

Billows of Muteness

Movement 1

Violin

Gravity Bone (prepared trombone)

Live electronics

for Alex Buehler and Tyler Adamthwaite

9' approx.

September 2020 – January 2021

john aulich

buffalo ny

General notes

Tablature score

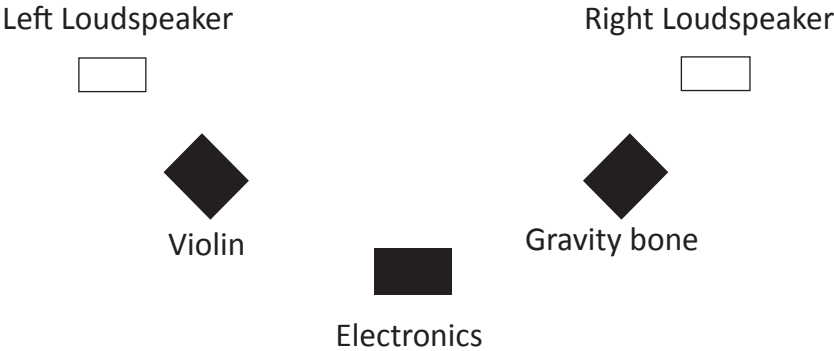
Billows of Muteness is written with an instrument-specific tablature specifying the physical actions to be undertaken in the course of performance. While this is primarily as a result of the nature of the materials themselves, it is also a consequence of the unpredictable nature of the gravity bone and of the violin on those strings to which a radical scordatura has been applied (see right).

Timing and coordination

There is no metric or general timing information on the score, save for an indication outlining the rough length of the first gravity bone action. It is unnecessary to closely co-ordinate for all but the specifically cued actions; rather, the performers should move through the material as though connected by a bungee cord. If one player falls too far behind, the other should find places to wait by lengthening sustains or repeating material ad lib; this is particularly necessary on the approach to cues, but similar care should be taken apropos of page turns, pauses and section breaks.

Stage configuration

The stage should be setup roughly as shown left; care should be taken that the violinist and trombonist can see one another, and that the electronics operator can see both of them sufficiently to communicate.



Gravity Bome Requirements and Setup

The following items are required for the trombone preperation:

- 1 Trombone
- 1 Trombone stand
- 1 Trombone mouthpiece.
- 1 Tenor saxophone mouthpiece.
- 1 Very soft reed.

1 Y-connector for tubing.

3 lengths of tubing of the correct diameter for:

Connecting the Y connector to the mouthpiece reciever
Connecting the Y connector to the trombone mouthpiece
Connecting the Y connector to the saxophone mouthpiece.

Tubes should be long enough to allow either mouthpiece to be played comfortably from a seated position when the trombone is resting on the stand.

The trombone should be placed on the stand, and the slide allowed to rest on the floor. The slide is not used for the duration of this piece.

Violin scordatura

The scordatura for the violin is as follows:

- IV - As low as possible while still speaking (unreliably)
- III - Up to E4
- IV - Down to E4
- I - Down to C, approx. 30 cents sharp.

Electronics requirements and set up

The following equipment is required for the electronics part:

- A modern computer fast enough to run a Max/MSP patch.

- The Max/MSP patch for Billows of Muteness Movement 1 (available from the composer).

- A 24-bit 44.1Khz Audio interface with minimal latency, at least 5 inputs and at least 2 outputs.

- A MIDI control surface or tablet that allows for the rapid change of multiple parameters at the same time.

- 2x condensor mics
- 3x contact mics

- The condensor mics should be placed one to two feet from each instrumentalist.

- One contact mic should be placed on the bridge of the violin.

- Two contact mics should be placed on the following components of the gravity bone:

- On the bell tube of the trombone.
- At the top of the saxophone mouthpiece.

Each mic should be connected to an independent input on the audio interface.

