

Fragmented Night

for Piano and Live Electronics
by Evan X. Merz

Electronics Addendum

The electronic portion of this score may be realized using a laptop computer with Pure Data installed, and a Behringer FCB1010 MIDI Foot Pedal. Other hardware or software may also be used.

In the score, the bottom line of the electronics staff indicates a pedal that is completely up, sending a MIDI value of 0. The top line of the electronics staff indicates a pedal that is completely depressed, sending a MIDI value of 128. A dotted line indicates improvisation, but subtle improvisation on the electronics part may occur throughout the piece.

What follows are three separate images that show the pure data patches used in this project. The first one is the main patch. The next one is the pitch shifting patch. The final image shows the patch for receiving input from the FCB1010 foot pedal.

If you are implementing this patch using another setup, then you can break the main patch down into a few basic parts. There are three pitch shifters connected to three delay units. Each unit has different settings. The pitch shifters all shift the incoming signal down from -3 to -28 semitones. These settings are controlled by switches on the FCB1010, although their use is not dictated by the score; they may be used freely as the performer sees fit. The three delay units delay the pitch-shifted signals by 100 to 300 milliseconds.

The other part of the patch is a simple ring modulation synthesizer. This synth modulates the incoming signal with a version of that signal that is pitch-shifted up 7 semitones and delayed for 200 milliseconds.

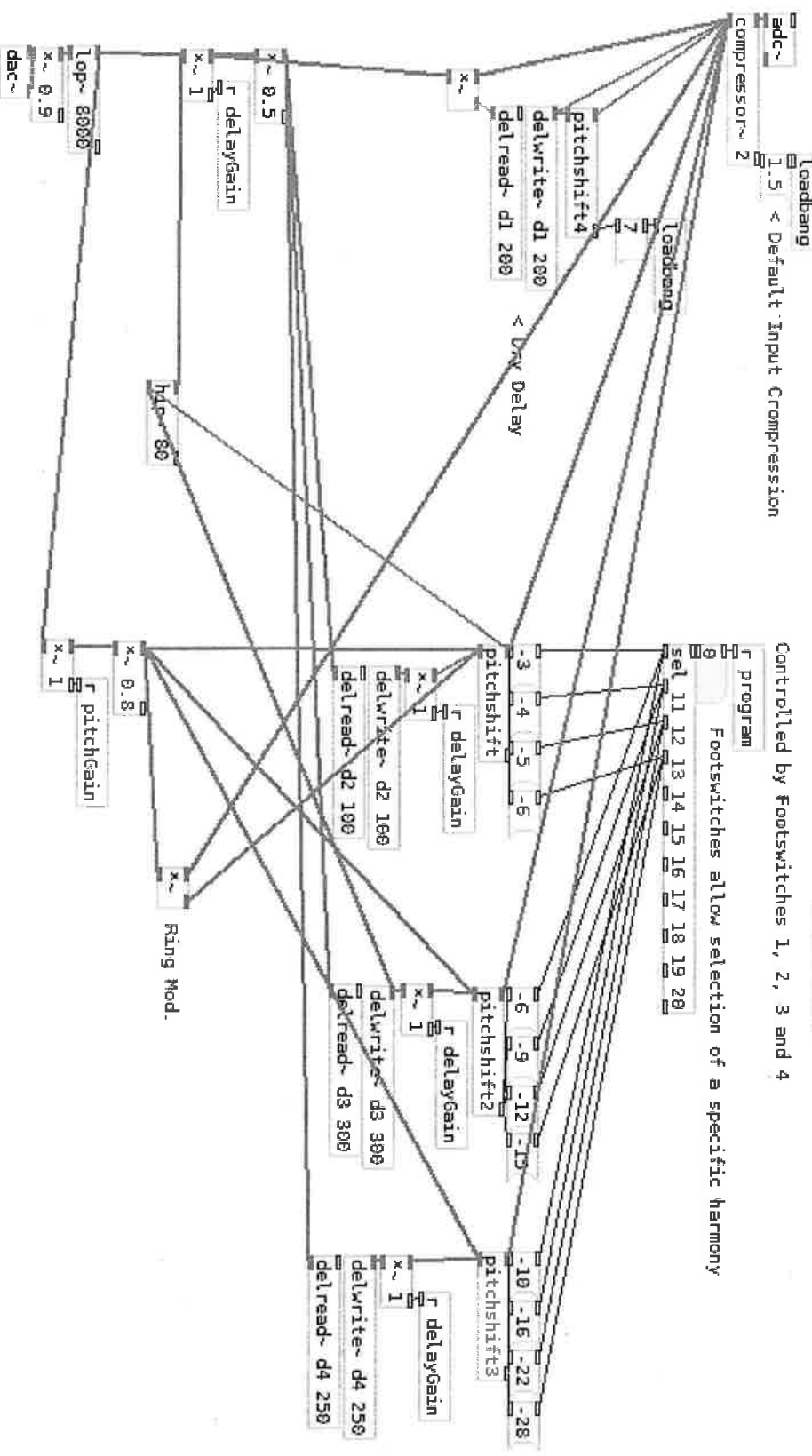
The gain of the patch is controlled by the foot pedal on a logarithmic scale. If you are realizing this on another system, then you should look closely at how the gain pedal is connected, because it is not just a simple volume knob at the end of the system.

