



MTO 27.2 Examples: Boyle, Flexible Ostinati, Groove, and Formal Process in Craig Taborn's *Avenging Angel*

(Note: audio, video, and other interactive examples are only available online)
<https://mtosmt.org/issues/mto.21.27.2/mto.21.27.2.boyle.html>

Example 1. The ostinato in "Bodies We Come Out Of" (Craig Taborn, *Light Made Lighter*), with two possible higher-level grouping interpretations. Audio example is from 0:06–0:25.

$\text{♩} = 300$



two-bar groups suggested by low-high pattern in bass notes
sentence-like structure suggested by ascending bass note patterns



3+3+2 structure suggested by hearing recurring F-D as a beginning

Example 2. "The Broad Day King," beginning (0:05–0:33)

$\text{♩} = 300$

1



Example 3. "The Broad Day King," 0:12–0:33, quarter-note pulse, Orientation 1

1

Musical score for Example 3, Orientation 1. The score is presented in two systems. Each system consists of a vocal line (top staff, treble clef) and a piano accompaniment (bottom two staves, grand staff). The piano accompaniment features long, sustained chords with a quarter-note pulse. A box with the number '1' is located above the first vocal staff.

Example 4. "The Broad Day King," 0:12–0:33, quarter-note pulse, Orientation 2

1

Musical score for Example 4, Orientation 2. The score is presented in two systems. Each system consists of a vocal line (top staff, treble clef) and a piano accompaniment (bottom two staves, grand staff). The piano accompaniment features long, sustained chords with a quarter-note pulse. A box with the number '1' is located above the first vocal staff.

Example 5. Primary dyad series (subject to octave transposition), generated by combining 1-cycle and 2-cycle (“The Broad Day King”)

The musical notation shows two staves. The upper staff is labeled '1-cycle' and the lower staff is labeled '2-cycle'. The 1-cycle is circled in red and the 2-cycle is circled in green. The notes are: C4, C#4, D4, D#4, E4, E#4, F4, F#4, G4, G#4, A4, A#4, B4, B#4, C5.

pitch interval in semitones:	12	11	10	9	8	7	6	5	4	3	2	1	0
interval class:	0	1	2	3	4	5	6	5	4	3	2	1	0

recurring {C, C} dyad

recurring {E, G#} dyad

Example 6. "The Broad Day King," section A, first presentation of primary dyad series (0:13–1:05)

1

series begins on second dyad

long hiatus

2-cycle meets ostinato pitch (E²)
1-cycle pitch (G#) displaced by an octave
complete E major triad

2-cycle changes octave

2-cycle pitch (A#) omitted

final dyad omitted

KEY:

annotations describe progression of dyad series

[interpolated pitches that are not part of the dyad series or ostinato]

longer stretches of material not based in dyad series

free material precedes next entrance of dyad series
upper pitches continue to highlight {E, G#} major third

Example 7. "The Broad Day King," section A, second and third presentations of primary dyad series (1:05–2:04)

2

augmented triad combines {C, E} and {E, G#} major thirds

extra notes highlight {C, E} and {E, G#} major thirds

3

long {C, C} dyad emphasizes C major dyad series descends instead of ascends octave doubling introduced

2-cycle displaced by an octave, emphasizing {E, G#} dyad octave doubling ostinato moves to B⁴ added E highlights {C, E} major third

Example 8. "The Broad Day King," formal diagram

	A	trans.	B	A'
Timing:	0:05–2:04	2:04–3:05	3:05–4:50	4:50–5:55
Dyad series:	primary (1-cycle/2-cycle)	n/a (free chrom.)	secondary (3-cycle/4-cycle)	primary (1-cycle/2-cycle)
Ostinato pitches:	E^5	B^4-E^5	$E^5-E^4-B^4-E^5$	E^5+E^6


Example 9. Secondary series of dyads generated by combining 3-cycle and 4-cycle ("The Broad Day King," B section)

The image shows musical notation for a secondary series of dyads. It consists of two staves, treble and bass, with a brace on the left. The treble staff is labeled "3-cycle" and contains three notes: E5, B4, and E5. The bass staff is labeled "4-cycle" and contains four notes: E5, E4, B4, and E5. The final notes of each cycle are enclosed in square brackets: [E5] in the treble and [E5] in the bass.

