MTO 8.2 Examples: Benitez, Simultaneous Contrast and Additive Designs

(Note: audio, video, and other interactive examples are only available online)
http://www.mtosmt.org/issues/mto.02.8.2/mto.02.8.2.benitez.php

Figure 1. Robert Delaunay, *Hommage à Blériot* (1914)
Figure 2. Color Wheel
Figure 3. Robert Delaunay, *Formes circulaires. Soleil n° 1 (1912–13)*
Example 1. The Modes of Limited Transposition

Mode 1: Whole-Tone Collection; 6-35 [0,2,4,6,8,10]; 2 transpositions

Mode 2: Octatonic Collection; 8-28 [0,1,3,4,6,7,9,10]; 3 transpositions

Mode 3: 9-12 [0,1,2,4,5,6,8,9,10]; 4 transpositions

Mode 4: 8-9 [0,1,2,3,6,7,8,9]; 6 transpositions

Mode 5: 6-7 [0,1,2,6,7,8]; 6 transpositions

Mode 6: 8-25 [0,1,2,4,6,7,8,10]; 6 transpositions

Mode 7: 10-6 [0,1,2,3,4,6,7,8,9,10]; 6 transpositions
Example 2. Derivation of the Chords of Transposed Inversions on the Same Bass Note from a V9 Chord (see *Traité de rythme*, 3:86) Reproduced with the kind authorization of Editions Alphonse Leduc, proprietary editor worldwide, Paris, France

Example 3. Chords of Transposed Inversions on the Same Bass Note

Example 4. Derivation of the Chords of Contracted Resonance from a V9 Chord (see *Traité de rythme*, 3:87) Reproduced with the kind authorization of Editions Alphonse Leduc, proprietary editor worldwide, Paris, France
Example 5. Chords of Contracted Resonance

Example 6. Turning Chords

Example for Note 22. Color Associations of Turning Chords, Chronochromie, Strophe I

(The top sonority is sounded immediately after the bottom sonority.)
Figure 4. Spatial Arrangement of the Orchestra at the Palais Garnier (1983) (Distances are approximate)

Stage

Orchestra Pit:
- Platform: Percussion, Strings
  - 22 Woodwinds
- Platform: 5 Mallet Percussion Instruments (includes Xylos)

Ozawa

Box:
- Ondes Martenot
  - 1 and 3

Box:
- 16 Brass,
  - Ondes Martenot 2

Figure 5. Analogous Additive Design Foreground and Background Pitch Designs linked by Analogous-Color Relationships Background Design, Angel’s Discourse, *Le baiser au lépreux*, R62:1–12 (Strophe 1), R65:1–12 (Strophe 2), R69:2–18 (Strophe 3), R72:1–24 (Strophe 4)

Strophes 1, 2, and 4: A Major: $\text{AM}^3$  \[\rightarrow\] AM$^3$

Strophe 3: A Major: $\text{AM}^3$  \[\rightarrow\] EM$^3$

**Example 13.** Compound Additive Design (Several Simultaneous Textural Layers), Analytical Reduction, Harmonic Content of the Blackbird’s Song, *L’Ange musicien*, R89:2–4

**Figure 6.** Compound Additive Design Associated with the Angel’s Music, *L’Ange musicien*, R89:1–16