

Full Circle

for Trombone and Interactive Electronics

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written for Jeremy Berkman and Benny Sluchin

Duration: 14 minutes.
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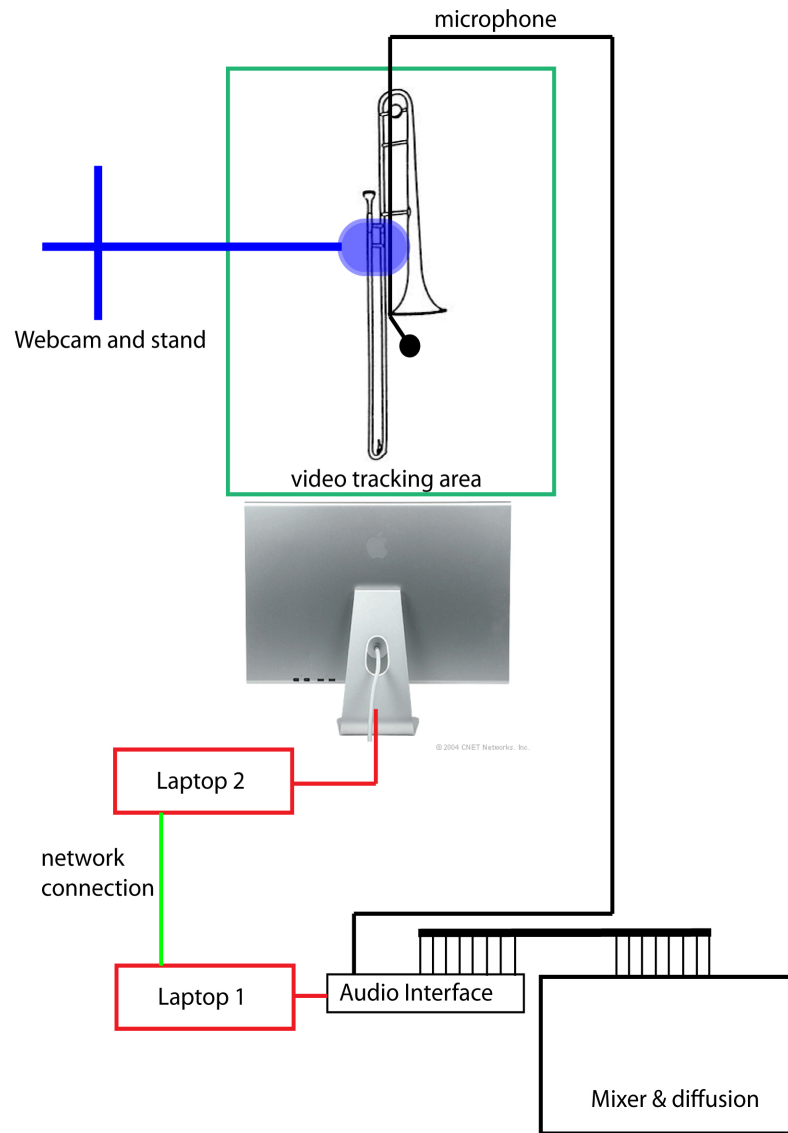
Technical Requirements

- 2 – Macintosh laptop computers (1 for audio processing running NoteAbilityPro and MaxMSPJitter (version 6.0 or higher) and 1 running NoteAbilityPro for score display for the performer.
- 2 – large screen displays (1 for each laptop)
- 1 – audio interface – with at least 1 mic input and 4 or 8 output channels
- 1 – Webcam (Logitech C900) with spigot for connecting to microphone stand
- 1 – tall microphone boom (capable of being 4 meters above the stage floor)
- 1 – long USB cable (with internal booster)
- 1 – microphone (DPA d:vote 400T) for the trombone
- 1 – mixer (with at least 8 input channels and 8 discrete output channels)
- 8 channel audio system (with speakers positioned around the hall). Optionally, 4 speakers may be used with speakers placed in the corners of the hall.
- 1 – plunger mute (other mutes can also be used in section IV of the composition)

