

Tempi by compound Ratio

$$4:5:6:7:8:9$$

$$\rightarrow \left\{ \frac{1}{1}, \frac{5}{4}, \frac{3}{2}, \frac{7}{4}, \frac{2}{1}, \frac{9}{4} \right\}$$

$$\rightarrow 39 \times 4:5:6:7:8:9$$

$$\rightarrow \{ 39, 48.75, 58.5, 68.25, 78, 87.75 \}$$

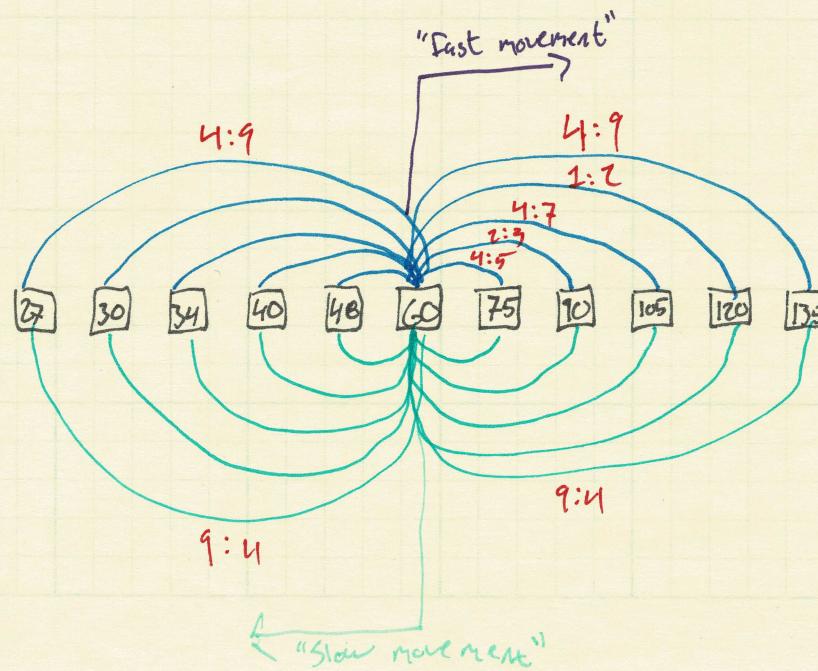
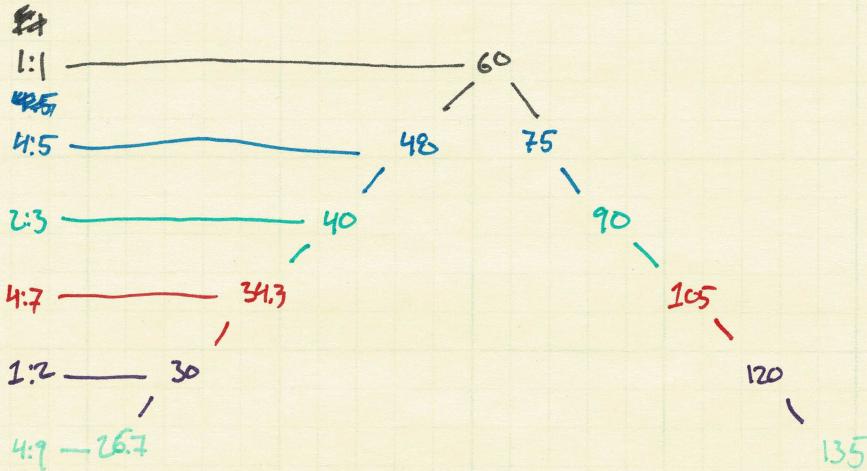
$$60 \times 4:5:6:7:8:9$$

$$\rightarrow \{ 60, 75, 90, 105, 120, 135 \}$$

$$60 \times 9:8:7:6:5:4$$

$$\rightarrow \left\{ \frac{1}{1}, \frac{4}{5}, \frac{2}{3}, \frac{4}{7}, \frac{1}{2}, \frac{4}{9} \right\}$$

$$\rightarrow \{ 60, 48, 40, 34.29, 30, 26.7 \}$$



Infiorescenze, o liber abaci

Diagram illustrating a musical score structure with multiple staves, time signatures, and local materials.

Top Section:

- Staves 1-6: Grid of numbers (3-6) across six staves.
- Annotations above staves: (4), (1), (7...), (2), (5...), (3), (6), (7), (5), (7), (3), (5), (7), (3), (5), (6).
- Annotations below staves: (x)-meter series, (x)-micro section, (x)-pitch content, (x)-density, sizes 1 2 3.
- Annotations on the right: 7 - [nαδ] - materials, 8 - time signatures.

