

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)

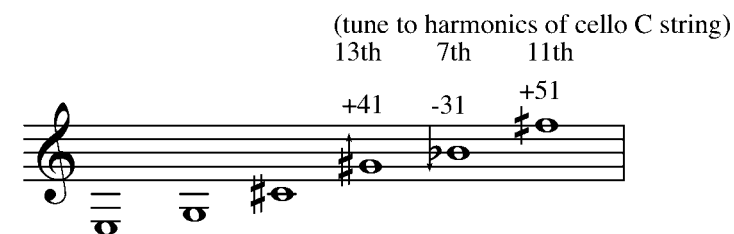
Violin

Violoncello

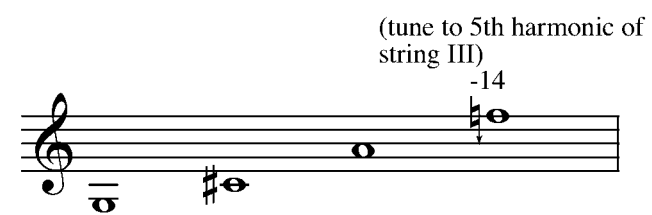
Electronics (amplification and playback)

Scordatura:

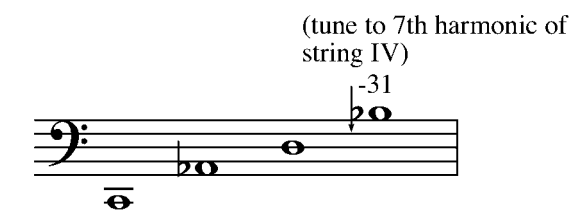
E.Guitar



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

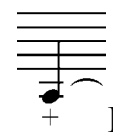
Harmonics – the following are used:

Harmonics

Fundamental (struck string)

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.

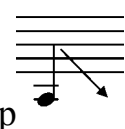
Sounds inside the piano:



Pluck string (from side)



Tap with fingertip



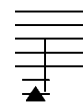
Scrape along string towards dampers with the nail.



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

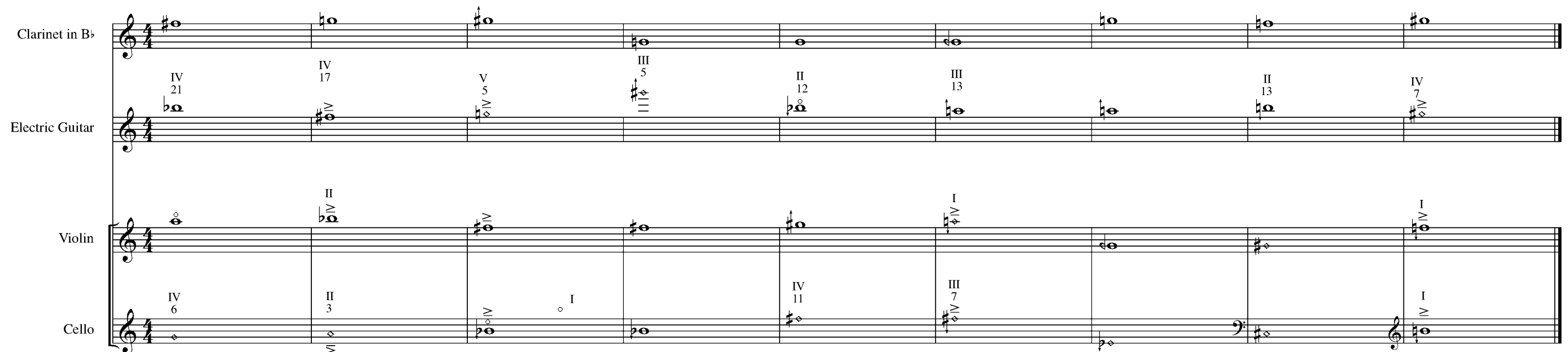
Harmonics/Microtones

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:



The exercise is written for four instruments: Clarinet in B \flat , Electric Guitar, Violin, and Cello. The music is in 4/4 time and consists of eight measures. The notes are quarter notes. The following table summarizes the fingering and harmonic positions indicated for each instrument in each measure:

Instrument	Measure 1	Measure 2	Measure 3	Measure 4	Measure 5	Measure 6	Measure 7	Measure 8
Clarinet in B \flat								
Electric Guitar	IV 21	IV 17	V 5	III 5	II 12	III 13	II 13	IV 7
Violin		II 3				I 4		I 4
Cello	IV 6	II 3		I 4	IV 11	III 7		I 4

Playing Techniques/Sound Production

Clarinet



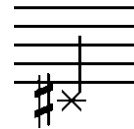
Rapid unmeasured triple-tongue (should sound like the string's ricochet).



