

Recursion (for S)

Benjamin R. Fuhrman

Circa Seven Minutes.

Notes on Performance

To perform *Recursion (for S)*, you will need access to a computer with Ableton Live and Max4Live. It was created and has been tested with Live Suite 9 and Max4Live 6. Microphones for the Bass Clarinet should be put on channels 1 and 2 (stereo track 1), although this can be changed in Live - just make sure to change the delay (stereo track 2) line to reflect this as well. Outputs are set to Master Outs 1 and 2, but can be reconfigured for other pairs as needed.

Program Notes

Recursion (for S) was commissioned by clarinetist Will Cicola, who was looking for new pieces that explored both quarter tones, and computers. The piece was created by taking extremely high res samples of Will's bass clarinet (176.4kHz, 24Bit), and using those as the basis for spectral processing and computer transformations that would generate all of the computer material with the exception of the delay line. Spectrums were edited, samples were processed, and instruments were programmed to create the dreamlike texture of the computer as the bass clarinet floats on the surface. Yet, in the end, all that the audience is really hearing is the bass clarinet. Just in a multiplicity of ways that support the live performer as they come full circle through the instrument, the piece, and the computer.

To Will Cicola

Recursion (for S)

Benjamin R. Fuhrman

12-3-13

$\text{♩} = 140$

Computer

sample/reverb on

S

Bass Clarinet

Comp.

3 playback

B. Cl.

Comp.

5 add "electronic" noises

B. Cl.

B. Cl.

8

16

B. Cl. ¹⁰

mp *mp*

5/16

B. Cl. ¹²

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

B. Cl. ¹⁷

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

B. Cl. ²³

mf *mp* *ff* *mp* *ff* *mp*

B. Cl. 27 *ff* *ff* *mp*

fade out 7 16

B. Cl. 30 *mp* *ff* *ff*

♩ = 105

computer swell fade out

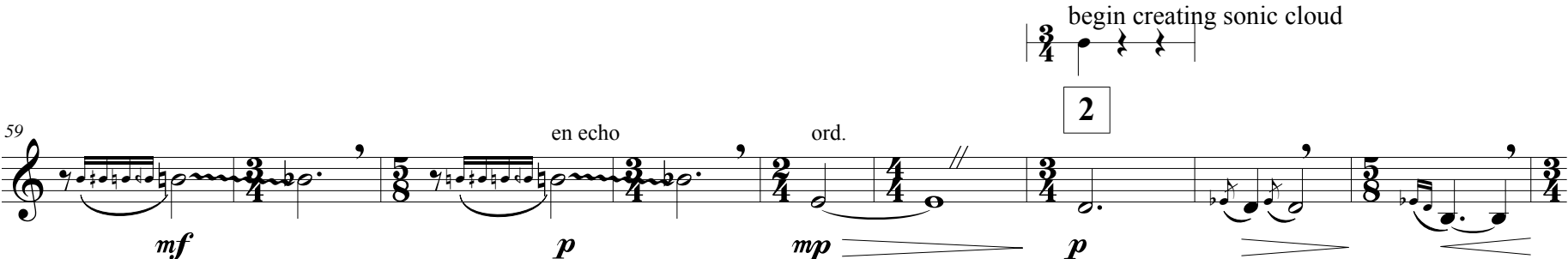
B. Cl. 33 *fff* *p* 1

41 alleatoric long samples in computer

Comp. 41


B. Cl. 41 *mp* *mp* *p*

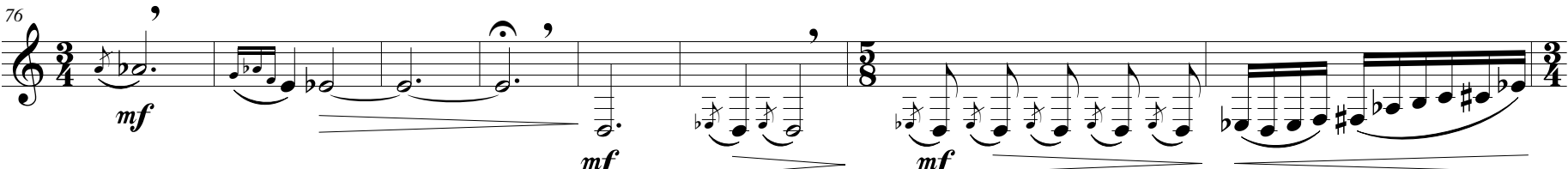
B. Cl. 

