Aaron Brooks

Energy Shapes

For electric guitar and electronic sounds

Program note:

ENERGY SHAPES is a slightly messy conglomeration of influences derived from musical styles and musical ideas that are dear to me. Heavy metal energy, modernist rigor and abstraction, and electronic noise all play a part in its multi-variant musical argument, which attempts an affective experience that is both directly visceral and intellectually subjective. Its harmonic and rhythmic structures are similarly messy. Each of its two main movements features a microtonal retuning of the open strings that brings overtone series derived frameworks into unpredictable interactions with the guitar's fretted, equal tempered construction. Rhythms are derived from the superimposition of various tempi, meters, and gestural types, creating a sort of crowded dance floor of disparate, simultaneously moving bodies that pleasantly smash against one another in not-quite-unison.

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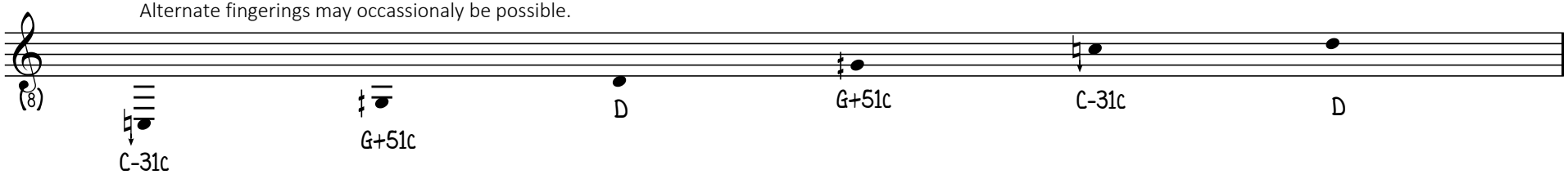
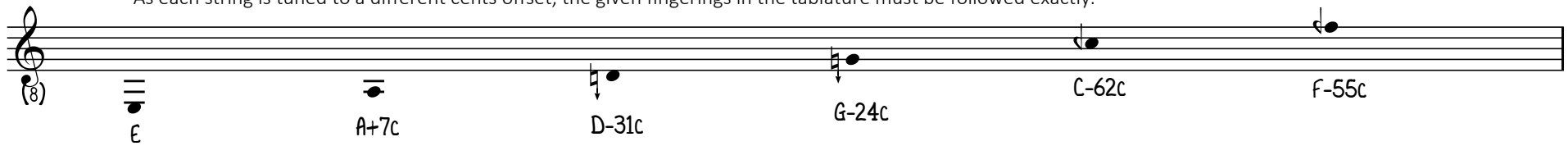
Tuning and Accidentals

The piece uses two microtonal retunings, given below as equal tempered pitches with cents offsets. These tunings combine a basis in just intonation with the guitar's fretted, 12 tone equal tempered construction to produce a variety of harmonic and melodic sounds. The guitarist may use the provided tuning recordings/reaper sampler patch to tune to by ear, or may use a microtonally capable tuner, such as those made by Peterson Tuners. Three types of accidentals (conventional/no accidental, quarter tone accidentals, and arrow down accidentals) are used to approximately represent the resultant sounding pitches. Tablature is provided throughout. The guitarist may wish to use two guitars to speed up the transition between movements.

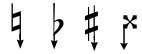
Movement 1's tuning is based on the 7th and 11th harmonic partials above an equal tempered D natural fundamental.
Alternate fingerings may occassionaly be possible.



Movement 2's tuning is based on a sequence of stacked 7th harmonic partials beginning on an equal tempered E natural fundamental.
As each string is tuned to a different cents offset, the given fingerings in the tablature must be followed exactly.



Ca. 1/4 sharp, 3/4 sharp, 1/4 flat, 3/4 flat.

 The given pitch is lowered slightly.

Accidentals always carry through the bar and never transer the octave.

Natural Harmonics are notated at the sounding pitch of their corresponding normally fretted note.

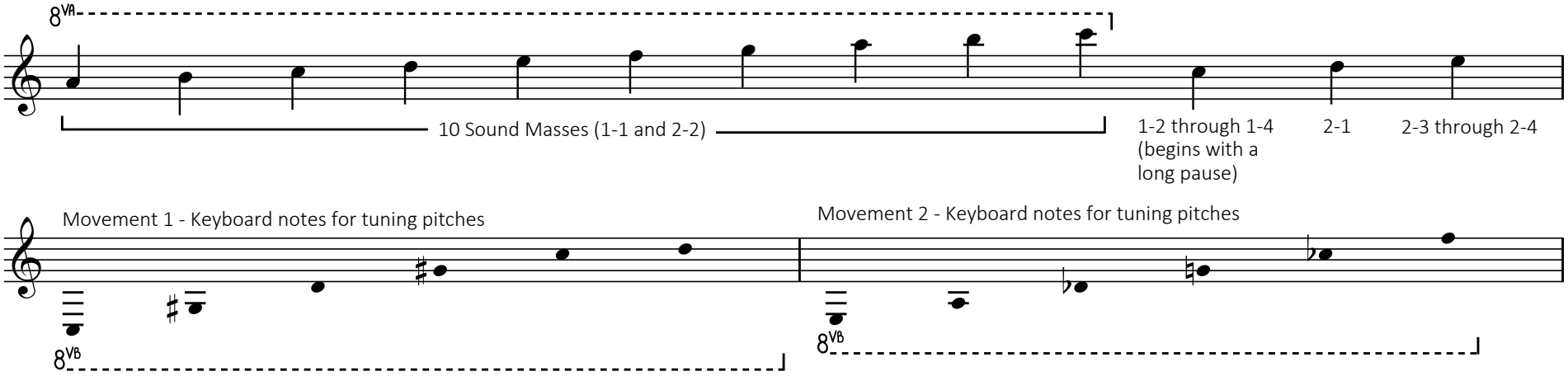
Electronics and Rhythmic Notation

The electronic part consists of two types of material. The first is a collection of 10 "sound masses," which should be assigned, one each, to the drawings in the score, with the order left to the performer's discretion, and triggered in real time, allowing for rhythmic flexibility in movements 1-1 and 2-2.

The second type of material consists of three spans of fixed media electronics which accompany movements 1-2 through 1-4, 2-1, and 2-3 through 2-4. These spans should be triggered where indicated in the score. Optional click tracks have been provided to aid in rhythmic coordination with this material.

The 10 sound masses, 3 spans of fixed audio, and 12 tuning pitches are triggered from a Reaper sampler patch, and are mapped to a 61-note MIDI keyboard as follows (click tracks are routed to outputs 3-4 and should not be audible to the audience). Audio files may be provided should the performer wish to use a different sampler.

An entirely fixed media version of the electronic part, with or without click track, may be provided should the use of a sampler prove logistically prohibitive. In this case, the performer should take care not to finish significantly before or after the electronics in movements 1-1 and 2-2.



The rhythmic notation in movements 1-1 and 2-2 is designed to allow the performer significant interpretitive freedom within a rhythmically amorphous language. 1-1 uses proportional notation within bracketed tempo changes to create a gestural character. 2-2 uses pulsed material within these brackets to create a constantly shifting tempo landscape. The performer should not attempt to maintain the same tempo between different brackets with the same tempo indication. For example, one "moderate" bracket should not necessarily be played at the same tempo as another "moderate" bracket. In certain cases, a gradual shift in tempo is indicated via a dashed line between two tempo indications within the same bracket. Dashed slurs indicate that notes should be played without pauses between, with the end of the slur indicating where the note should be released.

1-1. Burst, Squiggle, Blot

Aggressive and abstract

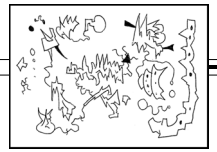
Electric guitar

Distortion on
Wah on

(scordatura)
D
C-31c
G+51c
D
G+51c
C-31c

Wah Heel — Toe — Fast
Wah Heel — Toe — Slow
Wah Heel — Toe — Heel — Moderate

mf — *ff*
molto espressivo, vibrato and portamento as desired
mp



Electronics

Sound masses (assign one sound mass to each drawing, trigger with a MIDI controller)

2

Wah Toe — Heel — Toe — Heel — Toe — Moderate — Very Fast

Pizz. — Ord. — Pizz. — Ord.

