CHAPTER 15

Modulation

TOPICS

Modulation
Closely Related Keys
Common Chord
Pivot Chord
Common Chord Modulation
Chromatic Modulation
Phrase Modulation
Direct Modulation

IMPORTANT CONCEPTS

Compositions from the common practice period frequently include more than one tonal center. The change from one tonic to another is often accompanied by the appearance of nondiatonic accidentals and harmonic movement emphasizing the new tonal area.

Modulation

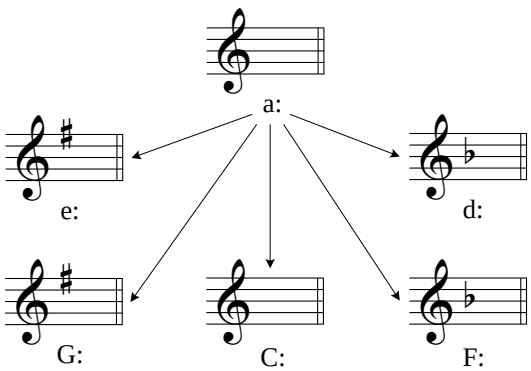
Modulation is a process that results in a shift of tonal center. The term applies to those occasions in music when one established tonal center gives way to another.

Closely Related Keys

Most modulations occur between *closely related keys*, which are those keys that differ by no more than one accidental in the key signature. If the original key is C major, the closely related keys are G major and F major, and the relative minors of each of the three keys, A minor, E minor, and D minor. If the original key is A minor, the closely related keys are E minor and D minor, and C major, G major, and F major (Figure 15.1).

Figure 15.1

Keys Closely Related to A Minor:

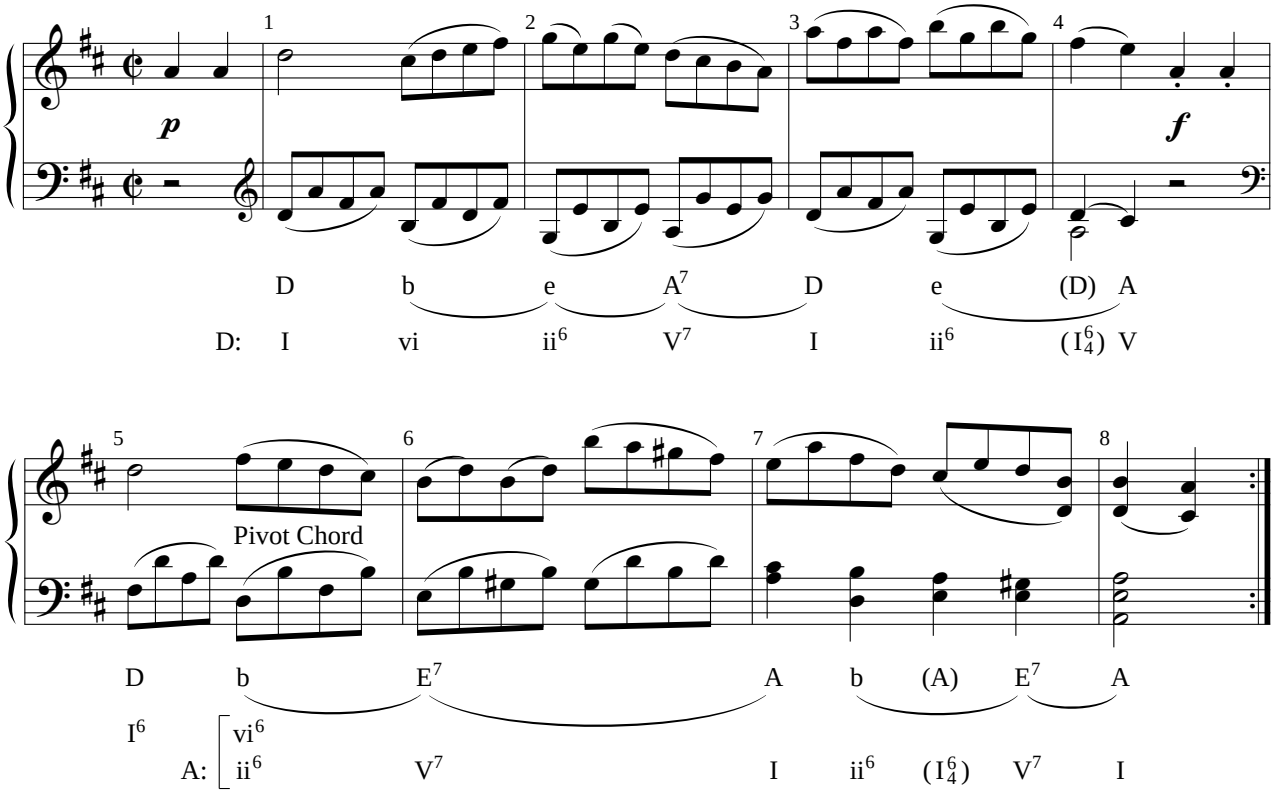


An easy way to understand modulation is to observe the ebb and flow of circle progressions. Up to this chapter, circle progressions have consistently remained diatonic; that is,

