The time limits of dust

For amplified cello, objects, loop station, and playback

The time limits of dust was written in the context of the Covid pandemic, our activities centering on daily rituals, and so the cello is played with everyday objects instead of a bow – toothbrush, espresso cup, large coin, pencil, and paper.

Co-conceived with the cellist Céline Papion, we chose a short text from the absurdist Soviet poet Daniil Kharms to capture the spirit of these daily rituals. They can be become monotonous, but they also offer comfort and familiarity. And if you look closely, they also are beautiful and fascinating, like the accumulation of dust on a sunlit table.

How easy it is for a person to get tangled up in insignificant things. You can walk for hours from the table to the wardrobe and from the wardrobe to the couch and never find a way out. You can even forget where you are and shoot arrows into some small cabinet on the wall. "Beware, cabinet!" you can yell at it. "I'll get you!" Or you can lie down on the floor and examine the dust. There is inspiration in this, too. It's best to do it on a schedule, in conformity with time. Although it's difficult to determine the time limit, for what are the time limits of dust?[1]

Dust serves as a metaphor for the accumulation of the daily rituals. To represent this, musical gestures are copied and overlaid on each other up to 120 times to form gradually shifting patterns.

The sounds heard in the playback come almost exclusively from the cello, with the single exception of the particularly musical coffee maker that is heard at the end of the piece.

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Performance Notes

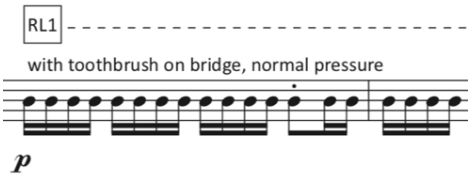
1. The score shows general cues from the playback so that the performer can orient her/his part with it, but there is some leeway with the coordination. Starting at m. 85, the cello's entrances should approximately align with the playback but do not need to be exact. It is fine to enter up to approximately one measure earlier or later than shown.
2. The cello should be amplified and tuned to A = 442.

[1] Written on August 17, 1940. Text taken from the following source: Daniil Kharms and Matvei Yankelevich, *Today I Wrote Nothing: The Selected Writing of Daniil Kharms* (New York, Ny: Ardis Publishers, 2009), 263.

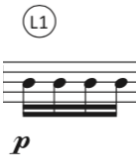
3. The cello and the playback should match in volume so that they blend as much as possible. Use the amplification so that the overall dynamic range of the piece is *piano* at the quietest and nearly *fortissimo* at the loudest.
4. The amplification should be raised somewhat for the toothbrush and ceramic cup motives (beginning to measure 74) since these objects tend to be on the quiet side.
5. No vibrato.
6. Accidentals carry through the measure.
7. The loop station's system is set to "rec->play." Each track's play mode is set to "loop." The "loop sync" is off. "Tempo sync" is on.
8. The work uses standard notation for quarter tones, i.e. backwards flat = -50 cents, half sharp = +50 cents.

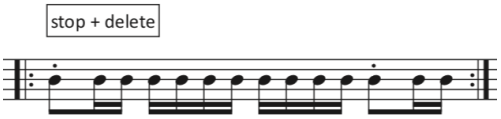
The following performance notes correlate with specific moments in the piece.

Measure (M.) 1

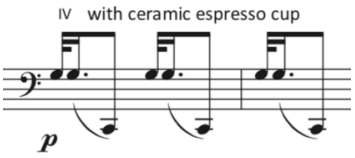


"RL1" in the box means to record with the loop station for the duration of the dotted line. Using the bristles of a toothbrush, brush back and forth across the flat part of the bridge (perpendicular to the body of the instrument).

M. 4

"L1" in the circle means that the recording of the loop should begin.

M. 17

"stop + delete" means to stop the loop station recordings and delete them.

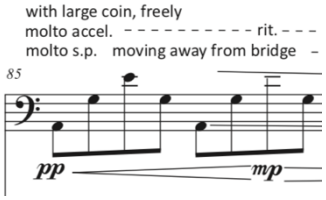
M. 30
Apply the bristles of the toothbrush to the nut (slightly above the end of the fingerboard and at the beginning of the scroll). Hold the toothbrush parallel to the fingerboard and brush horizontally.

M. 45

Lightly strike the string with a ceramic espresso cup on its side, letting it bounce once and then holding it with some pressure on the string. To produce the low C, remove the cup quickly to let the open string ring. Be careful not to strike the string too strongly to avoid hitting the cup against the fingerboard.

M. 50

The loop is recorded at a slightly slower tempo, which means that when it is repeated, the end of it will be cut off slightly by the loop station, creating a sort of “hiccup” effect, which is hard to hear in the thick texture. The cellist continues in m. 51 at a tempo that becomes increasingly more out of sync.

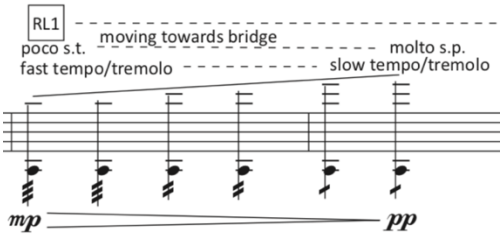
M. 85



Tap the strings with a large coin (e.g., an American quarter or a €2 coin) with the right hand while fingering the given notes with the left hand. Start the coin very near the bridge and continue down the string till it is far above the fingerboard (approximately one octave above the open string). Always allow the strings to vibrate.

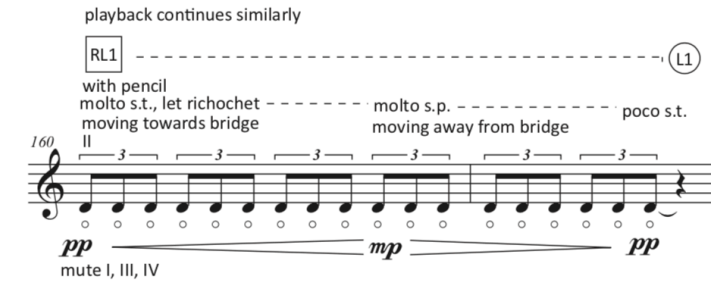
“freely” denotes that the lines are not synchronized exactly with one another, i.e., the lines in the playback with each other and the live cello with the playback. Play the gesture for around 8-10 seconds, varying the length somewhat each time.

