

CHAPTER 10

Harmonic Progression and Harmonic Rhythm

TOPICS

Harmonic Progression
 Root Relationships
 Circle Progression
 Noncircle Progressions

Ascending Fifths
 Ascending Seconds
 Descending Thirds

Harmonic Rhythm
 Changes
 Style

IMPORTANT CONCEPTS

In the previous chapters, we have focused attention on voice leading in two-voice and four-voice textures. Now we will concentrate on *harmonic progression*—the way in which chords succeed each other in a piece of music.

Harmonic Progression

From the baroque through the classical and romantic periods, composers employed harmonic progression as a principal organizing force. The movement from one chord to another provides an additional impetus to music and contributes a stimulus not found in melody or rhythm alone. Through all musical styles that involve tonal harmony, the shape of a composition is determined to a great extent by chord progressions. To experience an example, play the two sets of progressions in Figure 10.1 and determine which is the more effective. Both have the same soprano melody.

Figure 10.1

1. C a d G C
 C: I vi ii⁶ ii V V I

2. F a G d e G F
 C: IV vi V ii⁶₄ iii V IV

Which progression are you most accustomed to hearing? The chords in the first example seem to progress directly to the final chord, as if it were a predetermined goal. The second example lacks direction and seems to wander aimlessly.

The Relationship of Chords

In tonal music, the tonic chord is the most stable of all. Chords that move away from the tonic tend to create tension. Those that progress toward the tonic give fulfillment and relax the tension caused by the departure. Thus, complete tonal compositions invariably end with the tonic triad and more often than not begin with that same chord.

Root Relationships

Two forces, both involving *root relationships*, govern the relationship of chords in succession. Together they help organize phrases, periods, sections, and other musical units. These two forces are (1) the relationship of the chords to the prevailing tonality and (2) the intervals formed by the roots of adjacent chords. The triads constructed on each of the scale degrees relate to the tonic triad, which is the point of rest and the goal of harmonic progression. We can analyze individual chord progressions in terms of the interval formed between their roots.

Chord Progressions

The best way to study harmonic progression is to consider progressions in groups according to the interval produced by the roots of two adjacent chords. The following general categories will form the basis of our study of harmonic progression.

The Circle Progression

Examples: iii–vi, vi–ii, ii–V, V–I.

Undoubtedly the most common and the strongest of all harmonic progressions is the *circle progression*—adjacent chord roots in ascending fourth or descending fifth relationship. More than any other, this progression has the capability of determining a tonality, giving direction and thrust, and providing order in a section or phrase of music. It is indeed the basis of all harmonic progression.

Circle progressions are often found in succession—for example, ii–V–I, or even vi–ii–V–I. Figure 10.2 illustrates a complete circle from the tonic through all seven diatonic chords to the original tonic. Note that ascending fourths are equivalent to descending fifths (the pitches will be the same in either direction), and that not all of the fourths and fifths are perfect in the diatonic series: ascending augmented fourths and descending diminished fifths are necessary to maintain the diatonic setting. Chords 1, 5, 10, and 11 are seventh chords, but the added factor of a seventh does not affect the root movement or the progression function.

Figure 10.2

Beethoven: Sonata in F Minor, op. 2, no. 1, I: Allegro, mm. 146–152.

1 2 3 4 5 6 7 8 9 10 11 12

Chord roots: F⁷ bb Eb Ab Db^{M7} go C⁷ f Db go⁷ C⁷ f

Circle Progressions

We can derive many harmonic patterns from the progression built of consecutive ascending fourths or descending fifths: I–IV–vii°–iii–vi–ii–V–I. Note that the progression begins and finishes on the tonic.

All of the following common progressions result when specific chords are selected from the I–IV–vii°–iii–vi–ii–V–I series.

- I–IV–vii°–iii–vi–ii–V–I
- I– V–I = I–V–I
- I– ii–V–I = I–ii–V–I
- I–IV– V–I = I–IV–V–I
- I– vi–ii–V–I = I–vi–ii–V–I

In macro analysis, you will mark root movement by ascending fourth or descending fifth with a slur to identify circle progression motion. The excerpt in Figure 10.3 illustrates a complete diatonic circle progression. Note the macro analysis slurs indicating the series of circle progression root relationships.