they have remained within the limits of a single tonal center. In Figure 15.2, the first progressions move through a circle: vi–ii–V–I, then repeat the ii and V all in D major. However, both sets of circle progressions in the second phrase conclude with the A major triad, the chord preceding it is an E chord and acts as a dominant seventh, and G-sharp is found exclusively from measure 6 on. All of this evidence points toward a modulation from D major to A major—a fact that will be quite evident when the excerpt is heard.

Figure 15.2

Mozart: Sonata in D Major, K. 284, III: Theme, mm. 1–8.



Common-Chord Modulation

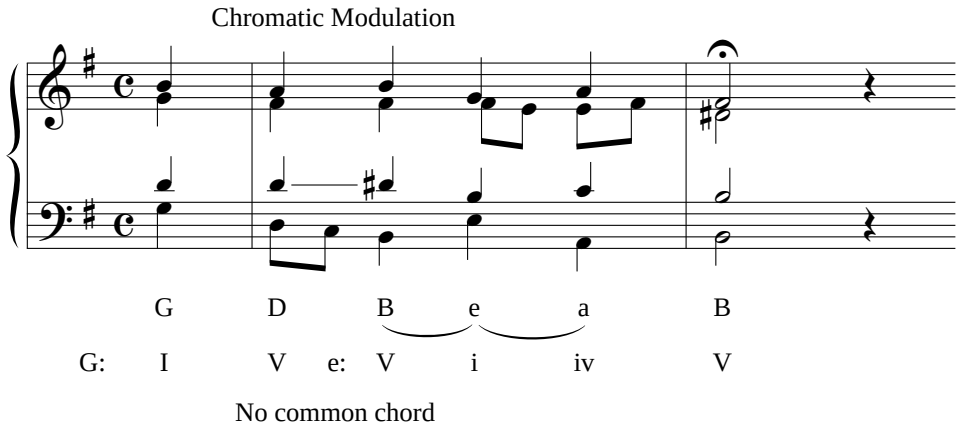
A *common chord*, meaning a chord that is common to each of two keys, offers a smooth introduction to the new key, since it is diatonic to both the old and the new key. This common chord is often called a *pivot chord* because it becomes a sort of middle ground between the two keys. *Common-chord modulation* is the name given to a modulation where a common chord (or chords) exists. Figure 15.2 contains a common chord—labeled in measure 5 as the pivot chord between D major and A major.

Chromatic Modulation

A *chromatic modulation* occurs at the point of a chromatic progression (a progression that involves the chromatic inflection of one or more tones). The letter name remains the same in a chromatic progression—for example, in the following Bach chorale. At chord 2, the tenor is D, but in chord 3, the D becomes D-sharp.

Figure 15.3

Bach: “Du grosser Schmerzensmann” (“Thou Great Man of Sorrow”), BWV 300, mm. 5–6.



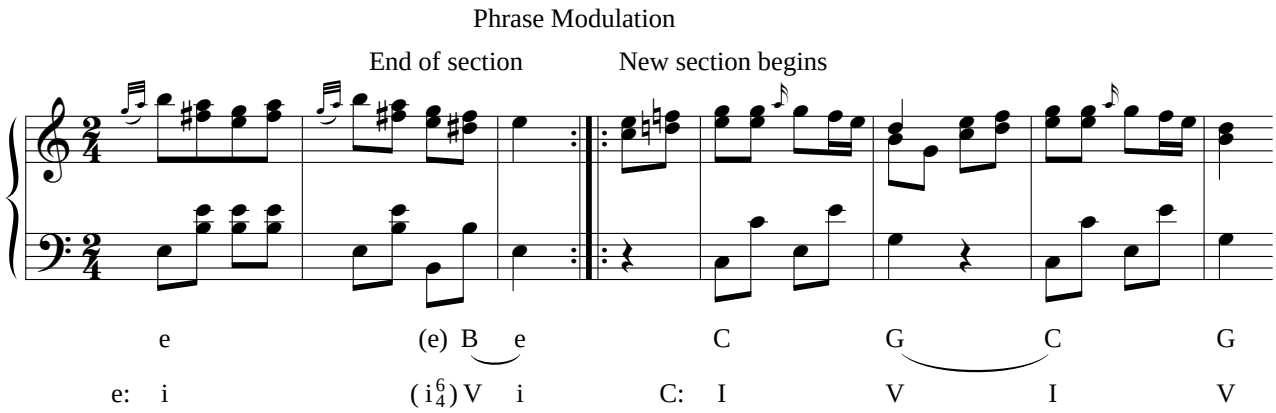
Chromatic modulations often occur in passages where the two keys involved are not closely related. They are somewhat less smooth than the common chord modulation and, on occasion, can call attention to the modulation.