Example 10. "The Broad Day King," beginning of B section, four presentations of secondary dyad series (3:04–3:34)

6


ostinato begins regular offbeat pattern



first presentation:
regular chordal arrivals suggest downbeats in 4/4

second presentation:
repetition of series suggests four-bar cycle/hypermeter;
rhythm varied slightly from first presentation

ostinato resumes earlier irregularity (unmetered durations shown above staff)



third presentation:
dyads repeat rhythm of second presentation

fourth presentation:
{C, C} dyad does not arrive on expected downbeat,
but rhythm of dyads otherwise repeats

Example 11. "The Broad Day King," ending of B section, four presentations of secondary dyad series (4:09–4:50)

8 upper line introduced; initial ascent suggests E major

free, non-cyclic material

C major triad

first presentation of secondary dyad series; four complete dyads

second presentation of secondary dyad series; 3-cycle breaks off after third dyad

third presentation of secondary dyad series; 3-cycle breaks off after third dyad

upper line reaches E⁶ and remains there for A' section

fourth presentation of secondary dyad series; incomplete

free, non-cyclic material

Example 12. "The Broad Day King," A' section, first three presentations of primary dyad series (4:50–5:26)

9

10

altered note in 1-cycle

11

{E, G#} dyad omitted

Example 13. Ostinato 1 as presented at the opening. It is flexible in its performance, but less so in its interpretation. Audio example is from 0:06–0:16.

harmonic autotelicism

rhythmic autotelicism

on-beat onsets (stability) syncopation (instability)

on-beat onsets (stability) syncopation (instability)

tonic (stability) dominant (instability)

Example 14. "Avenging Angel," Ostinato 2 (two alternate orientations)

Orientation 1



Orientation 2



Example 15. Repetition splits Ostinato 2 (shown in Orientation 1) into two halves related by transposition

identical rhythm and contour

T_{11}

$T_{9/3}$

"extra" note

T_1

exceptions to strict T_{11} transformation

$T_{1/11}$ expressed as 11 semitones rather than 1 semitone

Example 16. Two interpretations of tactus-level beat groups, shown by beams, within Ostinato 2 (Orientation 2). Audio example is from 4:09–4:24.

Interpretation (a)

5 6 5 6 6 7 5 4 6

grouping preference rules prioritized

Interpretation (b)

5 6 5 6 6 5 5 6 6

similar duration prioritized

KEY:

- parallelism 1 (repeated two-beat rhythmic pattern)
- parallelism 2 (repeated one-beat rhythmic/contour pattern)
- 5, 6, etc. duration of beat-group in sixteenths
- difference between two interpretations
- beginning of transposed repetition/orientation 1

Example 17. An interpretation of tactus-level beat-groups, shown by beams, within Ostinato 2 (Orientation 1). Audio example is from 4:20–4:36.

Interpretation (c)

4 7 5 4 6 5 6 5 4 4

KEY:
 succession of two beat-groups with parallel rhythm and contour
 4, 5, etc. duration of beat-group in sixteenths

pitch nadir does not initiate beat

Example 18. Ostinato 2, interpretation (d). Interpretation (d) prioritizes an isochronous pulse. Audio examples are from 4:20–4:36 (Orientation 1) and 4:09–4:24 (Orientation 2).

Interpretation (d), Orientation 1

beats:

Interpretation (d), Orientation 2

beats:

KEY:

stability (on-beat events) → instability (off-beat events) → stability (on-beat events)
 trajectory within each half of the ostinato

 single interpolated dotted-quarter beat

extra eighth/rising line creates increased momentum into downbeat

Example 19. Mid- and upper-level metric possibilities for tactus interpretations (a) and (d), both shown in Orientation 2. Because interpretation (d) prioritizes isochrony, its metric interpretations are shown here with conventional time signatures and bar lines.

Interpretation (b): primarily duple upper-level beat groups motivated by initial rhythm/contour parallelism

The musical notation for Interpretation (b) is in bass clef with a 7/16 time signature. It features two sets of brackets above the staff: a green bracket labeled 'parallelism 1' spanning the first two measures, and a blue bracket labeled 'parallelism 2' spanning the last two measures. Below the staff, a diagram shows 'upper-level beat groups' as horizontal bars. The first bar group covers the first two measures, the second covers the next two measures, and a dashed line labeled ': extension :' indicates a continuation of the pattern.

