Oded Ben-Tal

# ANEMOI

September 2004

In the Greek mythology the Anemoi were the personification of the four (or eight) directional winds. Thus they are portrayed alternatively as having individual identifying characteristics and as presenting different aspects of the same essence. This dichotomy is mirrored in the relationship between the flute and the electronics. In each of the four movements of the piece: Boreas, Zephryos, Notos, Eorus, the flute is attenuated (subtly at times, brutally at others) to highlight different aspects of its character. Anemoi is the result of a collaboration with Flautist Helen Bledsoe.

About the electronics:

Equipment: microphone, mixing desk, 2 speakers, computer running PD (http://puredata.info/about/). The speakers should be placed as close as possible to the player.

In Boreas the input from the flute is first ring-modulated then fed through a bank of filters into a feedback loop. Playing high notes (above top-staff f) increases amount of feedback while low notes reduce it. Very high notes change the modulating frequency and filter settings changing (somewhat) the sound outcome. The aim of the player is to generate a very slow crescendo in the feedback process, when such a slow-motion explosion is generated let it build and cut it abruptly (through the computer interface).

In Zephyros the processing is minimal: somewhat like adding vibrato to the tone. High/low notes are treated differently (essentially amplitude vs. frequency vibrato).

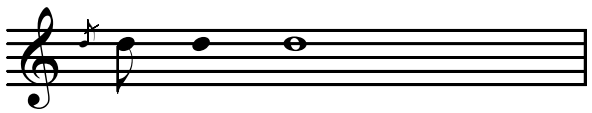
In Notos a fixed sequence of frequencies modulates the flute line. This sequence is triggered from the computer at measure 2 and the player should maintain strict synchronization with it (an optional click track is provided as part of the pd patch).

In Euros the flute notes trigger 2 kinds of responses from the computer – short bird-like sounds in response to rapid notes, and long vaguely flute-like sounds in response to long notes. Towards the end of the movement an additional soundfile is triggered from the computer (marked in the score).

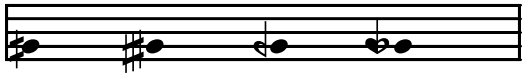
In each case where the program is required to make discriminations based on the input from the flute (high/low etc.) bare in mind that the software is not 100% reliable but this was composed into the piece (i. e. occasionally getting the 'wrong' response is welcomed).

# BOREAS

Associated with 'terrific wintery blasts' and 'cold icy power'



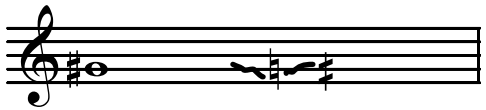
Note durations from shortest to longest. (used in addition to proportional placement in score).



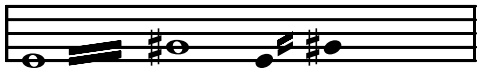
Microtones:
1/4 sharp  3/4 sharp  1/4 flat  3/4 flat

Vibrato rate contour

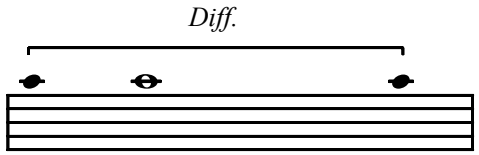
very high note



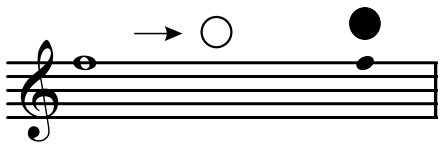
Gliss: g-sharp to g-natural to g-1/4 sharp



Tremolo

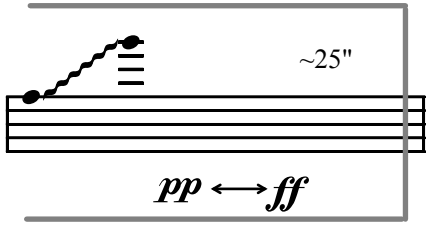



Use different fingering on repeated notes

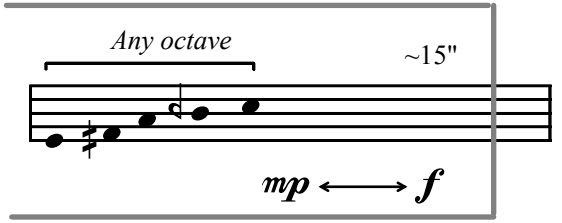


Gradually change to breathy note.