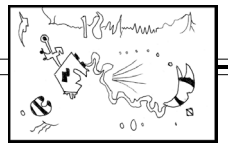
mp — *f* — *mf* — *ff* — *mp* — *f* — *mp* — *ff*

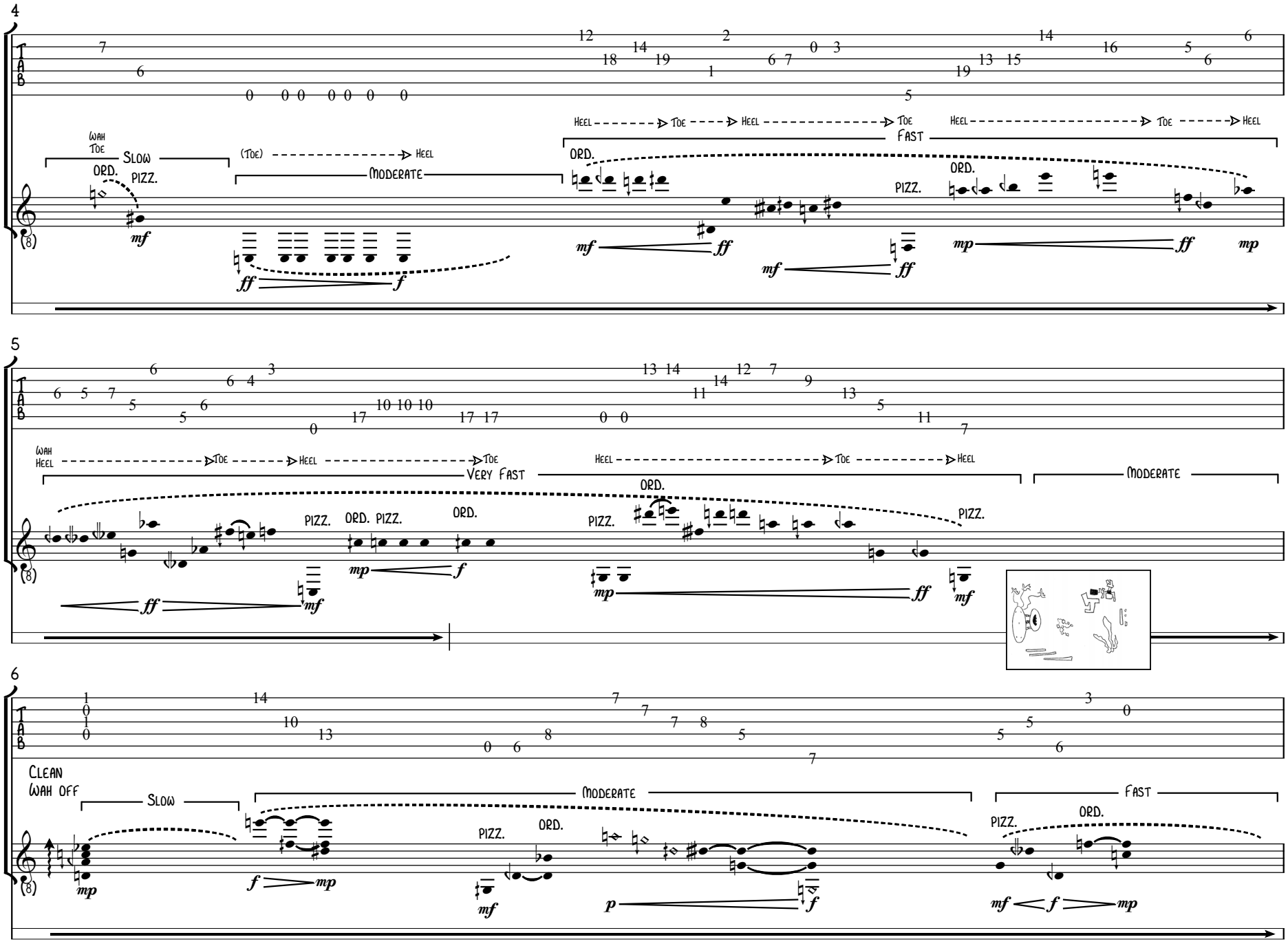
3

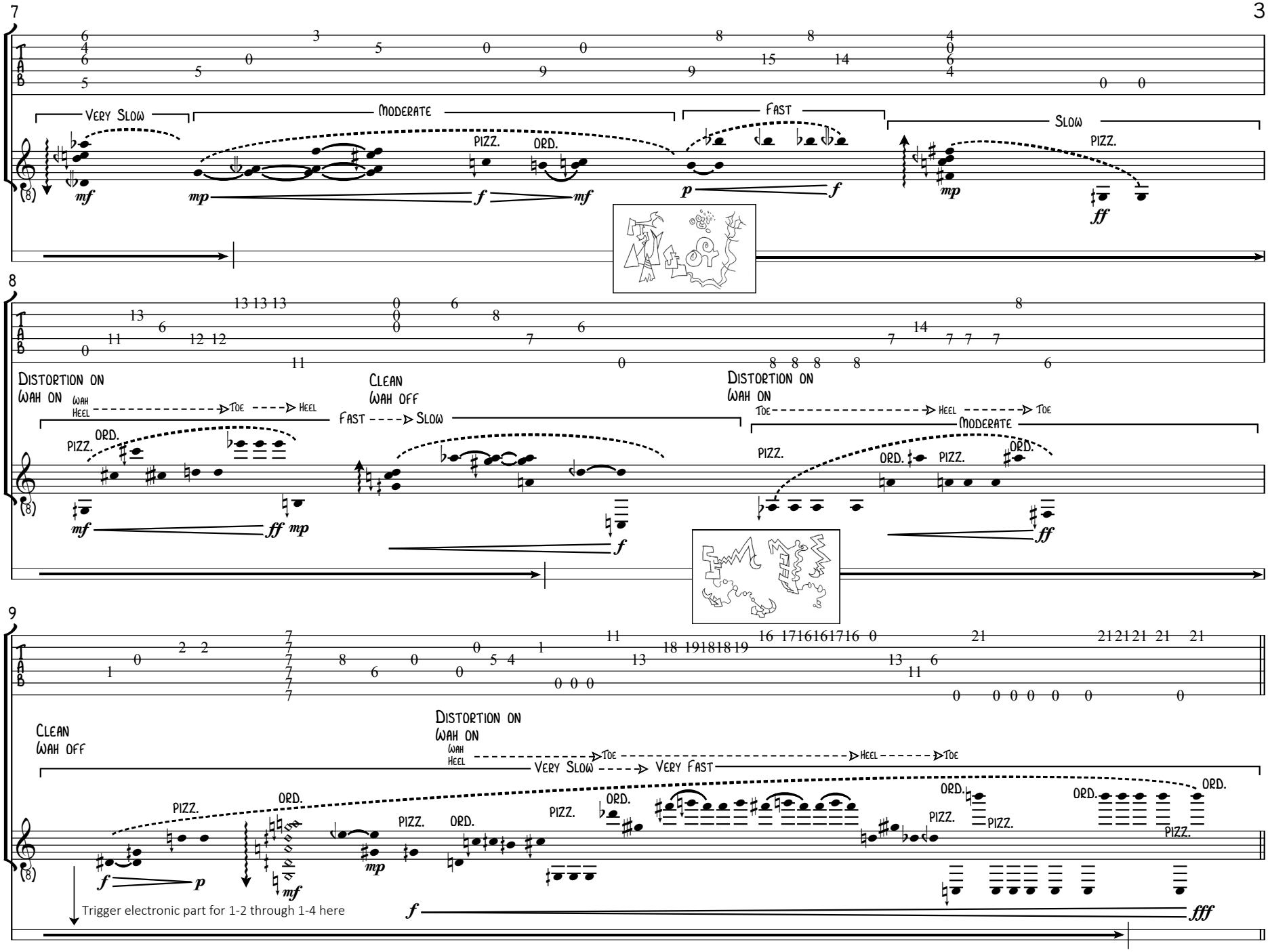
Wah Heel — Toe — Heel — Toe — Heel — Toe — Very Fast

(Toe) — Heel — Very Slow — Pizz.