Phrase Modulation

Phrase modulation, also known as *direct modulation*, occurs between phrases, periods, or larger sections where a phrase cadences in one key, and the next phrase begins immediately in a different key. In Figure 15.4, a phrase modulation occurs between phrases, the first of which is in E minor, and the second of which begins immediately in C major.

Figure 15.4

Mozart: Sonata in A Major, K. 331, III: “Alla Turca” Allegretto, mm. 6–12.



Other Modulation Types

There are a number of other modulation types in tonal music, which will be discussed in the second volume of this book. These modulations often include enharmonic chord spellings to facilitate the modulation to foreign keys (keys that are not closely related).

Modulations in Period Construction

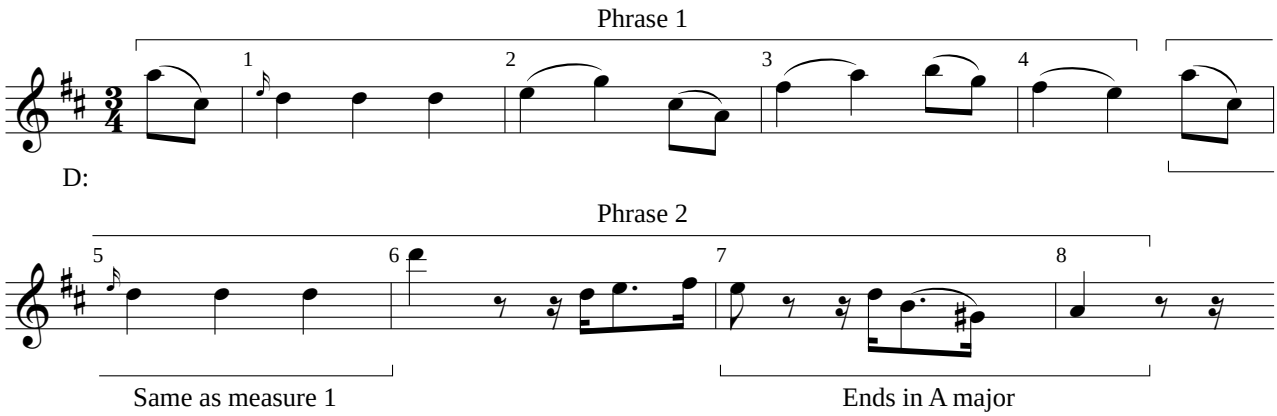
Chapter 6 sets the parameters for identifying phrases and periods in music. With the introduction of modulation, some further information may be helpful. In two-phrase periods:

1. Either phrase may contain a modulation.
2. Either phrase may cadence in a key different from the key at the beginning of the period.
3. The basic definition of a period remains: the cadence at the end of the second phrase must be stronger than the cadence at the end of the first phrase.

The following parallel period (Figure 15.5) begins in D major but ends in A major. Only the first measure of each phrase is the same.

Figure 15.5

Mozart: Sonata in D Major, K. 284, III: Variation XII, mm. 1–8.



In Figure 15.6, the second phrase is a sequence of the first phrase, transposed up a step.

Figure 15.6

Grieg: *The Last Spring,* op. 34, no. 2, mm. 3–10.