normal playing

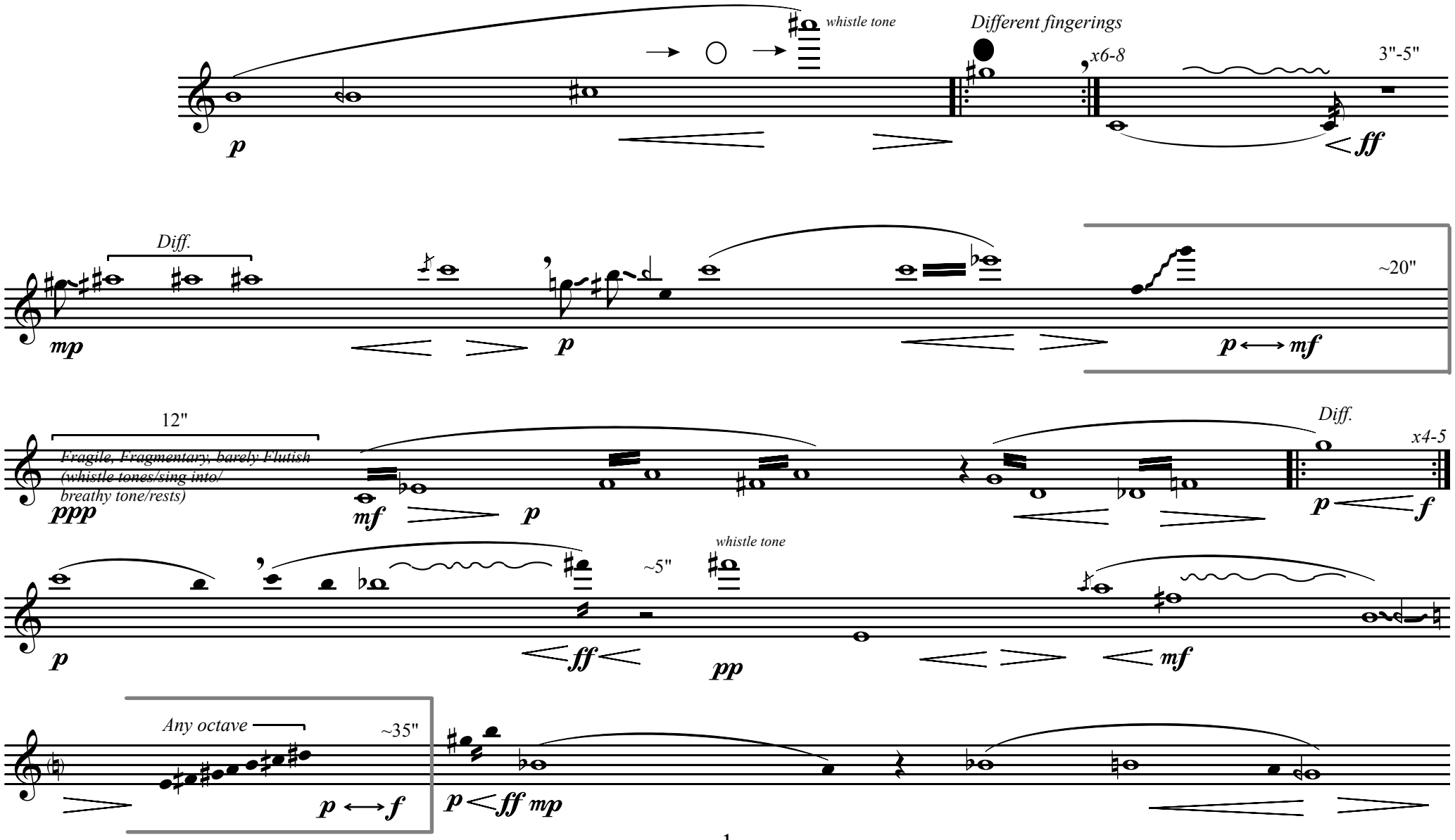


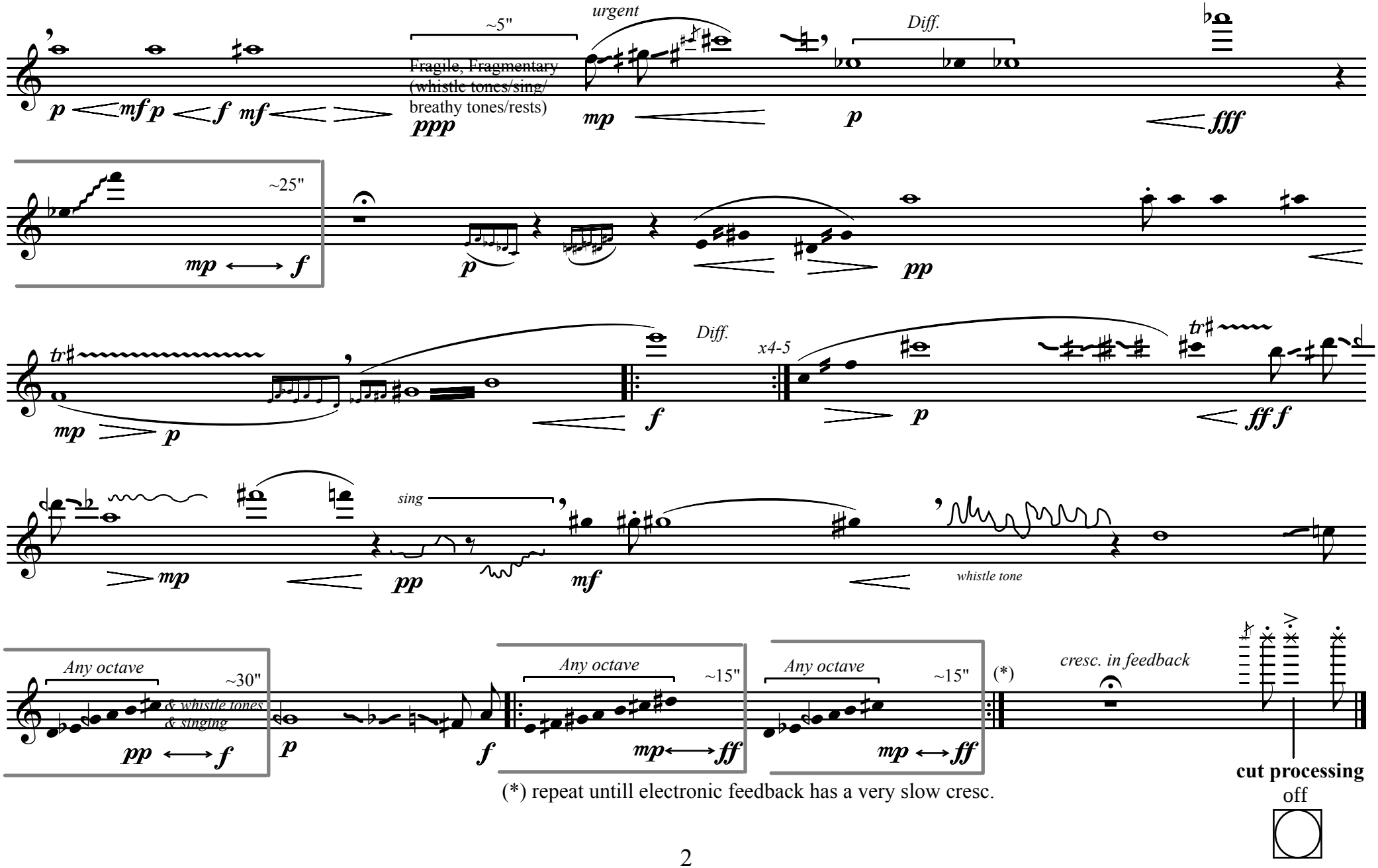

Improvise in similar fashion to previous music for the time indicated, at the indicated register and dynamic range.




Same as on the left, but using notes indicated at any octave.

The electronics distort the sound and feed it into a feedback loop. High notes increase amount of feedback, while low notes reduce feedback. In addition very high notes also change the setting of the distortion slightly (creating different resonances).
The final target of the player is to generate a *very* slow crescendo in the electronic (like a slow motion explosion) while exploring the sound world offered by the processing. The score aims to guide the player through the process of exploring the setup. Since feedback loops are inherently dangerous and this piece delibaratly plays with fire the player is always free to deviate from the score to save the situation.