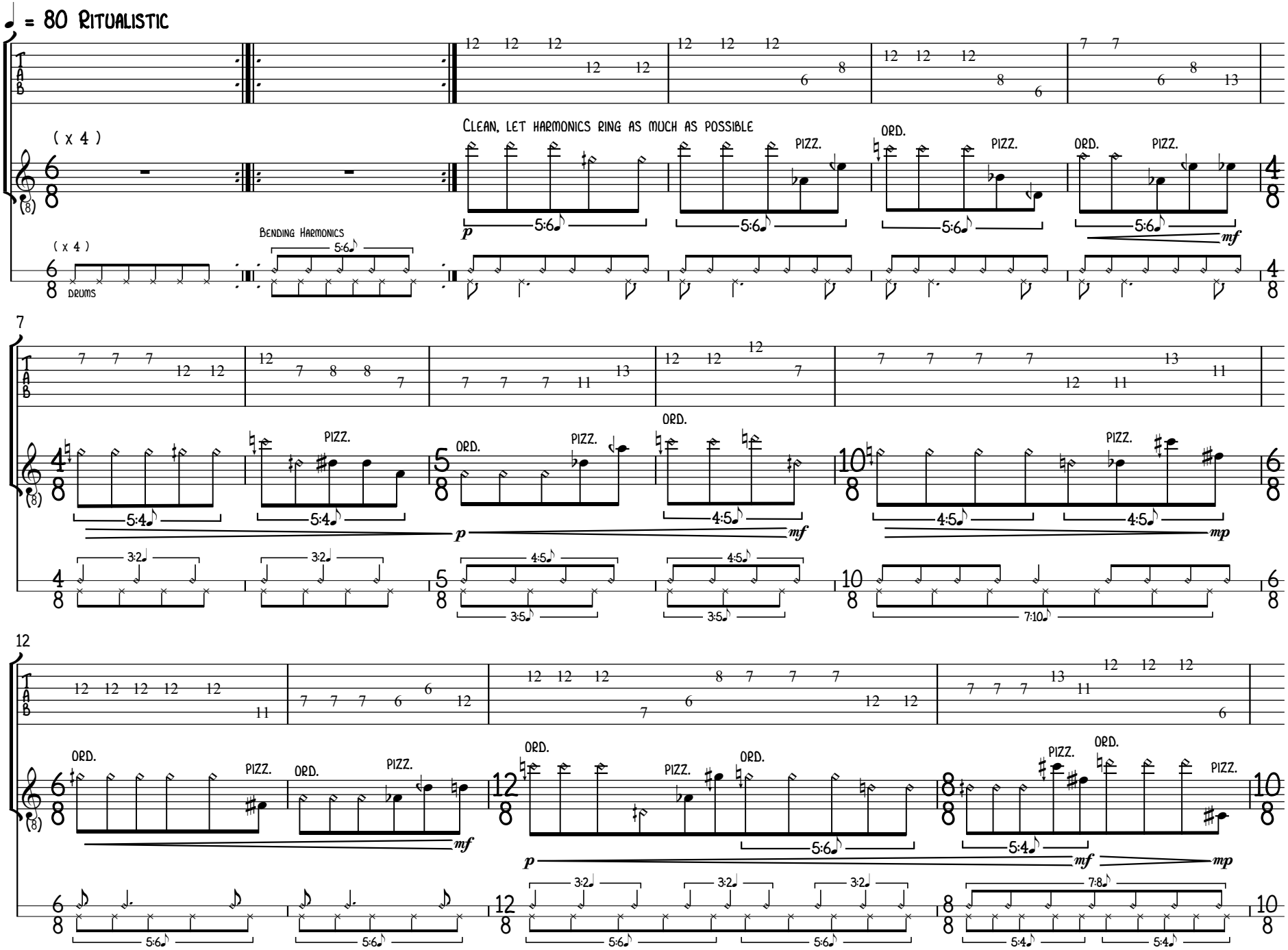
mp — *f* — *mf* — *ff* — *f* — *p* — *f* — *mf* — *p*