Violin

The violin part is bifurcated into two staves - the upper staff has 4 lines, representing each of the strings. Symbols and wedges on these strings represent modes of actuation. The lower staff spatially represents the fingerboard (lower = lower pitch). Lines on the lower staff represent finger placement are colour-coded according to the string.



Bowing hand on the upper staff:

 Red shapes and wedges appear on the upper staff and are indications to bow the string, with bow pressure and speed reflecting the size and shape of the wedge.

- ▶▶▶▶ Small blue triangles indicate pizz.
- ▶▶▶▶ Small orange triangles indicate col legno battuto.

Bowing hand above the staff:

-  Tremolo bowing.
-  Bow on the bridge.
-  Circular bowing, between the two positions indicated. A verbal indication of speed is always given.

Bowing hand on the upper staff:

-  Repeatedly mute and unmute the string with the finger to create a choked, granular sound.
-  Move from normal finger pressure to harmonic pressure (or vice versa).

Gravity bone

The gravity bone part is in two staves. The upper staff represents embouchure pressure, while the lower staff represents air / dynamics.

The gravity bone is an unstable instrument and the sounding result is unlikely to reflect actual activity, especially with regard to the parts using the tenor saxophone mouthpiece.

Embouchure on the upper staff:

-  Purple wedges and shapes represent embouchure pressure for the saxophone mouthpiece over time. The broader the wedge, the looser the embouchure pressure should be. Tigher embouchure pressure should risk choking, random leaps, etc.
-  Orange lines represent embouchure pressure for the trombone mouthpiece. These lines are in finer ‘resolution’ owing to the higher degree of control the performer will have.
-  Make a ‘sh’ sound while playing, following the contour of the mebouchure line.
-  Vocalize randomly whilst playing.
-  Flutter tonguing.
-  Indeterminate percussive sounds. The left-most symbol always involves hitting the instrument, while the right-most symbol could be hitting, making tutting sounds, etc.

Air on the lower staff:

-  Red wedges indicate pitched sounds. The size and shape of the wedges indicates the envelope of air pressure.
-  Blue wedges indicate aeolian / air-only sounds.

Electronics

The electronics part has 2 staves. The upper staff represents the parameters to be adjusted in real-time. The labelled and colour-coded parameters are the same as those on the Max/MSP patch. The lower staff is a very loose visual representation of the anticipated outgoing audio. However, the internals of the patch are subject to stochastic processes that will result in moment-to-moment differences between what is presented on the page and what actually occurs.

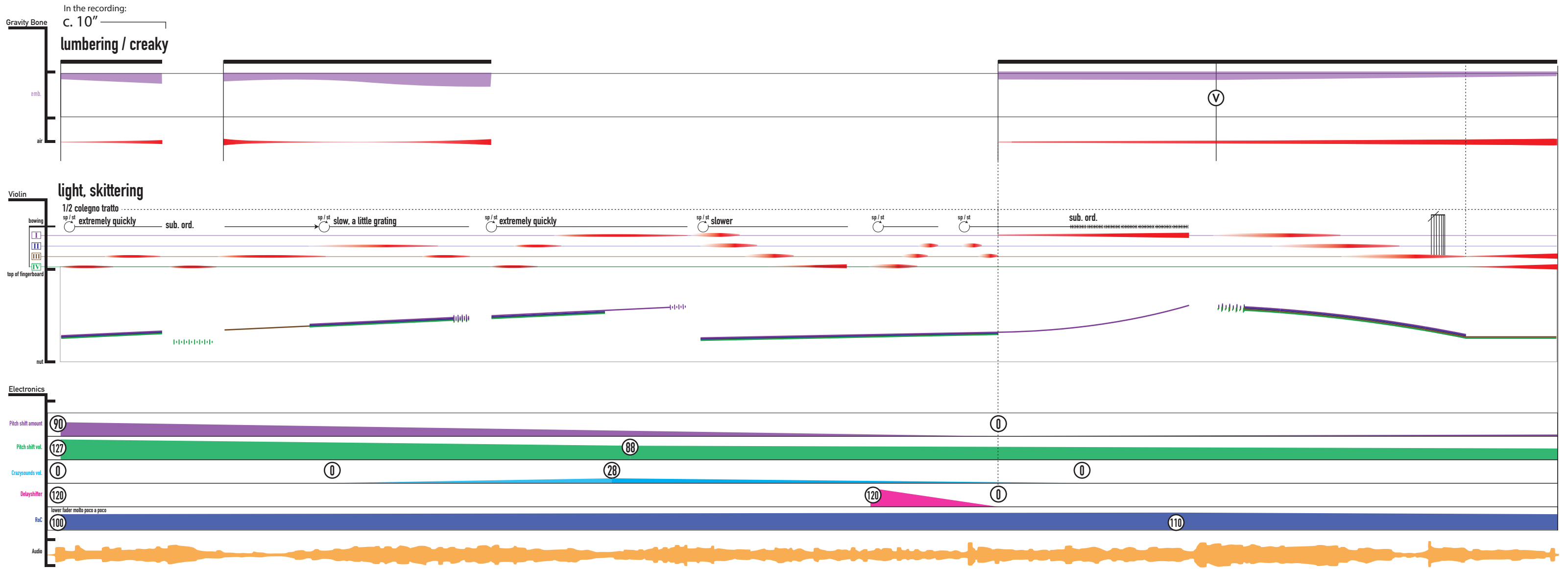
- Pitch shift amount
- Pitch shift vol.
- Crazysounds vol.
- Delayshifter
- RoC (Rate of change)

