

Idin Samimi Mofakham

Mantiq Al-Tayr: The Conference of the Birds

for

santur, percussion, ensemble, electronics & video

2022

About the notation:

The score is notated in the Helmholtz-Ellis JI Pitch Notation system (HEJI) to control every slight detail in the intervals and pitches and be respectful of the ancient and contemporary modal scale of Iranian classical music. As the essential part of this piece is based on my research on the natural harmonic series and notating the playable harmonic nodes, it was crucial to choose the HEJI notation system to be extremely precise in the size of the intervals and pitches.

The small numbers next to the sharps, flats, and naturals are the deviations in cents from the 12-TET and present the pitches' exact size as they should sound in the piece. I have also provided the interval ratios necessary for a more straightforward harmony analysis.

When tuning the strings, please take time to obtain clear, resonant, and beatless pure Pythagorean intervals, so the pitches of the open strings would be : G -4¢, D -2¢, A +0, E +2¢, C -6¢, (Pythagorean tuning). The concert pitch note for this piece is A4 = 442 Hz.

There are no time signatures involved in this piece, the divisions control the piece's temporality in seconds. Each bar is ten seconds long, and each page consists of six measures, thus taking 60 seconds = one minute for each page.

Explanation of microtonal accidentals:

The Extended Helmholtz-Ellis JI Pitch Notation (HEJI) is designed by Marc Sabat and Wolfgang von Schweinitz and used as a core notation in this composition.

$\flat \sharp \#$ PYTHAGOREAN JUST INTONATION | PRIMES 2 and 3 only

$\flat \sharp \#$ PTOLEMAIC JUST INTONATION | PRIMES up to 5

\flat SEPTIMAL JI | PRIME 7

$\flat \sharp$ UNDECIMAL | PRIME 11

$\flat \sharp \#$ TRIDECIMAL | PRIME 13

In the Santur part I have used traditional accidental of Iranian classical music for the musician's convenience:

\flat (Koron) and lowers the pitch by approximately 40 cents.

Explanation of general signs:

-  crescendo dal niente
-  decrescendo al niente
-  transition from one performance technique to another
-  rapid rupture of the sound
-  tremolos (always irregular, varying in speed through time)

-  continuous hold of the given pitch
-  continuous repetition of the given pitches

-  shows the duration of repetition of the pitch(es) inside the repetition boxes in case of multiple pitch choices

Percussion:

- suspended cymbal
- suspended frame drum (Daf)
- tuned plates G and A
- Glockenspiel
- Crotales
- Bass Drum
- Large Tam-tam

Santur:

Some parts of the score are designed for improvisations based on the given modal structures of classical Iranian music within the structure of the piece.

Lowest string on the instrument should be retuned and lowered to $\flat D$.

Woodwinds:

 random harmonic glissando
(pressure type described in the score when necessary)



multiphonics: the fundamental pitch of the multiphonics is described in the score. However, the multiphonics themselves will be chosen during the rehearsals as a collaboration between the composer, conductor, and performers.

Strings:

Bowing abbreviations:

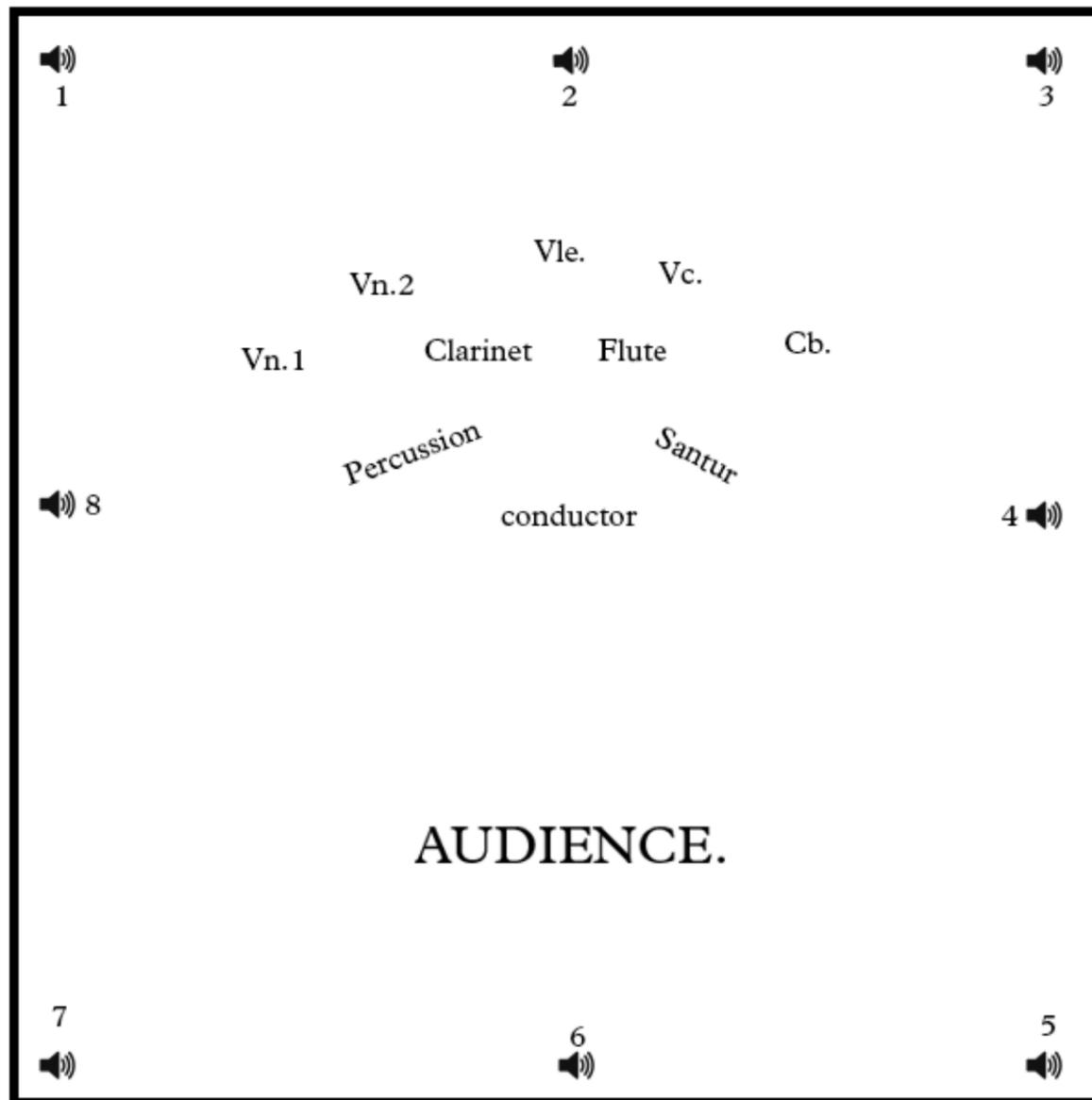
- ord. ordinario
- m.s.p. molto sul ponticello (aggregate many overtones)
- on the bridge to create white noise
- overpressure to create scratchy noise
- ord. pressure back to ordinary bow pressure



natural harmonics are displayed by the number of the overtone and the string number

*Every alteration from the given signs and additional verbal directions are explained in the score.

Localization and Spatialization:



Amplification:

All instruments should be amplified, and their sound should be defused into the playback system, including the fixed media material. If needed a moderate reverb considering the size of the room should be added.