Bottom Section:

- Measures I, II, III with local materials: α, β, γ, δ, ε, ζ.
- Measure numbers: I - 1,2,3, II - 4,5, III - 6,7.
- Annotations on the right: 9 - local materials, 10 - #of measures, 11 - main Section.

$$\begin{array}{c}
 \text{I} - 1, 2, 3 \\
 | \\
 \begin{bmatrix} \alpha & \beta & \gamma \\ 1 & 2 & 3 \\ 2 & 1 & 3 \\ 3 & 3 & 2 \end{bmatrix} \\
 \downarrow \\
 \begin{array}{c}
 \begin{bmatrix} \alpha & \beta & \gamma \\ 1 & 2 & 3 \\ 2 & 1 & 3 \\ 3 & 3 & 2 \end{bmatrix} \\
 \downarrow \\
 \begin{bmatrix} \beta & 6 & \gamma \\ 1 & 2 & 3 \\ 2 & 1 & 3 \\ 3 & 3 & 2 \end{bmatrix} \\
 \downarrow \\
 \begin{bmatrix} \beta & 6 & \gamma \\ 1 & 2 & 3 \\ 2 & 1 & 3 \\ 3 & 3 & 2 \end{bmatrix} \\
 \downarrow \\
 \begin{bmatrix} \beta & 6 & \gamma \\ 1 & 2 & 3 \\ 2 & 1 & 3 \\ 3 & 3 & 2 \end{bmatrix}
 \end{array}
 \end{array}$$

III - 6,7

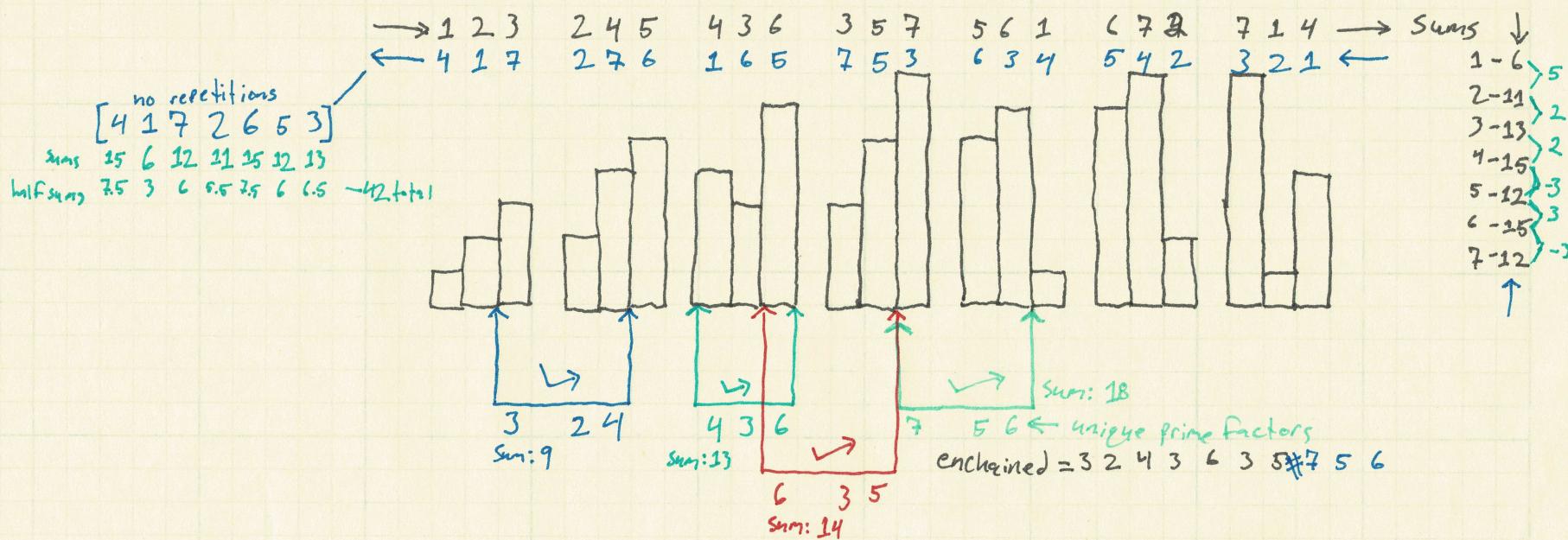
	Left Column (1-10)	Right Column (11-18)
1	ϵ	
2	ζ	
3	α	
4		α
5		ζ
6		ϵ
7		ϵ
8		ϵ
9		α
10	ζ	
11		α
12		α
13		ϵ
14		ϵ
15		ζ
16		ζ
17		α
18		α

