

THE UNIVERSITY OF CHICAGO

SUGGESTED AFFINITIES:
FOR SOLO PIANO, LARGE ENSEMBLE AND ELECTRONICS

A DISSERTATION SUBMITTED TO
THE FACULTY OF THE DIVISION OF THE HUMANITIES
IN CANDIDACY FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

DEPARTMENT OF MUSIC

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ABSTRACT

suggested affinities is a concerto for piano, accompanied by 13 musicians and electronics. At the center of the work is the piano sound itself, which is ramified and transfigured through its interaction with the ensemble, electronics, and an *obbligato* trio of timbrally related instruments (harp, vibraphone, and digital keyboard). The narrative of the composition explores affinities and differences between the piano and its related family members, between the acoustic and digital domains, and finally, between mechanized and animate sound.

The electronic component features realistic sounding *meta-instruments*—instruments with an unusually expanded palette for articulation, microtonal inflection, tessitura, resonance, and noise elements. Through the use of hardware “prosthetics”—localized speakers, keyboards, and/or pedals—the solo pianist and *obbligato* trio trigger digital instrumental simulations (with its new vocabulary of estranged possibilities) that blend in real-time with their acoustic counterpart.

suggested affinities is the culmination of research carried out over a series of works using meta-instruments written between 2014-17. It combines previous instrumental expansions and further develops the project by interacting with non-instrumental sounds. Murmurs, breaths, groans and other emulations, are also included in the orchestration and electronics in an attempt to fashion a piano with a physical–organic–body. Thus, as the machine-like properties of the piano amplify, so does its dream of becoming a biological being.

INSTRUMENTATION

Flute/Piccolo/Bass Flute

Oboe (+ aux. percussion: (1) shot glass)

Clarinet/Bass Clarinet

Horn in F (+ aux. percussion: (1) flexatone, and (1) shot glass)

Trumpet in C

Trombone (+ aux. percussion: (1) shot glass, and (1) slide whistle)

Percussion + electronics *

- ❖ vibraphone, glockenspiel, crotales (Eb 6, C6), bass drum, snare drum, string drum (lion’s roar), (1) medium bongo, sizzle cymbal, gong, woodblocks (x3), guiro, shot glasses (x3); (1) large superball, bass bow, parchment paper.

Harp + electronics *

- ❖ + 4 superballs, in different sizes (1 = small to 4 = large)

Solo Piano/Solo Keyboard + electronics * (+ fingerless gloves for playing *glissandi*)

Keyboard 2 *

Violin

Viola

Cello (+ aux. percussion: (1) waterphone)

Contrabass (with C extension)

Score in C; pitch content for electronics sound as written for meta-harp and meta-vibraphone, but not for the keyboards

All auxiliary percussion instruments are provided by the composer

*see next page for instructions on electronics

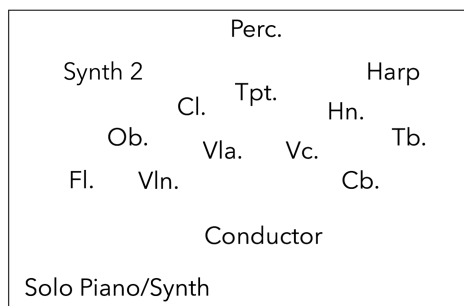
DURATION

ca. 22 minutes

PREMIERE PERFORMANCE

May 04, 2018; Logan Center for the Arts; Ensemble Dal Niente, Winston Choi–soloist, and Michael Lewanski–conductor. Chicago, IL.

SEATING PLAN



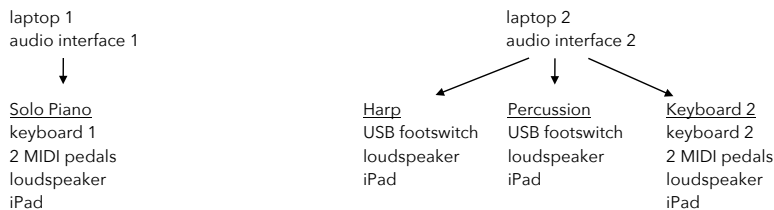
ELECTRONICS

The electronics consists of four meta-instruments played by the following performers: solo pianist, percussionist (meta-vibraphone/glockenspiel), harpist, and an additional keyboard player. Each performer has her own electronic setup and is responsible for individually triggering cues, according to the score. Cues consist of either soundfiles (harp, vibraphone) or a combination of soundfiles and changes in tuning/preset settings (solo keyboard and keyboard 2). Necessary materials and further instructions can be downloaded [here](#), or at <http://www.igor-santos.com/dissertation>

Gear List

- (2) laptops
- (2) audio interfaces
- (4) loudspeakers
- (2) 88-key MIDI controller (pitch-bend wheel required)
- (4) MIDI pedals
- (2) USB footswitches
- (4) iPads

Gear Distribution

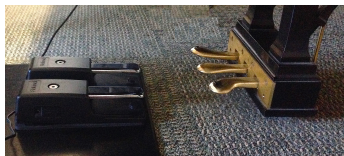


Solo Piano Setup

- The MIDI keyboard should be set on top of the piano, OR on a stand which is lower than the acoustic piano's keyboard
- Speakers should be placed inside the piano, or setup in a way that maximizes realistic blend

Solo Piano Setup (continued)

- The volume for the Keyboard should be in equal balance to the piano
- The two MIDI pedals may be setup in any manner that feels comfortable to the pianist. See figure below, where the keyboard pedals are played with the heel of each foot
- Cues can be triggered by playing A0 on the keyboard, the octave + and - buttons, or through the iPad screen
- The iPad should always be visible during performance, preferably set on the music stand



Harp and Percussion Setup

- Speakers should be placed behind the instruments, or setup in a way that maximizes realistic blend
- The volume for the speakers should be in equal balance to their acoustic counterparts
- USB footswitches are used to trigger cues
- The iPad should always be visible during performance, preferably set on the music stand

Keyboard 2 Setup

- Speakers should be placed behind the instrument
- Cues are triggered with by playing A0, the octave + and - buttons, or through the iPad screen
- The iPad should always be visible during performance, preferably set on the music stand

PERFORMANCE/NOTATION INSTRUCTIONS

General

Accidentals apply for the duration of the measure and only in the octave in which they are written

♯ ♯ ♯ ♯ ♯ ♯ ♯ ♯ ♯ ♯ - quarter-tone accidentals (ascending, descending)

♯ ♯ ♯ ♯ ♯ ♯ ♯ ♯ ♯ ♯ - twelfth-tone scale, ca. 16 cents (descending)

♯ ♯ ♯ - also used as approximations of harmonic partials (e.g. 5th, 7th partials), and eight tones (ca. 25 cents)

