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# Macro Level Two: Exploring a Harmonic Middleground

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Traditionally, music students begin their study of harmony with a fundamentals course that includes the systematic labeling of chords (i.e., triads and seventh chords) by quality and relationship to key (i.e., roman numerals). This approach is beneficial because it helps students understand basic musical elements and develops their analytical skills. Unfortunately, this chord-by-chord approach establishes an unwanted side effect. The problem comes when we want students to move from theory to practice, from static chords to motion in a musical phrase. There is a parallel to this in music performance. Although we may teach students to practice with a metronome, we would not want to hear someone perform music where the natural flow and motion in music are not conveyed. Clearly music teachers want their students to understand the various functions and relationships of chords to other harmonies in a tonal language. Several widely used harmony textbooks indicate this when they note the importance of moving beyond chord-by-chord analysis when examining harmonic progressions. Notably, Kostka/Payne,<sup>1</sup> Benward,<sup>2</sup> and Gauldin<sup>3</sup> have proposed analytical approaches that would enhance the study of motion in music.

Several researchers of macro-analytical techniques similarly have hinted at a second harmonic level when discussing performance implications<sup>4</sup> and structural elements.<sup>5</sup> Even though the idea of multiple levels in harmonic analysis is embraced by many scholars and educators who use

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1. Stefan Kostka and Dorothy Payne, *Tonal Harmony, With an Introduction to Twentieth-century Music* (New York: Alfred A. Knopf, 1984).

2. Bruce Benward, *Music in Theory and Practice*, 3d ed. (Dubuque, IA: Wm. C. Brown, 1985).

3. Robert Gauldin, *Harmonic Practice in Tonal Music* (W. W. Norton & Co. Inc., 1997).

4. Marilyn Saker, "The Development of Performance Interpretation through Macro Analysis Application," *Musical Insights* 1 (1997): 39–49.

5. For more information about tonal center circles, see Marilyn Saker, "A Theory of Circle of Fifth Progressions and Their Application in the Four Ballades by Frederic Chopin" (Ph.D. diss., University of Wisconsin Madison, 1992), 148, 217, 291, 356 and Brandy Gerber, "A Macro-Analytical Approach to Mozart's Piano Sonata in C Major, K. 545," *Musical Insights* 1 (1997): 57–68. Structural functions are discussed in Jamie Henke, "Circle Series in the Keyboard Works of Johannes Brahms: Structure and Function" (Ph.D. diss., University of Wisconsin Madison, 1989), 99–150. A balanced tonal axis is developed through a study of extant tonal centers in Warren Gooch, "Tonal Axis in Ravel's Sonatine: A Macro-Analytical Discussion," *Musical Insights* 1 (1997): 51–56.

macro-analytical techniques, a clear method for moving from chord-by-chord analysis to a second level of macro analysis is still lacking. Many note the importance and usefulness of harmonic middlegrounds. This is not the focus of this document. The aim of this article is to provide a primer for exploring a harmonic middleground, a second level of macro analysis. This harmonic hierarchy is generated when the general concepts suggested by the aforementioned texts are combined with macro-analytical techniques. This discussion begins with a brief summary of harmonic middleground as explored by Kostka/Payne, Benward/White, and Gauldin. A presentation of macro analysis level one will follow. The article will conclude with examples and a procedure for creating macro level two, a harmonic middleground.

## Reductive Analysis in Theory Textbooks

The first two editions of *Tonal Harmony* include a chapter entitled “Levels of Harmony.”<sup>6</sup> The authors discuss the basic tonal motion of a musical phrase by focusing on chord function and the relative importance of harmonies. Their goal is to provide a technique for reductive analysis. They present the idea of harmonic layers (see figure 1) to “encourage readers to understand that, although each chord may be labeled with its own roman numeral, all chords are not equally important.”<sup>7</sup> Reading from the bottom level (i --- vii<sup>06</sup> --- i<sup>6</sup>) to the top, Kostka and Payne illustrate how the inverted leading-tone triad is less important as a single harmony than the surrounding tonic triads. Therefore, the passing motion of the diminished triad is subsumed by the primary tonic triad. Likewise, the upper layers of this analysis remove the embellishing/passing harmonic gesture so that the most significant sonority (tonic triad) remains. This approach more accurately illustrates how a passing harmonic progression functions and sounds.

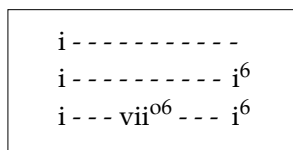


Figure 1. Levels of Harmony.

