

Miguel Espinel

Amygdala

for flute and live electronics

2015

Miguel Espinel

Amygdala

written for Cassie Lear

INSTRUMENTATION:

FLUTE

LIVE ELECTRONICS

Duration: ca. 8 minutes


May 2015

Denton, TX

Performance Guidelines: Special Notations

Flute

 **Flutter-tongue:** Roll tongue.


 **Tongue rams:** Percussive tongue attack.


 **Key clicks:** finger the note and attack with the G key.


 **Tongue pizzicato:** Short tongue attack.

• — **Sustain:** play and hold note at player's discretion, pacing naturally with breaths.

Computer:

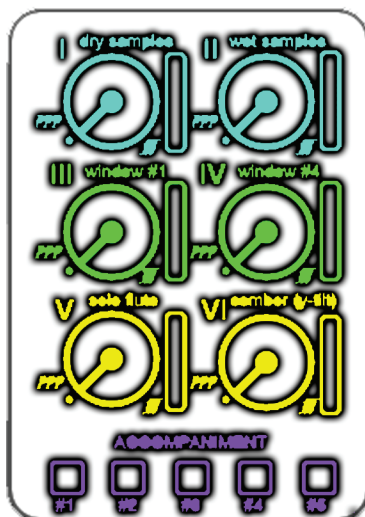
 **X-tilt:** tilt device to the sides while holding the push buttons.

 **Toggle sample:** turn sample on or off, depending on indication.

 **Move plot point:** move point in window #4 to transpose the flute sound.

IV: *f*
VI: *mf*

Window #3 levels: set levels on specific dial of window #3, dial is indicated by roman numeral and color coded as it appears on TouchOSC.



Window #3: Mixer

Dials - volume control for each element:

I: Unprocessed samples

II: Processed samples (z-axis/gravity)

III: Window #1: button transposer (x-axis/left-right tilt)

IV: Window #4: plot transposer

V: Solo flute signal

VI: Flute comb filter (y-axis/top-bottom tilt)

Buttons: Toggle samples #1-5 on or off

Performance Guidelines: Technical Details

Setting up electronics

This piece requires a computer with Max/MSP, a mobile device with TouchOSC, a sound interface for input and a microphone to capture the flute sound.

A clip-on microphone is recommended, but performers may decide to use a different microphone of their choice.

For communication between the computer and the device a wireless connection is required. This may be done through a router or through a network created on the computer directly (more reliable). The “Information, READ FIRST” button on the patch details information on how to create an ad-hoc network on Windows 8. However, this is also possible (and perhaps more simple) on other operating systems.

The “Find IP address” button on the top left of the patch shows the computer’s local IP. This address must match the first field on the TouchOSC settings window. The communication ports on the device should be 8000 to send messages to the computer and 9000 to receive messages. This is the default setting for TouchOSC and the patch is set to match these. If they do not match, they can be set on the TouchOSC settings window as well.

To set up the patch, make sure the samples subfolder contains the five samples.

To initiate the patch, press the button matching the one labeled “clear” on the patch (i.e., the blue toggle on Window#1). This button sets the parameters for the delay lines and may also be used as a panic button to clear the delays in case of feedback.

Now the patch and levels can be tested to perform the piece.

Amygdala

for Cassie Lear

Miguel Espinel

free, pacing with breaths

build up for approximately 5", let delays play for 5-10".

airy, blowing slightly into microphone for ca. 5", let build for 5-10"

Flute

Electronics

[Window #1] hold single buttons, responding to flute, tilt x-axis to transpose delays

[Window #3]: III: *f*
V: *f*

tilt device (continue with similar aleatory patterns)

3

molto rubato $\text{♩} \approx 60$

lip gliss

tongue pizz

tongue ram

Fl.

PC

[Window #1] hold multiple buttons, responding to flute, tilt x-axis to transpose delays

(continue with similar aleatory patterns)

4

Fl.

PC

[Window #3]: I: *mp* II: *f*
IV: *mf* VI: *mp*

5

loose, uncertain

begin with key clicks, add air, tongue pizz, and timbral effects with every repetition, building in intensity

Fl.

PC

#1 on (first run)

[Window #1]: pick a button for each note

#2 on (second run)

#4 on (first run)

9

free, pace with breath

Fl.

PC

#1 off

[Window #3]: I: *mf* III: *ff*
IV: *mp*

[Window #4] move plot point in response to flute

#2 off

#3 on

10

more uncertain

begin with key clicks, add air, tongue pizz, and timbral effects with every repetition, building in intensity

Fl.

PC

[Window #4] move plot point in response to flute (more subtle at first, become more abrupt with each repetition)

free voice -----| voice -----|

14 Fl. *mf*

PC **#3** off **#2** on [Window #1] hold multiple buttons, responding to flute, tilt x-axis to transpose delays **#1** on
tilt device

molto rubato ♩ ≈ 40

15 Fl. *f* *mf* *tr*

PC **#3** on [Window #1] hold multiple buttons, responding to flute, tilt x-axis to transpose delays

♩ ≈ 60

22 Fl. *f* lip gliss

PC press different buttons, non-specific tilt device **#5** on [Window #3]:
IV: *f*
VI: *mf*

most uncertain begin with key clicks, add air, tongue pizz, and timbral effects with every repetition, building in intensity 4x

30 Fl. *ff*

PC [Window #4] move plot point in response to flute (more subtle at first, become more abrupt with each repetition, tilt device expressively)

free, emotive whistling into microphone, continue whistling, improvising

34 Fl. *f*

PC [Window #1]: pick a button for each note

singing any lower note while playing, improvisation until cued out, continue playing, improvising

35 Fl. *f*

PC [Window #1]: pick a button for each note

more emotive

36 Fl. *ff* *mf* *f* *tr*

PC [Window #4] move plot point in response to flute (tilt device expressively) All samples off