Benjamin Lieberman

Atmavictu

for Wind Quintet and Electric Guitar

(2019)

Duration:

c. 9-10 minutes

Transposed Score

Instrumentation:
Electric guitar
Flute/Piccolo
Oboe
Clarinet in B♭
Horn in F
Bassoon

Notes on tuning and pitch material:

Atmavictu draws in part on pitch material derived from partials 8-15 of the harmonic series, as well as from higher order partials having related just relationships to those partials. A double horn in F and B♭ is required. Microtonal accidentals ideally denote precise pitches in the harmonic series. In the Horn and Guitar, microtonal accidentals should be interpreted to denote the unadjusted pitch values of the natural harmonics. In the remaining instruments, these pitch values may be rounded to the closest equal-tempered microtone so as to approximate the pitches of the natural harmonics.

The 11th harmonic (+51c or -49c) is denoted by the quarter-tone sign(s). The 13th harmonic (+40.5c or -59.5c) is denoted by an altered quarter-tone, or more precisely a fifth-tone sharp or three tenth-tones flat sign. The 7th and 14th harmonics (-31c) are denoted by a sixth-tone flat. The 5th and 10th harmonics (-14c) and the 15th harmonic (-12 cents) are denoted by a sixteenth tone-flat sign.

Sixth-tones, eighth-tones, and sixteenth-tones are also used to approximate just intervals from partials 8-15. For example, the Oboe's entrance at measure 6 on a C eighth-sharp is intended to approximate a just major third (5/4) from the 13th harmonic of C (Ab fifth-sharp) played by the horn. Put another way, C eighth-sharp (+ 25c) is intended to approximate the pitch value of the "5th harmonic of the 13th harmonic" of equal tempered C, i.e., the 65th harmonic of equal tempered C, which deviates from equal tempered C by about 26.8 cents.

The following microtonal accidental symbols are used:

= 3 quarter-tones sharp (or +151 c)

= 1 quarter-tone sharp (or + 51 c)

= 1 quarter-tone flat (or -49 c)

= 3 quarter-tones flat (or -149 c)

= 1 fifth-tone sharp (or +40.5 c), or 3 tenth-tones flatter (or -59.5 c) than the sharp - arrow modifies quarter tone symbol by -10 cents*

= 1 fifth-tone sharper than the flat (+ 40.5 c), or 3 tenth-tones flatter than the natural (- 59.5 c) - arrow modifies quarter tone symbol by -10 cents**

= 1 sixth-tone sharp

= 1 sixth-tone flat (or -31c)

= 1 sixth-tone flatter than the flat (or -131c)

= 1 sixth-tone flatter than the sharp (or +69 c)

= 1 eighth-tone sharp

= 1 eighth-tone flat

= 1 eighth-tone sharper than the sharp

= 1 eighth-tone flatter than the flat

↑ = 1 sixteenth-tone sharp (approximate - in a range of 10-14 cents)

↓ = 1 sixteenth-tone flat (approximate - in a range of 10-14 cents)

The arrows (↓↑) may also modify a flat or sharp by approximately 1 sixteenth-tone: , , ,

*Denotes 13th harmonic in Horn in series in which sixth scale degree of the diatonic major scale of the fundamental is a sharp (e.g., the G sharp in the B series is lowered by 59.5 cents to the natural 13th harmonic.)
** Denotes 13th harmonic for Horn in series in which sixth scale degree of the diatonic major scale of the fundamental is natural (e.g., the A in the C series is lowered by 59.5 cents to the natural 13th harmonic).

All accidental indications carry through the measure.

Notes for individual instruments:

In the cue staff of each part, the all-open string chord played by the guitar is indicated by a rectangular notehead, rather than the spelled-out chord.

In the **Horn** part, passages which are to be played on the natural harmonics are indicated as follows: **C**, **D♭**, **D**, etc., where the bracket indicates the duration of the valve position, specified by the sounding pitch of the fundamental. All of the pitches under a bracket should be played at their natural tuning, without any intonation adjustments. The harmonics which significantly deviate from the equal tempered pitch are specified as noted above. The 13th harmonic is also further indicated by the number 13 provided below the staff.

The **Guitar** should be tuned, from 6th string to 1st string, as follows: C2; G2; E3 -14c; Ab3 +41c; Bb3 - 31c; B3 -12. That is, the guitar is tuned to a C0 fundamental, where the 6th to 1st strings are respectively tuned to the 4th, 6th, 10th, 13th, 14th, and 15th partials. When quarter-tones are called for, the player must slightly bend the 3rd string. Chord diagrams and/or roman numerals are provided indicating fret number. In some instances, for legibility, some microtonal accidentals are omitted in chord clusters. However, the correct note will still be played if the chord diagram is followed. Altered quarter-tone symbols always indicate a note played on 3rd string, and sixth-tone-flat symbols always indicate a note played on the 2nd string.

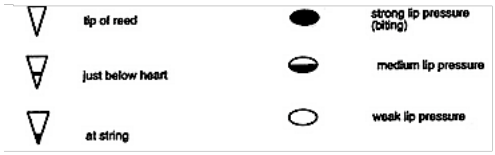
Fingering charts for each woodwind instrument are provided throughout the score, at least at the first occurrence of each microtone. These fingering charts are suggestive only. For some smaller microtones, only the closest pitch for which a chart was available is provided. If more than one microtone exists in a given measure, arrows and/or brackets are provided to clarify which diagram corresponds to which microtone. In addition, multiple fingering charts are often provided for the same pitch so that the player may determine the best balance between intonation and playability. The players are asked to make fingering and embouchure adjustments as they see fit. If precise intonation is impossible for a given pitch, an approximation to the closest quarter-tone or semitone is acceptable.

The **Flute** part calls for air sounds at times. The performance instructions as indicated throughout the score should be generally followed, but the flutist is welcome to improvise or embellish upon the notated rhythms or specific instructions according to their taste. All flute fingering diagrams come from Robert Dick's *The Other Flute*. The flutist is asked to play the piccolo in the section between Rehearsals F and H. Fingering diagrams are not provided here. The flutist is requested to determine best fingerings for the desired microtones.

In the **Oboe** part, all quarter-tone fingering diagrams come from *Oboe Unbound, Contemporary Techniques* by Libby Van Cleve, whereas all eighth-tone fingering charts come from *The Techniques of Oboe Playing* by Peter Veale.

The oboist is asked to perform a metamorphic multiphonic at measures 41-44. This multiphonic corresponds to metamorphic multiphonic 13, which can be heard at http://libbyvancleve.com/oboe-unbound/

The diagrams at measures 41-44 are also from *Oboe Unbound,* and indicate lip pressure and reed position, in addition to fingering.
A key is provided below:



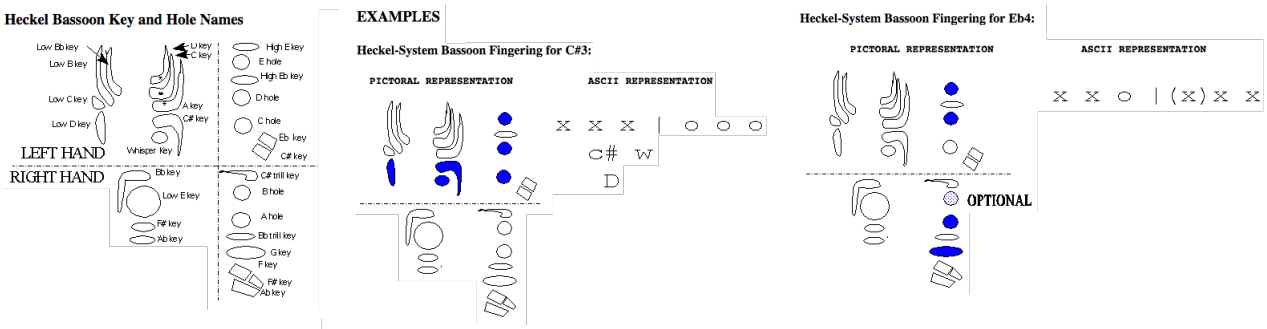
The oboist is also asked to perform double-tonguing on air at measures 154-157. The oboist should freely improvise, as long as the resulting sounds are quick and mainly unpitched. An example of this technique can also be heard at http://libbyvancleve.com/oboe-unbound/

The **Clarinet** part calls for several types of multiphonics. All of the multiphonics and their associated fingering charts come from https://heatherroche.net/
The multiphonics at measures 9-11 and 70-72 correspond to multiphonic nos. 12 and 28, and may be heard at:
https://heatherroche.net/2018/09/13/27-easy-bb-clarinet-multiphonics/
Dyad multiphonics at measures 40, 51, 137, and 138 may be heard here:
https://heatherroche.net/2014/07/02/on-close-dyad-multiphonics-for-bb-clarinet/
Spectral multiphonics at measures 43-48 and 79-81 are performed by overblowing the fundamental. Spectral multiphonics are notated with a diamond notehead at the fundamental pitch, and approximate desired higher partials with regular noteheads above the diamond. This technique, as well as the "downward sweep" called for at measure 43, is explained with audio examples here: https://heatherroche.net/2016/09/26/spectral-multiphonics-bb-and-bass/

All quarter-tone fingerings for the Clarinet are taken from Jason Alder's Clarinet Quarter-Tone Fingering Chart, which is publicly available at the following link:
https://www.jasonalder.com/fingeringchart/Clarinet_quarter-tone_fingering-chart--Jason_Alder.pdf

The **Bassoon** part calls for multiphonics to be performed at measures 38-44, 47-54, and 64-69. The notated lowest pitch represents the closest fingering, not necessarily the sounding pitch. The fingering charts for the bassoon multiphonics, as well as for microtones, are ascii fingering representations as described in the Bassoon-Family Fingering Companion by Terry B. Ewell, and provided by The International Double Reed Society at
https://www.idrs.org/wp-content/uploads/2018/04/FINGHOME.htm

All bassoon fingering charts for microtones used in this score were those provided by bassoonist Johnny Reinhard.
Reproduced below is an explanation of the ascii fingering representation, taken from the Bassoon-Family Fingering Companion:



An "x" indicates a covered hole or G key, an "o" (not shown here) indicates an open hole or G key. When the name of a key is given the key should be depressed. The sign "/" stands for a half hole, or in some instances a venting of the hole 1/4-3/4 open. The fractions 1/4 and 3/4 designates openings more or less than a half hole when the author specifies the size of the hole. Parentheses "( )" indicate an optional hole or key. Trills are designated as "tr," with more complex trills written out as two or three fingerings.

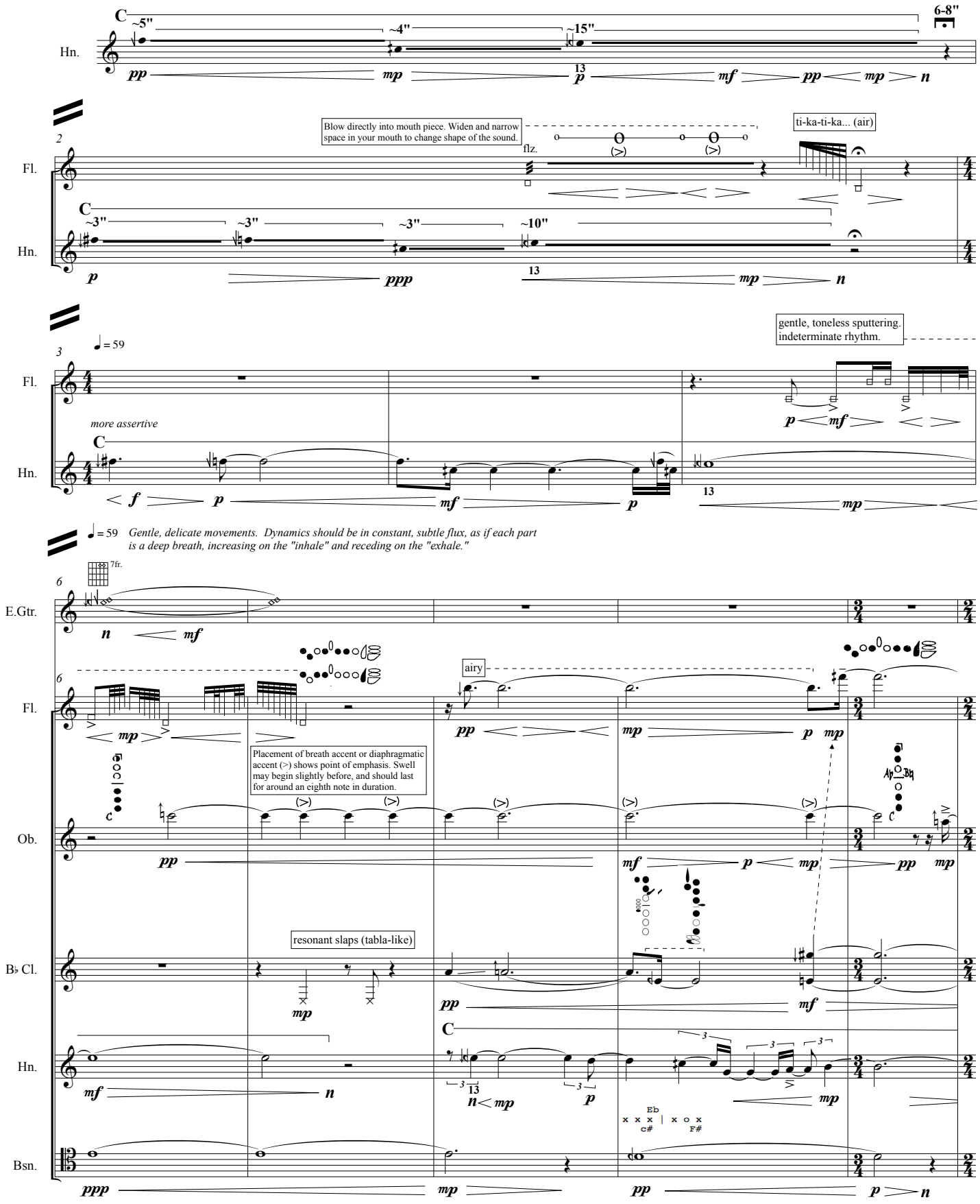
For Mom, who first gave me music

Transposed Score

Atmavictu

Benjamin Lieberman
(b. 1985)