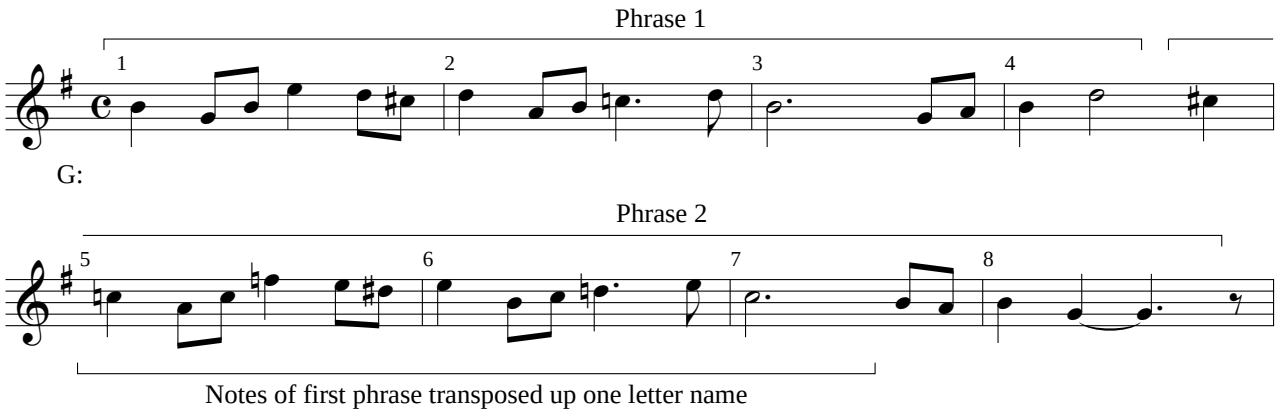
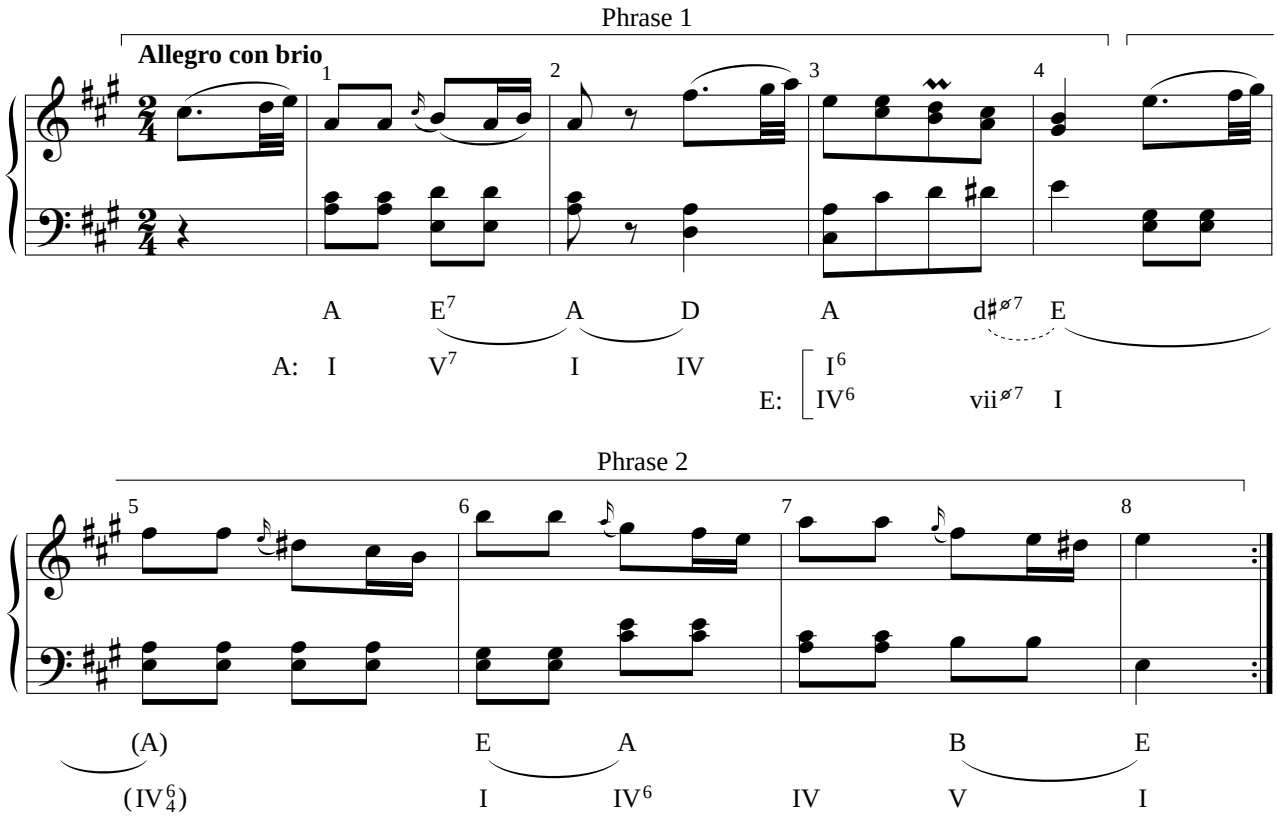


Figure 15.7 illustrates a contrasting period where the second phrase is in the key of the dominant.

Figure 15.7

Haydn: Sonata in C-sharp Minor, Hob. XVI:36, II: Scherzando, mm. 1–8.