Figure 10.3

Handel: Gigue from Suite (Partita) in G Major, G. 217, mm. 34–35.

G C f#° b e a D G
 G: I IV vii° iii vi ii V I
 Chord roots:
 Diatonic Full Circle

Phrases often open with a mixture of circle and noncircle progressions and close with a strong succession of circle progressions. The phrase in Figure 10.4 begins with presentations of both progression types, but then concludes with an extended series of circle progressions (iii–vi–ii–V–I). Chords 4 through 8 illustrate a typical profusion of circle progressions near a cadence. Many phrases end with a ii–V–i circle progression, which results in an authentic cadence.

Figure 10.4

Bach: “Straf’ mich nicht in deinem Zorn” (“Punish Me Not in Thy Wrath”), BWV 115, mm. 1–2.

1 2 3 4 5 6 7 8

E^b A^b B^b g c f^7 B^b E^b

E^b : I IV^6 V^6 iii^6 vi ii_5^6 V I

Roots:

Circle Progression Circle Progressions

Not all series of circle progressions conclude on the tonic chord. Frequently, phrases will end with the progression $ii-V$ (half cadence), thus leading us to expect that a following phrase will complete the direction toward the tonic.

Figure 10.5

Bach: “Lobt Gott, ihr Christen, allzugleich” (“Praise God, Ye Christians, All Together”), BWV 151, mm. 5–6.

1 2 3 4 5 6 7 8

D G D^7 G e G a D

G : V^6 I V_3^4 I^6 vi I^6 ii^6 V

Roots:

Circle Progression Circle Progression Circle Progression

We think of the circle progression as a drive toward the tonic, which, when achieved, is a point of relaxation. In the span of even a very short composition, chord progressions can reach the tonic many times, only to move away and begin another motion toward the goal.

The ebb and flow of music allows for movement away from, as well as toward, the tonic. Composers employ a variety of progression types that include *noncircle progressions*.

Ascending Fifths and Descending Fourths

Examples: I–V, IV–I, V–ii, vi–iii, iii–vii^o, and ii–vi.

Compared with the pattern of descending fifths, the *ascending fifth* or descending fourth provides relief from the constant motion toward tonic. The most frequent application is the progression from the tonic to the dominant (I–V), although ascending fifths may occur between chord roots on any scale degrees. The half cadence, which appears often, is an example of this type of movement.

Ascending Seconds

Examples: IV–V, V–vi, I–ii, ii–iii, iii–IV, and vii^o–I.

Adjacent chords whose roots lie in the relationship of an *ascending second* perform a most important function even though they are not as abundant as chords related by a descending fifth. The ascending second progression is often used to prepare a shift from the circle progression I–IV to another circle progression, V–I. The resulting progression, I–IV–V–I, is often considered a substitute for I–ii–V–I.

In Figure 10.6 the first two chords (I–V) are a typical example of the ascending fifth progression's departure from tonic. In the middle of the phrase an ascending second progression (I–ii) prepares a change from one circle (V–I in chords 2 and 3) to another (ii–V–I in chords 4 through 6).

Figure 10.6

Tchaikovsky: Symphony no. 5 in E Minor, op. 64, II: Andante cantabile, con alcuna licenza, mm. 8–12.

The musical score for Figure 10.6 consists of six measures of music in E minor. The piano part is written in 12/8 time. The first measure (measure 1) starts with a piano (*pp*) dynamic and features a D major chord (I). The second measure (measure 2) features an A7 chord (V⁴₃). The third measure (measure 3) features a D major chord (I⁶). The fourth measure (measure 4) features an e7 chord (ii⁴₃). The fifth measure (measure 5) features an A7 chord (V⁷). The sixth measure (measure 6) features a D major chord (I). Brackets below the root symbols indicate an 'Ascending 5th' progression from measure 1 to 2, and an 'Ascending 2nd' progression from measure 3 to 6.

The vii^o Triad

The ascending-second root relationship is employed in other capacities, one of which involves the leading-tone triad or seventh chord. Leading-tone harmony is most often considered dominant harmony since the triad contains the third, fifth, and seventh of the dominant seventh chord. For this reason, the leading-tone triad usually progresses to the tonic (vii^o–I) in an ascending-second relationship. Thus, the progression vii^{o6}–I, although weaker, functions for all practical purposes as V–I.