Plaintive; Longing; Distant



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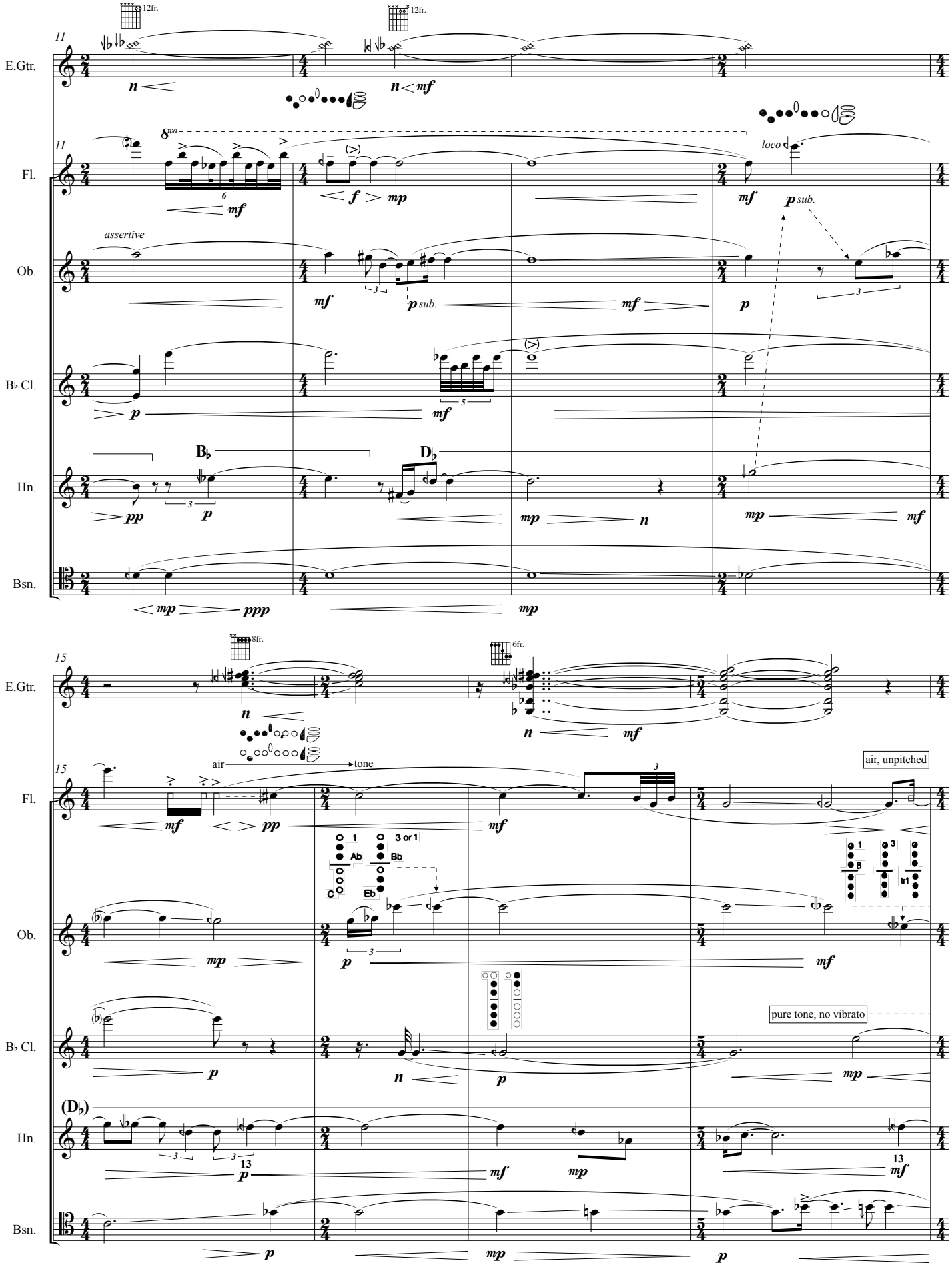
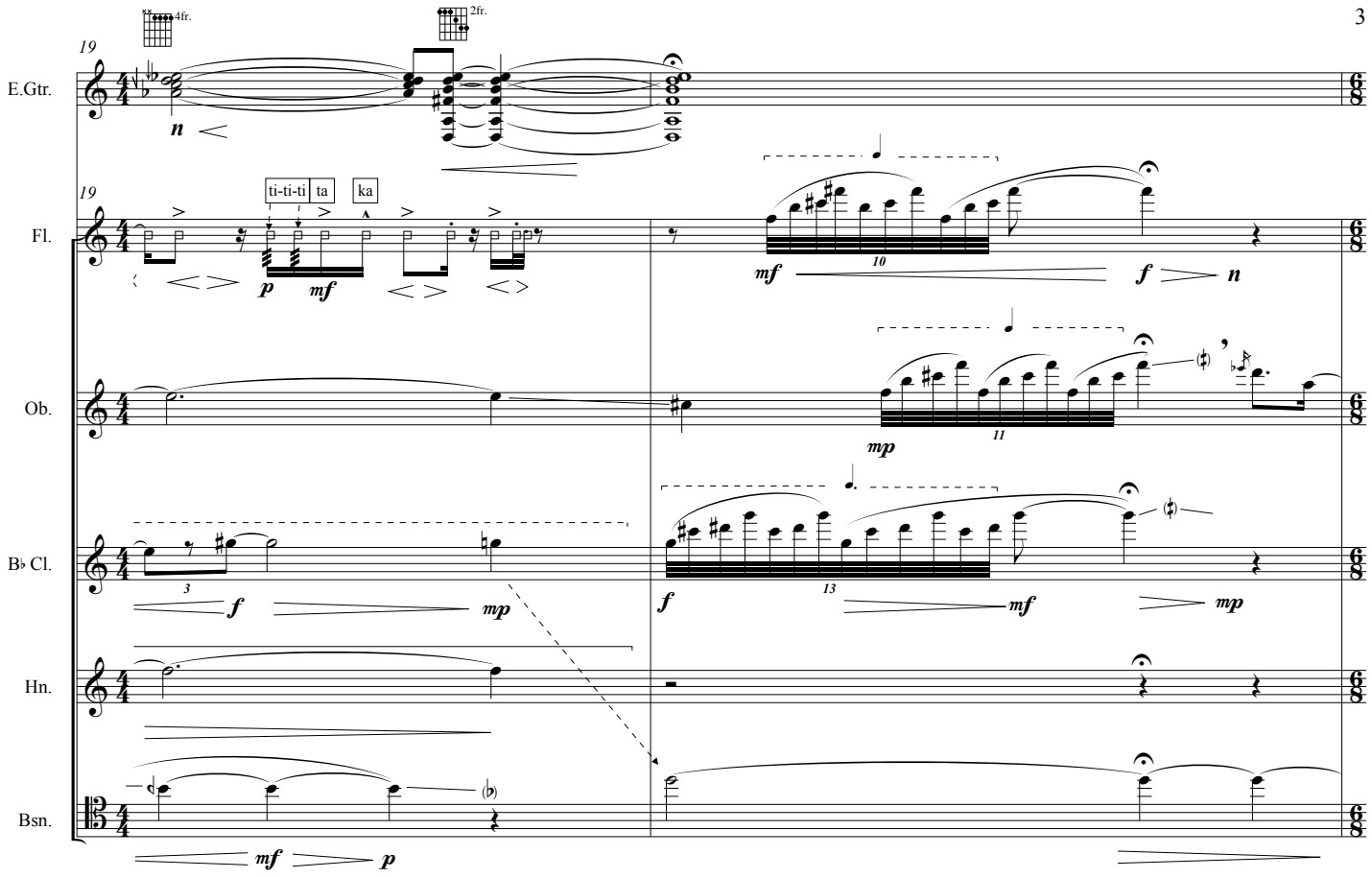
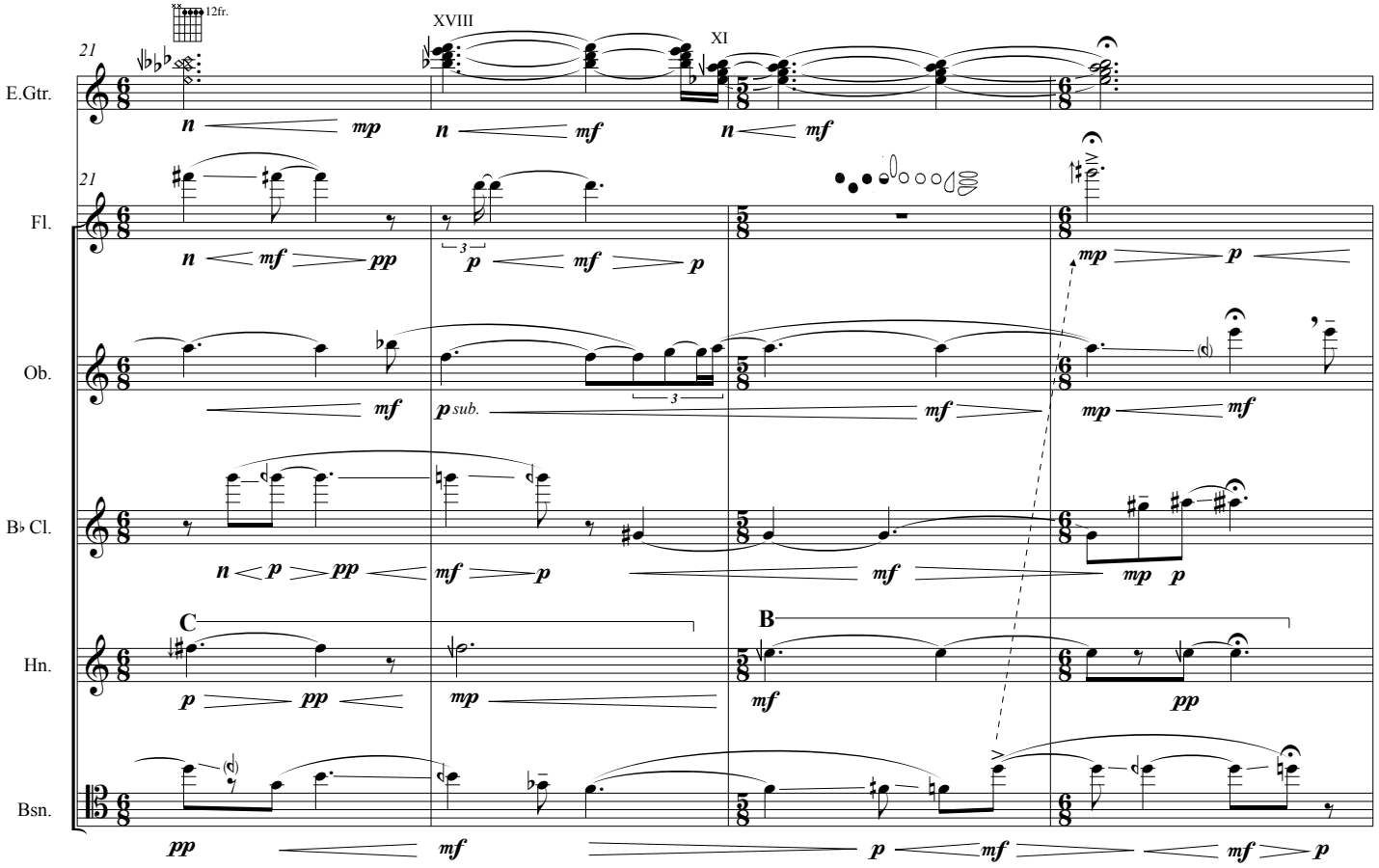
With slowly growing urgency

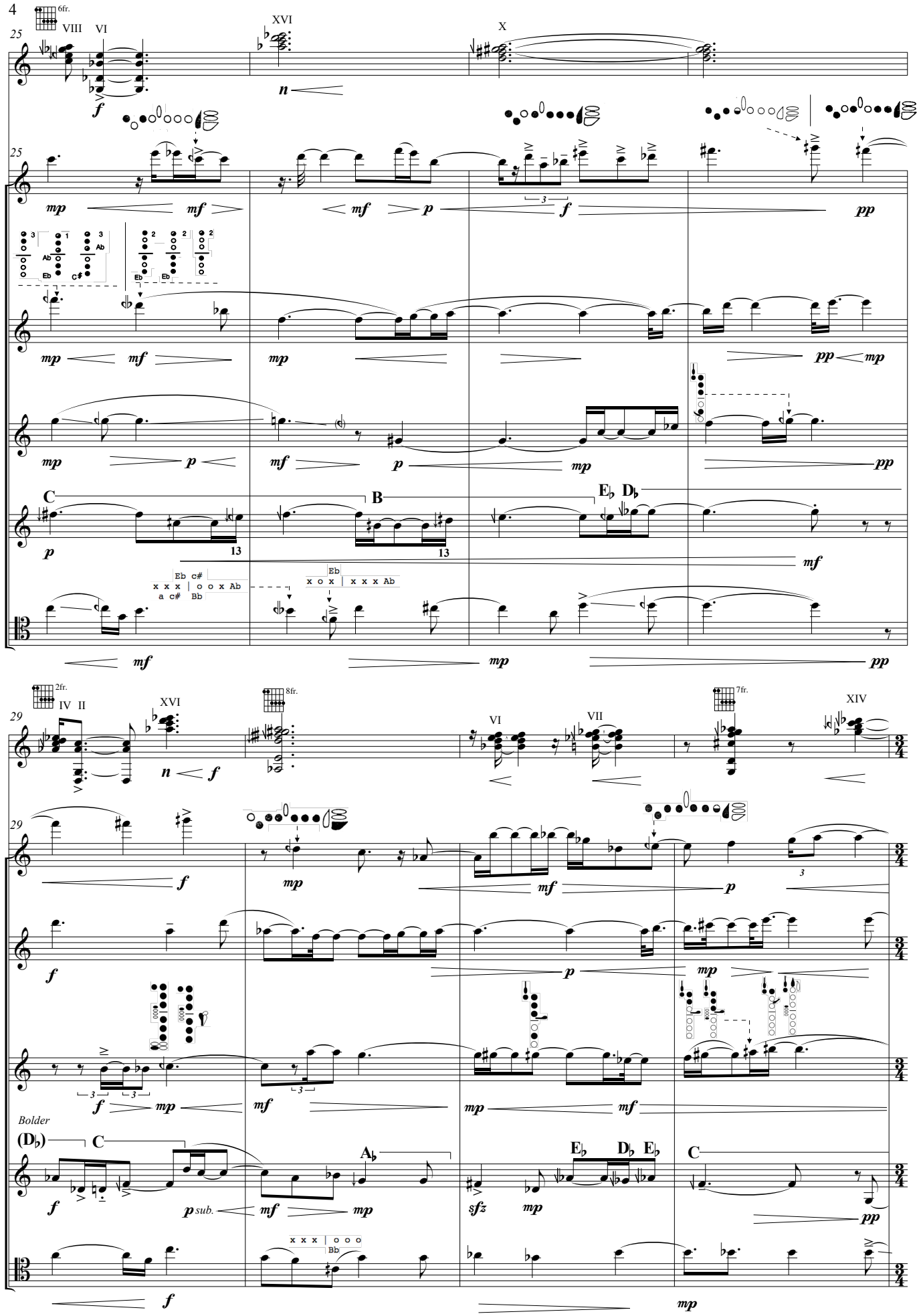


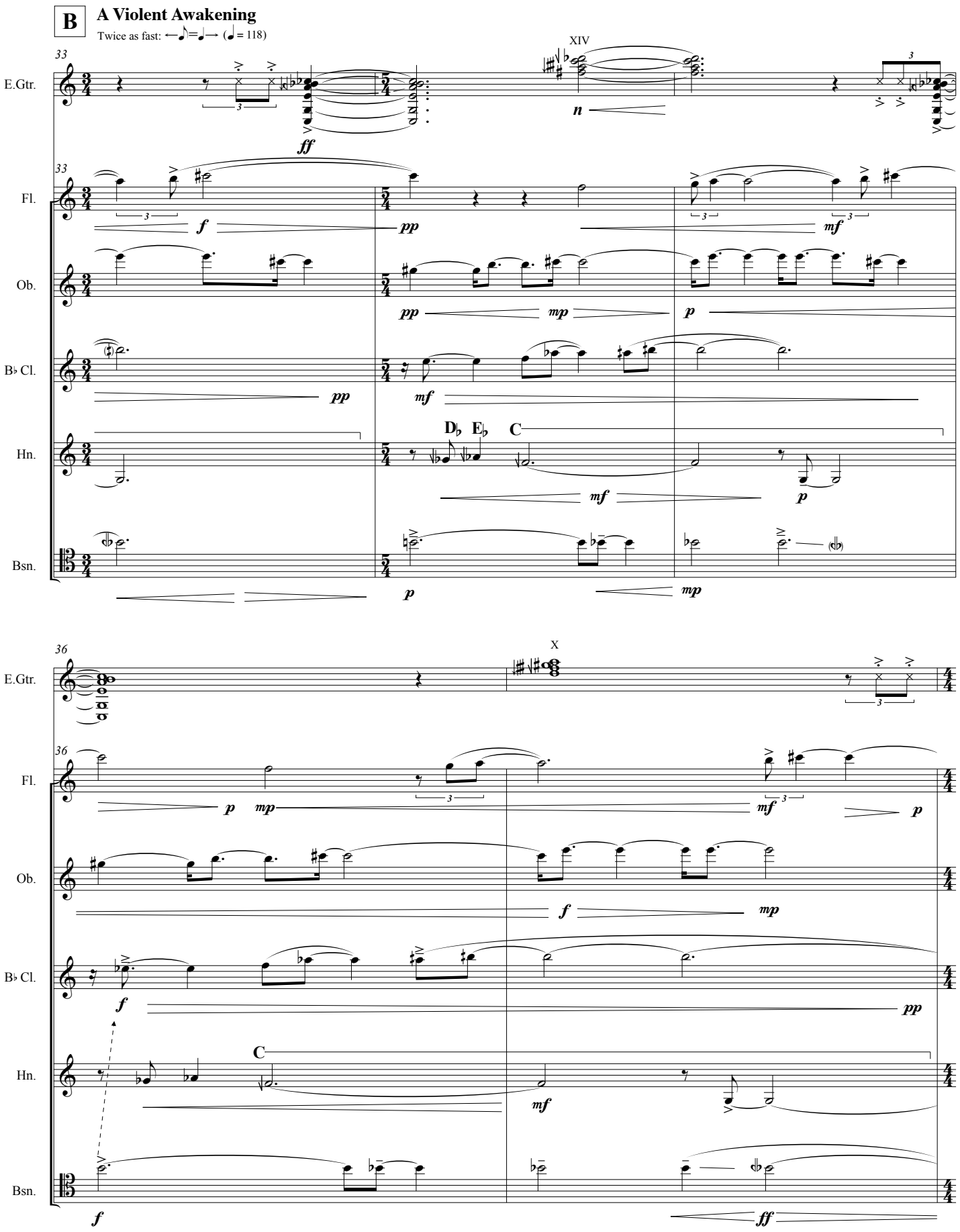


A **Undulating; Underwater** (L'istesso Tempo: ←♪=♪→)

In this section between Rehearsal A and Rehearsal B, dynamics should be mostly balanced such that instruments blend with slight undulations. Intensity should progressively increase with each successive system. The overall texture, regardless of intensity, should be shimmering, watery, and dream-like.




