After and Before

For Piano, Ensemble and Electronics

Alex Hills 2011-12

Instrumentation

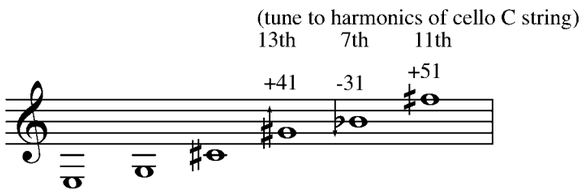
Piano

Clarinet in Bb/Bass Clarinet (at sounding pitch in score)
Electric Guitar with volume pedal (sounding an 8ve lower than written)
Violin
Violoncello

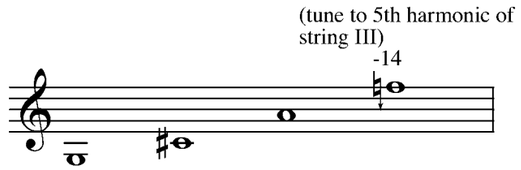
Electronics (amplification and playback)

Scordaturae:

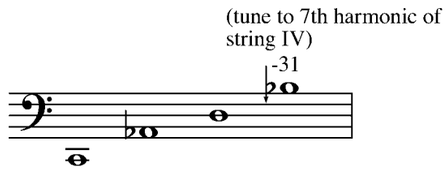
E.Guitar



Violin



Cello

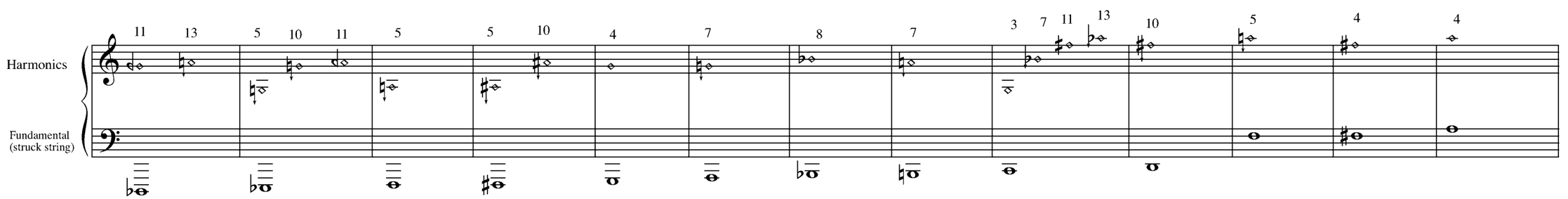


General Performance Instructions

All abbreviations etc. are standard. Accidentals carry throughout the bar. Bracketed dynamics are used where the playing technique will not produce the indicated dynamic. These should be an indicator of the level of physical energy that is put into the sound. Where bars are repeated and dynamics are indicated separated by slashes (***f***/***p*** etc.) these apply to the repeats in turn (first is ***f***, 2nd ***p*** and so on).

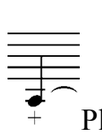
Performance Instructions - Piano

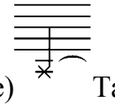
Harmonics – the following are used:

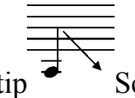


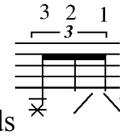
Harmonics 10,11&13 are best found on the 'short' length of the string between the dampers and the tuning pegs. The others occur in various locations along the long part, the 5th being easily found near the damper. The best locations for the others will vary from instrument to instrument. I've found paper re-inforcer rings a good way to mark the nodes.

Sounds inside the piano:

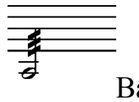

Pluck string (from side)


Tap with fingertip


Scrape along string towards dampers with the nail.



Tap with 3, scrape away from damper with 2, towards damper with thumb.

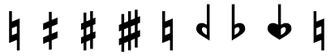

Back and forth tremolo on string with nails of thumb and fore-finger together.


Subharmonic – stop string firmly at very end of wound part and play key.