$(\sigma \circ \beta)$ → Permutation

Source Patterns

$$\Sigma = \{\alpha, \beta, \gamma, \delta, \epsilon, \eta\}$$

$$\Sigma = \{ \boxed{\alpha \beta \gamma} \quad \boxed{\beta \delta \epsilon} \quad \boxed{\delta \gamma \epsilon} \quad \boxed{\gamma \epsilon \eta} \quad \boxed{\epsilon \delta \alpha} \quad \boxed{\delta \eta \beta} \quad \boxed{\eta \alpha \gamma} \}$$



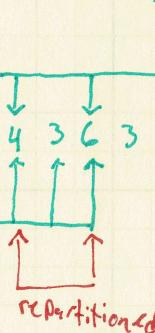
III Sections I - dense ↑ increase II - ↓ sudden drop! less dense III ↗ ↘ increasing plateaus - most dense ↓ sharp drop stend!

7 Subsections (3+2+2)

option 2

Patterned Sub-Subsections - 1 2 3 2 4 5 4 3 6 3 5 7 5 6 1 6 7 2 7 1 4

Option 1



9 available microdivisions (across subsections)

$[3\bar{4}, \bar{5}, \bar{3}, \bar{4}\bar{5}, \bar{5}, \bar{3}\bar{4}, \bar{3}\bar{5}, \bar{3}\bar{4}]$ - Parametric densities

less dense → more dense

5 time signature patterns:

- $\bar{4}$ - contoured
- $\bar{4}$ - permuted
- $\bar{4}$ - alternate
- $\bar{4}$ - conjoint
- $\bar{4}$ - irrational insertion
- $\bar{5}$ - Polyphonic accent structures
- $\bar{6}$ - voice
- $\bar{7}$ - interruptive polyphony (similar to $\bar{4}$)
- $\bar{8}$ - gliss up (long) / timbre-shifting longtones

Time Signatures

rotations
upon recurrence

+1's contoured $\dot{1} - [3 2 4 4 3 6 6 3 5 7 5 6] - [\text{looping}]$

+2's permuted $\dot{1} - [[8, 7, 6][6, 5][3, 2]] = \underline{8' 7' 6' 6' 5' 3' 2' 4' 5' 6' 2' 3' 6' 8' 7' 1/3 2' 7' 6' 8' 6' 5' 1, 8' 7' 6' 5' 6' 2' 3' ...}$

+3's alternate
reversed
and +
- $\dot{1} - [9 2 8 3 7 4 1 5 9 2 8 2 7 2 6 2 2 4 3 5 2 4 3 5 2 4 3 5 2 4 3 5 2 7 3 7 4 7 5 7 6 7]$

+5's conjoint $\dot{1} + \dot{5} (\text{translate } +\frac{3}{8})$
~~left-fives~~ $\dot{1} - [3 2 4 2 2 3 2 4 2 4 2 1 4 1 2 2 3 2 3 3 2 1 2 1 2 ...]$ rewrite denominators as 8's
 $\dot{1} - [3 2 4 2 2 3 2 4 2 4 3 5 2 2 3 2 3 3 3 2 4 4 3 7 3 2 3 5 5 2 6 6 2 3 3 5 2 6 6 4 4 2 2 ...]$

+7's "irrational insertion" $\dot{1} - [4 2 3 5 3 6 5 3 3 10 3 5 3 3 2 4 4 8 7 6 6 3 6 6 3 5 3 2 5 5 7 5 6 6 2 3 6]$
 \downarrow
~~non-power-of-2 - denominators = NP2D~~ Conjoint in reverse / Periodically subtract "irrationals" duration

mostly over 8 but free to change denominators?

4 - Fibonacci-related pitch segments
interval sequence - 1 2 3 5 8 13
 $0 \ 1 \ 1 \ 2 \ 3 \ 5 \ 8 \ 13 \ 21 \ 34 \ 55$ - don't use as pitch classes?
pitches $\times 1.5$ from center pitch
interleave the two

5 - contoured series
Josephus? Potamis?

5 - Guerrero - derived pitches?

2 - L-system - derived pitches?

6 - munged cantus firmus (pizzicks?)