Flutter-tongue

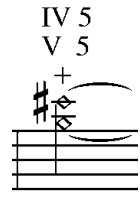


Glissando – always as smooth and gradual as possible.



Tongue attack with minimal air

Guitar



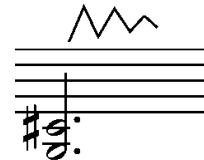
Tap harmonic



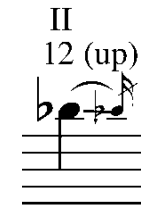
Scrape from bridge to frets along strings.



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



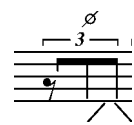
Unmeasured tremolo



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:

Senza Misura

The score is for five instruments: Clarinet in B \flat , Electric Guitar, Piano, Violin, and Cello. The tempo is marked "Senza Misura".

Clarinet in B \flat : Starts with a piano (*p*) dynamic. It features several measures with notes marked with an asterisk (*). The piece concludes with a fortissimo (*fff*) dynamic.

Electric Guitar: Starts with a piano (*p*) dynamic. It includes guitar-specific notations such as "IV 5" and "V 5" above notes, and "II 12" and "III 13" above chords. Dynamics range from *p* to *fff*.

Piano: The piano part is characterized by complex rhythmic patterns, including triplets and sixteenth notes. It includes performance instructions like "col leg. batt." and "arco".

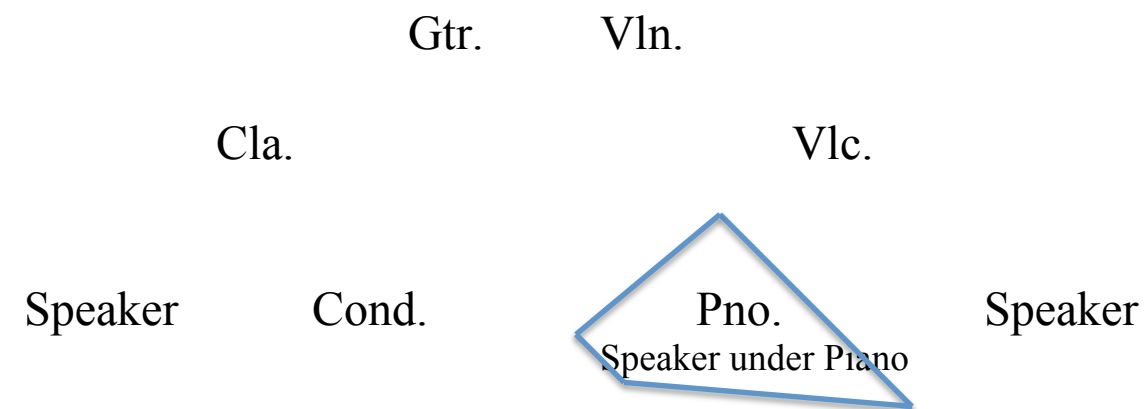
Violin: Starts with a piano (*p*) dynamic. It includes performance instructions like "pizz." and "arco". Dynamics range from *p* to *fff*.

Cello: Starts with a piano (*p*) dynamic. It includes performance instructions like "pizz." and "arco". Dynamics range from *p* to *fff*.

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 \flat

Electric Guitar

Piano

Electronics

Violin

Cello

11

Pno.

Ped. _____

Amplification ON

Speaker under piano only

1

2

Elec.

18

B♭ Cl.

E.Gtr.

Pno.

Elec.

Vln.

Vlc.

III

Attacks as imperceptible as possible until 26.