∧ ◡ ◻ - short, medium and long fermatas



- the end note of glissandi, written in parenthesis, should not be articulated

"ff" - relative dynamics according to the sound required



- highest possible note

Tremolos should always be very fast and dense

Woodwinds and Brass

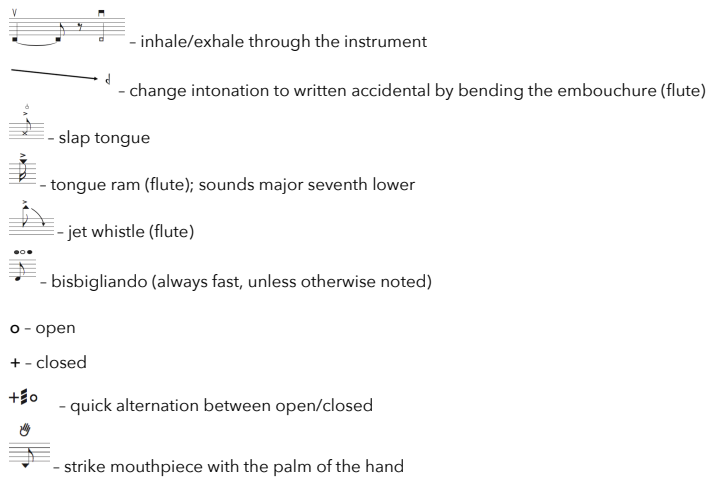


- mixture of tone and breath sound

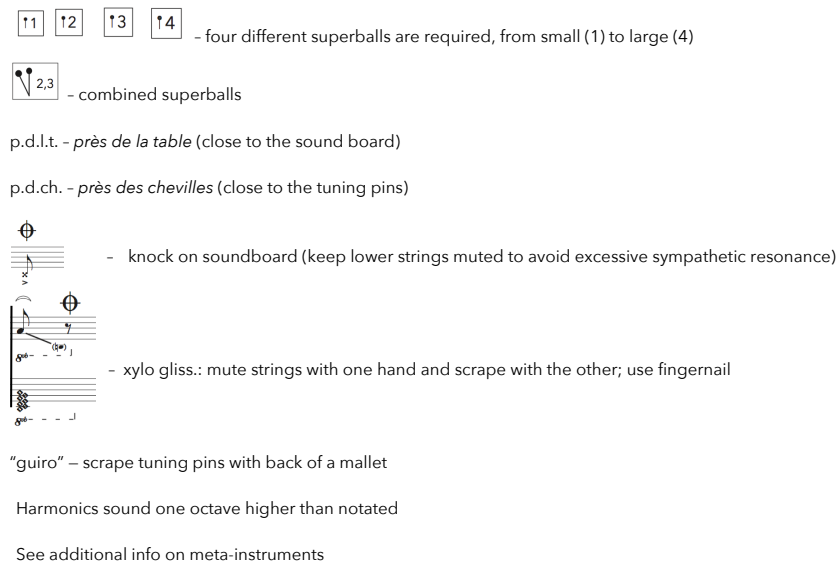


- breath only

Woodwinds and Brass (continued)



Harp



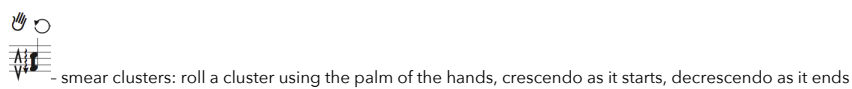
Percussion

Mallets may be decided freely by the percussionist, unless otherwise indicated

"guiro" - scrape on vibraphone resonators with the back of a mallet

See info on meta-instruments

Piano



Piano (continued)

Wearing fingerless gloves are recommended for playing glissandi

See info on meta-instruments

Strings

ST - sul tasto

AST - alto sul tasto

ORD - ordinario

SP - sul ponticello

ASP - alto sul ponticello

Natural harmonics should be played where indicated. If the harmonic does not fall on a nodal point of the string, the resulting sound is that of a hint of the pitch amongst a haze of "air"



- white noise, on the bridge; keep strings muted.

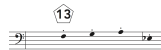


- air-noise gliss.; apply harmonic pressure using two or three fingers on the string. The effect is that of a fluttering sound of mostly white noise, with an audible ascent/descent in register



- overpressure, no pure tone

Meta-Instruments (harp, vibraphone, keyboard solo, keyboard 2)



- cues for electronics: each cue should be triggered where rhythmically placed; cues that



indicate preset changes (only for solo keyboard, and keyboard 2), should be prepared in advance; current cue numbers are displayed on each performer's iPad



- pitch-bend staff (for solo keyboard and keyboard 2): staff lines indicate position of pitch-bend wheel (top = max bend up, middle = no bend, lower = max bend down)

All other instrumental techniques are explained in the score, as they occur

suggested affinities

written for Winston Choi and
ENSEMBLE DAL NIENTE

♩ = 66

Flute

Oboe

Bass Clarinet
in B \flat

Horn in F

Trumpet in C
harmon mute (stem in)

Trombone
harmon mute (stem in)

Percussion
Perc.
playback

Harp

Hp.
playback

PIANO

solist

KEYBOARD

Keyboard II

Violin

Viola

Cello

Contrabass

4/4 ♩ = 66

3/4

5/4

lv.

depress sustain pedal to allow
for sympathetic resonances

1 (octonal-utonal, 81 primes)

(*molto legato* (semi-overlapping))
con rubato, sempre

play as if mumbled, without discernible accentuation, unless otherwise noted

p *mp* *p* *pp*

* approx. sounding register

4/4 ♩ = 66

3/4

5/4

5

Fl.

Ob.

Bass Cl.

Hn.

C Tpt.

Tbn.

vibraphone

Vib.

Vib. playback

stacc. possibile

Hp.

Hp. playback

5/4

4/4

5/4

4/4

Pno.

soloist

Kbd.

hybrid quarter tone/E

Kbd. II

5/4

4/4

5/4

4/4

Vln.

Vla.

Vc.

Cb.

8

Fl.

Ob.

Bass Cl.

Hn.

C Tpt.

Tbn.

Vib.

Vib. playback

Hp.

Hp. playback

4/4

8

2/4

Pno.

soloist

Kbd.

mp

ppp

p

mf

p

pp

p

f

Kbd. II

4/4

8

2/4

Vln.

Vla.

Vc.

Cb.

14

Fl.

Ob.

Bass Cl.

Hn.

C Tpt.

Tbn.

Vib.

Vib. playback

Hp.

Hp. playback

superball on soundboard 12 l.v. 11

5 4

4 4

14

Pno.

soloist

Kbd.

f mf p

(senza rit.)

2 (atonal/atonal, 81 primes)

play as if mumbled, without discernible accentuation, unless otherwise noted (molto legato (semi-overlapping))

loco sub. f p < mp > < mf > mf pp

sub. ff

ff sub.

sub. ff

5 4

4 4

Vln.

Vla.

Vc.

Cb.

23

Fl. *mf* *f* *pp* *f*

Ob. *mf* *f*

Bass Cl. *mf* *f*

Hn. *molto* *ff* *p*

C Tpt. *molto* *ff* *p*

Tbn. *molto* *ff* *p*

Vib. *f*

Vib. playback *f*

Hp. *f*

Hp. playback *f*

Lv.

23

Pno. *mf* *ff*

soloist

Kbd. *f* *ff*

Kbd. II *f*

5/4 **3/4**

23

Vin. *mf* *f* *f*

Vla. *sub p* *mf* *ff* S.P.

Vc. *mf* *ff* S.P.

Cb. *arco* *sub p* *mf* *ff* S.P.

5/4 **3/4**

25 ca. 6''

Fl. switch to Bass Flute

Ob.

Bass Cl.

Hn.

C Tpt.

Tbn.

Vib. arco *v* *crotales* *lx*

Perc. playback

Hp.

Hp. playback

25 ca. 6''

Pno.

soloist

Kbd.

Kbd. II

25 ca. 6''

Vln.

Vla.

Vc.

Cb.

28 Bass Flute *breathily*

Bass Fl. *f* *p* *mf* *pp*

Ob.

Bass Cl.

Hn.

C Tpt.

Tbn.

Perc. *snare drum* *large superball* *lv.* *f*

Perc. playback

Hp.

Hp. playback

28 *lv.*

Pno. *(2da) →*

soloist

Kbd. *sub. f* *pp* *(senza 2da)* *< p >* *p*

Kbd. II

28

Vln.

Vla.

Vc.

Cb. *SOLO A.S.T.* *f* *< f >* *< mf >* *p* *mf*

30

emb. bend

Bass Fl. *mf* *f* *<mf>*

Ob.

Bass Cl.

Hn.

C Tpt.

Tbn.

Perc.

Perc. playback

Hp.

Hp. playback

30

Pno. **3/4** **4/4**

soloist

Kbd. *p* *f* *<p>* *<mp>* *mf*

Kbd. II

30

Vln.

Vla.

Vc.

Cb. *<f>* *<mf>* *<mf>* *<p>* *<mp>* *f*

molto vibr.

ord.