In macro analysis, the leading tone to tonic progression is marked with a dotted slur to indicate its similarity to the circle progression. In Figure 10.7, chords 2–3 and 6–7 have been marked with the dotted slur to denote the leading-tone function.

Figure 10.7

Beethoven: Sonata in G Minor, op. 49, no. 1, I: Andante, mm. 1–4.

g f#° g D⁷ g f#° g c
 g: i⁶ vii^{o6} i V⁷ i vii^{o6} i iv

Roots:

Ascending 2nd Ascending 2nd

Descending Thirds

Examples: I–vi, vi–IV, IV–ii, iii–I, and V–iii.

Chord roots that lie in a relationship of *descending thirds* serve a definite function in that they provide contrast and facilitate change from one circle progression to another. Descending third progressions are often used in harmonic movement away from the tonic (I–vi) or in a longer chord series (I–vi–IV–ii) as shown in Figure 10.8.

Figure 10.8

Bach: “Der Tag, der ist so freudenreich” (“This Day Is So Joyful”), BWV 294, mm. 1–2.

G e C a G C D G
 G: I vi IV ii I IV V I

Roots:

Descending 3rds in Series

The Tonic $\frac{6}{4}$ Triad

The second-inversion tonic triad, especially in the cadence formula I_4^6 –V–I, reflects little of the stable quality normally associated with the tonic function and should be considered a decoration of the V chord that follows it.

Repeated Chords

In instances where the same triad is repeated or recurs in a different position, no progression takes place. In Figure 10.9, the repeated tonic chords at the beginning of the phrase are not considered a progression. Note also that the tonic in second inversion is simply a decoration of the ii–V–I progression that ends the phrase.

Figure 10.9

1 2 3 4 5 6 7 8

G f#^o G a D G
 G: I⁶ I vii^{o6} I⁶ ii⁶ (I₄⁶) V I

Roots:
 No Progression Decorated Dominant

Harmonic Rhythm

Harmonic rhythm is the frequency of harmonic changes in a composition (the rate at which chord progressions change). It is yet another aspect of the rhythmic life of a piece of music. The harmonic rhythm typically has the function of defining or confirming the prevailing meter of a composition. In Figure 10.10, there is one chord per measure.

Figure 10.10

Chopin: Mazurka in B-flat Major, op. 7, no. 1, mm. 1–4.

f *cresc.* *ff* *p*

Lead. * Lead. * *f* *

Bb: V⁷ I IV I

Harmonic rhythm:
 3/4

The harmonic rhythm of a composition can consist of slow or fast harmonic changes. Sometimes a single chord will be heard for several measures at a time. Other times, as in chorale settings, each successive melody tone will be harmonized with a different chord. When the harmonic rhythm is slow and extends over many measures, the eventual chord

change will occur on a downbeat. Even when the harmonic rhythm is faster than one chord per measure, chord changes will usually coincide with each downbeat.

Figure 10.11

Mozart: Sonata in D Major, K. 284, III: Theme, mm. 1–4.

D: I vi ii⁶ V⁷ I ii⁶ (I₄⁶) V

Harmonic rhythm:

History

During the Renaissance period, the emphasis was on melodic lines; chord progressions were only an incidental result. However, a Renaissance composer, Adrian Willaert (1490–1562), produced some early examples of what we now know as circle progressions in some of his works. Although these compositions were probably experimental in nature, the seeds of tonal harmony were apparent.

In the baroque period the tonal system based on the major and minor scales arose, and harmony began to be a stronger factor. Chord progressions, and especially circle progressions, are clearly in evidence in the works of such early baroque composers as Samuel Scheidt (1587–1654) and Claudio Monteverdi (1567–1643). The middle and latter part of the baroque period brought tonal harmony to a high level of sophistication.

The music of the classical period depends heavily for its structure on the standard chord progressions discussed in this chapter. The dominating force of the circle progression is evident in the music of this period, with functional harmony being the mainstay for harmonic relationships.