III (down until end of 33)

3

4

5

6

7

B \flat Cl.
25 *p* *p* *p* *mf*

E.Gtr.
25 *p* *p* *p* *mf*
III 13 5 I 7

Pno.
25 *dim.*

Elec.
8 9

Vln.
25 (lower than major 3rd position on string) *p* *p* *mf* II

Vlc.
25 *p* *p* *mf* III I III I

Detailed description of the musical score: This page contains six staves of music. The top staff is for B \flat Clarinet, the second for Electric Guitar, the third and fourth for Piano (Grand and Bass clefs), the fifth for Electric Bass, and the sixth and seventh for Violin and Viola. The music is in 4/4 time and features a variety of dynamic markings including piano (*p*) and mezzo-forte (*mf*). Performance markings such as accents, slurs, and a *dim.* (diminuendo) are present. The Electric Bass staff includes circled numbers 8 and 9. Fingerings and positions are indicated for the string instruments, with a specific instruction for the Violin: "(lower than major 3rd position on string)".

31

B♭ Cl. *pp* *sfz pp* *mf*

E.Gtr. *pp* *sfz pp* *mf* *p*

Pno. *p* *f* *p* *f*

Elec. 10 11 12 (Amplification OFF)

Vln. *pp* *sfz pp* *mf* *p*

Vlc. *pp* *sfz pp* *mf* *p*

III 13 III 12 III 5

I 12 II 12 III 5

(III) Ped.

III 7 IV 7

B

(♩ = 72)

E.Gtr. 36 *p* IV 21

Pno. 36 *p* (Long - first time only) *sfz* *sfz* (always quiet except for accents and bass)

Vln. 36 *p* II

Vlc. 36 *p* IV 6

B♭ Cl. 42 *p*

E.Gtr. 42

Pno. 42

Vln. 42

Vlc. 42

This musical score page, numbered 6, contains five staves of music starting at measure 48. The instruments are Bb Clarinet (Bb Cl.), Electric Guitar (E.Gtr.), Piano (Pno.), Violin (Vln.), and Viola (Vlc.). The music is written in 4/4 time and features a complex rhythmic structure with frequent changes in meter (3/4, 2/4, 3/4, 4/4). The dynamics are consistently marked as *p* (piano). The score includes various musical notations such as slurs, accents, and fingerings. The Bb Cl. and E.Gtr. parts feature long, sustained notes with slurs. The Pno. part is more active, with complex chordal textures and triplets. The Vln. and Vlc. parts also feature long, sustained notes with slurs. The score is divided into measures by vertical bar lines, and the time signature changes are clearly indicated.

Bb Cl. 48 *p* *p* *p* *p*

E.Gtr. 48 *p* *p* *p* *p*

Pno. 48

Vln. 48 *p* *p* *p* *p*

Vlc. 48 *p* *p* *p* *p*

To Bass Clarinet

B \flat Cl. 54

E.Gtr. 54

Pno.

Vln. 54

Vlc. 54

This page contains a musical score for measures 54 through 60. The score is arranged in a system with five staves: B \flat Clarinet, Electric Guitar, Piano (Grand Staff), Violin, and Viola. The music is in 4/4 time and features complex rhythmic patterns with triplets and slurs. Dynamics range from *p* (piano) to *f* (forte). Fingerings and bowings are indicated throughout. A section header "To Bass Clarinet" is centered above the first staff. The score includes various musical notations such as slurs, accents, and dynamic markings.

Measure 54: B \flat Cl. starts with a triplet of eighth notes, *p*. E.Gtr. has a triplet of eighth notes, *p*. Pno. has a triplet of eighth notes in the right hand and rests in the left. Vln. has a triplet of eighth notes, *p*. Vlc. has a triplet of eighth notes, *p*.

Measure 55: B \flat Cl. has a half note, *p*. E.Gtr. has a half note, *p*. Pno. has a half note chord, *p*. Vln. has a half note, *p*. Vlc. has a half note, *p*.

Measure 56: B \flat Cl. has a half note, *p*. E.Gtr. has a half note, *p*. Pno. has a half note chord, *p*. Vln. has a half note, *p*. Vlc. has a half note, *p*.

Measure 57: B \flat Cl. has a half note, *p*. E.Gtr. has a half note, *p*. Pno. has a half note chord, *p*. Vln. has a half note, *p*. Vlc. has a half note, *p*.

Measure 58: B \flat Cl. has a half note, *p*. E.Gtr. has a half note, *p*. Pno. has a half note chord, *p*. Vln. has a half note, *p*. Vlc. has a half note, *p*.

Measure 59: B \flat Cl. has a half note, *p*. E.Gtr. has a half note, *p*. Pno. has a half note chord, *p*. Vln. has a half note, *p*. Vlc. has a half note, *p*.