25
6fr.
VIII VI
XVI
X
E.Gtr.
Fl.
Ob.
B♭ Cl.
Hn.
Bsn.
C
B
E♭ D♭
29
2fr.
IV II
8fr.
VI
VII
7fr.
XIV
Bolder
(D♭) C
A♭
E♭ D♭ E♭
C


B
A Violent Awakening
Twice as fast: ♩=♩ (♩ = 118)
33
XIV
E.Gtr.
Fl.
Ob.
B♭ Cl.
Hn.
Bsn.
D♭ E♭ C
36
X

C Slower; Cascading; Cavernous (♩ = 90)

This section should see a quiet intensity, slowly building.

In this section, the guitar chords should be relatively soft so as not to overpower, and the melodies should pop out, notably louder.

38

E.Gtr.

Okay to breath/re-articulate, just avoid barlines

Fl.

Ob.

B♭ Cl.

Hn.

Bsn.

*start of metamorphic multiphonic

dyad #38

Multiphonic. Lowest note represents closest base fingering, not (necessarily) sounding pitch.

42

E.Gtr.

Fl.

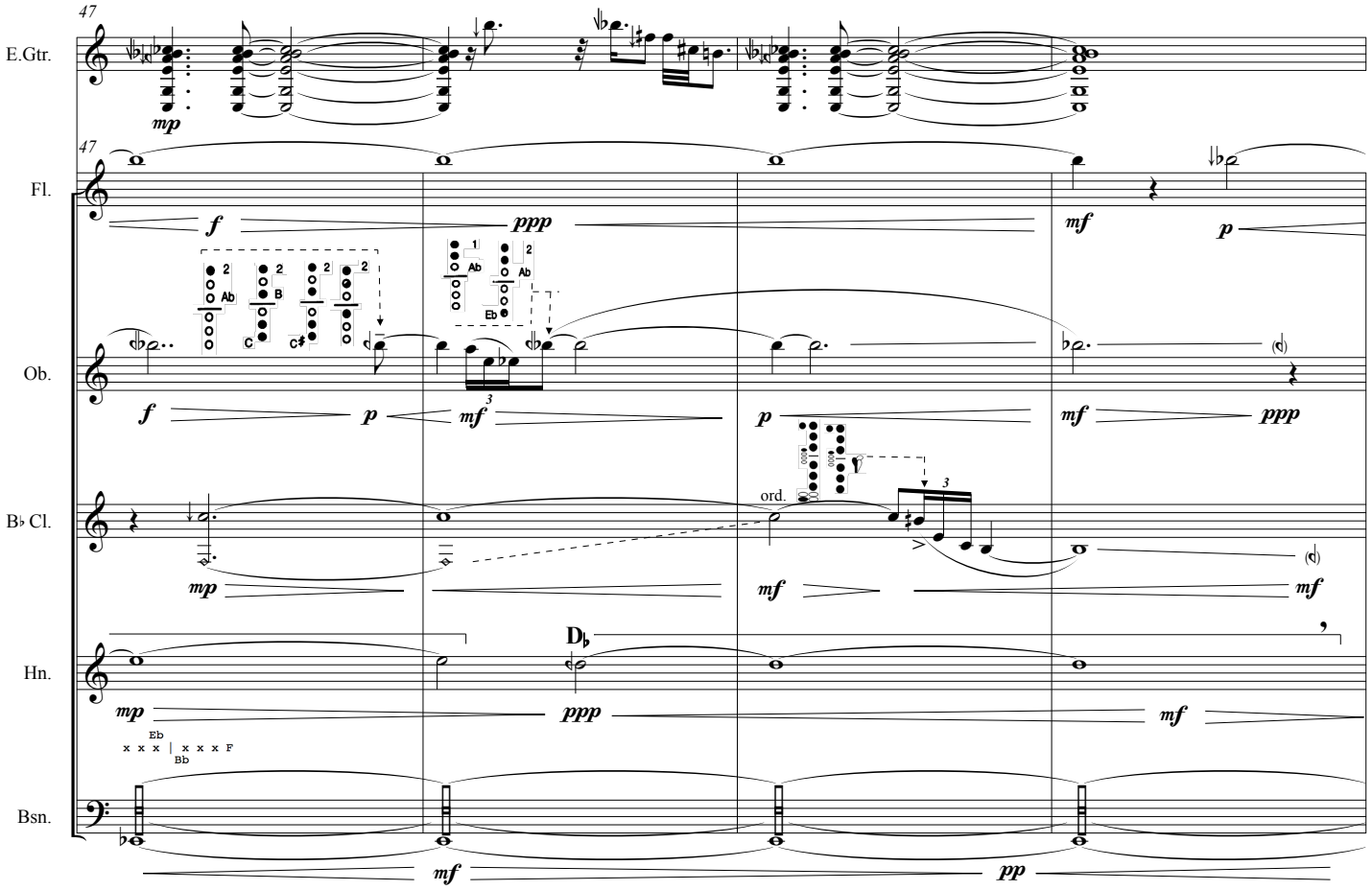
Ob.

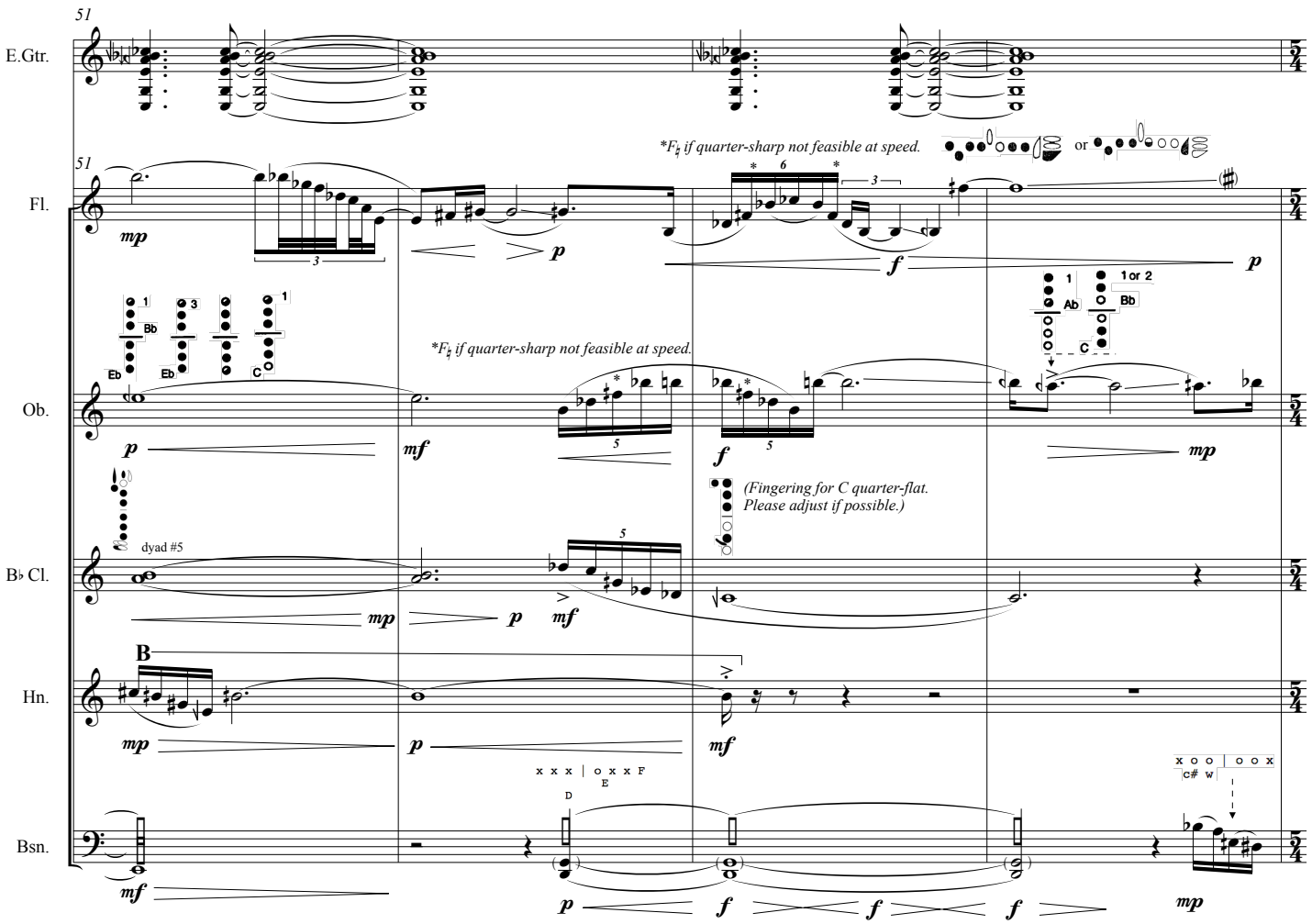
spectral multiphonic - downward sweep to fudamental, then bring out higher partials. Approximate pitches.

B♭ Cl.

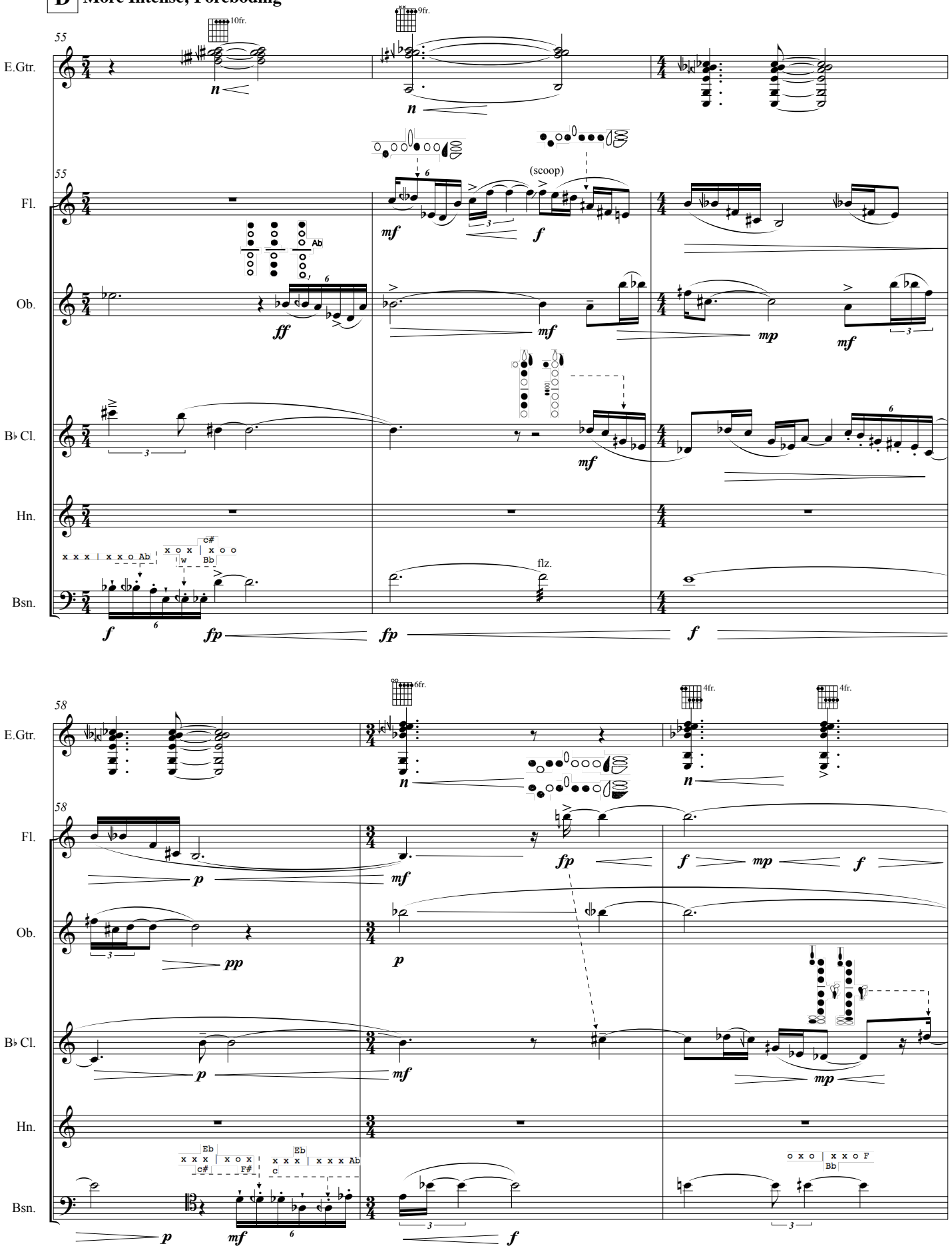
Hn.

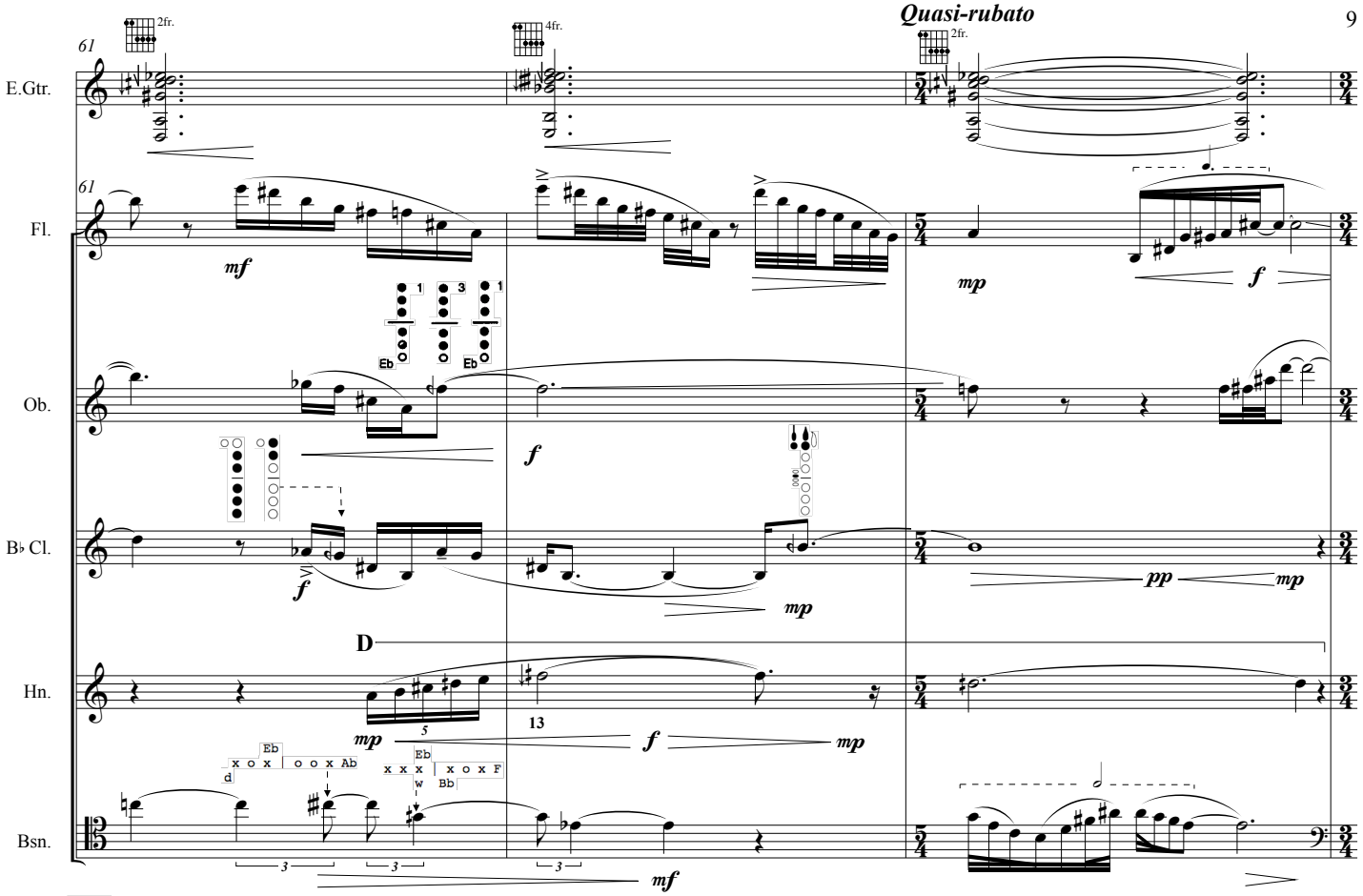
Bsn.

