



MTO 30.1 Examples: Lal, Harmonic “Quality” and Set-Class Structure

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

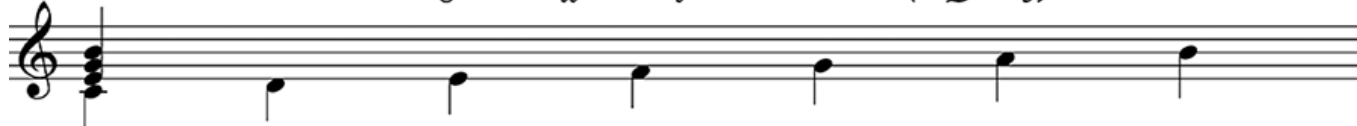
<https://mtosmt.org/issues/mto.24.30.1/mto.24.30.1.lal.html>

Example 1. Characteristic Structures Formed on Scale Degree 1 and Various Nodal Points in Some Important Early Twentieth Century Collections

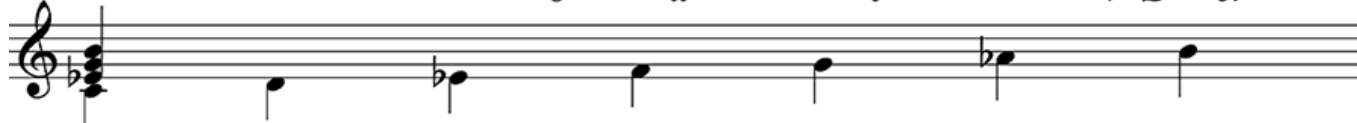
Hexatonic Collection = three major seventh/minor-major seventh scaffolding nodal points (I-Quality)



Diatonic Collection = scale degree 1 scaffolds major seventh tetrad (I-Quality)



Harmonic Minor Collection = scale degree 1 scaffolds minor-major seventh tetrad (I-Quality)



Acoustic Collection = scale degree 1 scaffolds dominant seventh tetrad (V-Quality)



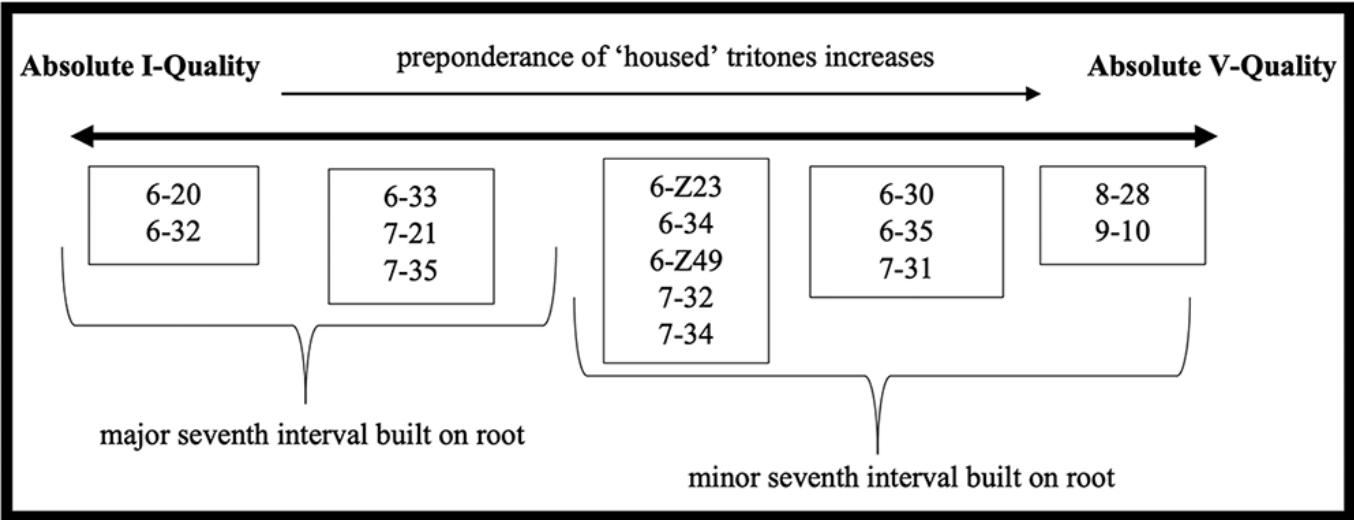
Whole-Tone Collection = six (three due to invariance) French Sixth scaffolding scale degrees (V-Quality)