36

Fl. *mf*

Ob. *mf*

Bass Cl. *mf*

Hn. +

C Tpt.

Tbn.

Vib. *p*

Vib. playback *p*

Hp. *p* *pp*

Hp. playback *p*

36

Pno. soloist *mp* *mf*

(*2da.*)

Kbd. *p* *mf*

5 (hybrid quarter tone/E)

Kbd. II *p*

36

Vin. ord. *mf sub p*

Vla. ord. *mf sub p*

Vc. ord. *mp*

Cb. ord. *sub p* *mf*

Detailed description of the musical score: The score is divided into three systems. The first system (measures 36-37) includes Flute, Oboe, Bass Clarinet, Horn, Trumpet, Trombone, Vibraphone, and Harp. The second system (measures 36-37) includes Piano soloist and Keyboard II. The third system (measures 36-37) includes Violin, Viola, Violoncello, and Contrabass. Dynamics range from *pp* to *mf*. Performance instructions include 'ord.' (order) and 'sub p' (sub piano). A specific fingering or articulation instruction '5 (hybrid quarter tone/E)' is present in the Keyboard II part.

38

Fl. *ff*

Ob. *ff*

Bass Cl. *ff*

Hn. *mf* *sub. p* *ff*

C Tpt. *mf* *sub. p* *f sub. p* *ff*

Tbn. *mf* *sub. p* *f sub. p* *ff*

Vib. *ff* *ff* *woodblock*

Vib. playback *f*

Hp. *ff*

Hp. playback *f*

34

38

Pno. *ff*

soloist

Kbd. *f* *ff*

Kbd. II *ff*

34

38

Vln. *mp* *ff*

Vla. *mf* *sub. p* *f sub. p* *ff*

Vc. *mf* *ff*

Cb. *ff* *secco*

f sub. p *f* *ff*

40

Fl. *pp* *ff* *pp* *pp* *ff* *pp*

Ob. *pp* *f* *pp* *pp* *f* *pp* *f*

B♭ Cl. *pp* *f* *pp* *pp* *f* *pp* *f*

Hr. *pp* *f* *pp* *f* *pp* *f*

C Tpt. *pp* *f* *pp* *f* *pp* *f*

Tbn. *pp* *f* *pp* *f* *pp* *f*

Perc. **gong** scrape w/ beater or coin
Lv. *< ff*

Hp. playback

Hp. playback

3
4

Pno. *ff* *ff* *ff* *ff*

soloist *ff* *ff* *ff* *ff*

Kbd. *ff* *ff* *ff* *ff*

Kbd. II

3
4

Vin. *pp* *ff* *pp* *pp* *ff* *pp*

Vla. S.P. *ff*

Vc. S.P. *ff*

Cb. S.P. arco *ff*

53

Fl. *mf* *ff* switch to Bass Flute

Ob. *mf* *ff* remove reed

Bass Cl. *ff* *mf*

Hn. *f* remove stem

C Tpt. *p* *f* *p* remove stem

Tbn. *p* *f* remove stem

Perc. lion's roar (string drum) *fff* arco *f* crotales *f* l.v.

Perc. playback

Hp. l.v.

Hp. playback

54

Pho. *f* loco l.v.

soloist l.v. synth only

Kbd. *mf* (depress silently) *sf* Sost. *mf* loco

Kbd. II l.v.

55

Vln. arco S.P. *mf* *ff* *p* *ff* *p* *pp*

Via. S.P. *mf* *f* *ff*

Vc. S.P. *f* *ff*

Cb. S.P. *ff* *f*

57

Bass Fl.

Ob.

Bass Cl.

Hn.

C Tpt.

Tbn.

Perc. snare drum \rightarrow 2 \rightarrow snares off

Perc. playback

Hp.

Hp. playback

57

Pno. soloist

Kbd.

57

hybrid quarter tone/E1

PP

(senza ♩)

(depress silently)

Sost. ♩

loco

lv.

fz

57

ord.

pp

S.P.

pp

f

S.P.

pp

f

S.P.

pp

f

S.P.

pp

f

pp

f

61

Bass Flute (Bass Flute)
ppp
 without the reed, air sound only, with contour

Ob.
ppp
 breathy

Bass Cl.
ppp

Hn.
pp
 mute on

C. Tpt.
 (harmon, stem removed)
pp

Tbn.
 (harmon, stem removed)
pp

Perc.
 woodblock
fff

Perc. playback

Hp.
 Hp. playback

61

Pno. soloist
mf
 (Sost. rit)

Kbd.
 (Sost. rit)

Kbd. II
p
 (Sost. rit)
fff

61

Vin.
 (8^{va} →)
 ord.
p → *pp* → *f*

Vla.

Vc.

Cb.

65 breathy quasi parlando

Bass Fl. *pp*

Ob. *pp* quasi parlando

Bass Cl. *pp* breathy quasi parlando

Hn. con sord. *ppp* quasi parlando

C Tpt. *ppp* (harmon, stem removed) quasi parlando

Tbn. *ppp* (harmon, stem removed) quasi parlando

Perc. *pp* snare drum rub w/ paper quasi breathing

Hp. *pp*

Hp. playback

65 I.v. *pp*

Pno. soloist (Sost. *pp*)

Kbd. (Sost. *pp*)

Kbd. II (Sost. *pp*)

65 *pp*

Vln. *pp*

Vla. *pp* A.S.T. quasi parlando (IV) flaut.

Vc. *pp* A.S.T. quasi parlando flaut.

Cb. *pp* A.S.T. quasi parlando (IV) flaut.

54

54

68

Bass Fl. *poco* *pp*

Ob. *poco* *pp*

Bass Cl. *poco* *pp*

Hr. *poco* *pp*

C Tpt. *poco* *pp*

Tbn. *poco* *pp*

Perc. *poco* *pp* (vibraphone)

Perc. playback *pp*

Hp. *pp*

Hp. playback *pp*

69

Pno. *f* (Sost. *pp*)

Kbd. (Sost. *pp*)

8 (hybrid quarter tone ET)

Kbd. II *pp* (Sost. *pp*)

70

Vln. *p* *pp* (8^{va} →) senza vibr.

Vla. *poco* *pp*

Vc. *poco* *pp*

Cb. *poco* *pp*

71

Fl. switch to Piccolo

Ob. put the reed back; pick up shot glass + beater

Bi. Cl. *mf*

Hn. mute off
pick up shot glass + beater

C. Tpt. stem in

Tbn. stem in harmon mute;
pick up shot glass + beater

Vib. (lion's roar (string drum))
sub. *f*

Perc. playback

Hp. *mf*

Hp. playback

71

Pho. *f*

soloist

Kbd. *sub. f* *pp* *p*

Sost.

Kbd. II. *mf*

71

Vln. *mf* *pp* *mf* *pp*

Vla. *mf*

Vc. *mf*

Cb. *mf*

3/4 4/4

3/4 4/4

75 Piccolo *mf*

Ob.

Bi. Cl.

Hn.

C. Tpt.

Tbn.

Perc. *f* *p* *vibraphone*

Perc. playback

Hp. *f* *p* *f* *p*

Hp. playback *f* *p* *f* *p*

75 Pno. soloist *f* *f*

5 4 4 4

Kbd. *p* *mf* *f* *mf* *f*

(Sost. *rit.*)

Kbd. II *f*

(senza *rit.*)

75 Vln. *f* *mf* *f* *pp*

ord. S.P. *f* *f*

ord. senza vibr. *f* *f*

Vla. *f* *f*

Vc. *sfz*

Cb.

79

Picc. *f*

Ob. *ff* (shot glass)

Bass Cl.

Hn.

C Tpt.

Tbn.

Perc. *ff* (bongo)

Perc. playback *ff* (woodblocks)

Hp.

Hp. playback

79 **4/4** (5^{ma} →)

Pno. soloist *ff* (senza 5^{ba})

Kbd.