6. Stefan Kostka and Dorothy Payne, *Tonal Harmony, With an Introduction to Twentieth-century Music* (New York: Alfred A. Knopf, 1984), 181–190, 2d ed., 237–245.

7. Stefan Kostka and Dorothy Payne, *Tonal Harmony, With an Introduction to Twentieth-century Music*, 2d ed. (New York: Alfred A. Knopf, 1989), 245.

Beginning with the third edition of *Music in Theory and Practice*, Benward presents “Shorthand Analysis,” which later becomes macro analysis.<sup>8</sup> This technique of analysis is designed to chart harmonic direction through a process of reduction that allows students to “cut through the chord-by-chord detail to reveal the overall harmonic thrust.”<sup>9</sup> Benward also mentions that this analytical approach is designed to “simplify tonal analysis and provide students with a better understanding of both structure and form.”<sup>10</sup> This technique will be discussed extensively later in this article.

In the preface of *Harmonic Practice in Tonal Music*, Gauldin notes the traditional approach of vertically oriented systems of harmonic analysis. He is especially interested in the melodic aspects of music and the linear forces that shape the harmony.

In this text I have attempted to correct this imbalance [of neglecting the melodic aspects] by correlating harmony with the interaction of melodic lines. Therefore, harmonic function itself will be seen as largely deriving from this contrapuntal framework; voice-leading analysis may thus form the basis for insightful performances of the music itself.<sup>11</sup>

Gauldin’s approach is deeply rooted in Schenkerian analytical techniques. Similar to example 1, analytical reductions are used to show which chords are essential (i.e., primary and more important) and which are less essential (i.e., secondary and often function as harmonic embellishments). In Gauldin’s reductive notation, more important or essential chord tones are represented by black noteheads with stems. Consequently, black noteheads without stems represent less essential tones.<sup>12</sup> Similar to Kostka/Payne’s comments on a passing harmonic passage (I—vii<sup>06</sup>—I<sup>6</sup>), Gauldin considers the leading tone triad to have a secondary function when compared to the surrounding tonic triads. This embellishing harmony (vii<sup>06</sup>) extends or prolongs the more significant tonic triad. The resulting voice-leading connections of the primary harmony are indicated by slurs in example 1.

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8. Bruce Benward, *Music in Theory and Practice*, 3d ed. (Dubuque, IA: Wm. C. Brown, 1985), vol. 1, 239–244. For macro analysis, see Bruce Benward and Gary White, *Music in Theory and Practice*, 4th ed. (Dubuque, IA: Wm. C. Brown, 1989), vol. 1, 371–374.

9. Bruce Benward, *Music in Theory and Practice*, 3d ed. (Dubuque, IA: Wm. C. Brown, 1985), vol. 1, xii.

10. Bruce Benward, *Music in Theory and Practice*, 3d ed. (Dubuque, IA: Wm. C. Brown, 1986), vol. 2, xi.

11. Robert Gauldin, *Harmonic Practice in Tonal Music* (W. W. Norton & Co. Inc., 1997), ix.

12. Robert Gauldin, *Harmonic Practice in Tonal Music* (W. W. Norton & Co. Inc., 1997), 40, 158.

$I^6$      $(vii^6)$      $I$

┌──────────┐  
 (Passing motion)  
 (Extending or  
 Prolonging C  
 Major)

### Example 1. Gauldin, Reductive Analysis of Passing Motion.

All three of these texts articulate the importance and benefits of reductive analysis. The proposed macro level two is most closely aligned with the first two approaches by combining levels of harmony to macro analysis. In addition, it draws from some of the principles presented in Gauldin's text.

## Macro Analysis: Level One

The first level of macro analysis was initially presented in the "Shorthand Analysis" chapter of *Music in Theory and Practice*. The procedures for analysis have changed somewhat in subsequent editions of this text. Using principles from the sixth edition of the text,<sup>13</sup> a first level of analysis is illustrated using Schumann's Chorale, Op. 68, No. 4 (see example 2). Unlike standard practice, roman numerals are listed above macro-analytical symbols.

13. Bruce Benward and Gary White, *Music in Theory and Practice*, 6th ed. (Dubuque, IA: Wm. C. Brown, 1997), vol. 1, 79–80, 94–95, 191, 206, 228, 240, 256, 281.