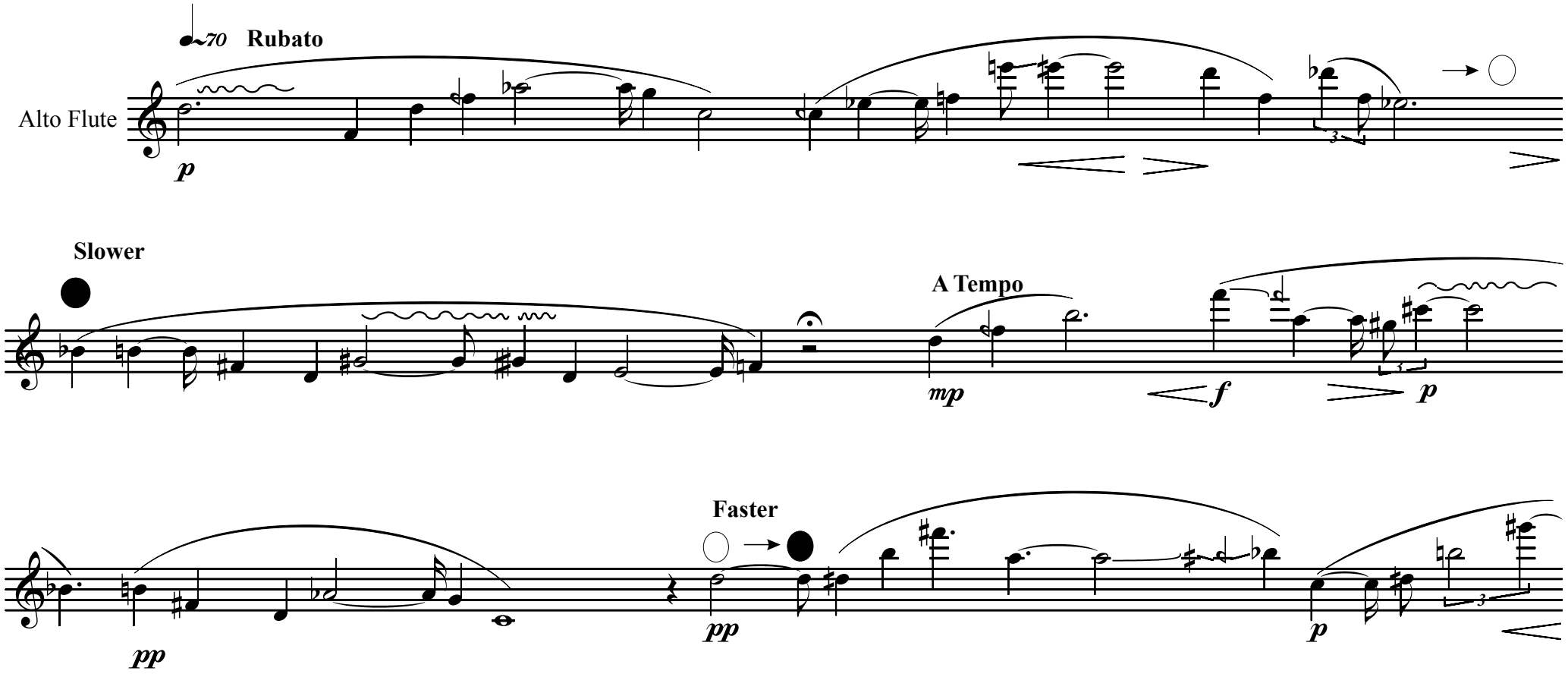

whistle tone
Different fingerings
x6-8
3"-5"
p
ff
Diff.
mp
p
~20"
p ⟷ mf
12"
Fragile, Fragmentary, barely Flutish
(whistle tones/sing into/
breathy tone/rests)
ppp
mf
p
Diff.
x4-5
p
f
whistle tone
~5"
p
ff
pp
mf
Any octave
~35"
p ⟷ f
p
ff
mp