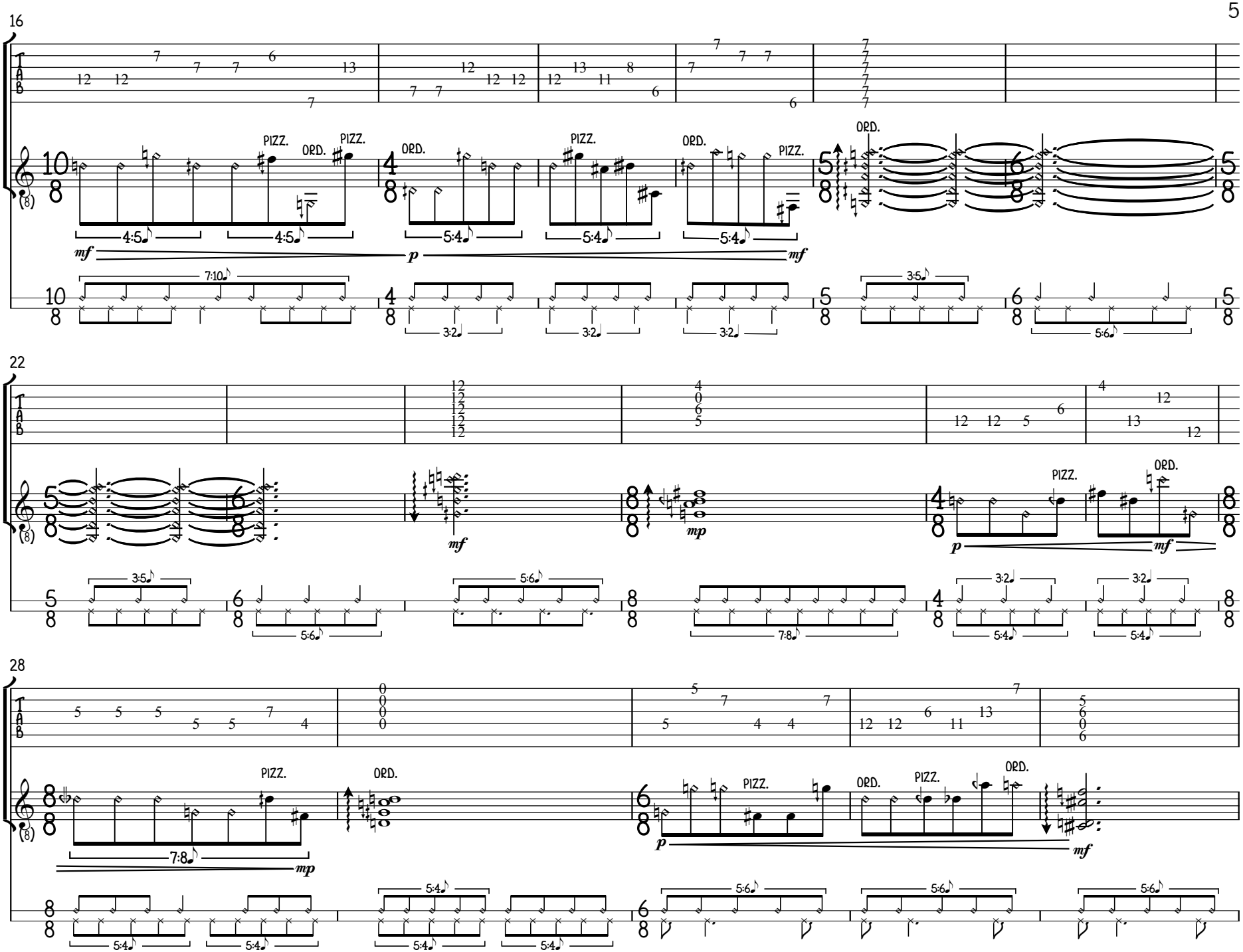


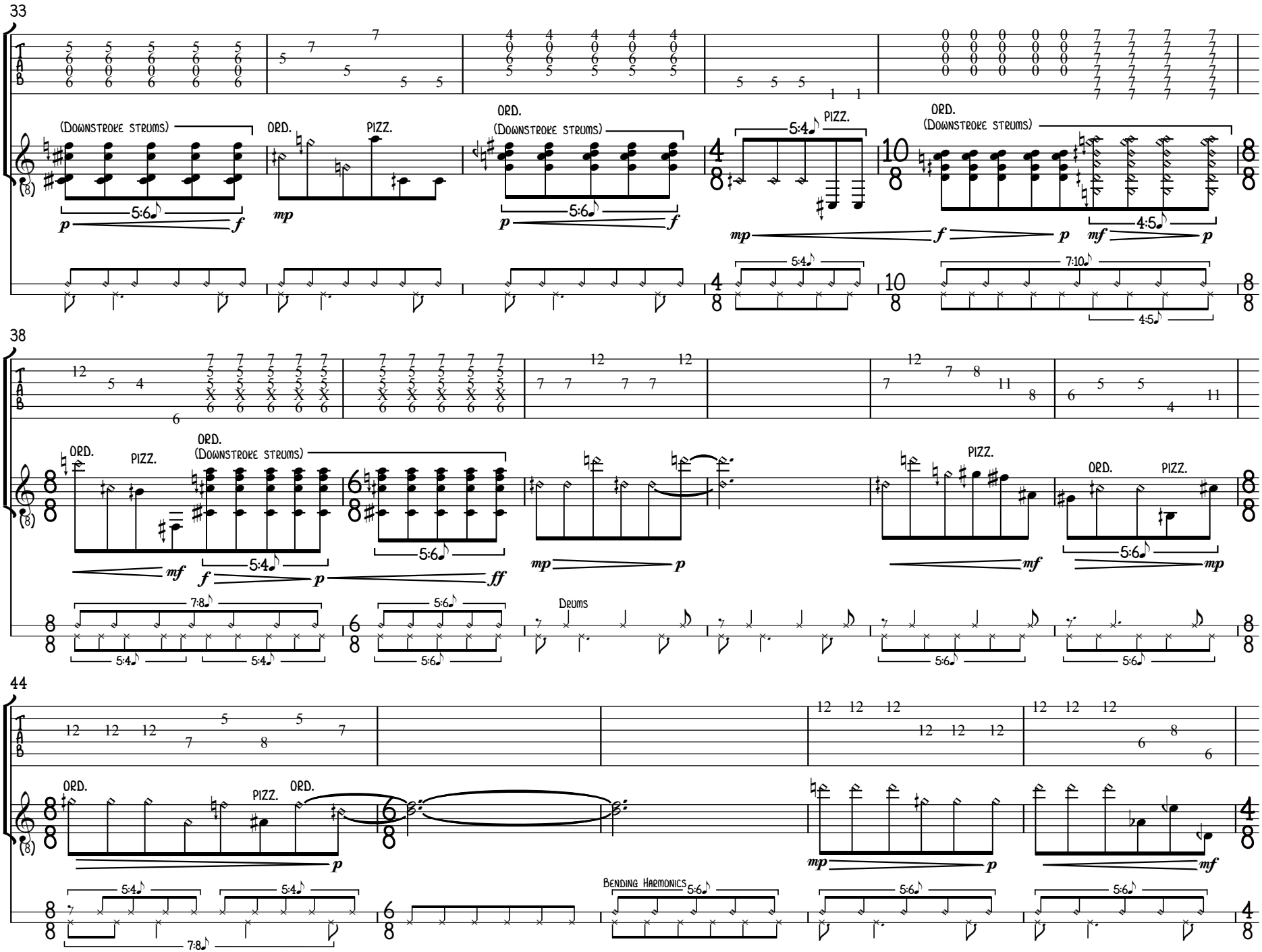

4
WAH
TOE
SLOW
ORD.
PIZZ.
(TOE)
HEEL
MODERATE
HEEL
TOE
HEEL
TOE
FAST
ORD.
PIZZ.
ORD.
HEEL
TOE
HEEL
5
WAH
HEEL
TOE
HEEL
TOE
VERY FAST
PIZZ.
ORD. PIZZ.
ORD.
HEEL
TOE
HEEL
ORD.
PIZZ.
PIZZ.
MODERATE
6
CLEAN
WAH OFF
SLOW
MODERATE
PIZZ.
ORD.
FAST
PIZZ.
ORD.

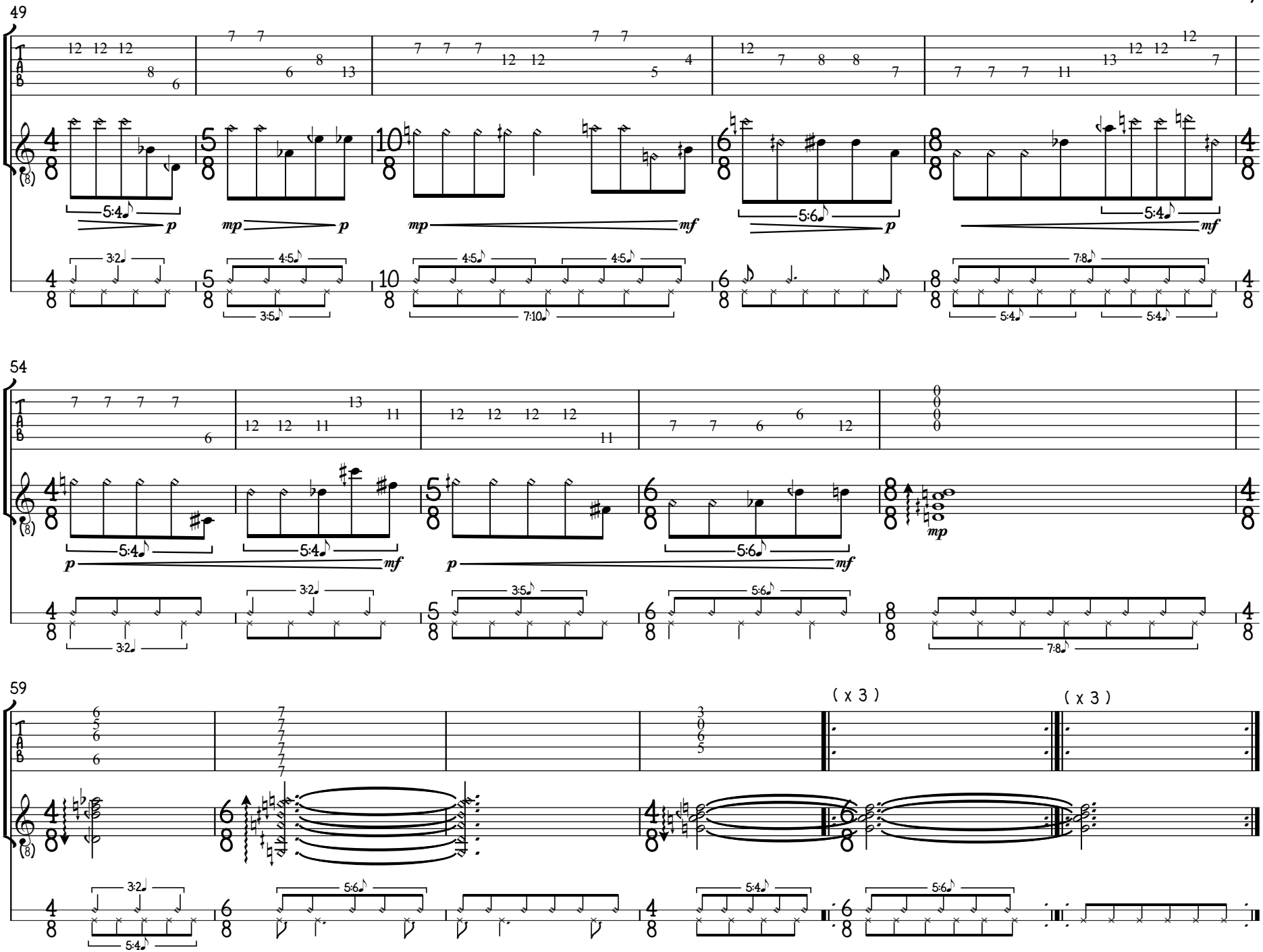

7
Very Slow
Moderate
Fast
Slow
PIZZ.
ORD.
8
Distortion on
Wah on
Wah
Heel
Toe
Heel
Clean
Wah off
Fast
Slow
Distortion on
Wah on
Toe
Heel
Toe
Moderate
PIZZ.
ORD.
9
Clean
Wah off
Distortion on
Wah on
Wah
Heel
Toe
Heel
Toe
Very Slow
Very Fast
PIZZ.
ORD.
Trigger electronic part for 1-2 through 1-4 here