Measure 60: B \flat Cl. has a half note, *f*. E.Gtr. has a half note, *p*. Pno. has a half note chord, *p*. Vln. has a half note, *p*. Vlc. has a half note, *p*.

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

The musical score consists of five staves: Bb Cl., E.Gtr., Pno., Vln., and Vlc. The piece is in 4/4 time and features a complex rhythmic structure with frequent changes in meter (4/4, 3/4, 2/4, 3/2, 4/4). The score includes various dynamics such as *p*, *f*, *pp*, and *ppp* (flat), along with performance instructions like *con sord.* and *ppp* (flat). Fingerings and bowings are indicated throughout. The Pno. part features intricate textures with triplets and quintuplets. The Vln. and Vlc. parts have specific performance markings, including a note that is 'I (notably sharp of min 3rd position)' and a final triplet in the Vlc. part.

67

To Bb Cla (2nd time).

$\overset{3}{\leftarrow} \text{musical note} = \text{musical note} \rightarrow = 108$
x5

Breathy, pitch barely audible

Bb Cl. *f/p/f/p/f* *ppp* (flat)

E.Gtr. *f* *ppp* (flat)

Elec. Outer speakers only [A] [B] [C]

Vln. *f/p/f/p/f* *ppp* (flat)

Vlc. *f/p/f/p/f* *ppp* (flat)

III 13 II 12 (up) I 12 II 7 III 5 III +6 I III 5 I 12

III 13 I 0 (whammy bar) I 13 II 7 I 12 V 12

D E F G H I

77

Bb Cl. *f/p/f/p/f* *ppp* (flat)

E.Gtr. *f* *ppp* (flat)

Elec. [D] [E] [F] [G] [H] [I]

Vln. *f/p/f/p/f* *ppp* (flat)


Vlc. *f/p/f/p/f* *ppp* (flat)

III 13 I 0 (whammy bar) I 13 II 7 I 12 V 12

D E F G H I

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

D

 = 54

rit.

86

B♭ Cl.

E.Gtr.

Pno.

Elec.

Vln.

Vlc.

II 8
III 5

I 12

II 12 (up)

I 1

p

ff

p

ff

s

III

Ped.

J

K

M

N

O

P

Q

6

I

I

94

B♭ Cl.

E.Gtr.

Pno.

Elec.

Vln.

Vlc.

III 5

I 12

V (whammy bar)

II 12

II 9

I 12

f

ppp

p

ff

p

ff

p

ff

R

S

T

U

V

W

IV

senza sord.

f

senza sord.

III 7

f

f

103

Pno.

f

(ped ad lib. - long pedals)

3 5 7 7 3 10 11 11 10 7 3 11 10 7 3 7 5 11 10 7 7 3 5 5 4 7 3 5 5 4 5 3 5 4 3 8 3 5 4

III

III

113

E.Gtr. *p* *mf* *p* *mf*

Pno.

Vln.

Vlc.

121

B♭ Cl.

E.Gtr. *pp*

Pno.

Vln.

Vlc. *pp*

F

To Bass Clarinet

130

B♭ Cl.

E.Gtr.

Pno.

Vln.

Vlc.

To B♭ Cla.

138

B♭ Cl.

E.Gtr.

Vln.

Vlc.

147

B♭ Cl. *pp*

E.Gtr. *pp* II 9 III 10 (up) I I III 11 (up) I I I 12 III 5 *f*

Vln. *f* *pp* *p* *f* *p*

Vlc. *pp* *p* *f* *pp*

154

B♭ Cl. *f* *pp* *f* *p*

E.Gtr. *f* *pp* *f* *p*

Vln. *f* *p* *pp* *f* *p*

Vlc. III 7 IV 11 III 8 III 9 III sempre 7 8 9 10 11 *f* *p*

G

rit. ----- ♩ = 96

162

B♭ Cl. *pp* *f* *pp* *f*

E.Gtr. *pp* *sfz pp* *f* *pp* *f*

Pno. *fff* *1/3 1/3 1/3 etc.* Ped. sempre, vary gap between last note and release