Acoustic instruments diffusion in the 2, 4, 6 & 8.

Video projection:

A 360-degree video projection should be provided. However, in case of technical difficulties, it can be reduced to the three sides of the audience or only as a background of the ensemble.

The video projection should be as large as possible, so the process in the visual material could affect the concert hall's lighting.

Light:

The concert hall should be as dark as possible when the concert starts, only with the percussion entrance a weak spotlight opens on the performers. The light of the concert hall should gradually change during the performance from pitch black to extreme white light at the end.

Duration: 70 minutes

for Jennifer Torrence & Mirsaeed Hosseiny Panah

Mantiq Al-Tayr: The Conference of the Birds

Prologue

0" ♩ = 60

10"

20"

30"

40"

50"

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The musical score is arranged in a grand staff format with the following instruments and parts:

- Santur:** Treble clef, single staff with a whole rest in each of the six measures.
- Percussion:** Percussion clef, single staff with a whole rest in each of the six measures.
- Bass Flute:** Treble clef, double staff with whole rests in each of the six measures.
- Bass Clarinet in Bb:** Treble clef, double staff with whole rests in each of the six measures.
- Violin I:** Treble clef, double staff with whole rests in each of the six measures.
- Violin II:** Treble clef, double staff with whole rests in each of the six measures.
- Viola:** Alto clef, double staff with whole rests in each of the six measures.
- Violoncello:** Bass clef, double staff with whole rests in each of the six measures.
- Contrabass:** Bass clef, double staff with whole rests in each of the six measures.
- Tape:** Treble and Bass clefs, double staff. The bass staff begins with a note at 36.8 Hz, followed by a long horizontal line with an arrow pointing right, and the dynamic marking *ppp*.

1'00" 1'10" 1'20" 1'30" 1'40" 1'50"

Tape 3D spectra opens up



BASS DRUM *fluently and in flow*
 2'00" **accel.** ← → **rall.** 2'10" 2'20" 2'30" 2'40" 2'50"

B.D. *ppp* with bass drum soft mallets

Tape



3'00" **accel.** ← → **rall.** 3'10" 3'20" 3'30" 3'40" 3'50"

B.D. *pp sim.*

Tape



4'00" **accel.** ← → **rall.** 4'10" 4'20" 4'30" 4'40" 4'50"

B.D. *p*

Tape

I. Quest

5'00" accel. ← → rall. 5'10" 5'20" 5'30" 5'40" 5'50"

B.D. *p*

Vc. bow as slow as possible 4°/II *p* *pp*

Cb. bow as slow as possible 2°/II *p* *pp* *p*

Tape *mf*

Detailed description: This system covers the time interval from 5:00 to 5:50. It features five staves: B.D. (Bass Drum), Vc. (Violin), Cb. (Cello), and Tape. The B.D. part starts with a rhythmic pattern of eighth notes at *p* dynamics, enclosed in a box. The Vc. and Cb. parts are primarily sustained notes with bowing instructions: 'bow as slow as possible' and fingering like '4°/II' for the violin and '2°/II' for the cello. Dynamics for Vc. range from *p* to *pp*, and for Cb. from *p* to *pp*. The Tape part provides a harmonic accompaniment with a *mf* dynamic.



6'00" accel. ← → rall. 6'10" 6'20" 6'30" 6'40" 6'50"

B.D. *p* *mf*

Vla. bow as slow as possible 9°/IV *p* *pp*

Vc. *p* *pp* *p*

Cb. *pp* *p* *pp*

Tape *mf*

Detailed description: This system covers the time interval from 6:00 to 6:50. It features five staves: B.D. (Bass Drum), Vla. (Viola), Vc. (Violin), Cb. (Cello), and Tape. The B.D. part continues with the rhythmic pattern at *p* dynamics, then changes to *mf*. The Vla. part has a 'bow as slow as possible' instruction with fingering '9°/IV', with dynamics *p* and *pp*. The Vc. part has dynamics *p* and *pp*. The Cb. part has dynamics *pp*, *p*, and *pp*. The Tape part continues with its *mf* accompaniment.

7'00" **accel.** ← → **rall.** 7'10" 7'20" 7'30" 7'40" 7'50"

B.D. *p* *mf*

Vln. I *p* *pp*

Vln. II *p* *pp*

Vla *p* *pp* *p*

Vc. *pp* *p* *pp*

Cb. *p* *pp* *p* *pp*

Tape *mf*

bow as slow as possible 4°/III

bow as slow as possible 2°/III

8'00" **rall.** *still in flow* 8'10" 8'20" 8'30" 8'40" 8'50"

B.D. *p*

Vln. I *p* *pp*

Vln. II *2°/I* *p* *pp* *p*

Vla *p* *pp*

Vc. *p* *pp* *5°/II*

Cb. *p* *pp* *4°/I*

Tape *mf*

9'00" *try to equally distribute durations in time and flow*

9'10"

9'20"

9'30"

9'40"

9'50"

San. *mf*

molto rall. *slow down so much that there is no clear pulsation from the previous rhythmic structure*

B.D. *pp* To Tuned Plates Perc.

Vln. I *mf* *p* *mf*

Vln. II *pp* *mf* *p*

Vla *mf* *p*

Vc. *mf* *p*

Cb. *p* *pp*

Tape *mf*

10'00"

10'10"

10'20"

10'30"

10'40"

10'50"

San. Māhur 3D

improvise in flow - very lyrical -
avoid rhythmic patterns - allow sounds to reverbrate and dissolve in silences

Vln. I

Vln. II

2°/I 2°/II smooth change between pitches
not to fast in tempo

Vla

4°/II 3°/III smooth change between pitches
not too fast in tempo

Vc.

Cb.

Tape

11'00"

11'10"

11'20"

11'30"

11'40"

11'50"

San. Del-kash $\sharp A$

sim.

↓ avoid periodic synchronization

Vln. I 4°/III 5°/IV smooth change between pitches
not too fast in tempo

p *mf* *p*

Vln. II 2°/I 2°/II

p *mf* *p* *mf* *p*

Vla 4°/II 3°/III

p *mf* *p* *mf*

Vc. 5°/I 5°/II smooth change between pitches
not too fast in tempo

mf *p* *mf* *p*

Cb. 4°/I 5°/II smooth change between pitches
not too fast in tempo

p *p*

Tape

mf

II. Love

12'00" 12'10" 12'20" 12'30" 12'40" 12'50"

San. Sur $\sharp A$

p

Plates TUNED PLATES

mf l.v.

B. Fl. non vibrato sempre

mf

B. Cl. non vibrato sempre

mf

↓ avoid periodic synchronization

Vln. I $4^\circ/III$ $5^\circ/IV$ change faster between the pitches, smooth and in flow

mf

Vln. II $2^\circ/I$ $2^\circ/II$

mf

$2^\circ/II$ $3^\circ/III$ change faster between the pitches, smooth and in flow

mf

Vla $4^\circ/II$ $3^\circ/III$

p

mf change faster between the pitches, smooth and in flow

Vc. $5^\circ/I$ $5^\circ/II$

mf

$4^\circ/II$ $3^\circ/III$ change faster between the pitches, smooth and in flow

mf

Cb. $4^\circ/I$ $5^\circ/II$ change faster between the pitches, smooth and in flow

mf

Tape *mf*

mf

13'00" 13'10" 13'20" 13'30" 13'40" 13'50"

San. *mf* *p* *mf*

Plates 1.v.

