Greg Dixon

Fractures

for clarinet and computer (2012)

Program Notes

Fractures celebrates nostalgia and the past, while recontextualizing the past into something completely new. The work appropriates ideas from acoustic works for clarinet by composers such as Gershwin, Tchaikovsky, and William O. Smith. At times, the work is a rhapsodic fantasy inspired by the many popular synthesizer albums from the 60's and 70's created in the wake of Wendy Carlos' seminal album *Switched on Bach*. These sections contain very brief sampled quotations from LPs of electronic works that explore the synthesis of clarinet-like tones. These quotations are borrowed from popular recording artists of the time, such as Wendy Carlos, Dick Hyman, Ruth White, and Mort Garson, along with many others. Samples of vintage synthesizers are also a part of this sonic palette. Mannerisms and styles from these works also influence the score for the clarinetist.

Performance Notes

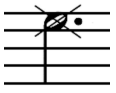
Notation

Accidentals are maintained throughout each bar and are canceled by barlines.

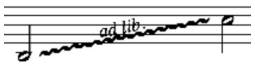
If no meter is given there are two possible options for tempo interpretation:

1. A bracket provides the total durationof the bar or system. Bracket subsets may also be specified. Stems or flags provide relative duration.

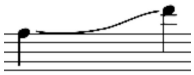
2. Rhythms are played based upon the specified tempo without any downbeat accentuation.



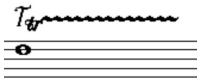
= Aggressively sing or scream through the clarinet while fingering the given note. Scream within a minor third of the notated pitch to achieve an aggresive timbral effect. Sustain the scream for the given duration.



= Improvise a melodic line in a similar musical manner to the surrounding material following the general direction or contour provided.



= Glissando that follows the direction or contour of the solid line. Pitch change should match the relative location on the staff over time.



= Timbre trill

Technical Notes

The computer part for *Fractures* was written using the software Max/MSP (version 5.18). This version (or a later version) of Max/MSP or Max/MSP Runtime should be used to perform the computer part.

The piece requires one microphone to amplify and process the sound of the clarinet. Quality condenser lavalier microphones are preferable.

Fractures utilizes a variety of computer cues. There are cues for the following: Events, "Start Recording," and "Stop Gestures." Stop Gesture cues accomplish two different things: 1. they stop the recording and 2. they play back the prerecorded sample in various prescribed ways.

The technician can use a MIDI controller or ASCII keyboard to control the Start Recording and Stop Gestures used in this piece. The Max/MSP patch for fractures contains a patcher "setup_MIDI" where one can modify the MIDI messages that control the Start Recording cue and the various Stop Gesture cues. The patch can also set it up so a computer keyboard can be used to accomplish these cues. To turn the ASCII keyboard control on, turn on the toggle switch located above the patcher, "keyboard."

Stop Gesture Key (Stop Gestures a-h are keys 1-8 respectively)

Stop Gesture a (1): immediately plays the prerecorded sample at normal speed.
Stop Gesture b (2): immediately plays the prerecorded sample transposed up an octave.
Stop Gesture c (3): immediately plays the prerecorded sample transposed down an octave.
Stop Gesture d (4): immediately plays the prerecorded sample transposed randomly within a two-octave span.
Stop Gesture e (5): immediately plays the prerecorded sample backwards at normal speed.
Stop Gesture f (6): immediately plays the prerecorded sample backwards transposed up an octave.
Stop Gesture g (7): immediately plays the prerecorded sample backwards transposed down an octave.
Stop Gesture h (8): immediately plays the prerecorded sample backwards transposed randomly within a two-octave span.

Notation of Cues for Computer

Events: (space bar)

Clear Buffers: (delete)

Rehearsable Cues:

Stop Recording: (backslash)

Non-rehearsable Cues:

Start Recording: (return)

Stop Gestures: = Stop Gesture "a"