Analysis

Measure	Phrase	Cadence	Key	Symbol	Form
1–4	1	Half	A major	a	Contrasting Period
5–8	2	Perfect Authentic	E major	b	

Analytical Symbols for Modulations

Use the following symbols to analyze modulations:

1. Common chord—select the common chord and analyze it in both keys:

   C: I ii6 V I vi6
   G: ii6 V I

2. Other types of modulation—name the new key and adjust chord analysis accordingly:

   G: I V I a: V6 I V i

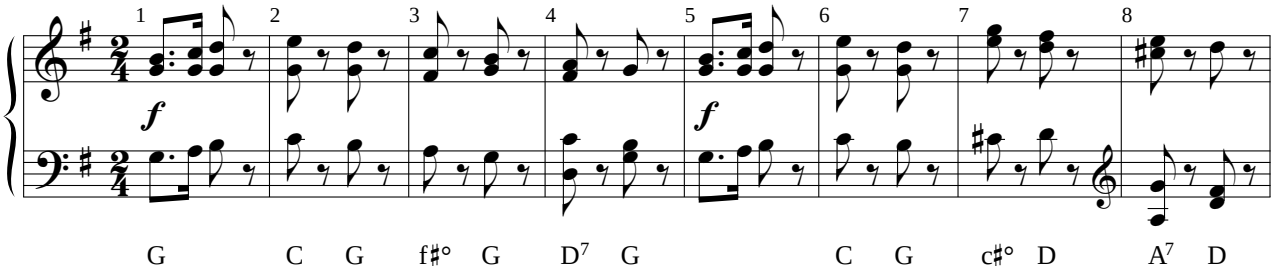
Macro Analysis

Macro analysis is a helpful tool for identifying modulation and can be used as a preparatory step to Roman numeral analysis. By using the following strategy it may simplify the process to determining if a modulation exists:

1. Analyze an entire section with the macro analysis letter symbols. Do this before considering key centers or Roman numerals.

Figure 15.8

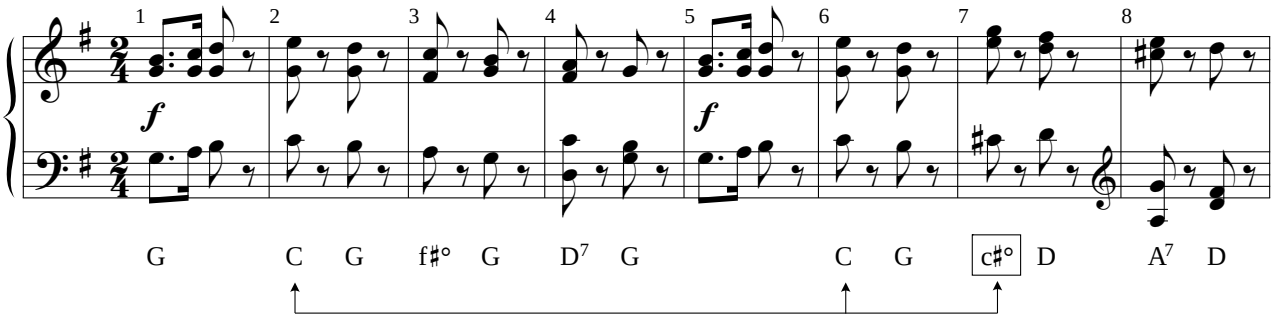
Schumann: "Soldatenmarsch" ("Soldiers' March") from *Album for the Young*, op. 68, no. 2, mm. 1–8.



2. After completing the macro letter names, go back and read through the analysis. Pay particular attention to the symbols that change from the pattern established at the beginning of the excerpt. Changes in symbols frequently occur at the ends of phrases and often point to a modulation. In this example, the C symbol appearing in measures 2 and 6 changes to c♯° in measure 7. This change from C to c♯° indicates a modulation has occurred.

Figure 15.9

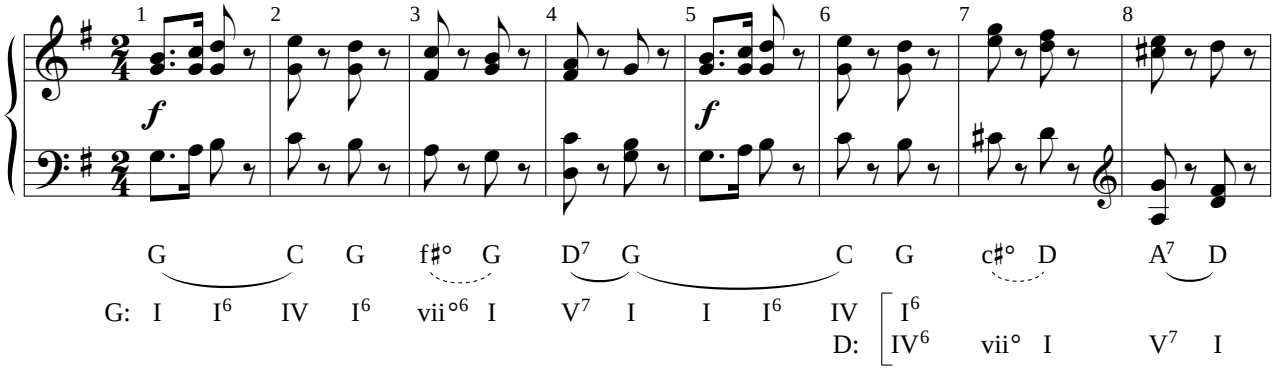
Schumann: "Soldatenmarsch" ("Soldiers' March") from *Album for the Young*, op. 68, no. 2, mm. 1–8.