B. D. finger tips, not synchronised, both hands *mf* 1.v. whatever remains of sound

B. Fl. 18 11 $\sharp B - 48c$ *mf* *mf* *mf*

B. Cl. *mf* *mf* *mf* $\sharp B - 48c$

Vln. I $4^\circ/III$ $3^\circ/IV$ *pp* *mf* slow down the pitch change tempo

Vln. II $2^\circ/II$ $3^\circ/III$ *mf*

Vla. $3^\circ/II$ $3^\circ/III$ *pp* *mf* slow down the pitch change tempo

Vc. $4^\circ/II$ $3^\circ/III$ *mf*

Cb. $9^\circ/I$ $4^\circ/II$ *pp*

Tape *mf*

Abu'ata / $\text{e} \times \text{Az}$ slowly begin to groove and add rhythmic patterns

14'00"

14'10"

14'20"

14'30"

14'40"

14'50"

Bayat-e Turk continue in the same groove manner

San. *p* *mf* *p* *mf* *p* *mf*

Plates

B. D. finger tips, not synchronised, both hands *mf* l.v., sim. *f* only finger tips, not synchronised, both hands *p*

B. Fl. always avoid steps in thirds! *p* *mf* *p* *mf*

B. Cl. always avoid steps in thirds! smooth change between pitches not too fast in tempo *mf* *p* *mf* *p*

Vln. I *mf* *p* *mf* *p*

Vln. II *mf* *p* *mf* *p* *mf*

Vla *mf* *p* *mf* *p* *mf* *p*

Vc. *mf* *p* *mf* *p* *mf* *p*

Cb. *mf* *p* *mf* *p* *mf* *p*

Tape *mf*

4°/III 3°/IV 4°/III 2°/II 3°/III 3°/II 3°/III 4°/II 3°/III 9°/I 4°/II 2°/II 3°/III 3°/III 3°/III 2°/II

slow down the pitch change tempo

slow down the pitch change tempo

slow down the pitch change tempo

finger tips change to open palm!, not synchronised, both hands

always avoid steps in thirds!

smooth change between pitches not too fast in tempo

finger tips, not synchronised, both hands

only finger tips, not synchronised, both hands

l.v., sim.

15'00" 15'10" 15'20" 15'30" 15'40" 15'50"

San. *Afshari*
p groovy rhythmic patterns, in dialogue/response to the polyrhythm patterns in percussion
mf balance your dynamics to the plate sounds
 intensify greatly

Plates
 move freely between given variants:
 if chosen play x4
 if chosen play x2
mf
 intensify greatly

B. Fl. *p* change faster between the pitches, smooth and in flow, avoid steps in thirds
 B. Cl. *mf* *p* $\sharp E -49\text{c}$ $\sharp E -49\text{c}$

Vln. II *p*
 Vc. *p*
 Cb. $9^\circ/I$ $4^\circ/II$ $4^\circ/II$
mf *p*

Tape *mf* $13/12$

16'00" 16'10" 16'20" 16'30" 16'40" 16'50"

San. *Afshari* in dialogue with percussion
f

Plates in dialogue with santur
f

B. Fl. *mf* *p* *mf* *p*

B. Cl. *mf* *p* *mf* *p*

Vln. I

Vln. II

Vla. change bow freely
 √ m.s.t.

Vc. change bow freely
 √ m.s.t.

Cb. change bow freely
 √ m.s.t.

Tape

4°/II III

2°/II III

p

mf

p

change bow freely
 √ m.s.t.

change bow freely
 √ m.s.t.

change bow freely
 √ m.s.t.

p

mf

p

→

17'00" 17'10" 17'20" 17'30" 17'40" 17'50"

San. *Afshari* *extend pattern structures, wait on certain pitches, let them reverb*
ff as much as possible *f*

Plates *ff* *f*

B. Fl. *mf* *p* *mf* *p* *mf* *p*

B. Cl. *mf* *p* *mf* *p* *mf*

Vln. I *p* *4°/II III*

Vln. II *2°/II III* *p*

Vla. *m.s.t., come prima* *mp* *mf* *p*

Vc. *m.s.t., come prima* *p* *mf* *p*

Cb. *m.s.t., come prima* *p* *mf* *p*

Tape

18'00"

18'10"

18'20"

18'30"

18'40"

18'50"

San. **Afshari** **molto rall.** *slow down so much that there is no clear pulsation from the previous rhythmic structure*



mf

Plates *give more and more space between the repetition of a pattern, fading away*

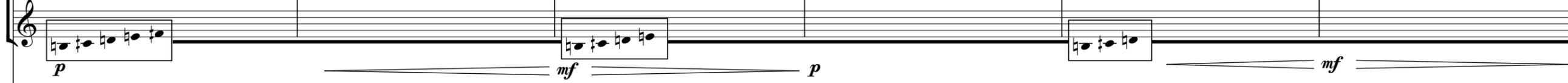


mf l.v.

B. Fl. *mf* *p* *mf* *p*



B. Cl. *p* *mf* *p* *mf*



Vln. I *4°/II III* *mf* *p* *mf* *p* *f*



Vln. II *2°/II III* *mf* *p* *mf* *p* *f*



Vla *m.s.t.* *p* *mf* *p* *f*



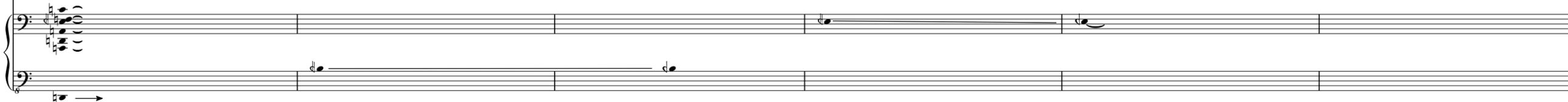
Vc. *m.s.t.* *p* *mf* *p* *f* *mp*



Cb. *m.s.t.* *p* *mf* *p* *f* *mp*



Tape



III. Knowledge

19'00"

19'10"

19'20"

19'30"

19'40"

19'50"

The musical score is arranged in a system with the following parts and markings:

- Plates:** Treble clef, rests in the first four measures, then a half note with a dynamic marking of *mf* and a first ending bracket labeled "1.v." in the fifth measure.
- B. Fl.:** Treble clef, melodic line with dynamics *mf* and *p*.
- B. Cl.:** Treble clef, melodic line with dynamics *p* and *mf*.
- Vln. I:** Treble clef, sustained notes with dynamics *p* and *mf*. Fingering: 4°/II III.
- Vln. II:** Treble clef, sustained notes with dynamics *mf* and *p*. Fingering: 3°/II III.
- Vla:** Bass clef, sustained notes with dynamics *mp*, *p*, *f*, and *mp*. Includes markings for *m.s.p.* and *ord.*
- Vc.:** Bass clef, sustained notes with dynamics *f* and *mp*. Includes markings for *m.s.p.* and *ord.*
- Cb.:** Bass clef, sustained notes with dynamics *f* and *mp*. Includes markings for *m.s.p.* and *ord.*
- Tape:** Bass clef, rests in the first four measures, then a half note in the fifth measure.

