Fiery Verticals

For flute and electronics

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Programme Note

The title of the piece – *Fiery Verticals* – is borrowed from Francis Bacon's approach to caging in the dark, despairing and godless figures in his paintings of popes. Bacon places these figures within a transparent cage, constraining and trapping them, rendering their isolation palpable. These noble figures in their resplendent garb are robbed of their inherited dignity by the spindly cubes that hem them in. Just so for the flute: no opulent, gaudy *morceaux-de-concours* floridity or Pan-like idyllic evocations here. Instead, this object and its qualities are laid out in a new frame, ready for interrogation.

For all the discomfiting crisis of Bacon's style, it's the detail in the brush-strokes that fascinates me. How does he get those teeth to appear so hellish? How does he render the torment so pitiful? For this piece, I wanted to step as close to the flute as I invariably do when I'm in front of a Bacon canvas. The close-microphone technique allows us to attend to the tiniest fluctuation of air, whistles, intonation and timbre. Amplify that and stretch it beyond its time (not unlike Bacon's obsession with popes) and there, revealed, is a microscopic world of sound that is so easily lost through the distraction of desiring a linear melody.

In this piece, the flautist is asked to make tiny adjustments to embouchure, position and fingering patterns while the electronics part morphs the live signal randomly (but nearly-predictably) within a closely-constrained cage of possibilities. The flute, so undeniably horizontal, is made vertical through live processing and warping.

Performance Instructions

The flute should be amplified using, ideally, a very close clip-on mic (such as a DPA 4060) that points towards the mouthpiece aperture. This signal is fed straight into the audio interface of a computer. The signal from the live flautist is used for live processing and can be routed back out to reinforce the live sound. All sounds in the electronics part are processed live - there are no pre-recorded samples.

This performance requires the accompanying MaxMSP patch, which has a very straight-forward user interface for controlling input and output routing and levels. There is also the option to apply EQ and reverb processes to the input signal within the patch. The live processing is divided into two categories: 1) the main timestretch; and 2) the bass components. This division allows for control over the levels of each element so that a good balance can be achieved in the venue.

Cues for the patch are given in the score and should be triggered with arrow keys or the space bar by the person operating the computer.

Equipment list:

- Computer running MaxMSP
- Audio interface (stereo outputs or greater)
- Clip-on or very close mic (DPA 4060 or similar)
- Stereo speakers (or more for a more detailed stereo spread)

Fiery Verticals

Movement I

Always slow, always gradual

one breath

From silence; start with flute away from mouth and gradually bring into position with constant airflow

air with some tone

ppp

Breathe audibly as processed sounds near silence

Wait for processed sounds to subside

Starts real-time timestretching; sounding pitch is doubled in the timestretch processing throughout. Selects new pitches every 12"; gradual changes

Indicates approximate pitch region in relation to the live part plus the number of additional pitches being added

1

+2

+2 from -3 octaves

one breath

voice (near mouthpiece) → air sound (hardly any pitch)

"sh"

pp

2

+4

+4 from -8 semitones below

one breath

Transition *sim.*

air across mouthpiece → whistle tone (one pitch)

pp

one breath

Transitions as above

one breath

one breath

Continue to next bar straight away

lip down

p

3

+2

+2 from -3 octaves

gradual change to slow, wide vibrato

pp *p*

4

+4

+4 from -8 semitones below

no vibrato lip bend; slow vibrato

(no gliss.)

ppp *p*

5

+4

+4 from -8 semitones below
+1 from -3 octaves

+1

one breath

lip down full tone → whistle tone

p *mp*

6

+4

+4 from -8 semitones below

one breath

slide

wide vibrato → no vibrato

mp *pp*

7

+1

+1 from -3 octaves

Trigger early ad lib. to change underlying chord

one breath

no vibrato lip bend; slow vibrato

(no gliss.)

