



MTO 14.3 Examples: Kallis, Principles of Pitch Organization in Scriabin's Early Post-tonal Period

(Note: audio, video, and other interactive examples are only available online)

<http://www.mtosmt.org/issues/mto.08.14.3/mto.08.14.3.kallis.php>

Example 1. Scriabin's primary pitch material

acoustic scale (7-34) octatonic scale (8-28, 1:2)

9-10

The image shows three musical staves in treble clef. The top staff contains two scales: the 'acoustic scale (7-34)' and the 'octatonic scale (8-28, 1:2)'. The middle staff contains a scale labeled '9-10'. The notes are as follows:
acoustic scale (7-34): C4, D4, E4, F#4, G4, A4, Bb4
octatonic scale (8-28, 1:2): C4, Bb3, Bb4, Ab4, Ab3, G#4, G#3, F#4
9-10: C4, Bb3, Bb4, Ab4, Ab3, G#4, G#3, F#4

Example 2. Model of pitch organization in Scriabin

acoustic indicator octatonic indicator

acoustic scale octatonic scale, Model A

1 2 3 #4 5 6 b7 1 b2 b3 b3 #4 5 6 b7

Mystic Chord Mystic Chord, octatonic version (Mystic Chord B)

The image shows a model of pitch organization in Scriabin. It consists of two systems of musical notation. The top system shows two scales: the 'acoustic scale' and the 'octatonic scale, Model A'. The acoustic scale is C4, D4, E4, F#4, G4, A4, Bb4. The octatonic scale is C4, Bb3, Bb4, Ab4, Ab3, G#4, G#3, F#4. The bottom system shows two chords: the 'Mystic Chord' and the 'Mystic Chord, octatonic version (Mystic Chord B)'. The Mystic Chord is C4, E4, G4, Bb4. The octatonic version is C4, Bb3, Bb4, Ab4, Ab3, G#4, G#3, F#4.

Example 3. Generation of 9-10 from the union of the acoustic and the octatonic scales

The diagram shows a single musical staff in treble clef. A large rectangular box encloses the entire staff, with the label "9-10" centered above it. Inside this box, there are two smaller rectangular boxes. The upper box is labeled "8-28" and contains a sequence of eight notes: C4, Bb4, Ab4, Gb4, F#4, E4, D4, and C4. The lower box is labeled "7-34" and contains a sequence of seven notes: C4, Bb4, Ab4, Gb4, F#4, E4, and D4. The notes in the "8-28" box are positioned above the notes in the "7-34" box, and they together form the "9-10" scale.

Example 4. Scriabin's octatonic/acoustic transformations

The diagram illustrates Scriabin's octatonic/acoustic transformations in two parts, a) and b).
 Part a) shows two octatonic scales. The first is labeled "Type a" and "6-34", with notes: C4, D4, Eb4, E4, F#4, G4, Ab4, Bb4. The second is labeled "Type b" and "6-Z49", with notes: C4, Bb4, Ab4, Gb4, F#4, E4, D4, C4. Arrows point from these scales down to part b).
 Part b) shows the "acoustic collection" for each type. The first is labeled "acoustic collection" and "7-31", with notes: C4, D4, Eb4, E4, F#4, G4, Ab4, Bb4, C4. The second is labeled "7-31" and has notes: C4, Bb4, Ab4, Gb4, F#4, E4, D4, C4. Below these are two "Mystic Chords":
 - "Mystic Chord" (Dominant 13, 5th omitted): C4, Eb4, F#4, G4, Ab4, Bb4.
 - "Mystic Chord B" (Dominant 13 with b9, 5th omitted): C4, Bb4, Ab4, Gb4, F#4, E4.