21'00"

21'10"

21'20" mute with one hand,
while another performs battuto

21'30"

21'40"

21'50"

San. *sfz p* *molto rall.* *ppp*

Plates *l.v.*

B. D. *f* *finger tips change to open palm!, not synchronised, both hands* *l.v.*

B. Fl. *mf*

B. Cl. *mf*

Vln. I *p* *mf* *p* *mf* *p* *mf*

Vln. II *mf* *p* *mf* *p* *mf* *p*

Vla *ord.* *mp* *m.s.p.* *ord.* *mp* *f* *mp* *f*

Vc. *ord.* *mp* *m.s.p.* *ord.* *mp* *f* *mp* *f*

Cb. *m.s.p.* *ord.* *mp* *f* *mp* *f* *mp* *f*

Tape

22'00"

22'10"

22'20"
mute,
come prima

22'30"

22'40"

22'50"

San.

Plates

B. D.

finger tips change to open palm!,
not synchronised,
both hands

Vln. I

Vln. II

Vla

Vc.

Cb.

Tape

23'00"

23'10"

23'20"

23'30"

23'40"

23'50"

San. *mute, sim.* **molto rall.** *l.v.* *sfz p* *ppp* *sfz p* *ppp*

Plates *finger tips change to open palm!, not synchronised, both hands* *l.v.* *finger tips change to open palm!, not synchronised, both hands* *l.v.*

B. D. *f* *f*

Vln. I *p* *mf* *p* *mf* *p* *mf*

Vln. II *mf* *p* *mf* *p* *mf* *p*

Vla *ord.* *m.s.p.* *ord.* *m.s.p.*

Vc. *m.s.p.* *ord.* *f* *mp* *f* *mp*

Cb. *f* *mp* *f* *mp*

Tape

5°/III 4°/IV 5°/III 5°/IV

15/8 #C -12¢ 3/4 #F -14¢

24'00"

24'10"

24'20"

24'30"

24'40"

24'50"

San. *sfz p* *molto rall.* *ppp* l.v.

Plates *mf* l.v.

B. D. *mf* l.v.

finger tips, not synchronised, both hands

Vln. I *p* *mf* *p* *mf* *p* *mf*

5^o/III 4^o/III 5^o/IV change faster between the pitches, smooth and in flow

Vln. II *p* *mf* *p* *mf* *p* *mf*

4^o/III 7^o/IV smooth change between pitches not too fast in tempo

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

ord. m.s.p. ord. m.s.p.

Vc. *f* *p* *f* *mp* *f* *mp*

m.s.p. ord. ord. m.s.p.

11 8 $\sharp G -49c$

Cb. *f* *mp* *f* *mp*

m.s.p. ord. ord. m.s.p.

Tape

25'00"

25'10"

25'20"

25'30"

25'40"

25'50"

San. *mute, sim.* **molto rall.** l.v. *sfz p* *ppp*

Plates *finger tips, not synchronised, both hands* l.v. *mf* To Tam-tam

Vln. I *5°/III* *4°/III* *5°/IV* *p* *mf* *p* *mf* *p* *mf* *slow down the pitch change tempo*

Vln. II *3°/II* *4°/III* *7°/IV* *mf* *p* *mf* *p* *mf* *p* *change faster between the pitches, smooth and in flow* *slow down the pitch change tempo*

Vla *ord.* *m.s.p.* *ord.* *m.s.p.* *ord.* *m.s.p.* *p* *f* *p* *f* *p* *f* *12* *11* *E -49c*

Vc. *m.s.p.* *ord.* *m.s.p.* *ord.* *m.s.p.* *ord.* *f* *mp* *f* *mp* *f* *mp*

Cb. *m.s.p.* *ord.* *m.s.p.* *ord.* *m.s.p.* *ord.* *f* *mp* *f* *mp* *f* *mp* *33* *32* *D -47c*

Tape

IV. Detachment

26'00"

26'10"

26'20"

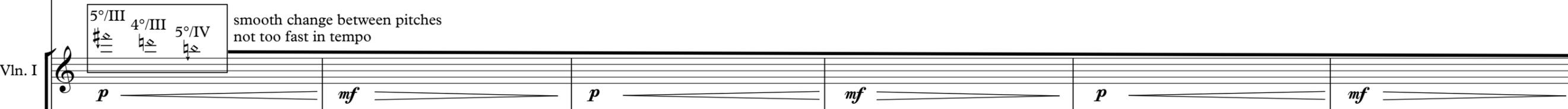
26'30"

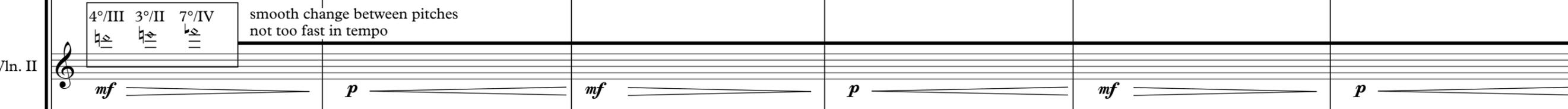
26'40"

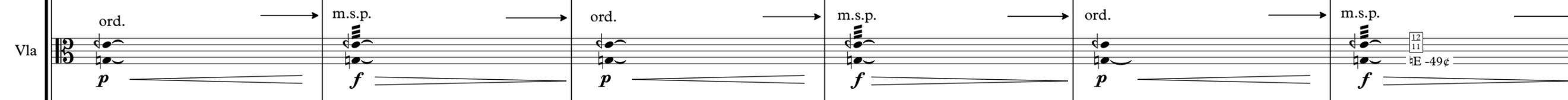
26'50"

San. 

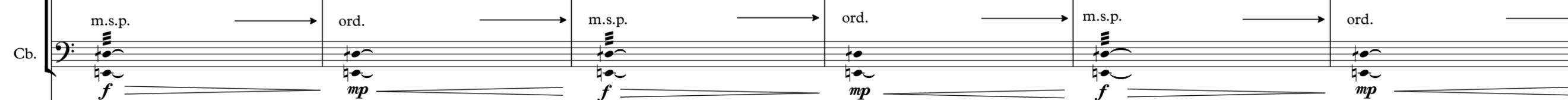
T.-t. **LARGE TAM-TAM** with small superballet mallet slowly draw large circles and explore different spectral timbres *mf* *p* *f* *ppp* finish movement, l.v. with small superballet mallet *mp*

Vln. I  smooth change between pitches not too fast in tempo

Vln. II  smooth change between pitches not too fast in tempo

Vla  *p* *f* *p* *f* *p* *f* ord. m.s.p. ord. m.s.p. ord. m.s.p. 12
11 $\sharp E -49\text{¢}$

Vc.  *f* *mp* *f* *mp* *f* *mp* m.s.p. ord. m.s.p. ord. m.s.p. ord.

Cb.  *f* *mp* *f* *mp* *f* *mp* m.s.p. ord. m.s.p. ord. m.s.p. ord.

Tape 

27'00"

27'10"

27'20"

27'30"

27'40"

27'50"

San. *sfz p* *molto rall.* *ppp* *l.v.*

T-t. *p* *f* *p* *ppp* *sim., l.v.* *with large superballet mallet* *f* *p* *mf* *ppp* *l.v.*

B. Fl. *sempre non vibrato* *mf*

B. Cl. *sempre non vibrato* *mf*

Vln. I *p* *mf* *p* *mf* *p* *mf*
 5°/III 4°/III 5°/IV
 change faster between the pitches, smooth and in flow

Vln. II *mf* *p* *mf* *p* *mf* *p*
 3°/II 4°/III 7°/IV
 change faster between the pitches, smooth and in flow

Vla. *ord.* *m.s.p.* *ord.* *m.s.p.* *ord.* *m.s.p.*

Vc. *f* *mp* *f* *mp* *f* *mp*
m.s.p. *ord.* *m.s.p.* *ord.* *m.s.p.* *ord.*

Cb. *f* *mp* *f* *mp* *f* *mp*
m.s.p. *ord.* *m.s.p.* *ord.* *m.s.p.* *ord.*

Tape *ff*

28'00" very fast arpeggios between the pitches in any configurations 28'10" 28'20" 28'30" 28'40" 28'50"

San. *p* *ff* l.v.

