Phase Transition

for 11 strings and harpsichord

(2019)

Xavier Shuang Xu

Performance notes to Phase Transition

Instrumentation

This work is scored for 6 violins, 2 violas, 2 cellos and a double bass. The size can be doubled or tripled but not more.

The harpsichord can be replaced by a piano if availability is a problem. The pianist may use the pedal to sustain the notes.

General guidelines

The harpsichord/piano player acts like the conductor – when the cue of the harpsichord is heard, each string player may enter the next section at any time before finishing the current repeating cell.

Each string player selects a tempo between 60-80 M.M. and stick to it until the *ritardando* near the end, where each player decelerates relative to his/her own originally selected tempo.

Synchronization between the instruments is *not* required at any time.

All strings play with the mute throughout the piece, and all strings play *legato* unless other articulations are noted.

Accidentals only affect the attached notes. However, naturals are still written at times for clarity.

The notes are beamed to a crotchet (when possible) only for sighting convenience and does not bear metric or rhythmic meaning.

The same rules apply throughout the piece.

String techniques:

s.p. *sul ponticello*

c.l.b. *col legno battuto*

pizz. *pizzicato*

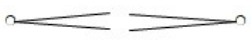
These techniques and string use specifications apply to the attached note, or all the notes under the attached bracket ⌐¬, or *al fine* as indicated.

: fingering of harmonics is notated explicitly by the diamond note head, meaning a light touch on the specified string. The sounding pitch is written in parenthesis when convenient.

Please note that towards the end of the work, some diamond notes remain as the indication of light touch but the resulting sound may not be an effective harmonic. Simply play as the score instructs.

: *quasi glissando*, sliding between notes while keeping the notes distinguishable.

: *saltato,* as fast as possible, the number of notes is equal to the number of the dots (ranging from 2 to 5, please count).


crescendo from nothing and *diminuendo* to nothing

Keyboard configuration for harpsichord (translated into dynamics for piano).

Symbol	harpsichord	piano
I	4’	Play one octave higher
II	Front 8’	Dynamics: piano to pianissimo
II^{l}	Front 8’ with lute stop	Dynamics: piano to pianissimo with left pedal
III	Back 8’	Dynamics: mezzo-piano to mezzo-forte
I/II	4’ + front 8’	Dynamics: forte

Phase Transition

Xavier Shuang Xu (b.1988)

♩ = 60-80 (see notes)

all strings *con sord. al fine*

ca. 25" →

Violin 1

Violin 2

Violin 3

Violin 4

Violin 5

ppp

Violin 6

5 5 5 5

ppp

Viola 1

6 6

ppp

Viola 2

6

ppp

Violoncello 1

ppp

Violoncello 2

IV 5 IV 3

ppp

Contrabass

ppp

Harpsichord

II^{l} →

A

ca. 30"

poco a poco cresc.

Vln. 1

Vln. 2

Vln. 3

Vln. 4

ppp

Vln. 5

Vln. 6

Vla. 1

Vla. 2

Vc. 1

IV

IV

III

Vc. 2

IV

IV

Cb.

A

Hpsd.

Vln. 1

Vln. 2

Vln. 3

Vln. 4

pp

Vln. 5

pp

Vln. 6

pp

Vla. 1

pp

Vla. 2

pp

Vc. 1

IV II IV

pp

Vc. 2

pp

Cb.

pp

Hpsd.

B

ca. 30" →

poco a poco cresc.

Vln. 1

Vln. 2

Vln. 3

pp

Vln. 4

Vln. 5

Vln. 6

Vla. 1

Vla. 2

Vc. 1

Vc. 2

IV

Cb.

B

II →

Hpsd.

Vln. 1

Vln. 2

Vln. 3

Vln. 4

Vln. 5

Vln. 6

Vla. 1

Vla. 2

Vc. 1

Vc. 2

IV

Cb.

I

Hpsd.

C

ca. 30"

Vln. 1

Vln. 2

Vln. 3

Vln. 4

Vln. 5

Vln. 6

Vla. 1

Vla. 2

Vc. 1

IV IV

Vc. 2

Cb.

