

# II

Color Coded Pitch-Classes

●	●	●	●	●	●	●	●	●	●		
A	A#	B	C	C#	D	D#	E	F	F#	G	G#

Sehr langsam (♩ = ca 56)  
mit Dämpfer

rit.

ic3 relationship

saturation (all 12 pcs)

10

rit.

(inverted rhythm)

ic3 → U. E. 5889  
T4 (from first colto statement)

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MUSI 661: Analytical Techniques (Dr. Lavengood)

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Anton **Webern**: Five movements for string quartet, op. 5 – **II. Sehr Langsam**

## OUTLINE

- I tried to analyze this piece by first separating each musical element, and then finding relationships between them. So, essentially, horizontal and vertical analysis of pitch, harmony and rhythm to find larger implications of form, theme, and motive. First, I determined the prime form set-classes created by chords on every beat of the piece to find vertical relationships in harmony. Then, I color coded each pitch-class to try to see relationships in frequency of specific pitches, and to possibly find tone-rows and ordered sets of pitches. From there, I was looking at each phrase texturally and gesturally; what was each musical sentence, and how was it related to the next? I also noticed how themes were defined and transformed—through rhythm and presentation of certain intervals.

### THEME (Horizontal):

- 2 “thematic” ideas. A = melody and accompaniment texture. B = interruptive (012) motive. The overall thematic structure of this movement could be loosely organized as ABA, or more specifically, ABABA.
- This larger form gives the impression of an arc, which can be seen in micro-analysis of harmonic fragments of tension-and-release.
- The rhythmic gesture “3 eighth-note pickup,” or three eighth notes preceding downbeats, is found in almost every measure of the piece (1:3 ; 3:1). This feeling of rest on a downbeat, with 3 notes picking up into a melody, defines a deeper rhythmic structure throughout the work, which is augmented, diminished, and inverted. This rhythm can define what a theme “is” in this work!

### HARMONY (Vertical):

- Most importantly, I noticed that timbral “sections” could be organized (A, B type organization of “harmony”) by the first interval of each set-class. For example, the strikingly different intervals of (01) and (02), the half and whole steps, are juxtaposed with every successive gesture, in both micro- and macro-structures. In m. 1/pickup, the first larger gesture begins and ends with set-classes beginning in 01. On the next gesture in m. 2, the interval 02 is emphasized. In the following, 01, and so on.
  - These important close intervals could demonstrate larger structural movement to the harmonic weight of each successive phrase, as well as smaller structure within each gesture. Generally, intervals begin very close, gradually move out, and come back in, like an arc, or like breathing. **Again, this arc-like tendency of harmonic movement creates tension and release in both macro- and micro- gestures throughout the work.**
  - After finding the set-classes throughout the piece, I noticed **a lot of tritone intervals present** (almost always at any given beat of the music). I found these tritones by seeing **06 or 17** in the set-class. This emphasis on the tritone must connect the work somehow—the symmetrical implications of the tritone (equal half steps on either side). Perhaps this tritone is a larger unit that is transposed throughout the work. By analyzing the transpositional movement of each tritone interval between important set-classes, one may be able to see a pattern of movement throughout the work.
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## DISCUSSION QUESTIONS:

- Should this work be analyzed horizontally, or vertically? I.e., did you analyze the pcs and ics of the melodic line separately from its accompanying “chords”? Or did you analyze each “chord” vertically, as one harmony including the melodic pitch? How do both answers help analyzing the work?
- What does determining the set-class of each beat of the music tell about its larger intervallic organization and relationship? Are these set classes transposed and inverted, and if so, what does that imply for the structure of the work?
- What role does rhythm have in organizing melodic / thematic material?
- Is there a specific “tone row” found in this work? Is it inverted/transposed/retrograde?
- What role do dynamics play in the work? Are they used to denote more “important” pitch/interval material, or solely for mood and variation in color/timbre? Are the dynamics serialized, or not?
  - “Melodic” material is often denoted with the “p” dynamic, the loudest in the work.