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pd dsp 1 < Audio On
FC81010
pd dsp 0 < Audio Off

Pedal A = Delay Gain
f pedala
+ 128
/ 256
pow 5
moses 0.05
s delayGain

Controlled by Footswitches 1, 2, 3 and 4
f program
sel 11 12 13 14 15 16 17 18 19 20
Footswitches allow selection of a specific harmony



< Delay Units (Pedal)

Fragmented Night I

for Piano, Fixed Media and Live Electronics

Evan X. Merz

Piano

♩ = 90

Electronics

128

0

|| C

Detailed description: This system contains the first five measures of the piece. The piano part is in treble clef with a common time signature. The tempo is marked as quarter note = 90. The dynamics are *pp* (measures 1-2), *p* (measure 3), and *mp* (measures 4-5). The electronics part is represented by a rectangular box with a vertical bar line and the letter 'C' below it, indicating common time. A number '128' is written above the box, and a '0' is written below it.

6

pp

f

8va

pp

||

Detailed description: This system contains measures 6 through 10. The piano part continues in the treble clef. Measure 6 starts with *pp*. Measure 7 has a dynamic of *f*. Measure 8 has an *8va* (octave above) marking with a dashed line. Measure 9 has a dynamic of *pp*. Measure 10 has a dynamic of *pp*. The electronics part is a rectangular box with a vertical bar line and the letter '||' below it.

11

p

f

8va

p

||

Detailed description: This system contains measures 11 through 16. The piano part continues in the treble clef. Measure 11 has a dynamic of *p*. Measure 12 has a dynamic of *f*. Measure 13 has an *8va* marking with a dashed line. Measure 14 has a dynamic of *p*. Measure 15 has a dynamic of *p*. Measure 16 has a dynamic of *p*. The electronics part is a rectangular box with a vertical bar line and the letter '||' below it.

17

p

f

mp

mf

pp

||

Detailed description: This system contains measures 17 through 21. The piano part continues in the treble clef. Measure 17 has a dynamic of *p*. Measure 18 has a dynamic of *f*. Measure 19 has a dynamic of *mp*. Measure 20 has a dynamic of *mf*. Measure 21 has a dynamic of *pp*. The electronics part is a rectangular box with a vertical bar line and the letter '||' below it.

Musical score for piano, measures 22-28. The score is written for a grand piano with a treble and bass clef. The treble clef part consists of whole rests in measures 22-28. The bass clef part features a rhythmic pattern of eighth and sixteenth notes with various accidentals (sharps and naturals). A dynamic marking of *f* (forte) is placed below the bass line in measure 24, and a dynamic marking of *pp* (pianissimo) is placed below the bass line in measure 28. A double bar line is present at the end of measure 28.

Fragmented Night II

for Piano, Fixed Media and Live Electronics

Evan X. Merz

Piano

♩ = 100

p *f* *p* *mf*

Electronics

128

0

|| C

5

p *mf* *p*

||

9

ff *mp* *p*

ff

||

12

ff *p* *mp* *f*

p *mp* *f*

||

15

p *mf* *p*

||

19

mf *pp*

||

23

ff *mf* *ff* *mp*

ff *mf* *mp*

||

Fragmented Night III

for Piano, Fixed Media and Live Electronics

Evan X. Merz

Piano

$\text{♩} = 110$

128

Electronics

|| C improvise

5

mf

||

9

p

ff

||

14

mp

f

mf

||

Fragmented Night IV

for Piano, Fixed Media and Live Electronics

Evan X. Merz

Piano

♩ = 120

p *f* *p*

Electronics

128

|| C

0

4

mf *p* *accel.* *a tempo* *mf* *p* *mp* *p*

p *f*

||

7

ff *p* *gently, expressively*

||

11

||

15 *spritely*
8va *accel.* *a tempo*

p *f* *mp* *pp*

18 *ritard.* *a tempo*

p *ff* *p*

21

ff *p*

Fragmented Night V

for Piano, Fixed Media and Live Electronics

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Performance Note

Hold fermatas for a long time, but do not allow the notes to fully fade away.

The score is divided into three systems, each with Piano, Electronics, and Live Electronics parts.

System 1 (Measures 7-13):
Piano: Treble clef, common time. Tempo: $\text{♩} = 130$, *rubato*. Dynamics: *p* (measures 7-8), *mp* (measures 9-13).
Electronics: Treble clef, common time. Dynamics: *p*.
Live Electronics: Treble clef, common time. Dynamics: *pp*. Includes a fermata over the final measure (13) and the instruction "(play the lowest Bb on the piano)".

System 2 (Measures 14-19):
Piano: Treble clef, common time. Dynamics: *spritely* (measures 14-16), *expressively, very rubato* (measures 17-19).
Electronics: Treble clef, common time. Dynamics: *p*.
Live Electronics: Treble clef, common time. Dynamics: *p*.

System 3 (Measures 20-25):
Piano: Treble clef, common time. Dynamics: *p*.
Electronics: Treble clef, common time. Dynamics: *p*.
Live Electronics: Treble clef, common time. Dynamics: *p*.

Musical score for piano, measures 26-31. The score is written on two staves: a treble clef staff and a bass clef staff. The key signature is one sharp (F#), and the time signature is 7/8. The piece concludes with a double bar line and a repeat sign (||) in the first measure of the final system. The final measure of the first system contains a chord with a dynamic marking of *pp* (pianissimo).

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