M. 116



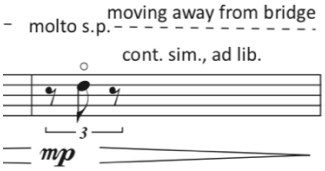
Tap the coin on the string. Start somewhat over the fingerboard and move towards the bridge, ending nearly on it. Allow the open C string to ring. Be careful not to tap the string too loudly. Although the overall dynamic will become loud, you should play at a lower dynamic to avoid hitting the fingerboard. The louder dynamic will result from the amplification and the many layers of sound accumulating.

M. 160



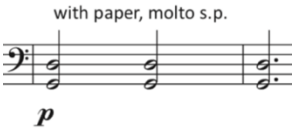
Tap the string with a pencil, allowing it to ricochet quickly on each note. Start quite far over the fingerboard and move towards the bridge, ending nearly on it. Mute the other strings.

M. 179



Continue similarly, improvising a random, sporadic but mostly constant rhythm on the D harmonic.

M. 205



Place a piece of paper, A4 or American letter size, in a landscape orientation under the G and D strings near the bridge. Draw it smoothly and continuously back and forth in the given rhythm. The paper should have a meaningful picture on it, which the audience can see. The choice of the picture is up to the performer, but it should have something to do with daily routines.

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For Céline Papion

Joseph Michaels

Rigid, non rubato ♩= 92

RL1

with toothbrush on bridge,
normal pressure

cello (vc)

p

playback

L1

always downstroke after the staccato eighth

sim.