ppp *p*

8

+4

+4 from -8 semitones below
+1 from -3 octaves

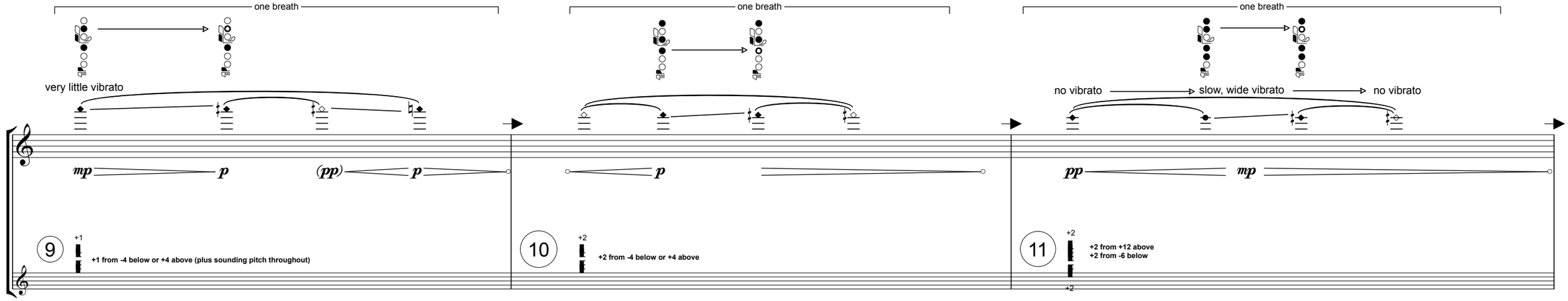
+1

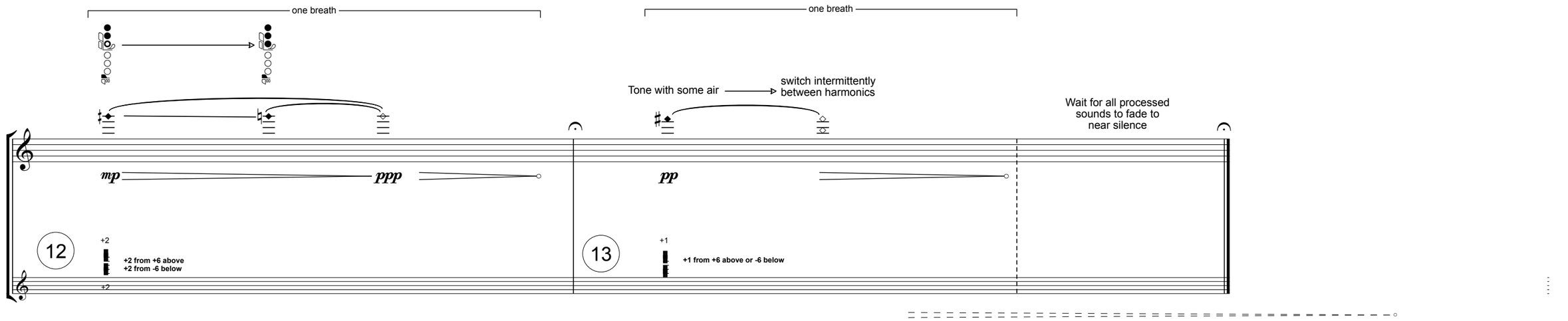
Wait for all processed sounds to fade to near silence