C

III

Hpsd.

poco a poco cresc.

Vln. 1

Vln. 2

p

Vln. 3

Vln. 4

Vln. 5

Vln. 6

IV

Vla. 1

Vla. 2

Vc. 1

IV

Vc. 2

Cb.

Hpsd.

Vln. 1

Vln. 2

Vln. 3

Vln. 4

Vln. 5

Vln. 6

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Cb.

Hpsd.

D ca. 30" →

Vln. 1

Vln. 2

Vln. 3

Vln. 4

Vln. 5

Vln. 6

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Cb.

D →

Hpsd.

poco a poco cresc.

Vln. 1

mp

Vln. 2

Vln. 3

Vln. 4

Vln. 5

Vln. 6

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Cb.

Hpsd.

Vln. 1

Vln. 2

Vln. 3

Vln. 4

Vln. 5

Vln. 6

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Cb.

Hpsd.

ca. 15"

E

Vln. 1

Vln. 2

Vln. 3

Vln. 4

Vln. 5

Vln. 6

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Cb.

E

I/II

Hpsd.

ca. 15"

F

Vln. 1

Vln. 2

Vln. 3

Vln. 4

Vln. 5

Vln. 6

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Cb.

F

Hpsd.

ca. 15"

G

Vln. 1

Vln. 2

Vln. 3

Vln. 4

Vln. 5

Vln. 6

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Cb.

G

Hpsd.

H **ca. 15"** → **poco a poco decresc.**

Vln. 1

Vln. 2

Vln. 3

Vln. 4

Vln. 5

Vln. 6

Vla. 1

Vla. 2

III IV

Vc. 1

Vc. 2

IV

Cb.

H

Hpsd.

III

ca. 15"

I

Vln. 1

Vln. 2

Vln. 3

Vln. 4

Vln. 5

Vln. 6

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Cb.

I

Hpsd.

ca. 15"

J

Vln. 1

Vln. 2

Vln. 3

Vln. 4

Vln. 5

Vln. 6

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Cb.

Hpsd.

mp

ca. 25"

K

Vln. 1

Vln. 2

Vln. 3

Vln. 4

Vln. 5

Vln. 6

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Cb.

K

II

Hpsd.

ca. 30" →

L

Vln. 1

Vln. 2

Vln. 3

Vln. 4

Vln. 5

Vln. 6

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Cb.

L

III

Hpsd.

Vln. 1

Vln. 2

Vln. 3

Vln. 4

Vln. 5

Vln. 6

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Cb.

Hpsd.

M

ca. 30"

Vln. 1

Vln. 2

Vln. 3

Vln. 4

Vln. 5

Vln. 6

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Cb.

M

Hpsd.

Vln. 1

Vln. 2

Vln. 3

Vln. 4

Vln. 5

Vln. 6

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Cb.

Hpsd.

Vln. 1
Vln. 2
Vln. 3
Vln. 4
Vln. 5
Vln. 6
Vla. 1
Vla. 2
Vc. 1
Vc. 2
Cb.
Hpsd.

N

ca. 30"

Vln. 1

Vln. 2

Vln. 3

s.p.

s.p.

Vln. 4

s.p.

Vln. 5

s.p.

Vln. 6

s.p.

Vla. 1

s.p.

c.l.b.

Vla. 2

s.p.

Vc. 1

s.p.

Vc. 2

Cb.

N

I/II

Hpsd.

Vln. 1

Vln. 2

Vln. 3

Vln. 4

Vln. 5

Vln. 6

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Cb.

Hpsd.

decresc.

