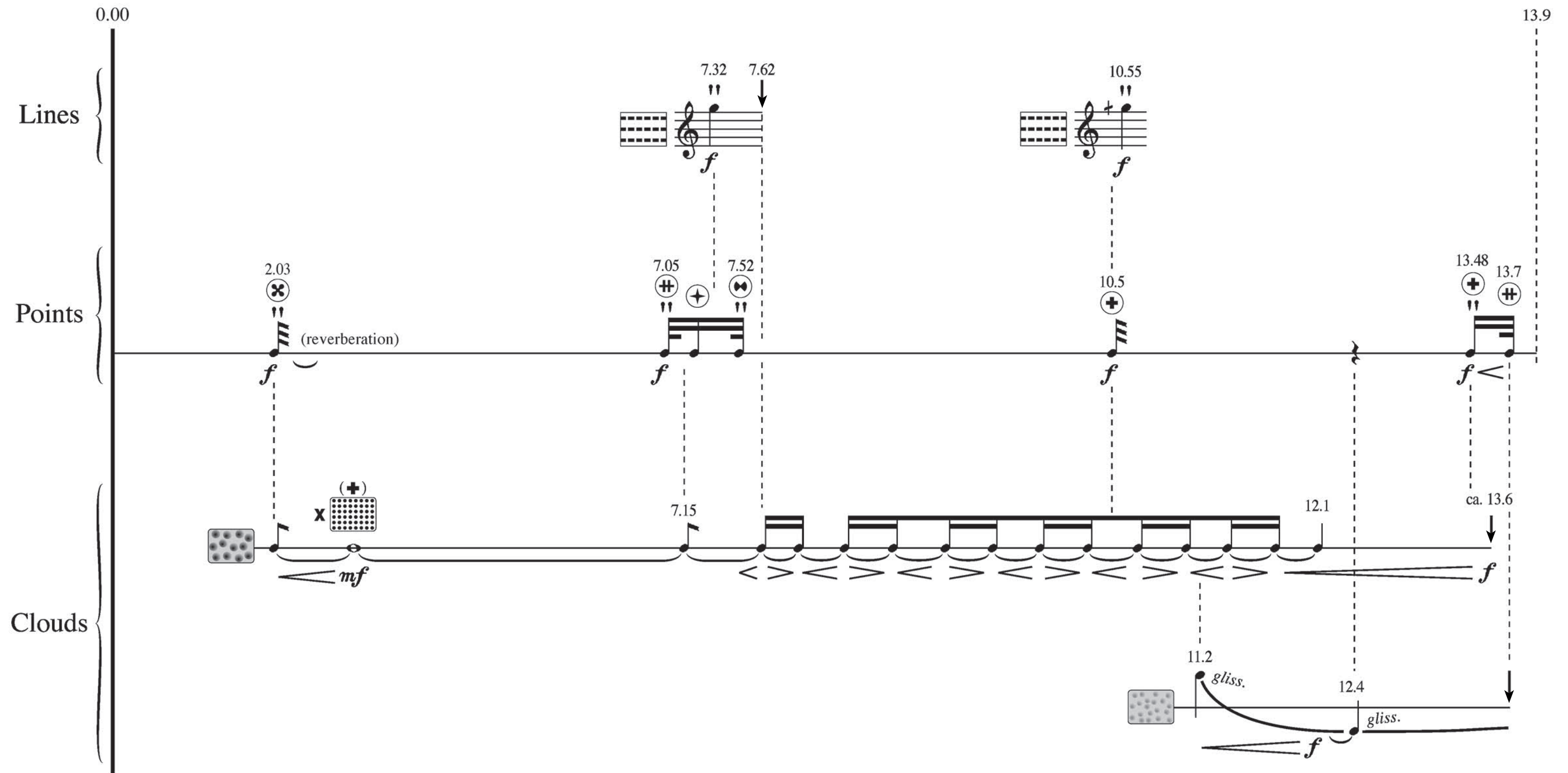
Cautionary Point timbres are used to qualify Cloud timbres.

dynamics

fff ff f mf mp p pp PPP PPPP

These have been allocated purely subjectively. The equivalent mechanical process would involve a 2- or 3- dimensional trammel having decibel, frequency and timbre-class as its parameters.