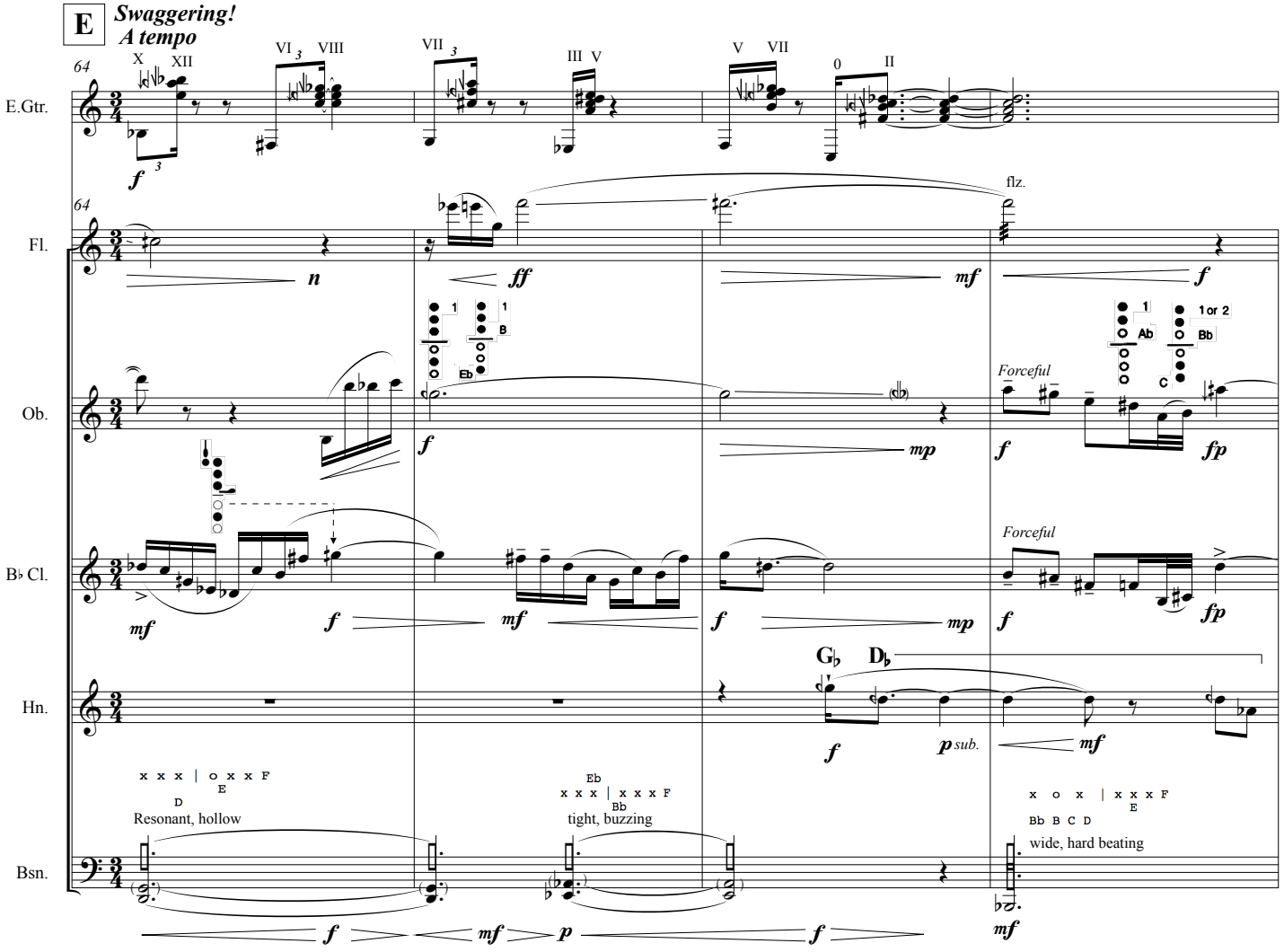

47
E.Gtr.
mp
47
Fl.
f
ppp
mf
p
Ob.
f
p
mf
p
mf
ppp
B♭ Cl.
ord.
mp
mf
mf
Hn.
D♭
mp
ppp
mf
Bsn.
mf
pp

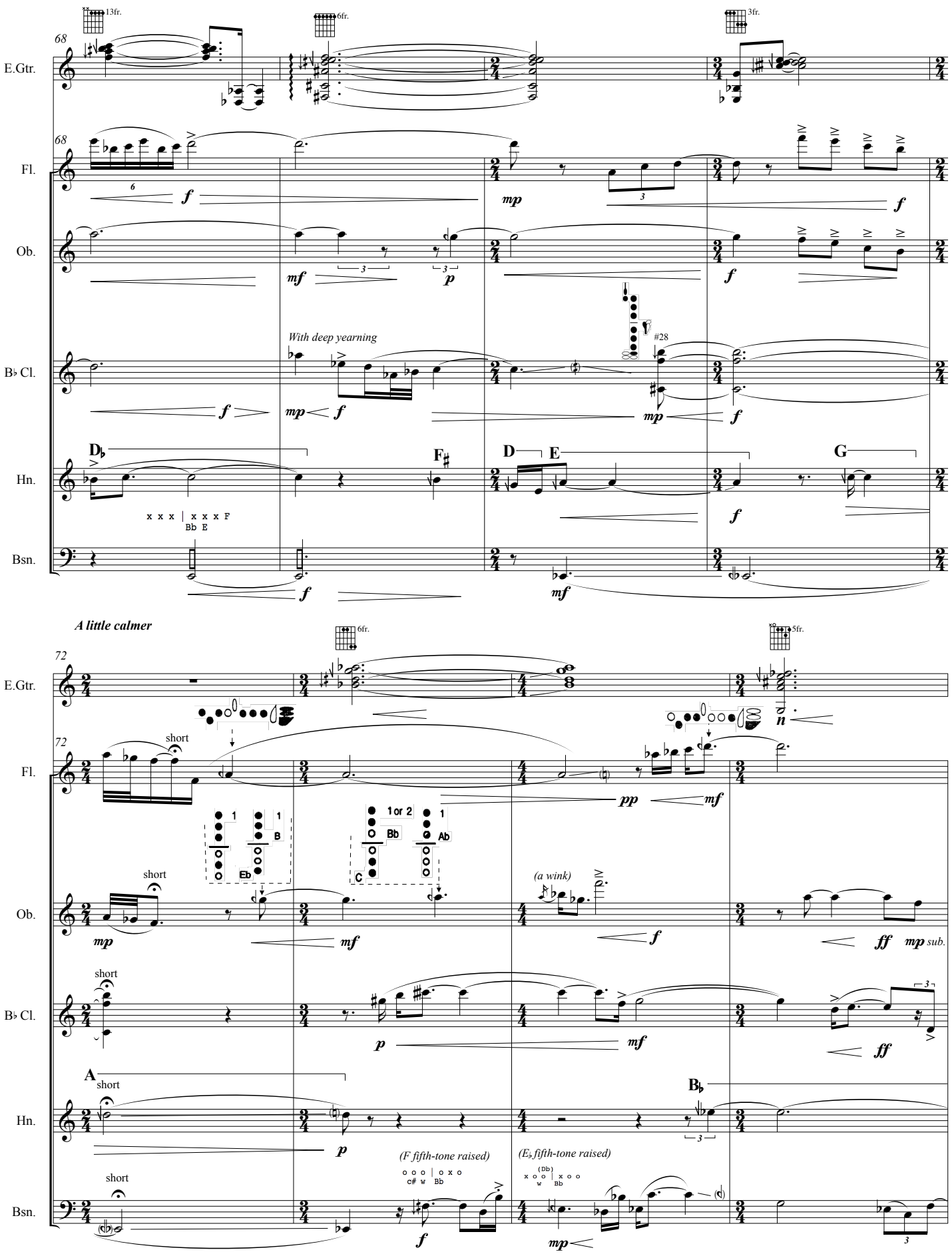

51
E.Gtr.
51
Fl.
mp
p
*F♮ if quarter-sharp not feasible at speed.
or
f
p
*F♮ if quarter-sharp not feasible at speed.
Ob.
p
mf
f
mp
(Fingering for C quarter-flat.
Please adjust if possible.)
dyad #5
B♭ Cl.
mp
p
mf
B
Hn.
mp
p
mf
Bsn.
mf
p
f
f
f
mp

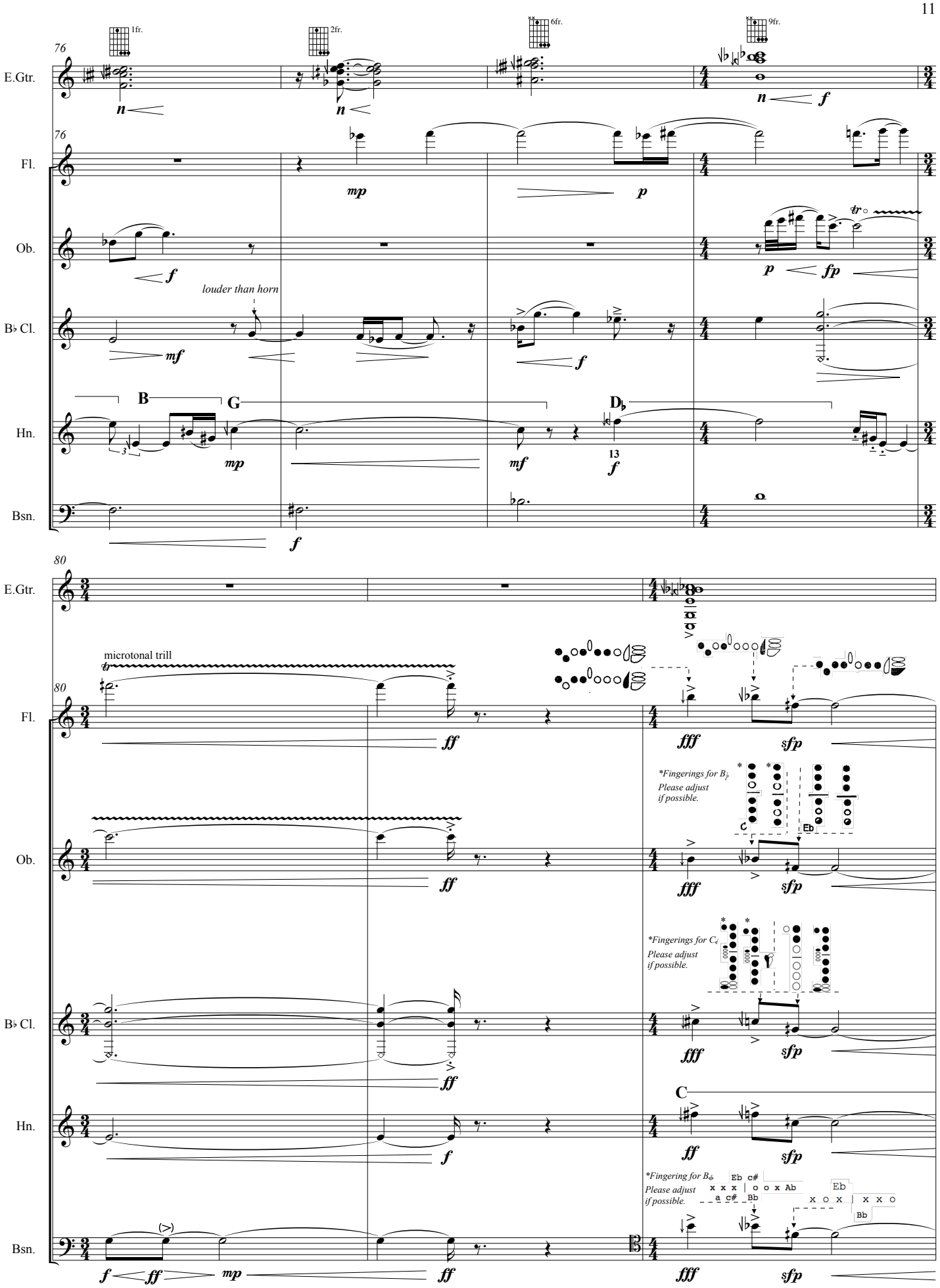
D **More Intense; Foreboding**




61
E.Gtr.
2fr.
4fr.
2fr.
Fl.
mf
mp
f
Ob.
Eb
f
B♭ Cl.
f
mp
pp
mp
D
Hn.
mp
13
f
mp
Eb
x o x | o o x Ab
d
Eb
x x x | x o x F
w Bb
Bsn.
3
3
3
mf

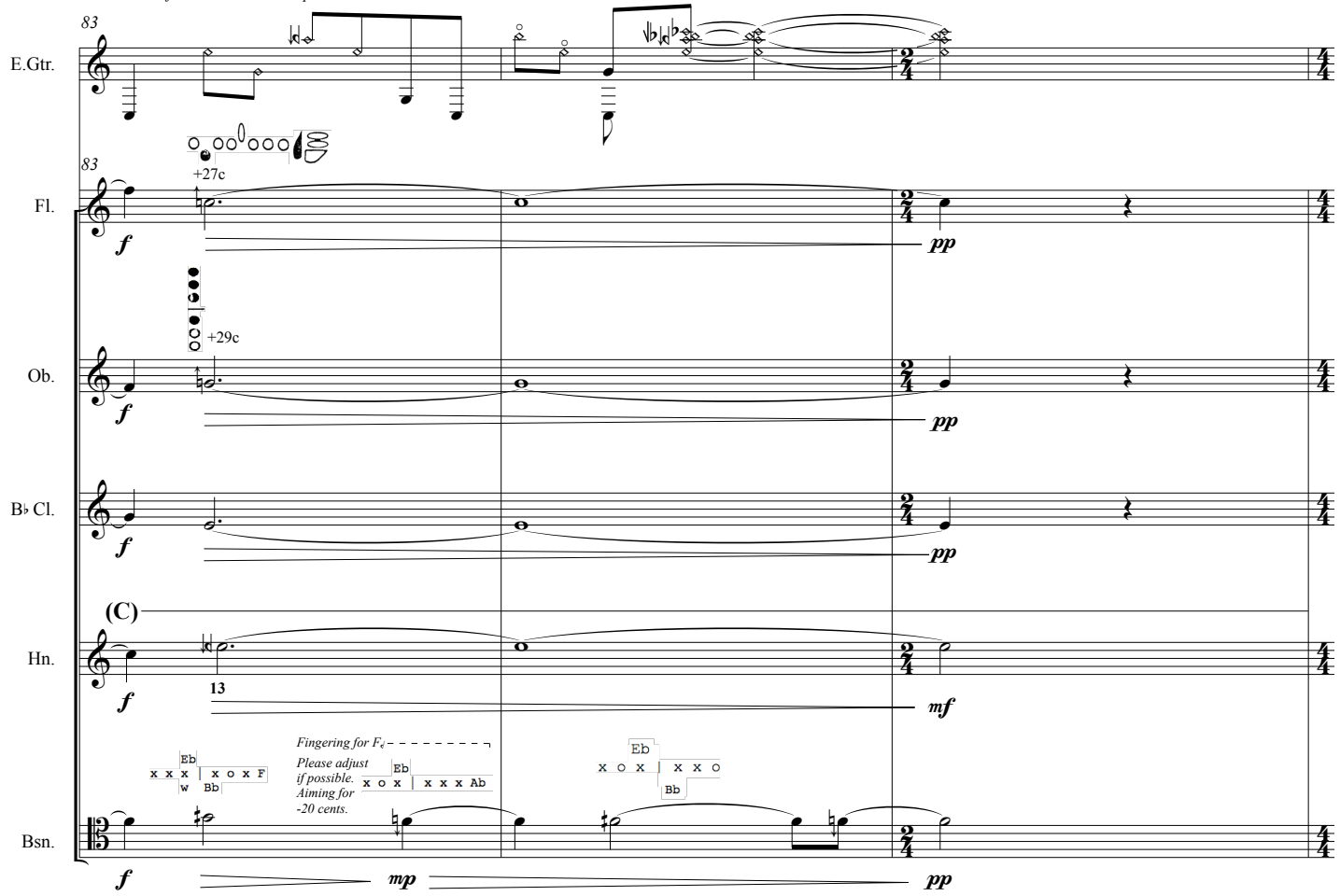

E
Swaggering!
A tempo
64
E.Gtr.
X
XII
VI
3
VIII
VII
3
III V
V VII
0
II
f
3
Fl.
flz.
n
ff
mf
f
Ob.
1
Eb
1
B
f
mp
Forceful
f
fp
1
Ab
1 or 2
Bb
C
B♭ Cl.
mf
f
mf
f
mp
Forceful
f
fp
Hn.
G♭
D♭
f
p sub.
mf
x x x | o x x F
D E
Resonant, hollow
Eb
x x x | x x x F
Bb
tight, buzzing
x o x | x x x F
E
Bb B C D
wide, hard beating
Bsn.
f
mf
p
f
mf