Example 5. Scriabin's primary pitch material

Presto $\text{♩} = 152$

5-28 5-28 5-28 C acoustic 5-28 5-28 5-28 G acoustic

p *poco cresc.*

A \flat 7#11 D \flat 7#11 G \flat 7#11 C13#11 E \flat 7#11 A \flat 7#11 D \flat 7#11 G13#11

T_7

Example 6. 9-10, T_3 operation

9-10

T_0

T_3

T_6

T_9

* = acoustic indicator

Example 7. Octatonic scale, array of harmonies in Scriabin's post-tonal oeuvre

a) b)

1 2 3 4 5 6 7 8

6-Z49 6-30 6-Z50 5-28 5-25 5-29 5-32 5-19

c)

9 10 11

6-Z23 5-28 5-28

* * *

* = common octatonic/acoustic harmonies

1. *Mystic Chord* B 2. *Mystic Chord* B variant (Dom 7, $\flat 9$, $\sharp 11$) 3. *Mystic Chord* B variant (Major triad, $\flat 9$, $\sharp 11$, 13)
 4. Dom 7, $\flat 9$, $\sharp 11$, 5 omitted 5. Major triad, $\sharp 11$, 13 6. Dom 7, $\flat 9$ 7. Sixth $\flat 9$, $\sharp 11$ 8. Major triad $\flat 9$, $\sharp 11$
 9. *Mystic Chord* B variant (Dom 7, $\sharp 11$, 13) 10. Dom 7, $\sharp 11$, 13, 5 omitted 11. Dom 7, $\sharp 11$

Example 8. Acoustic scale, array of harmonies in Scriabin's post-tonal oeuvre

a) b)

1
6-34

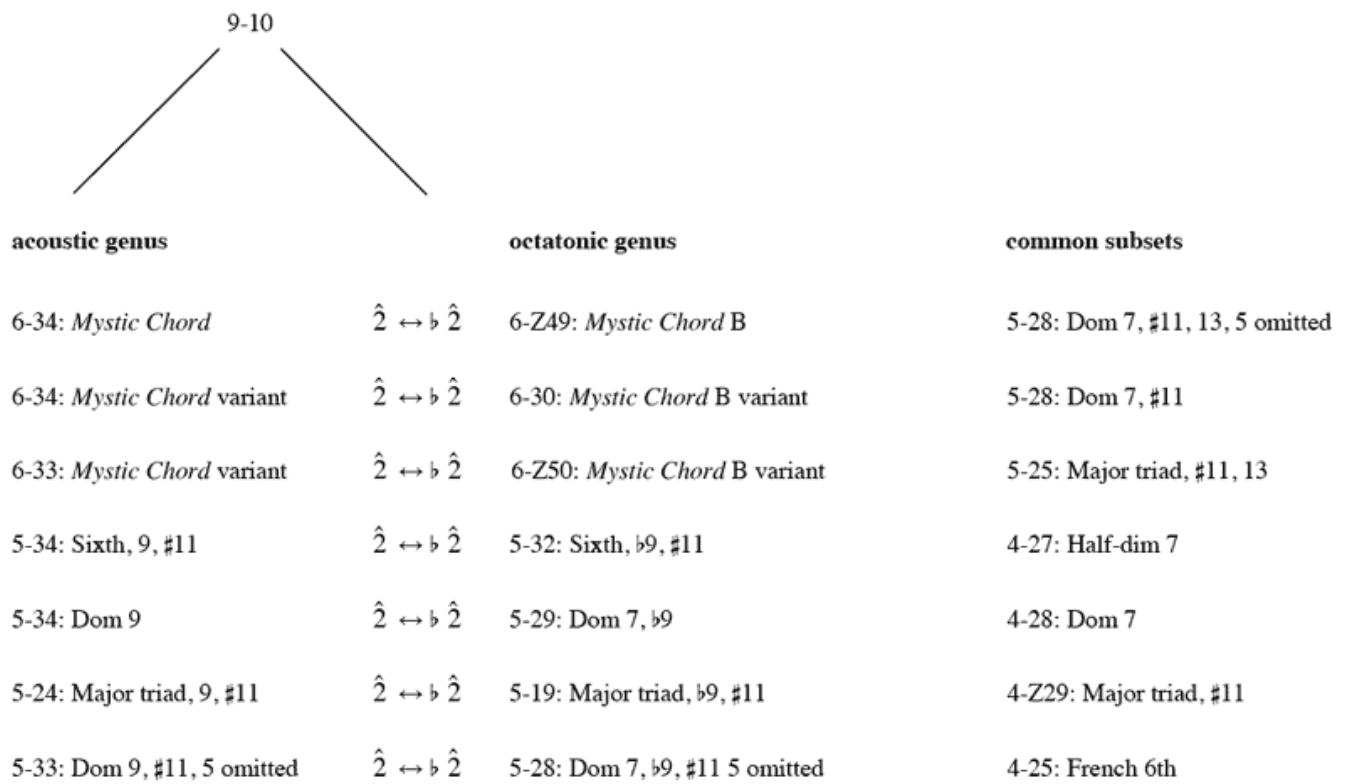
2 3 4 5 6 7 8
6-34 6-33 5-34 5-34 5-24 5-25 5-33

