

**Hans Tutschku**

# Shadow of Bells

for piano and electronics

2015



In the summer 2014, I spent three months in Japan to study aspects of traditional and contemporary culture, life and ritual. I visited countless temples, listened to their bells and wandered the gardens - all of them breathing with a particular rhythm.

The influence on my sense of time was incredibly fascinating.

*Shadow of Bells* for piano and electronics brings those memories back into my musical world but I'm not trying to replicate any existing structure or particular musical source. The electronics act as a shadow to the piano and provide an acoustic space around the instrument.

The 20-minutes composition is a meandering walk through imaginary landscapes of quietness and resonance. The quick shifts between fluid, crystalline, singing passages, sparse lines and large chords depict the sonic interplay of a society with many contrasts.

The sense of slowness has occupied many of my recent works. This new composition is again an invitation to step out of our fast-paced activities and to discover small elements and their variations through time.

### **Interpretation**

The piece alternates between phrases which contain rests with exact counts and other moments where the timing is more flexible. In those cases approximate durations for the fermatas have been indicated.

Section E should be played as fast as possible, while keeping a steady tempo.

The sostenuto pedal is always played with the right foot, as the left foot is pressing the MIDI pedal to trigger the electronic events.

The different tempi are depicting changing characters and sonic qualities.

Contrasts in dynamics are very important.

The player should search for many different colors throughout the work.

### **Notation**

Grace notes are always before the beat. They are played one dynamic level below the ordinary notes, unless they have specific dynamic markings.

Accents are always very pronounced.  
In section E, accents are always forte.

Accidentals carry through the bar. In most sections they have been repeated to facilitate the reading.

**S.~~fa~~** Hold notes in sostenuto pedal till next release sign.

## Electronics

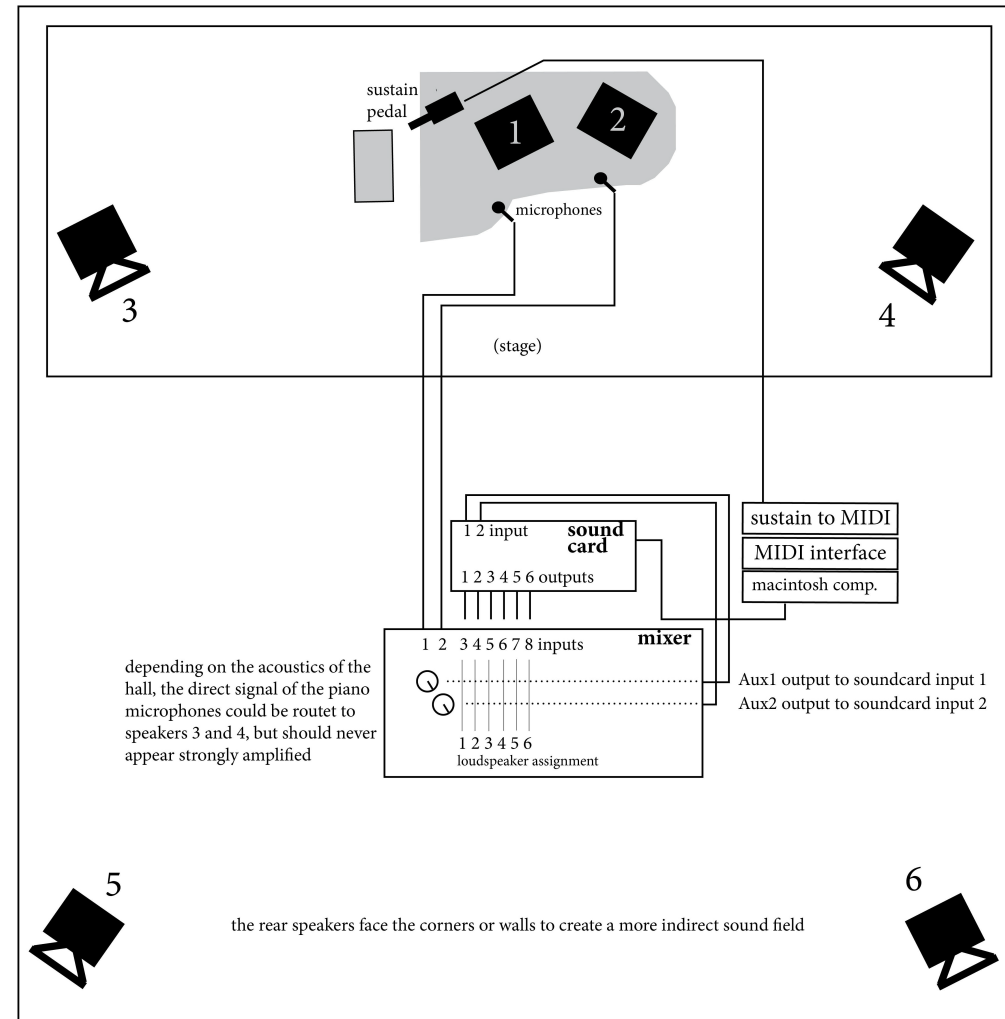
The electronics are realized with a Macintosh computer, running the Max/MSP application 'Shadow of Bells', downloadable from [www.tutschku.com](http://www.tutschku.com).