Vln. 1

Vln. 2

Vln. 3

Vln. 4

Vln. 5

Vln. 6

Vla. 1

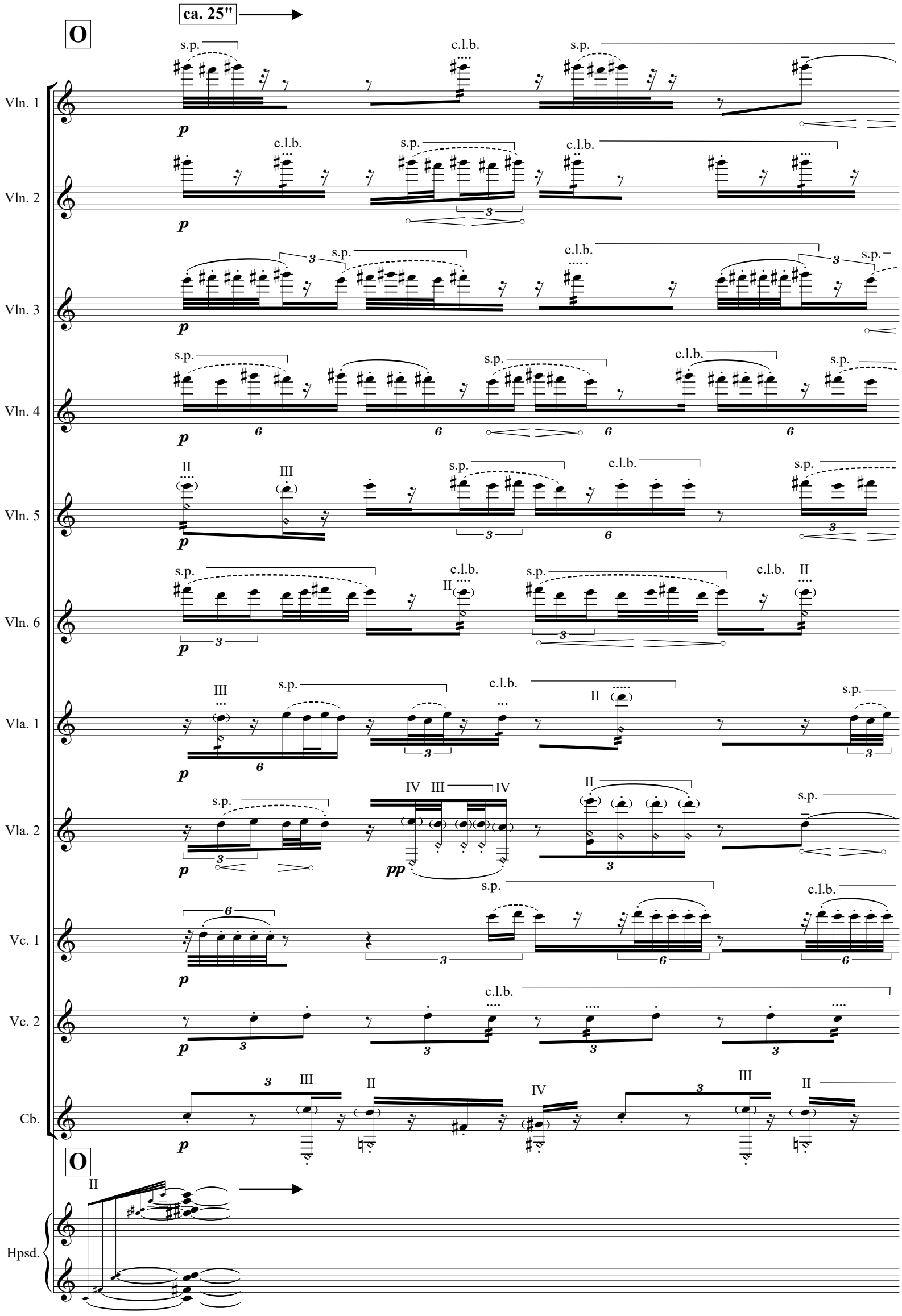
Vla. 2

Vc. 1

Vc. 2

Cb.

Hpsd.


ca. 25"
O
Vln. 1
Vln. 2
Vln. 3
Vln. 4
Vln. 5
Vln. 6
Vla. 1
Vla. 2
Vc. 1
Vc. 2
Cb.
Hpsd.
s.p.
c.l.b.
p
pp
II
III
IV

Vln. 1
Vln. 2
Vln. 3
Vln. 4
Vln. 5
Vln. 6
Vla. 1
Vla. 2
Vc. 1
Vc. 2
Cb.
Hpsd.