c)
9 10 11
6-Z23 5-28 5-28
* * *

* = common acoustic/octatonic harmonies

1. *Mystic Chord* B 2. *Mystic Chord* variant (Dom 9, #11) 3. *Mystic Chord* variant (Major triad, 9, #11, 13)
 4. Sixth, 9, #11 5. Dom 9 6. Major triad, 9, #11 7. Major triad #11, 13 8. Dom 9, #11, 5 omitted
 9. *Mystic Chord* variant (Dom 13, #11, 9 omitted) 10. Dom 7, #11, 13, 5 omitted 11. Dom 7, #11

Figure 1.



Example 9. Scriabin, Poème-Nocturne, Op. 61, mm. 1–7

The musical score is presented in three systems, each with a treble and bass staff. The first system begins with the instruction *avec une grâce capricieuse* and a dynamic marking of *mp*. A *poco* marking is placed over the first few notes. Above the staff, a bracket labeled T_0 spans the first two measures, followed by *molto rit.* and another *acoustic indicator* bracket. An *octatonic indicator* points to a specific note in the second measure. The first system concludes with *molto piu vivo*. The second system starts with *poco cresc.* and features a *rit.* marking. It includes two *acoustic indicator* and *octatonic indicator* brackets, and a *poco* marking. A bracket labeled T_2 spans the final two measures. The third system begins with a *pp* dynamic and a *poco cresc.* marking. It contains four *acoustic indicator* and *octatonic indicator* brackets. The notation throughout is highly chromatic and rhythmically intricate.

Figure 2. Substitution-based interaction: network of set interrelationships, from Callender (1998, Fig. 11, p. 227)