Technical Notes and Setup

A camera (Logitech C900 or comparable webcam) is mounted on a boom microphone stand and placed above the performer so that the performer and connected by a USB cable to the main computer. A microphone (DPA d:vote 400T or comparable mic) is attached to the bell of the trombone and positioned so that it is still possible to use a plunger mute during the performance. The microphone is connected to the input of an audio interface. The audio interface is connected to Mac laptop Computer 1 via firewire or thunderbolt. Computer 1 is running NoteAbilityPro and MaxMSP. All MaxMSP controls are embedded in NoteAbilityPro score which is running during the performance. Computer 2 is connected to Computer 1 through a closed wireless network and the performer's score is displayed in NoteAbilityPro on Computer 2. One of the large screen displays is placed in front of the performer and the performer reads the score from this screen. The pages on the performer's score are automatically turned by network messages sent from Computer 1.

Technical Setup Schemata



Score Notes

R
M
L

rotate trombone **R**

breath (exhale)
(one long breath)

breath (inhale)
(almost a gasp)

hissing
(with plunger mute)

mp

lip gliss.....

pp

move slide silently

(motionless) (move slide silently) (motionless)

The second staff in the score represents rotations of the trombone slide from the center positions (M) to the right (clockwise) and to the Left (counterclockwise.) Rotations to the right and left trigger electroacoustic events

Symbols denoting audible exhale and inhale - the duration of the breath is determined by the length of the line - no specific pitch is required.

Produce an audible hissing sound and change the position of the plunger mute at the same time. The sound should be constantly modulating.

Produce a glissando by altering lip pressure.

Move the slide silently without blowing into the trombone - slide motions will be tracked and produce electroacoustic events

Move the slide as if you are playing the approximate pitches indicated in the rhythm indicated. Electroacoustic sounds will be generated when the slide is moving.

Full Circle

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Keith Hamel 2014

with plunger

$\text{♩} = 60$
breath [exhale]
(one long breath)

breath [inhale]
(almost a gasp)

ppp *p* *pp* *mp*

rotate trombone

R L

7

hissing
(with plunger mute)

pp

R L

breath [exhale]
plunger: closed → open

p *mf*

12

hissing
(with plunger mute)

mp

R L

lip gliss....

pp

17

move slide silently

R L

22

Tbn.

move slide silently

breath (exhale)

pp *p* *ppp* *pp*

p

27

Tbn.

breath (inhale)

slowly close and open plunger mute...

p *ppp* [vary dynamics ppp to mp].....

R
M
L

32

Tbn.

[breathy tone]
[quasi gliss]

move slide silently

vib: ~~~~~

pp *pp* *mp* *pp*

37

Tbn.

lightly

pp

ppp *p*

R
M
L

42

Tbn.

pp *mp* *ppp* *p*

47

Tbn.

R M L

(smooth transition to and from flutter)

pp *mfpp* *mp* *pp* *p* *ppp*

R

L

52

Tbn.

pp *ppp* *p*

lip gliss....

57

Tbn.

mp *pp* *mp* *pp* *p* *mp* *p*

5

62

Tbn.

mp *pp* *mp* *pp* *mp*

67

Tbn.

mp *mf* *p* *mp* *mf* *p*

72

Tbn.

mf *p* *mf* *mf* *ppp* *pp*

4 4 6 6 (move slide silently...)