The ideal sound setup is with six loudspeakers. Two are placed below the piano, facing the sound board. Two are on the left and right side of the stage and two in the back of the hall, facing the back corners or walls to create a more indirect sound field. The soundfiles are always played back through the speakers below the piano. The surrounding speakers are reproducing changing acoustic spaces around the piano.

If a six-channel setup is not available, one could perform the work in a reduced, four-channel version (see next page). The two-channel version is for intended for rehearsals and should not be used for concerts, as it does not allow for a spatial separation of the reverb and the soundfiles.

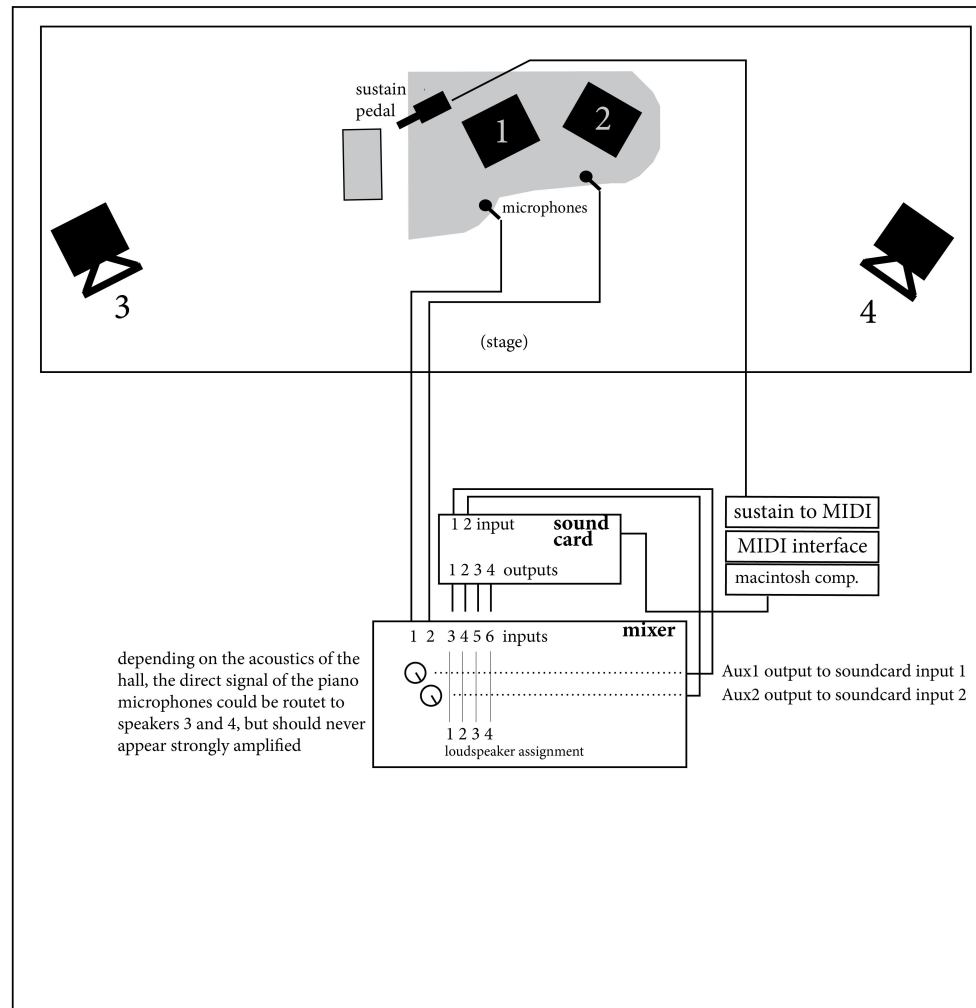
## Technical requirements for the 6-channel version