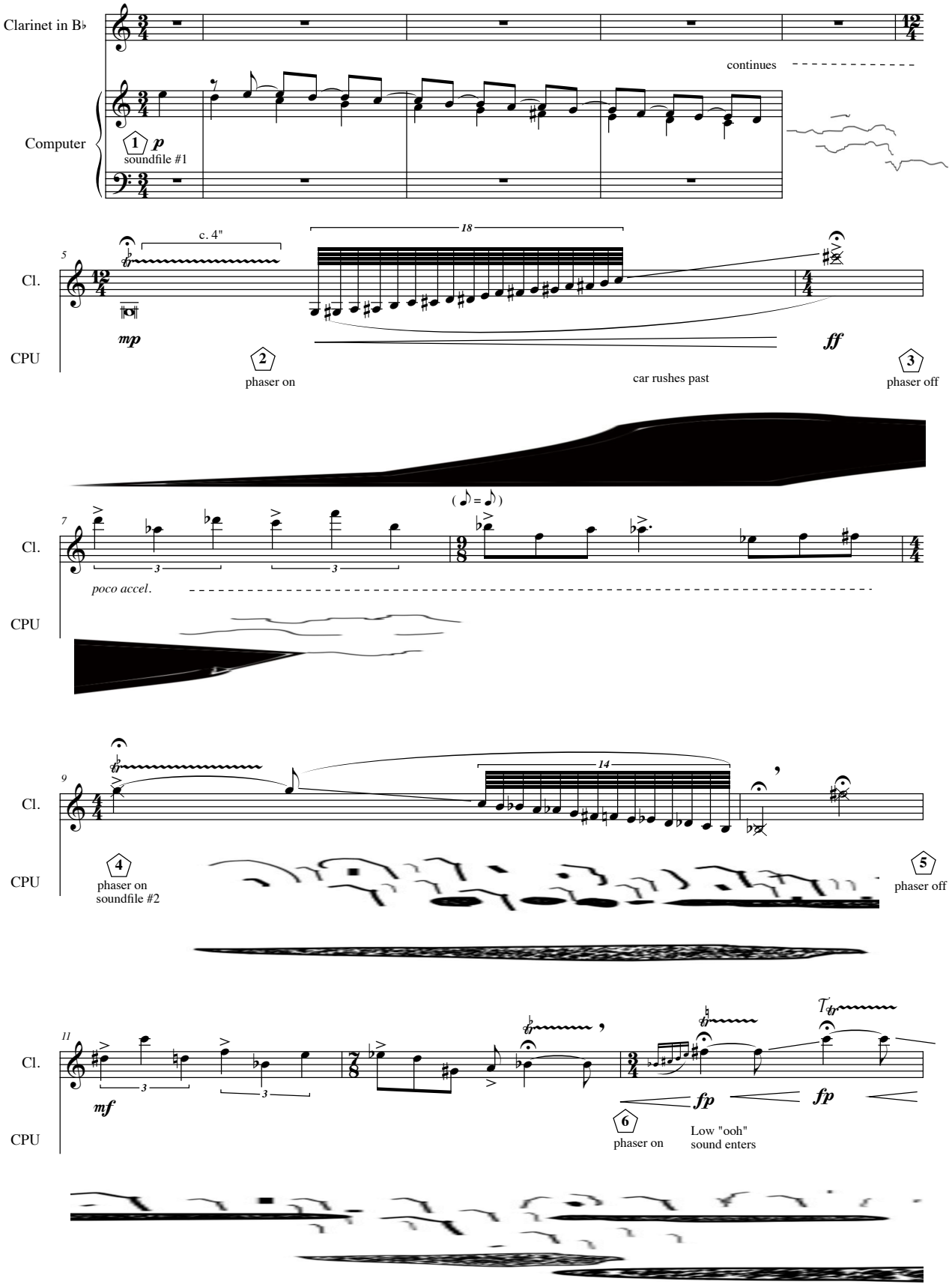
= Choose any Stop Gesture

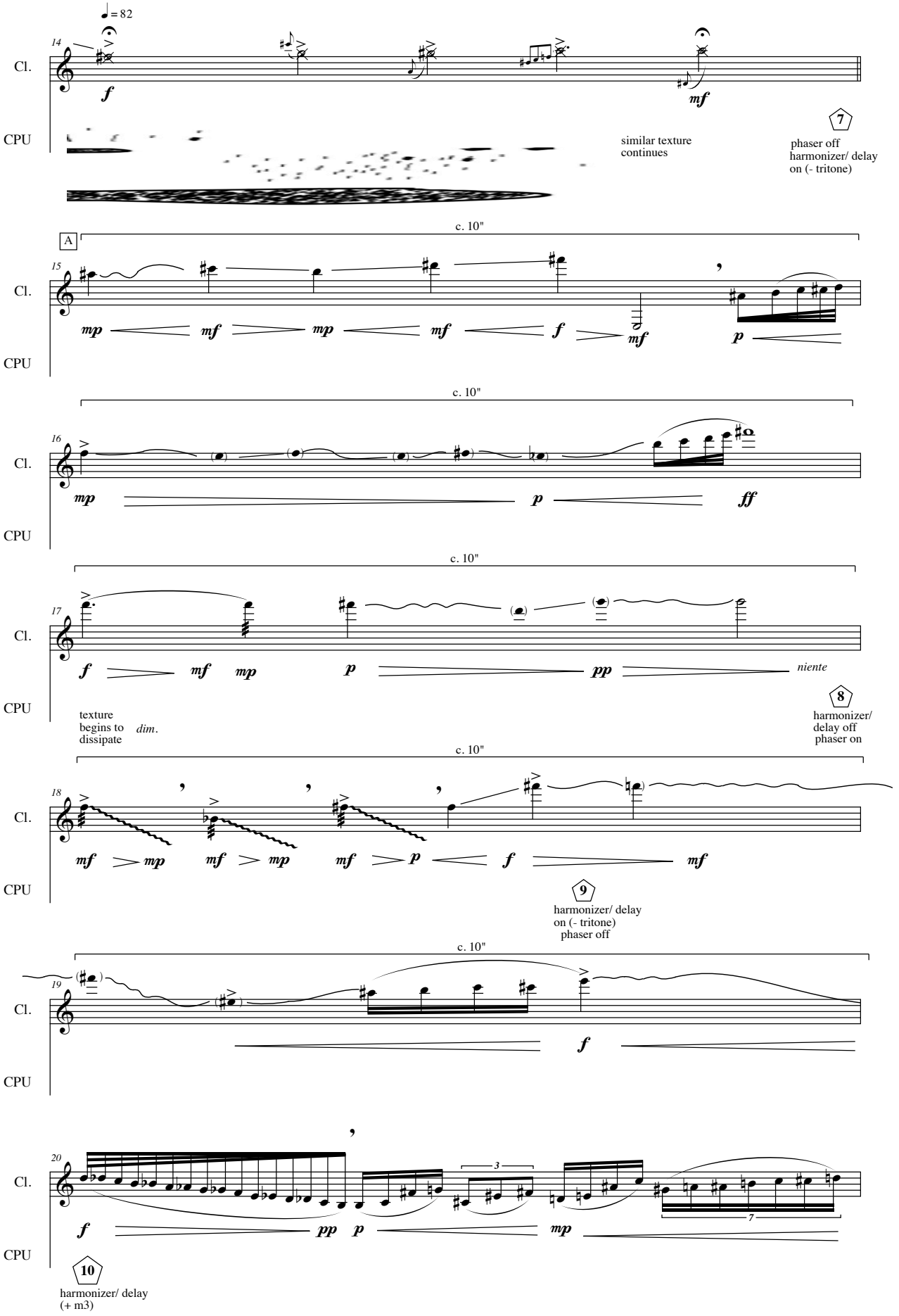
Fractures

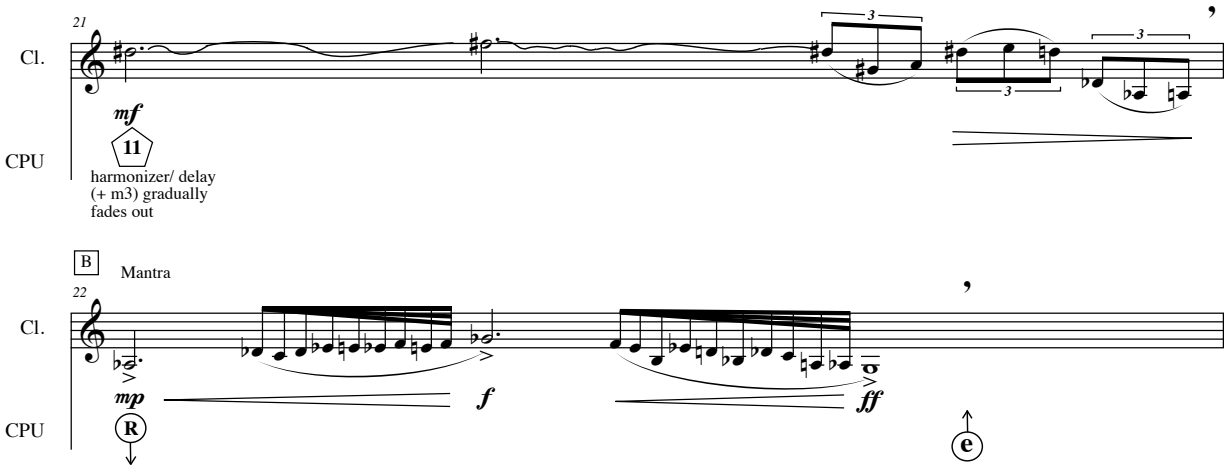