Sonal Atoms



13.9

14.0 *mf* ca. 15.2

17.81 18.1 *f* > <

17.42 18.51 *mp*

14.2 16.1 *f*

17.42 18.1 *f* gliss.

19.7 20.04 *mp*

19.58 19.83 *f*

20.66 *mf*

21.68 21.8 *f*

22.4 22.6 *mf*

23.03 *p*

23.45 *mf*

23.75

18.23 17.97 *f*

18.7 19.42 19.75 *mp*

20.74 20.98 *mf*

22.33 (+) 22.7 (x) *f*

24.7

This musical score for "Sonal Atoms" by Curtis Roads features a complex arrangement of staves and performance instructions. The score is divided into sections by vertical dashed lines at time markers 24.7 and 34.6.

Staff 1 (Top): Treble clef, starting at 31.6 with a glissando. It includes a *gva* (glissando) instruction and a section labeled "(inaudible)" between 31.6 and 34.2. Dynamics range from *f* to *f*.

Staff 2: Treble clef, starting at 31.5. Dynamics include *ff* and *f*. A glissando is marked at 34.1.

Staff 3: Treble clef, starting at 30.2. Dynamics include *p* and *mf*.

Staff 4: Bass clef, starting at 31.3. Dynamics include *p*.

Staff 5 (Middle): A single staff with various performance markings including *f*, *mp*, and *f*. It features several circled symbols: a square with a plus sign, a circle with a plus sign, and a circle with a dot.

Staff 6 (Bottom): A single staff with performance markings including *f*, *mf*, *gliss.*, *ff*, and *mf*. It includes a circled square with a plus sign and a circled double-dot symbol.

The score is annotated with numerous time markers (e.g., 26.18, 26.8, 27.5, 28.6, 29.18, 29.4, 29.55, 30.9, 30.2, 30.8, 30.7, 30.9, 31.18, 31.3, 31.5, 31.32, 31.6, 32.1, 32.9, 33.4, 34.1, 34.33, 34.0, 34.45, 26.2, 26.13, 28.52, 29.0, 33.12) and dynamic markings (*f*, *mp*, *mf*, *ff*, *p*).

34.6 35.66 35.57

mp

35.95

f

39.75 40.4 41.28

mf *p*

41.4 41.96

mf

38.1 39.23 39.65 40.62 40.9 41.12 41.42 42.0 42.1 43.3 44.15 45.0

f *mf* *f* *mp* *f* *f* *mp* *p* *mp* *p* 45.0

35.72 35.72 36.2 36.65 37.1 38.0 39.5 42.3 44.2 45.25 45.2

ca. *mp* ca. *mf* ca. *mp* *p*

(irregular dynamic and timbre)

f *mp*

Musical score for "Sonal Atoms" by Curtis Roads. The score is divided into several sections with time markers and dynamic markings.

- Section 1 (45.3 - 48.15):** Bass clef staff with dynamics π and mf . Treble clef staff with *gva* and mf . Middle staff with dynamics p , f , mp , fff , f , and mp . Includes various symbols like squares, circles, and crosses.
- Section 2 (48.15 - 50.82):** Treble clef staff with *gliss.* and mp . Middle staff with dynamics p and p .
- Section 3 (50.82 - 52.07):** Treble clef staff with mf . Middle staff with dynamics mp and mp .
- Section 4 (52.07 - 54.1):** Treble clef staff with mf . Middle staff with dynamics mp and mp .
- Section 5 (54.1 - 55.8):** Middle staff with dynamics mp and f . Includes a *(timbre gliss.)* marking.

The score is divided into three horizontal sections by a central line. The top section contains three staves of musical notation. The first staff has notes at 60.6 (marked *mp*), 61.36 (marked *gliss.*), and 61.5. The second staff has notes at 62.4 (marked *mf*), 63.32, and 64.5 (marked *p*). The third staff has notes at 63.68 (marked *mf*) and 64.73 (marked *p*). A long horizontal line spans from 65.8 to 69.57, with a *gliss.* marking above it.