1-2. Mechanism

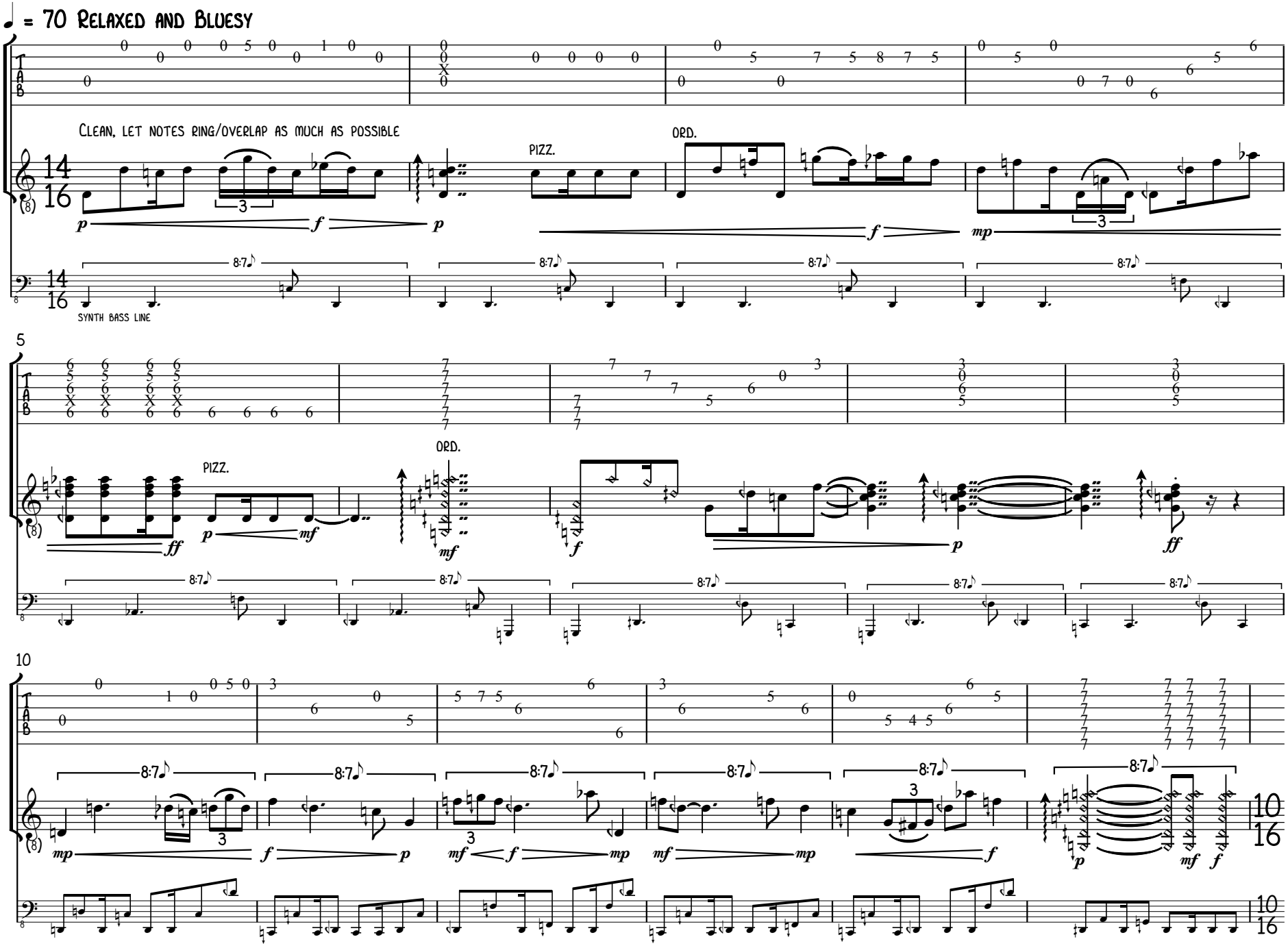


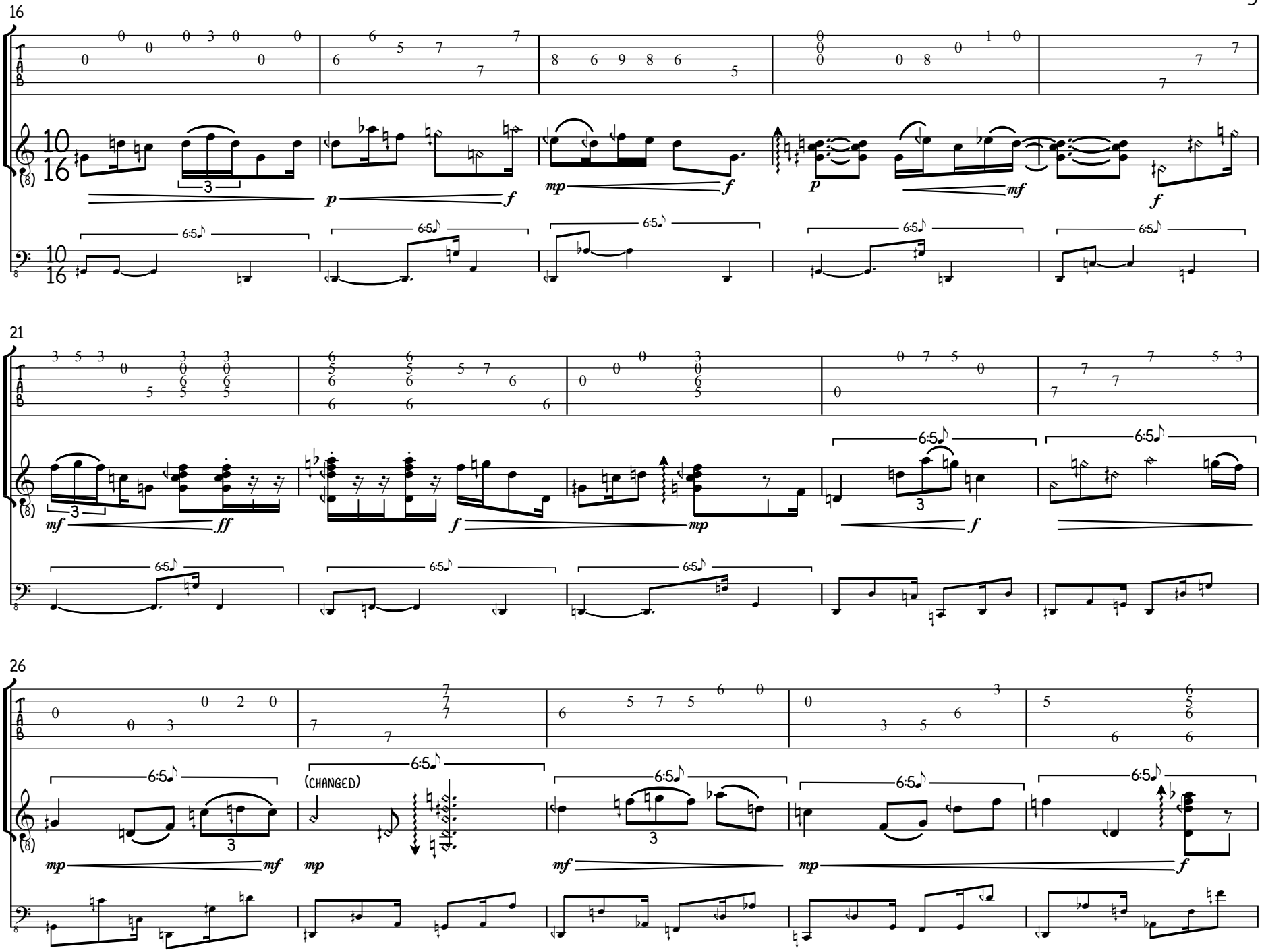

16
PIZZ.
ORD.
PIZZ.
ORD.
PIZZ.
ORD.
PIZZ.
ORD.
4:5
4:5
5:4
5:4
5:4
mf
p
mf
7:10
3:2
3:2
3:2
3:5
5:6
22
mf
mp
PIZZ.
ORD.
p
mf
3:5
5:6
5:6
7:8
3:2
3:2
5:4
5:4
28
PIZZ.
ORD.
7:8
mp
PIZZ.
ORD.
PIZZ.
ORD.
p
mf
5:4
5:4
5:4
5:4
5:6
5:6
5:6

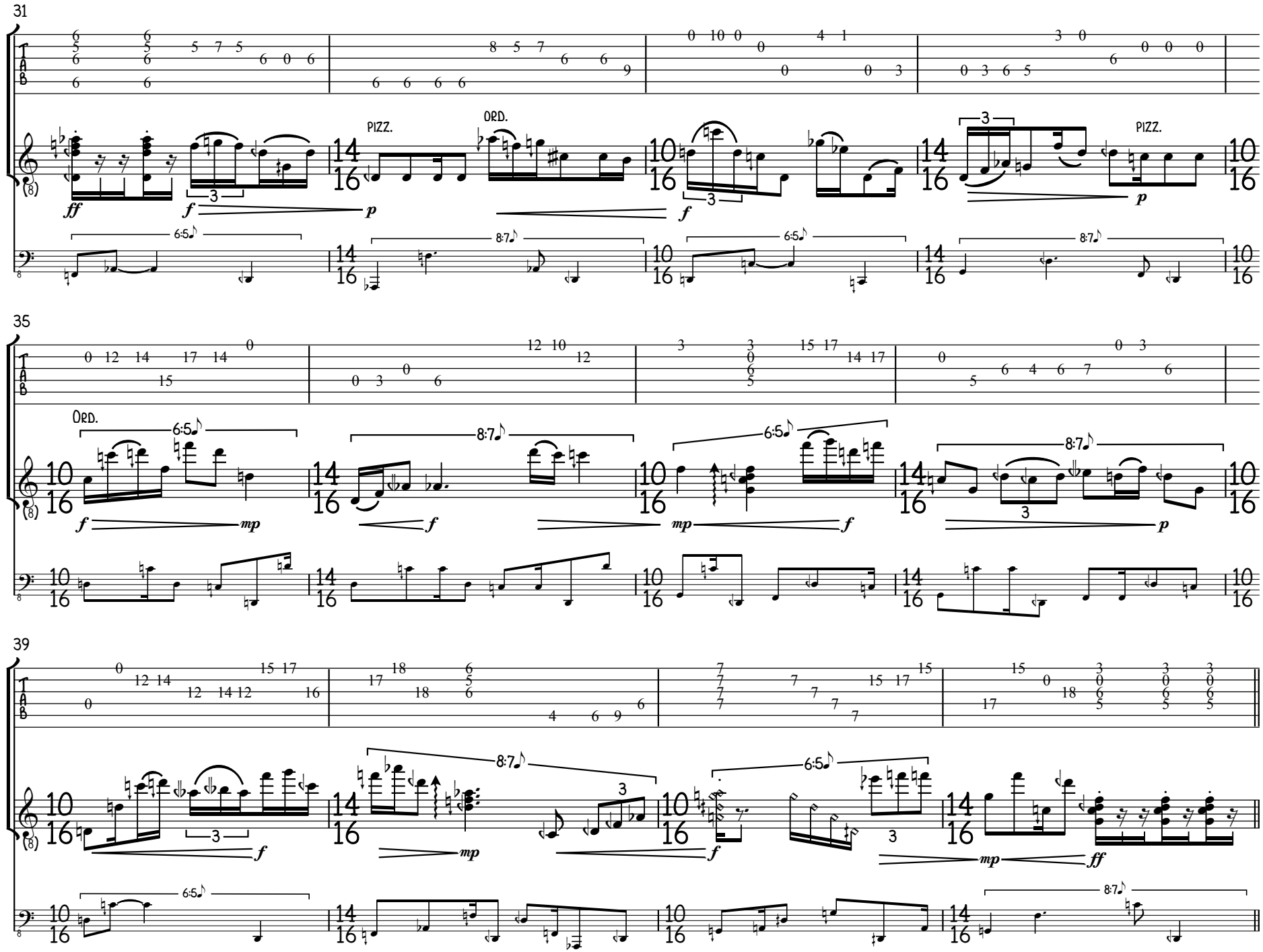

33
(Downstroke strums)
ORD.
PIZZ.
ORD.
(Downstroke strums)
5:4
PIZZ.
ORD.
(Downstroke strums)
38
ORD.
PIZZ.
ORD.
(Downstroke strums)
PIZZ.
ORD.
PIZZ.
Drums
44
ORD.
PIZZ.
ORD.
Bending Harmonics