Vln. 1
Vln. 2
Vln. 3
Vln. 4
Vln. 5
Vln. 6
Vla. 1
Vla. 2
Vc. 1
Vc. 2
Cb.
Hpsd.

ca. 20"

P

Vln. 1

s.p. c.l.b. s.p. pizz.

pp

Vln. 2

c.l.b. s.p. pizz. s.p.

pp

Vln. 3

c.l.b. 3 s.p. c.l.b. pizz.

pp

Vln. 4

s.p. c.l.b. s.p.

pp 6

Vln. 5

s.p. c.l.b. s.p. s.p.

II II

pp 3

Vln. 6

s.p. c.l.b. s.p.

II II

pp 3

Vla. 1

s.p. c.l.b. s.p. s.p. c.l.b. s.p.

II II

pp

Vla. 2

s.p. c.l.b. s.p. c.l.b.

II II II

pp 6 6

Vc. 1

c.l.b. s.p. pizz.

pp 6 3

Vc. 2

3 s.p. s.p.

Cb.

II I

pp 3

P

Hpsd.

II^{l}

Vln. 1
Vln. 2
Vln. 3
Vln. 4
Vln. 5
Vln. 6
Vla. 1
Vla. 2
Vc. 1
Vc. 2
Cb.
Hpsd.

s.p. pizz. c.l.b. s.p.
pizz. c.l.b. s.p.
s.p. c.l.b. pizz.
c.l.b. s.p. s.p.
c.l.b. s.p. pizz. c.l.b.
c.l.b. s.p. II s.p.
c.l.b. pizz.
s.p. c.l.b. II pizz.
c.l.b. pizz.
s.p.
pizz. *al fin* IV II

Vln. 1
pizz.
s.p.
c.l.b.

Vln. 2
pizz.
c.l.b.
s.p.

Vln. 3
s.p.
c.l.b.
pizz.

Vln. 4
pizz.
c.l.b.
s.p.

Vln. 5
c.l.b.
II
pizz.
s.p.

Vln. 6
pizz.
c.l.b.
s.p.
II

Vla. 1
s.p.
c.l.b.
pizz.

Vla. 2
s.p.
II
c.l.b.

Vc. 1
c.l.b.
pizz.

Vc. 2
s.p.

Cb.
I
IV
II

Hpsd.

ca. 20" →

Q

Vln. 1

pizz. s.p. c.l.b.

Vln. 2

pizz. c.l.b. s.p.

Vln. 3

s.p. c.l.b. pizz.

Vln. 4

pizz. c.l.b. s.p.

Vln. 5

c.l.b. pizz. s.p.

Vln. 6

pizz. c.l.b. s.p.

Vla. 1

s.p. c.l.b. pizz.

Vla. 2

pizz. c.l.b.

Vc. 1

c.l.b. pizz.

Vc. 2

s.p.