4

vc

4 with toothbrush, pan right

pb

p

with toothbrush, pan left

p

RL2

7

vc

10 L2

vc

10

pb

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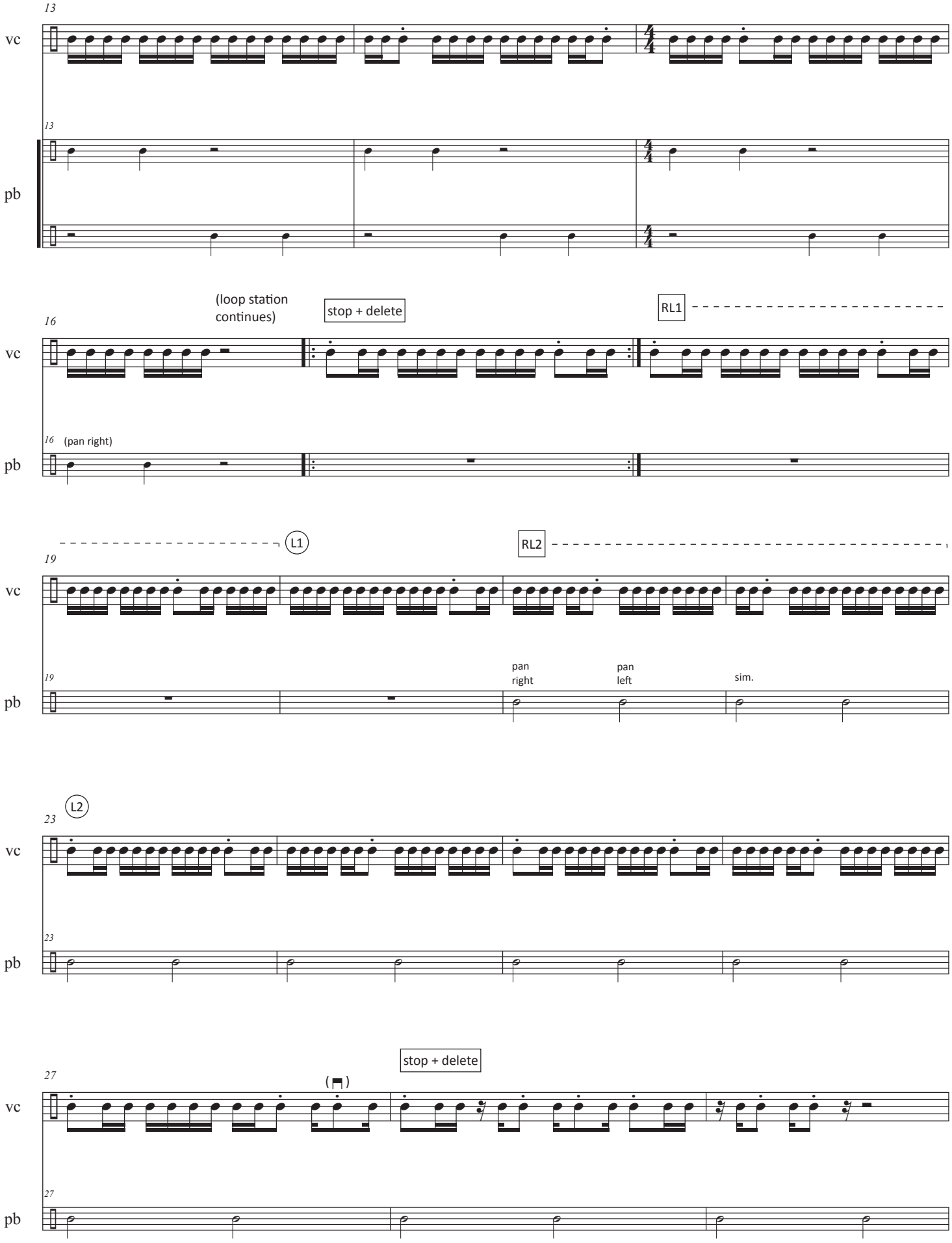
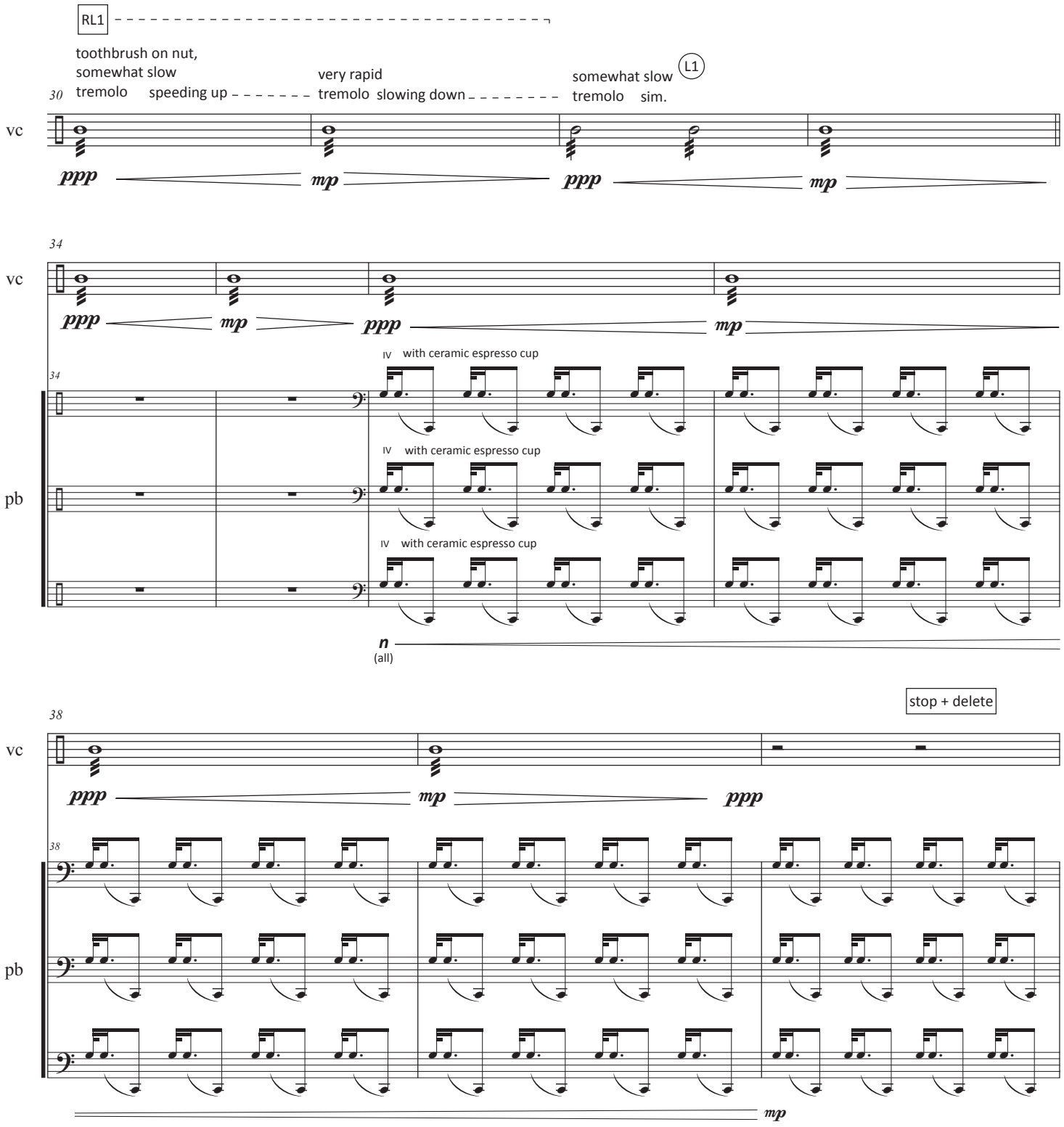