Whereas the style of the romantic period was marked by increased chromaticism, harmonic progression continued as an important form-creating element of the period. In the last quarter of the century, the use of standard progressions gradually declined as composers became more and more experimental in their approach.

In the post-romantic and impressionistic period, composers such as Maurice Ravel (1875–1937), Richard Strauss (1864–1949), and Gustav Mahler (1860–1911) continued to rely heavily on traditional harmonic progression; but others, such as Claude Debussy (1862–1918), Erik Satie (1866–1925), and Alexander Scriabin (1872–1915), looked for and found other alternatives.

The twentieth century was a period of extreme experimentation. Much of the music of the first half of the century was not organized along tonal lines. However, in the recent past there has been a strong resurgence in tonality, and standard harmonic progressions are often heard again.

Most jazz and popular music is structured around standard harmonic progressions (which jazz musicians refer to as *changes*). The most common of these progressions is the 12-bar blues progression. The table in Figure 10.12 shows common variants of this progression. Notice that the chords are all notated as major triads with a minor seventh (see Chapter 11), which is typical of the blues style.

Figure 10.12

Standard 12-Bar Blues Progressions.

Figure 10.12 displays five standard 12-bar blues progressions (A through E) in E-flat major. Each progression is shown as a staff of music with chord symbols below the notes. The bars are numbered 1 through 12.

- A:** I⁷ I⁷ I⁷ I⁷ IV⁷ IV⁷ I⁷ I⁷ V⁷ IV⁷ I⁷ V⁷
- B:** I⁷ I⁷ I⁷ I⁷ IV⁷ IV⁷ I⁷ I⁷ V⁷ IV⁷ I⁷ I⁷
- C:** I⁷ I⁷ I⁷ I⁷ IV⁷ IV⁷ I⁷ I⁷ IV⁷ V⁷ I⁷ V⁷
- D:** I⁷ IV⁷ I⁷ I⁷ IV⁷ IV⁷ I⁷ I⁷ V⁷ IV⁷ I⁷ V⁷
- E:** I⁷ I⁷ I⁷ I⁷ IV⁷ IV⁷ I⁷ I⁷ V⁷ V⁷ I⁷ I⁷

“Sweet Home Chicago,” recorded by Robert Johnson in 1936, is a blues song using the first chord progression in Figure 10.12.

Figure 10.13

Johnson: “Sweet Home Chicago.”

Figure 10.13 shows the first line of the blues song “Sweet Home Chicago” by Robert Johnson. The notation includes the melody line with lyrics and chord symbols above the notes. The key signature is one flat (B-flat major/E-flat minor) and the time signature is 4/4.

Oh — Ba - by don't you want — to go, — Oh —

— Ba - by don't you want to go, — back to the land

— of Cal-i - for - nia — from my sweet ho - me Chi - ca - go. —

APPLICATIONS

In this chapter we will concentrate on harmonizing two different kinds of melody: chorales (or hymn tunes) and folk songs. Although the two categories are similar in some respects, they differ in harmonic rhythm. A chorale or hymn tune traditionally uses one chord to each melody note, whereas folk tunes often have one chord for each measure.

How to Harmonize a Tonal Melody

Harmonizing a Chorale Phrase

Ultimately, harmonizing a melody is a matter of personal taste. Nevertheless, although you have some leeway in the selection of chords, a certain standard of musical communication, known as *style*, prevents you from exercising complete freedom.

Earlier in the chapter, we examined several examples of chorale phrases. Bach's harmonizations of the chorales represent a large body of respected literature. In the learning stage, it is quite appropriate for you to imitate the harmonic construction of these magnificent works. After your skills have matured, you can explore individual choice and creativity. However, in this chapter we will try to make our chorale harmonizations as much like those of Bach as possible. The following general principles will guide our choice of chords:

1. You must use half (I–V, IV–V, or ii–V) or authentic (V–I) cadences for the final two notes of each phrase.
2. You should use circle progressions throughout in each phrase. Circle progressions are more often longer and more abundant near the cadence than at the beginning of the phrase.
3. Harmonize each melody note with one chord. It is possible to repeat chords occasionally, but adjacent repeated chords are usually in different positions to provide melodic motion in the bass.
4. Employ first-inversion chords and nonharmonic tones to make a smoother (stepwise) bass melody.
5. Shape the bass line carefully to make it a singable melodic line. Use the principles of species counterpoint as a guide to constructing bass melodies. However, remember that the bass usually has more leaps than the other voices.
6. Avoid overuse of ascending-third and descending-second progressions.