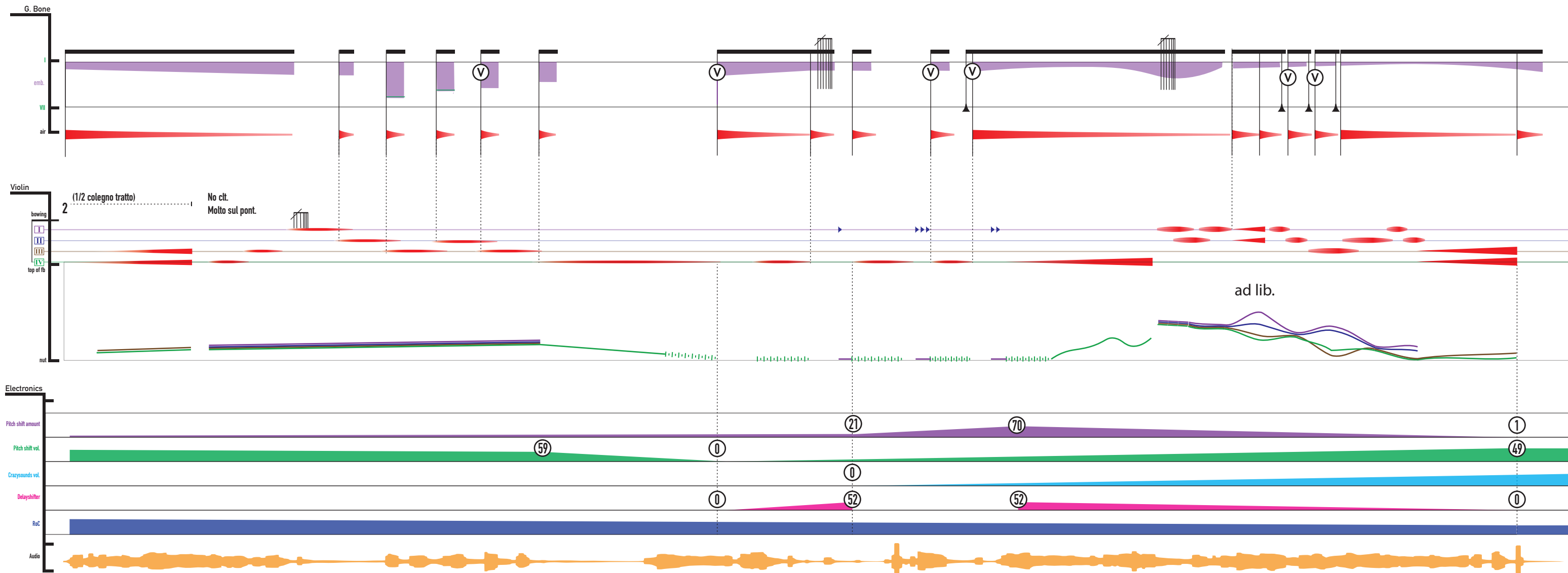
The electronics part has 5 staves with colour-coded wedges (one per parameter). The labelled parameters are the same as those on the Max/MSP patch.