Interpretation (d): duple and triple possibilities for mid-level metric level

The musical notation for Interpretation (d) is in bass clef with a 3/4 time signature. The first staff shows four measures with labels below them: 'mostly descending contour', 'mostly ascending contour', 'mostly descending contour', and 'mostly ascending contour'. The second staff shows the same music with two arrows pointing to the first and fifth measures, both labeled 'strong on-beat arrival'.

Example 20. "Avenging Angel," first phase (0:00–1:30), based solely in Ostinato 1

Ostinato 1 introduced

4x

A simple melody begins; ostinato varies only slightly

itches of ostinato begin to change, often moving in chromatic lines

six-beat phrase extension

six-bar phrase begins

characteristic cluster chords begin

C

4x

2x

2x

melody drops out for transitional passage

Example 21. “Avenging Angel,” start of second phase (1:30–2:15). Increasingly clear allusions to Ostinato 2 occur, but these incursions are interrupted by returns of Ostinato 1’s characteristic rhythm and texture.

brief dotted-eighth pulse stream

①

repeated five-16th pattern freer alternation of eighth and dotted eighth IOIs

Ostinato 2, Orientation 1 (for reference)

②

melody highlights pitches from Ostinato 2 (transposed up one octave), circled in the inset above

③

④

bass line states an exact octave-doubled excerpt of Ostinato 2, circled in the inset below

doubled 8vb

Ostinato 2, Orientation 1 (for reference)

Example 22. “Avenging Angel,” beginning of final phase, first two cycles of Ostinato 2. The transcription is beamed here according to interpretation (d). The audio example (4:04–4:20) begins just before this.

Example 23. Final phase, last four cycles (6:16–end). The ostinato is shown beamed here according to interpretation (c).

repeated five-sixteenth pattern (detached)

hiccup

maximally even distribution of fifty pulses into nine beats (alternating IOIs of 5 and 6 sixteenths)

6 5 6 5 6 5 6 5 [6]

freer alternation between IOIs of 2 and 3 sixteenths for the final cycle (all detached)

22

8^{vb}

Example 24. An elusive and flexible ostinato in “Neverland” (2:56–3:34): (a) a paradigmatic pitch series to which each iteration of the cycle refers, (b) the nine iterations. Black noteheads indicate pitches drawn from the paradigmatic series and gray noteheads indicate other pitches.

a) paradigmatic pitch series

(variable)

b) nine cycles through the series (2:56–3:34)

= 264 bpm

1)

3)

5)

7)

9)

Example 25. “Neverland,” first three iterations of the cycle (2:56–3:10), both hands. The sustained chords rarely align with ostinato onsets, and do not feature regular durations.

1)

2)

3)

Example 26. Distinctive beginning and ending gestures in the first four iterations (2:56–3:15)

1)

2)

3)

4)

A distinctive beginning gesture:
 -- pitches: E³, F#², (G)
 -- rhythmic profile: short to long

A distinctive ending gesture, centered around pitch-class D, repeated exactly

Example 27. Number of pitches from the paradigmatic series included in each iteration. Darker shading indicates higher numbers, and thus a clearer allusion to the cyclic repetition.

Iteration	Number of Pitches from Paradigmatic Series
1	9
2	7
3	12
4	8
5	9
6	6
7	9
8	8
9	7

Example 28. Duration (in eighth notes) of each iteration, based on the beginning / ending boundaries shown in Example 24). Darker shading indicates longer duration. (Since no new cycle begins after Iteration 9, its precise duration is not salient.)

Iteration	Total Duration in Eighth Notes
1	19
2	19
3	21
4	22
5	22
6	21
7	16
8	10
9	(18)

Example 29. Percentage of eighth beats with note onsets in each iteration. Darker shading indicates a higher density of onsets; that is, an overall faster rhythm.

Iteration	Percentage of Eighth Beats with Note Onsets
1	68
2	58
3	71
4	73
5	77
6	95
7	88
8	80
9	89

Example 30. Transposed segments of the paradigmatic pitch series

a) paradigmatic pitch series

(variable)

b) nine cycles through the series (2:56-3:34)

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)
- 7)
- 8)
- 9)

distinctive ending gesture

transposed ending gesture

partial transposed ending gesture

descending fifths from paradigmatic series

descending fifths at other transposition levels

earlier transposition of asc. octave + desc. fifth

descending fifth + ascending octave from series (only occurs late in the passage)

ascending octaves at other transposition levels or in wrong position

asc. octave from series without preceding desc. fifth