- 6 loudspeakers
  - 2 microphones (e.g. Neumann 184)
  - macintosh computer with Application 'Shadow of Bells'
  - 6-channel sound card
  - sustain pedal (placed to the left of the piano pedals)
  - converter sustain-to-MIDI
- the rear speakers are not directed towards the audience, rather face the back corners or walls



### Technical requirements for the 4-channel version

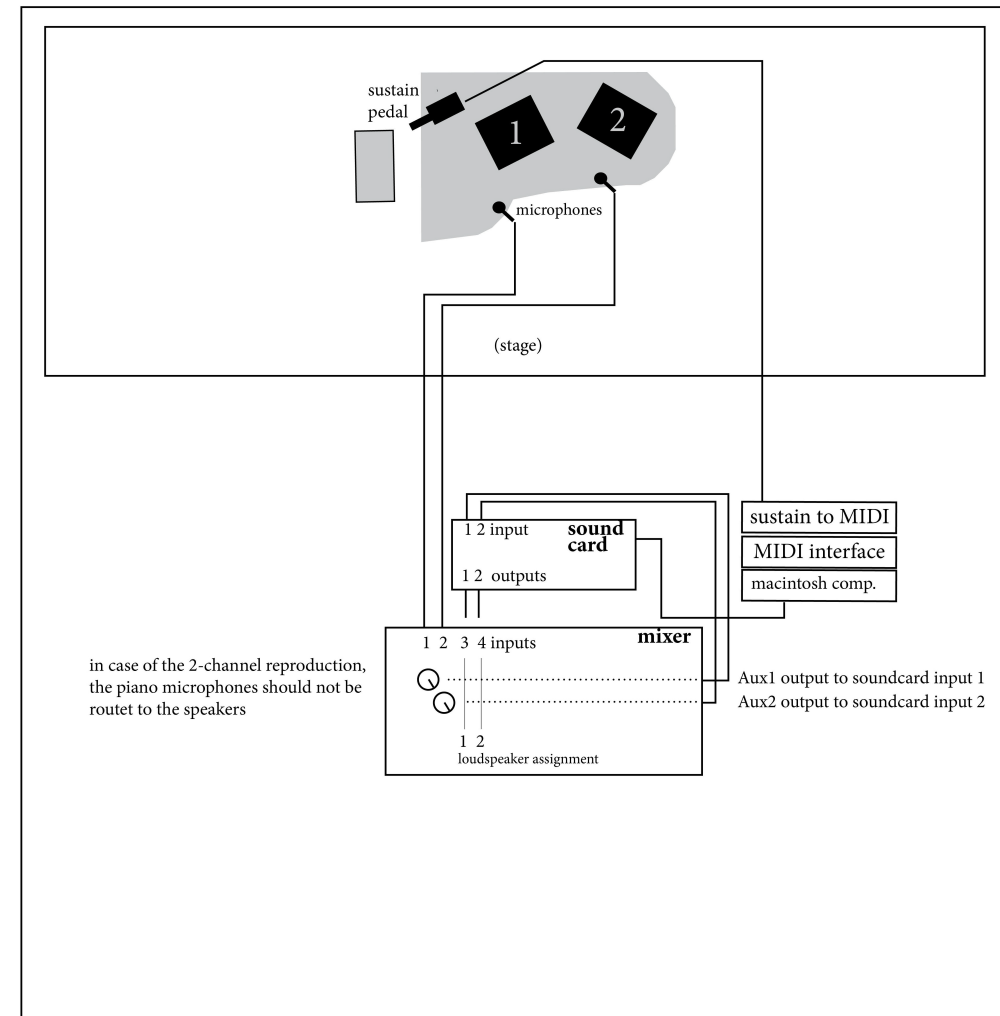
- 4 loudspeakers
- 2 microphones (e.g. Neumann 184)
- macintosh computer with Application 'Shadow of Bells'
- 4-channel sound card
- sustain pedal (placed to the left of the piano pedals)
- converter sustain-to-MIDI