T.-t. with large superball mallet *ff* *p* *mp* *PPP* l.v.

B. Fl. *mf*

B. Cl. random harmonic glissando *mf* sim. *mf*

Vln. I *p* *mf* *p* *mf* *p* *mf* slow down the pitch change tempo

Vln. II *mf* *p* *mf* *p* *mf* *p* slow down the pitch change tempo

Vla. ord. m.s.p. ord. m.s.p. ord. m.s.p. ord. m.s.p.

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

Vc. m.s.p. ord. m.s.p. ord. m.s.p. ord. m.s.p. ord.

Cb. *f* *mp* *f* *mp* *f* *mp*

Cb. m.s.p. ord. m.s.p. ord. m.s.p. ord. m.s.p. ord.

Tape *ff*

29'00"

29'10"

29'20"

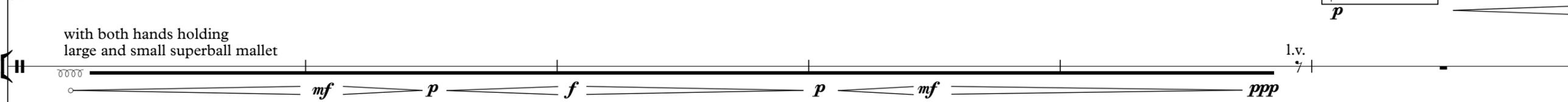
29'30"

29'40"

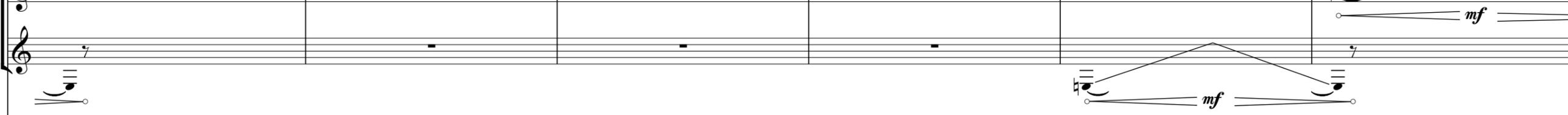
29'50"

very fast arpeggios,
create a cloud of sounds

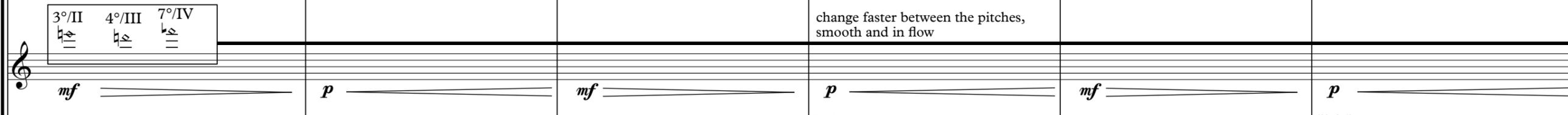
San. 

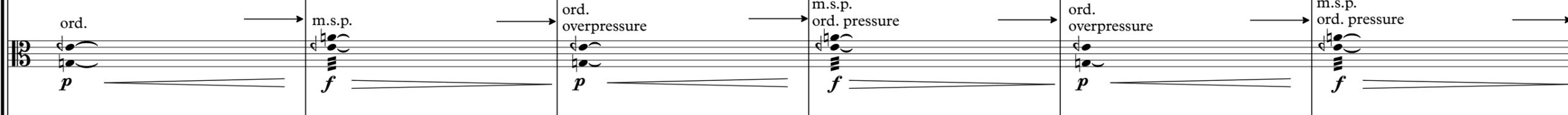
T-t.  with both hands holding large and small superballet mallet

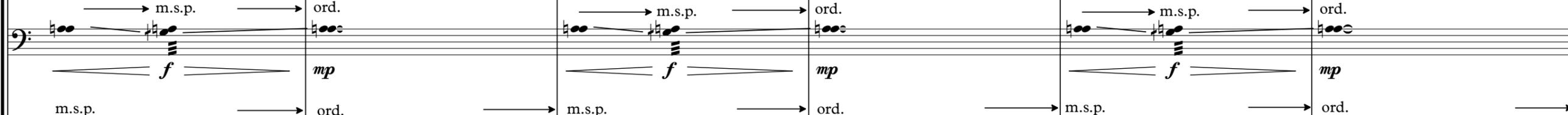
B. Fl. 

B. Cl. 

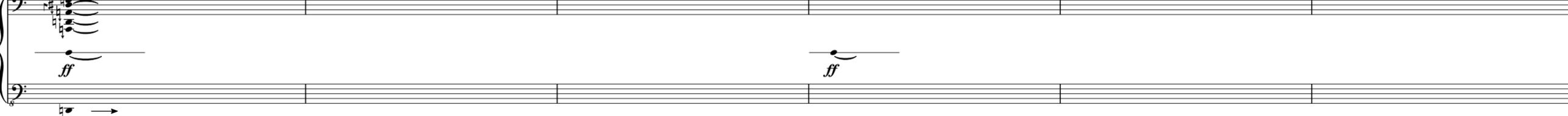
Vln. I  5°/III 4°/III 5°/IV change faster between the pitches, smooth and in flow

Vln. II  3°/II 4°/III 7°/IV change faster between the pitches, smooth and in flow

Vla.  ord. → m.s.p. → ord. overpressure → m.s.p. ord. pressure → ord. overpressure → m.s.p. ord. pressure

Vc.  m.s.p. → ord. → m.s.p. → ord. → m.s.p. → ord.

Cb.  m.s.p. → ord. → m.s.p. → ord. → m.s.p. → ord.

Tape 

slow down the pitch change tempo

30'00"

30'10"

30'20"

30'30"

30'40"

30'50"

very fast arpeggios, come prima

San. *ff* *p*

T-t. hand 1: knuckle sporadically and rhythmically irregularly to add more selective layer to the sound
hand 2: with small superball mallet *mp* *f* *p* *mf* *p* *mp* *ppp*

B. Fl. random harmonic glissando *mf*

B. Cl. random harmonic glissando + overpressure *mf* random harmonic glissando, no overpressure! *f*

Vln. I *p* *mf* *p* *mf* *p* *mf*
change faster between the pitches, smooth and in flow

Vln. II *mf* *p* *mf* *p* *mf* *p*
slow down the pitch change tempo
change faster between the pitches, smooth and in flow

Vla. ord. *p* *f* *p* *f* *p* *f*
m.s.p. *f* *mp* *f* *mp* *f* *mp*

Vc. *f* *mp* *f* *mp* *f* *mp*
m.s.p. *f* *mp* *f* *mp* *f* *mp*

Cb. *f* *mp* *f* *mp* *f* *mp*
m.s.p. *f* *mp* *f* *mp* *f* *mp*

Tape *ff* *ff*

5°/III 4°/III 5°/IV
3°/II 4°/III 7°/IV

1.v. *7* *7* *7* *7* *7* *7*

less and less

31'00"