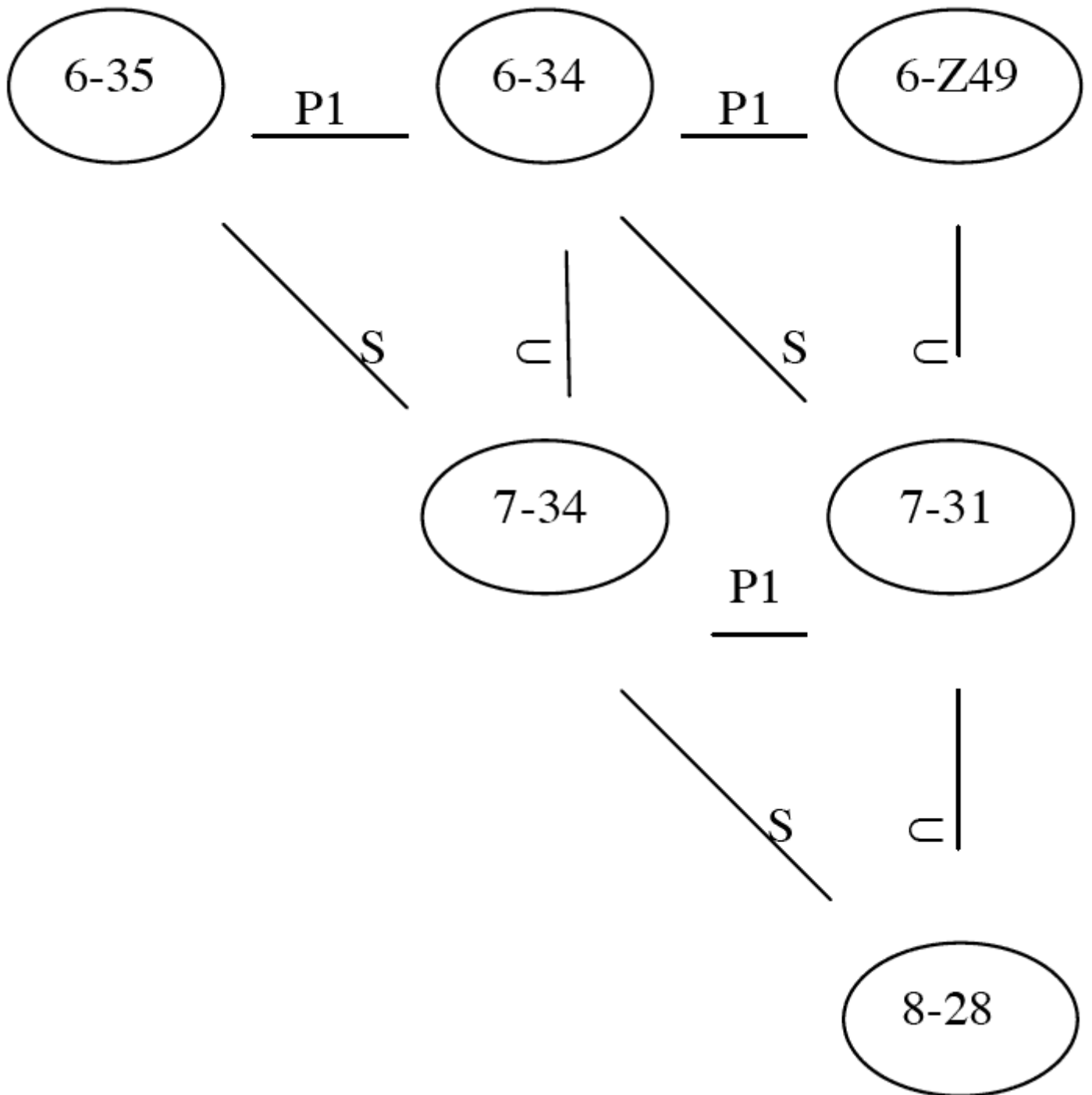


Figure 3. Voice-leading between P1-related sets

6-35: {0 2 4 6 8 t}	6-Z49: {0 1 4 6 9 t}	7-31: {0 1 4 6 7 9 t}
Scale degree: 1 2 3 #4 #5 b7	1 b2 3 #4 6 b7	1 b 2 3 #4 5 6 b7
↕	↕	↕
6-34: {0 2 4 6 9 t}	6-34: {0 2 4 6 9 t}	7-34: {0 2 4 6 7 9 t}
Scale degree: 1 2 3 #4 6 b7	1 2 3 #4 6 b7	1 2 3 #4 5 6 b7

Example 10a. Scriabin, Poème, Op. 69, No. 1, mm. 1–6

Allegretto 7-26: C, Db, D \sharp , E, F \sharp , A, B \flat

6-34: C Mystic Chord / 6-Z49: C Mystic Chord B

6-34: C Mystic Chord 6-35: A \flat Mystic Chord whole-tone version

7-26: E, F, F \sharp , G \sharp , A \sharp , C \sharp , D

6-34: E Mystic Chord

6-34: E Mystic Chord / 6-Z49: E Mystic Chord B

* = octatonic indicator

Example 10b. Scriabin, Poème, Op. 69, No. 1, mm. 1–5, acoustic/whole-tone interaction

6-35 (*A^b Mystic Chord*, whole-tone version)

6-34/6-Z49 (*C Mystic Chord/Mystic Chord B*)

6-34 (*E Mystic Chord*)