for Rachel Yoder

Greg Dixon

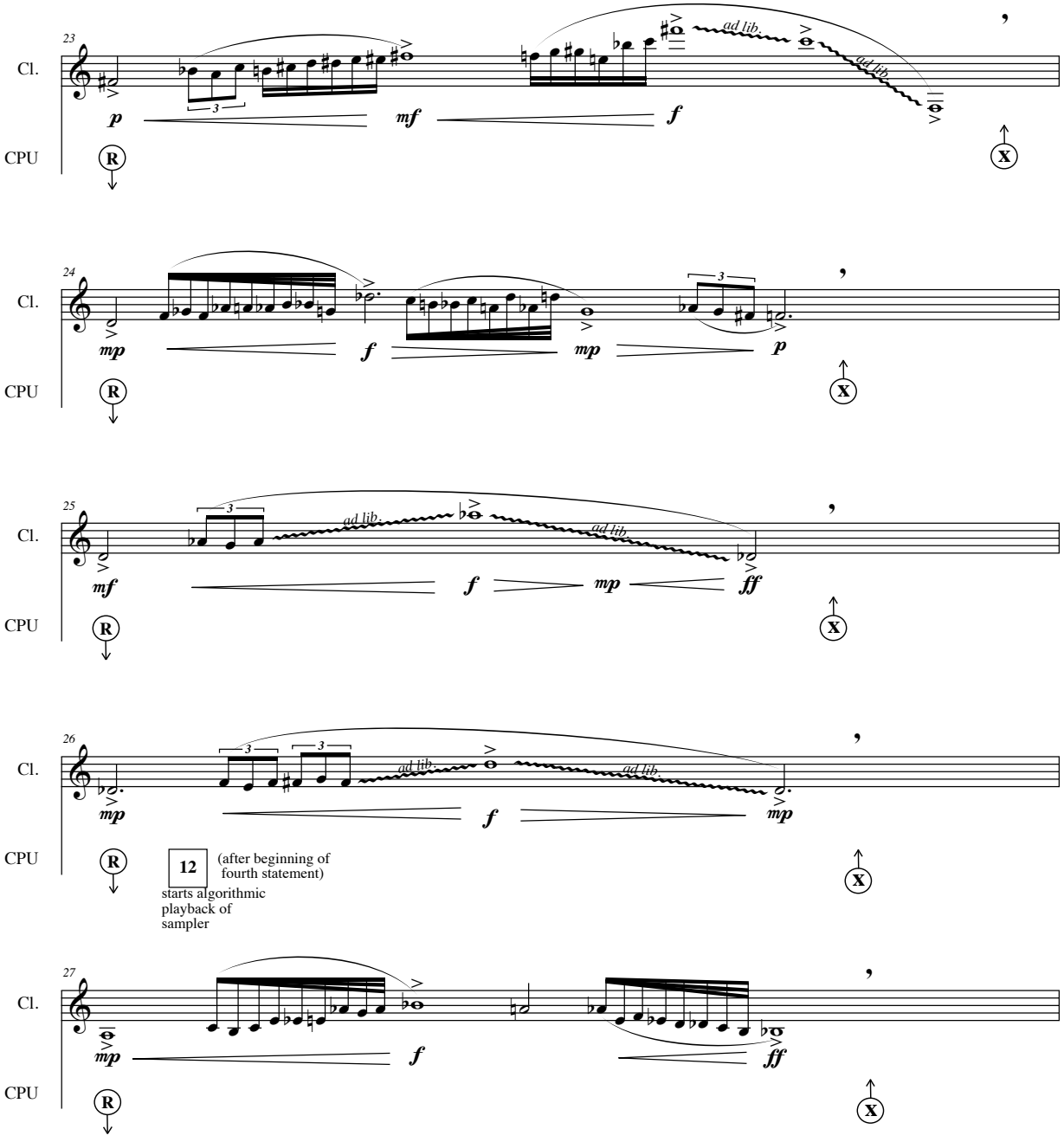
♩ = 82

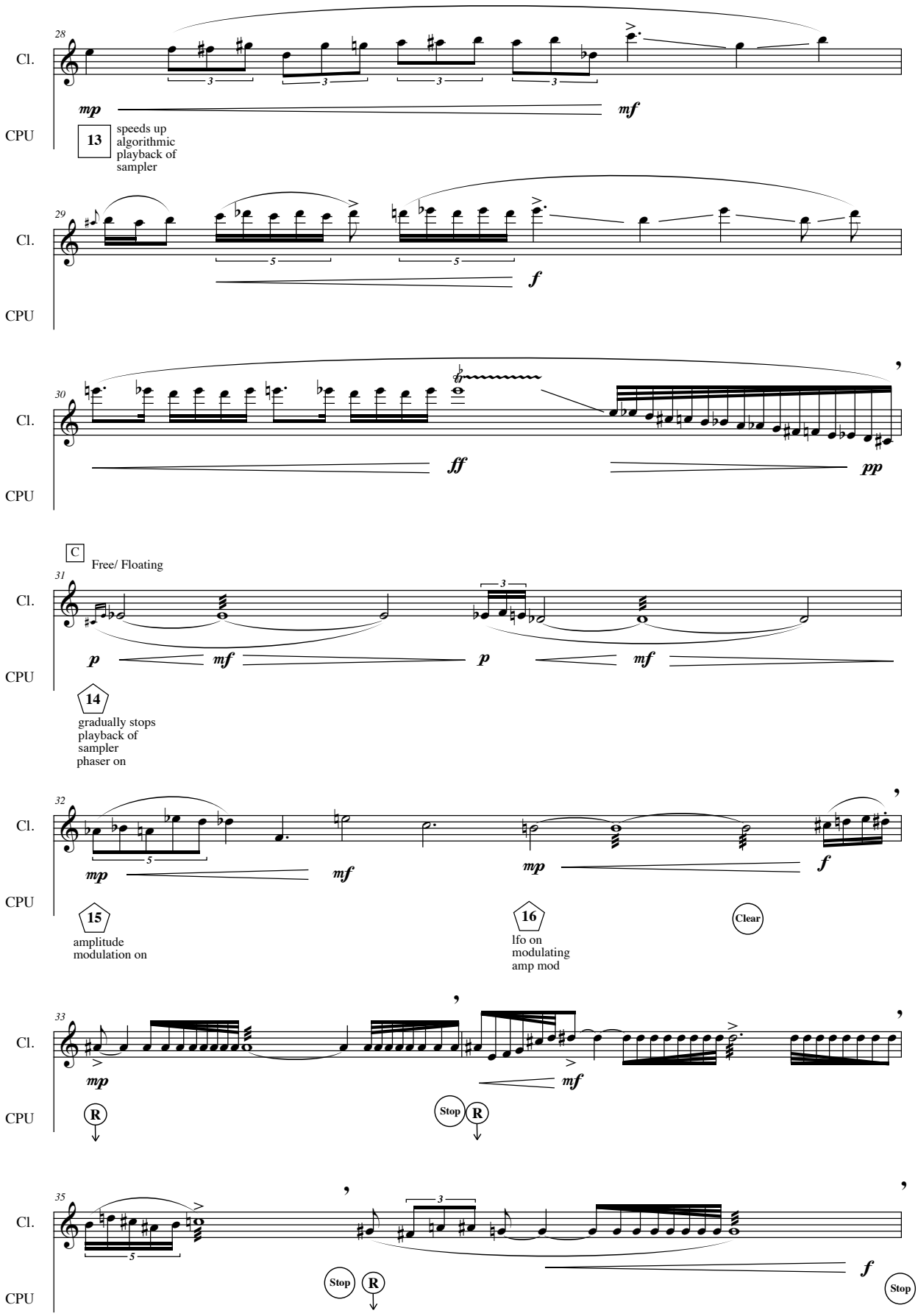


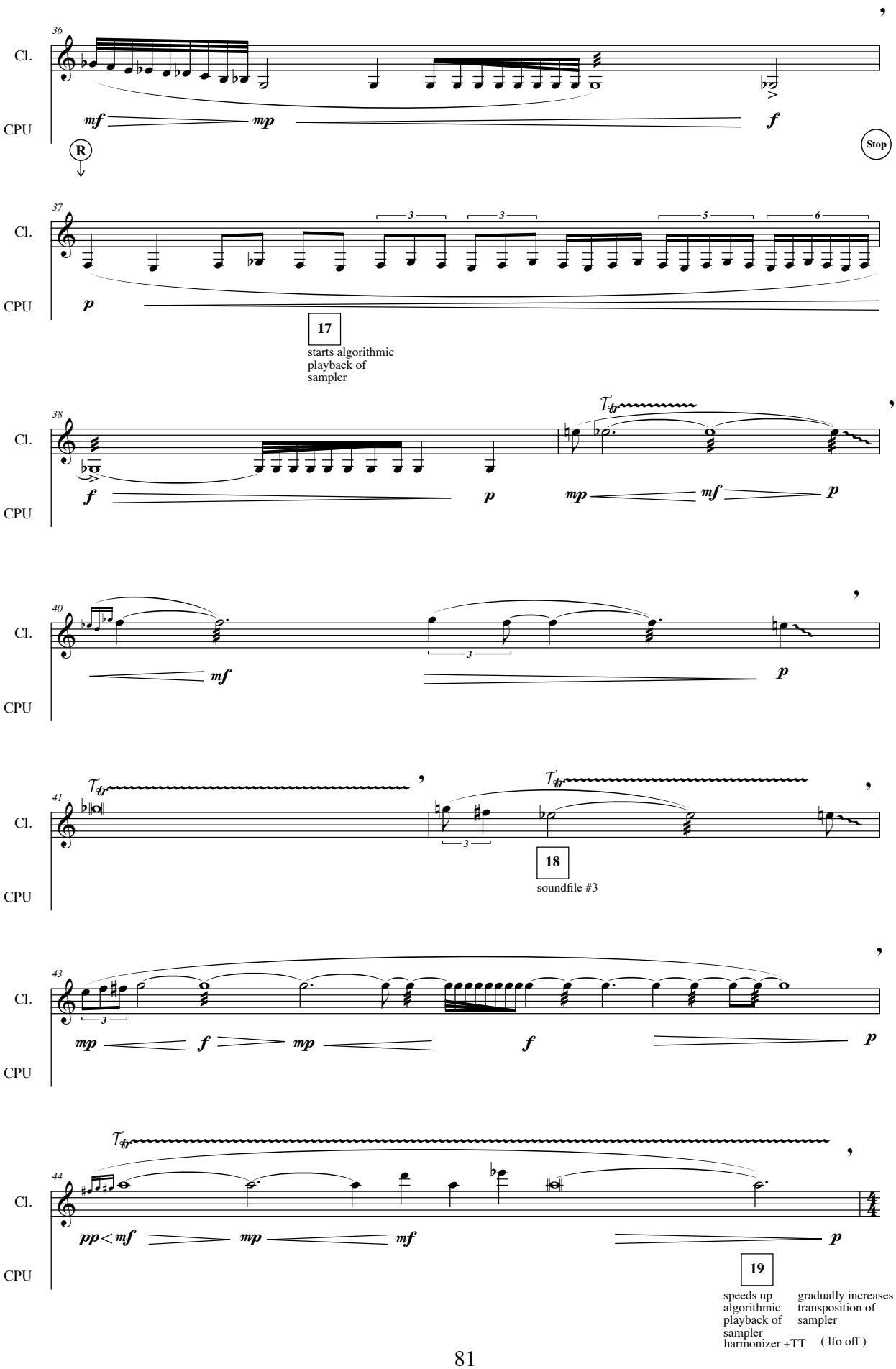

♩ = 82
14
Cl.
CPU
f
mf
similar texture
continues
7
phaser off
harmonizer/ delay
on (- tritone)
A
c. 10"
15
mp
mf
mp
mf
f
mf
p
16
mp
p
ff
17
f
mf
mp
p
pp
niente
texture
begins to
dissipate
dim.
8
harmonizer/
delay off
phaser on
18
mf
mp
mf
mp
mf
p
f
mf
9
harmonizer/ delay
on (- tritone)
phaser off
19
f
20
3
7
f
pp
p
mp
10
harmonizer/ delay
(+ m3)