31'10"

31'20"

31'30"

31'40"

31'50"

San. *ff* *mf*

T-t. large superball mallet *l.v.*

B. Fl. random harmonic glissando + overpressure *f* *mf* *sim.*

B. Cl. no harm. gliss., non vibrato *ff* *mf* *f*

Vln. I *p* *mf* *p* *mf* *p* *mf*

Vln. II *mf* *p* *mf* *p* *mf* *p*

Vla. ord. *p* m.s.p. ord. pressure *f* ord. overpressure *f* m.s.p. ord. pressure *f* ord. overpressure *p* m.s.p. ord. pressure *f*

Vc. m.s.p. ord. pressure *f* ord. overpressure *mp* m.s.p. ord. pressure *f* m.s.p. ord. pressure *mp* m.s.p. ord. pressure *f* ord. overpressure *mp*

Cb. m.s.p. *f* ord. overpressure *mp* m.s.p. ord. pressure *f* ord. overpressure *mp* m.s.p. ord. pressure *f* ord. overpressure *mp*

Tape *ff* *ff* *ff*

5°/III 4°/III

3°/II 4°/III 7°/IV

Del-kash 2A

very fast arpeggios on the modal scale, vary between full range and fragmentary processions

change faster between the pitches, smooth and in flow

change faster between the pitches, smooth and in flow

slow down the pitch change tempo

sim.

sim.

32'00"

32'10"

32'20"

32'30"

32'40"

32'50"

accelerate and build up tension
in very virtuosic way

l.v.

Del-kash 2A very fast arpeggios, full range versus smaller fragments

San. *f* *ff* *mf*

T-t. with small superballet mallet *pp* *mf* *p* *f* *pp* l.v.

B. Fl. random harmonic glissando, no overpressure! *f* *mf* *mp*
no harm. gliss., non vibrato sempre

B. Cl. random harmonic glissando, no overpressure! *ff* *f* *p*

Vln. I *p* *mf* *p* *mf* *p* *mf*
5°/III 4°/III 5°/III 3°/II
slow down the pitch change tempo

Vln. II *mf* *p* *mf* *p* *mf* *p*
3°/II 7°/IV 7°/IV
slow down the pitch change tempo

Vla. ord. *p* *f* *p* *f* *p* *f*
ord. pressure

Vc. *f* *mp* *f* *mp* *f* *mp*

Cb. m.s.p. *f* *mp* *f* *mp* *f* *mp*
ord. overpressure

Tape. *ff* *ff* *ff*

V. Unity

33'00"

33'10"

33'20"

33'30"

33'40"

33'50"

San. *f* *ff* l.v.

T-t. *ff* hit with fist l.v. *ff* sim. l.v. To Bass Drum

B. Cl. 7

Vln. I 3°/II *p* *mf* *p* *mf* *p* *mf* 2°/II

Vln. II 4°/III *mf* 5°/IV *p* *mf* *p* *mf* *p* 3°/III

Vla. ord. *p* m.s.p. *f* ord. overpressure *p* m.s.p. ord. pressure *f* ord. overpressure *p* m.s.p. ord. pressure *f*

Vc. ord. ord. pressure *f* m.s.p. *mp* ord. *f* m.s.p. *mp* ord. *f* m.s.p. *mp*

Cb. m.s.p. *f* ord. overpressure *mp* m.s.p. ord. pressure *f* m.s.p. ord. pressure *mp* slowly release III *f* m.s.p. ord. *mp*

Tape *ff* *ff* *ff*

34'00"

34'10"

34'20"

34'30"

34'40"

34'50"

San. **Del-kash $\sharp A$** very fast arpeggios
mf \rightarrow *f* \rightarrow *ff* l.v.

T.-t. **BASS DRUM** fluently and in flow, independently
ff with bass drum soft mallets
ff with the side of fist l.v.
ff always a quick action, immediately come back to the bass drum flow
ff l.v. sim.

Vln. I *p* \rightarrow *mf* \rightarrow *p* \rightarrow *f* \rightarrow *p* \rightarrow *f*
 sul I m.s.p. \rightarrow ord. \rightarrow m.s.p.

Vln. II *f* \rightarrow *p* \rightarrow *f* \rightarrow *p* \rightarrow *f* \rightarrow *p*
 sul II ord. \rightarrow m.s.p. \rightarrow ord. \rightarrow m.s.p. \rightarrow ord.

Vla. ord. \rightarrow ord. overpressure \rightarrow m.s.p. ord. pressure \rightarrow ord. \rightarrow ord.
f \rightarrow *mp* \rightarrow *f* \rightarrow *p* \rightarrow *f* \rightarrow *mp* \rightarrow *ff*
 slowly release II

Vc. ord. \rightarrow sul III \rightarrow m.s.p. \rightarrow ord. \rightarrow m.s.p. \rightarrow ord.
 slowly release II
f \rightarrow *mp* \rightarrow *ff*
 fluently and in flow, independently
 accel. \leftrightarrow rall.

Cb. *ff* \rightarrow *mf*
 fluently and in flow, independently
 accel. \leftrightarrow rall.

Tape *ff* \rightarrow *ff* \rightarrow *ff*

35'00" 35'10" 35'20" 35'30" 35'40" 35'50"

San. *Del-kash 2A* very fast arpeggios *mf* *f* arpeggios smoothly change into the following rhythmic pattern, independently from percussion soloist and the other ensemble members slightly limit the melodic material in order to reach to:

T-t. *ff* 1.v. *ff* 1.v. *ff* 1.v.

B. D.

Vln. I ord. *p* *f* *p* *ff* ord. fluently and in flow, independently *accel.* *rall.* m.s.p.

Vln. II *ff* *mf* *ff* *mf* *ff* m.s.p. ord.

Vla m.s.p. *mf* *ff* ord. *mf* m.s.p.

Vc. m.s.p. ord. *mf* *ff* m.s.p. ord. *mf* *ff* ord.

Cb. ord. *ff* *mf* *ff* m.s.p.

Tape *ff* *ff* *ff*

34

in sync, march like

36'00" choose one note from the box and repeat continuously in the given pattern in different octave relations

36'10" 36'20" 36'30" **in sync!** 36'40" 36'50"

San. *f*

T.-t. *ff* l.v.

B. D. **bass drum not in sync!** *ff* slowly get in sync with the strings *ff* **return in sync!**

B. Fl. To Piccolo *ff* *mf* *ff* *mf* *ff* *mf* *ff* *mf* *ff* *gliss.*

B. Cl. *ff* *mf* *ff* *mf* *ff* *mf* *ff* *mf* *ff*

in sync, march like

Vln. I *ff* ord. m.s.p.

Vln. II *ff* m.s.p. ord.

Vla *ff* ord. m.s.p.

Vc. *ff* m.s.p. ord.

Cb. *ff* ord. m.s.p.

Tape. *ff* *ff* *ff*

fluently manipulate between chosen multiphonic fingerings

random harmonic glissando + overpressure

M1 M2 M3

completely out of sync!

begin to improvise as previously,
slowly expanding from
previous pitch set

39'10"

39'20"

39'30"

39'40"

39'50"

Del-kash ♯A

slow down so much that there is no clear pulsation from the previous rhythmic structure

San.