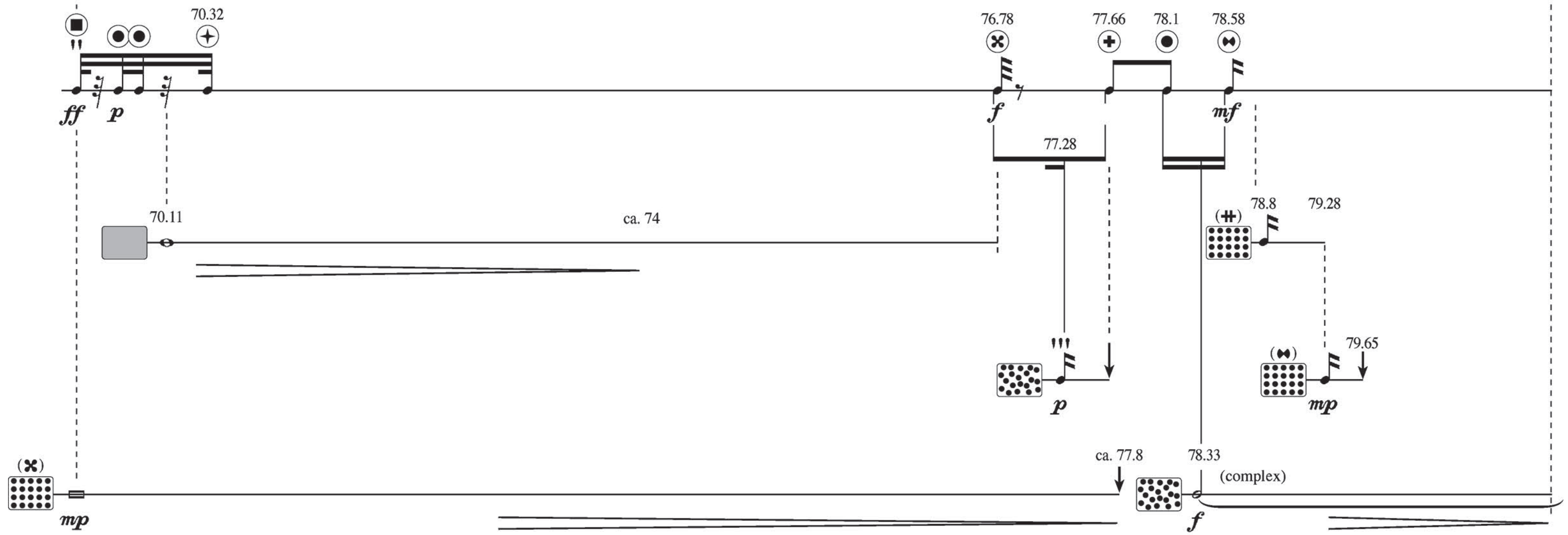
The middle section contains three staves. The top staff has notes at 59.96 (marked *f*), 60.1 (marked *mp*), 62.0 (marked *gliss.*), 63.2 (marked *f*), and 63.88 (marked *gliss.*). The middle staff has notes at 61.82 (marked *mp*), 62.78, and 63.12 (marked *f*). The bottom staff has notes at 57.6 and 68.2 (marked *f*).