6 6

77

Tbn.

mf *f* *pp* *mp* *pp* *f* *pp*

(smooth transition to and from flutter)

R L

82 (move slide silently)

Tbn. *f* *mp* *fp* *mf* *pp*

87 pick up plunger plunger mute closed gradually open and close plunger mute

Tbn. *p* *pp* *mp* *p* *f*

92

Tbn. *pp* *mf* *fp* *mf* *pp*

97 hissing (with plunger mute) plunger mute open breath (inhale) (almost a gasp) put down plunger

Tbn. *mp* [vary dynamic level] *mp*

R M L

II. = 90

102

Tbn.

mp *f* *p* *mf*

vib: *ord.*

R M L

106

Tbn.

p *mp* *p* *p* *f* *f*

R M L

110

Tbn.

ffp *mp* *f* *pp*

5 6 7

R M L

114

Tbn.

p *mf* *p* *mf* *f*


2 4 1

R M L

118

Tbn.

ff *p* *mp* *pp*

vib: 

R L

124

Tbn.

p *mf* *p* *mf* *f*

127

Tbn.

f *f* *ff*

(motionless) (move slide silently) (motionless)

131

Tbn.

ff *p* *ffp* *f* *mp* *f*

(motionless) (move slide silently) (motionless)

R L

135

Tbn.

f *mp* *mf* *pp*

R L

139

Tbn.

f *ff* *f* *ffmp*

5 4

143

Tbn.

f *fp*

146

Tbn.

ff *mf* *ff* *f*

(motionless) (move slide silently) (motionless)

150

Tbn.

mf *ff* *ffp* *ffp* *f*

R L

155

Tbn.

mp *ff mp* *ff* *mf*

158

Tbn.

ff *mp* *ff p*

161

Tbn.

vib:

quasi gliss...

f *pp* *p*

R M L

f *pp* *p*

R
M
L

164

Tbn.

quasi gliss...

mp *p* *p* *ppp*

mp *p* *p* *ppp*

167

Tbn.

quasi gliss...

mf *p* *mp* *pp*

mf *p* *mp* *pp*

170

Tbn.

f *mp* *f* *pp* *p*

quasi gliss...

175

Tbn.

[plunger mute in]

mf *f* *p*

gradually close and open.....

open..... closed

179

Tbn.

pp *mp* *pp* *pp* *mp*

gradually open and close plunger mute....

closed open

184

Tbn.

ppp *ppp* *mp* *pp* *mp* *pp*

breath [exhale]
[one long breath]

gradually open and close plunger mute....

R

L

189

Tbn.

ppp *p* *ppp* *p* *ppp*

plunger closed..... open

[plunger mute down]

III $\text{♩} = 72$

Tbn. 4/4 p mp pp p mf

Tbn. 3/4 p p pp mp pp mp *espressivo*

Tbn. 3/4 4/4 6/4 4/4 p mp pp p mp pp

Tbn. 4/4 p mf pp p mp

Tbn. 3/4 4/4 mf mp mf p

Tbn. 7/8 3/4 pp mp

217
Tbn. $\frac{3}{4}$ $\frac{5}{4}$ $\frac{3}{4}$ $\frac{7}{8}$ $\frac{3}{4}$
mf *p* *mp* *p* *mp*

222
Tbn. $\frac{4}{4}$ $\frac{5}{4}$
pp *p* *mf* *p* *pp*

227
Tbn. $\frac{5}{4}$ $\frac{3}{4}$ $\frac{4}{4}$ $\frac{4}{4}$
pp *mp* *pp* *p* *mp* *mf* *p*

231
Tbn. $\frac{3}{4}$ $\frac{3}{4}$ $\frac{4}{4}$ $\frac{4}{4}$
mf *f* *mp* *p* *mp*

235
Tbn. $\frac{2}{4}$ $\frac{4}{4}$
p

IV

♩ = 90

(omax)
with a steady pulse

239

Tbn.

mf

243

Tbn.

246

Tbn.

p *mf* *p*

249

Tbn.

mp *mf* *f* *p* *f* *mf*

253

Tbn.

(improvise against OMax circa 2 minutes)

256

Tbn.

p

260

mp *f* *fmp* *ff* *p*

wide vibrato

264

V ♩ = 60

ppp *p*

267

move slide silently

ppp *p*

R

L

271

p