T-t.

B. D.

Picc.

B. Cl.

Vln. I

Vln. II

Vla

Vc.

Cb.

Tape

To Bass Flute

fluently and in flow,
gain independence
accel. ← rall.

fluently and in flow,
gain independence
accel. ← rall.

VI. Wonderment

40'00"

40'10"

40'20"

40'30"

40'40"

40'50"

San. *Del-kash 4A* very slow arpeggios *f* *ff* *mp* *Del-kash 4A* fast arpeggios, but with a lot of space in between the entrances

T. t. *f* l.v.

B. D. give more and more space between the repetition of a pattern

Vln. I ord. *mf* *ff* *mf* *ff* *mf* *ff* m.s.p.

Vln. II m.s.p. *mf* *ff* *mf* *ff* *mf* *ff* ord. m.s.p.

Vla ord. *mf* *ff* *mf* *ff* *mf* *ff* ord. m.s.p.

Vc. m.s.p. *mf* *ff* *mf* *ff* *mf* *ff* ord. m.s.p.

Cb. ord. *mf* *ff* *mf* *ff* *mf* *ff* ord. m.s.p.

Tape *ff*

slow down so much that there is no clear pulsation from the previous rhythmic structure, stay rhythmically independent from the other performers

slow down so much that there is no clear pulsation from the previous rhythmic structure, stay rhythmically independent from the other performers

41'00" 41'10" 41'20" 41'30" 41'40" 41'50"

San. *f* *p* *mf*

l.v. *Del-kash ʔA* very fast arpeggios, more irregular breaks between the melodic patterns l.v.

T.-t. *f*

B. D. *mp*

give more and more irregular breaks between the repetition of a pattern

Vln. I *mf* *ff* *mf* *f* *mp* *f*

Vln. II *mf* *ff* *mf* *f* *mp* *f*

Vla *mf* *ff* *mf* *f* *mp* *f*

Vc. *mf* *ff* *mf* *f* *mp* *f*

Cb. *mf* *ff* *mf* *f* *mp* *f*

ord. m.s.p. ord. m.s.p. ord. m.s.p. ord. m.s.p. ord.

slow down so much that there is no clear pulsation from the previous rhythmic structure, stay rhythmically independent from the other performers

Tape

42'00"

42'10"

42'20"

42'30"

42'40"

42'50"

perform single notes in different octaves,
dispersed in time

l.v.

San.

B. D.

B. Fl.
 B. Cl.

Vln. I
 Vln. II
 Vla
 Vc.
 Cb.

Tape

l.v.

To Crotales

non vibrato sempre

random harmonic glissando

non vibrato sempre

ord.

on the bridge (white noise)

on the bridge (white noise)

ord.

on the bridge (white noise)

on the bridge (white noise)

ord.

on the bridge (white noise)

43'00"

43'10"

43'20"

43'30"

43'40"

43'50"

San. come prima, even more space between the notes, calm *p* *pp* l.v. *p* *mf* *pp* l.v.

B. Fl. *mf* *mf* random harmonic glissando + overpressure

B. Cl. *mf* *mf* nat., non vibrato *mf* random harmonic glissando + overpressure

Vln. I *mp* come poss., noisy

Vln. II *mp* come poss., noisy

Vla. *mp* come poss., noisy

Vc. *mp* come poss., noisy

Cb.

Tape

44'00"

44'10"

44'20"

44'30"

44'40"

44'50"

San.

Crot. **CROTALES** perform single notes in different octaves, dispersed in time, short arco strokes

B. Fl.

B. Cl.

Tape

45'00"

45'10"

45'20"

45'30"

45'40"

45'50"

San.

Crot.

B. Fl.

B. Cl.

Tape

46'00"

46'10"

46'20"

46'30"

46'40"

46'50"

San. *p* l.v.

Crot. *pp* l.v. *very ascetic, full of space* *p* *pp* l.v.

B. Fl. random harmonic glissando no overpressure! *mf* *f* sim.

B. Cl. random harmonic glissando no overpressure! *mf* nat., non vibrato *f* random harmonic glissando no overpressure! *mf*

Tape *mf*

VIII. Poverty and Annihilation

47'00"

47'10"

47'20"

47'30"

47'40"

47'50"

San. *p* *p* *mp*

Daf *mf* *mp*

Croc. *p* *pp*

B. Fl. *mf* *mp*

B. Cl. *mf* *mp*

Tape *mf*

with fingertips moving from the side towards the center and back

perform in the same manner as previously, but use soft mallets

in same manner as before, but use soft mallets

random harmonic glissando no overpressure!

nat., non vibrato

sim.

48'00"

48'10" mute with one hand,
while another performs battuto

48'20"

48'30"

48'40"

48'50"

San. *p* *sfz p* *molto rall.* *ppp* *p*

Cym. *pp*

with soft mallets, delicate

Daf *mp*

Crot. *p* *mf* *pp*

with soft mallets sim.

B. Fl. *p* *p*

sim.

B. Cl. *p*

Tape *mf*

with finger tips!
perform in different directions
on the membrane, explore

49'00" mute with one hand, while another performs battuto
49'10" l.v.
49'20" l.v.
49'30"
49'40"
49'50" l.v.

San. *sfz p* *molto rall.* *ppp* *p* *mf* *mp* *p*

Cym. *finger tips!* l.v. *mp* *with finger tips!* *mf* *finger tips!*

Daf. l.v. *mp*

Crot. *like in the first entrance, short strokes, irregular* *p* *mf* *pp*

B. Fl. *random harmonic glissando no overpressure!* *f*

B. Cl. *random harmonic glissando no overpressure!* *mf* *nat., non vibrato* *mf*

Vln. II *bow on bouts* *mp* *provoke sonorous noises* *f*

Tape *mf*

50'00"

50'10"

50'20"

50'30"

50'40"

50'50"

San. *p* l.v.

Cym. *mf* l.v. finger snap!

Daf *mp* l.v.

Crot. *p* *mf* *pp* l.v. with fingers or knuckles! Try to cause very selective but distant sounds → move fast between the pitches → slow down random harmonic glissando no overpressure!

B. Fl. *p* *mf* nat., non vibrato

B. Cl. *mf* nat., non vibrato

Vln. II *mp* *mp* sim.

Vla *mp* *mf* *mp* bow on bouts provoke sonorous noises

Tape *mf*

random taps on the surface, irregular rhythmically, like on crotales

51'00"

51'10"

51'20"

51'30"

51'40"

51'50"

San. *p* *mp* l.v. *p* l.v.

Cym. *pp* *mp* *pp* *mp* *pp* *mp* speed up, random taps on the surface, irregular rhythmically, like on crotales

Daf *pp* *mp* l.v.

Crot. *p* *mf* *pp* l.v.

B. Fl. nat., non vibrato *mp* nat., non vibrato

B. Cl. *mp* *p* sim.

Vln. I *mp* *sim.* bow on bouts provoke sonorous noises

Vln. II *sim.*

Vla. *mp* *sim.*

Tape *mf*

52'00" 52'10" 52'20" 52'30" 52'40" 52'50"

San. l.v. *p* 52'10" mute with one hand, while another performs *battuto* **molto rall.** l.v. activate the string for new resonances *sfz p* *ppp* perform random taps on the surface of instruments, explore positions, timbres and intensities intense here *pp* *mp* *pp* 52'50" very fast arpeggios as calm as possible, like a cloud *pp*

Cym. *pp* intense here *mp* *pp* l.v.