Roman Numerals: I vii<sup>o6</sup> I<sup>6</sup> vii<sup>o6</sup> I ii<sup>6</sup> V I I I<sup>6</sup> IV I<sup>6</sup> V<sup>4</sup> I V

MACRO Symbols: (Level #1) G f#<sup>o</sup> G f#<sup>o</sup> G a7 D G G G C G D7 G D

Example 2. Schumann, Chorale, op. 68, no. 4.

## Macro Analysis: Level Two

Once chord-by-chord analysis is complete, certain chords are omitted to reveal a second level of macro analysis (see figure 2). The reduction process focuses on chords that create harmonic prolongation and embellishment through chordal arpeggiation, passing, pedal, and neighbor motion. This procedure is shown in examples 3–5.

1. Omit second inversion triads (often performed in macro level 1)
2. Omit passing sonorities (e.g., vii<sup>o6</sup> and V<sup>4</sup> in progressions such as I—vii<sup>o6</sup>—I<sup>6</sup> and I—V<sup>4</sup>—I<sup>6</sup>)
3. Omit arpeggiated harmonies (e.g., I<sup>6</sup> in the progression I—I<sup>6</sup>)
4. Omit neighbor motion (e.g., V<sup>6</sup> in the progression I—V<sup>6</sup>—I)
5. Omit other embellishing chords that appear between structural chords.

Figure 2. Macro Level Two.

Common passing harmonic gestures include the inverted leading-tone triad and the dominant seventh chord in second inversion (see example 3). Schumann uses a diminished triad, vii<sup>o6</sup>, to create the passing motion that prolongs or extends G major in measures one and two. Another passing harmonic passage appears in the sixth and seventh measures of example 3. In both instances, the passing sonorities (vii<sup>o6</sup>, V<sup>4</sup>) located between the structural harmonies are removed in the middle-ground reduction. The prolonged G major triad becomes especially clear

in the second level of macro analysis when these embellishing chords are subsumed.

Roman Numerals: I vii<sup>o6</sup> I<sup>6</sup> vii<sup>o6</sup> I ii<sup>6</sup> V I I I<sup>6</sup> IV I<sup>6</sup> V<sup>4</sup><sub>3</sub> I V

MACRO Symbols: (Level #1) G f#<sup>o</sup> G f#<sup>o</sup> G a7 D G G G C G D7 G D

MACRO Symbols: (Level #2) G a7 D G C G D

(Passing motion) (Prolonging G)

### Example 3. Schumann, Chorale, op. 68, no. 4.

Examples of neighbor, passing, and cadential motion as well as chordal arpeggiation appear in the second movement of Mozart's Piano Sonata, K. 311 (see example 4). In the first and second measures, the bass voice includes a lower neighbor pattern, G—F#—G, and a neighbor group motion, G—A—F#—G. These embellishing tones (i.e., F# and A) appear with less significant chords (i.e., V<sup>6</sup> and V<sup>4</sup><sub>3</sub> or V<sup>6</sup><sub>5</sub>). As a result, these decorative chords function as neighbor motion that extends the essential tonic triad (see macro level two in example 4). This pattern repeats in measures five and six.

Passing motion, in measures three and four, is created by two common step-wise progressions. First, the passing second inversion triad (tonic six-four) embellishes the subdominant harmony. Second, the important tonic triad is supported by a leading-tone chord that occurs between two tonic sonorities. Unlike the previous examples of the passing diminished triad (I<sup>6</sup>—vii<sup>o6</sup>—I), this is a root position leading-tone chord. This may be due to a change in texture (i.e., from 4 to 2 voices). Nonetheless, the less structural passing motion is evident and matches the step progression in the upper voices.

Brief examples of cadential motion and chordal arpeggiation are located in measures four, seven, and eight. The essential dominant harmonies are embellished by tonic triads in second inversion. Similar to suspensions and other accented non-harmonic tones, this unstable tonic chord delays the appearance of an important harmony. In measure seven, the subdominant is extended beyond the passing motion by a chordal arpeggiation (i.e., IV—IV<sup>6</sup>).

When a harmonic reduction is created (macro level two), the less structural harmonies (e.g.,  $V^6$ ,  $V^{\frac{4}{3}}$ ,  $I_4^6$ ) are not shown in the second harmonic level. Only the more significant chords are carried to the next tier of analysis. Therefore, the essential sonorities (e.g., G, C, D) remain as a harmonic middleground.