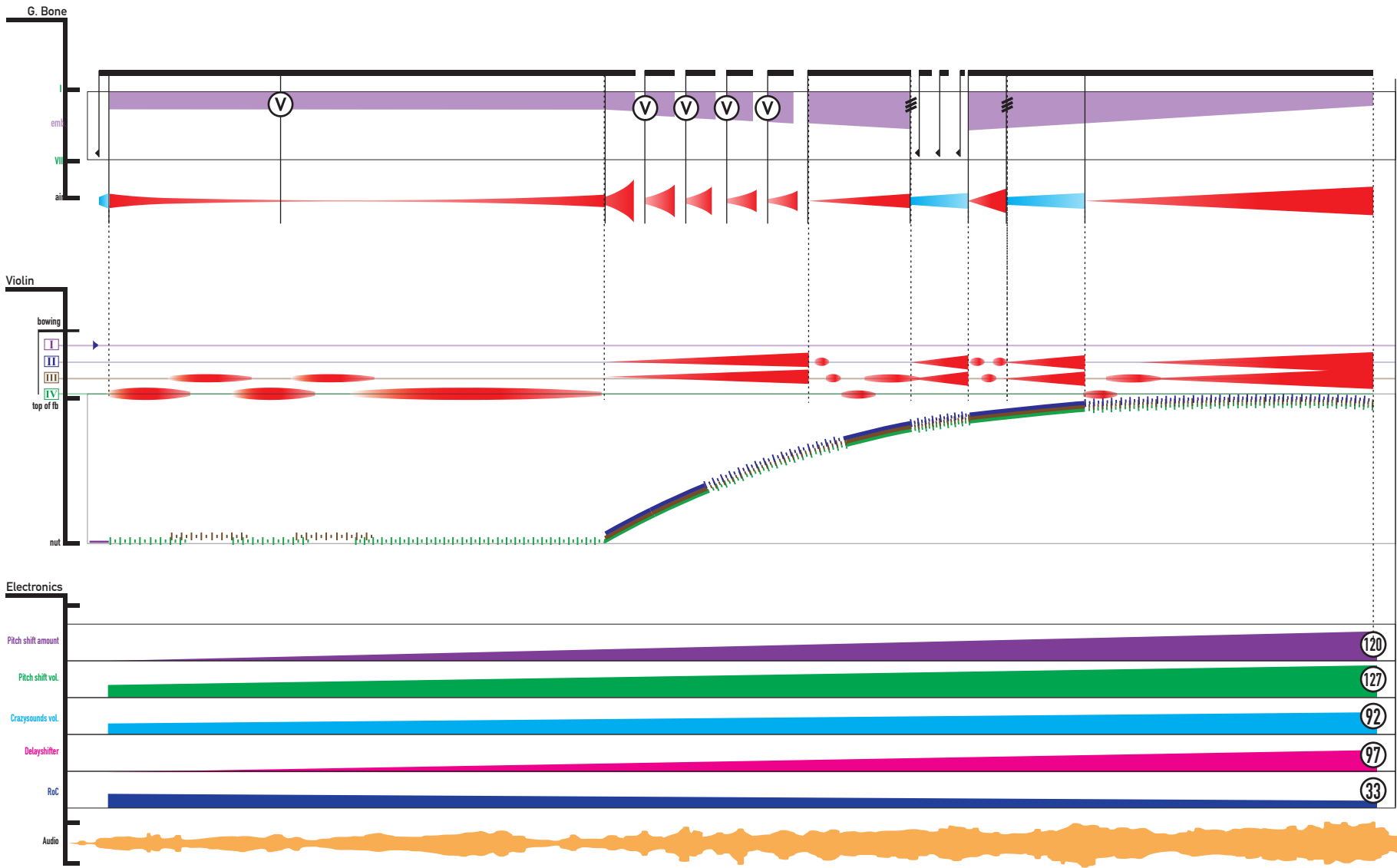
Each wedge represents a change over time; there is no shading when a fader is to be left in its current position.