3. After the differing symbols are identified, scan the area containing the new symbol to determine where the modulation begins and ends. Be sure to study the score both before and after the symbol change. When music modulates to a closely related key, the modulation may not be readily apparent until a cadence appears in the new key. To determine where the modulation begins, work backward from the cadence.
4. Complete the macro analysis with slurs. The circle progression and leading-tone slurs often help to verify the new key of the modulation.
5. When the macro analysis is completed, add key indications, Roman numerals, and inversion symbols.

Figure 15.10

Schumann: "Soldatenmarsch" ("Soldiers' March") from *Album for the Young*, op. 68, no. 2, mm. 1–8.



History

Most compositions of the Renaissance period are modal and did not contain modulations in the tonal sense, but simple modulations to closely related keys began to develop in the early baroque period. Joachim Burmeister (1564–1629), in his treatise *Musica poetica* (*The Poetics of Music*), was one of the first theorists to distinguish between major and minor modes. Composers were reluctant to wander far from the original tonic of a composition because the prevailing system of tuning caused serious intonation problems. By 1700, with the changes in the tuning system, modulation became an integral part of the musical style.

Modulation became somewhat more venturesome during the classical period. During the last 25 years (1800–1825) of the period, composers, such as Beethoven (1770–1827) and Haydn (1732–1809), explored modulation to distant keys.

It was during the romantic period that composers carried modulation to the limits. Composers such as Wagner (1813–1883), Franck (1822–1890), and Liszt (1811–1886) developed highly chromatic styles in which frequent and unusual modulations were featured.

During the post-romantic and impressionistic periods, a number of composers expanded their tonal language beyond the bounds of traditional tonality. With the demise of major-minor tonality, modulation became a much less important factor in music.

Much of the music written in the twentieth century goes beyond the tonal system based on major and minor keys. Except for some forms of jazz that incorporate atonality and free tonality, both jazz and popular music are essentially tonal. Consequently, modulation still plays an important role in this music.

APPLICATIONS

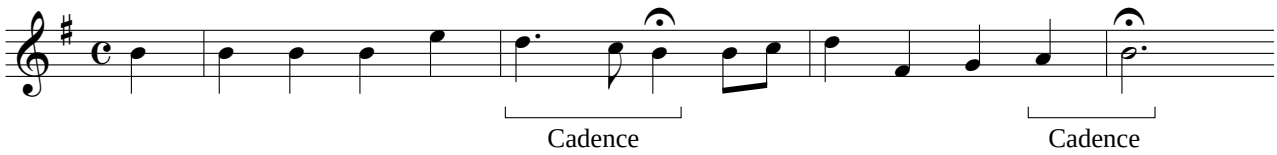
Melodies can be harmonized to include modulation, and often, several options are possible when creating a harmonization. The following suggestions will be helpful in harmonizing melodies that modulate.

Harmonizing Melodies That Modulate

The same procedure should be followed for melodies that modulate as for those that do not. This procedure is described in Chapter 10. To illustrate the technique, two phrases of the chorale tune, "Keinen hat Gott verlassen" ("God Has Forsaken No One"), are harmonized to show each step of the process.

Figure 15.11

"Keinen hat Gott verlassen" ("God Has Forsaken No One"), mm. 1–4.



The key signature indicates either the key of G major or E minor. The closely related keys are D major, C major, B minor, and A minor.

The end of the first phrase would support cadences in G major or C major. Three possibilities for the first cadence are shown in Figure 15.12.

Figure 15.12

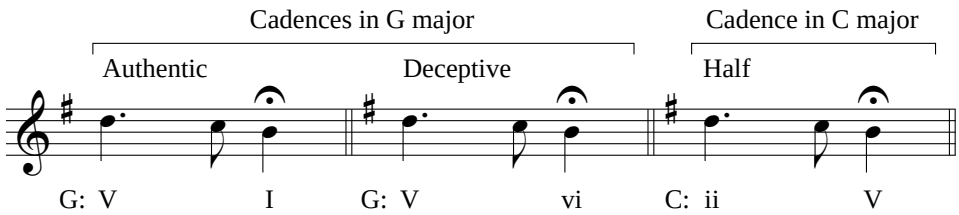
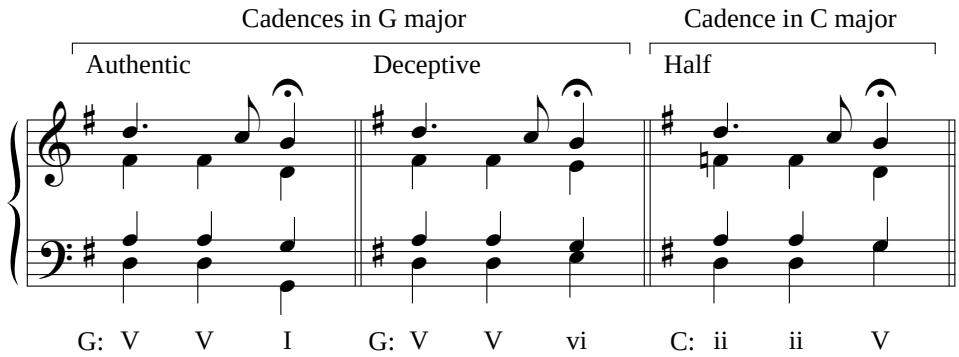