Compare the three harmonizations of a chorale melody shown in Figure 10.14. Only one of the three is by Bach.

Figure 10.14

Version 1: 1 2 3 4 5 6 7 8

D e D b a G G b

G: V⁶ vi V iii ii I I iii

Version 2: 1 2 3 4 5 6 7 8

G G D G C G D G

G: I I V⁶ I IV⁶ I⁶ V I

Version 3: 1 2 3 4 5 6 7 8

G G D G C G D G

G: I I V I IV I V I

The following is a set of conclusions about the three examples in Figure 10.14. You must learn to criticize your own work in this way to develop skill in the harmonization of melodies.

1. *Cadence*: No cadence in number 1. Numbers 2 and 3 have authentic cadences.
2. *Circle progressions*: No circle progressions in number 1. Numbers 2 and 3 have three circle progressions each.
3. *Harmonic rhythm*: All three have one chord per melody tone and there is one repeated chord in each harmonization.
4. *Chord positions*: Number 1 has one inverted chord; number 2 has three inverted chords; and number 3 has no inverted chords.
5. *Bass line direction*: Numbers 1 and 2 have a good contour in the bass melody, whereas number 3 is much less acceptable.
6. *Weak progressions*: Number 1 has three descending second progressions and one ascending third progression, whereas numbers 2 and 3 have no weak progressions.

To summarize, the second harmonization is clearly superior to the other harmonizations. This also happens to be Bach's harmonization of the chorale melody "Was Gott tut, das ist wohlgetan" ("What God Does Is Well Done").

Harmonization of Folk and Familiar Melodies

Many of the suggestions for harmonizing a chorale melody also apply to folk and familiar melodies. The most important difference, as stated before, is the harmonic rhythm. The following suggestions for harmonizing a well-known melody are in addition to those given for chorale melodies and are related primarily to harmonic rhythm.

Determining the Harmonic Rhythm

1. Harmonic rhythm is important in establishing a clear meter. For this reason, chords usually change on the first beat of a measure. In $\frac{3}{4}$ and $\frac{6}{8}$ a second chord change often occurs in the middle of the measure. In $\frac{3}{4}$ a second chord change can occur on the third beat.
2. Two melody notes that skip are usually part of a single chord. Look at skips as opportunities to determine the implied chord. If the two notes that skip do not fit into a single chord, or if the harmonic rhythm will be thrown off by harmonizing them with one chord, change the chord.

To test the above general guidelines, *Gaudeamus Igitur* (“Therefore Let Us Rejoice”) is shown in Figure 10.15 with four different harmonizations. Play each version and determine which you think is the most acceptable.

Figure 10.15

Gaudeamus Igitur (“Therefore Let Us Rejoice”).

The figure displays a musical score for the piece "Gaudeamus Igitur". At the top, a melody is written on a treble clef staff in 3/4 time, with notes numbered 1 through 12. Below the melody are four different harmonicizations, each shown on a bass clef staff. Version 1 shows a simple harmonic rhythm with chords changing on the first beat of each measure. Version 2 shows a more complex harmonic rhythm with chords changing more frequently. Version 3 shows a harmonic rhythm that is appropriate for the melody, with three circle progressions. Version 4 shows a harmonic rhythm that is not appropriate for the style, with chords changing for every melody note.

Assessment of the Four Versions

Version 1: There is no harmonic cadence at the end of the phrase. Also the harmonic rhythm doesn't support the meter. There is a repeated chord between the third beat of the first measure and the first beat of the second, and the chords change on the second beat of measures 2 and 3.

Version 2: There is an authentic cadence at the end of the phrase. The harmonic rhythm is much too fast for this familiar melody. The harmonic rhythm does not support the meter.

Version 3: The harmonic rhythm is appropriate for this simple melody and there are three circle progressions. A clear authentic cadence completes the phrase.

Version 4: This harmonization attempts to provide a chord change for each melody note, which is not appropriate to the style. There is no cadence at the end of the phrase.