### Technical requirements for the 2-channel version

- 2 loudspeakers
- 2 microphones (e.g. Neumann 184)
- macintosh computer with Application 'Shadow of Bells'
- 2-channel sound card
- sustain pedal (placed to the left of the piano pedals)
- converter sustain-to-MIDI

**Important:** Under no circumstances should the 2-channel version make use of frontal speakers, facing the audience. The soundfiles must always originate from speakers under the piano and make the sound board resonate.



# Shadow of Bells

for piano and electronics

Hans Tutschku (2015)

A 1

$\text{♩} = 126$

rev1 open

pp p mp mp f p mp mf p

rev1 open 2 3 soundfile "rin+bowl" 6 7 8 9

1 4 10

A 2

$\text{♩} = 80$

~ 15

mp

*P*

rev1 open 2 3 soundfile "rin+bowl" 6 7 8 9 soundfile "chimes"

1 4 10

A 3

$\text{♩} = 96$

~ 10

p mp ppp mp mf p mp

11 12 13 14 15 16 17 18 19

A 4

$\text{♩} = 126$

~ 5

11 12 13 14 15 16 17 18 19

15

A 5

B 1

♩ = 96

♩ = 126

20 21 22 23 24 25 26 27 28

5/4 3/4 4/4 3/4 5/4

rev1 closed

\* fca.

29 30 31 32

3/4 4/4 3/4

\*

B 2

♩ = 96

9

don't rush

Musical score for section B 2, measures 9-11. The treble staff features a melody with dynamics *mf*, *p*, and *mp*. The bass staff has dynamics *mp* and *pp*. A piano part below includes a 'Lea' marking and *pp* dynamics.

B 3

♩ = 126

11

Piano part for section B 2, measures 33-38. Includes markings for 'rev1 open', 'soundfile "bells"', and 'rev1 closed'. Measure numbers 33, 34, 35, 36, 37, and 38 are indicated.

♩ = 96

12

Musical score for section B 3, measures 12-13. The treble staff features a melody with dynamics *mf*, *f*, *p*, *mp*, and *f*. The bass staff has dynamics *p*. A piano part below includes a 'S. Lea' marking and *p* dynamics.

B 4

♩ = 126

13

crisp

Piano part for section B 3, measures 39-46. Includes markings for 'S. Lea', 'rev1 closed', and 'Lea'. Measure numbers 39, 40, 42, 43, 44, 45, and 46 are indicated.