49
54
59
(x 3)
(x 3)

1-3. Drop, Float




16
21
26
(CHANGED)


31
PIZZ.
ORD.
PIZZ.
35
ORD.
39

1-4. Interlude #1

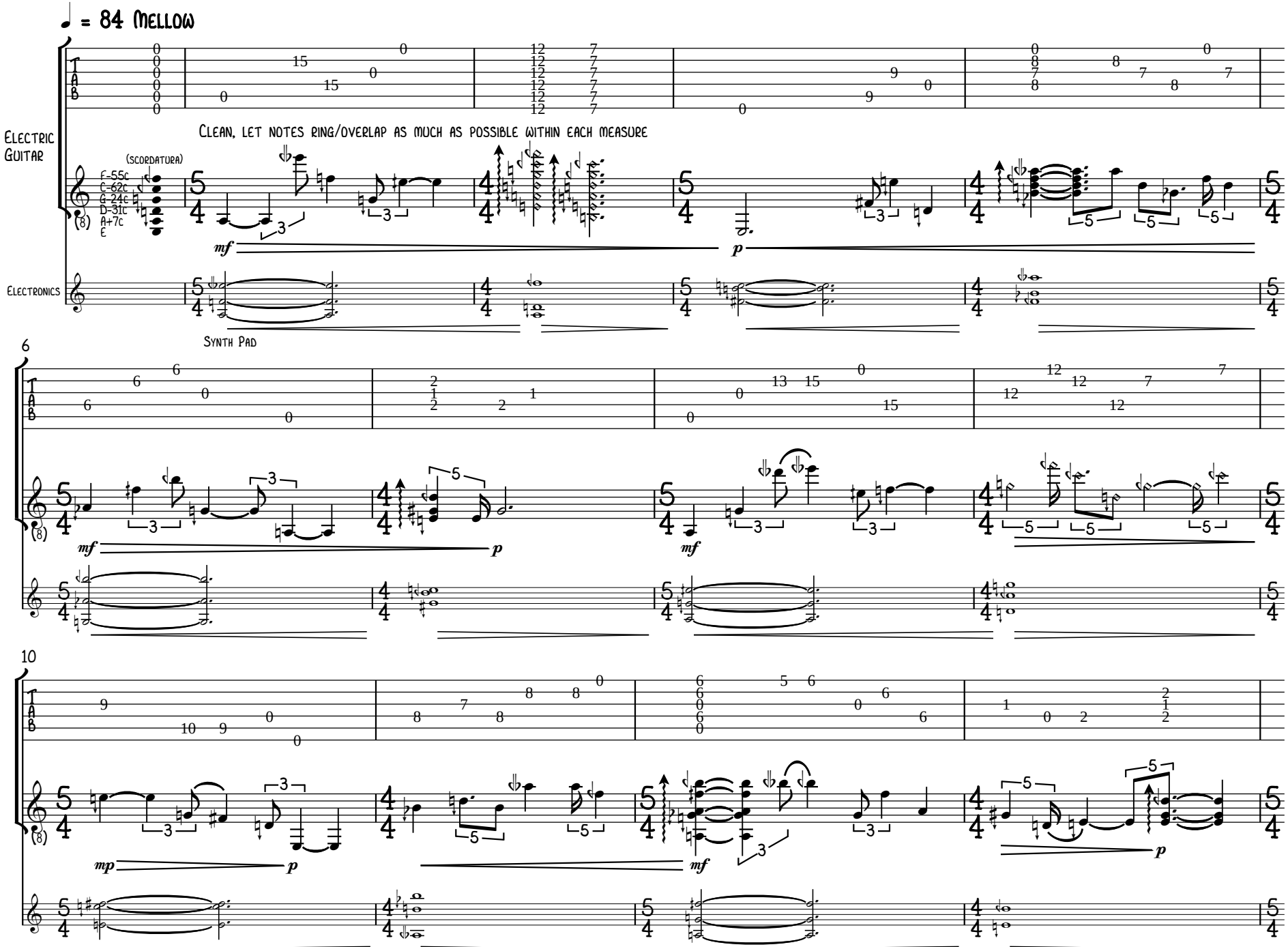
Granular Sounds

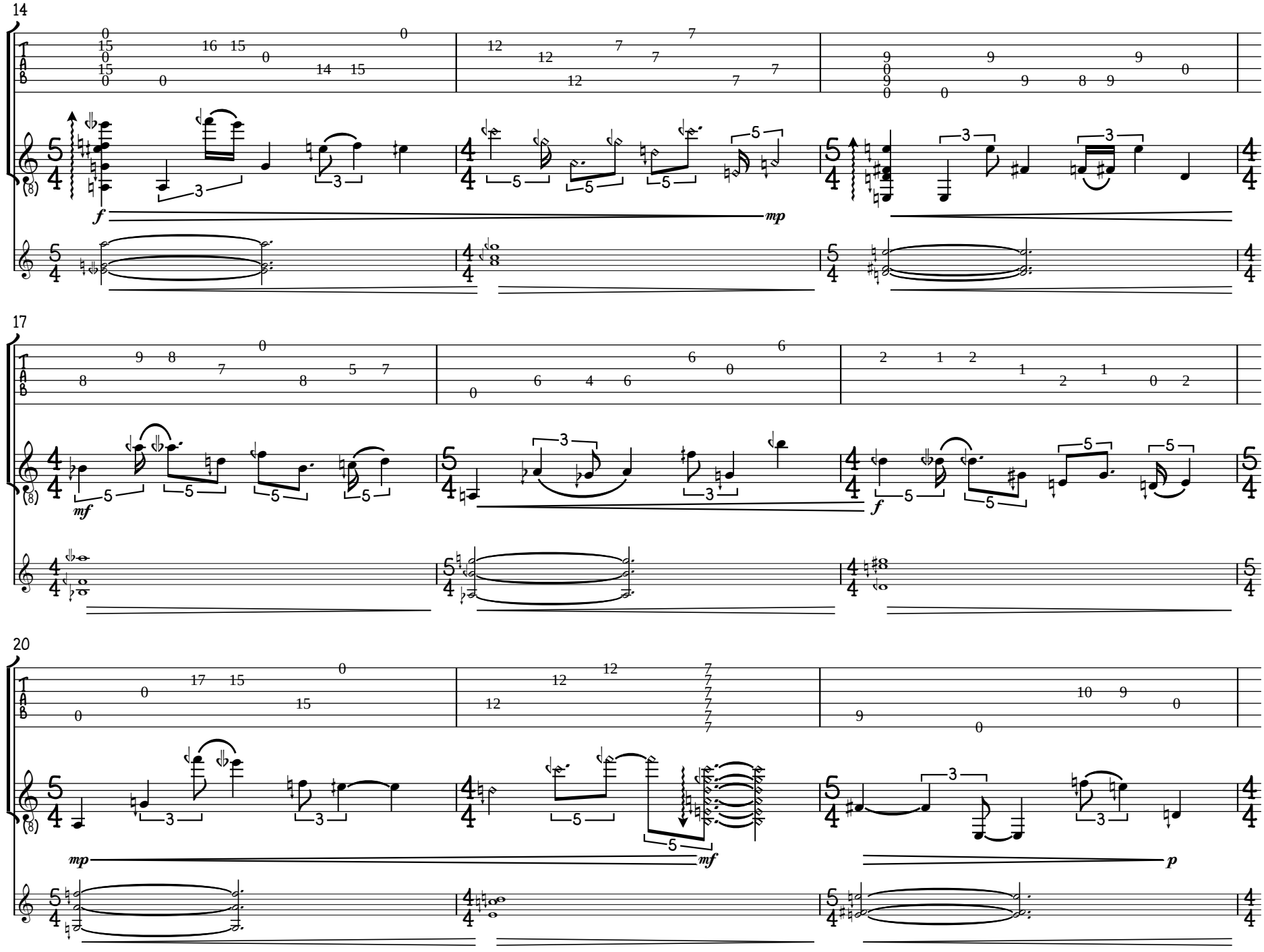
Ca. 1 minute

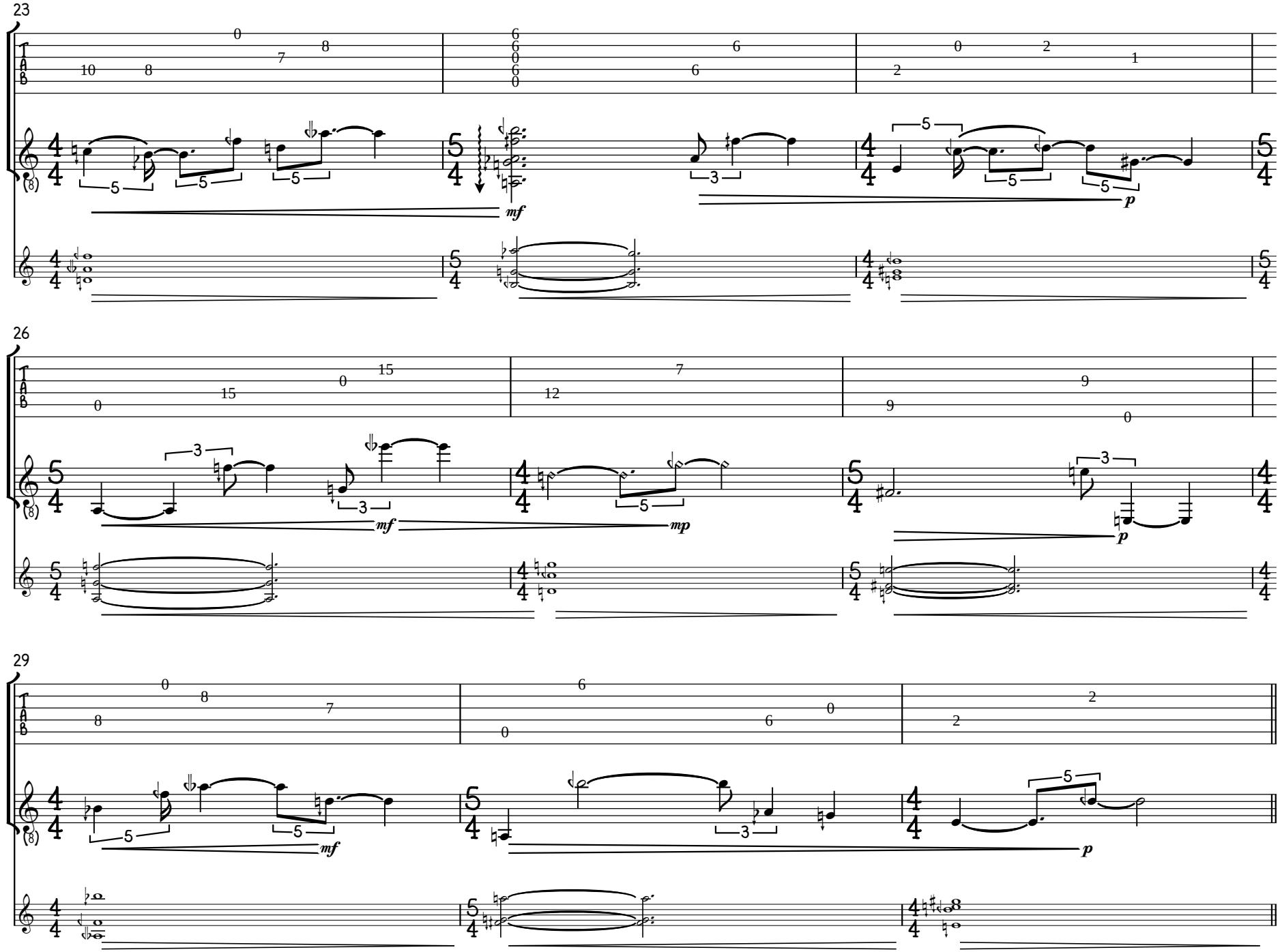
Switch guitars for movement 2 if using multiple guitars.
Tune if using a single guitar with a silent tuning method.

Tune for movement 2
if using a single guitar without a silent tuning method, then trigger 2-1.

2-1. Calming Beam




14
17
20
f
mp
mf
f
mp
mf
p


23
26
29
mf
mp
p

2-2. Triangle, Zig Zag, Dash

Aggressive and abstract

Distortion on

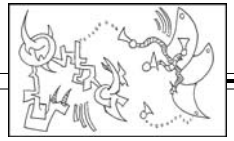
PIZZ. ORD. Fast

ff molto espressivo, vibrato and portamento as desired