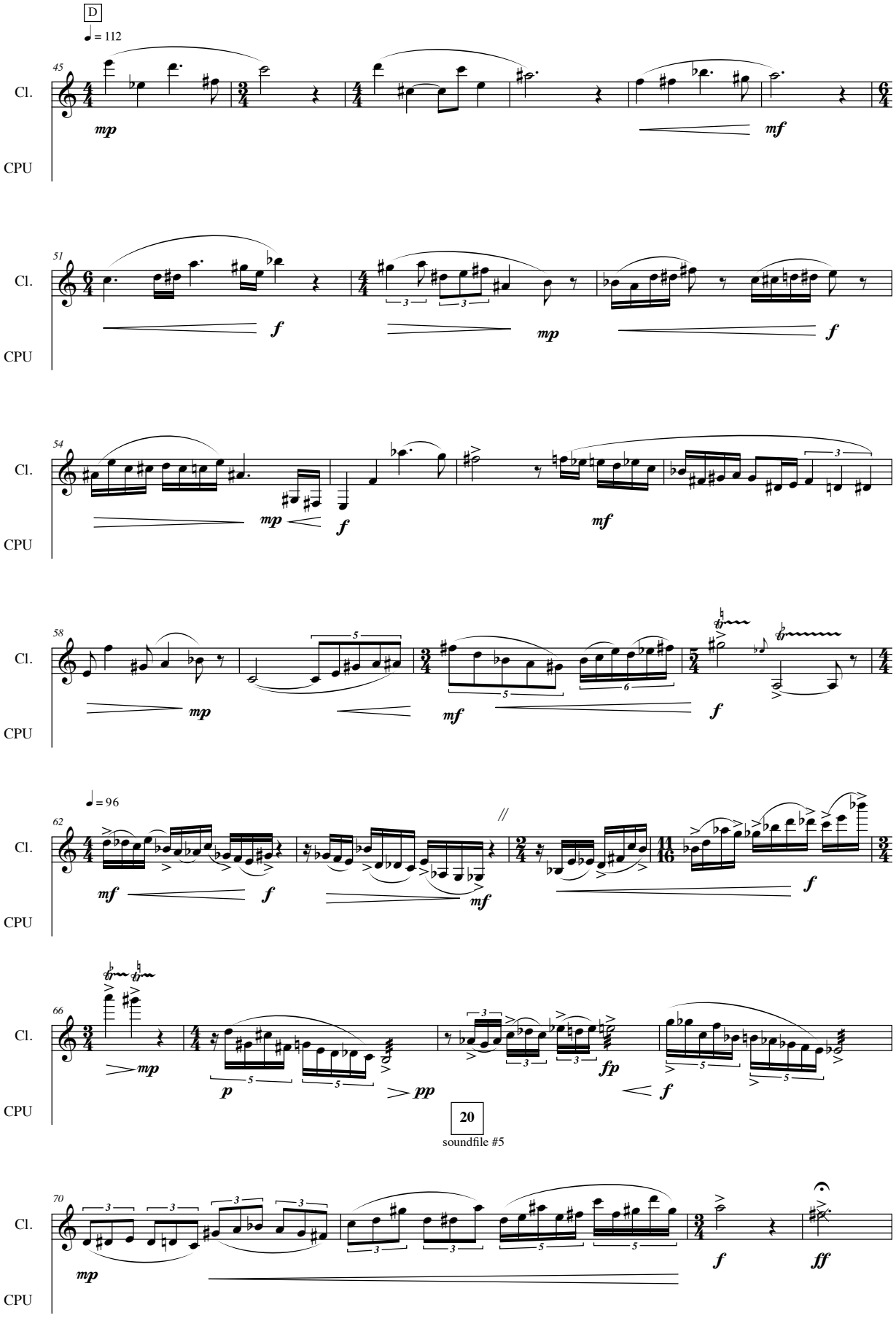


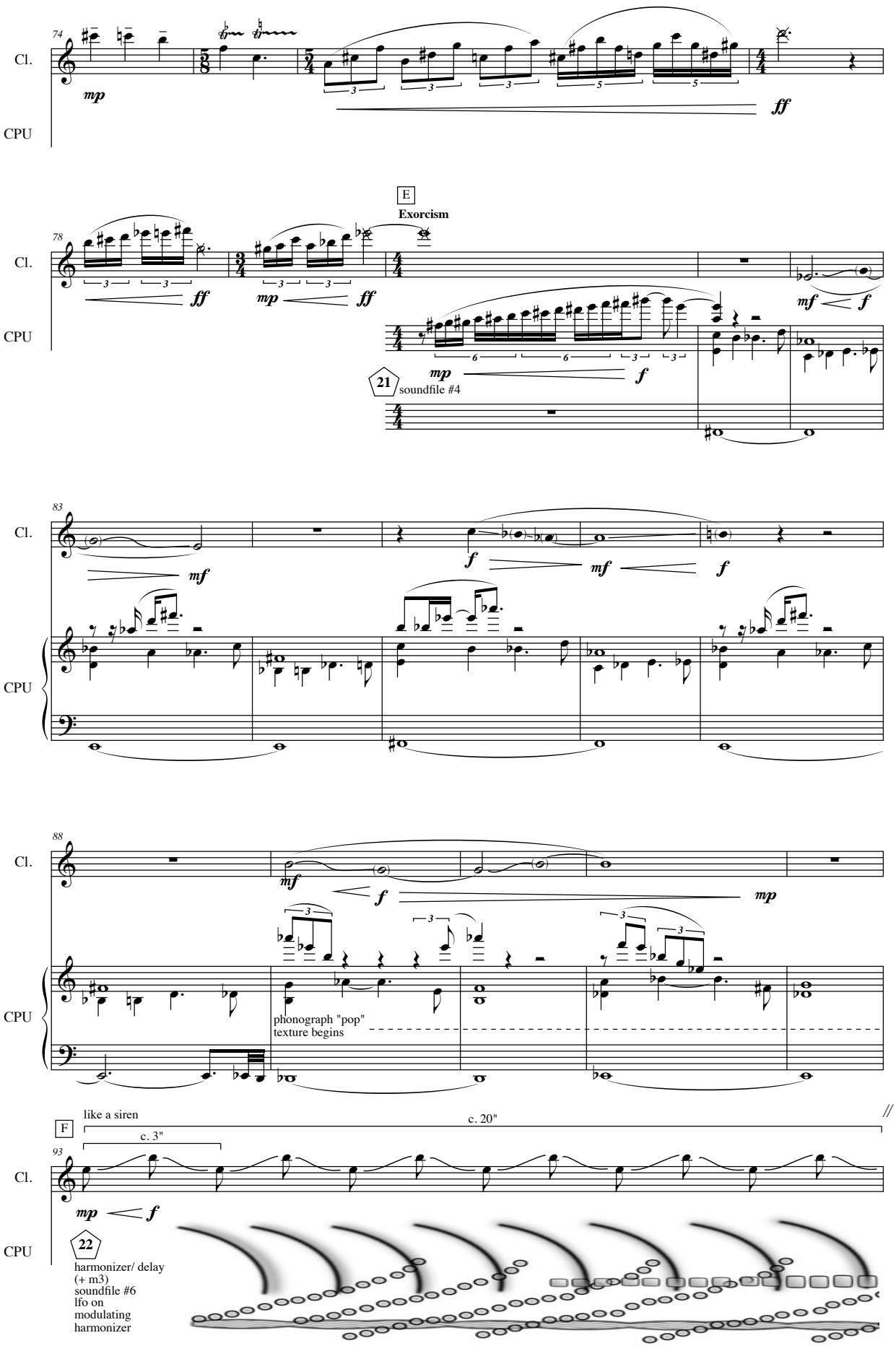
Choose any of the following five systems, play it completely, then move on to another. Continue after playing all systems.