Performance Instructions – Ensemble

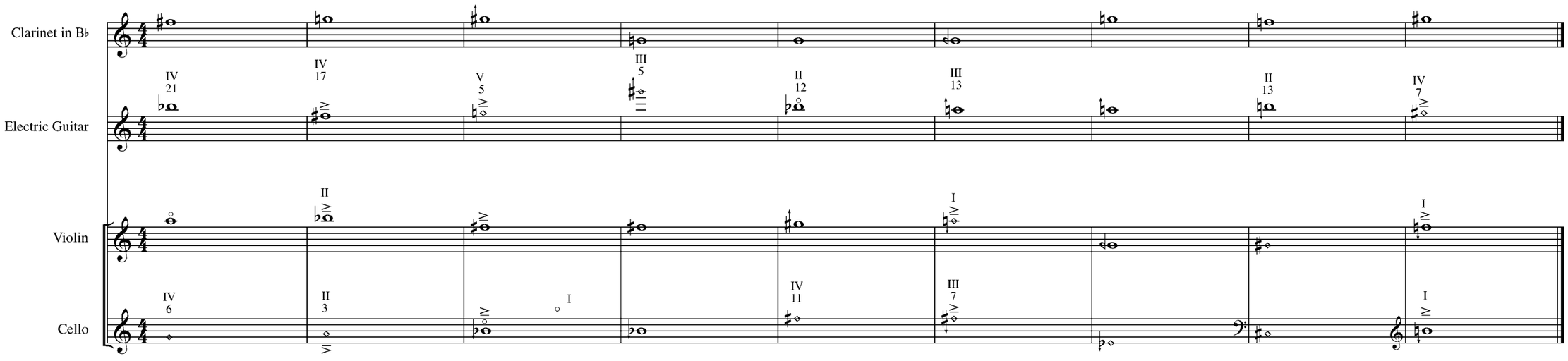
Harmonics/Microtones

Much of the harmony is generated using natural harmonics to produce complex microtonal chords. These should all be played in exactly the positions indicated. Quarter-tones are written as follows:



Arrows on an accidental either apply to the intonation of the harmonic being produced, or if not a harmonic, a non-specific deviation of less than a quarter-tone. Where the violin and cello play notes on an already detuned string, they should be played where the 'intune' version of the pitch would be played (cello, bar 51, for instance) unless otherwise indicated (violin 64). Violin and cello harmonics are written in playing position, guitar harmonics in sounding position. All other notes should sound as written.

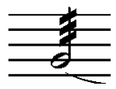
The following exercise works through many of the main harmonic structures of the piece in various orchestrations and may be helpful in rehearsing their intonation and balance:



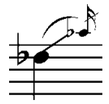
Playing Techniques/Sound Production

Clarinet

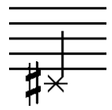
Rapid unmeasured triple-tongue (should sound like the string's richochet).



Flutter-tounge

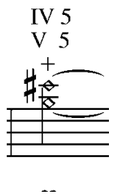


Glissando – always as smooth and gradual as possible.

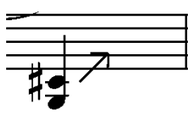


Tongue attack with minimal air

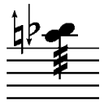
Guitar



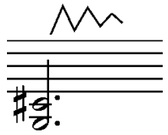
Tap harmonic



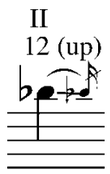
Scrape from bridge to frets along strings.



Tremolo – place nail/pick on both strings and move up and down string.



Extreme but decreasing vib with whammy bar.



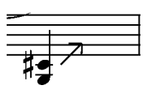
Bend string sharp before playing then return to normal tension gradually.

Strings

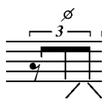
Ricochet

Unmeasured tremolo

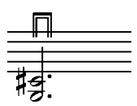
Tremolo across strings



Drag bow from fingerboard to bridge (minimal pitch).