Elec. Amplification ON Under piano speaker only

Vln. *pp* *f* *pp* *f*

Vlc. *pp* *sfz pp* *sfz* *pp* *f*

Detailed description of the musical score: The score is for measures 162 to 171. It features six staves: B♭ Clarinet, Electric Guitar, Piano, Electric Amplification, Violin, and Viola. The tempo is marked 'rit.' with a metronome marking of ♩ = 96. A box labeled 'G' is positioned above the first measure. The B♭ Clarinet part starts with a *pp* dynamic and includes fingerings III 4 and II 5. The Electric Guitar part starts with *pp* and includes fingerings III 4 and II 5. The Piano part features a *fff* dynamic and a triplet of eighth notes marked '1/3 1/3 1/3 etc.'. The Electric Amplification staff has a section labeled 'Amplification ON Under piano speaker only'. The Violin part starts with *pp* and includes fingerings III 11 and IV 11. The Viola part starts with *pp* and includes fingerings III 11 and IV 11. Dynamic markings include *pp*, *f*, *sfz pp*, *sfz*, and *fff*. Performance instructions include 'Ped. sempre, vary gap between last note and release' and 'Amplification ON Under piano speaker only'.

B♭ Cl. 171 *pp* *f* *pp* *ff* *sfzpp*

E.Gtr. 171 *pp* *sfzpp* *f*

Pno.

Elec. 13 14 15 16 17 18 *f*

Vln. 171 *pp* *f* *pp* *sfzpp*

Vlc. *ff* *pp* *ff* *pp* *ff* *pp* *sfzpp*

Detailed description: This page of a musical score contains six staves. The B♭ Clarinet staff (top) features a melodic line with dynamics ranging from *pp* to *sfzpp*. The Electric Guitar staff includes a guitar-specific notation with fret numbers (I 7, II 5, III 4) and dynamics from *pp* to *f*. The Piano staff shows a complex accompaniment with triplets and slurs. The Electric Bass staff has a rhythmic line with dynamics of *f* and numbered measures 13-18. The Violin staff has a melodic line with dynamics from *pp* to *sfzpp*. The Viola staff has a rhythmic line with dynamics from *ff* to *sfzpp*. The score includes various performance markings such as slurs, accents, and dynamic hairpins.

H

3 $\text{♩} = 72$
 $\leftarrow \text{♩} = \text{♩} \rightarrow$

rit......

178

B♭ Cl. *sfzpp* *sfzpp* *ff*

E.Gtr. *ff* *sfzpp* *ff*

Pno. *f*

Elec. 19 *f*
 Ped. Amplification OFF

Vln. *sfzpp* *sfzpp* *ff* *f*

Vlc. *sfzpp* *sfzpp* *ff* *p*

----- ♩ = 96

♩ = 72 *rit.* -----

♩ = 96

♩ = 72

B♭ Cl.

E.Gtr.

Pno.

Vln.

Vlc.

187

I 8
II 5
III 5

I 0
II 12
III 12

I 2
II 1
III 2
IV 3
V 4
VI 5

11
10
5
4

11
5
5
4

III
IV
7
11

II 4
III 4

I 4
II 3

Ped.

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

pp *f* *pp* *f* *f* *f*

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

193

rit. $\text{♩} = 96$ $\text{♩} = 72$

B♭ Cl.

E.Gtr.

Pno.

Vln.

Vlc.

f *ff* *p* *mf*

II 5
III 5

I 8

III 5

5 4

5 4

III 11

III 11

III 13 11 5

$\text{♩} = 96$

accel. -----
(demis stay same length
regardless of accel.)

199

B♭ Cl.

E.Gtr.

Pno.

Vln.

Vlc.

fff

fff

fff

fff

fff

5
4

--- (III) ---
Ped.

III
II

III
II

I

$\text{♩} = 72$

206

Pno.

p (always quiet except for accents and bass)

sfz

f

--- (III) ---

212

sempre marcattissimo

ff

Pno.

(III)-----

220

(retake silently)

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

Pno.

mf

(III)-----

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

Elec. All speakers 20

228

p *mp > p* *pp* *ppp*

Pno.

p *ppp*

J ♩ = 54

⁵ ♩ = 67.5

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

(still Cue 20) Amplification ON

(Pedal wedged down until end)

250

³ ♩ = 90

³ ♩ = ⁵ ♩

K
 ♩ = 54

5 ♩ = 67.5
 ← ♩ = ♩ →

261

B♭ Cl. *pp* *p* *mf* *f* *p* *p* *p*

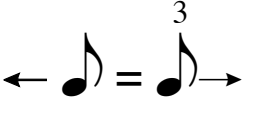
E.Gtr. *pp* *p* *mf* *f* *p* *p* *p*

Pno.