Moderate

PIZZ. ORD. Fast

mf



Sound masses (assign one sound mass to each drawing, trigger with a MIDI controller)

2

Very Fast

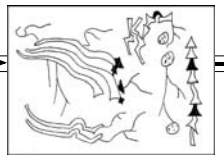
ff

Slow

PIZZ. ORD. PIZZ. ORD.

Fast

mf



3

Fast

ff

PIZZ. ORD.

Moderate

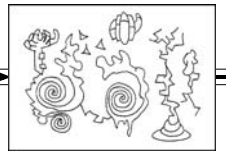
PIZZ. ORD.

mp

Very Slow

Very Fast

mf *ff*

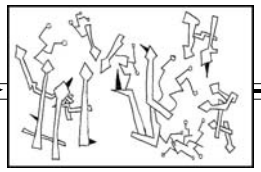


4

Very slow | Very fast | Fast | Very fast | Moderate | Very slow

PIZZ. ORD.

ff *mf*

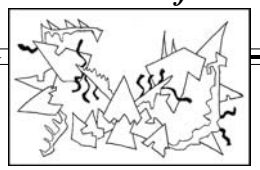


5

Fast | Very fast | Moderate | Very fast | Slow | Fast | Moderate

PIZZ. ORD. PIZZ. ORD.

ff *mf* *f* *mf*



6

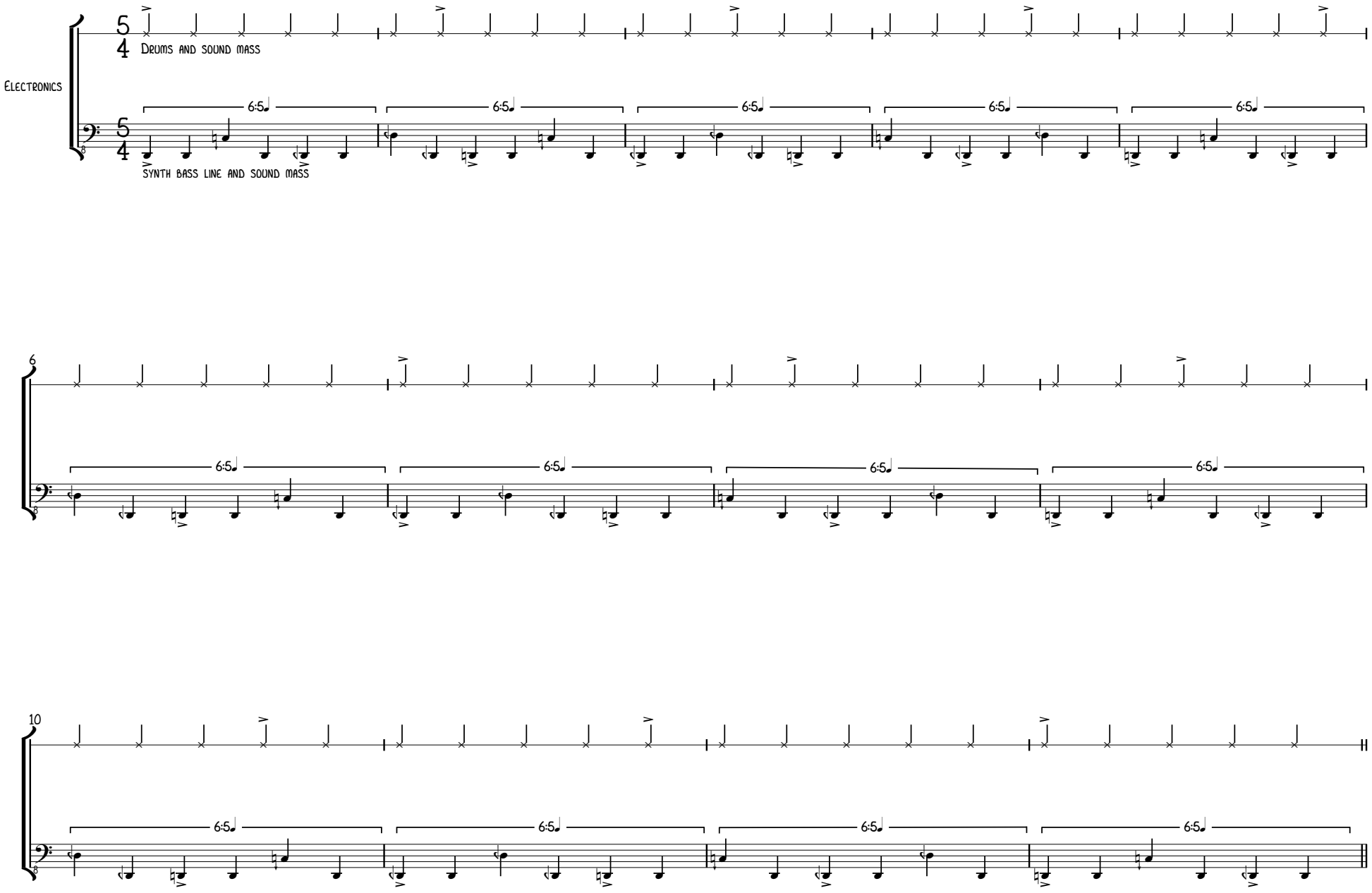
Very fast | Fast | Very fast | Very slow | Fast | Very fast | Moderate