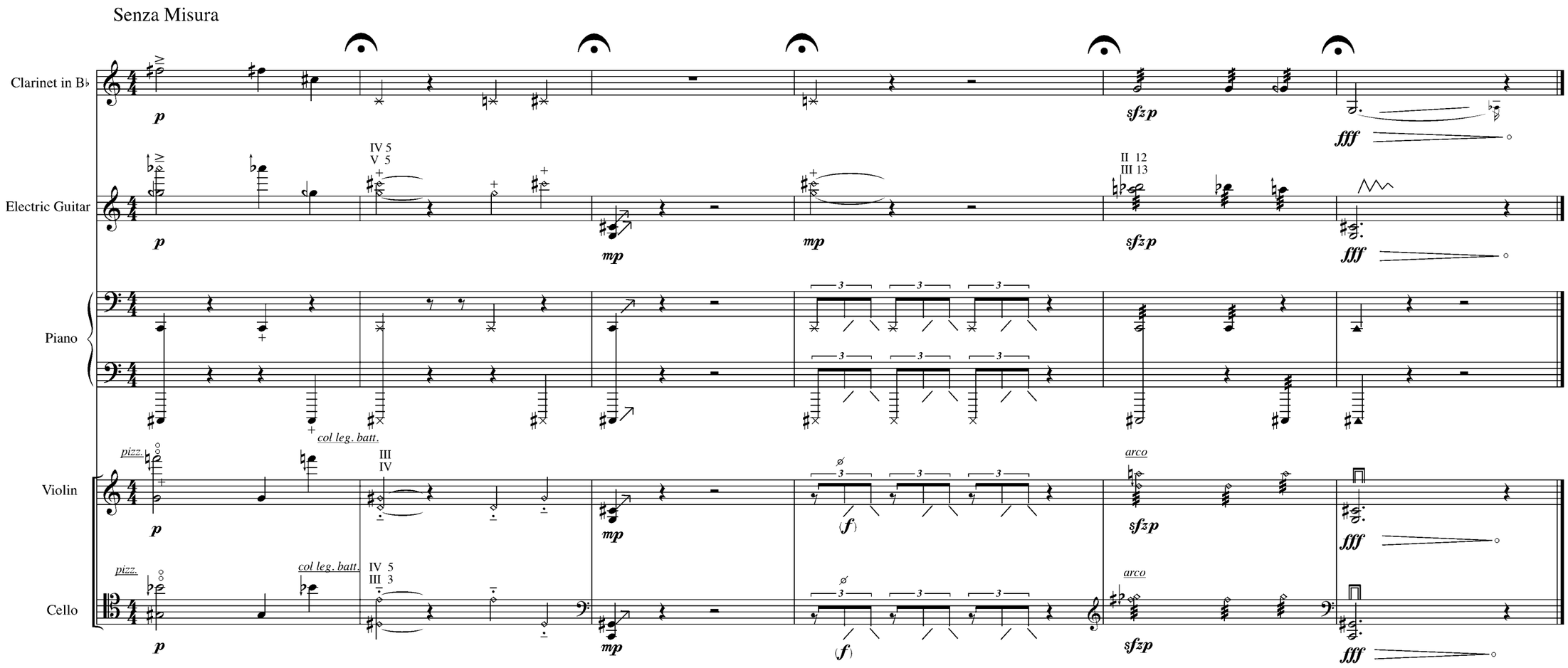
Rhythmic bow scrape from fingerboard to bridge then back again with l.hand mute grip.



Excess bow pressure (no pitch).

Composite Sounds

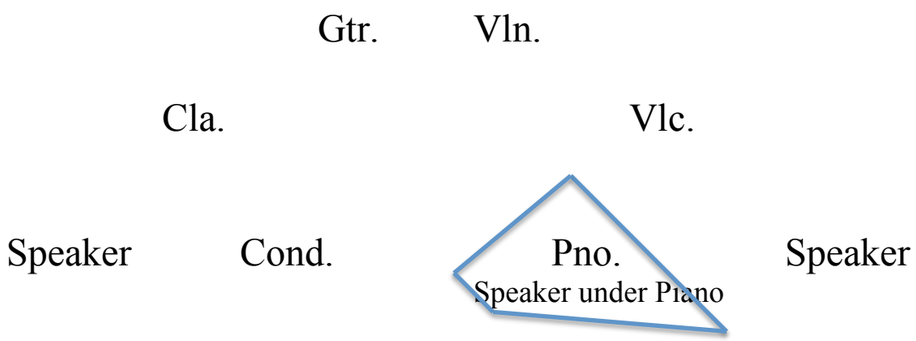
The last part (letter K onwards) of the piece has several sounds where the ensemble mimic or amplify playing techniques inside the piano. This could be isolated and rehearsed separately using the following:



Electronics

The piano should be gently and unobtrusively amplified in those sections where it is indicated. Samples identified by numbers 1-20 are to be synchronized with the piano attack they accompany, and to be ended by the next piano attack (no matter how little of their nominal duration has passed), except for the final, very long, track, which is to be faded across bars 264 and 5. Samples indicated by letter (between bars 72 and 101) are to be triggered on the beat indicated, and last for a fixed duration.