Decoupled gesture archetypes

1. - airyness + or -
2. - glissando ↗ or ↘
3. - instrument angle ↤ → ↥
4. - embouchure tension □ → □ → □
5. - trill
 - a. - written out w/ interference pitches
 - b. - pitch runs
6. - mouth articulation (consonants)
7. - before-graces
8. - on-beat-grace flurries
9. - bisbigliando
 - a. - microtonal pitch waver
 - b. - pitch-bend wiggle
10. - Sing and play (vowels)
 - a. - bends
11. - Vibrato / smorzando
 - a. - accents
 - b. - polyphonic accents

12. - key clicks
13. - legato / articulated (i.e. rearticulated like guerrero)
14. - tongue / no tongue / lip
15. - frullato (tongue or throat) -*Josh can't do tongue
16. - pitch bends

Some coupling ideas

1. - airy + glissando
2. - airy + trill
3. - accented + trill
4. - pitch bend + rearticulation
5. - airy + frullato + on-beat-grace flurries
6. - bisbigliando + sing
7. - long glissando + airy
8. - long glissando + polyphonic accents
9. - Sustained tone + Polyphonic accents
10. -

Some rhythm ideas

1. - subdivided note marker
2. - subdivides unity callsite
3. - unsichtbare farben
4. - even division
5. - tales (glissando)
6. - tales (re-articulation)
7. - even division → accelerando
8. - reacted RTM structure (re-proportioned Stutter)

Desiderata

- microforms
↳ miniaturized versions of everything else

Polyphonic accent structure

- voice

- interruptive polyphony (like 2.)

- gliss up (long)
↳ I sustain over time
↳ close holes on alto

- timbre-shifting (long tones)

what happens when

well-defined materials fuse?

1. all combinations of

characteristic features are allowable

2. only the most distinctive feature of one or the other or both is allowed

3. microformal alternation between the two (likely requires rhythmic unification because alternation by measure big)

Rhythm

Partition rhythms a little better?

2 max? excluding E (in rare cases)

1 appearances

n appearances

2 July
2013
CRTE

begin piece

α - microforms

bisbigliando / pitch-bend wiggle

rearticulation - color / rearticulation - takea

quiet

Rhythm 1, 3, *, *

B - even divisions + periodic accents (derived from integer series) } - ascending integer series
- pitches derived from intervals of integer series
- trill / trill-figures

quiet + very low accents → loud + staccato → low + sibito quiet

Rhythm 4, 7

Eva 1

or
frozen idea?

δ - leary

bursts voice

bursts

microforms?

highly varied dynamic range
overall effect loud?

Rhythm 1, 2, 3

Eva 3

γ - airy glissando (takea)

- pitches ↗ semi tone at a time

soft → loud

morphing long tones

* episode of unity capsule Eva 1

* usually like fermata

↳ air / tension / vib / angle / frillato / voice / vowel

frozen idea?

both per statement
and across statements

Rhythm 5, 8

Eva 2

ε - interruptive polyphony: relatively easy going

- change material of ① layer each appearance

— — — — —] 8
 : : : : :] 5

layers dynamically distinct

Rhythm 1 (by how?), 8?

Eva 3

δ - articulated

key clicks, pizzicato, phatic

before grace / on-beat - grace

○ → ○
↓ ↓
S ← P →

episode!

usually loud occasionally punctured by soft

Rhythm *, 6, 3, ? or 2, obgc, 8

Eva 2

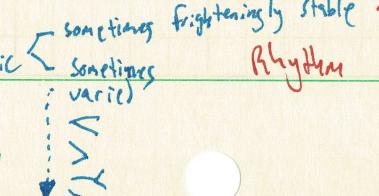
η - tight microtonal voice-leading - random walk?

fast → slowing down

rungs

can be made to ascend or descend

any dynamic



Rhythm 1, 8, 4, 5, 7

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42-285 400 SHEETS EYE-ERASE 5 SQUARE
42-286 500 SHEETS EYE-ERASE 5 SQUARE
42-287 1000 SHEETS EYE-ERASE 5 SQUARE

Statement Types

Microformal - lots of small instances of A and B



Oppositional - A is contrasted by B



Evolutional - A becomes B (or more like B)

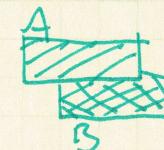


Interruptive - A (or A's process) is stopped by B (but can begin again)



Variegated - A is happening with B

↳ ligature - characteristics of A and B are recombined to form a new compound material



Incised/intricated - A is cut into/layered between B

