

Fractus IV

for Trombone and SuperCollider

01

Trombone

Computer

trombone-like gesture

ca. 1:00: Between Events **01** and **02**, improvise on invented material or using the provided gestures as a basis. Improvisation should adhere to the following *general* guidelines:

- gradually transition from sparse to dense;
- gradually transition from quiet to loud;
- tend toward non-pitched sounds, but do not exclude pitched material entirely; and;
- use plunger mute freely yet discretionally

During this section, the computer will generate trombone-like sounds. The player is encouraged to listen and react to these sounds, and to incorporate those reactions into the improvisation.

The player, at his or her discretion, may depress and hold the foot pedal to record a gesture. The computer will granulate the input while the pedal remains depressed. Upon release, the computer will fade the effect over approximately 6 seconds.

After approximately 1 minute, the computer will culminate in a swath of noise, at which point the player should advance to Event **02** by quickly double-tapping the foot pedal.

plunger, flutter tongue & gliss.

sing while playing

inhale/exhale, whisper through instrument

slap tongue & gliss.

sudden registral changes

short percussive sounds

loosely $\text{♩} = 130$ **02**

CPU triggers a three-measure noise swell and dramatic hit

Fractus IV

exploratory and free, as if improvising.
use plunger as desired through m. 20.

6

Tbn. *gliss* *ord* → *slap tongue*

ff *mf* *mf* *f*

rising tone cluster

percussive gesture loosely at 130 bpm

becomes arrhythmic, pontillistic texture

pp

7

Tbn. *indefinite pitches*

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

occasional held note with crescendo

8

Tbn. *mf* *pp* *ff* *mp* *pp* *ff* *p*

Fractus IV

9

Tbn.

mp *f* *mp*

indefinite pitches

CPU

10

Tbn.

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

deliberately

3

drop plunger

CPU

11

Tbn.

p *mp* *p*

strictly ♩ = 130

CPU

over the next 12 measures, the CPU accompaniment gradually locks to a sixteenth note grid in a pseudo E-flat mixolydian mode. notated pitches and rhythms in the CPU staff are approximate until m. 22.

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15

Tbn.

mf

mp

gradual crescendo to m. 32

18

Tbn.

f

mp

21

Tbn.

f

ff

aleatoric pulse with B-flat tonal center

bass hit

Fractus IV

24

Tbn.

pp

mf

cpu

n

bass hit Ξ

mf

pitch and timbre vary significantly, but overall texture adheres to a strict pulse

31

Tbn.

f

mf

cpu

36

Tbn.

f

mf

p

mf

3

cpu

Fractus IV

04

4I

Tbn.

with renewed energy

mp *f*

mutated bass hit

ff

Tbn.

46

mf

3

CPU

5I

Tbn.

mp *p* *ff* *p* *p*

CPU

Fractus IV

05

Tbn. 57

CPU

Tbn. 61

CPU

pitches drift upward

accompaniment loses sense of pulse

Tbn. 64

CPU

harsh up/down glissando growl

Fractus IV

69

Tbn.

aggressive flutter tongue

f *fff*

CPU

sudden chime-like resonance

ff

accompaniment resumes 130 bpm pulse

73

Tbn.

mf

CPU

gradual decrescendo to approx. m. 97

pulse undergoes a timbral shift and loses sense of pitch

pp

77

Tbn.

f *mp* *ff* *mp*

CPU

mp

Fractus IV

81

Tbn.

p *mp* *f* *mf* 3

CPU

p

87

Tbn.

scattered echoes

p *f* *mf* *p*

pitches smear randomly

CPU

p cresc.

pulse converges on A with eighth note emphasis and periodic triplet figures

3 3

f percussive hit

93

Tbn.

ff *f* *mp* *mf*

CPU

recurring granular sweeps

p *mf*

rising/falling tone cluster

Fractus IV

97

Tbn.

mp *f* *p*

CPU

IOI

Tbn.

meandering gliss

extremely short, indefinite pitches

f *mp* *fp* *f* *mf*

CPU

IO5

Tbn.

f *ff*

CPU

Fractus IV

109

Tbn. flutter tongue with unusual embouchure, creating a fast double-tongue-like effect

mf *ff*

3

p *f*

114

Tbn. pitch range expands, tone becomes more aggressive randomly interrupt flutter tongue with improvised, angular, staccato gestures

pulse gradually becomes arrhythmic

pp

07

121

Tbn. normal flutter

ff *mf* *f*

mp

meandering background tones

Fractus IV

synchronize with visual metronome if necessary strictly ♩ = 130

08

Tbn. I27

CPU

gradual crescendo

pulse recedes into background CPU adds harmony via Event 08

f *mf* *f* *mf* *f*

Tbn. I33

CPU

rough gliss.

f *mf* *ff* *f*

09

Tbn. I38

CPU

improvise freely with plunger through m. 177

ff *f* *p* *ff*

harmonization is captured, granulated, and added to climactic texture

Fractus IV

Tbn. I44

noise gradually subsumes all

Tbn. I48

IO

Tbn. I52

explore random timbres and techniques while following the general shape of the gesture

deliberate and forceful descent

CPU accompaniment explodes, improvisatory trombone gestures are spatialized/granulated wildly

CPU is reduced to a dull roar over ca. 20 seconds

Fractus IV

extremely loud and intimidating: sing/growl while playing, creating beating patterns between voice and instrument , whisper/mumble through trombone , still quite loud, but losing energy ,

I 153

Tbn. *fff* hold for one full breath *mf* *f* ca. 10" *ff* hold for one full breath

CPU

subtle echo effect begins

I 154

Tbn. *mf* *mp* drop plunger, hold fermata as desired for dramatic purposes

loosely ♩ = 48, dreamlike

CPU

pp *p* *n* *pp* *p*

dull roar fades out, atonal chords gradually fade in

I 156

Tbn. *p*

CPU

p *pp* *p*

Fractus IV

Tbn. I59

pp pp mp

pp p pp

Tbn. I64

3 p 3 pp

strictly ♩ = 40

I2

p pp

Tbn. I69

with overflowing emotion

ppp mf f

pitches converge on D-flat major mp

Fractus IV

I73

Tbn.

mf $\langle^3 f$ mf \rangle^3

CPU

I77

accel.----- $\bullet = 140$

Tbn.

p $\langle f \rangle p$ $\langle mf \rangle p$ $\langle ff$

CPU

CPU pitches smear

n

pseudo-pitched percussive rhythm

I81

(synchronized with CPU)

indefinite pitches

Tbn.

p < ff *pp* $\langle ff$ *mp* $\langle ff$ *p < ff* *mp* $\langle ff$

CPU

Fractus IV

I3

improvised aggressive gesture with optional plunger, flutter tongue, breath, vocalization, etc.

185

Tbn.

mf *ff* *fff*

CPU

ff

The image shows a musical score for two instruments: Tbn. (Tuba) and CPU (Computer Processing Unit). The Tbn. part begins at measure 185 with a dynamic of *mf*. It features a melodic line with some chromaticism and a crescendo leading to *ff* and then *fff*. The CPU part has rests in the first two measures, followed by a dynamic of *ff*. There is a large black scribble at the end of the CPU part. Handwritten annotations include a box labeled 'I3' with an arrow pointing to a specific note in the Tbn. part, and a note about an 'improvised aggressive gesture' with various performance techniques like plunger, flutter tongue, breath, and vocalization. The page number '17' is at the bottom.