Kbd. II *ff* (senza 5^{ba})

79 **4/4** (5^{ma} →)

Vin. *ff* (5^{ma} →)

Via. *ff* (5^{ma} →)

Vc.

Cb.

82

Picc. *f* *ff*

Ob. *ff*

Bass Cl.

Hn.

C Tpt.

Tbn. *ff* (shot glass)

Perc. (glockenspiel) *ff* (staccato possibile)

Glock. playback (hybrid quarter tones) *ff*

Hp. *ff* (staccato possibile) *gw*

Hp. playback (hybrid quarter tones) *ff*

Pno. soloist *f* *ff*

Kbd.

Kbd. II *f* *ff*

Vln. *f* *ff*

Vla. *f* *ff*

Vc. *ff* (as high as possible (1))

Cb. *ff* (1) behind and close to the bridge, high screeching sound.

Musical score for orchestra and soloist, measures 185-204. The score includes parts for Piccolo, Oboe, Bass Cl., Hn., C Tpt., Tbn., Glock., Glock. playback, Hp., Hp. playback, Pno. soloist, Kbd., Kbd. II, Vin., Via., Vc., and Cb. The score features complex rhythmic patterns, dynamic markings (*ff*), and a 2/4 time signature change.

89 switch to flute in C

Fl.

Ob.

Bass Cl.

Hn.

C Tpt.

Tbn.

Glock.

Glock playback

Hp.

Hp. playback

89 **5/4** **4/4**

Pno. soloist

Kbd.

Kbd. II

89 **5/4** **4/4**

Vln.

Via.

Vc.

Cb.

f

pp

02 (Flute in C) breath only

Fl.

Ob. shot glass

key clicks, random keys

Bass Cl.

Hn. shot glass

valve clicks

C Tpt.

Tbn. shot glass

Glock.

Glock playback

Hp. *près des chevilles*
fidèle to tempo, pitch

Hp. playback

Pno.

soloist

Kbd. *pedal noise (depress pedal forcefully)*

flutter

soundfile: short low register moan

Kbd. II

Vln. *(δ^{st})*

Vla. *(δ^{st})*

Vc. white noise, bow on bridge

Cb. white noise, bow on bridge

03

04

05

06

07

08

09

10

11

12

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96

Fl. *mf*

Ob. *mf*

Bass Cl.

Hn. *mf*

C Tpt.

Tbn. (*mf*)

Glock.

Glock. playback

Hp. 13 12 11 *ff* l.v.

Hp. playback

96 Pno. *s*

soloist *tr*

Kbd. *mf* *fff*

Kbd. II *s* (*tr*)

96 Vin. *sfz*

Vla.

Vc.

Cb. *f*

99

Fl.

Ob. (*mf*)

Bass Cl. switch to Bb Clarinet

Hn. (*mf*)

C Tpt.

Tbn. (*mf*)

Glock.

Glock. playback

Hp. *f* *près des chevilles* (close to tuning pins) *su-*

Hp. playback

Pno. *ff*

soloist

Kbd. *ff*

Kbd. II *ff*

Vln. *ff*

Vla. on bridge, white noise *f*

Vc.

Cb. *f*

112

Fl. *pp* *ff* *pp* *p* *ff*

Ob. *pp* *ff* *pp* *p* *ff*

B♭ Cl. *pp* *ff*

Hn. *pp* *ff*

C Tpt. *pp* *ff*

Tbn. *mf* *ff*

Perc. *ff* *f* (vibraphone)

Perc. playback *f* (soundfile FFT piano harmony)

Hp. *f*

Hp. playback (soundfile FFT piano harmony)

112

Pno. *ff* *mf* *ff* *f*

soloist *ff* *mf* *ff* *f*

Kbd. *ff* *mf* *ff* *f*

Kbd. II (soundfile FFT piano harmony)

112

Vln. *pp* *ff* *pp* *p* *ff* *p* *f* *p* (S.T.)

Vla. *pp* *ff* *pp* *p* *ff* *p* *f* *p* (S.T.)

Vc. *p* *ff* *p* *f* *p* (S.T.)

Cb. *p* *ff* *p* *f* *p* (S.T.)

124

Fl. *f* *ff*

Ob. *f* *ff*

B♭ Cl. *f* *mf* *ff*

Hn.

C Tpt.

Tbn.

Perc. (shot glasses (x3)) *ff* (woodblocks) *ff*

Perc. playback

Hp. *f* *secco*

Hp. playback *f* (soft quarter notes) *secco*

124

Pno. *f* *secco* *fff*

soloist

Kbd. *f* *fff*

13 (atonal-utonal, 81 primes)

Kbd. II *ff* *f* *ff*

124

Vin. *ff* *f* *pizz.*

Vla. *ff* *f* *pizz.*

Vc. *ff* *f* *pizz.*

Cb. *ff* *f* *pizz.*

127

Fl. *pp* \rightarrow *f* *pp* \rightarrow *f*

Ob. *pp* \rightarrow *f* *pp* \rightarrow *f*

Bi. Cl. (2x only) *pp* \rightarrow *f* *pp* \rightarrow *f*

Hn. *p* < *mf* > *pp* \rightarrow *f* *pp* \rightarrow *f*

C Tpt. *p* < *mf* > *p* *pp* \rightarrow *f* *pp* \rightarrow *f*

Tbn. *p* < *mf* > *p* *pp* \rightarrow *f* *pp* \rightarrow *f*

Perc. woodblock shot glass *f* *f*

Hp. *f*

Hp. playback

Pno. soloist *f* *mf* *f* *pp* \rightarrow *f* *pp* \rightarrow *f*

Kbd. *mf* *f*

Kbd. II. *lv.* (on 2x) *Sost.* (depress silently) *sfz* release pedal 2x only

Vln. *sfz* *arco* *A.S.P.* *fz* *pp* *fp*

Vla. *sfz* *arco* *A.S.P.* *fz* *pp* *fp*

Vc. *sfz* *arco* *A.S.P.* *fz* *pp* *fp*

Cb. *f* *arco ord.* *f*

3 4 5 8

3 4 5 8

135

Fl. *p* *f* *mp* *bisb. fast*

Ob. *p* *f* *p* *fast*

B♭ Cl. *p* *f*

Hr. *fz. +* *p* *f* *ff*

C Tpt. *fz.* *p* *f* *ff* *p*

Tbn. *fz.* *p* *f* *ff*

Perc. *woodblock* *vibraphone* *shot glass* *gong* *scrape* *lx.*

Perc. playback

Hp. *lx.* [13] [11]

Hp. playback

135

2/4 3/4

Pno. *gw* *sub. p* *gw*

soloist

Kbd. *f gw* *gw* *gw* *p*

Kbd. II

135

2/4 3/4

Vln. *S.P.* *p* *ff* *ord.* *p* *f* *p*

Vla. *S.P.* *p* *ff* *ord.* *p* *f* *p*

Vc. *S.P.* *p* *ff* *ord.* *p* *f* *p*

Cb. *S.P.* *p* *ff* *ord.* *p* *f* *p*

accel.

139

pizz.

Fl. *mf* *f* *f*

Ob. *p* vary speed

B♭ Cl. bisb. fast *p* *mf* *mf*

Hr. *p* *mp* *mf*

C Tpt. *p* *mp*

Tbn. *p* *mp*

Perc. lv. ()

Perc. playback

Hp.

Hp. playback

accel.

139

4/4

4/4

Pno. *swr* 1

soloist

Kbd. *swr* 1

Kbd. II

accel.

139

4/4

4/4

Vln. *p* *f* *p* *f* *ff*

Vla. *p* *f* *p* *f* *ff*

Vc. *p* *f* *p* *f* *ff*

Cb. *p* *f* *p* *f* *ff*

♩ = 140 *molto ritard.*

143

Fl. *sfz* vary speed *f* overblow *fff*

Ob.

B♭ Cl. *f* *f* *f* *p* bisb.