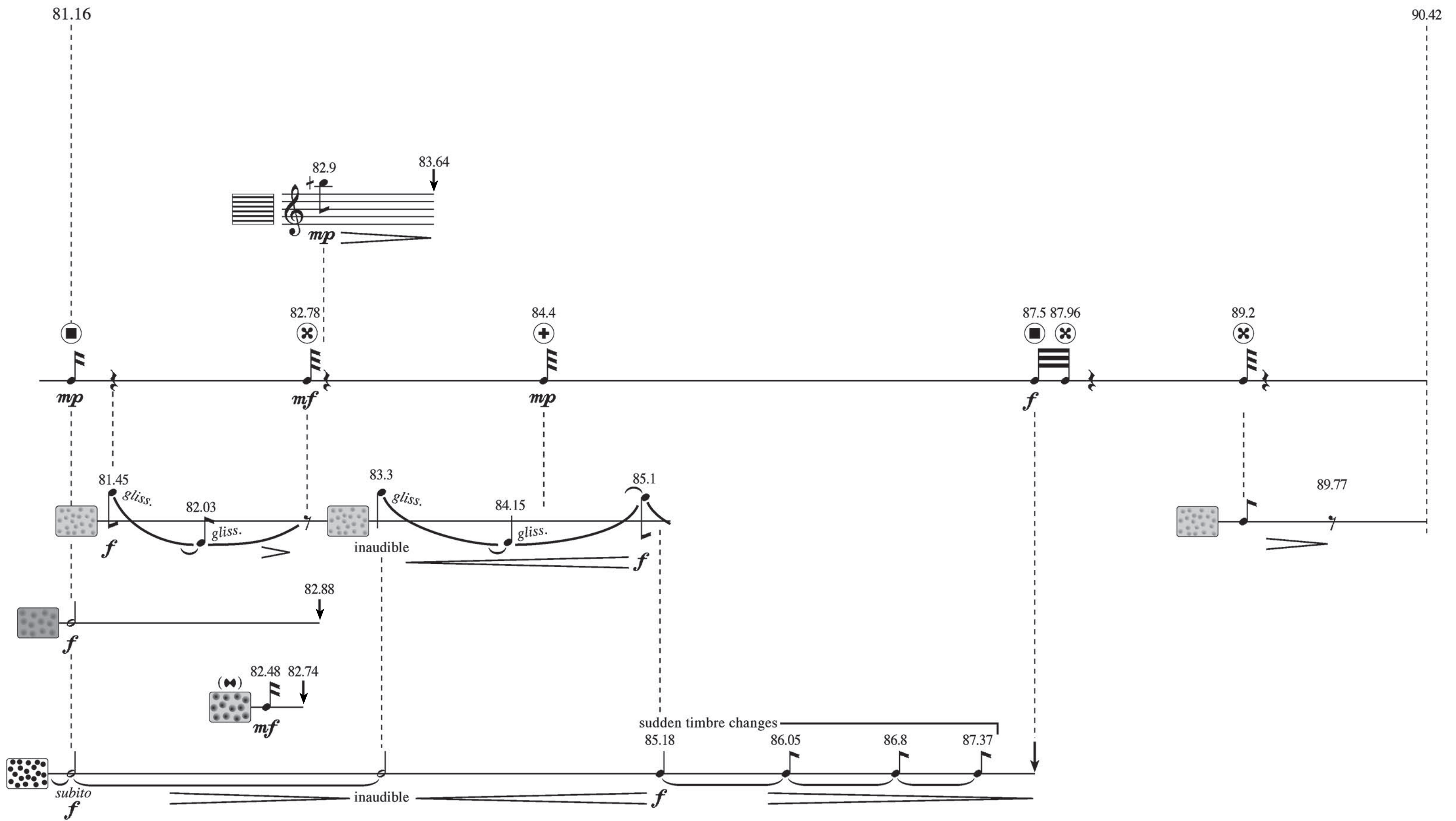
The bottom section contains one staff with notes at 55.8 and 69.57, both marked *mp*.