Figure 15.13 shows these same cadences in four-part harmony.

Figure 15.13



Five possibilities for the second cadence are shown in Figure 15.14.

Figure 15.14

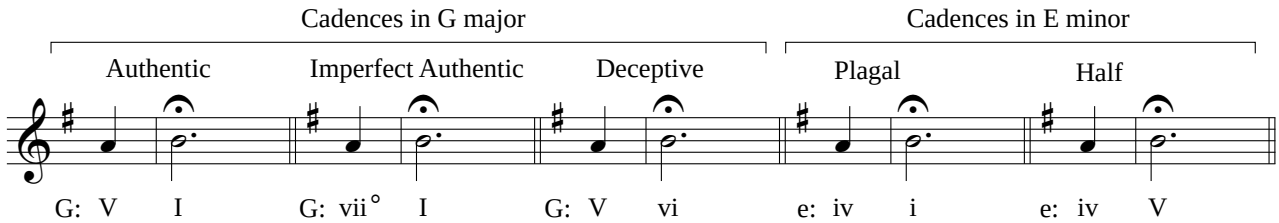
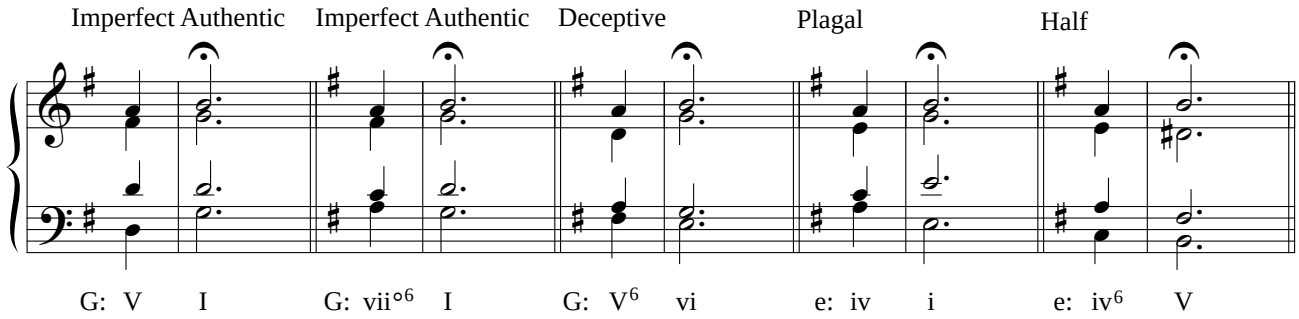


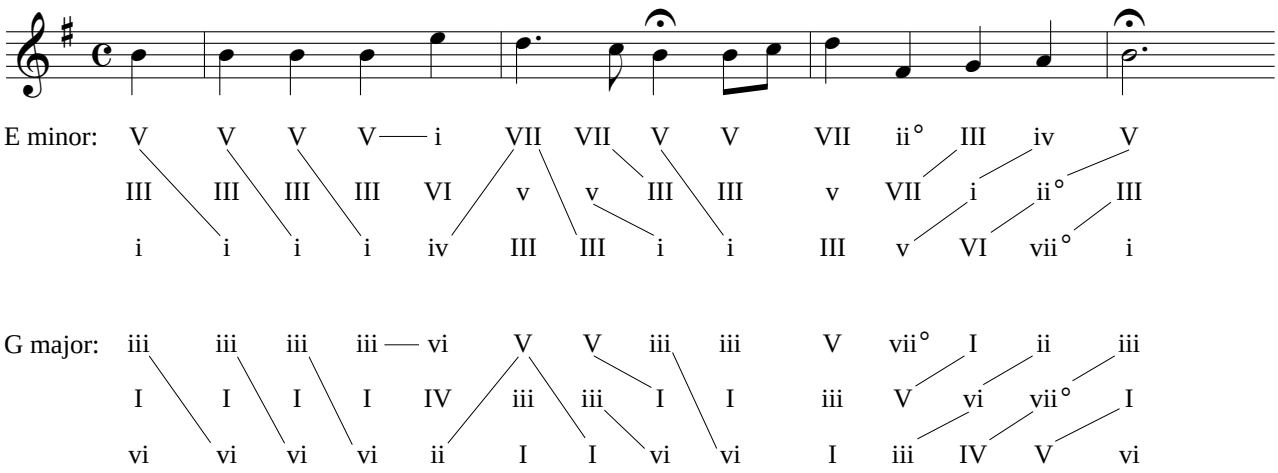
Figure 15.15 shows these same cadences in four-part harmony.

