

Composing *Fake Mosaic*
for soprano sax and percussion

Lawton Hall
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Music does something other than what the humans gathered around it would like it to do, something other than what they have programmed. That is why they listen to it; it is not their double, nor the mirror of their vanity. "Made" the way it is, it has its own capacity to act. It forges identities and sensibilities; it does not obey them. It does act (fait oeuvre) in this sense.

Antoine Hennion

"From ANT to Pragmatism: A Journey with Bruno Latour at the CSI"

Composition as Dialog

- *What am I telling the piece to do?*
- *What is the piece telling me it wants to do?*

Giving the Piece a Voice

- *Generative/algorithmic processes give the music agency, allowing for a two-way dialog between me and the piece.*
- *The piece also exerts agency through its instrumentation.*

My Compositional Interests

- Groove / Rhythm
- Timbral Fusion / Harmony as Timbre
- “Hyperinstruments”
- Noise-Pitch Continuum
- Melody

Pre-Compositional Decisions

INSTRUMENTATION:

Soprano Sax, Vibes, two Crash Cymbals

- *Vibes and Soprano Sax have similar range, allowing for timbral fusion/blend.*
- *Crash cymbals fill out the noise end of the noise-pitch continuum and contrast clear bell tones in the vibes.*
- *Sax carries melody. Percussion colors individual sax notes (like a mosaic!)*
- *Both players capable of playing rhythmically active music.*

A

BEGINNING - I

Strongly melodic, sax drives rhythmic energy

Hesitance/trepidation gives way to flow and constant motion; unstable groove

Strong sense of rhythmic process; feeling of forward motion

sparse rhythm → maximum density

heterogenous distribution of noise + pitch → noise overtakes texture

B

I - N

Suspension of rhythmic processes; freely composed, sense of weightlessness and mystery

Cymbals become a more rhythmically-driving voice, rather than just coloristic

Sax takes on a textural/timbral role

C

N - END

Return of rhythmic processes

Sax re-emerges as melodic voice

Percussion is much more independent than in A section

Longer periods of regular pulse (more stable) than A section

sparse rhythm → maximum density

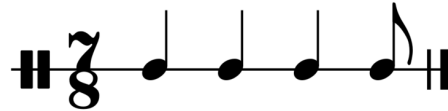
blended hyper-instrument → distinct timbral roles

Euclidean Rhythms

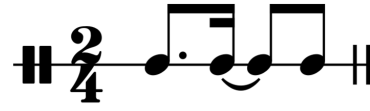
GENERATIVE RHYTHMIC PROCESS

Algorithm that takes a number of onsets (k) and distributes them evenly across a number of beats (n)

Ruchenitsa
Euclidean Rhythm
($n = 7, k = 4$)



Tresillo
Euclidean Rhythm
($n = 8, k = 3$)



www.lawtonhall.com/blog/euclidean-rhythms-pt1

Modulating Euclidean Rhythms

By changing either the k or n value of each cycle, it's possible to change the rhythmic density of the generated rhythms.

MODULATING k VALUE

$$k = [2...12], n = 12$$

[2, 12] [3, 12] [4, 12] [5, 12] [6, 12] [7, 12] [8, 12] [9, 12] [11, 12] [12, 12]

becomes increasingly dense

MODULATING n VALUE

$$k = 2, n = [2...12]$$

[2, 2] [2, 3] [2, 4] [2, 5] [2, 6] [2, 7] [2, 8] [2, 9] [2, 10] [2, 11] [2, 12]

becomes increasingly sparse

$k = 3, n = 25 \dots 3$

[3, 25] [3, 24] [3, 23] [3, 22]

5 [3, 21] [3, 20] [3, 19] [3, 18] [3, 17]

10 [3, 16] [3, 15] [3, 14] [3, 13] [3, 12]

15 [3, 11] [3, 10] [3, 9] [3, 8] [3, 7] [3, 6] [3, 5] [3, 4] [3, 3]

Superimposed Modulating Euclidean Rhythms

(4, (25..4))

Sax: Aggregate Rhythm of All Three Streams

1

(5, (25..5))
Percussion Right Hand

2

(3, 25..3))
Percussion Left Hand

3

8

1

2

3

15

1

2

3

A Section Pitch Sieves

The image displays a musical score for a piano section, consisting of two systems of music. Each system is written for the right and left hands on a grand staff. The first system is marked with [5,4] above the first measure and [6,5] above the second measure. The second system is marked with [6,7] above the first measure and [8,7] above the second measure. The notation includes various note values, accidentals (sharps and flats), and slurs connecting notes across measures. The pitch sieve markings indicate specific intervals or patterns to be played.