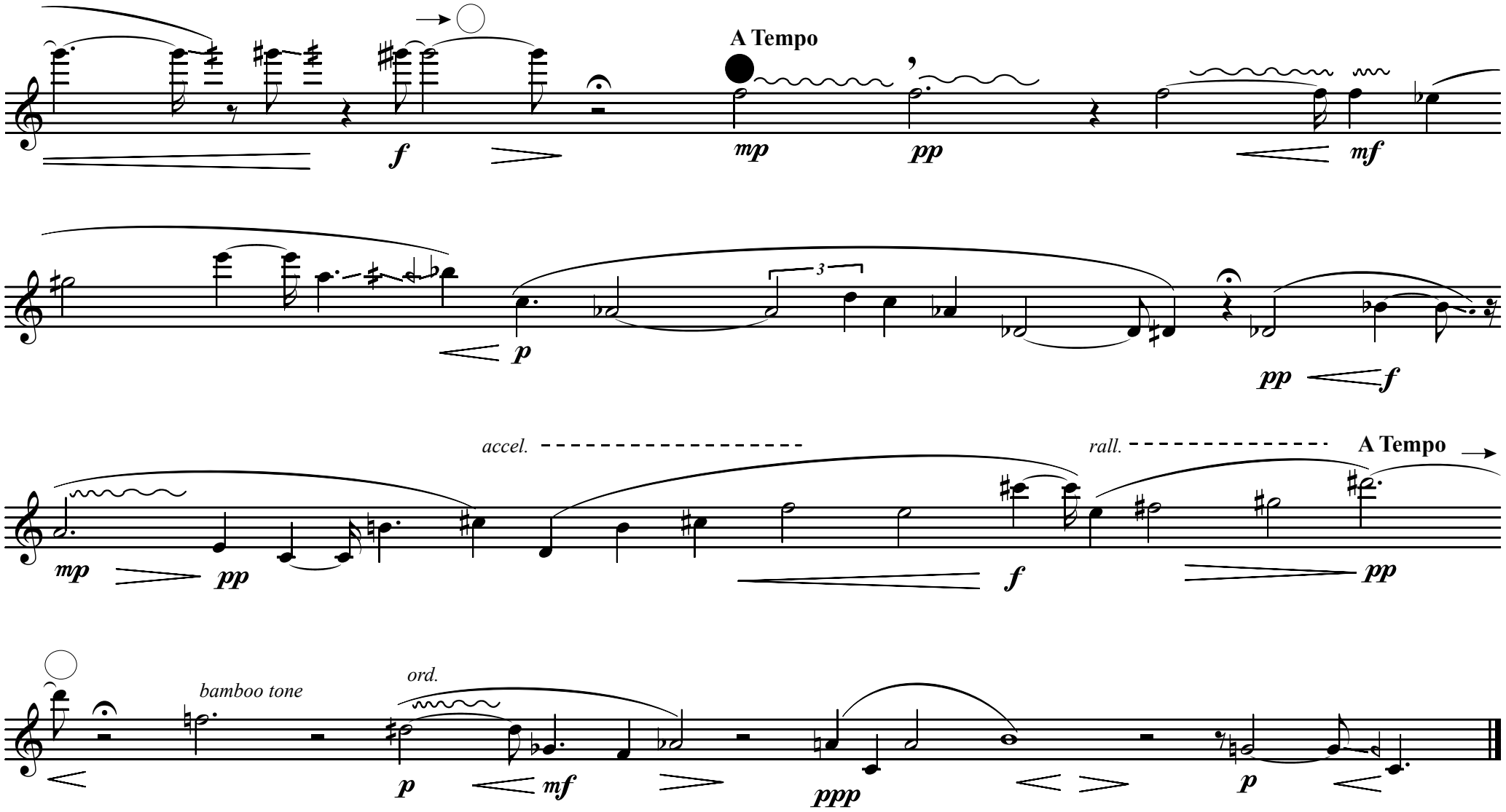

(*) repeat untill electronic feedback has a very slow cresc.

# ZEPHYROS

associated with 'sweet breeze' 'murmuring sounds' and 'gentle force'