28
Cl.
CPU
mp
mf
13
speeds up algorithmic playback of sampler
29
Cl.
CPU
f
30
Cl.
CPU
ff
pp
C
Free/ Floating
31
Cl.
CPU
p
mf
p
mf
14
gradually stops playback of sampler
phaser on
32
Cl.
CPU
mp
mf
mp
f
15
amplitude modulation on
16
lfo on modulating amp mod
Clear
33
Cl.
CPU
mp
mf
R
Stop
R
35
Cl.
CPU
f
Stop
R
Stop


36
Cl.
CPU
mf
mp
f
R
Stop
37
3
3
5
6
p
17
starts algorithmic playback of sampler
38
tr
f
p
mp
mf
p
40
mf
3
p
41
tr
tr
3
18
soundfile #3
43
3
mp
f
mp
f
p
44
tr
pp < mf
mp
mf
p
19
speeds up algorithmic playback of sampler
gradually increases transposition of sampler
harmonizer +TT
(lfo off)


D
♩ = 112
45
Cl.
CPU
mp
mf
51
f
mp
f
54
mp
f
mf
58
mp
mf
f
♩ = 96
62
mf
f
mf
f
66
mp
p
pp
fp
f
20
soundfile #5
70
mp
f
ff


74
Cl.
CPU
mp
ff
E
Exorcism
78
ff
mp
ff
mf
f
mp
f
21
soundfile #4
83
mf
f
mf
f
88
mf
f
mp
phonograph "pop"
texture begins
like a siren
c. 20"
F
c. 3"
93
mp
f
22
harmonizer/ delay
(+ m3)
soundfile #6
lfo on
modulating
harmonizer

94

Cl.

CPU

mp f mp ff

similar texture continues

(car horn honk)

96

♩=180

23

harmonizer/ delay
(+ P4)
(lfo off)

102

108

24

harmonizer
feedback gradually
increases

112

accel.

(cuica enters)