Suggested Seating/Speaker Placement



Programme Note

Two of the great limitations of the piano are that all 88 keys are tuned the same distance apart from each other (at least nominally) and that once one has played a note, the only control one has over is to stop it sounding. Compared to the infinite gradations of space on a fingerboard, of a bow, of breath, this seems rather unfortunate! This piece is, amongst other things, my attempt to come to grips with those restrictions – to explore the microtonal possibilities of the piano, and ways to both draw attention to and modify its wonderfully rich and complex resonance. This is done by unconventional means of playing the instrument itself, electronics, and the presence of the ensemble. However, resonance also implies something else – a dimension of cause and effect, where it is an inevitable consequence of a fixed action. Here, I seek to destabilize that relationship – effects become uncoupled from their causes, heard with the ‘wrong’ action, and indeed in some cases precede those actions altogether. So the piece becomes a little laboratory for ‘impossible’ relationships between sound and time. I’m immensely grateful to the Royal Academy of Music for financial support towards this project, to Ensemble Plus-Minus for their willingness to engage with the piece and, especially, to Roderick Chadwick, whose initial question ‘has there even been a truly spectral piano piece?’ (I still don’t know) started this all several years ago, and whose playing has been a constant inspiration for it.

Score

for Roderick Chadwick and Ensemble Plus-Minus

♩ = 72

Clarinet in B♭

Electric Guitar

Piano

fff
(l.h)

R. hand over onto C♯ always

III

Electronics

Violin

Cello

11

Pno.

Ped.

Amplification ON

Speaker under piano only

1

2

Elec.

A

Attacks as imperceptible as possible until 26.

18

B♭ Cl.

p

III

5

E.Gtr.

p

Pno.

III

(down unitl end of 33)

3

4

5

6

7

Elec.

II

Vln.

p

I

Vlc.

p

B♭ Cl.

E.Gtr.

Pno.

Elec.

Vln.

Vlc.

25

III 13

5

I 7

dim.

8

9

I (lower than major 3rd position on string)

II

III 7

I

II

III 7

I

III

I

p

mf

B♭ Cl.

E.Gtr.

Pno.

Elec.

Vln.

Vlc.

31

pp

sfz pp

mf

III 13

II 12

I 12 II 12

III 5

p

f

(III)

Ped.

10

11

12

(Amplification OFF)

I

III 7

IV 11

III 7 IV 7

B

(♩ = 72)

E.Gtr.

IV
21

p

Pno.

(Long - first time only)

p

sfz

sfz

(always quiet except for accents and bass)

Vln.

II

p

Vlc.

IV
6

p

B♭ Cl.

p

E.Gtr.

Pno.

Vln.

Vlc.

B♭ Cl.

E.Gtr.

Pno.

Vln.

Vlc.

B♭ Cl.

E.Gtr.

Pno.

Vln.

Vlc.

54

To Bass Clinet

II 13

IV 7

V 5

II 13 IV 19

II 19 III 13

I 15 II 12

III 5 IV 7

III

I

I II

IV III

II III

I

III 4

I

p

f

3

3:2

C Very dry, beginning and end of notes clearly defined but extremely quiet.

B♭ Cl.

E.Gtr.

Pno.

Vln.

Vlc.

(III) I (notably sharp of min 3rd position)

con sord.

x5

3 ♪ = ♪ ♩ = 108

67

B♭ Cl.

E.Gtr.

Elec.

Vln.

Vlc.

To Bb Cla (2nd time).

Outer speakers only

Breathy, pitch barely audible

Minimal tone, pitch barely audible

(whammy bar)

A B C D E F G H I

77

(semiquaver figure stays at same speed
across rit - piano matchs it at D)

rit.

D

♩ = 54

B♭ Cl.

E.Gtr.

Pno.

Elec.

Vln.

Vlc.

Ped.

J K M N O P Q

B♭ Cl.

E.Gtr.

Pno.

Elec.

Vln.

Vlc.

Pno.

94

103

III 5

I 12

V (whammy bar) 5

II 12

II 9

I 12

f

ppp

p

ff

3:2

III

R

S

T

U

V

W

IV

I

senza sord.

III 7

f

E

(*f*)

(ped ad lib. - long pedals)

E.Gtr.

Pno.

Vln.