ff *mf* *ff*

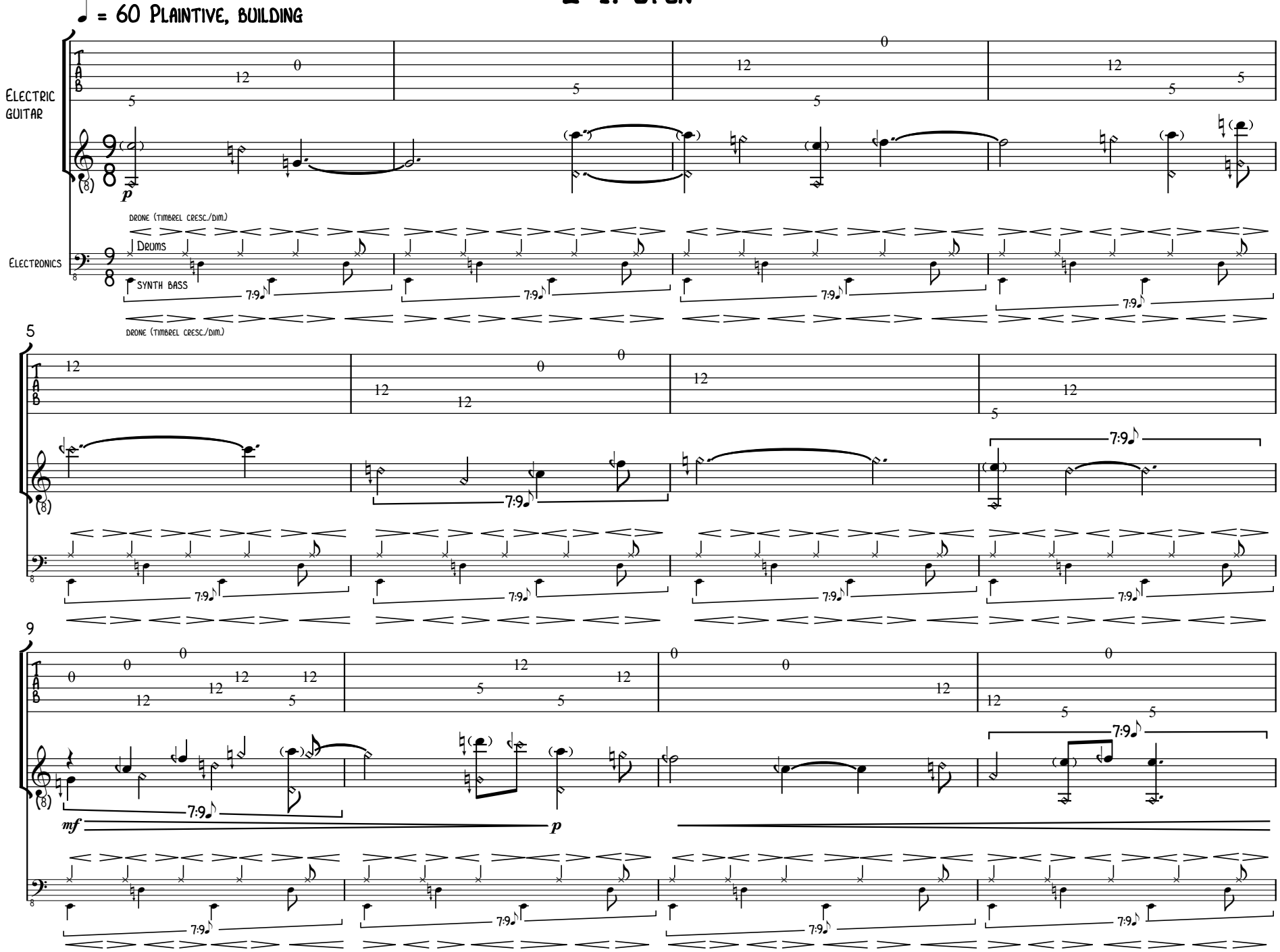
Trigger electronic part for 2-3 through 2-4here

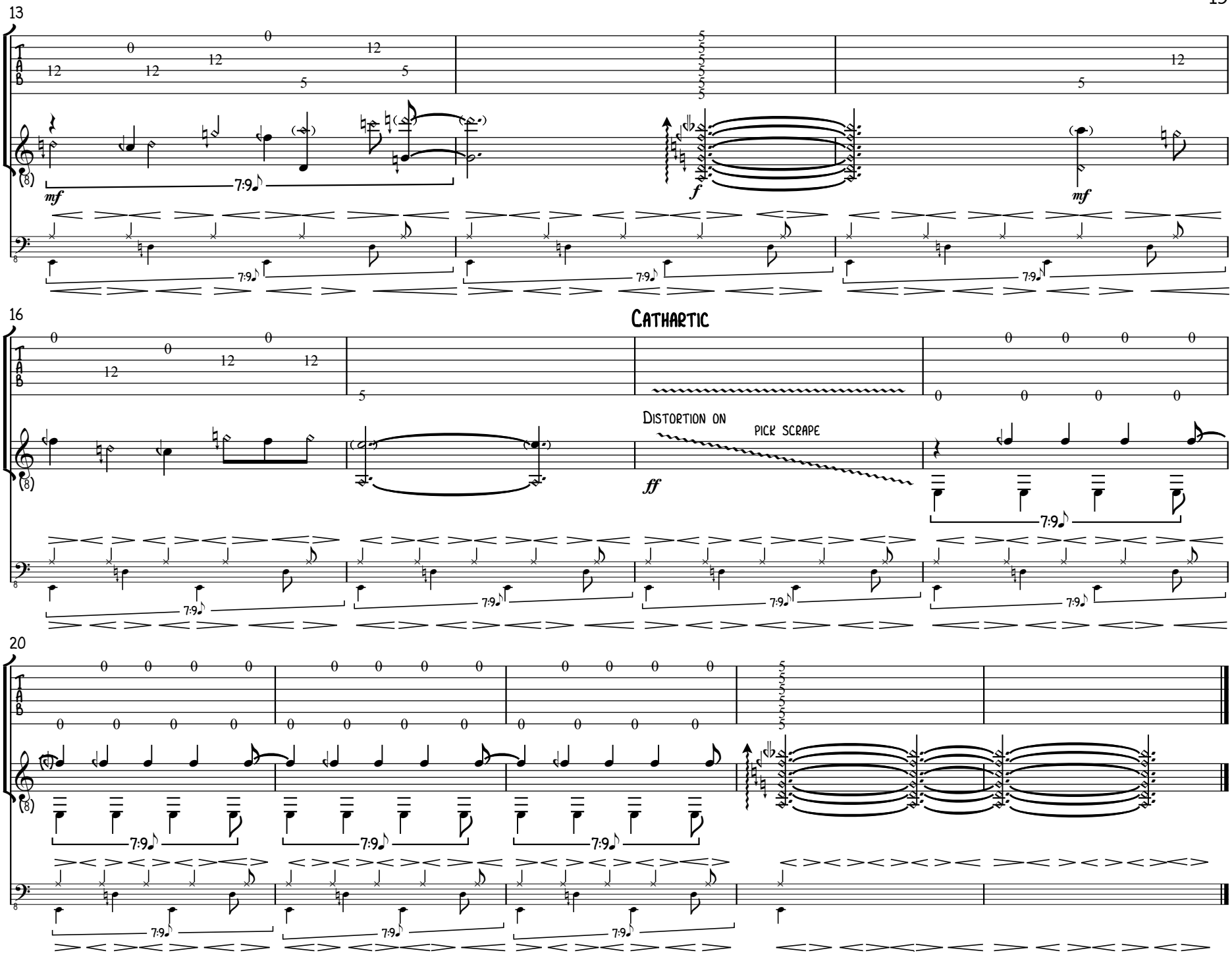
2-3. Interlude #2

♩ = 70 Resolute



2-4. Open


♩ = 60 Plaintive, building
Electric Guitar
Electronics
Drone (timbrel cresc./dim.)
Drums
Synth Bass
Drone (timbrel cresc./dim.)
5
9
p
mf
p
7:9


13
mf
7:9
f
mf
16
CATHARTIC
DISTORTION ON
PICK SCRAPE
ff
7:9
20
7:9