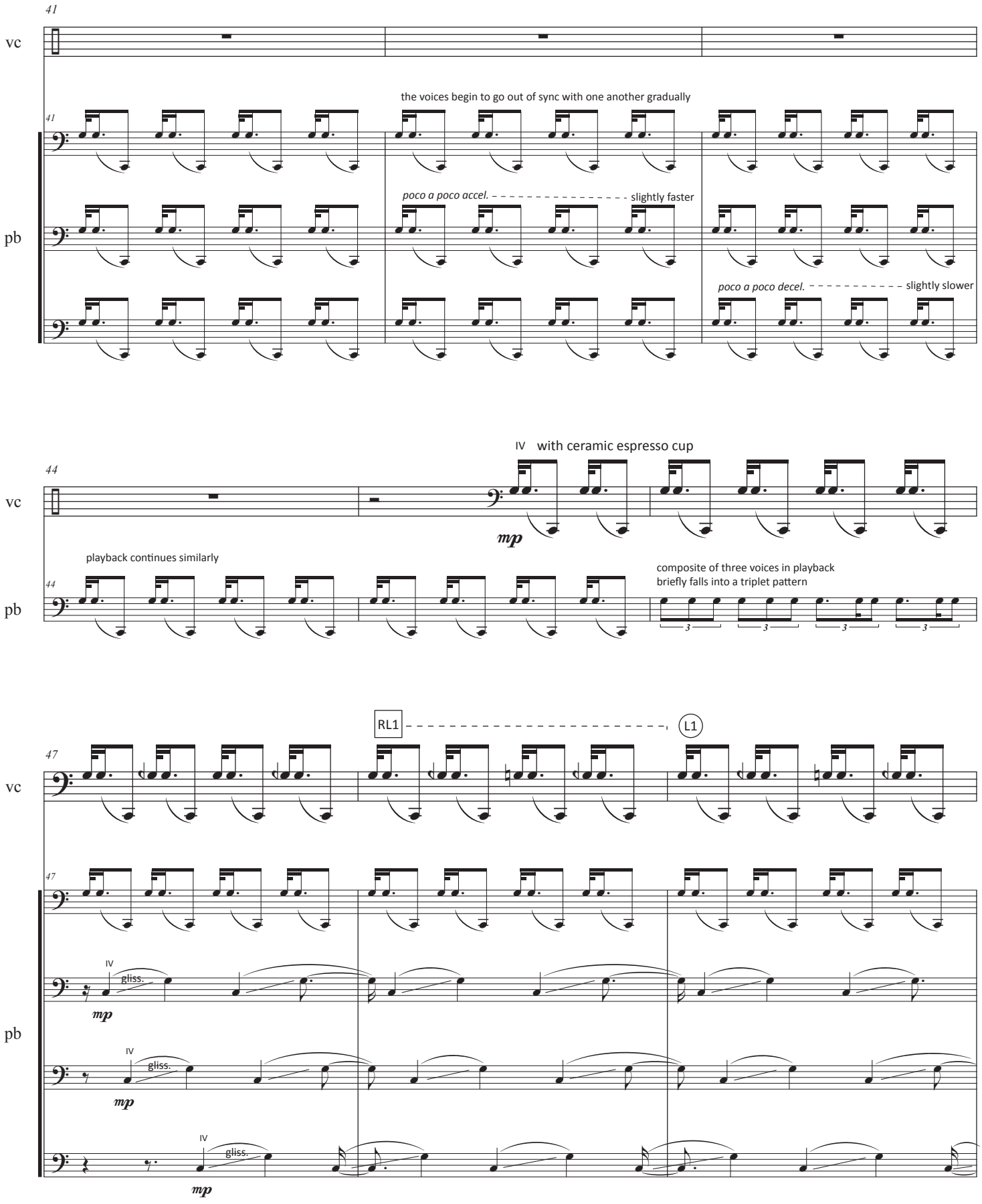
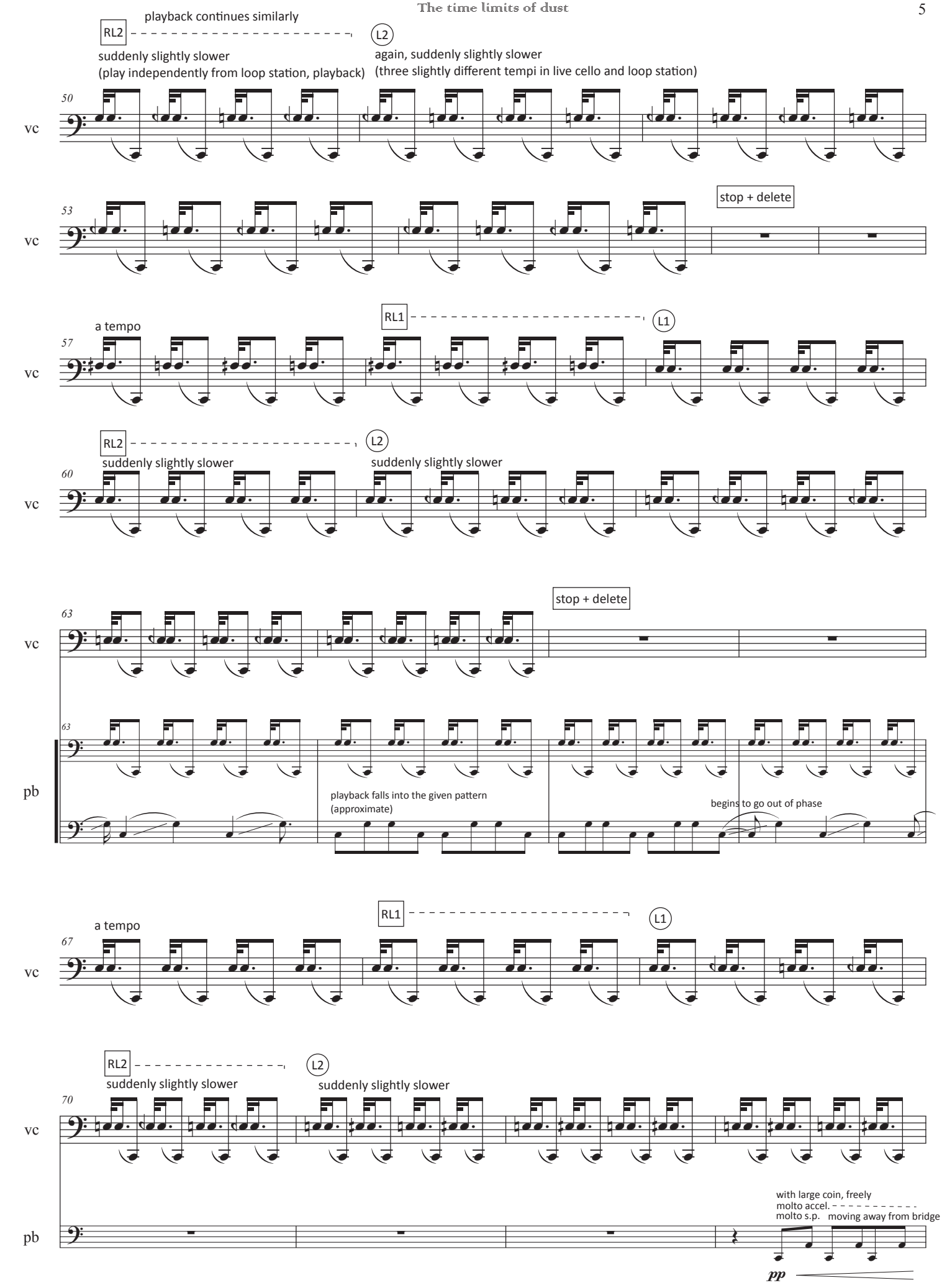
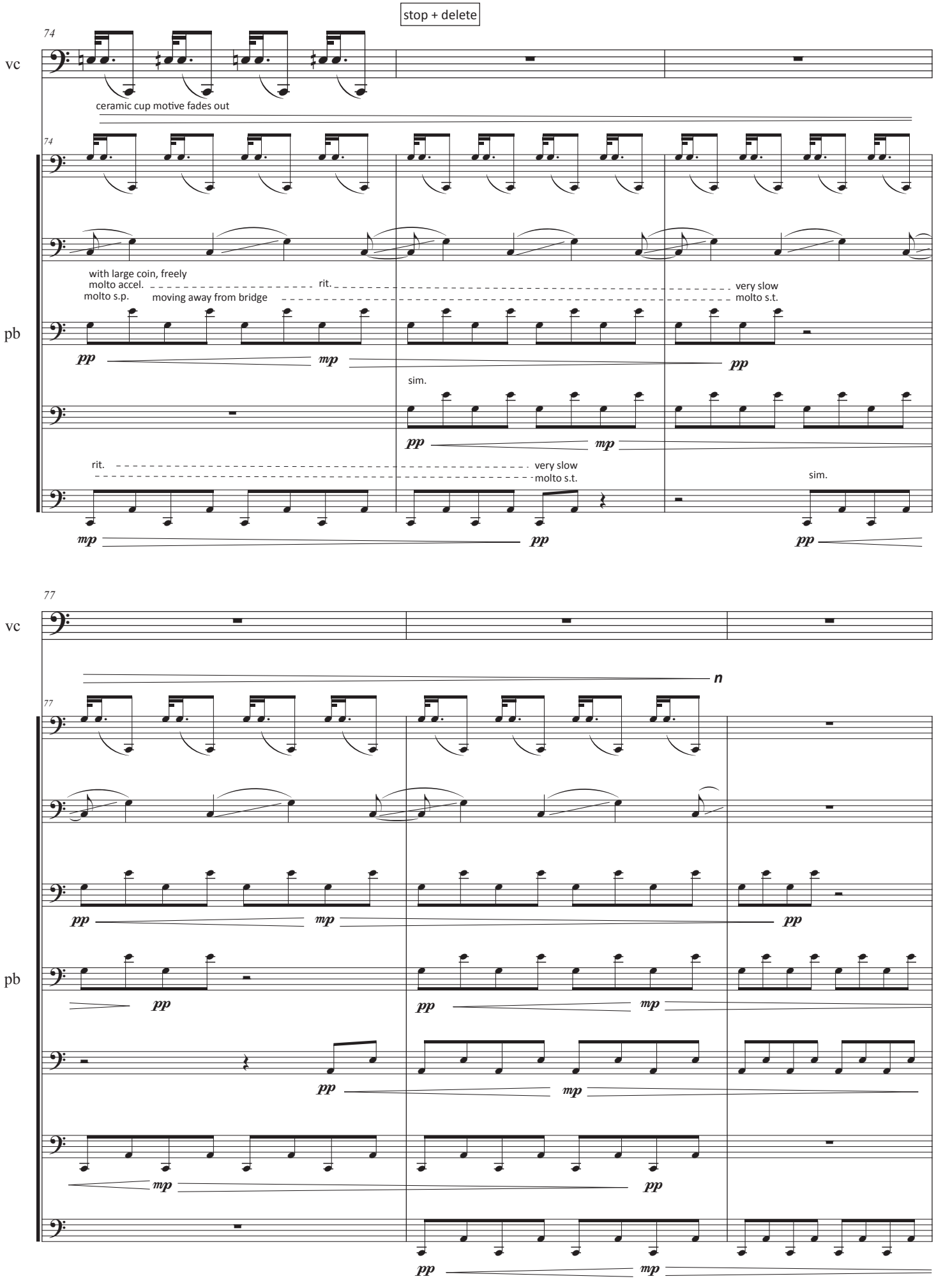