Octatonic Collection = four dominant seventh scaffolding nodal points (V-Quality)



Example 2. Alexander Scriabin's Post-Tonal Set-Class Repository: A Continuum from Absolute I-Quality to Absolute V-Quality



Example 3. Competing Pitch Collections in Schoenberg, op. 19, no. 2

Key: Black/DIA, Red/HEX, Blue/WT, Green/OCT, Dashed Brackets/Gesture Divisions

The image displays a musical score for Schoenberg's op. 19, no. 2, consisting of three systems of piano music. The score is annotated with color-coded boxes and dashed brackets to highlight specific pitch collections and gesture divisions.

- System 1 (Measures 1-3):** Measure 1 is marked with a '2'. Measure 3 is marked with a '3'. A black box (DIA) highlights the first two measures. A green box (OCT) highlights the first two notes of measure 3. A blue box (WT) highlights the first two notes of measure 3. A red box (HEX) highlights the first two notes of measure 3 and the first note of measure 4.
- System 2 (Measures 4-6):** Measure 4 is marked with a '4'. Measure 5 is marked with a '5'. Measure 6 is marked with a '6'. A red box (HEX) highlights the first two notes of measure 4. A green box (OCT) highlights the first two notes of measure 5. A red box (HEX) highlights the first two notes of measure 5 and the first note of measure 6. A green box (OCT) highlights the first two notes of measure 6. A red box (HEX) highlights the first two notes of measure 6 and the first note of measure 7.
- System 3 (Measures 7-9):** Measure 7 is marked with a '7'. Measure 8 is marked with an '8'. Measure 9 is marked with a '9'. A green box (OCT) highlights the first two notes of measure 7. A blue box (WT) highlights the first two notes of measure 7 and the first note of measure 8. A red box (HEX) highlights the first two notes of measure 8. A green box (OCT) highlights the first two notes of measure 8. A red box (HEX) highlights the first two notes of measure 8 and the first note of measure 9. A yellow box (WT) highlights the first two notes of measure 9. A red box (HEX) highlights the first two notes of measure 9 and the first note of measure 10.

Example 4. Competing Pitch Collections in op. 19, no. 2, Gesture 1 (mm. 1–3)

2-4/G Diatonic?

5-21/Hex_{2,3} (lacking B \flat)

7-31/Oct_{2,3} (lacking F)

4-24/WT_{1,3} (lacking C \sharp , F)

4-7/Hex_{3,4} (lacking E \flat , E)

I-Quality (DIA?/HEX) ----- V-Quality (WT/OCT) -- I-Quality

Example 5. Competing Pitch Collections in op. 19, no. 2, Gesture 2 (mm. 4–6)

4-19/Hex_{3,4} (lacking E, A \flat)

5-28/Oct_{0,1} (lacking D \flat , G, A)

4-7/Hex_{2,3} (lacking D, E \flat)

4-7/Hex_{3,4} (lacking E \flat , D)

4-7/Hex_{0,1} (lacking E, F)

4-12/Oct_{0,1} (lacking E, F \sharp , G, B \flat)

6-Z13/Oct_{2,3} (lacking A \flat , A)

5-21/Hex_{3,4} (lacking E)

Example 6. Competing Pitch Collections in op. 19, no. 2, Gesture 3 (mm. 7–9)

4-21/C Diatonic?