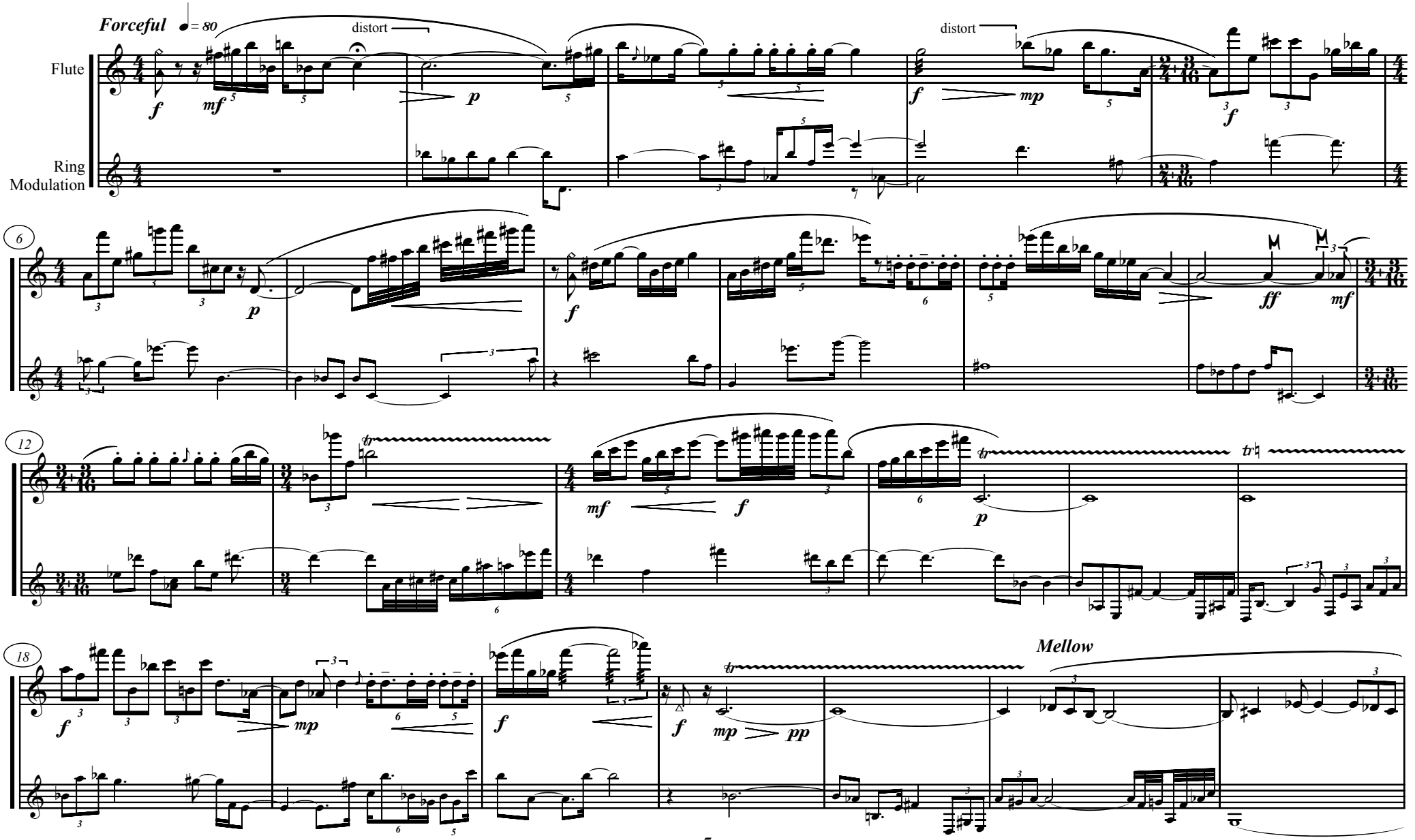


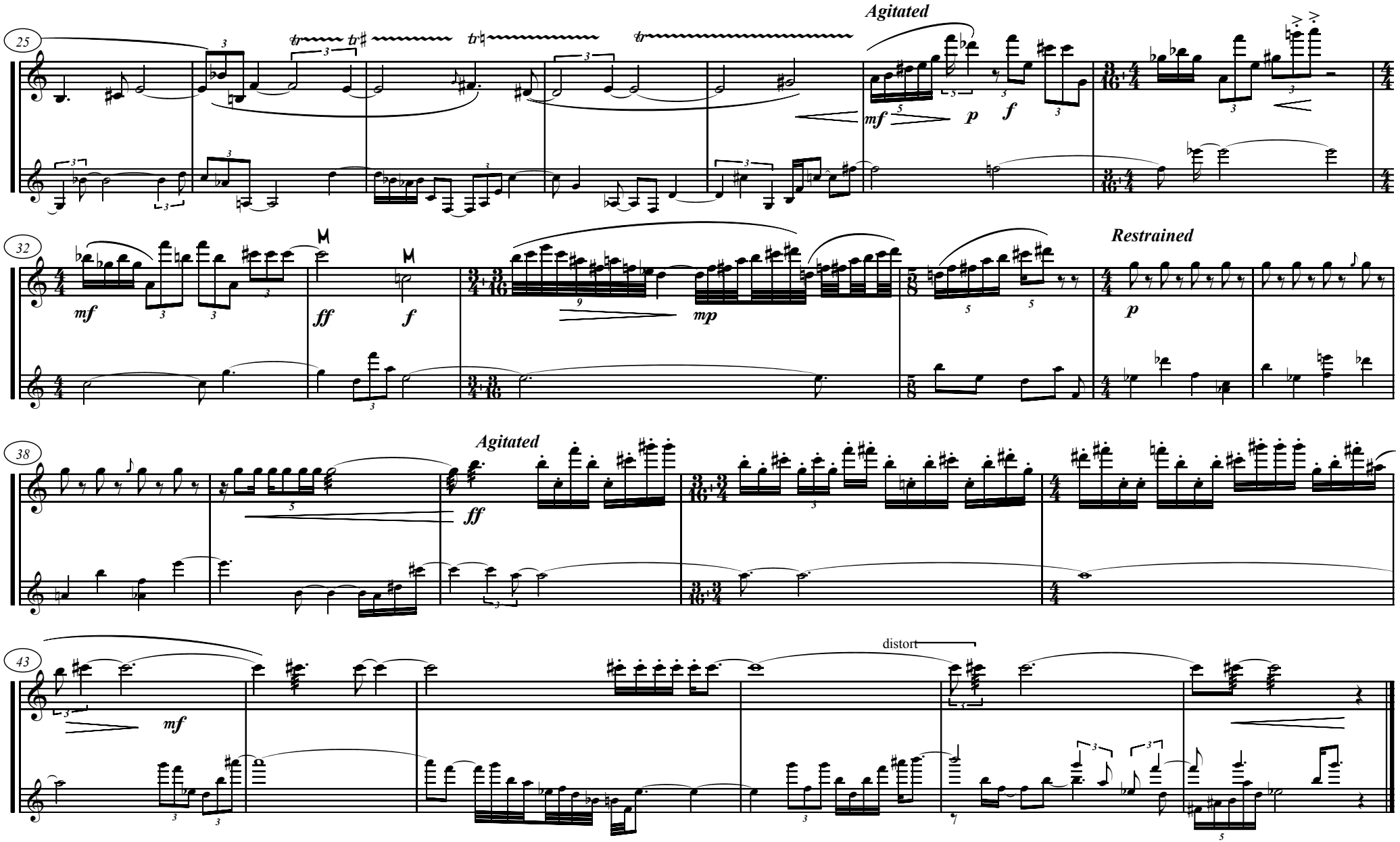

The electronic processing consists of very slight shading of the flute tones. low notes and high notes are treated differently.


A Tempo
f
mp
pp
mf
p
3
pp
f
accel.
rall.
A Tempo
mp
pp
f
pp
bamboo tone
ord.
p
mf
ppp
p