A \sharp → A \flat C \sharp → C \sharp

Example 11. Scriabin, Etrangeté, Op. 63, No. 2

7-31: *C Mystic Chord B + D \sharp*

7-31: *A Mystic Chord B + C*

T_9 →

6-Z49: *C Mystic Chord B*

5-33 5-32 5-33

* = acoustic or octatonic (D/D \flat) indicator

Figure 4. Voice-leading between S-related sets

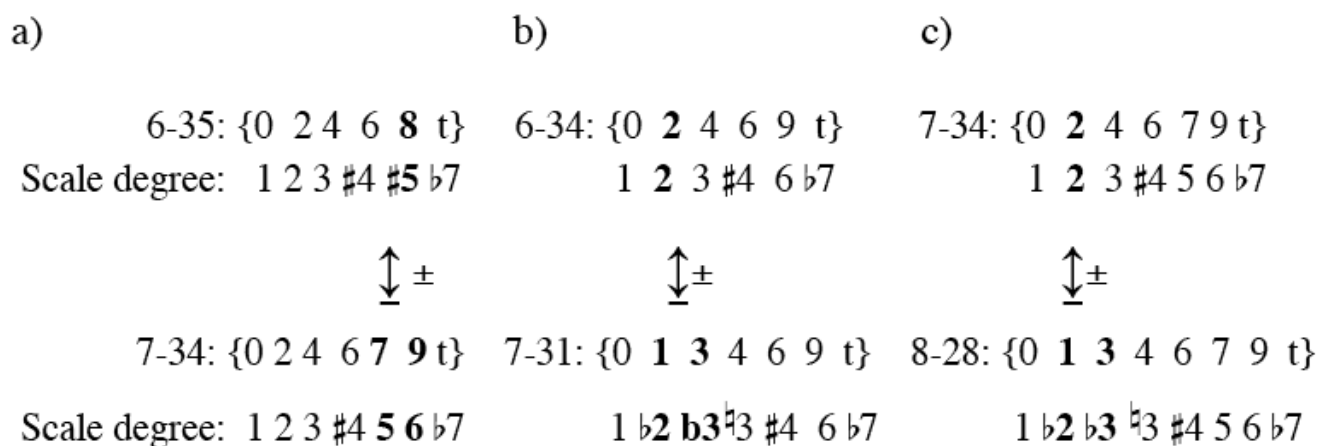


Table 1. Scriabin, Poème, Op. 69, No. 1, mm. 1–6

	T_0	T_2
Scale degree	$\hat{1} \flat\hat{2} \sharp\hat{2} \flat\hat{3} \hat{3} \sharp\hat{4} \hat{5} \hat{6} \flat\hat{7}$	$\hat{1} \flat\hat{2} \sharp\hat{2} \flat\hat{3} \hat{3} \sharp\hat{4} \hat{5} \hat{6} \flat\hat{7}$
Pitch content	C–D \flat –D \sharp –E \flat –E \sharp –F \sharp –G–A–B \flat	D–E \flat –E \sharp –F–F \sharp –G \sharp –A–B–C
Harm. status	1 \flat 9 9 \flat 3 3 \sharp 4 5 13 \flat 7	1 \flat 9 9 \flat 3 3 \sharp 4 5 13 \flat 7
	T_0	T_3
Scale degree	$\hat{1} \flat\hat{2} \sharp\hat{2} \flat\hat{3} \hat{3} \sharp\hat{4} \hat{5} \hat{6} \flat\hat{7}$	$\hat{1} \flat\hat{2} \sharp\hat{2} \flat\hat{3} \hat{3} \sharp\hat{4} \hat{5} \hat{6} \flat\hat{7}$
Pitch content	C–D \flat –D \sharp –E \flat –E \sharp –F \sharp –G–A–B \flat	E \flat –F \flat –F \sharp –G \flat –G \sharp –A–B \flat –C–D \flat
Harm. status	1 \flat 9 9 \flat 3 3 \sharp 4 5 13 \flat 7	1 \flat 9 9 \flat 3 3 \sharp 4 5 13 \flat 7
	T_0	T_4
Scale degree	$\hat{1} \flat\hat{2} \sharp\hat{2} \flat\hat{3} \hat{3} \sharp\hat{4} \hat{5} \hat{6} \flat\hat{7}$	$\hat{1} \flat\hat{2} \sharp\hat{2} \flat\hat{3} \hat{3} \sharp\hat{4} \hat{5} \hat{6} \flat\hat{7}$
Pitch content	C–D \flat –D \sharp –E \flat –E \sharp –F \sharp –G–A–B \flat	E–F–F \sharp –G–G \sharp –A \sharp –B–C \sharp –D
Harm. status	1 \flat 9 9 \flat 3 3 \sharp 4 5 13 \flat 7	1 \flat 9 9 \flat 3 3 \sharp 4 5 13 \flat 7
	T_0	T_6
Scale degree	$\hat{1} \flat\hat{2} \sharp\hat{2} \flat\hat{3} \hat{3} \sharp\hat{4} \hat{5} \hat{6} \flat\hat{7}$	$\hat{1} \flat\hat{2} \sharp\hat{2} \flat\hat{3} \hat{3} \sharp\hat{4} \hat{5} \hat{6} \flat\hat{7}$
Pitch content	C–D \flat –D \sharp –E \flat –E \sharp –F \sharp –G–A–B \flat	F \sharp –G–G \sharp –A–A \sharp –B \sharp –C \sharp –D \sharp –E
Harm. status	1 \flat 9 9 \flat 3 3 \sharp 4 5 13 \flat 7	1 \flat 9 9 \flat 3 3 \sharp 4 5 13 \flat 7
	T_0	T_9
Scale degree	$\hat{1} \flat\hat{2} \sharp\hat{2} \flat\hat{3} \hat{3} \sharp\hat{4} \hat{5} \hat{6} \flat\hat{7}$	$\hat{1} \flat\hat{2} \sharp\hat{2} \flat\hat{3} \hat{3} \sharp\hat{4} \hat{5} \hat{6} \flat\hat{7}$
Pitch content	C–D \flat –D \sharp –E \flat –E \sharp –F \sharp –G–A–B \flat	A–B \flat –B \sharp –C–C \sharp –D \sharp –E–F \sharp –G
Harm. status	1 \flat 9 9 \flat 3 3 \sharp 4 5 13 \flat 7	1 \flat 9 9 \flat 3 3 \sharp 4 5 13 \flat 7