Figure 15.15



We will choose the key of G major and the key of E minor to illustrate the process of modulation. The two phrases are shown in Figure 15.16 with possible harmonizations. We have indicated circle progressions by drawing a line between chords.

Figure 15.16



Play the chorale melody on the piano and accompany it (using block chords) with several combinations from the preceding possibilities. When a selection has been made, follow the procedures described in Chapter 10, fashioning a compatible bass line, adding the remaining voices, and finally inserting appropriate nonharmonic tones. The following suggestions will assist you in making good choices:

1. Remember that the descending P5 progression involving dominant and tonic harmony is important in establishing a key. Be sure you include such progressions to clarify the key, particularly after a modulation.
2. For the present, it is desirable to include at least one common chord just before the new key is to be initiated.
3. Start your selection of chords with the cadence and work backward to establish a smooth set of progressions.

From the previous information, two students made harmonizations. The first (Figure 15.17) conceives the entire melody in G major, whereas the second (Figure 15.18) begins in E minor, modulates to G major, then returns to E minor.

Figure 15.17

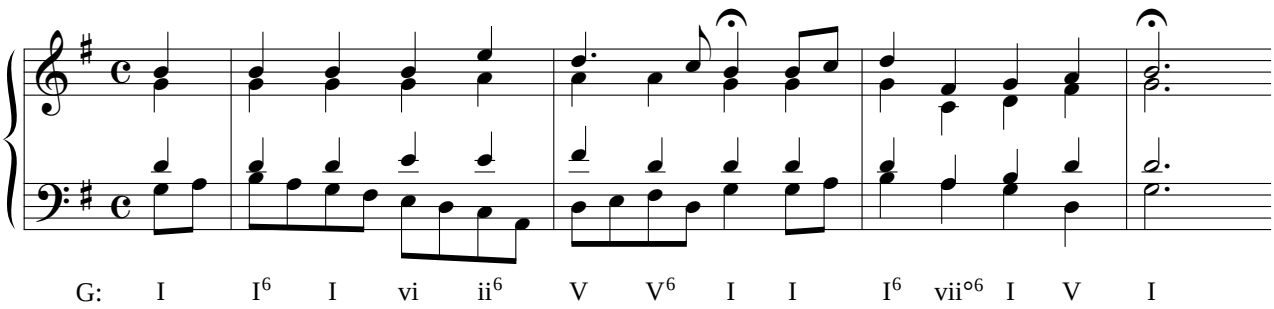
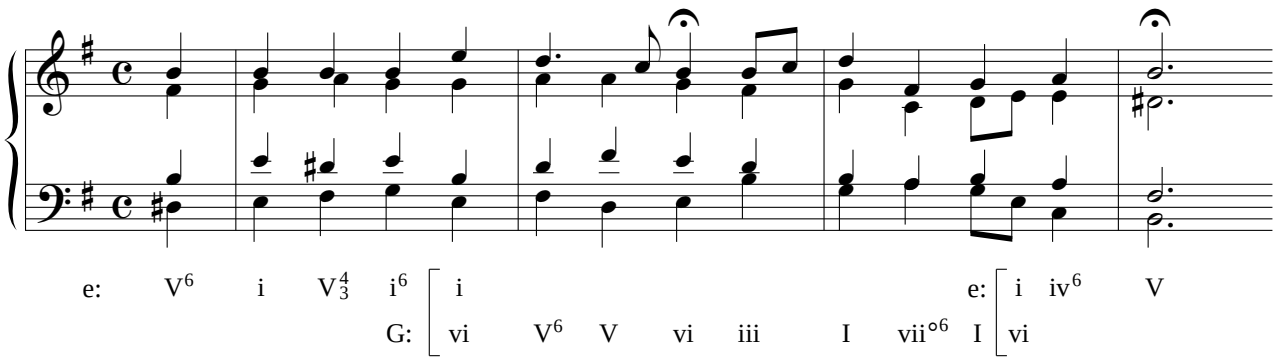


Figure 15.18



Finally, the harmonization of these two phrases by J. S. Bach is presented in Figure 15.19 for comparison.

Figure 15.19

Bach: "Keinen hat Gott verlassen" ("God Has Forsaken No One"), BWV 369, mm. 1–4.