B 5

♩ = 115

♩ = 80

(bells I)

like two small bells,  
independent from soundfile

rev1 open  
soundfile  
"e-repeated"

soundfile  
"gong-sequence"

49

55

♩ = 115

17

~ 4

♩ = 115

18 19 20 **B 6**

*pp* *ppp* *mp* *ppp* *p* *legato* *mf* *p*

rev1 closed slowly soundfile "bells"

65 66 67 68 69 70

64

**B 7** **C 1**

♩ = 96 126

21 22 23 24 25

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

\* Leo

71 72 73 74 75 76 77 78 79

soundfile "bell-melody"

75

C 2  
♩ = 115

26

very fluid

80 81 82 83 84 85

C 3  
♩ = 96

27

28

29

86 87 89 90 91 92

C 4

♩ = 115

♩ = 96

30

31

32

\* Rec.

\* Rec.

\*

93

94

rev 1  
open slowly

96

97

98

5/4

4/4

5/4

4/4

6/4

5/4

95

C 5

♩ = 115

♩ = 115

33

34

like a surprise

**ff**

clear diminuendo from the beginning

**p**

**pp**

Rec.

\*

rev 1 closed  
soundfile "rin+owl"

100

101

rev 1 open

103

5/4

6/4

4/4

99

102

D 1

D 2

35

swirling into an enormous outbreak

♩ = 96

Musical score for measures 104-109. The piano part features complex rhythmic patterns with dynamics ranging from *p* to *ffff*. The double bass part provides harmonic support with chords and bass lines. A conductor's part below the piano part indicates dynamics and includes the instruction "rev1 closed". Measure numbers 104, 105, 106, 107, 108, and 109 are marked along the bottom staff.

104

D 3

D 4

♩ = 70

♩ = 115

37

38

39

very light and playful

Musical score for measures 110-118. The piano part features complex rhythmic patterns with dynamics ranging from *ff* to *ppp*. The double bass part provides harmonic support with chords and bass lines. A conductor's part below the piano part includes the instruction "rev3 open". Measure numbers 110, 111, 112, 113, 114, 115, 116, 117, and 118 are marked along the bottom staff.

rev3 open

111

(♩=115)

♩=80

♩=96

D 5

like closing a chapter

mp ppp pp mp p pp mp p

ppp

119 120 121 122 123 rev3 closed 125 126 127 128 129 130 131 132 133

124

D 6

♩=80

not aggressive

legato

peaceful

f mp p mp mf mp ff mp p mp f

~4 5

134 135 136 137 138 139 140 rev2 open 142 143

141

47

calm, but keep the tempo

48

49

*p* *mf* *mp* *p* *mf* *mp* *p* *mp* *mf* *p* *mp*

\* *Leg.* \* *Leg.*

144 145 146 147 148 149 150 151 152 153

3/4 4/4 2/4 4/4 3/4 2/4 3/4 2/4 3/4 2/4 3/4 2/4 3/4 2/4 3/4

51

53 fr

*p* *p* *pp* *ppp* *p*

*pp* *pp*

take silent into sostenuto pedal

S. Leg.

154 155 156 157 159 160 161 162 163 164

2/4 3/4 5/4 3/4 2/4 3/4 2/4 3/4 2/4 3/4 2/4 3/4 2/4 3/4

rev1 open  
rev2 closed

soundfile  
"c# 1"

158

160

E

as fast as possible,  
but with one steady tempo

in section E  
accents always forte

56

crisp, with humor, don't use sustain pedal at all

64

mp p mf mp p p

166 167 168

165

165

72

73

mp p mp p

169 170 171 172



77

84

Musical score for measures 173-175. The score is written for a single melodic line in 5/4 time. Measure 173 starts with a *mf* dynamic and contains a triplet of eighth notes. Measure 174 begins with a *p* dynamic and features a triplet of eighth notes. Measure 175 starts with a *mf* dynamic and includes a triplet of eighth notes. The score includes various articulations such as accents (>) and slurs. The bass line is mostly silent, with a few notes in measure 174.