Example 12. Scriabin, Masque, Op. 63, No. 1, mm. 1-4

Allegretto
avec une douceur cachée

$T_3 \rightarrow$

7-26: C, D \flat , D \sharp , E, F \sharp , A, B \flat 7-26: E \flat , F \flat , F \sharp , G, A, C, D \flat

6-34: C Mystic Chord /6-Z49: C Mystic Chord B

6-34: E \flat Mystic Chord /6-Z49: E \flat Mystic Chord B

* = octatonic indicator

Example 13. Scriabin, Prelude, Op. 59, No. 2, mm. 1-5

Sauvage, belliqueux

acoustic indicator

acoustic indicator

octatonic indicator

p

acoustic indicator

octatonic indicator

5

4

8-18: C, C#, D, Eb, F#, G, A, Bb (T_0)

Example 14. Scriabin, Poème-Nocturne, Op. 61, mm. 159–72

6-34: *D \flat Mystic Chord* 6-Z50: *D \flat Mystic Chord B variant*

3 3 3

6-34: *D \flat Mystic Chord* 6-Z50: *D \flat Mystic Chord B variant*

3 3 3

6-34: *D \flat Mystic Chord* octatonic indicator

3 3 3

6-34: *D \flat Mystic Chord* octatonic indicator octatonic indicator

3 3 3

Figure 5.

Measure 1: 6-34 → 7-31	Measure 2: 6-34 → 7-31
Measure 3: 6-21 → 7-31	Measure 4: 6-Z50
Measure 5: 6-21 → 7-31	Measure 6: 5-19 → 7-31
Measure 15: 8-27 → 6-30	Measure 16: 7-31 → 6-30

Example 15a. Scriabin, Prelude, Op. 67, No. 1, mm. 1–6. Based on Poppe

1

Andante

6-34 7-31 6-34 7-31 6-21 7-31

9-10 (T_0) 9-10 (T_0) 8-12 (T_0) 6-Z50 (T_0)

5

6-21 7-31 5-19 7-31

8-12 (T_0) 7-31 (T_0)

Example 15b. Scriabin, Prelude, Op. 67, No. 1, mm. 15–16

15

8-27 6-30 7-31 6-30

8-27 (T_{10}) 7-31 (T_{10})