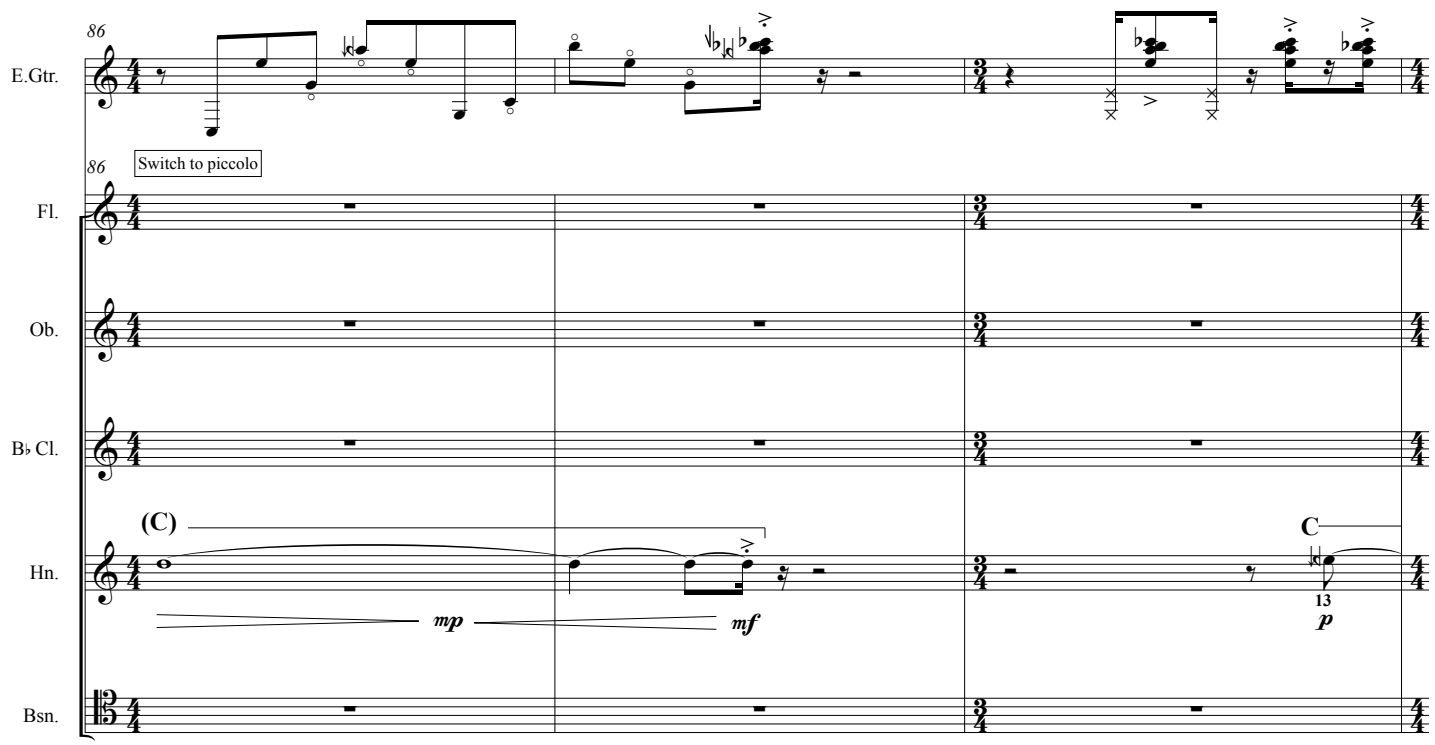

68
E.Gtr.
13fr.
6fr.
3fr.
Fl.
Ob.
B♭ Cl.
With deep yearning
#28
Hn.
D♭
F♯
D
E
G
x x x | x x x F
Bb E
Bsn.
A little calmer
72
5fr.
short
1 or 2
Eb
Bb
Ab
C
(a wink)
A
B♭
(F fifth-tone raised)
(E♭ fifth-tone raised)
c# w Bb
(Db)
w Bb

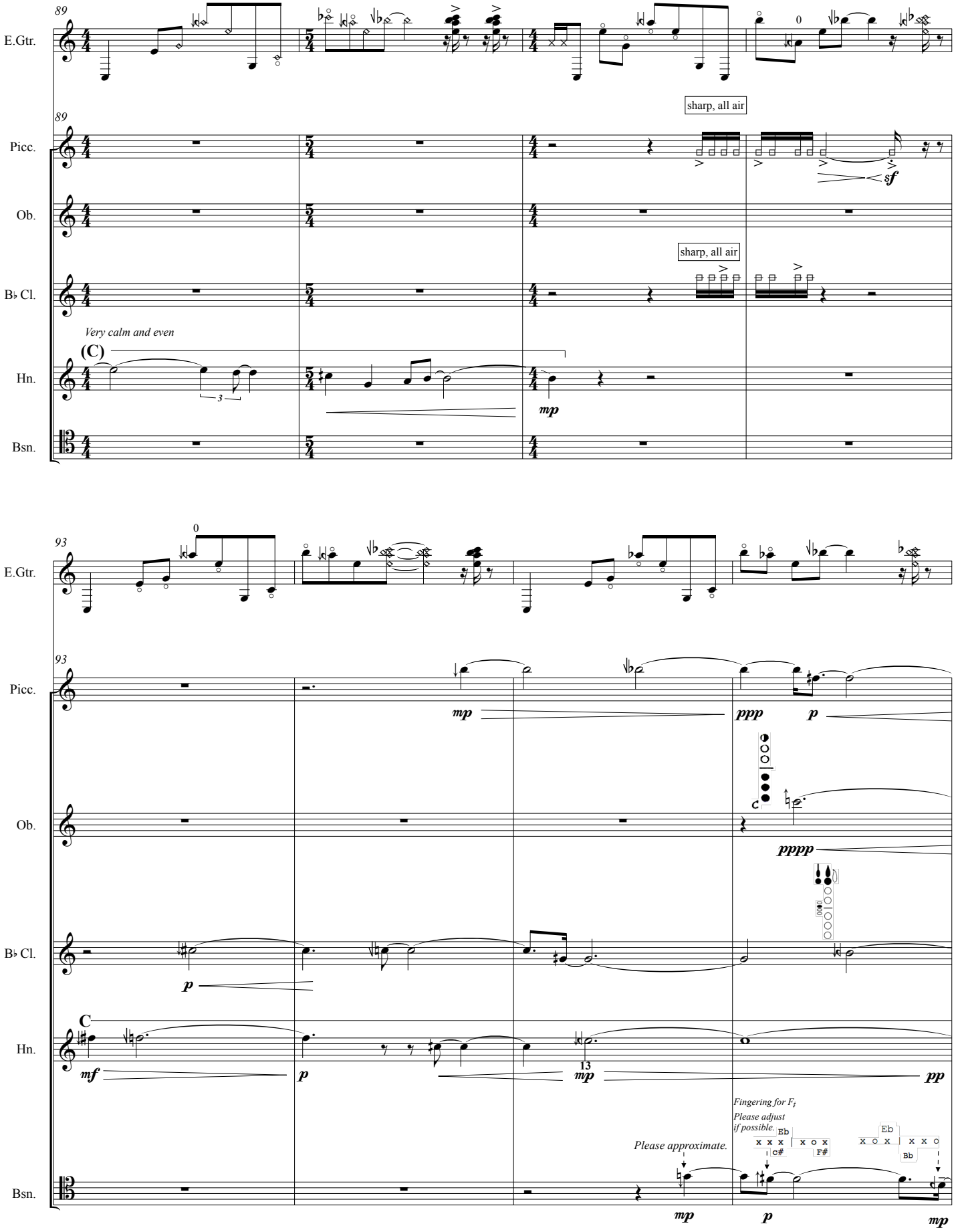

76
E.Gtr.
1fr.
2fr.
6fr.
9fr.
n
f
Fl.
mp
p
Ob.
tr
fp
louder than horn
B♭ Cl.
mf
B
G
D♭
Hn.
13
Bsn.
80
microtonal trill
ff
fff
sfp
*Fingerings for B♭
Please adjust
if possible.
C
Eb
*Fingerings for C♯
Please adjust
if possible.
*Fingering for B♭
Please adjust
if possible.
Eb c♯
x x x | o o x Ab
a c♯ Bb
Eb
x o x | x x o
Bb

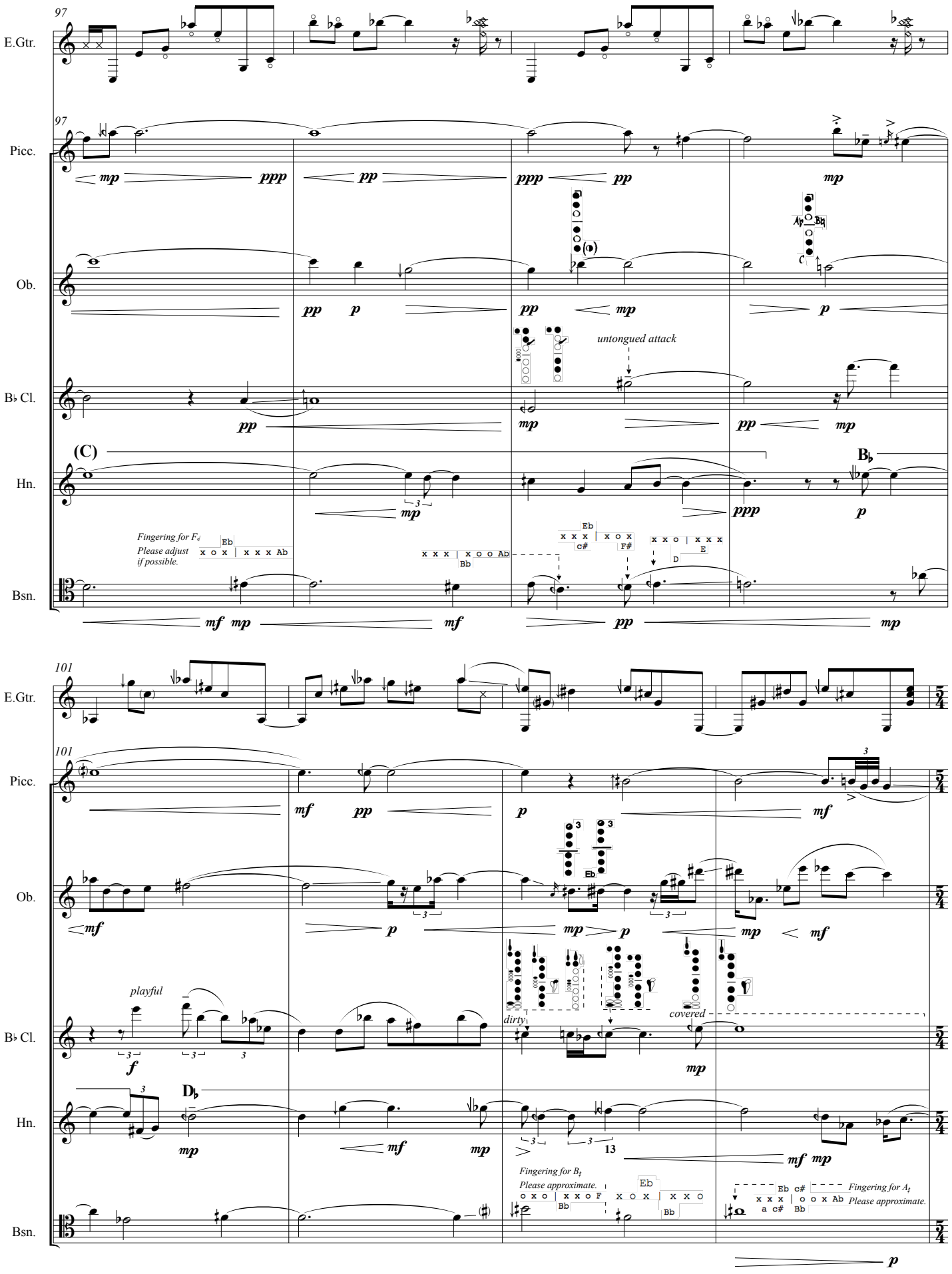
F **Laid back; Loose; Gritty**

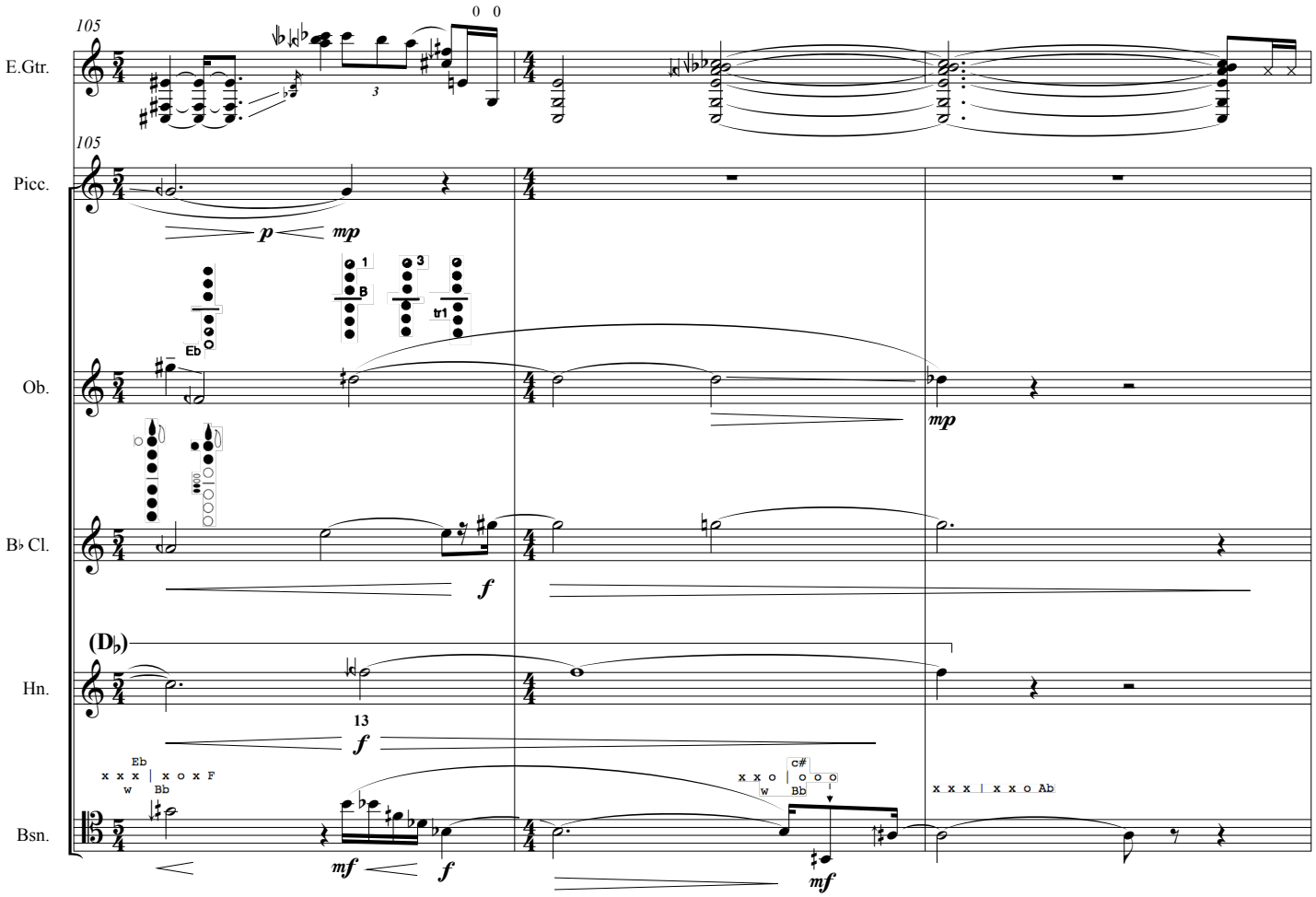
Guitar should be loose; some improv/embellishments that stay within the groove are acceptable. Improvise dynamics. Be out front, but do not overpower.