Roman Numerals: I  $V^6$  I  $V^{\frac{4}{3}}$  I  $IV^6$   $I_4^6$  IV  $I^6$  vii $^\circ$  I  $I_4^6$  V  
 or  $V_6^5$  (passing) (cadential)

MACRO Symbols: (Level #1) G D G D7 G C (G) C G  $\text{F}\sharp^\circ$  G (G) D

MACRO Symbols: (Level #2) G (Neighbor motion) (Prolonging G) C (Passing motion) (Prolonging C) G (Passing motion) (Prolonging G) D

Roman Numerals: I  $V^6$  I  $V^{\frac{4}{3}}$  I  $IV^6$   $I_4^6$  IV  $IV^6$   $I_4^6$  V I  
 or  $V_6^5$  (passing) (cadential)

MACRO Symbols: (Level #1) G D G D7 G C (G) C (G) D G

MACRO Symbols: (Level #2) G (Neighbor motion) (Prolonging G) C (Passing motion) (Prolonging C) D G

Example 4. Mozart, Piano Sonata, K. 311,  
2nd movement, mm. 1–8.

## Macro Level Two: Deeper Layers

A deeper level of harmonic middleground can be created by using tonal centers as important structural points (see note 5). This is especially useful in longer compositions. In addition to tonal centers, multi-chord tonicizations in secondary relationships (mini modulations) can also serve as structural targets. Figure 3 contains two samples of these chord patterns that progress to temporary harmonic goals. Occasionally, the harmonic tension in secondary relationships intensifies when their resolution is delayed. This can be achieved when secondary chords with the same temporary tonic appear in succession (e.g.,  $V^7/V-vii^{o7}/V-V$ ). The harmonic target thus becomes more essential because of this increased harmonic motion. Similarly, short chord progressions, often sequenced, that create mini modulations are also considered as more important. Although these harmonic patterns may be brief, their harmonic targets (i.e., temporary tonics) become more essential at this deeper level of macro analysis.

1.  $V/V \rightarrow vii^{o7}/V \rightarrow V$
2. A sequential pattern such as  $ii^6 \rightarrow V^7 \rightarrow I$  in different keys
 

C:	$ii^6$	$V^7$	I
b:	$ii^{o6}$	$V^7$	i
a:	$ii^{o6}$	$V^7$	i
G:	$ii^6$	$V^7$	I

**Figure 3. Examples of Structural Secondary Relationships.**

Example 5 illustrates a harmonic middleground of tonal centers. Secondary functioning chords are not included in the deepest harmonic level in this example because they function as part of a sequential pattern that does not contain several consecutive chords of secondary relationship to a single temporary tonic (see figure 3). D major, the tonal center, serves as the target of the chord progressions in the first four measures. The harmonic goal changes to A major following the common chord modulation in measure 5. It is typical for tonal centers to serve as the arrival point of harmonic progressions. Therefore, the next layer of harmonic middleground is created by highlighting tonal centers and important harmonic goals as the most essential structures in the deepest level of macro analysis (see macro level two in example 5).



MACRO Symbols: (Level #1)

D b e A7 D e

MACRO Symbols: (Level #2)

D  
(Tonal center)

4

MACRO Symbols: (Level #1)

A D b E7 A b E7 A

MACRO Symbols: (Level #2)

A  
(Tonal center)

Example 5. Mozart, Piano Sonata, K. 284,  
3rd movement, mm. 1–17.

9

A:  $V/V$  V  
 D:  $V/V$   $V^7$

MACRO Symbols: (Level #1) B7 E A7 D (G) (e) A7 D A g#° A

MACRO Symbols: (Level #2) (A) D

(Tonal center) (Tonal center to end of example)

13

MACRO Symbols: (Level #1) D b e A7 D e A7 D

MACRO Symbols: (Level #2)

Example 5, continued.

If the approaches in major theory textbooks are any indication, many teachers are interested in having their students explore harmonic middlegrounds. Perhaps the ideas presented in this article will assist those who use macro analysis. A study of harmonic levels beyond the traditional chord-by-chord technique does allow one to examine performance issues and their connection to harmonic motion and structure. Prolongations and structural chords can influence such performance decisions as tempo, accent, and emphasis (see note 5). For example, the prolongation of G major in example 4 can be conveyed by using a quicker tempo to create a sense of musical flow. A slower performance might draw the listener's attention to each chord rather than the single pro-

longed harmony. The structural subdominant might be performed with extra emphasis (i.e., slight accent or relaxed tempo). Many different interpretative techniques could be used to direct the listener through prolonged harmonies toward structural sonorities. Whatever the case, it is important that our macro analysis supports the sound and function of a musical passage. As we explore the larger scale harmonic motion, perhaps other areas of harmonic middleground and backgrounds will emerge.