3-12/Hex_{2,3}/Hex_{3,4}

4-25/Oct_{1,2}
(lacking D, E, A \flat , B \flat)

6-20/Hex_{2,3}
(complete)

6-35/WT_{1,3}
(complete)

4-7/Hex_{0,1}
(lacking A, B \flat)

4-20/Hex_{3,4}
(lacking E \flat , A \flat)

8-19/h-h_{2,3,4}
(lacking A \flat)

V-Quality (WT) ----- V-Quality (WT/OCT) -- I-Quality (h-h, then HEX)

Example 7. Start-End Frame, Schoenberg, op. 19, no. 1 (m. 1/mm. 15–17)

5-3/chromatic

Thirteen Intervening Measures

4-7/Hex_{3,4}
(lacking C, B)

4-19/Hex_{3,4}
(lacking C, G \sharp)

7-21/Hex_{1,2} plus B

4-16/B Diatonic?

Example 8. Start-End Frame, Schoenberg, op. 19, no. 3, (m. 1/mm. 8–9)

7-21/Hex_{2,3} plus C#

4-19/Hex_{0,1} (lacking A, D \flat)

Six Intervening Measures

4-21/WT_{1,3} (lacking A, B)

4-14/B \flat Diatonic?

This musical score for Example 8 shows two systems of piano music. The first system contains two measures highlighted in red boxes, with arrows pointing to them from the labels '7-21/Hex_{2,3} plus C#' and '4-19/Hex_{0,1} (lacking A, D \flat)'. A bracket above these two measures is labeled 'Six Intervening Measures'. The second system contains two measures highlighted in blue and black boxes, with arrows pointing to them from the labels '4-21/WT_{1,3} (lacking A, B)' and '4-14/B \flat Diatonic?' respectively.

Example 9. Start-End Frame, Schoenberg, op. 19, no. 4 (mm. 1–2/mm. 12–13)

4-19/Hex_{1,2} (lacking D, F#)

Nine Intervening Measures

5-4/chromatic

This musical score for Example 9 shows two systems of piano music. The first system contains two measures highlighted in a red box, with an arrow pointing to it from the label '4-19/Hex_{1,2} (lacking D, F#)'. A bracket above these two measures is labeled 'Nine Intervening Measures'. The second system contains two measures highlighted in a purple box, with an arrow pointing to it from the label '5-4/chromatic'.

Example 10. Start-End Frame, Schoenberg, op. 19, no. 5 (mm. 1–3/mm. 14–15)

3-4/Hex_{0,1}
(lacking E, G#, A)

6-Z44/chromatic

6-27/Oct_{2,3}
(lacking E_b, F#)

6-Z26/E Diatonic?
(lacking F#)

Eleven Intervening Measures

Detailed description: This musical score shows two systems of piano music. The first system (measures 1-3) is enclosed in a red box and labeled '3-4/Hex_{0,1} (lacking E, G#, A)'. The second system (measures 4-13) is enclosed in a purple box and labeled '6-Z44/chromatic'. The third system (measures 14-15) is enclosed in a green box and labeled '6-27/Oct_{2,3} (lacking E_b, F#)'. The final two measures (14-15) are enclosed in a black box and labeled '6-Z26/E Diatonic? (lacking F#)'. A box labeled 'Eleven Intervening Measures' spans from the end of the purple box to the start of the green box.

Example 11. Start-End Frame, Schoenberg, op. 19, no. 6 (mm. 1–2/m. 9)

3-7/E Diatonic?

6-Z12/chromatic

3-9/C Diatonic?

Six Intervening Measures

8-1/chromatic

Detailed description: This musical score shows two systems of piano music. The first system (measures 1-2) is enclosed in a purple box and labeled '3-7/E Diatonic?'. The second system (measures 3-8) is enclosed in a purple box and labeled '6-Z12/chromatic'. The third system (measures 9-10) is enclosed in a purple box and labeled '8-1/chromatic'. A box labeled 'Six Intervening Measures' spans from the end of the second purple box to the start of the third purple box. A label '3-9/C Diatonic?' with an arrow points to the bass line of the second system.