Hn. *p* *fff* sing in unison

C Tpt. *mf* *f* *fff* trem. slow → fast

Tbn. *sfz* *f* *p* *fff* sing in unison

Perc. Perc. playback

Hp. Hp. playback

♩ = 140 *molto ritard.*

143

Pho. *fff* *fff* *fff* *fff* *fff* *fff*

soloist

Kbd. *fff* *fff* *fff* *fff* *fff* *fff*

Kbd. II *f*

♩ = 140 *molto ritard.*

143

Vln. *p* *fff* gradually increase bow pressure

Vla. *p* *fff* gradually increase bow pressure

Vc. *p* *fff* gradually increase bow pressure

Cb. *p* *fff* gradually increase bow pressure

tempo I° ♩ = 66

146

Fl.

Ob.

Bass Cl. *senza vibr.*
(*p*)

Hn.

C Tpt.

Tbn.

Perc. *vibraphone*
f
ad lib.

Perc. playback

Hp. *f*
ad lib.

Hp. playback

tempo I° ♩ = 66

3/4 **4/4**

146

Pno.

soloist

Kbd.

Kbd. II

tempo I° ♩ = 66

3/4 **4/4**

146

Vln.

Vla.

Vc. *pick up waterphone*

Cb. *ord.*
p

150

Fl. *senza vibr.*

Ob.

B♭ Cl.

Hr.

C Tpt.

Tbn.

Vib.

Vib. playback

Hp.

Hp. playback

Pno.

soloist

Kbd.

Kbd. II

Vln.

Vla.

Vc.

Cb.

14 (hybrid quarter tone/E1)

ad lib.

(senza vib. →)

(senza vib. →)

150

158

Fl.

Ob.

B♭ Cl.

Hn.

C Tpt.

Tbn.

Vib.

Vib. playback

Hp.

Hp. playback

158

Pno.

soloist

Kbd.

Kbd. II

158

Vln.

Vla.

Vc.

Cb.

ord.

p

lv.

p

170

Fl. *pp* switch to Bass Flute

Ob. *pp*

B♭ Cl.

Hn.

C Tpt.

Tbn.

Vib. *p* *poco ff*

Vib. playback

Hp. *p* *poco ff*

Hp. playback

170

Pno. *mp*

soloist

Kbd. *mp*

Kbd. II

170

Vln. *p*

Vla. (IV) A.S.T. *pp*

Vc.

Cb.

l'istesso tempo (♩ = 66)

174 **Bass Flute**
breathy, quasi parlando
pp

Ob.

174 **Bass Clarinet**
breathy, quasi parlando
pp

Hn.

C Tpt.

Tbn.

Vib.

Vib. playback

Hp.

Hp. playback

soft but well articulated

l'istesso tempo (♩ = 66)

174

Pno.

soloist

Kbd.

15 (hybrid quarter tone/E)

Kbd. II

l'istesso tempo (♩ = 66)

174

Vln.

Vla.

Vcl.

Cb.

S.P. quasi parlando
pp

S.P. quasi parlando
pp

S.P. quasi parlando
pp

S.P. quasi parlando
pp

177 senza vibr., sempre

Bass Fl.

Ob.

Bass Cl.

Hn.

C Tpt.

Tbn.

Vib.

Vib. playback

Hp.

Hp. playback

177

Pno. soloist

Kbd.

Kbd. II

177

Vin. senza vibr., sempre

Vla. senza vibr., sempre

Vc. senza vibr., sempre

Cb. senza vibr., sempre

180

Bass Fl.

Ob.

Bass Cl.

Hn.

C Tpt.

Tbn.

Vib.

Vib. playback

Hp.

Hp. playback

180

Pno. soloist

Kbd.

Kbd. II

180

Vln.

Vla.

Vc.

Cb.

183

Bass Fl.

Ob.

Bass Cl.

Hn.

C Tpt.

Tbn.

Vib.

Vib. playback

Hp.

Hp. playback

183

Pno. soloist

Kbd.

Kbd. II

183

Vln.

Vla.

Vc.

Cb.

seamlessly transition into white noise, play on the bridge

A.S.P.

187

Fl.

Ob.

Bass Cl.

Hn. *air* *f* *s* *sfz*

C Tpt. *air* *f* *s* *sfz*

Tbn. *air* *f* *s* *sfz*

Vib.

Vib. playback

Hp.

Hp. playback

187

Pno. soloist

Kbd.

5 (soundfile: exhale + digital pedal noise)

Kbd. II

187

Vln. *f* *sfz* *trem. decel.*

Vla. *f* *sfz* *trem. decel.*

Vc. *f* *sfz* *trem. decel.*

Cb. *f* *sfz* *trem. decel.*

3
4

3
4

192 poco meno mosso ♩ = 60 \hat{A}

Fl.

Ob.

Bass Cl.

Hr.

C Tpt.

Tbn.

Perc.

Perc. playback

Hp.

Hp. playback

192 poco meno mosso ♩ = 60 \hat{A}

3/4 4/4

Pno. soloist

Kbd.

Kbd. II

(pull up on the edge of white keys, w/ fingernail)

(piano noise preset)

(pedal noise)

(pedal release)

(match the loudness of the digital pedal)

(slide foot off the pedal onto the floor)

key release noise (the sound of the release should occur in rhythm)

192 poco meno mosso ♩ = 60 \hat{A}

3/4 4/4

Vin.

Vla.

Vc.

Cb.

(1x only)

(1x only)

196

Flute in C

Fl. Fl. *ppp* 20'' whistle tones

Ob. Ob. *ppp* 20'' air within long breaths, articulate attacks, subtly breathe as necessary

Bass Cl. Bass Cl. *ppp* 20'' M 48 multiphonic in and out of focus, as full sounding as possible breathe as necessary

Hn. Hn. *ppp* 20'' air within long breaths, articulate attacks, subtly breathe as necessary

C Tpt. C Tpt. *ppp* 20'' air within long breaths, articulate attacks, subtly breathe as necessary

Tbn. Tbn. *ppp* 20'' air within long breaths, articulate attacks, subtly breathe as necessary

Perc. Perc. *ppp* 20'' (bass drum)

Perc. playback Perc. playback *ppp*

Hp. Hp. 13 *ppp* 20'' steady pressure—produce rich multiphonic

Hp. playback Hp. playback

Pno. soloist Pno. soloist *ppp* 20'' (eff: acoustic pedal resonance, spectral freeze)

Kbd. Kbd. *ppp* 20''

Kbd. II Kbd. II 16 (piano noise present) *ppp* 20'' (pedal noise)

Vin. Vin. *ppp* 20'' (IV) (III)

Vla. Vla. *ppp* 20'' (IV) (III)

Vc. Vc. *ppp* 20''

Cb. Cb. *ppp* 20'' M (IV) (bow above finger) multiphonic in and out of focus, as full sounding as possible

ppp < *pp* >

199 switch to Bass Flute

Fl.

Ob.

B♭ Cl.

Hn.

C Tpt.

Tbn.

Perc. *l.v.* *pp*

Perc. playback

(do not immediately release superball from strings)

Hp. *l.v.* *p*

Hp. playback

199 **3**
4

Pno. *f* *ff* "guiro"

solist *f* *ff* *ff* *ff* "guiro"

Kbd. *l.v.* *f* *ff* *ff* *ff* "guiro"

Kbd. II *f* *ff* *ff* *ff*

199 **3**
4

Vln.

Vla.

Vc.

Cb.

203 ritard. ----- a tempo ritard. -----

Fl.

Ob.

Bass Cl.

Hn.

C Tpt.

Tbn.

Perc. **vibraphone** "guiro" scrape resonators, w/ fingernails
uneven, sporadic attacks

Perc. playback

Hp. "guiro" on tuning pins, w/ wooden part of mallet
uneven, sporadic attacks

Hp. playback

203 ritard. ----- $\frac{4}{4}$ a tempo ritard. -----

Pno. soloist (depress silently) loco L.v. L.v. Sost. rit.