# NOTOS

Associated with 'wide coursing gales' and 'lightly leaping feet'



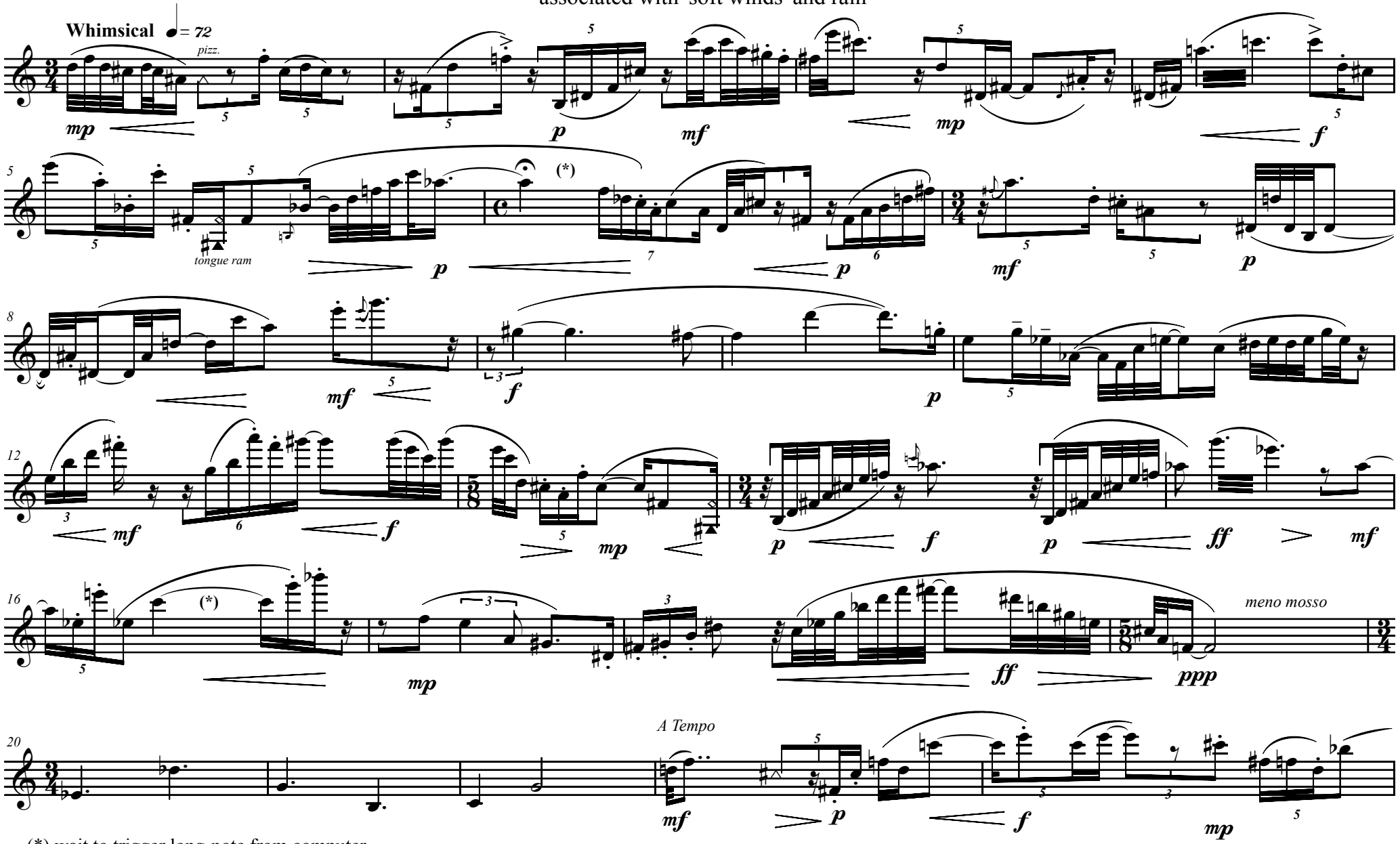



The 'ring modulation'staff provides a notated version of the oscilator(s) modulating the flute line.
The player should maintain absolute synchronicity with these (an optional click track is available).