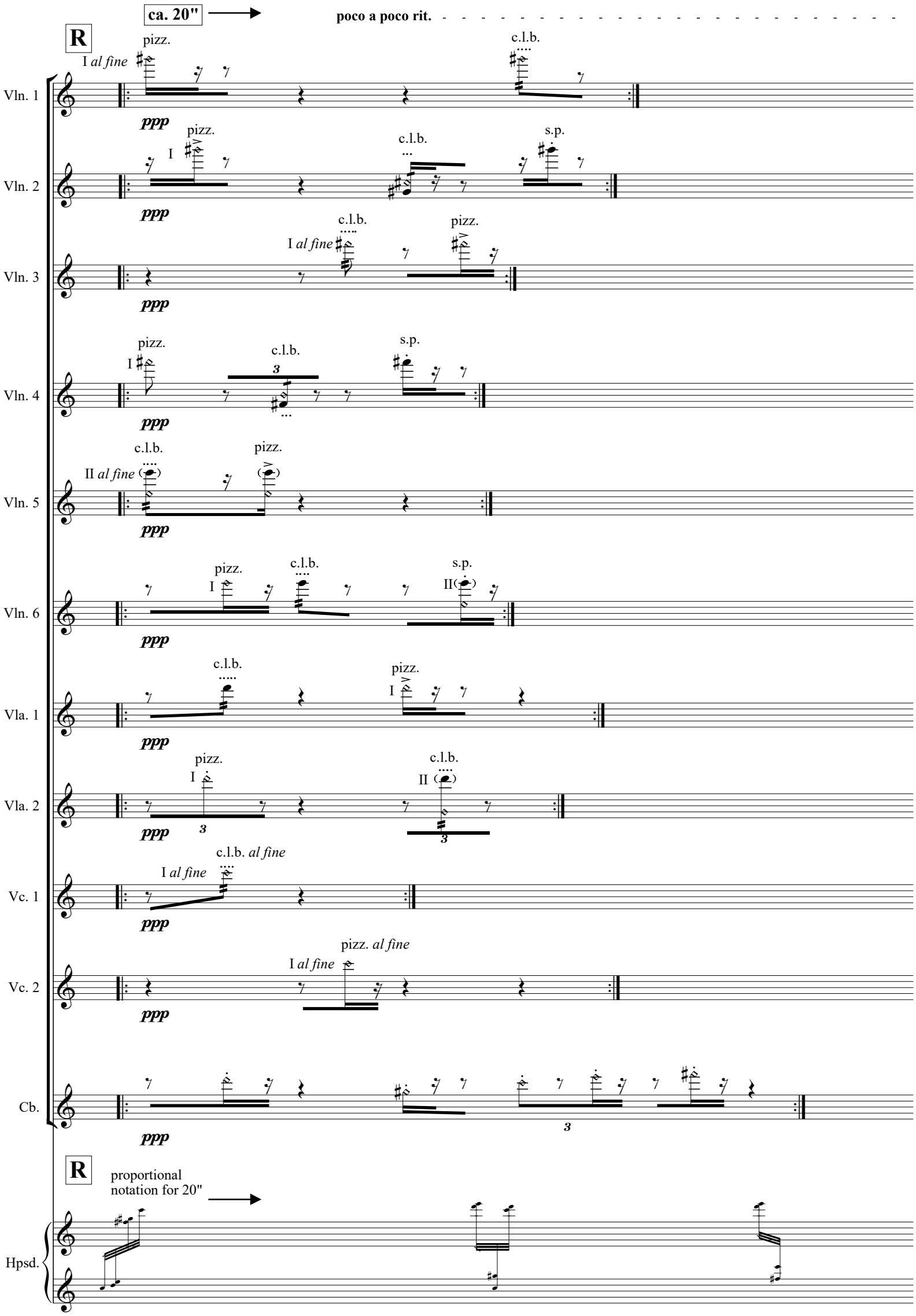
Cb.

I *al fine*

Q

Hpsd.

I →


ca. 20"
poco a poco rit.
R
Vln. 1
Vln. 2
Vln. 3
Vln. 4
Vln. 5
Vln. 6
Vla. 1
Vla. 2
Vc. 1
Vc. 2
Cb.
Hpsd.
pizz.
c.l.b.
s.p.
I al fine
II al fine
c.l.b. al fine
pizz. al fine
ppp
proportional
notation for 20"

ca. 75% of own original tempo

S **all repeat 5x at own tempi**

Vln. 1 — pizz. *al fine*

Vln. 2 — pizz. I — c.l.b.

Vln. 3 — c.l.b. — pizz.

Vln. 4 — pizz. I *al fine*

Vln. 5 — c.l.b. — pizz.

Vln. 6 — pizz. *al fine* I *al fine*

Vla. 1 — pizz. *al fine* I *al fine* 3

Vla. 2 — c.l.b. *al fine* II *al fine* 3

Vc. 1

Vc. 2

Cb. 3

S proportional notation for 20"

Hpsd.

T **all repeat 5x at own tempi** →

Vln. 1

Vln. 2 — c.l.b.

Vln. 3 — c.l.b.

Vln. 4 — pizz.

Vln. 5 — c.l.b.

Vln. 6

Vla. 1 — 3

Vla. 2 — 3

Vc. 1

Vc. 2

Cb.

T proportional notation for 20" →

Hpsd.

total time: ca. 8'