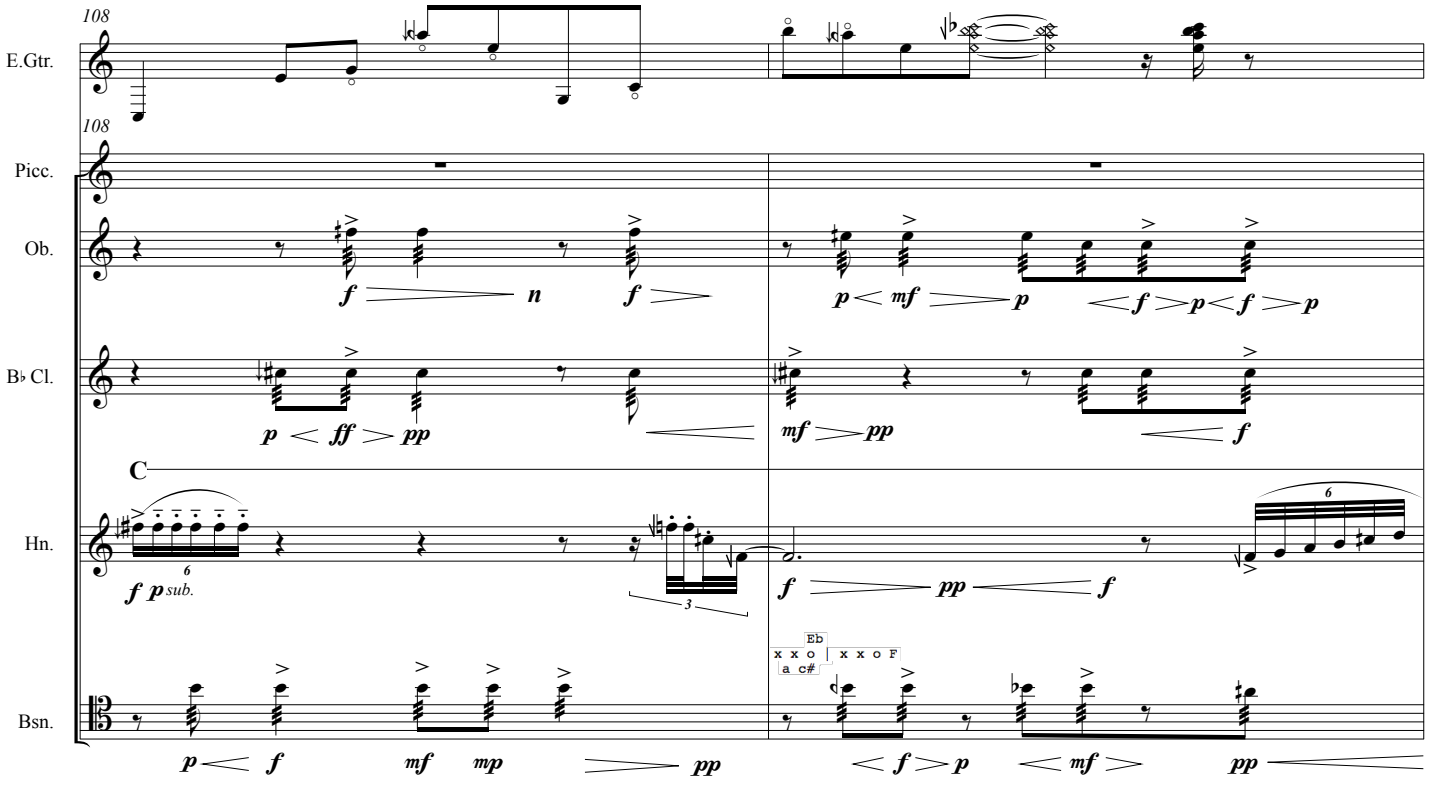


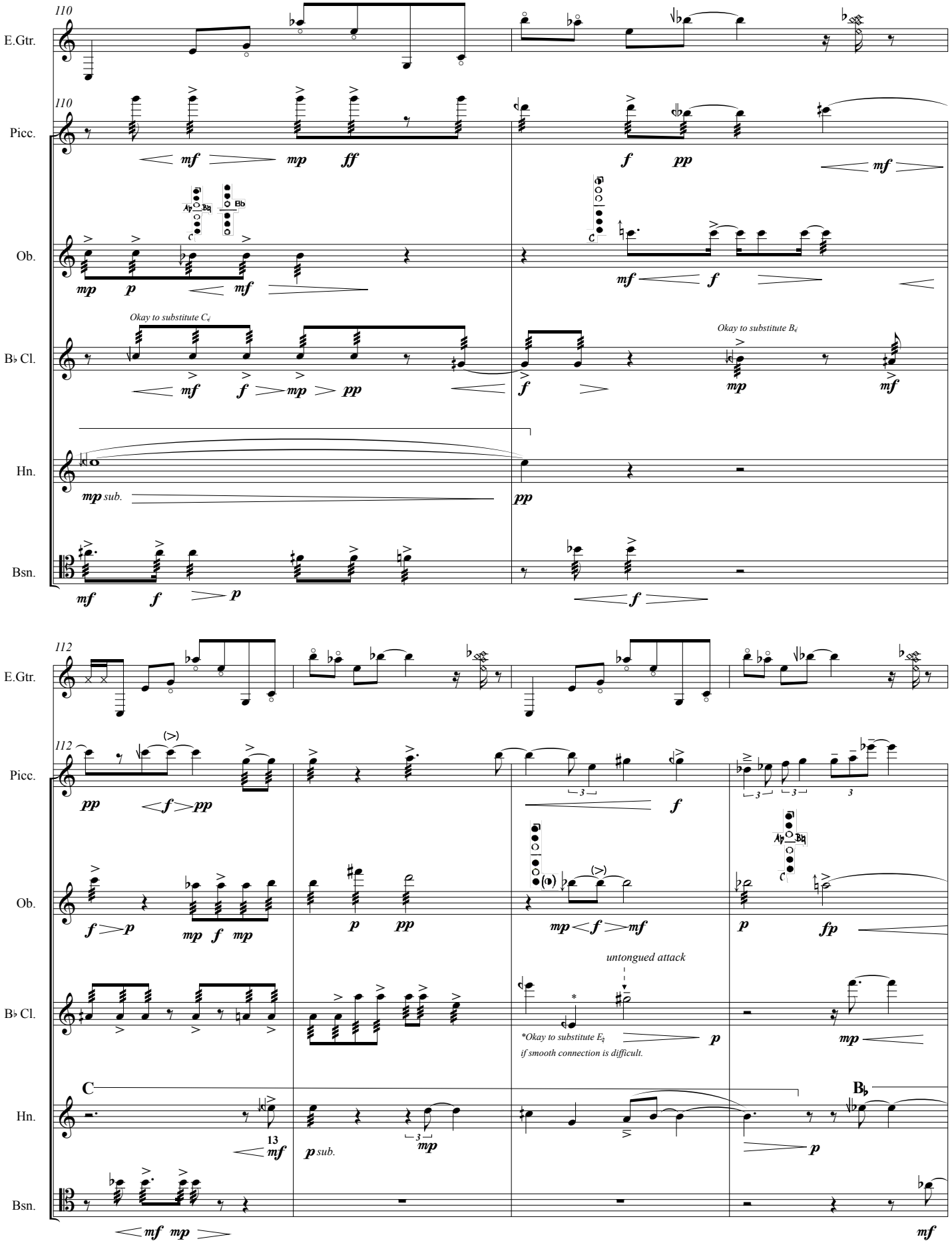

89
E.Gtr.
89
Picc.
sharp, all air
sf
Ob.
sharp, all air
B♭ Cl.
Very calm and even
(C)
Hn.
mp
Bsn.
93
E.Gtr.
93
Picc.
mp
ppp
p
Ob.
pppp
B♭ Cl.
p
C
Hn.
mf
p
13
mp
pp
Fingering for F♯
Please adjust
if possible.
Please approximate.
Bsn.
mp
p
mp

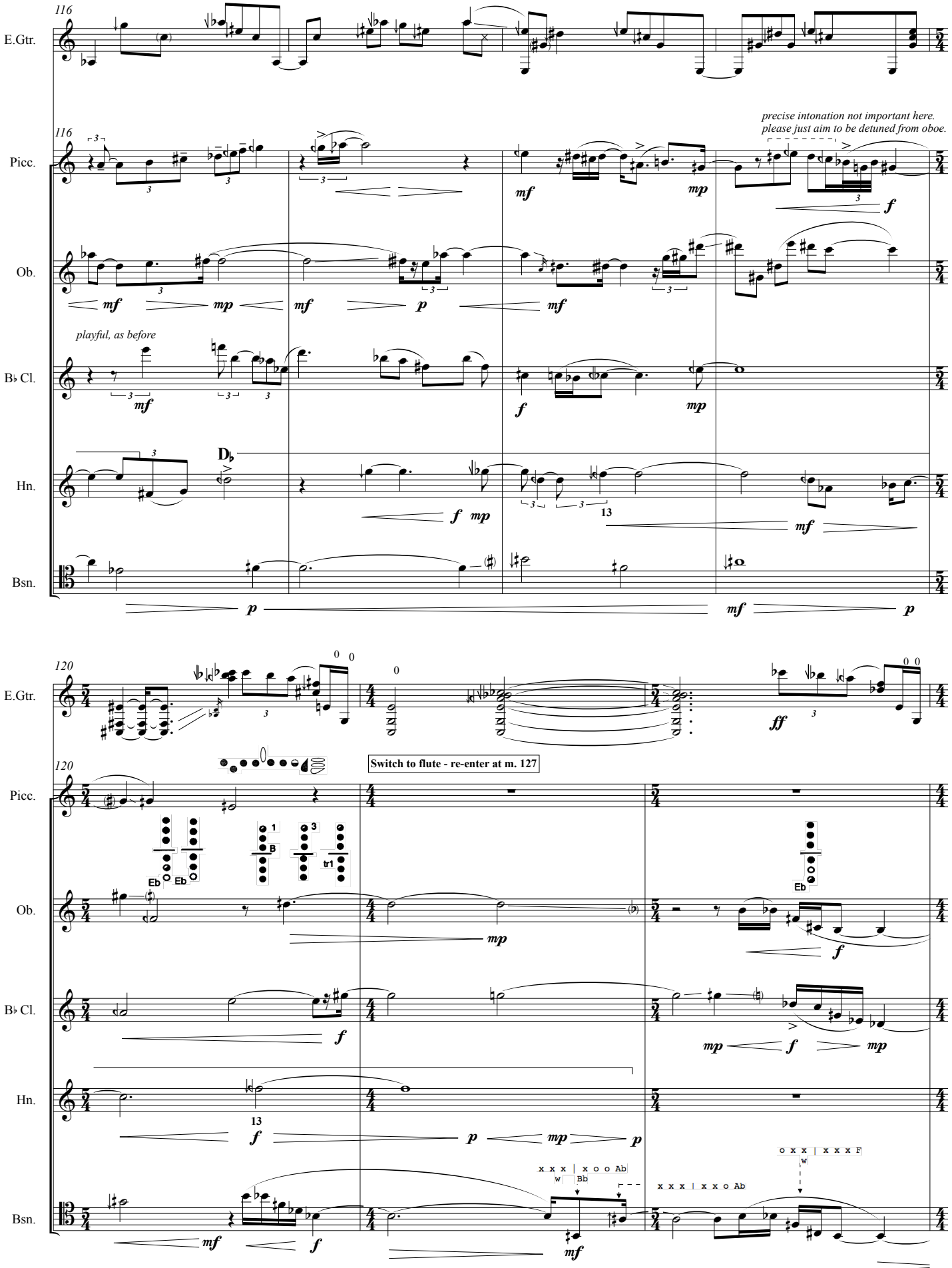

97
E.Gtr.
Picc.
Ob.
B♭ Cl.
Hn.
Bsn.
(C)
B♭
untongued attack
Fingering for F♯
Please adjust if possible.
101
playful
dirty
covered
D♭
Fingering for B♮
Please approximate.
Fingering for A♮
Please approximate.

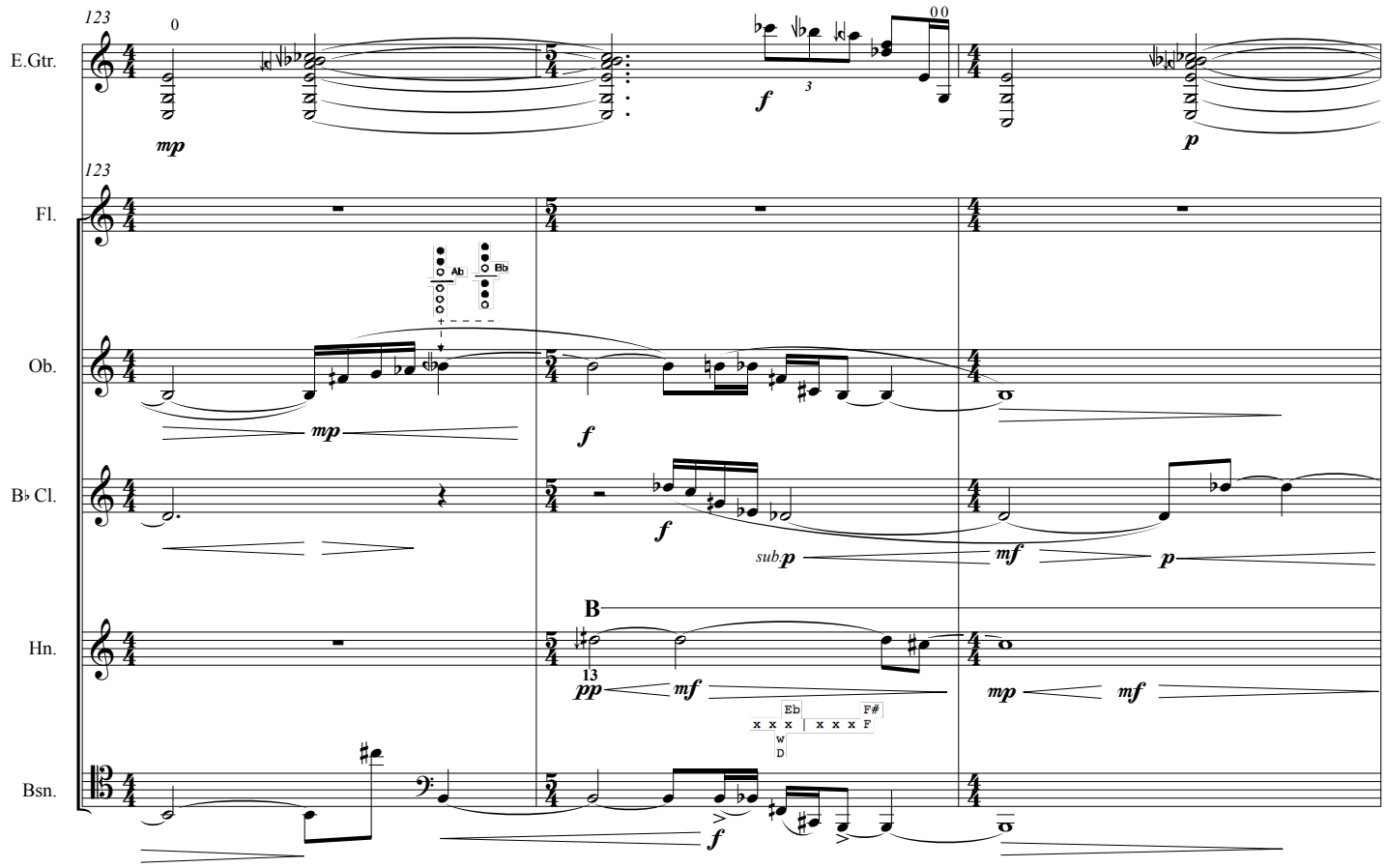


G *In measures 108-115:*
*Unaccented notes with a tremolo should form a stuttering, pulsating texture at around **pp-mp**. Accented notes with a tremolo should quickly "pop out" for the duration of one to three attacks or pulses at the indicated dynamic level, and then immediately recede back into the texture. The speed of the stutter, i.e., individual pulsations, should be around triplet 16th or 32nd notes, with some slight variation. Please achieve this effect either by staggering or shaking the air flow without tonguing or with very quick, light tonguing so that the individual attacks in the unaccented portions are not sharp or percussive.*