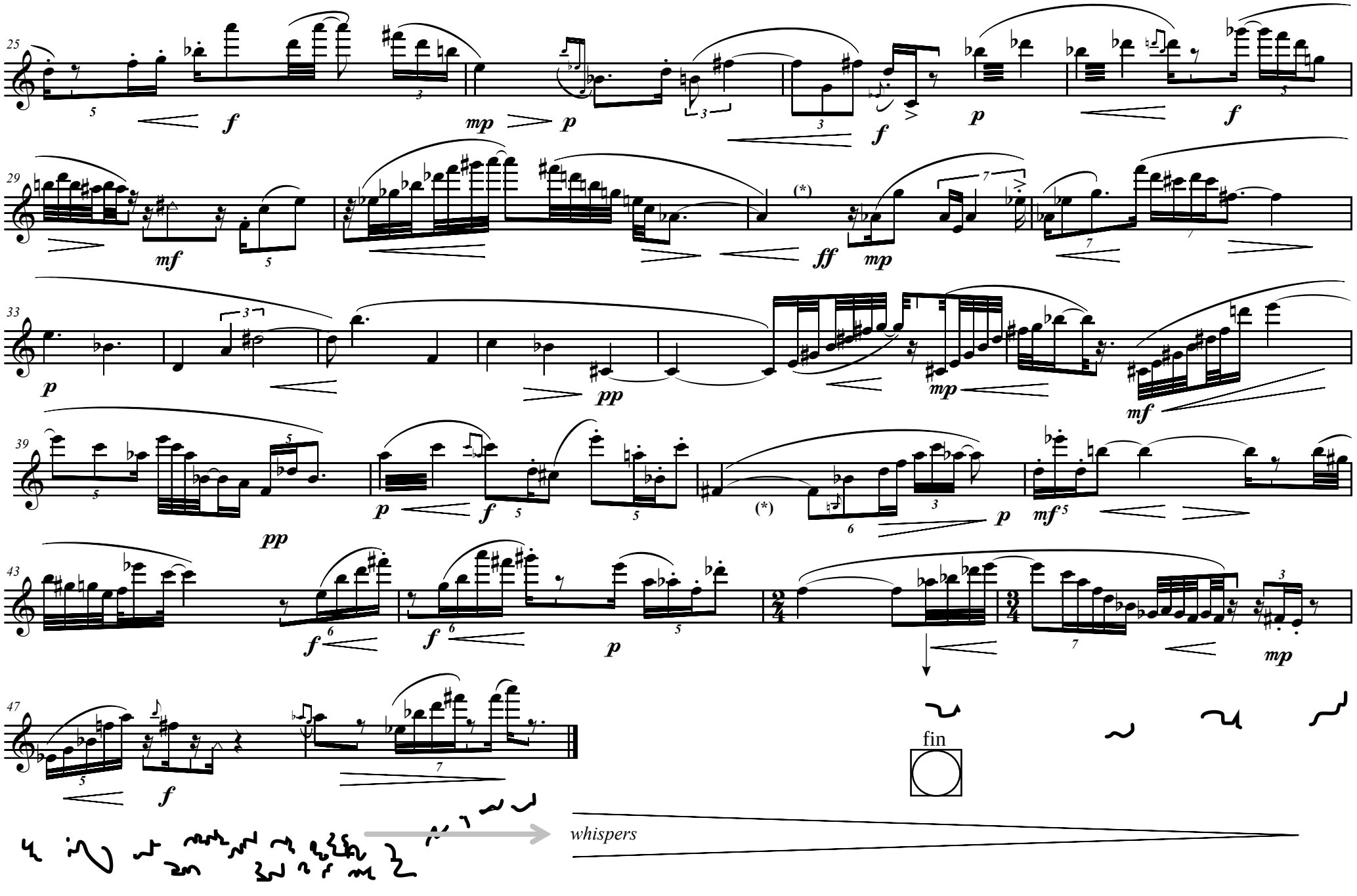
M multiphonic containing pitch provided
Trills are semi-tone, unless marked otherwise.

# EUROS

associated with 'soft winds' and rain




(*) wait to trigger long-note from computer.


25
f
mp
p
f
p
f
29
mf
ff
mp
33
p
pp
mp
mf
39
pp
p
f
(*)
p
mf
43
f
f
p
mp
47
f
fin
whispers