Fiery Verticals

Movement II

Always slow, always gradual

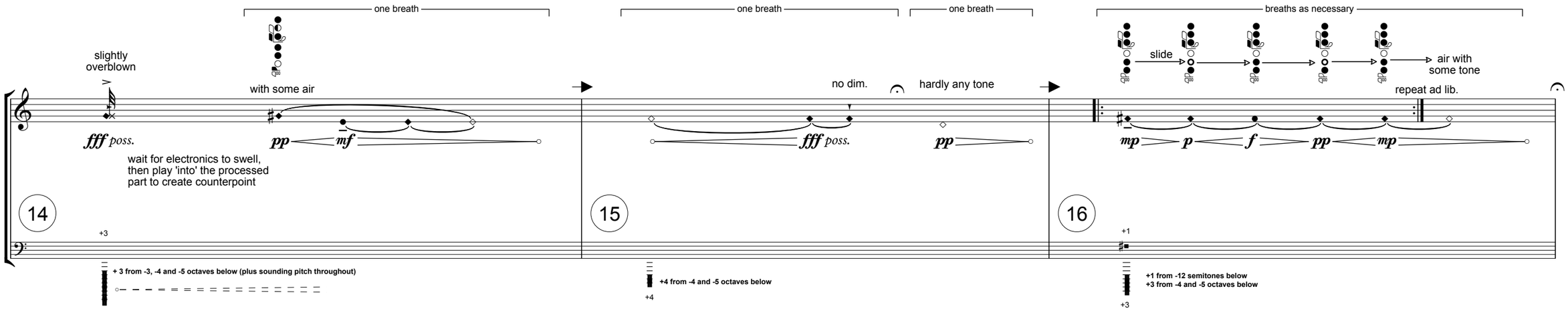




Fiery Verticals

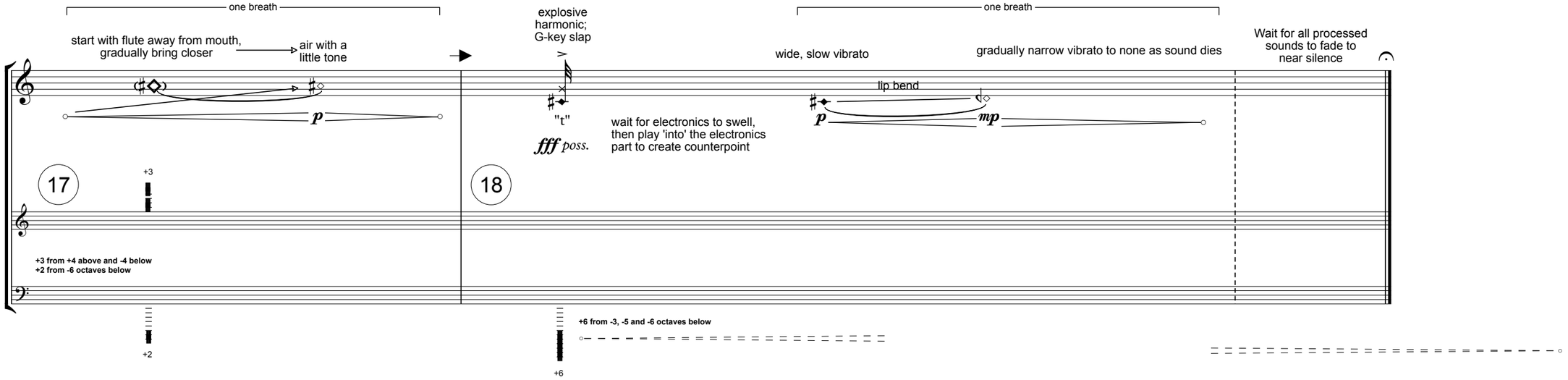
Movement III

Generally slow, with more movement in places



Moving along a little more

Easing off again



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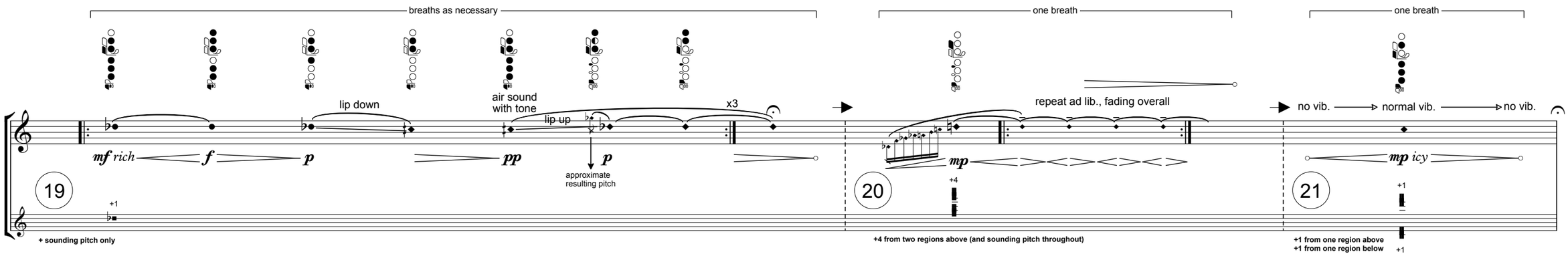
Movement IV

More active



More active still