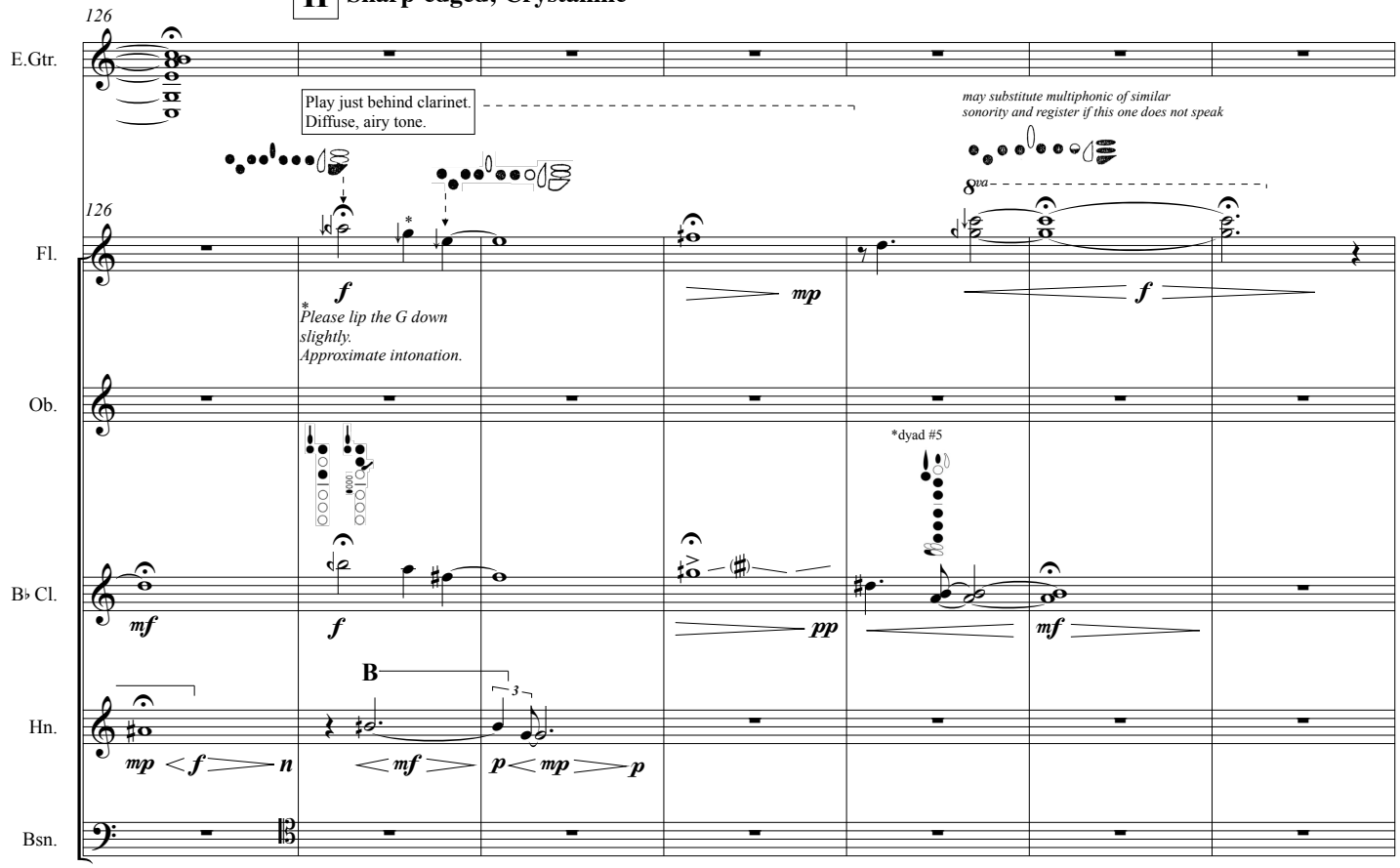


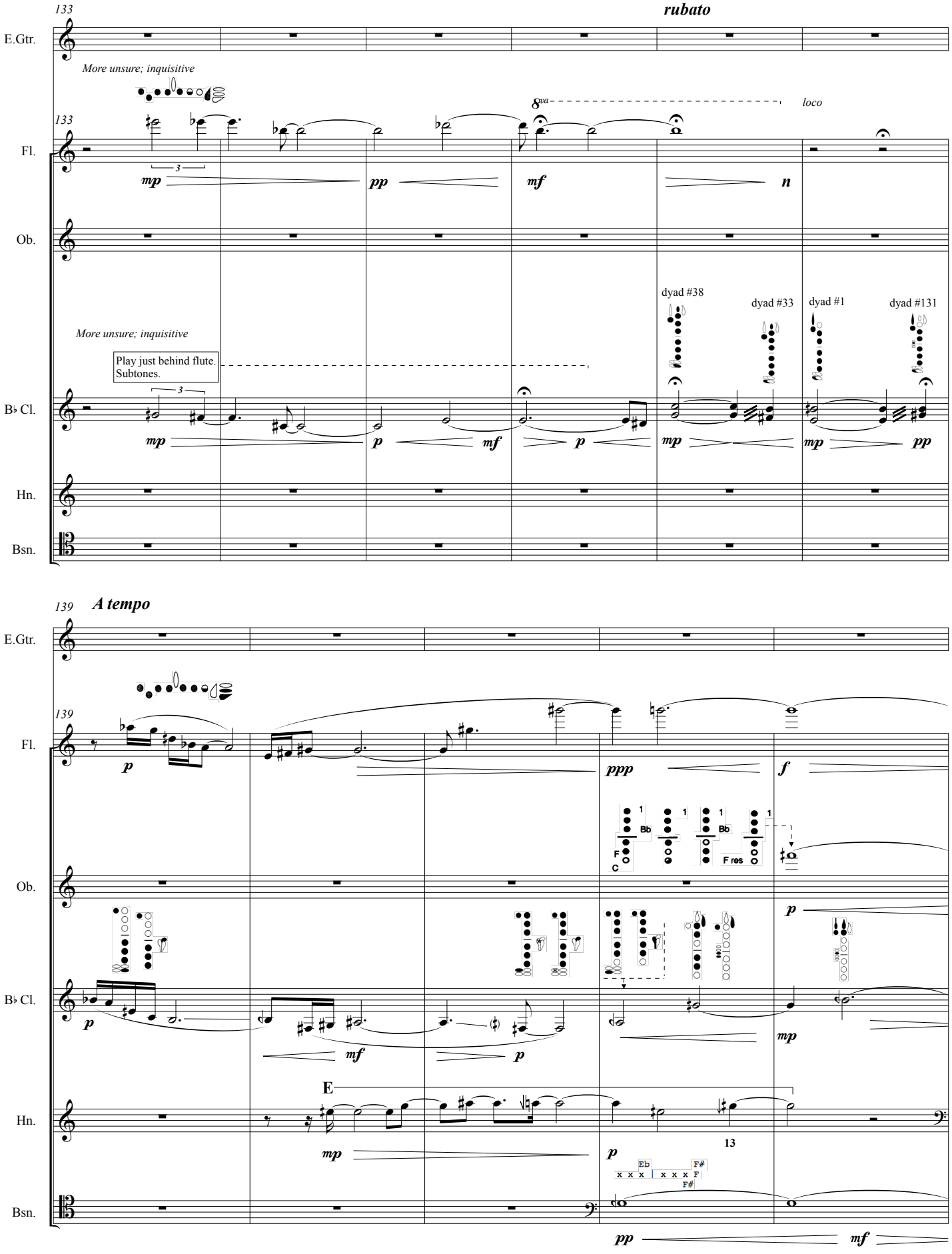

110
E.Gtr.
Picc.
Ob.
B♭ Cl.
Hn.
Bsn.
Okay to substitute C♯
Okay to substitute B♯
112
untongued attack
*Okay to substitute E♯ if smooth connection is difficult.
C
B♭
13


116
E.Gtr.
Picc.
Ob.
B♭ Cl.
Hn.
Bsn.
precise intonation not important here.
please just aim to be detuned from oboe.
playful, as before
D♭
13
120
Switch to flute - re-enter at m. 127
Eb
tr1
x x x | x o o Ab
w Bb
o x x | x x x F
w



H **Sharp-edged; Crystalline**




133
rubato
E.Gtr.
More unsure; inquisitive
8va
loco
133
Fl.
3
mp
pp
mf
n
Ob.
dyad #38
dyad #33
dyad #1
dyad #131
More unsure; inquisitive
Play just behind flute.
Subtones.
B♭ Cl.
3
mp
p
mf
p
mp
mp
pp
Hn.
Bsn.
139
A tempo
E.Gtr.
139
Fl.
p
ppp
f
Bb
Bb
F res
F
C
Ob.
p
B♭ Cl.
p
mf
p
mp
E
Hn.
mp
p
13
Eb
F#
F#
Bsn.
pp
mf

I Ethereal; Ominous

In this section, breath accents should be played as surges in volume around one eighth note to one quarter in duration. Larger volume changes and tempo are somewhat loose.

144

E.Gtr.

Fl.

Ob.

B♭ Cl.

Hn.

Bsn.

sharp "S." improvise rhythm and air sound variations. No tone.

Up to next rehearsal mark, improvise variations in air/tone ratio.

breath on beat 3 if needed

151

3fr.

Blow directly into mouth piece. Widen and narrow space in your mouth to change shape of the sound. The flutter should emerge as if an extension of the guitar.

air → tone

flz.

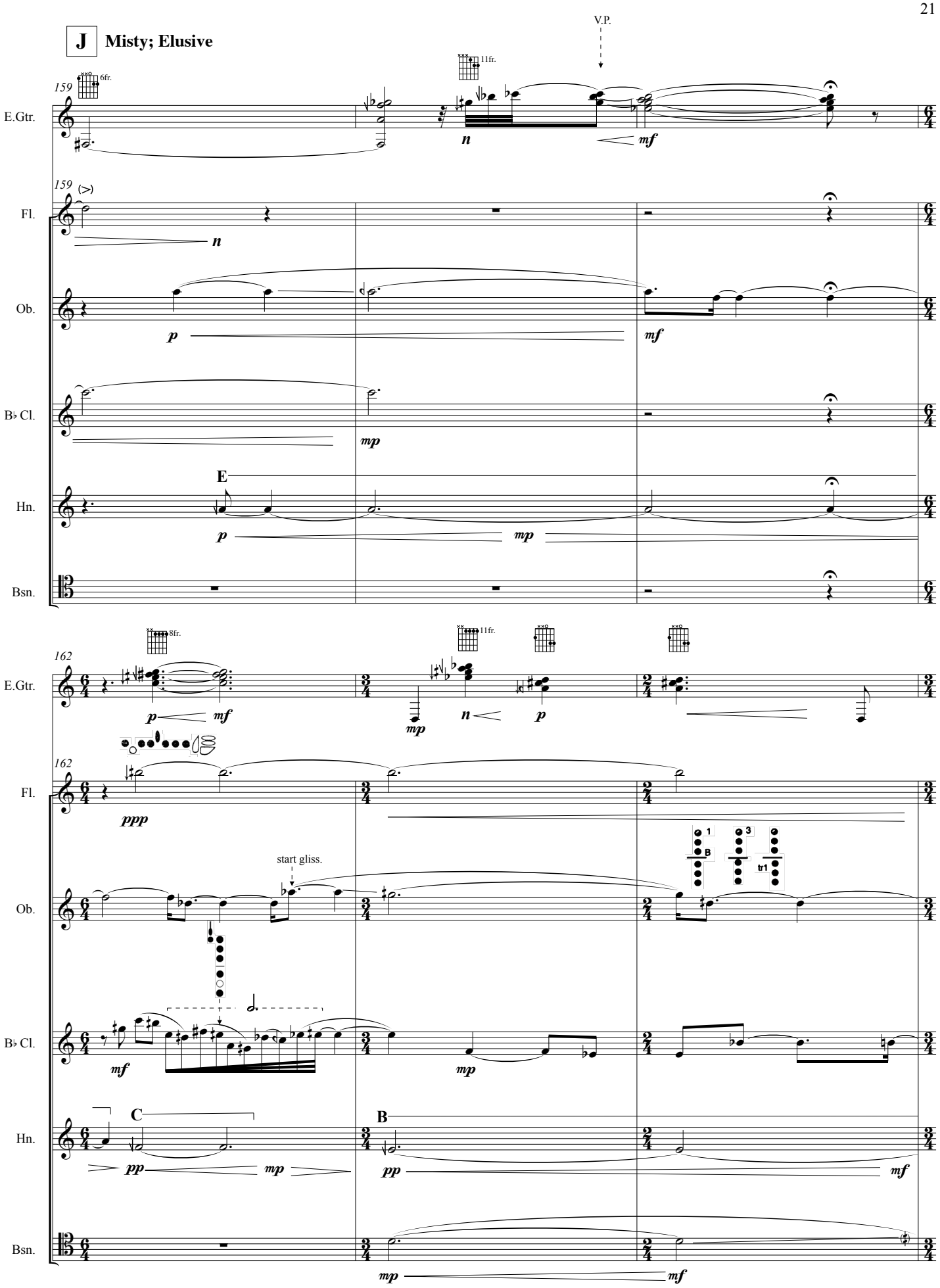
Continue to vary air/tone balance

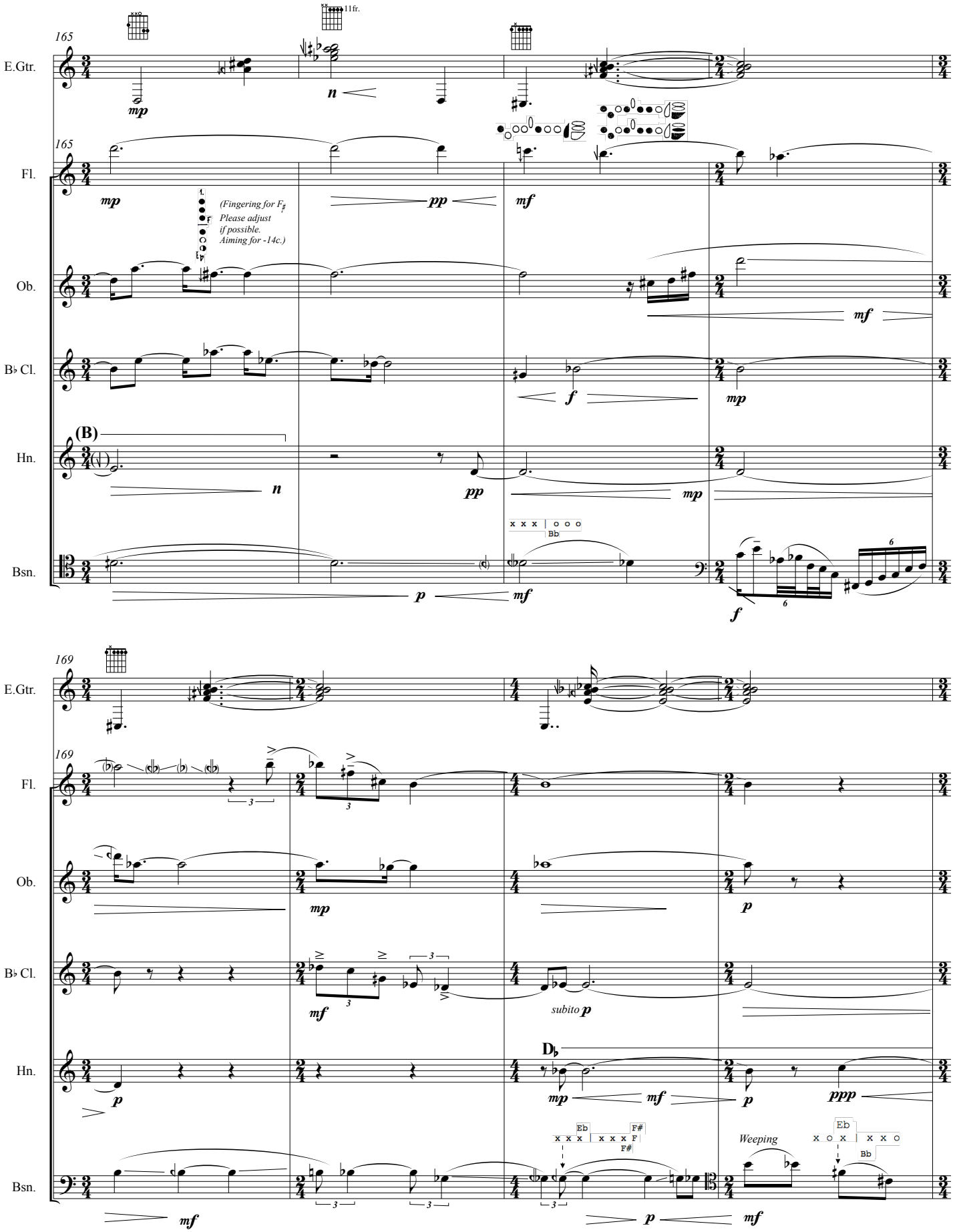
Double-tonguing on air. Rhythm freely determined.