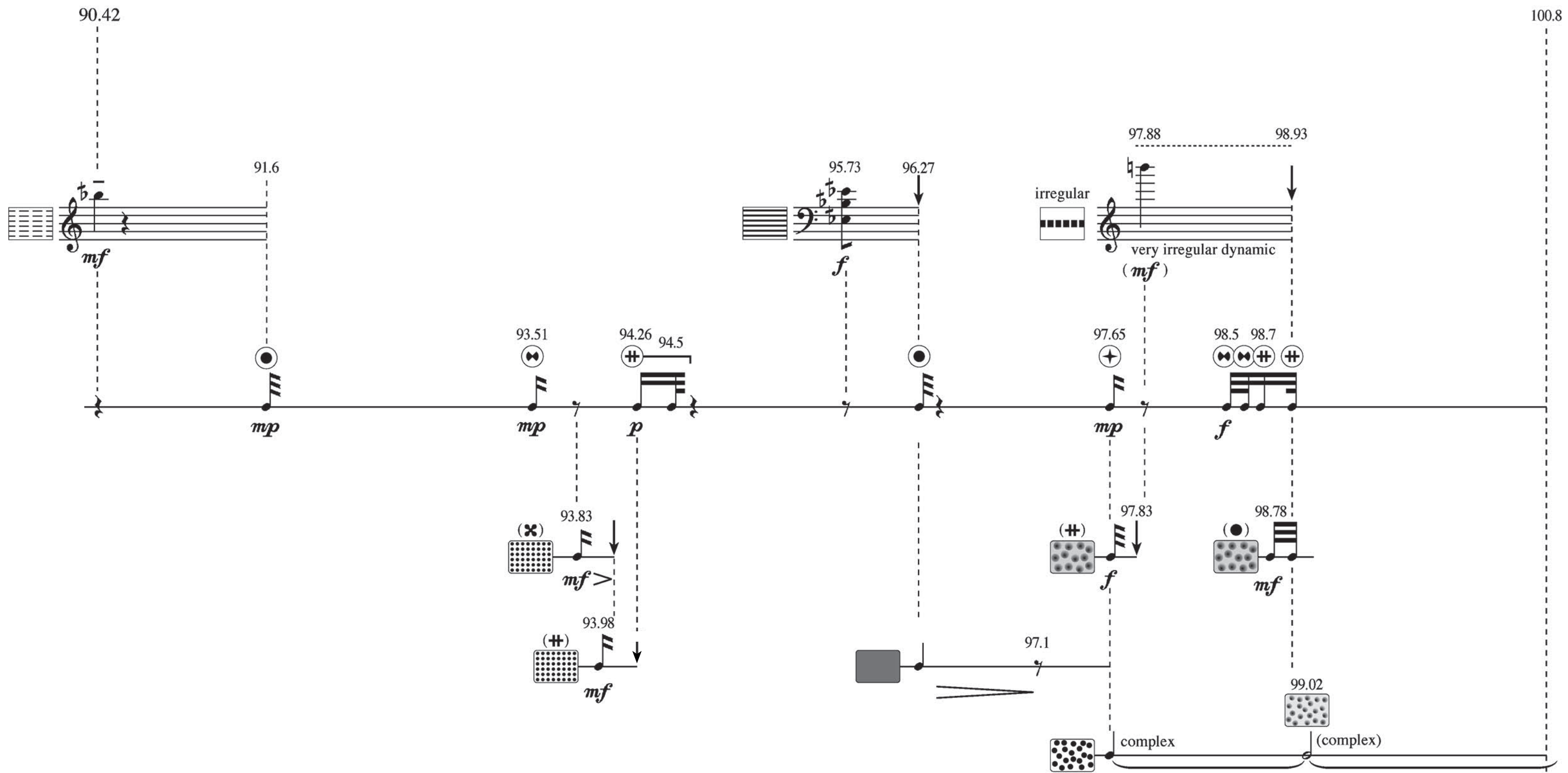
Various musical symbols are used, including circles with crosses, circles with pluses, and rectangular boxes with dots. Dynamic markings include *f*, *mp*, *mf*, and *p*. Performance instructions include *gliss.*, *reverb.*, and *subito*.

69.57

81.16







100.8

101.02 101.71
100.88 101.58

101.13 101.36 101.82

102.82 103.14 103.53 103.92
103.75 104.13 104.42

105.42 105.77 106.04
105.3 105.58 105.94 106.25
105.15

106.58
106.48

107.31 107.54 107.9
2 oct.
mf

108.23 108.87
fff mf

108.15 108.47 109.07 109.67 110.03

mp > fff mp f mf p mp f mf

102.28 102.56
mp

107.0 107.54
gliss. f gliss.