## SPECIFIC ANALYSIS

### THEME (Horizontal):

- Each motive, or melodic fragment, is created through its rhythmic presentation. Slower rhythms, often presented in rhythmic unison with other voices, denote accompaniments for melodies with faster rhythm.
- This movement has 2 distinct “thematic” ideas.
- **A:** The first is this **melody-and-accompaniment texture**, appearing in:
  - the viola at the beginning of the work -m.4
  - the 2<sup>nd</sup> violin in m. 5-6
  - the 1<sup>st</sup> violin in m. 7-9
  - finishing out in the 2<sup>nd</sup> violin in m. 12-13 in the 2<sup>nd</sup> violin.
- I also found that melodic fragments more frequently jumped around in larger interval-classes to almost, but not all of the 12 pitch-classes, while accompanimental figures were more static and moved in closer interval-classes. This could be a more specific definition of melodic vs. accompanimental textures in this work—by the nature of larger interval jumps and faster rhythm, vs. smaller interval jumps and slower rhythms.
- **B:** An interruptive “theme” emerges in m. 4 of the work, as I call, the **(012) motive**. The (012) theme is presented in the same dotted eighth, tied sixteenth ratio (3:1) that gives it thematic weight, repeated and referenced as a melodic fragment. The reason this idea is separate—it is the only idea presented in the work that uses 3 pitches at once, in linear counterpoint, and includes no accompaniment. Specifically, this idea first rises from bass harmonies to treble (m. 4-5), then resolves tension by falling down from treble harmonies to bass (m. 6-7). This idea can represent a “B” motive of the work (although still punctuated with melody-and-accompaniment in m.5-6).
  - Specifically, in m. 6-7, this device is stated in transposed succession—the 1<sup>st</sup> violin states ic1, then the 2<sup>nd</sup> violin states ic1 but transposed T1, then the viola states ic transposed T1 again. These pitches create the overall (012) set-class, but its offset rhythmic presentation truly creates its striking thematic effect.
- **Therefore, the overall thematic structure of this movement could be loosely organized as ABA, or more specifically, ABABA. (A = melody/accompaniment, B = (012) motive). This**

**larger form gives the impression of an arc, which can be seen in micro-analysis of harmonic fragments of tension-and-release.**

- RHYTHM as a THEMATIC DEVICE: I noticed a certain characteristic rhythm to important melodic phrases. **The rhythmic gesture “3 eighth-note pickup,” or three eighth notes preceding downbeats, is found in almost every measure of the piece (1:3 ; 3:1).** This feeling of rest on a downbeat, with 3 notes picking up into a melody, defines a deeper rhythmic structure throughout the work, which is augmented, diminished, and inverted. Most notably, the “3 eighth-note pickup” is found in the viola melody in m. 1-3, the viola melody in m. 5, the violin melody in m. 7-8 and 10, and the final viola statement in m. 13. This rhythmic idea is accompanimentally stated as eighth rest, dotted quarter (m. 1-3 and 5-6 in the viola/cello), contracted (“diminished”) into 3 sixteenth-notes (m. 6 in the violin, m. 7 in the viola/cello), inverted (m. 11-13 in the viola/cello). **This 3:1 rhythmic ratio is used as a “thematic” compositional element that creates a larger cohesion and dialogue!**
- ROWS: *Thinking horizontally, can you find any clearly denoted “rows” in the work?*
  - After analyzing the interval relationships between notes of each melody, I concluded that there is no obvious ordered relationships of interval-classes or pitch-classes in relation to each melodic fragment. I also could not find obviously stated 12-tone rows that use all 12 pitches.
  - I also thought that analyzing when “saturation” was occurring throughout the work; when were all 12 pitches finally presented, in what order, and what does this imply for larger structure? I noticed that Bb/A# was the least sounded pitch, and sparingly used once or twice on each line (with most prominence at the very end). Perhaps I could find meaning in this, relating to saturation and the temporal ratio of all 12 pitch-classes being present, creating larger macro-structure.