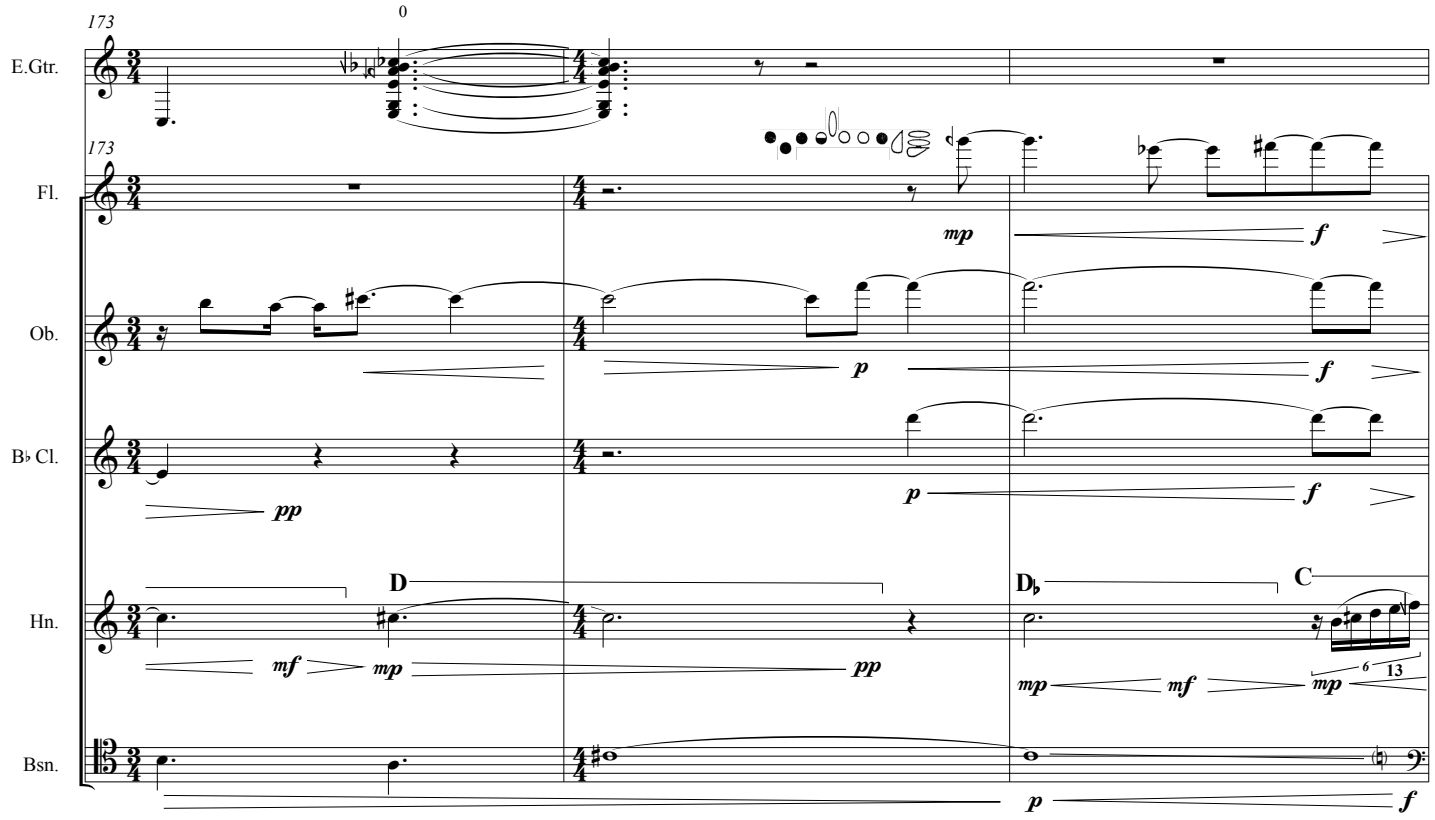
breath if needed

F

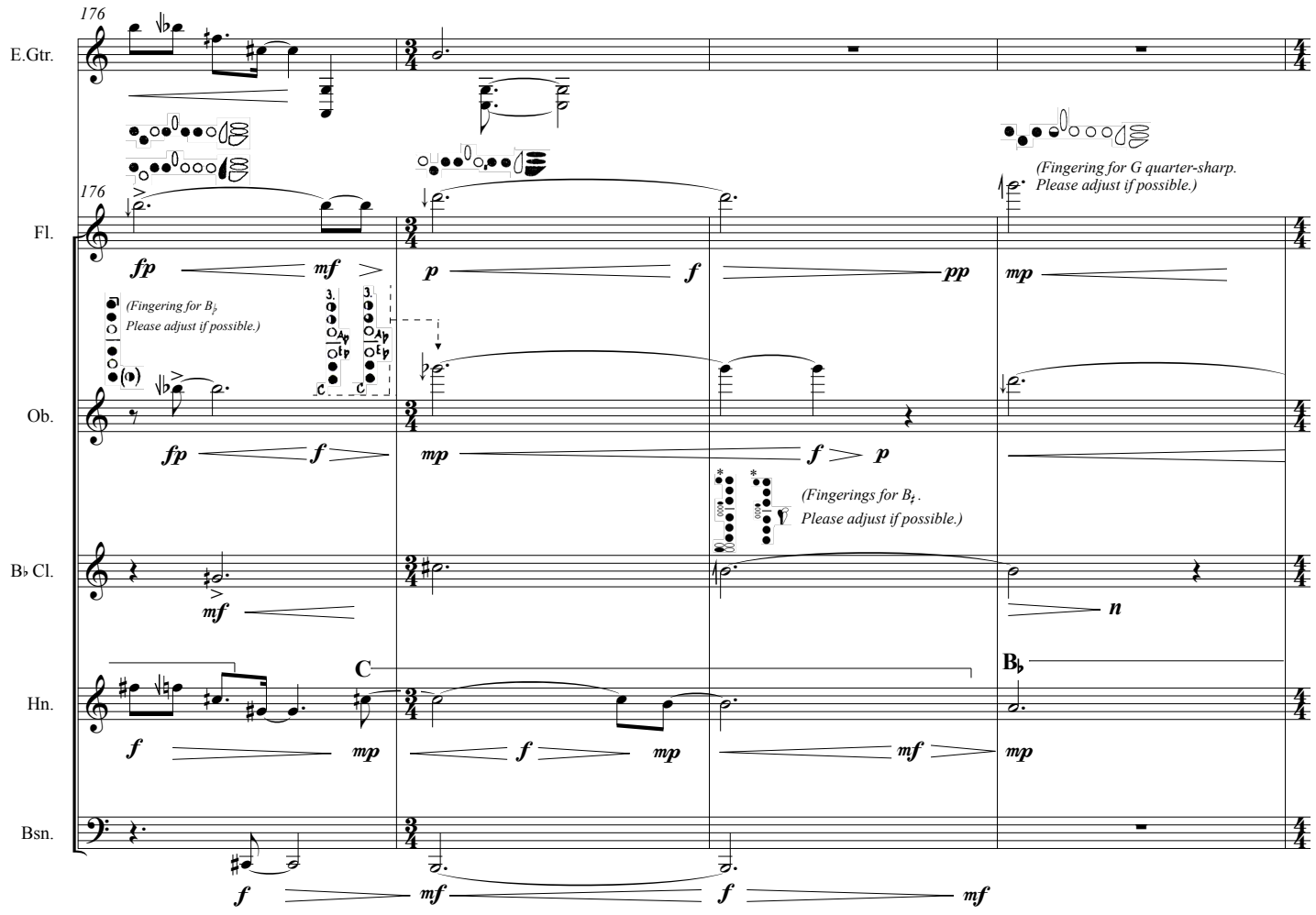
A♭

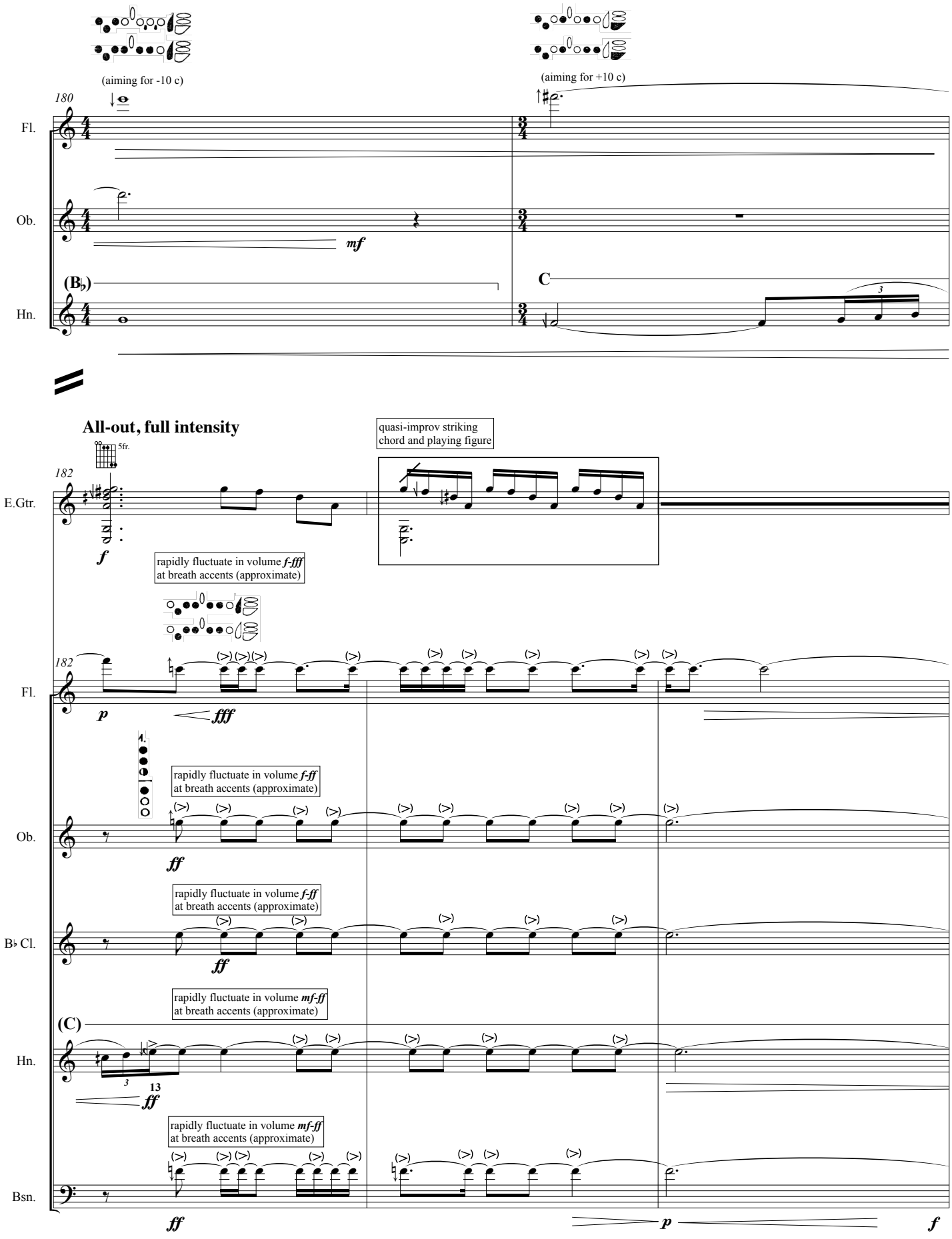

J
Misty; Elusive
V.P.
159
6fr.
11fr.
E.Gtr.
Fl.
Ob.
B♭ Cl.
Hn.
Bsn.
E
162
8fr.
11fr.
start gliss.
C
B

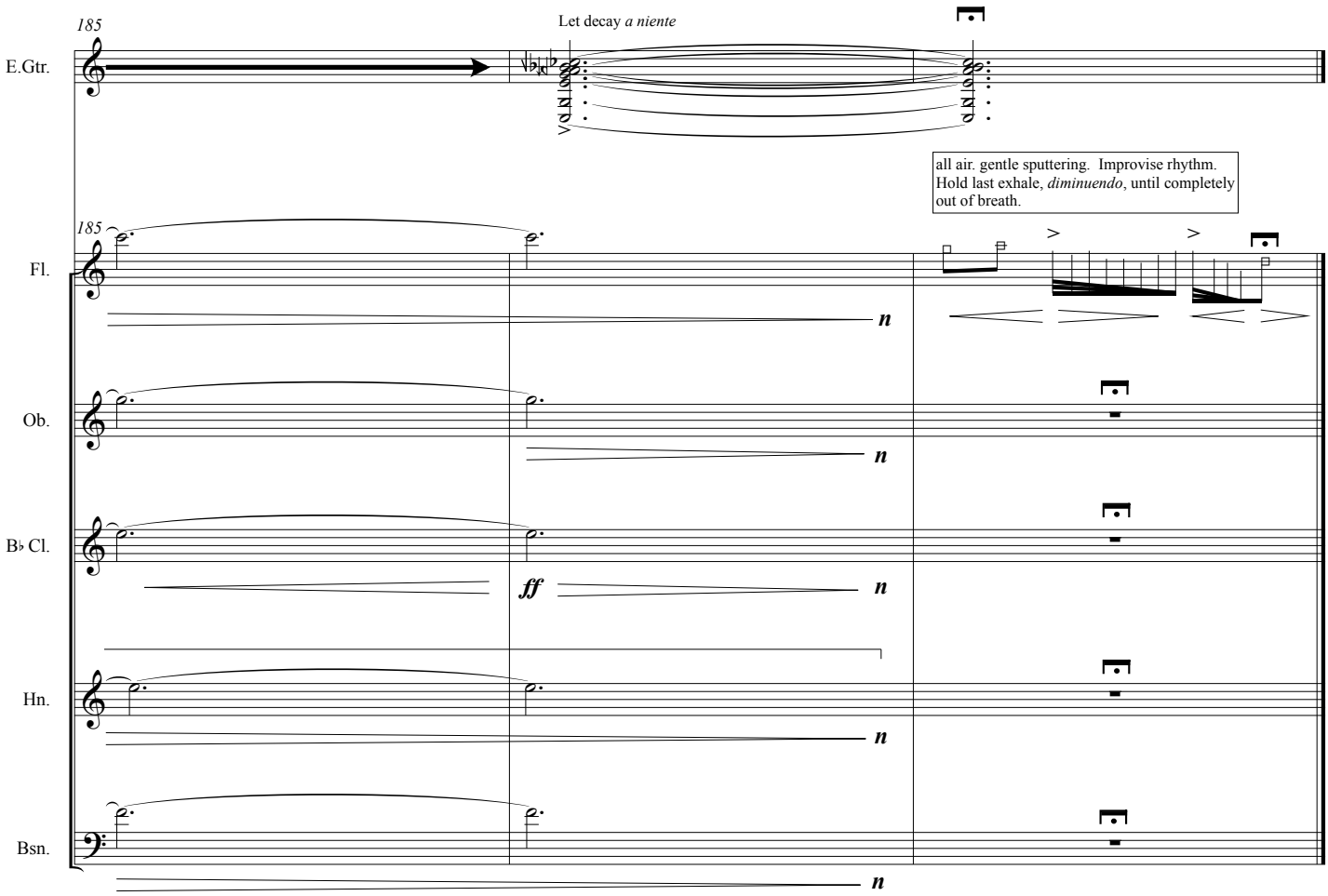

165
E.Gtr.
11fr.
mp
n
Fl.
mp
pp
mf
(Fingering for F♯
Please adjust
if possible.
Aiming for -14c.)
Ob.
mf
B♭ Cl.
f
mp
(B)
Hn.
n
pp
mp
Bb
Bsn.
p
mf
f
6
169
E.Gtr.
Fl.
mp
p
B♭ Cl.
mf
subito p
D♭
Hn.
p
mp
mf
p
ppp
Eb
F#
Weeping
Bsn.
mf
p
mf



K **Passionate; Wistful; With Deepest Longing**




(aiming for -10 c)
(aiming for +10 c)
180
Fl.
Ob.
mf
(B♭)
Hn.
C
All-out, full intensity
quasi-improv striking chord and playing figure
5fr.
182
E.Gtr.
f
rapidly fluctuate in volume f-fff at breath accents (approximate)
182
Fl.
p
fff
rapidly fluctuate in volume f-ff at breath accents (approximate)
Ob.
ff
rapidly fluctuate in volume f-ff at breath accents (approximate)
B♭ Cl.
ff
rapidly fluctuate in volume mf-ff at breath accents (approximate)
(C)
Hn.
13
ff
rapidly fluctuate in volume mf-ff at breath accents (approximate)
Bsn.
ff
p
f


185
Let decay *a niente*
E.Gtr.
8va
all air. gentle sputtering. Improvise rhythm.
Hold last exhale, *diminuendo*, until completely
out of breath.
185
Fl.
Ob.
B♭ Cl.
Hn.
Bsn.
ff
n