Vlc.

B♭ Cl.

E.Gtr.

Pno.

Vln.

Vlc.

F

To Bass Clinet

130

B♭ Cl.

E.Gtr.

Pno.

Vln.

Vlc.

ff fff p

138

To B♭ Cla.

B♭ Cl.

E.Gtr.

Vln.

Vlc.

G

rit. ♪= 96

B♭ Cl.

E.Gtr.

Pno.

Elec.

Vln.

Vlc.

1/3 1/3 1/3 etc.

Ped. sempre, vary gap between last note and release

Amplification ON

Under piano speaker only

B♭ Cl.

E.Gtr.

Pno.

Elec.

Vln.

Vlc.

H

3 ♩ = ♪ = 72

rit.

B♭ Cl.

E.Gtr.

Pno.

Elec.

Vln.

Vlc.

Ped.

Amplification OFF

B♭ Cl.

E.Gtr.

Pno.

Vln.

Vlc.

187

♩= 96 ♩= 72 *rit.* ♩= 96 ♩= 72

pp *ff* *f* *p* *sfz* *(f)*

I 12 14 15 17 18 19

I 8 II 5 III5

I 0 II 12 III 12

2 1 2 3 4 5

11 10 5 4

III IV 7 11

IV 7

II 4 III 4

I 4 II 3

11 5 5 4

III

Ped.

rit. ♪= 96 ♩= 72

B♭ Cl.

E.Gtr.

Pno.

Vln.

Vlc.

♪= 96

accel.

(demis stay same length
regardless of accel.)

B♭ Cl.

E.Gtr.

Pno.

Vln.

Vlc.

199

fff

5
4

(III)

Ped.

III
11

3

I

♩= 72

206

p (always quiet except for accents and bass)

sfz

f

212

sempre marcatissimo

ff

Pno.

(III)

220

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

Pno.

(retake silently)

mf

(III)

(catch all 6 notes in pedal
and keep until end of 237)

All speakers

20

Elec.

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

228

p *pp* *ppp*

Pno.

mp *p* *p* *ppp*

J

♩ = 54

5

♩ = ♩

♩ = 67.5

Pno.

Electronics only for c.1 minute -
start after 2nd C/C# double attack

f

5:4 5:4 5 5:4

(still Cue 20)

Amplification ON

Elec.

(Pedal wedged down until end)

3

♩ = ♪

♩ = 90

250

Pno.

3

♪ = ♪

5

K

♩ = 54

5 ♪ = ♪ ♩ = 67.5

B♭ Cl.

E.Gtr.

Pno.

Elec.

Vln.

Vlc.

261

pp p mf f p p p p

III 5
I 1

IV 5
V 5

(still cue 20)

Fade gradually across both repeats

(amplification stays ON until end)

I
IV

I
III

col leg. batt.

III
IV

IV 5
III 3

pizz.

c.l.b.

3

B♭ Cl.

E.Gtr.

Pno.

Vln.

Vlc.

269

f p f p

mp

f

pizz. c.l.b. pizz. c.l.b.

p

♩ = 45

279

B♭ Cl.

mf

279

E.Gtr.

mf *mp* *mf* *mp* *mf* *mp*

Pno.

3 2 1

279

Vln.

c.l.b. *c.l.b.*

f

Vlc.

c.l.b. *c.l.b.*

f

(*f*)

(*f*)

5

B♭ Cl.

E.Gtr.

Pno.

Vln.

Vlc.

286

c.l.b.

pizz.

arco

II 12
III 13

IV III
11 7

IV
11

♩ = 54

3
← ♪ = ♪ →

293

B♭ Cl.

sfz p < f p

293

E.Gtr.

sfz p < f p

Pno.

293

Vln.

pizz. c.l.b.

sfz p (f) p

Vlc.

pizz. c.l.b.

III
7

sfz p (f) p

♩ = 81

301

B♭ Cl.

pp/mp f mf f fff

(2nd time only)

301

E.Gtr.

pp/mp f mf f fff

(2nd time only)

Pno.

3

Vln.

pp/mp mf f fff

pizz. c.l.b. arco

Vlc.

pp/mp mf f fff

pizz. c.l.b. arco

B♭ Cl.

E.Gtr.

Pno.

Vln.

Vlc.

308

fff

3

n.

San Pedro de Atacama-London
July 2011-August 2012