85

Musical score for measures 176-179. The score is written for a single melodic line in 5/4 time. Measure 176 starts with a *f* dynamic and contains a sextuplet of eighth notes. Measure 177 begins with a *mp* dynamic and features a triplet of eighth notes. Measure 178 starts with a *f* dynamic and includes a triplet of eighth notes. Measure 179 ends with a *p* dynamic and a triplet of eighth notes. The score includes various articulations such as accents (>) and slurs. The bass line is mostly silent, with a few notes in measure 176 and 178. At the end of measure 179, there is a \* *Leo.* marking.

F  
♩ = 55

(still in the fast tempo)  
bells 2  
like sonorous bells, but not frightening

180 rev2 open soundfile "bells" 181

183 soundfile "bells" 183

186 soundfile "bells" 186

189 soundfile "bells" 189

192 soundfile "bells" 192

195 soundfile "bells" 195

197 soundfile "bells" 197

199 soundfile "gong-sequence" 199

G 1  
♩ = 115

(64 fr) (10 fr) (10 fr)  
the bell-chords should be in the background and not interrupt the melodic line

201 soundfile "bells" 202

204 soundfile "bells" 204

207 soundfile "bells" 207

210 soundfile "bells" 210

211 rev2 closed soundfile "bell-theme" 211

213

(72)

Musical score for measures 214-221. The score is written for a grand staff (treble and bass clefs). Measure 214 is in 4/4 time with dynamics *mp* and *mf*. Measure 215 is in 4/4 time with dynamics *mp* and *mf*. Measure 216 is in 2/4 time with dynamic *mp*. Measure 217 is in 4/4 time with dynamic *mp*. Measure 218 is in 4/4 time with dynamic *mp*. Measure 219 is in 5/4 time with dynamic *mf*. Measure 220 is in 3/4 time with dynamic *mp*. Measure 221 is in 5/4 time with dynamic *mf*. The score includes various musical notations such as triplets, slurs, and dynamic markings.

Musical score for measures 222-226. The score is written for a grand staff (treble and bass clefs). Measure 222 is in 5/4 time with dynamic *mp*. Measure 223 is in 4/4 time with dynamics *mf* and *mp*. Measure 224 is in 5/4 time with dynamic *mf*. Measure 225 is in 5/4 time with dynamics *mp*, *mf*, and *p*. Measure 226 is in 5/4 time with dynamic *p*. The score includes various musical notations such as triplets, slurs, and dynamic markings.

\*

G 2

♩ = 96

73

now, the bell-chords are in the foreground

mf mp

mf

mf

mf

227 228 229 230 231 232 233

4/4 3/4 4/4

G 3

♩ = 55

84

85 fr

mp p

p

mp

p

235 236 237 238 239

4/4 2/4 4/4

234

H 1

♩ = 96

102

Musical score for H 1, measures 240-243. The score is written for treble and bass staves. Measure 240 is in 5/4 time, 241 in 3/4, 242 in 5/4, and 243 in 3/4. Dynamics include *mp p*, *p*, *f*, and *fff*. There are triplets in measure 240 and a quintuplet in measure 241. A *Red.* (ritardando) marking is present in measure 242.

H 2

♩ = 65

35 var.

Musical score for H 2, measures 244-246. The score is written for treble and bass staves. Measure 244 is in 3/4 time, 245 in 3/4, and 246 in 5/4. Dynamics include *f*, *fff*, *mf*, and *ff*. A *Red.* (ritardando) marking is present in measure 246. The instruction "powerful, not aggressive" is written above the first staff. A *~ 4* marking is above the first staff in measure 246.

soundfile "bells"

247

37

35 var.