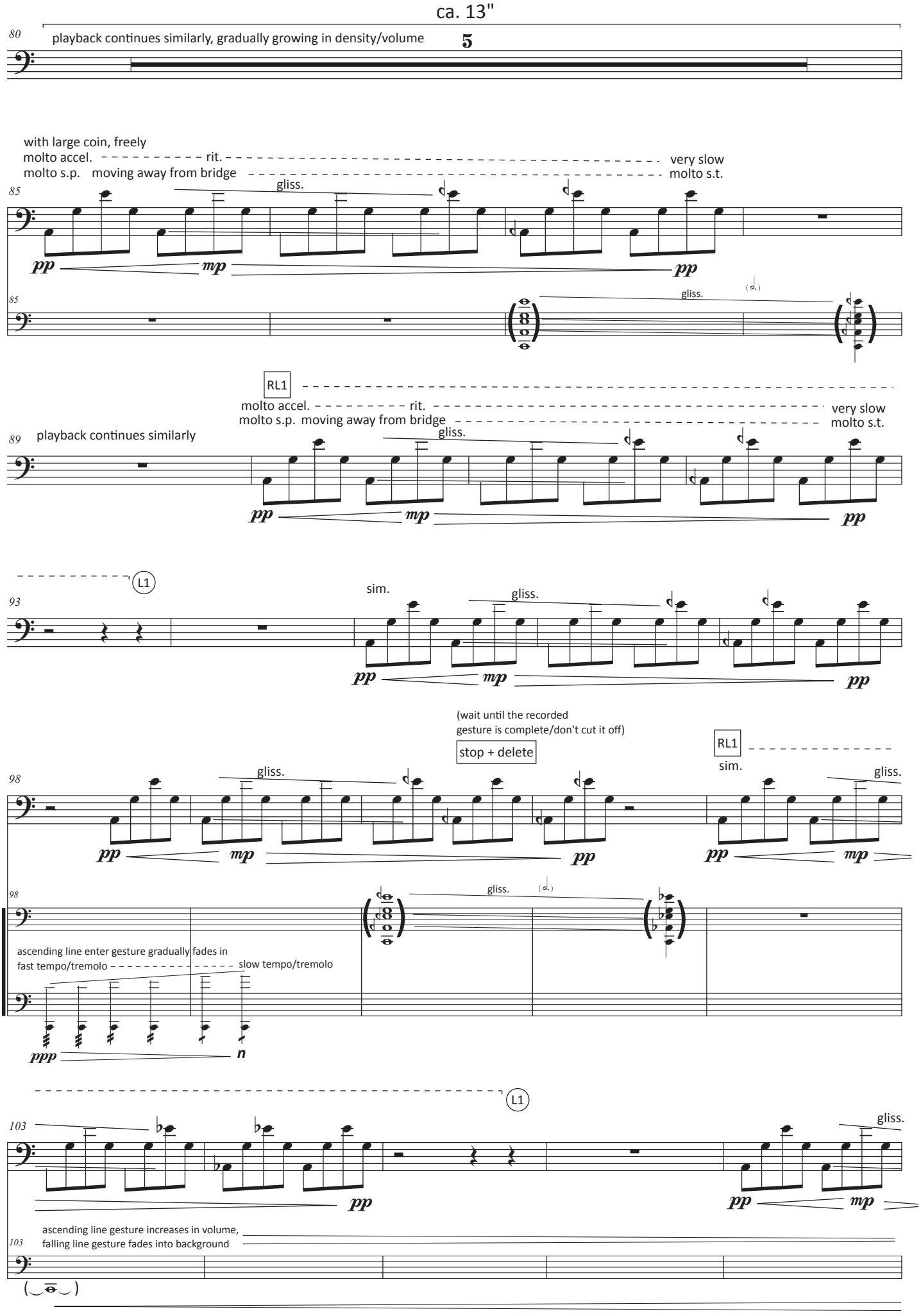
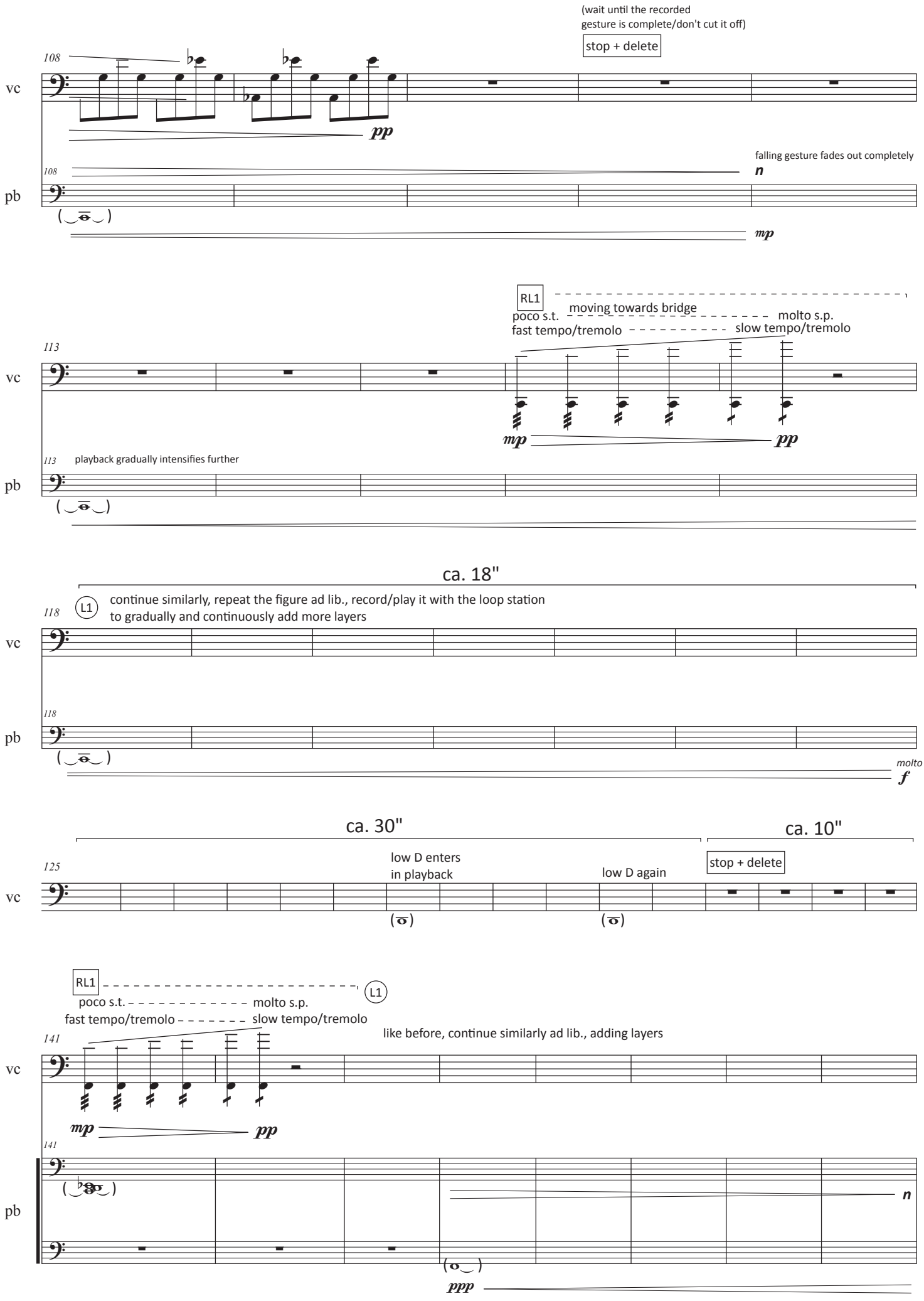
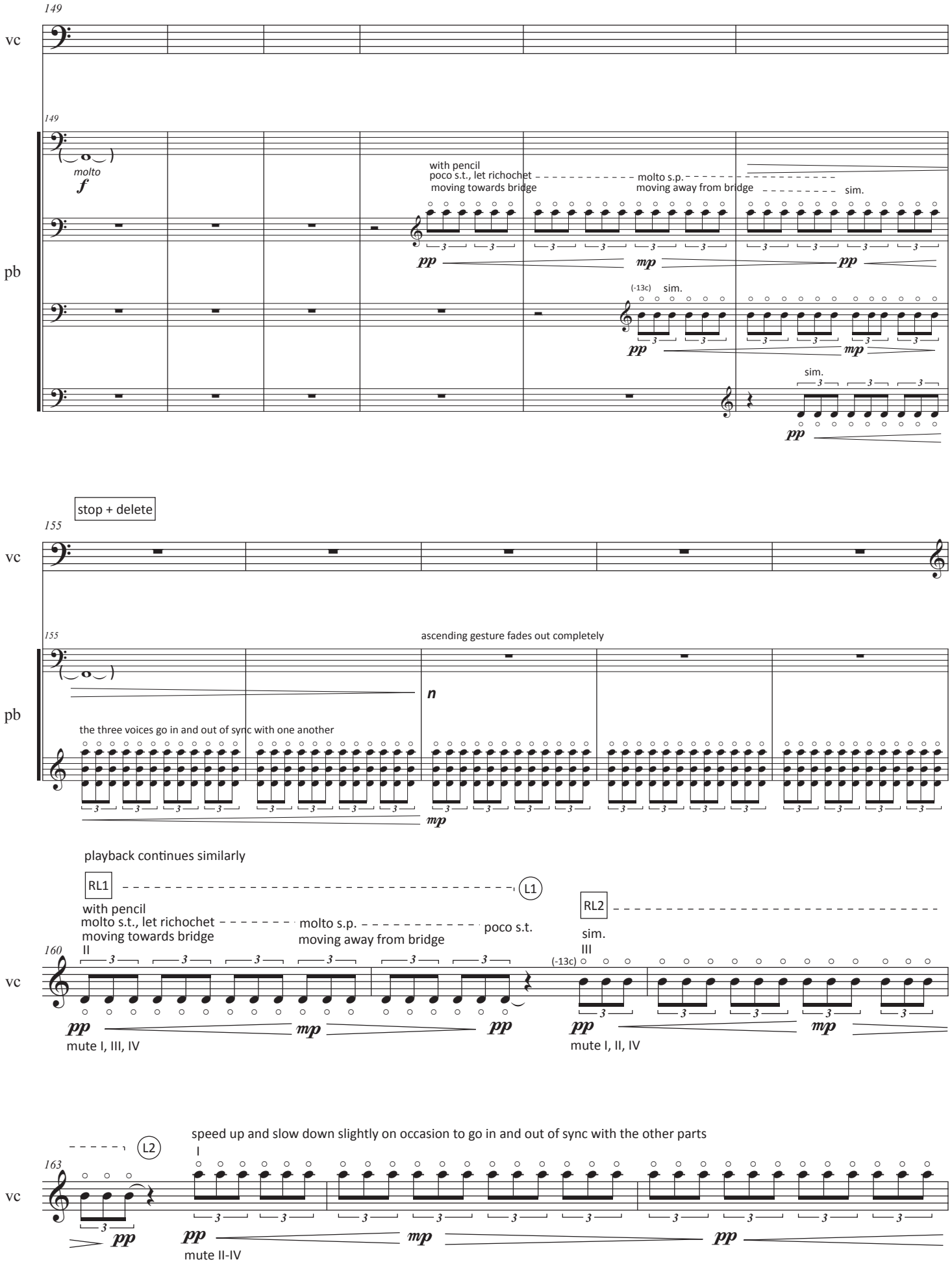