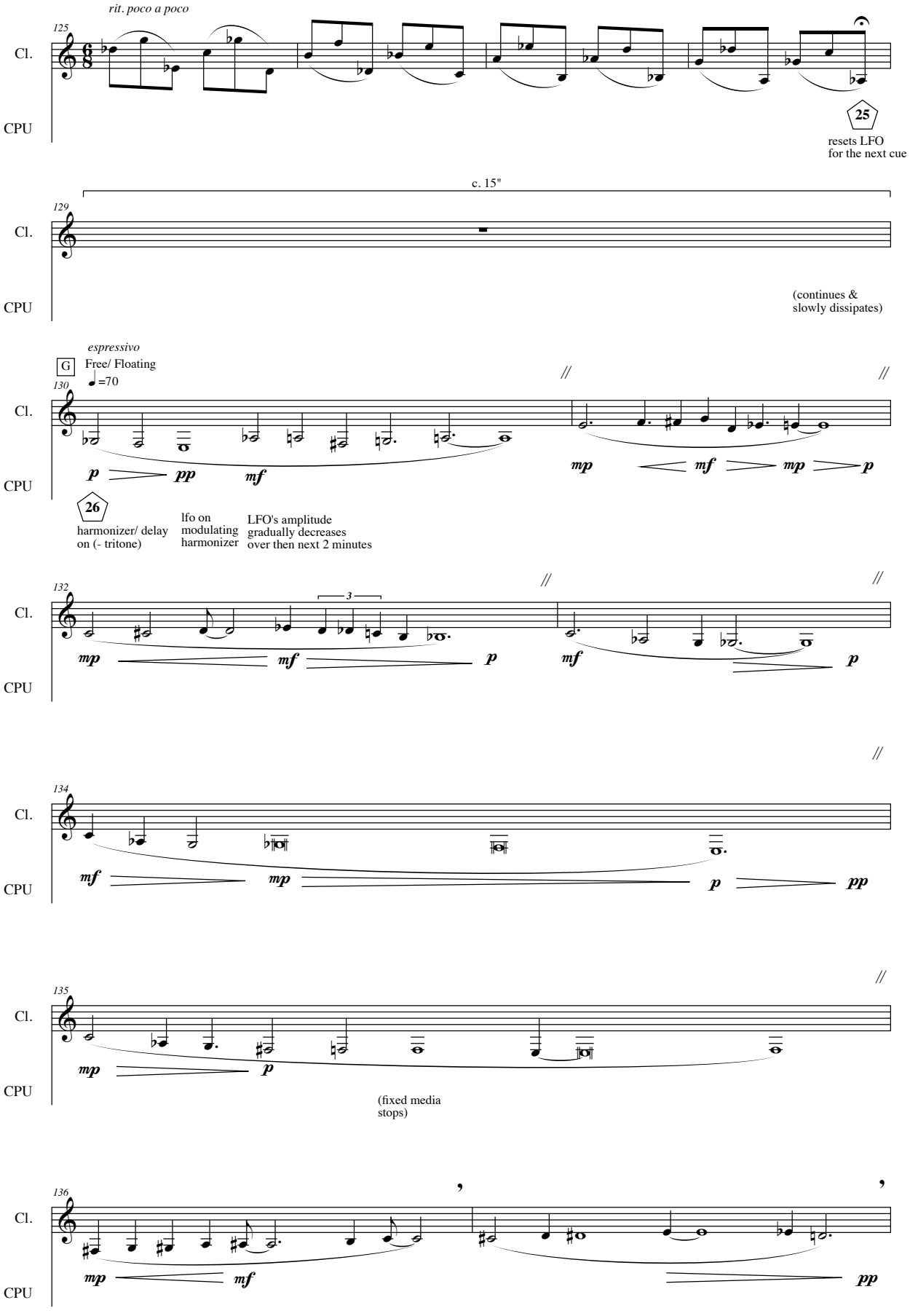
117

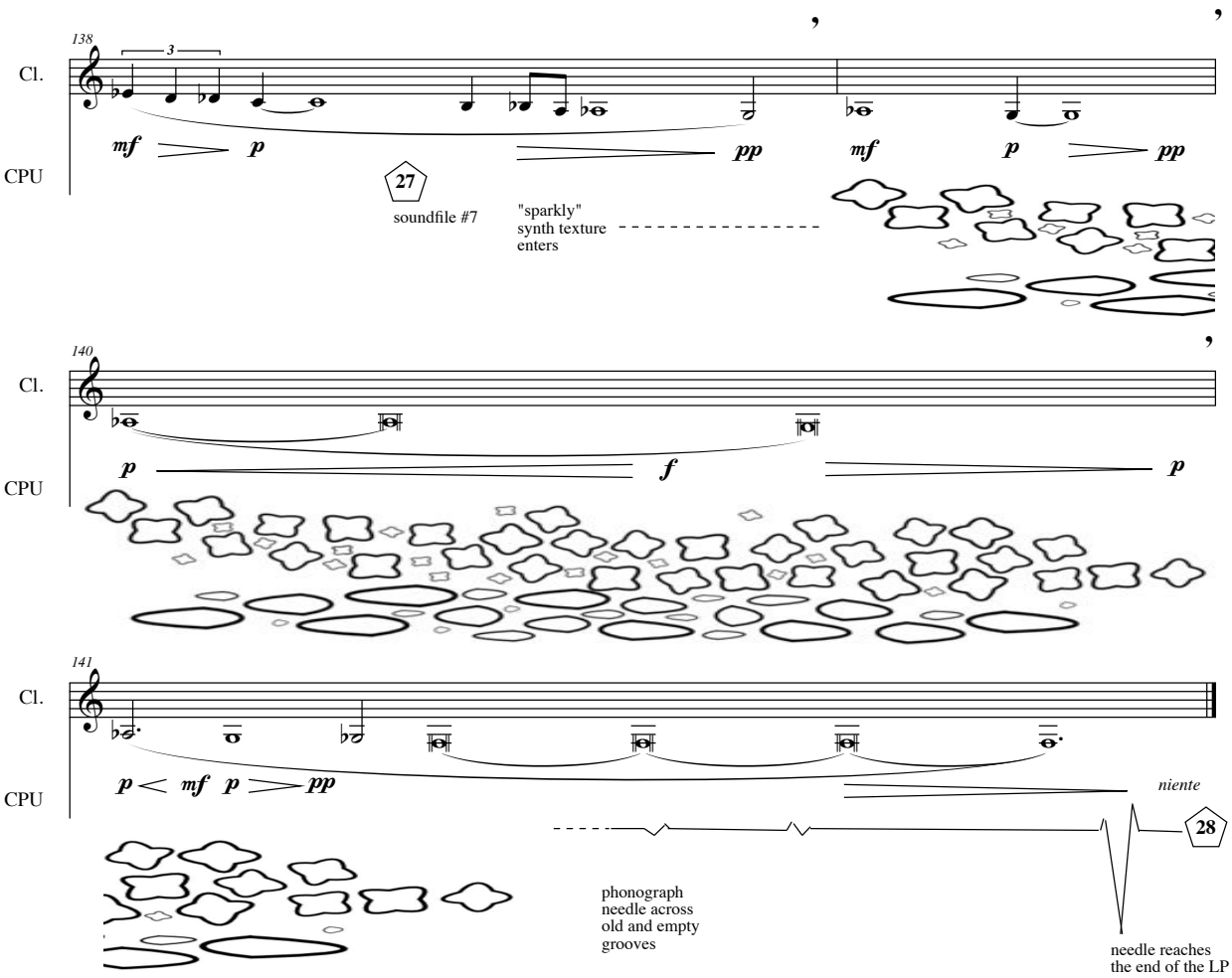
a tempo

accel.

(cuica stops)

121


rit. poco a poco
125
Cl.
CPU
25
resets LFO
for the next cue
c. 15"
129
Cl.
CPU
(continues &
slowly dissipates)
espressivo
G
Free/ Floating
♩=70
130
Cl.
CPU
p
pp
mf
mp
mf
mp
p
26
harmonizer/ delay
on (- tritone)
lfo on
modulating
harmonizer
LFO's amplitude
gradually decreases
over then next 2 minutes
132
Cl.
CPU
3
mp
mf
p
mf
p
134
Cl.
CPU
mf
mp
p
pp
135
Cl.
CPU
mp
p
(fixed media
stops)
136
Cl.
CPU
mp
mf
pp


138
Cl.
CPU
3
mf
p
pp
mf
p
pp
27
soundfile #7
"sparkly"
synth texture
enters
140
Cl.
CPU
p
f
p
141
Cl.
CPU
p
mf
p
pp
niente
28
phonograph
needle across
old and empty
grooves
needle reaches
the end of the LP