Elec. (still cue 20) Fade gradually across both repeats (amplification stays ON until end)

Vln. *p* *pizz.* *col leg. batt.* *pizz.* *c.l.b.* *pizz.* *c.l.b.* *pizz.* *c.l.b.*

Vlc. *p* *pizz.* *col leg. batt.* *pizz.* *c.l.b.* *pizz.* *c.l.b.*



269

B \flat Cl.

E.Gtr.

Pno.

Vln.

Vlc.

f p *f p* *f*

f p *f p* *mp* *f*

pizz. *c.l.b.* *pizz.* *c.l.b.* *mp* *p* *pizz.* *c.l.b.*

pizz. *c.l.b.* *pizz.* *c.l.b.* *mp* *p* *pizz.* *c.l.b.*

mp *p*

Detailed description: This page of a musical score, numbered 24, covers measures 269 to 274. It features five staves: B \flat Clarinet (B \flat Cl.), Electric Guitar (E.Gtr.), Piano (Pno.), Violin (Vln.), and Viola (Vlc.). The music is in 3/4 time and consists of two systems of four measures each, separated by a double bar line. The first system (measures 269-272) is in 3/4 time, and the second system (measures 273-274) is in 4/4 time. The B \flat Cl. and E.Gtr. parts feature dynamic markings of *f* and *p*. The Pno. part includes chord diagrams and dynamic markings of *mp* and *f*. The Vln. and Vlc. parts include performance instructions such as *pizz.* (pizzicato) and *c.l.b.* (col legno battuto). A triplet of eighth notes is indicated at the end of the score.

♩ = 45

279

B♭ Cl.

E.Gtr.

Pno.

Vln.

Vlc.

mf

mf mp mf mp mf mp

f

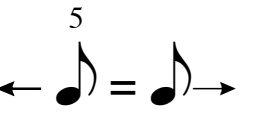
f

c.l.b.

c.l.b.

f

f



286

B♭ Cl. *f sfzp f sfzp f sfzp*

E.Gtr. *f mf mp sfzp f sfzp f sfzp*

Pno.

Vln. *f pizz. c.l.b. sfzp f sfzp f sfzp*

Vlc. *f pizz. c.l.b. sfzp f sfzp f sfzp*

II 12
III 13

arco IV III IV 11

♩ = 54

← ³ ♩ = ♩ →

293

B♭ Cl. *sfzp* *< f* *p*

E.Gtr. *sfzp* *< f* *p*

Pno.

Vln. *sfzp* *pizz.* *c.l.b.* *f* *p*

Vlc. *sfzp* *pizz.* *c.l.b.* *f* *p*

Detailed description of the musical score: The score is for measures 293 to 300. It is in 4/4 time with a key signature of one sharp (F#). The tempo is marked as quarter note = 54. The instruments are B♭ Clarinet, Electric Guitar, Piano, Violin, and Viola. The B♭ Cl. and E.Gtr. parts start with a *sfzp* dynamic, followed by a crescendo to *f* and then a decrescendo to *p*. The Piano part features a complex rhythmic pattern with many triplets and slurs. The Violin and Viola parts also start with *sfzp*, followed by *pizz.* and *c.l.b.* markings, then a crescendo to *f* and a decrescendo to *p*. The Viola part includes a fingering instruction 'III 7' at the end of measure 299.

♩ = 81

301

B♭ Cl.

E.Gtr.

Pno.

Vln.

Vlc.

pp/mp *f* *mf* *f* *fff*

(2nd time only)

pp/mp *f* *mf* *f* *fff*

(2nd time only)

pp/mp *mf* *f* *fff*

pizz. *c.l.b.* *arco* *pizz.* *c.l.b.* *arco*

pp/mp *mf* *f* *fff*

pp/mp *mf* *f* *fff*

← ♩ = ♩ →

308

B \flat Cl.

E.Gtr.

Pno.

Vln.

Vlc.

The musical score for measures 308-312 is arranged in five systems. The first system (measures 308-310) shows the B \flat Clarinet and Electric Guitar parts. The B \flat Clarinet part features a melodic line with slurs and dynamic markings of *fff*. The Electric Guitar part provides harmonic support with chords and slurs, also marked *fff*. The second system (measures 310-312) features the Piano part, which includes complex rhythmic patterns with triplets and slurs. The Violin and Viola parts (measures 310-312) play a sustained harmonic accompaniment with slurs and dynamic markings of *fff* and *n.*.

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