13
vc
13
pb
(loop station continues)
stop + delete
RL1
16
vc
16
(pan right)
pb
L1
RL2
19
vc
19
pan right
pan left
sim.
pb
L2
23
vc
23
pb
stop + delete
27
vc
27
pb

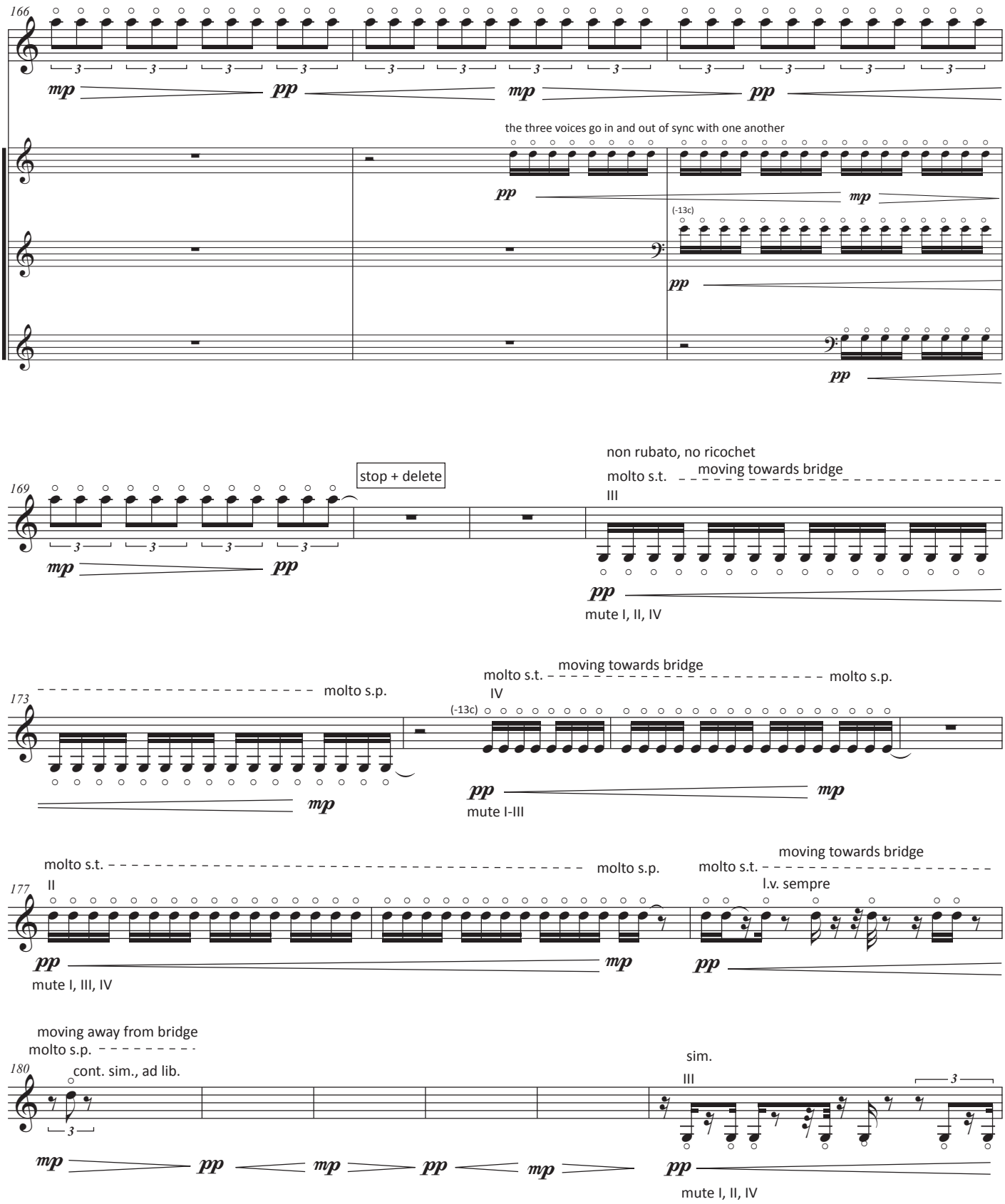
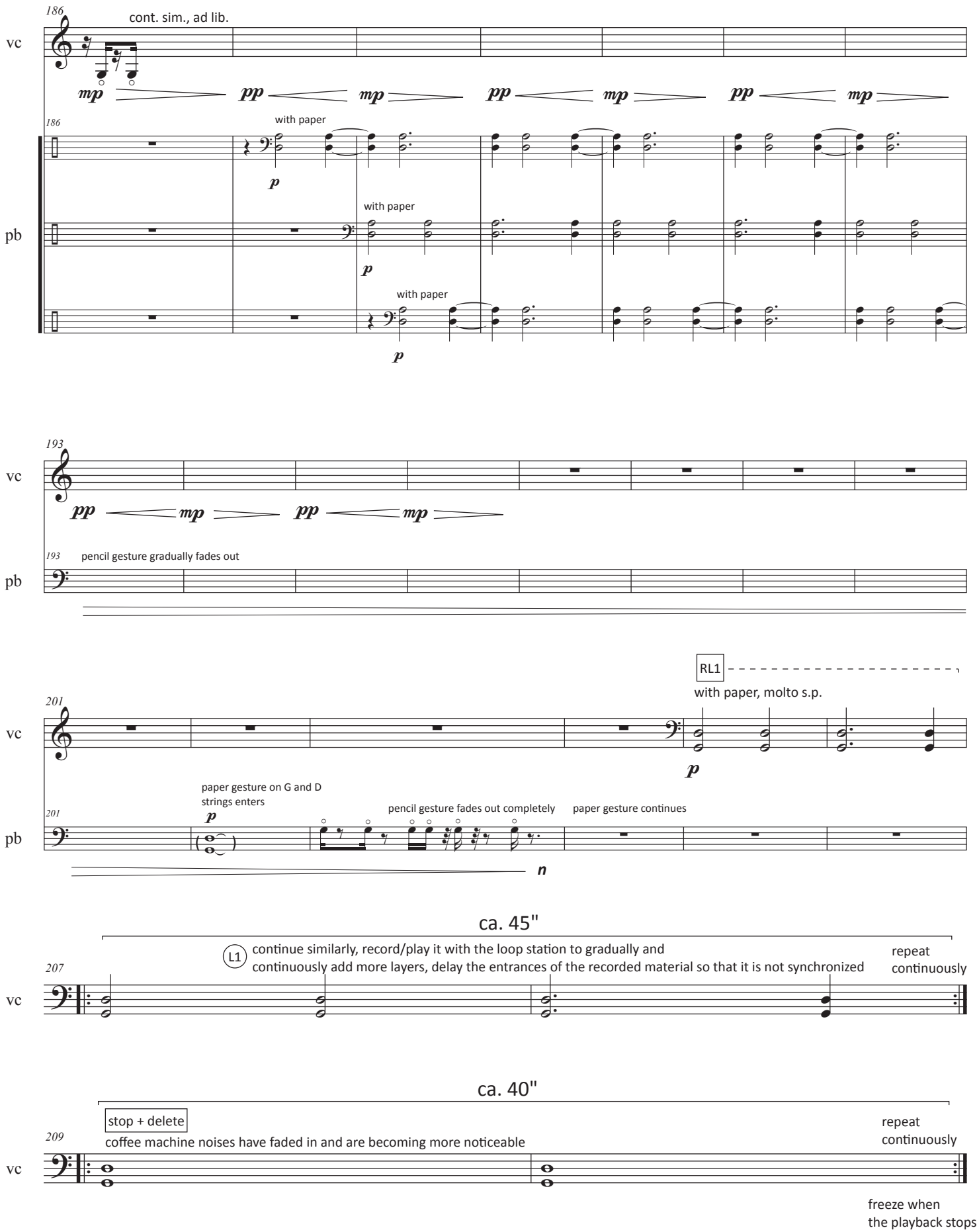