103.82 104.62 105.6
p mf

109.0

timbre change (complex) (complex) (complex)

(complex)

f

the operator produces a very faint gliss.
110.0
gliss.

x

110.69

128.4

The score consists of several staves and annotations:

- Top Staff (Treble Clef):** Contains a melodic line with glissandi and dynamic markings. Key time points are 121.66, 122.36, 124.6, and 125.4. A legend indicates that a square symbol (■) represents "with timbre changes".
- Middle Staff (Treble Clef):** Features a short melodic fragment starting at 120.8 and ending at 121.37, marked with a circled 'x' and a dynamic of *mf*.
- Bottom Staff (Bass Clef):** Shows a long glissando line with notes at 112.43, 115.45, 117.74, and 118.37, all marked with *gliss.*
- Annotations:**
 - A circled 'x' at 110.79 is associated with a dynamic of *f*.
 - A circled 'x' at 121.37 is associated with a dynamic of *mf*.
 - A circled '+' at 125.4 is associated with a dynamic of *p*.
 - A circled 'x' at 121.8 is associated with a dynamic of *f*.
 - A circled 'x' at 122.8 is associated with a dynamic of *mf*.
 - A circled 'x' at 123.2 is associated with a dynamic of *p*.
 - A circled 'x' at 120.8 is associated with a dynamic of *mf*.
 - A circled 'x' at 121.37 is associated with a dynamic of *mf*.
 - A circled 'x' at 121.8 is associated with a dynamic of *f*.
 - A circled 'x' at 122.8 is associated with a dynamic of *mf*.
 - A circled 'x' at 123.2 is associated with a dynamic of *p*.
 - A circled 'x' at 124.6 is associated with a dynamic of *p*.
 - A circled 'x' at 125.4 is associated with a dynamic of *p*.
- Other Elements:**
 - A bracketed section at ca. 111.2 shows two different timbre patterns.
 - A bracketed section at the bottom left shows two different timbre patterns.
 - A circled 'x' at 110.79 is associated with a dynamic of *f*.
 - A circled 'x' at 121.37 is associated with a dynamic of *mf*.
 - A circled '+' at 125.4 is associated with a dynamic of *p*.
 - A circled 'x' at 121.8 is associated with a dynamic of *f*.
 - A circled 'x' at 122.8 is associated with a dynamic of *mf*.
 - A circled 'x' at 123.2 is associated with a dynamic of *p*.
 - A circled 'x' at 120.8 is associated with a dynamic of *mf*.
 - A circled 'x' at 121.37 is associated with a dynamic of *mf*.
 - A circled 'x' at 121.8 is associated with a dynamic of *f*.
 - A circled 'x' at 122.8 is associated with a dynamic of *mf*.
 - A circled 'x' at 123.2 is associated with a dynamic of *p*.
 - A circled 'x' at 124.6 is associated with a dynamic of *p*.
 - A circled 'x' at 125.4 is associated with a dynamic of *p*.

This musical score, titled "Sonal Atoms" by Curtis Roads, is a complex multi-layered composition. It features a central melodic line and several accompaniment parts, including a bass line and a vibrato part. The score is annotated with precise frequency values (e.g., 128.4, 129.26, 130.02, 131.03, 131.23, 131.72, 132.46, 135.2, 135.35, 135.9, 136.0, 136.64, 137.15, 137.95, 138.0, 138.2, 138.54, 138.84, 139.41, 139.84, 140.33, 140.66, 141.0) and dynamic markings such as *f*, *mf*, *p*, and *mp*. The notation includes various musical symbols like notes, rests, glissandos, vibrato, and articulation marks. A section of the score is labeled "direction no longer audible". The piece is transcribed by James Ingram.

Musical score for Curtis Roads' "Sonal Atoms". The score is divided into three systems. The first system (measures 141.0-142.86) features piano and guitar parts with dynamics *f* and *f*>. The second system (measures 144.1-147.8) includes piano, guitar, and a central staff with dynamics *mf*, *mp*, *f*, and *f*>. The third system (measures 148.38-150.9) features piano and guitar parts with dynamics *pppp*, *mp*>, and *mf*, along with a glissando and a *mf* dynamic.