Kbd. aggressive "guiro", depressing keys w/ multiple fingernails (only key release noises will sound/resonate) ff sub. ff sub. rit.

Kbd. II key release noise ff uneven, sporadic attacks

203 ritard. ----- $\frac{4}{4}$ a tempo ritard. -----

Vln.

Vla. *PPP*

Vc. *PPP*

Cb.

♩ = 88 mecanico

207

Bass Flute (pitch fades in and out) *pp* flutter tongue, *vary breathy*, exaggerate air sounds and key clicks, *always*

Ob. tongue ram *p* key clicks, random keys *p* breath only *pp*

Bass Cl. key clicks, random keys *p* *bish, fast* *vary breathy*, exaggerate air sounds and key clicks, *always* flutter (pitch fades in and out) *pp*

Hr. air *f* wash, wash, w/ hand fast *pp* sing in unison *pp*

C.Tpt. smack multipiece (w/ palm) *p* air *p* valve clicks *p*

Tbn. air *f* flap tongue (no precise pitch required on flap tongues)

Perc. single sweep *p* (actual guiro) *p*

Perc. playback

Hp. (each repeat as identical as possible) *p* "guiro" (low string tuning pins to high) single sweep *p* soundboard *p*

Hp. playback superball on strings *p* (make 2nd part of D audible) *p*

♩ = 88 mecanico

207

Pho. *f*

Kbd. keyboard "thud" *f* quickly press and release key for a loud, physical "thud" *f*

Kbd. II "guiro" *f* (key release noise) *f*

♩ = 88 mecanico

207

Vin. c.l.b. (col legno battuto) ricochet *pp* c.l.b. behind the bridge *p* ord. circ. bowing SP-ST *pp*

Vla. A.S.P. *pp* S.P. on bridge, white noise *p* A.S.P. *f*

Vc. S.P. c.l.b. (col legno battuto) ricochet *p* S.P. A.S.P. *pp* c.l.b. (V) as high as possible *p* pizz. (II) (muted) *p*

Cb. on bridge, no pitch *pp* pizz. (II) (muted) *pp* arco *p* c.l.b. (col legno battuto) ricochet *p*

-60-

2/3

Bass Fl. *tr* *pp* *pizz.* *p* *pp* *ff*

Ob. *p* *pp* *pp* *p*

Bass Cl. *p* *pp* *bisb. fast* *tr* *pp*

Hn. *f* *p* *f* *pp* *pp*

C Tpt. *p* *p* *p*

Tbn. *pp* *f* *pp*

Perc. *vibraphone* "guiro" w/ fingernails *p* *(actual) guiro* *p*

Perc. playback

Hp. *11* *soundboard* *mp* *12* *mf* *2,3* *ff*

Pno. *2/3* *ppp* *sub. off* *3* *4*

solist

Kbd. *smear cluster* *mf* *p* *p* *ff*

Kbd. II

Vln. *2/3* *c.l.b.* *pp* *mp* *pp* *p* *mf* *ff* *pp* *ord.* *3* *4*

Via. *A.S.P.* *pp* *S.P.* *A.S.P.* *pp* *f*

Vc. *arco* *S.P.* *c.l.b.* *pp* *p* *S.P.* *A.S.P.* *c.l.b. (IV)* *p* *pizz. (0)* *p*

Cb. *pp* *p* *c.l.b.* *p* *S.T. trem.* *A.S.P.* *f*

216

tutti x6 tutti x4 tutti x2

Flute in C emb. bend

Bass Fl. *p* *mf* *ff* *ff*

Ob. *p* *p* *ff* *ff*

Bass Cl. *p* *p* *mf* *ff*

Hn. *f* *mp* *f* *p*

C Tpt. *p* *f* *mf* *f* *ff*

Tbn. *p* *f* *p* *f*

Perc. *vibraphone* with fingernails *pp* *p* "guiro" w/ fingernails *pp* *pp* with fingernails w/ mallet *mf* w/ mallets *f*

Perc. playback

Hp. *gliss. both hands* *loco* *p* *f* *pp* *f*

Hp. playback

216

3/4 tutti x6 2/4 tutti x4 3/8 tutti x2 2/4 5/4

Pno. *pp* *p* *mf*

soloist

Kbd. *p* *f*

Kbd. II *f* *f*

216

3/4 (S.M.) tutti x6 2/4 tutti x4 3/8 tutti x2 2/4 wild vibrato A.S.P. 5/4

Vin. *(P)* *slow vibr., in and out* *cresc. over repeat* *f* *ff*

Vla. *S.P.* *A.S.P.* *S.P.* *S.P.* *pp* *mf* *pp* *ff*

Vc. *S.P.* *A.S.P.* *S.P.* *S.P.* *pp* *mf* *f* *ff*

Cb. *c.l.b.* *pizz. (l) (r)* *c.l.b.* *c.l.b.* *f* *ff*

p *f* *mp* *mf* *f* *ff*

switch to flute in C (omit earlier repetitions if necessary)

tongue ram

flap tongue

smack mouthpiece w/ palm

"wa wa" fast

gliss. both hands

loco

wild vibrato

A.S.P.

220 $\text{♩} = 66$
switch to Piccolo

Fl. *ff* tongue ram *stacc* click multiple keys at once *ff*

Ob.

Bass Cl. *ff* s.t. (slap-tongue) click multiple keys at once *ff* remove mouthpiece

Hn. *ff* "wa wa" fast *sempre tenuto* *sempre staccato* *ff* *fp* *f*

C Tpt. *ff* "wa wa" fast *sempre tenuto* *sempre staccato* *ff* *fp* *f*

Tbn. *ff* *sempre staccato* *ff* *fp* *f*

Perc. *ff* bongo (actual) guiro

Perc. playback

Hp. *ff* keep lowest strings muted before attack (soundboard) 13 *secco*

Hp. playback

220 $\frac{5}{4}$ $\frac{4}{4}$ $\text{♩} = 66$

Pno. *ff* *sempre tenuto* *sempre staccato* *ff* *ff*

sol. Kbd. *ff* *ff* *ff*

Kbd. II *ff* aggressive "guiro" escape while depressing keys, multiple fingernails *ff* *ff*

220 $\frac{5}{4}$ $\frac{4}{4}$ $\text{♩} = 66$

Vln. *ff* *ord.* *pp*

Vla. *ff* *ricochet* *ff* on bridge, white noise *f*

Vc. *ff* *c.l.b.* *pizz.* *ff* arco on bridge, white noise *f*

Cb. *ff* *c.l.b.* *pizz.* *ff* arco on bridge, white noise *f*

226

Piccolo whistle tones (vary between steady and random states) as high as possible

Fl.

Ob.

Bass Cl.

Hn.

C Tpt.

Tbn.

Perc.

Perc. playback

Hp.

Hp. playback

226

Pno. soloist

Kbd.

Kbd. II

226

Vln.

Vla.

Vc.

Cb.

< p >

< mf >

< mf >

< f >

p

return mouthpiece

tenuito l.v.

ff

loco

mp

sub. f

loco

(depress silently)

8^{va} Sost. 9^{da}

8^{va} Sost. 9^{da}

(5^{ma})

p

ff

229

Picc.

Ob.

Bass Cl.

Hn.

C Tpt.

Tbn.

lion's roar (string drum) uneven, sporadic short attacks

Perc.

Perc. playback

Hp.

Hp. playback

229

loco

Pno.

ffz

soloist (Sost. 9da.)

Kbd.

(Sost. 9da.)

17 (atonal-utonal, 81 prime)

sub. f

secco

mf

Kbd. II

229

Vin.

Vla.

Vc.

Cb.

f

mf

p

mf

232 switch to flute in C

Picc.

Ob.

Bass Cl.

Hn.

C Tpt.

Tbn.

Perc.

Perc. playback

Hp.

Hp. playback

breathe in through the instrument

breathe in through the instrument

breathe in through the instrument

tenuto

12 (soundboard)

sporadic short bursts secco

p *ff* *f* *f*

222

Pno.

soloist

Kbd.