H 3

soft, but with focus

\* Reo.

mp mp p p

~ 8

265 266 ~ end of soundfile 268 269 270 271 272 273 soundfile "sequ. 23"

5/4 4/4 5/4 2/4 7/4 5/4 4/4 4/4

274

H 4

35 var.

p mf mf mf mf p

ff ff mf ff

277 278 279 280 281

5/4 4/4 5/4 6/4 4/4 5/4 5/4

pp

rev1 closed slowly soundfile "bells"

\* Rec.

283 284 285

281

K 1

$\text{♩} = 126$

*a little schizophrenic, with constantly changing characters*

286 *p* \* Rec. soundfile "chimes" 288

289 *mf* \* Rec. 290 *f* \* Rec. 291 *p* \* Rec. 292 *mp* \* Rec.

287

K 2

$\text{♩} = 80$

293 *f* \* Rec. soundfile "fast sequ. 04" 295 *p* \* Rec. 296 *pp* \* Rec. 297 *pp* \* Rec.

294



Musical score for measures 298-301. The score is written for piano in 5/4 and 6/4 time signatures. It features a treble and bass staff. Dynamics include *p* (piano) and *f* (forte). There are trills and triplets in the treble staff. A rehearsal mark *Rec.* is placed above measure 299. A soundfile "fast sequ. 05" is indicated below measure 300, with a diamond-shaped marker containing the number 300. Measure 301 ends with a double bar line.

Musical score for measures 302-307. The score is written for piano in 3/4, 7/4, 6/4, and 4/4 time signatures. It features a treble and bass staff. Dynamics include *p* (piano), *mp* (mezzo-piano), *mf* (mezzo-forte), and *f* (forte). There are trills and triplets in the treble staff. Rehearsal marks *Rec.* are placed above measures 302, 304, and 307. A soundfile "fast sequ. 02" is indicated below measure 303, with a diamond-shaped marker containing the number 303. A performance instruction "take silent into sostenuto pedal" is written in the right margin above measure 307. Measure 307 ends with a double bar line.

K 3

rev3 open  
(soundfile continues)

308

309

310

311

soundfile "sequ. 18"

*mf mp*

*ff*

*mp*

*p*

*mf p*

*mp*

312

313

314

*ff p*

*mf p*

*ff*

*p*

*ff p*

*mf*

*mp*

Musical score for measures 315-319. The score is written for a single melodic line on a grand staff. The key signature has one sharp (F#). The time signature changes from 4/4 to 5/4, then back to 4/4, then 5/4, and finally 6/4. Dynamics include *mf p*, *mf*, *mf p*, *mp*, and *pp*. There are several triplet and quintuplet markings. A *p* dynamic is indicated below the staff for measure 316.

Metronome and tempo markings. A box labeled "316" is positioned above a metronome icon. Below it, the text "soundfile 'fast sequ. 06'" is written. A tempo marking of "♩ = 65" is present. Measure numbers 315, 317, 318, and 319 are indicated along a horizontal line with their respective time signatures: 4/4, 5/4, 4/4, 5/4, and 6/4.

Musical score for measures 320-326. The score is written for a single melodic line on a grand staff. The key signature has one sharp (F#). The time signature changes from 7/4 to 3/4, then 7/4, then 5/4, then 4/4, then 6/4, and finally 5/4. Dynamics include *pp*, *mp*, *pp*, *p*, and *pp*. There are several triplet and quintuplet markings. A box labeled "K 4" is positioned above the staff. A tempo marking of "♩ = 65" is present. A marking "\* Leo." is located below the staff in measure 323.

Metronome and tempo markings. A box labeled "316" is positioned above a metronome icon. Below it, the text "soundfile 'fast sequ. 06'" is written. A tempo marking of "♩ = 65" is present. Measure numbers 320, 321, 322, 323, 324, 325, and 326 are indicated along a horizontal line with their respective time signatures: 7/4, 3/4, 7/4, 5/4, 4/4, 6/4, and 5/4.

K 5

♩ = 55

(51)

*peaceful*

K 6

♩ = 45

(51+53 rev)

328

*wait till end  
of resonance  
in the electronics*

336