Key musical elements and dynamics include:

- System 1 (141.0-142.86):** Piano and guitar parts with dynamics *f* and *f*>. Notes are marked with frequencies: 141.0, 141.17, 141.4, 141.68, 142.1, 142.35, 142.55, and 142.86.
- System 2 (144.1-147.8):** Piano, guitar, and central staff. Dynamics include *mf*, *mp*, *f*, and *f*>. Notes are marked with frequencies: 144.1, 144.55, 145.21, 145.77, 145.93, 146.0, 146.5, 146.96, 147.25, 147.48, and 147.8.
- System 3 (148.38-150.9):** Piano and guitar parts. Dynamics include *pppp*, *mp*>, and *mf*. Notes are marked with frequencies: 148.38, ca. 148.7, 148.95, 149.2, ca. 150.1, 150.5, 150.68, 150.78, and 150.9. A glissando is indicated at 149.82.

ca. 151

163.6

The score consists of three staves. The top staff is a treble clef with a key signature of one flat. The middle staff contains various performance instructions and glissando markings. The bottom staff contains rhythmic notation and dynamic markings.

Key annotations and markings include:

- Staff 1 (Treble Clef):**
 - Measures 158.28, 158.18, 159.08, 159.56, 160.1, 160.79, 161.4, 161.81, 162.28.
 - Measures 160.64, 161.03, 161.3, 161.55, 161.94, 162.14, 162.55.
 - Dynamic markings: *mf*, *f*, *mf*, *f*, *mp*, *mf*, *f*.
 - Final measure at 162.6 with dynamic *mf*.
- Staff 2 (Performance Instructions):**
 - 155.8: *gliss.*, *mp*
 - 157.1: *gliss.*, *p*
 - 158.88: *gliss.*
 - 159.23: *gliss.*
 - 159.7: *gliss.*
 - (160.79): *(gliss.)*
 - ca 162.3: *very fast*, *p*
 - 162.49, 162.8, 163.23, 163.41: *f*
- Staff 3 (Rhythmic/Other):**
 - 156.6, 156.98: *mf*
 - 162.49, 162.8, 163.23, 163.41: *f*

Additional symbols include a circled plus sign (+), a circled cross (x), a square with a plus sign (+), and a square with a cross (x), often accompanied by a grid of dots representing a specific sound or texture.

163.6

ca. 166.5

170.33

171.75

ca. 167.2 (+)

ca. 167.8

168.44

ca. 165.66

166.1

ca. 166.4 (+)