Kbd. II

5/4 4/4

loco

ff^z sub.

mf

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

Sost. *rit.*

loco

lv.

(depress silently)

Sost. *rit.*

232 (15ms)

Vln.

Vla.

Vc.

Cb.

5/4 4/4

p

S.P.

pp

"air-noise" gliss. (mute strings w/ palm)

fp

S.T. A.S.P.

S.P. A.S.T.

p *mf* *fp* *ff* *p*

244

Fl.

Ob.

Bass Cl.

Hn.

C Tpt.

Tbn.

Perc.

Perc. playback

Hp.

Hp. playback

244

Pno. soloist

Kbd.

Kbd. II

244

Vln.

Vla.

Vc.

Cb.

7/8

3/4

5/8

3/8

2/8

arco

(III) A.S.P.

(II) A.S.P.

(I) A.S.P.

pizz.

ff

ff

tempo 1° ♩ = 66
whistle tones

248

Fl. *PPP* *p* *f*

Ob.

Bass Cl. *PPP* *p* *f*

Hn. *PPP* *p* *f*
within long breaths, articulate short attacks

C Tpt. *PPP* *p* *f*
within long breaths, articulate short attacks

Tbn. *PPP* *p* *f*
within long breaths, articulate short attacks

Perc. (bass drum) *PPP* *p* *f*

Perc. playback

Hp. 13 steady pressure—produce rich multiphonic *PPP* *p* *f*

Hp. playback

248

2/8 4/4 tempo 1° ♩ = 66 3/4 5/8

Pno. *sfz*

soloist

Kbd. *sfz*

Kbd. II 19 frozen digital pedal resonance *sfz*

248

2/8 4/4 tempo 1° ♩ = 66 3/4 5/8

Vln. *pizz.* *sfz* *arco* (IV) (III) *PPP* *p* *f*

Vla. *pizz.* *sfz* *arco* (IV) (III) *PPP* *p* *f*

Vc. *c.l.b. ricochet (IV) n.* *sfz* *arco* *PPP* *p* *f*

Cb. *c.l.b. ricochet (IV) n.* *sfz* *M (IV) (bow above finger)* *PPP* *p* *f*

253

Fl. *f* *ff* sim.

Ob. *ff* sim.

Bass Cl. *ff* sim.

Hr. *ff* sim. +50

C Tpt. *ff* sim. +50

Tbn. *f* flap tongue *ff*

Perc.

Perc. playback

Hp. *ff* sim.

Hp. playback *ff* sim. knock, simile

Pno. **3/4** **3/8** **7/8** **3/4** **5/8**

soloist

Kbd. *ff*

Kbd. II *ff*

Vln. *f* arco pizz. *ff* sim. arco (III) A.S.P. pizz.

Vla. *f* arco pizz. *ff* sim. arco (II) A.S.P. pizz.

Vc. pizz. c.l.b. ricochet *ff* sim. arco (I) A.S.P. c.l.b. pizz. c.l.b. pizz.

Cb. pizz. c.l.b. ricochet *ff* sim. arco (I) A.S.P. c.l.b. pizz. c.l.b. pizz.

ff sim. *ff* sim. *ff* sim.

257

Fl. *pp* *ff* *ff* sim. *ff*

Ob. *p* *ff* *ff* sim.

Bass Cl. *f* *ff* *ff*

Hn. *ff*

C Tpt. *ff*

Tbn. *ff*

Perc. (actual) guiro *ff*

Perc. playback

Hp. *ff*

Hp. playback

257

Pno. *f* *ff* *ff* sim. *ff*

soloist

Kbd. *p* *ff* *ff*

Kbd. II

257

Vln. *ff* arco *sub p* *ff* *ff* *pizz.*

Vla. *ff* arco *sub p* *ff* *ff* *pizz.*

Vc. *ff* arco S.P. *p* *ff* *ff* *c.l.b.* *pizz.*

Cb. *c.l.b.* *p* *ff* *ff* *c.l.b.* *pizz.* *c.l.b.* *ff* *ff* *ff* sim.

molto vibr (exaggerated)

arco

sub p

c.l.b.

pizz.

269 ♩ = 66

Fl.

Ob.

Bass Cl.

Hn.

C Tpt.

Tbn.

Perc.

Perc. playback

Hp.

Hp. playback

(sizzle cymbal) soft mallets Lv.

pp (possible) mp

M 48

pp (possible) mp

p

rhythm ad lib.; blend in w/ playback

pedal gliss.

♩ = 66

♩ = 66

♩ = 66

269 ♩ = 66

Pno.

soloist

Kbd.

Kbd. II

molto rubato on figurations

pp mf pp

pp mp p

pp mp p

pp mp p

(17, oboe multiphonic tuning) emphasize top note of the chord

269 ♩ = 66

Vln.

Vla.

Vc.

Cb.

arco ord.

pp

278 **accel.** $\bullet = 88$ **mecanico**

Fl. *ff* *ff* sim. *ff*

Ob. *ff* *ff* *ff* sim. *ff*

Bass Cl. *ff* *ff* *ff* sim.

Hn. *ff* *ff* sim.

C Tpt. *ff* *ff* sim.

Tbn. *ff* *ff* *ff* *ff* flap tongue

Perc. *ff*

Perc. playback

Hp. *ff*

Hp. playback

278 **3/4 accel.** $\bullet = 88$ **mecanico**

Pno. *ff* *ff* sim. *ff*

soloist *ff* *ff* *ff*

Kbd. *ff* *ff* *ff*

Kbd. II *ff* *ff* *ff*

278 **3/4 accel.** $\bullet = 88$ **mecanico**

Vin. *ff* *ff* *ff* *ff* pizz.

Vla. *ff* *ff* *ff* *ff* pizz.

Vc. *ff* *ff* *ff* *ff* c.l.b. pizz.

Cb. *ff* *ff* *ff* *ff* c.l.b. pizz.

-82-

290 ♩ = ca. 60

Fl.

Ob.

Bass Cl. switch to Bb Clarinet

Hn.

C Tpt.

Tbn. mute off

Perc.

Perc. playback

Hp.

Hp. playback

290 ♩ = ca. 60 **AD LIBITUM**

Pno.

solosist (doubled keyboard:atonal/atonal 81 + 72nd @ 8.0h)
(change preset after the first chord)

Kbd.

Kbd. II

290 ♩ = ca. 60

Vln.

Vla.

Vc.

Cb.

♩ = 88 **mecanico**

291

Fl. *ffz*

Ob. *ffz*

B♭ Cl. *f* (B♭ Clarinet)

Hn. *ffz*

C Tpt. *ffz*

Tbn. *pp* *f* senza sord.

Perc. *ffz* (vibraphone) *ffz* (woodblocks)

Perc. playback *ffz* (doubled scale (B1 prime + 40tet))

Hp. *ffz* (xylo gliss) (broad)

Hp. playback *ffz*

291

4/4 ♩ = 88 **mecanico** 5/4 4/4

Pno. *ffz*

soloist *ffz* (11) (atonal-utonal, 81 primes)

Kbd. *ffz*

Kbd. II *ffz*

291

4/4 ♩ = 88 **mecanico** 5/4 4/4

Vln. *f* arco ord. *p* *f*

Vla. *f* arco ord. *p* *f*

Vc. *ffz* ord. *p* *f* secco

Cb. *ffz* ord. *p* *f* secco

293

Fl. *ffz* *pp* *f* *ffz*

Ob. *pp* *f* *ffz*

Bi. Cl. *pp* *f*

Hn. breath attack *ffz*

C Tpt. flap tongue *ffz*

Tbn. *ffz*

Perc. (vibraphone) woodblocks (actual) guiro *ffz* *ffz*

Vib. doubled scale (B1 prime + 60Hz) *ffz*

Hp. *ffz*

Hp. playback *ffz*

4

293 4

Pho. *ffz* *ffz*

soloist

Kbd. *ffz* *ffz* *ffz*

Kbd. II *ffz*

4

293 4

Vln. arco pizz. arco ord. *f* *ffz* *p* *f* *ffz*

Vla. arco pizz. arco ord. *f* *ffz* *p* *f* *ffz*

Vc. ord. *ffz* *p* *f* *ffz* (IV) pizz.