#### HARMONY (Vertical):

- Most importantly, I noticed that timbral “sections” could be organized (A, B type organization of “harmony”) by the first interval of each set-class. For example, the strikingly different intervals of (01) and (02), the half and whole steps, are juxtaposed with every successive gesture, in both micro- and macro-structures. In m. 1/pickup, the first larger gesture begins and ends with set-classes beginning in 01. On the next gesture in m. 2, the interval 02 is emphasized. In the following, 01, and so on. **These important close intervals could demonstrate larger structural movement to the harmonic weight of each successive phrase, as well as smaller structure within each gesture. Generally, intervals begin very close, gradually move out, and come back in, like an arc, or like breathing.** On the following line, m. 506 emphasize the 01 interval, interrupted by the falling (012) theme, then juxtaposed with a section heavily emphasizing the 02 interval. In m. 7-9, the 2<sup>nd</sup> violin accompanies (with ic2, 02) a melody shared between the 1<sup>st</sup> violin and viola. This melody uses every interval-class 1-6, creating the severe tension out of the static, unchanging ic2 accompaniment. This tension is released with the final note of the melody in m. 10, joining the accompaniment to create the same (012) texture, bringing resolution. On the 3<sup>rd</sup> line, m. 10-13, you can see the accompaniment starting with 01, but the melody increasingly deviating, until returning to 01. **Again, this arc-like tendency of harmonic movement creates tension and release in both macro- and micro- gestures throughout the work.**
  - M. 5 – the accompanying chords (viola and cello) begin and end in set-class (0167), which is a popular set called the “**distance model.**” The accompaniment in m. 5-6: (0167, distance model) is presented, moving to (014), to (048), back to (014), and back to (0167, distance model), just like an arc! This harmonic device again creates that arc-like sense of tension and release, giving weight to (0167) as a cadential harmony in m. 5-6. The 2<sup>nd</sup> violin plays a melody that, by analyzing the pitches as a whole, strongly emphasize whole

tones, and the 02 interval mentioned previously (02468). This sharply contrasts with the accompanimental harmony, emphasizing the half step, or 01. This creates tension and release within the smaller arc, still using those same two elements discussed, 01 and 02!

- *From Wiki:* A **distance model** is the alternation of two different intervals to create a non-diatonic musical mode such as the 1:3 distance model, the alternation of semitones and minor thirds: C-E $\flat$ -E-G-A $\flat$ -B-C. This scale is also an example of polymodal chromaticism as it includes both the tonic and dominant as well as "'two of the most typical degrees from both major and minor' (E and B, E $\flat$  and A $\flat$ , respectively).
- The pitch-class sets at the beginning and end of the work can show a sense of “tonality”, or large-scale tension and release. Most notably, the first accompanying chord is set-class (0147), created again in the “coda” of the work on the last line in m. 10-11 (presented T5). This intervallic organization creates a sense of “returning to home” at the end, before a final emphasis on the all-interval tetrachord and a final punctuating use of the **alpha chord** (0346). This chord can also be referred to as a major-minor chord, or the use of both 3 and b3 at once, creating a great sense of instability within the consonant framework of a major 5<sup>th</sup>. **Perhaps Webern intended to resolve to this final chord to imply the furthest deviance from a traditional cadence at the end of a work.**
- After finding the set-classes throughout the piece, I noticed **a lot of tritone intervals present** (almost always at any given beat of the music). I found these tritones by seeing **06 or 17** in the set-class. This emphasis on the tritone must connect the work somehow—the symmetrical implications of the tritone (equal half steps on either side). Perhaps this tritone is a larger unit that is transposed throughout the work. By analyzing the transpositional movement of each tritone interval between important set-classes, one may be able to see a pattern of movement throughout the work.