ca. 169.8

ca. 170.2

170.46

170.78

171.11

171.32

ca. 172.16

ca. 172.83

172.37

164.25

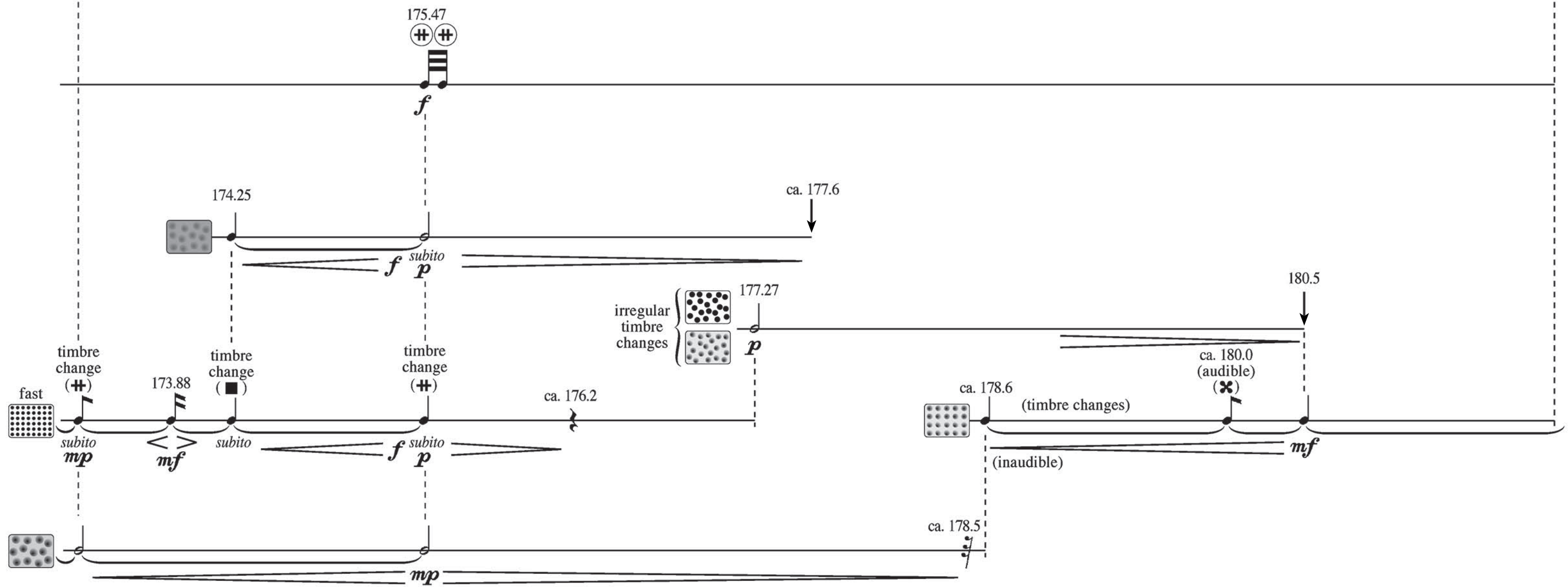
timbre change

The above operators apply to this timbre.

ca. 173.38

ca. 173.38

181.82



181.82

181.86 *mf*

182.1 *p* irregular timbre changes

182.4 *p*

183.5 hollow *mp*

183.96

184.1 *p*

184.34 *p* gliss.

184.41

184.92

ca. 185.15

185.93 *mf* (pan right to left)

186.0

186.98 *mf*

187.24

187.83 *f*

188.5 *mf*

188.52 *mp*

189.06 *mp*

189.4 *mp*

189.78 *mp*

190.78

Detailed description: The score consists of three staves. The top staff features a bass clef with a 'hollow' note at 183.5 and a treble clef with a 'pan right to left' instruction at 185.93. The middle staff has a treble clef with notes at 181.86, 182.1, 182.4, 184.1, 184.34, 184.41, 184.92, 185.93, 186.98, 187.83, 188.5, 188.52, 189.06, 189.4, and 189.78. The bottom staff contains various rhythmic and timbre-related notations, including a 'gliss.' at 184.34 and 'irregular timbre changes' at 182.1. Dynamics range from *p* to *f*. Time markers are indicated by vertical dashed lines.

190.78

191.53 191.99 192.29 192.44 192.84

mf *mf* *mf*

193.3

193.63 *mf* 194.06 *f*

(groups) *mf* 194.72 195.75 195.69 196.17

197.0 197.4 197.8 198.15 198.5

(groups) *mp* 197.12 197.6 197.94 198.3 198.65 198.96 199.13 199.48 199.77

199.2 199.51 199.8 *mf*

197.24 197.34 197.71 198.08 198.08 198.77

(●) *mp*

(●) (⊗) (⊕) } 193.1 complex *f*

200.0

Detailed description: This musical score is a transcription of Curtis Roads' 'Sonal Atoms'. It features three staves: a top staff with a treble clef and a piano keyboard icon, a middle staff with a bass clef and a piano keyboard icon, and a bottom staff with a piano keyboard icon. The score is annotated with time markers (e.g., 190.78, 191.53, 191.99, 192.29, 192.44, 192.84, 193.3, 193.63, 194.06, 194.72, 195.75, 195.69, 196.17, 197.0, 197.4, 197.8, 198.15, 198.5, 197.12, 197.6, 197.94, 198.3, 198.65, 198.96, 199.13, 199.48, 199.77, 199.2, 199.51, 199.8, 197.24, 197.34, 197.71, 198.08, 198.08, 198.77) and dynamic markings (*mf*, *f*, *mp*). The score includes various musical notations such as notes, rests, and slurs. A legend at the bottom left defines symbols: a circle with a dot (●) for 'complex', a circle with an 'x' (⊗) for 'f', and a circle with a plus sign (⊕) for 'f'. The score is framed by vertical dashed lines at 190.78 and 200.0.