Daf *pp* intense here *mp* *pp* l.v.

Crot. *p* *pp* with fingers and knuckles, like before, calm l.v.

B. Fl. non vibrato *p* non vibrato *p*

B. Cl. *p*

Vln. I *sim.* *mp*

Vln. II *mp*

Vla. *mp*

Vc. bow as slow as possible 3°/III *pp*

Cb. bow as slow as possible 2°/II *pp*

Tape *mf*

53'00" activate the string for new resonances

53'10"

53'20" l.v.

53'30" mute with one hand, while another performs battuto **molto rall.**

53'40" l.v.

53'50" perform single notes in different octaves, dispersed in time, very ascetic

San. *ppp* *pp* *sfz p* *ppp* *p*

Daf with soft mallets, calm, ascetic *pp* come prima, very calm with soft mallets, very ascetic, dialogue with santur

Crot. *p* *pp* *p*

B. Fl.

B. Cl. non vibrato *p*

Vln. I *mp*

Vln. II *mp*

Vla. bow as slow as possible 3°/III *pp*

Vc.

Cb.

Tape *mf*

Epilogue

54'00"

54'10"

54'20"

54'30"

54'40"

54'50"

San. *pp* l.v. *pp* *p* *pp* speed up slow down and fade away l.v.

Crot. *pp* l.v. *pp* *p* *pp* speed up slow down and fade away l.v.

B. Fl. non vibrato *p*

Vln. I 8°/III bow as slow as possible *pp*

Vln. II 4°/III bow as slow as possible *pp*

Vla. *mf*

Vc. *mf*

Cb. *mf*

Tape *mf*

55'00"

55'10"

55'20"

55'30"

55'40"

55'50"

San. *l.v.* *pp* *ppp* *p* *pp*

Daf. perform random taps on the surface, explore positions, timbres and intensities *pp* *mp* *pp* *mp* *ppp* *l.v.*

Crot. *pp* *l.v.*

B. Fl. *non vibrato* *p* *non vibrato* *p*

B. Cl. *non vibrato* *p*

Vln. I

Vln. II

Vla

Vc.

Cb.

Tape *mf*

56'00"

56'10"

56'20"

56'30"

56'40"

56'50"

tune the lowest string to $\sharp D$
bow steady and even, make the string vibrate as one big breath

San.

Daf.

Crot.

B. Fl.

B. Cl.

Vln. I

Vln. II

Vla

Vc.

Cb.

Tape

come prima, very calm

pp

non vibrato

non vibrato

non vibrato

mf

mf

1.v.

p

p

57'00"

57'10"

57'20"

57'30"

57'40"

57'50"

The musical score is arranged in a system with the following parts and markings:

- San. (Soprano):** *mp* at 57'00".
- Daf:** *pp* at 57'30" with the instruction "come prima, very calm".
- Crot. (Crotchet):** *l.v.* (lento vivace) markings at 57'10" and 57'50".
- B. Fl. (Bass Flute):** *non vibrato* markings at 57'00" and 57'40".
- B. Cl. (Bass Clarinet):** *non vibrato* marking at 57'20".
- Vln. I & II (Violins):** *mf* (mezzo-forte) dynamic.
- Vla. (Viola):** *mf* dynamic.
- Vc. (Violoncello):** *mf* dynamic.
- Cb. (Cello):** *mf* dynamic.
- Tape:** *mf* dynamic.

58'00"

58'10"

58'20"

58'30"

58'40"

58'50"

faster bowing, more intense

San.

Crot.

B. Fl.

B. Cl.

Vln. I

Vln. II

Vla

Vc.

Cb.

Tape

Musical notation for San. starting at 58'10" with a fermata and a slur. The dynamic is *mp*.

Musical notation for San. at 58'20" with a fermata and a slur. The dynamic is *mp*.

Musical notation for San. at 58'30" with a fermata and a slur. The dynamic is *mp*.

1.v.

To Glockenspiel

non vibrato

non vibrato

p

Musical notation for B. Cl. starting at 58'10" with a fermata and a slur.

Musical notation for B. Cl. at 58'20" with a fermata and a slur.

Musical notation for B. Cl. at 58'30" with a fermata and a slur.

Musical notation for Vln. I starting at 58'00" with a fermata and a slur.

Musical notation for Vln. I at 58'10" with a fermata and a slur.

Musical notation for Vln. I at 58'20" with a fermata and a slur.

Musical notation for Vln. I at 58'30" with a fermata and a slur.

Musical notation for Vln. I at 58'40" with a fermata and a slur.

Musical notation for Vln. I at 58'50" with a fermata and a slur.

Musical notation for Vln. II starting at 58'00" with a fermata and a slur.

Musical notation for Vln. II at 58'10" with a fermata and a slur.

Musical notation for Vln. II at 58'20" with a fermata and a slur.

Musical notation for Vln. II at 58'30" with a fermata and a slur.

Musical notation for Vln. II at 58'40" with a fermata and a slur.

Musical notation for Vln. II at 58'50" with a fermata and a slur.

Musical notation for Vla starting at 58'00" with a fermata and a slur.

Musical notation for Vla at 58'10" with a fermata and a slur.

Musical notation for Vla at 58'20" with a fermata and a slur.

Musical notation for Vla at 58'30" with a fermata and a slur.

Musical notation for Vla at 58'40" with a fermata and a slur.

Musical notation for Vla at 58'50" with a fermata and a slur.

Musical notation for Vc. starting at 58'00" with a fermata and a slur.

Musical notation for Vc. at 58'10" with a fermata and a slur.

Musical notation for Vc. at 58'20" with a fermata and a slur.

Musical notation for Vc. at 58'30" with a fermata and a slur.

Musical notation for Vc. at 58'40" with a fermata and a slur.

Musical notation for Vc. at 58'50" with a fermata and a slur.

Musical notation for Cb. starting at 58'00" with a fermata and a slur.

Musical notation for Cb. at 58'10" with a fermata and a slur.

Musical notation for Cb. at 58'20" with a fermata and a slur.

Musical notation for Cb. at 58'30" with a fermata and a slur.

Musical notation for Cb. at 58'40" with a fermata and a slur.

Musical notation for Cb. at 58'50" with a fermata and a slur.

Musical notation for Tape starting at 58'00" with a fermata and a slur. The dynamic is *mf*.

Musical notation for Tape at the end of the page with a fermata and a slur.

1:01'00" 1:01'10" 1:01'20" 1:01'30" 1:01'40" 1:01'50"

San. *mp* *pp* *very calm* *mp*

suddenly speed up bowing → as slow as possible → gradually slow down and fade away

Glock. speed up tremolo → slow down → speed up tremolo and add rhythmic irregularities

Tape *mf*

1:02'00" 1:02'10" 1:02'20" 1:02'30" 1:02'40" 1:02'50"

Glock. *pp* *stillness* *ppp*

slow down and perform very calm → think of creating hum rather than sound, and stop

Tape *mf*

1:03'00" 1:03'10" 1:03'20" 1:03'30" 1:03'40" 1:03'50"

Tape *mf*

1:04'00" 1:04'10" 1:04'20" 1:04'30" 1:04'40" 1:04'50"

Tape *mf*

1:05'00" 1:05'10" 1:05'20" 1:05'30" 1:05'40" 1:05'50"

Tape *mf*