RL1
toothbrush on nut,
somewhat slow
tremolo
speeding up
very rapid
tremolo
slowing down
somewhat slow
tremolo
sim.
L1
30
vc
ppp
mp
ppp
mp
34
vc
ppp
mp
ppp
mp
34
IV with ceramic espresso cup
pb
IV with ceramic espresso cup
IV with ceramic espresso cup
n
(all)
stop + delete
38
vc
ppp
mp
ppp
38
pb
mp

41
vc
the voices begin to go out of sync with one another gradually
41
poco a poco accel.
slightly faster
pb
poco a poco decel.
slightly slower
IV with ceramic espresso cup
44
vc
mp
playback continues similarly
composite of three voices in playback
briefly falls into a triplet pattern
44
pb
3
RL1
L1
47
vc
47
IV
gliss.
mp
pb
IV
gliss.
mp
IV
gliss.
mp


playback continues similarly
RL2
L2
suddenly slightly slower
(play independently from loop station, playback)
again, suddenly slightly slower
(three slightly different tempi in live cello and loop station)
50
vc
53
stop + delete
a tempo
RL1
L1
57
RL2
L2
suddenly slightly slower
suddenly slightly slower
60
63
stop + delete
pb
playback falls into the given pattern
(approximate)
begins to go out of phase
a tempo
67
RL2
L2
suddenly slightly slower
suddenly slightly slower
70
with large coin, freely
molto accel.
molto s.p. moving away from bridge
pp

stop + delete
74
vc
ceramic cup motive fades out
74
with large coin, freely
molto accel.
molto s.p.
moving away from bridge
rit.
very slow
molto s.t.
pb
pp
mp
pp
sim.
pp
mp
rit.
very slow
molto s.t.
sim.
mp
pp
pp
77
vc
n
77
pp
mp
pp
pb
pp
pp
mp
pp
mp
mp
pp
pp
mp


ca. 13"
80
playback continues similarly, gradually growing in density/volume
5
vc
with large coin, freely
molto accel.
rit.
very slow
molto s.p. moving away from bridge
molto s.t.
85
gliss.
pp
mp
pp
pb
RL1
molto accel.
rit.
very slow
molto s.p. moving away from bridge
molto s.t.
89
playback continues similarly
gliss.
L1
93
sim.
(wait until the recorded
gesture is complete/don't cut it off)
stop + delete
RL1
sim.
98
ascending line enter gesture gradually fades in
fast tempo/tremolo
slow tempo/tremolo
ppp
n
103
ascending line gesture increases in volume,
falling line gesture fades into background


(wait until the recorded
gesture is complete/don't cut it off)
stop + delete
108
vc
pp
falling gesture fades out completely
108
pb
n
mp
RL1
poco s.t.
moving towards bridge
molto s.p.
fast tempo/tremolo
slow tempo/tremolo
113
vc
mp
pp
113
playback gradually intensifies further
pb
ca. 18"
118
L1
continue similarly, repeat the figure ad lib., record/play it with the loop station
to gradually and continuously add more layers
vc
118
pb
molto
f
ca. 30"
ca. 10"
125
low D enters
in playback
low D again
stop + delete
vc
RL1
poco s.t.
molto s.p.
fast tempo/tremolo
slow tempo/tremolo
L1
like before, continue similarly ad lib., adding layers
141
vc
mp
pp
141
pb
n
ppp


149
vc
149
pb
molto
f
with pencil
poco s.t., let richochet
moving towards bridge
molto s.p.
moving away from bridge
sim.
pp
mp
pp
(-13c)
sim.
pp
mp
sim.
pp
stop + delete
155
vc
155
pb
ascending gesture fades out completely
n
the three voices go in and out of sync with one another
mp
playback continues similarly
RL1
L1
with pencil
molto s.t., let richochet
moving towards bridge
molto s.p.
moving away from bridge
poco s.t.
RL2
sim.
160
II
III
(-13c)
vc
pp
mp
pp
pp
mp
mute I, III, IV
mute I, II, IV
L2
speed up and slow down slightly on occasion to go in and out of sync with the other parts
I
163
vc
pp
pp
mp
pp
mute II-IV


166
vc
pb
mp
pp
the three voices go in and out of sync with one another
(-13c)
169
stop + delete
non rubato, no ricochet
molto s.t.
moving towards bridge
III
mute I, II, IV
173
molto s.p.
molto s.t.
moving towards bridge
molto s.p.
IV
(-13c)
mute I-III
177
molto s.t.
molto s.p.
II
moving towards bridge
molto s.t.
l.v. sempre
mute I, III, IV
moving away from bridge
molto s.p.
180
cont. sim., ad lib.
sim.
III
mute I, II, IV

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