At the start and end of any given change MIDI numbers 0 - 127 are given to show the position of the parameter. Absolute precision is not necessary, but the pitch shift amount and rate of change parameters are sensitive in the lower part of their range.

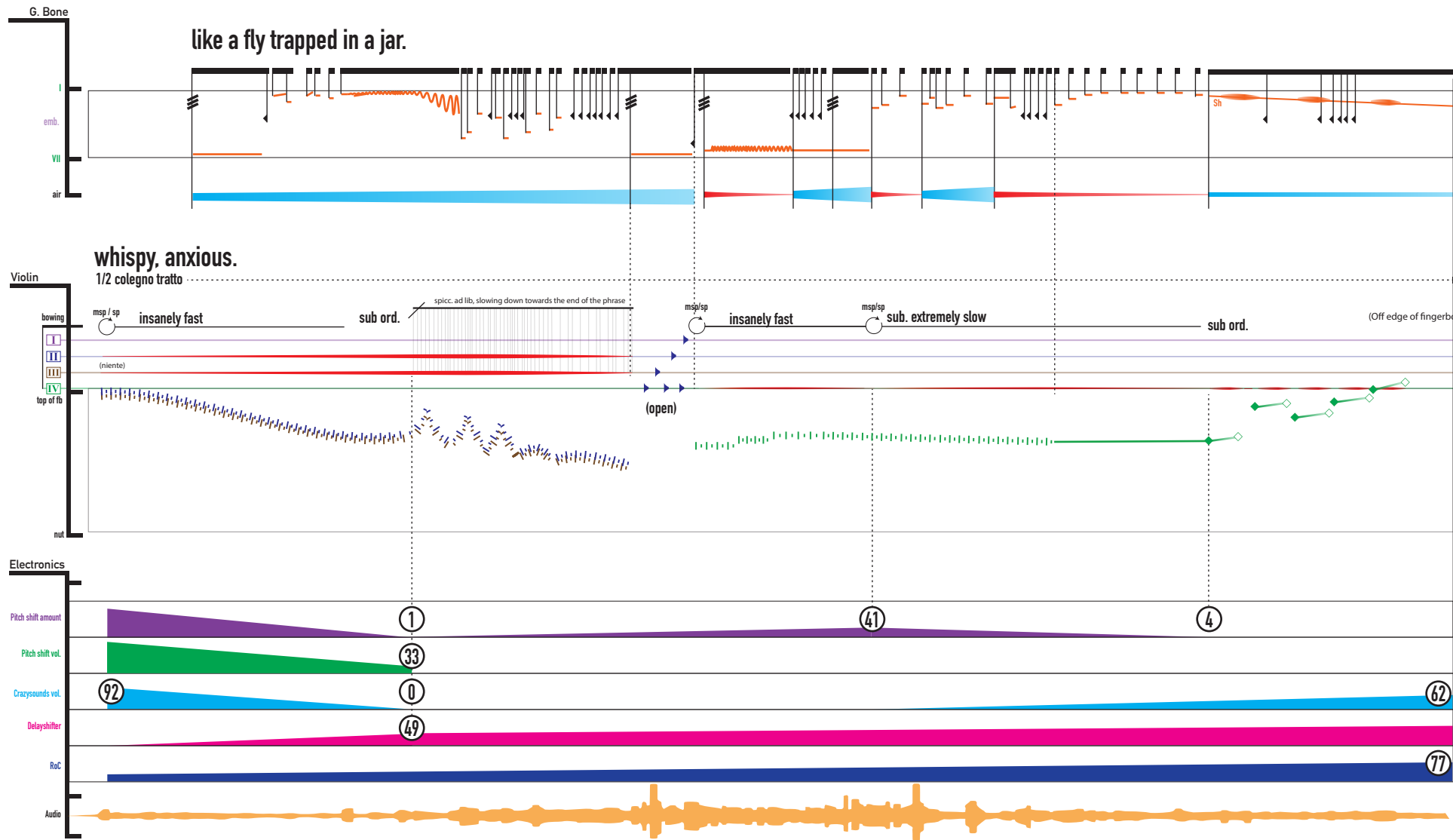
A 'Oak door, who lifted you off your hinges?' Lightly, tenuously, but not light-heartedly; scream backwards.