B. Cl. 

begin creating sonic cloud

2

B. Cl. 

B. Cl. 

B. Cl. ⁸⁴

mf *p* *f* *mf*

B. Cl. ⁹⁰

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

B. Cl. ⁹⁷

mp *mp* *p* *p* *p*

B. Cl. ¹⁰⁶

mp *f* *f*

cloud - peak intensity

B. Cl. 139 ord. Growl

ff *ff*

B. Cl. 147

fff *mf* *f* *f*

B. Cl. 153

f *mp* *mp*

B. Cl. 159 en echo ord.

ff *mp* *p* *mf*

♩ = 140

transition out of cloud

B. Cl. 166

mf *mp* *mp* *mp*

B. Cl. 172

f *mp* *mp* *mp* *f*

Comp. 177

4

playback of first sample

return of "electronics"

B. Cl.

mp *f* *mp* *f* *mp* *f*

B. Cl. 180

mp

B. Cl. 182

mf *mp*

B. Cl. 184


f *mp* *f* *mp* *f*

B. Cl. 187

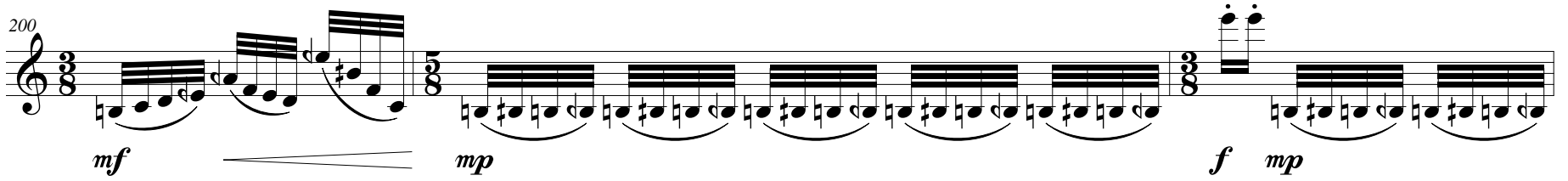
mp *mp*

B. Cl. 189

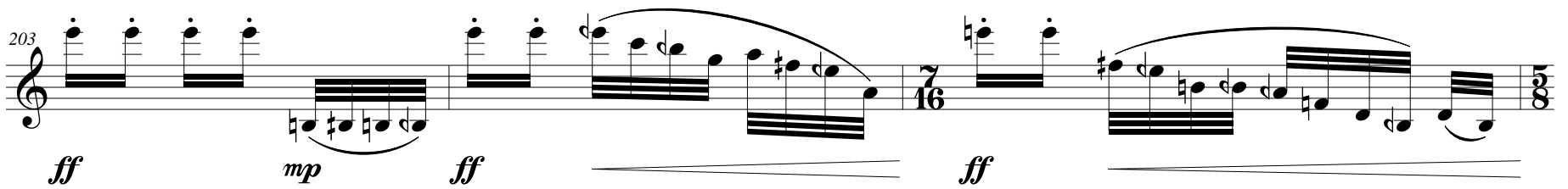
f *mp* *f* *mp* *f* *mf* *f* *mf* *f*

B. Cl. 


194 *mf* *f* *mf* *f* *ff* *mf* *f* *f*

B. Cl. 

200 *mf* *mp* *f* *mp*

B. Cl. 

203 *ff* *mp* *ff* *ff*

B. Cl. 

206 *mp*

208
B. Cl.

mf *mp*

210
B. Cl.

mp

212
B. Cl.

ff *mf* *ff* *mf* *ff*

215
Comp.

peak sample/electronics intensity

215
B. Cl.

mf *ff*

B. Cl. 217

mf *ff*

B. Cl. 219

fade out computer - except reverb

fff

B. Cl. 223

reverb swell - hold till end

Growl

mp *ffff*