Cb. ord. *ffz* *p* *f* *ffz* (III) pizz.

306 *l'istesso tempo* (♩ = 88)

Fl. *pizz.* *sfz* *f* *sfz* *f* *f*

Ob. *sfz* *f* *sfz*

B♭ Cl. *f* *sfz* *f* *p*

Hr. *switch to flexatone* *f*

C Tpt. *fast* *f* *mf*

Tbn. *p* *f* *sfz*

Vib. *vibraphone* *ff* *ad lib.* *f*

Vib. playback

Hp. *ff* *f*

Hp. playback

306 *l'istesso tempo* (♩ = 88)

Pno. *ff* *f*

soloist

Kbd. *f*

Kbd. II *ff* *ad lib.*

20 (hybrid quarter tone/ET)

3 **4** **5** **4**

306 *l'istesso tempo* (♩ = 88)

Vin. *ord. jsté* *f* *p* *f* *c.l.b.* *sfz*

Vla. *ord. hochet* *ff* *sfz* *f* *pizz.* *arco* *P.T.* *f*

Vc. *ff* *pizz.* *arco* *S.P.* *A.S.T.* *f* *sfz*

Cb. *pizz.* *arco* *S.P.* *c.l.b.* *ff* *sfz*

3 **4** **5** **4**

322

Fl. *senza vibr.* *p* switch to Bass Flute

Ob.

B. Cl. *senza vibr.* *p*

Hn. *p* fade out (lower iterations, softer) switch to horn

C. Tpt.

Tbn.

Vib. *f* *mf*

Vib. playback *f* *mf* *p*

Hp. *f* *mf* *p* D \flat E \flat

Hp. playback *f* *mf* *p*

Pno. *loco* *f* *mf* *mp* *p*

soloist

Kbd. *f* *mf* *mp* *p*

Kbd. II *mf* *p*

Vln.

Vla.

Vc. *con sord.* (IV) *very slow gliss* (steady, re-articulate seamlessly) *p*

Cb.

3/6

Bass Fl.

Ob. *senza vibr.*

B. Cl.

Hn.

C Tpt.

Tbn. *slide whistle* *ff* *to Trombone*

Vib. *sub. ff* *mp* *p*

Vib. playback *sub. ff* *mp* *p*

Hp. *D1 E1* *sub. ff* *p*

Hp. playback *sub. ff* *p*

3/6

Pno.

soloist *sub. ff* *mf* *p*

Kbd. *sub. ff* *mf* *p*

Kbd. II *sub. ff* *pick up credit card*

3/6

Vin. *pizz.* *sub. ff*

Vla. *pizz.* *sub. ff*

Vc.

Cb. *p*

senza vibr.
arco
S.P.

320 $\text{♩} = 66$

Bass Fl.

Ob.

B♭ Cl. *senza decresc.* cut-off w/ double-bass attack switch to Bass Clarinet

Hr.

C Tpt.

Tbn.

Vib. *pp* mute with double-bass attack flip snare drum upside down (snares off)

Vib. playback

Hp. *pp* mute with double-bass attack

Hp. playback *pp*

320 $\frac{5}{4}$ $\frac{4}{4}$ $\text{♩} = 66$

Pno. *pp* (for sympathetic resonance)

soloist *pp* release pedals with double-bass attack

Kbd. *pp* *Erman* *pp* flutter *pp*

Kbd. II

320 $\frac{5}{4}$ $\frac{4}{4}$ $\text{♩} = 66$

Vln.

Vla. *p* A.S.T.

Vc. *senza decresc.* "choke"

Cb. *sub. fff*

328 x3

Bass Fl. Bass Flute tongue ram

Ob. F distort multiphonic

Bass Cl. Bass Clarinet growl

Hn. air

C Tpt. air

Tbn. air

Perc. snare drum upside down, snares ON

Perc. playback large superball fff sub.

Hp. fff scrape with credit card

Hp. playback

328 x3

Pno. 5 4

Kbd. 4

Kbd. II fff fingernails w/ credit card aggressive guiro

328 x3

Vln. arco on bridge, white noise fff sub. 5 4

Vla. on bridge, white noise fff sub.

Vc. on bridge, white noise fff sub.

Cb. on bridge, white noise A.S.P. sporadic attacks fff sub.

poco meno mosso ♩ = 60

337

Bass Fl. (breathe in through the instrument) (breathe out through the instrument) sim. *pp*

Ob. (breathe in through the instrument) (breathe out through the instrument) sim. *pp*

Bass Cl. (breathe in through the instrument) (breathe out through the instrument) sim. *pp*

Hn. (breathe in through the instrument) (breathe out through the instrument) sim. *pp*

C Tpt. (breathe in through the instrument) (breathe out through the instrument) sim. *pp*

Tbn. (breathe in through the instrument) (breathe out through the instrument) sim. *pp*

Perc.

Perc. playback

Hp. (scrape lowest strings with hands (soft noise imitating inhale and exhale gestures) up down sim. *pp*)

Hp. playback

337

Pno. *f*

14 (piano noise preset)

Kbd. *f*

15 (file: inhale)

16 (file: exhale)

Kbd. II

337

Vln. *f*

Vla. *pp*

Vc. *pp*

Cb. *p*

335

Bass Fl.

Ob.

Bass Cl.

Hn.

C Tpt.

Tbn.

Perc.

Perc. playback

Hp.

Hp. playback

335

Pno.

soloist

Kbd.

Kbd. II

335

Vln.

Vla.

Vc.

Cb.

vibraphone
"guiro"
on resonators, w/ fingernails
uneven, sporadic attacks
p

"guiro"
on tuning pins, w/ wooden part of mallet
uneven, sporadic attacks
p

enter suddenly, before resonances dissipate

aggressive "guiro",
ff sub.

ff sub.

23 (file: acoustic pedal resonance, spectral freeze)

329

Bass Fl. *pp* poco

Ob. *pp* poco

Bass Cl. *pp* poco

Hn. *pp* poco

C Tpt. *pp* poco

Tbn. *pp* poco

Perc. *ff* sub. forcefully depress sustain pedal Lv. w/ fingertips, scrape music stand for soft noise (inhale/exhale gesture)

Perc. playback

Hp. *ff* (inhale/exhale-like gestures) down

Hp. playback *p* (harp resonance, frozen)

329

Pno. *f*

soloist

Kbd. (reset: piano noise, slightly softer)

Kbd. II

329

Vln. without bow scrape strings w/ hand for a soft noise inhale/exhale gesture *pp* poco

Vla. without bow scrape strings w/ hand for a soft noise inhale/exhale gesture *pp* poco

Vc. without bow scrape strings w/ hand for a soft noise inhale/exhale gesture *pp* poco

Cb. without bow scrape strings w/ hand for a soft noise inhale/exhale gesture *pp* poco

343

Fl.

Ob.

B-Cl.

Hn.

C Tpt.

Tbn.

Perc.

Perc. playback

Hp.

Hp. playback

up

sim.

pp

22 digital pedal resonance, spectral freeze

mf

343

Pno. soloist

Kbd.

Kbd. II

343

Vln.

Via.

Vc.

Cb.

347 abrupt cut

Fl.

Ob.

B♭ Cl.

Hn.

C Tpt.

Tbn.

Perc.

Perc. playback

72 (file: fade out)

Hp.

Hp. playback

80 (file: fade out)

347 10''

Pno.

soloist

Kbd.

10''

25 (file: fade out)

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23 (file: fade out)

Kbd. II

347 abrupt cut

Vln.

Vla.

Vc.

Cb.