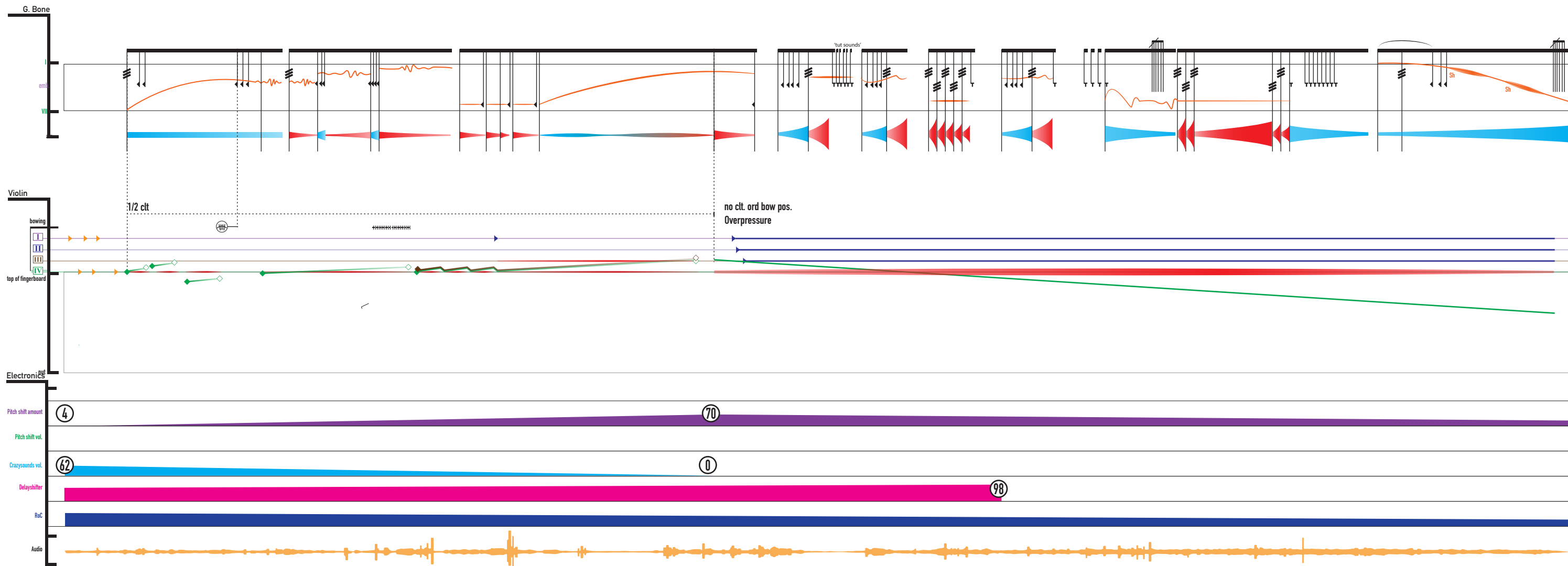


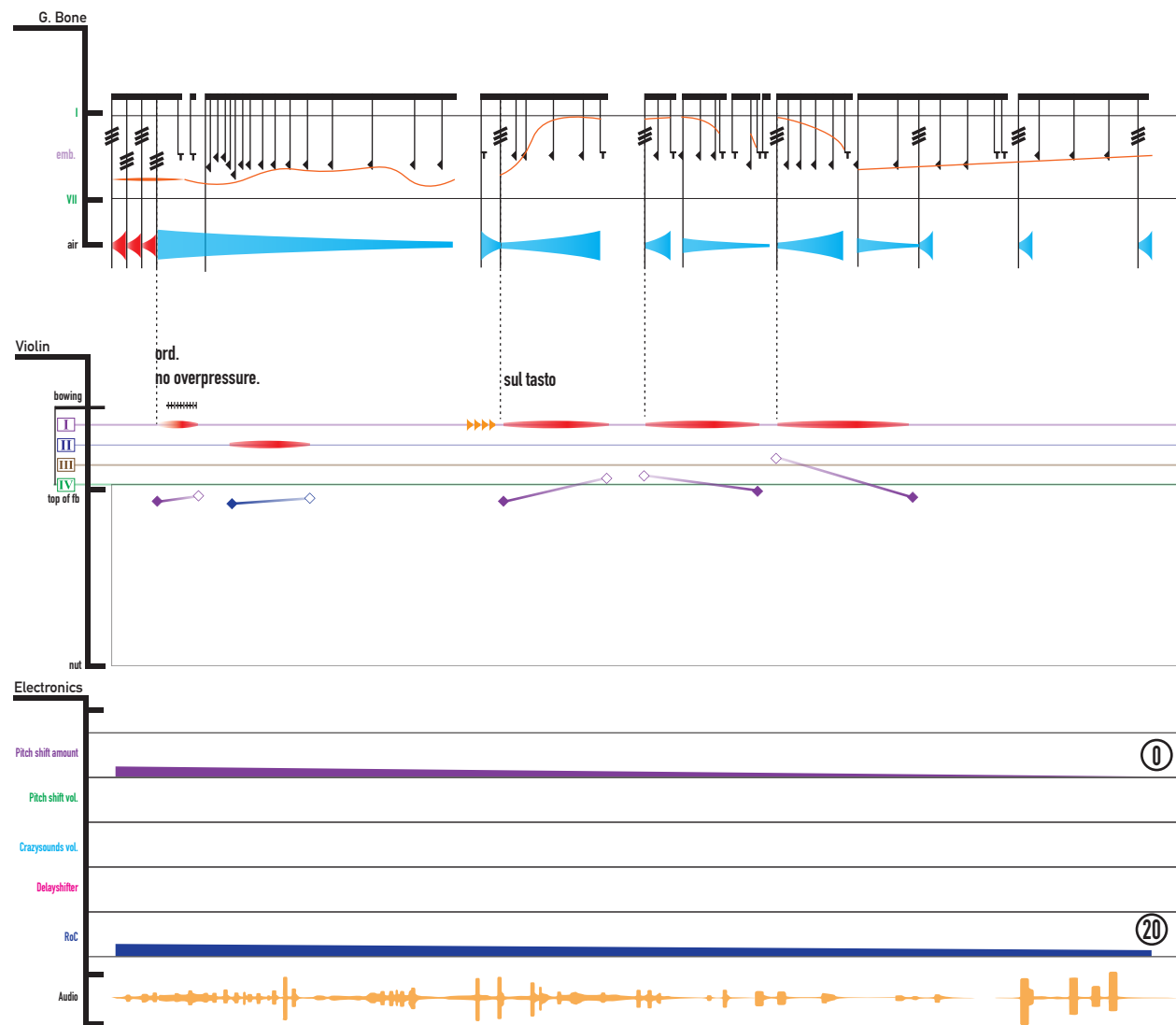




B 'We gaze at each other, we whisper out darkness' A residue; fingerprints left on glass, tumeric stains, no dust where we last sat. Quality of yearning.







(no pause)

