

Geometry I

Eric Simonson (2002/2004)

for piccolo and computer generated sounds

Performance Notes

Geometry I is the first in a projected series of works for acoustical instruments and computer generated sounds. The title refers to the composer's interest in harmonies that expand and contract according to a fixed ratio with respect to focal pitches. For example, the pitches in a 6-note chord may have their intervals (equal tempered) from a selected focal pitch expanded by $5/3$'s, resulting in a new stretched out 6-note chord that maintains the basic proportions of the original. The ratio of $5/3$'s is also applied to temporal relationships. This transformation of a vertical entity is paralleled by transformations of horizontal entities, as in the contour and speed distortions of the opening 32-note melody of *Geometry I*.

The piccolo part is enhanced by computer generated sound events (pre-generated soundfiles) that are triggered by means of a MIDI foot pedal. A MAX/MSP patch is available that facilitates this triggered soundfile playback. There are 27 cues [see score] that are executed sequentially by the performer (preferably) or--in the absence of a MIDI foot pedal--by an assisting engineer operating a mouse. The cues are to be executed at the precise points indicated in the score, even though the performer does not need to be concerned with synchronizing his/her part with the computer generated sounds.

The duration of *Geometry I* is approximately 4 mins., 45 secs.

141 *p* *mf* *f* *mf* *f* *mf* *pp* *mf* *f* *p* *f*

153 *p* *f* *pp* *mf* *f* *mf* *f*

164 *mf* *p* *f* *p* *f* *p* *f* *p* *f*

Section III

175 *p* *f* *pp* *p* *f* *pp* *f* *p* *mf*

186 *p* *f* *pp* *p* *f* *p* *f* *p* *ff* *f* *p* *f* *pp*

197 *mf* *f* *p* *pp* *mf* *f* *p* *sf* *pp* *f* *pp* *p* *f* *mf* *p*

207 *f* *p* *ff* *mf* *p* *f* *pp* *f* *p* *mf* *f* *p* *ff* *ff* *p*

cue 11

cue 12

cue 13

cue 14

cue 15

cue 16

cue 17

Section IV

cue 18

216

p *f* *p* < *mf* > *p* *mf* *f* *p* *f* *p* *mf* *p* *f* *p* < *f* > *pp* *mf*

cue 19

cue 20

cue 21

228

p *mf* *pp* *p* *f* *mf* *f* *ff*

cue 22

cue 23

cue 24

239

mf < *f* *mf* *p* *mf* *f* *mf* *ff* *p* *f* *ff* *f* *p* *mf* *mf* *mf*

Section V $\text{♩} = 54$

249

pp *f* *p* *f* *p* *p* *f* *p* *f* *ff* *p* *f* *ff* *p*

cue 25

259

f *p* *mf* *f* *p* *f* *pp* *mf* *f* *p* *ff*

cue 26

268

mf *f* *pp* *p* *mf* *p* *mf* *f* *pp* *mf* *f* *mf*

cue 27

278

p *f* *p* *mf* *f* *p* *mf* *mf* *mf* *mf* *p* *mf*

The image displays a musical score for a single melodic line, divided into Section IV and Section V. Section IV spans measures 216 to 278, while Section V spans measures 239 to 278. The score is written in treble clef with a 2/4 time signature. It features a variety of rhythmic patterns, including eighth and sixteenth notes, often beamed together in groups of 3, 5, 6, or 7. Dynamic markings range from *pp* (pianissimo) to *ff* (fortissimo), with many passages marked with accents. Fingerings are indicated by numbers 1-5 above notes. Section V begins with a tempo marking of $\text{♩} = 54$. Cue points are marked with boxes and dashed lines, indicating specific measures for rehearsal or recording. The key signature changes from one sharp (F#) to two flats (Bb) at the start of Section V.

289

p *f* *p* *f* *mf* *p* *pp* *p* *mf* *pp* *mf*