

CHAPTER 14

Secondary Dominants and Leading-Tone Chords

TOPICS

Secondary Dominants
Altered Chords
Primary Dominants

Tonicized Chord
Tonicization
Secondary Leading-Tone Chords

Nondiatonic Tones
Four-Chord Formulas
Tritone Substitution

IMPORTANT CONCEPTS

We have already observed the characteristics of the primary dominant chords (V and V⁷) and the primary leading-tone chords (vii^o, vii^{ø7}, and vii^{o7}) in their diatonic settings. Similar in function to these chords are the secondary dominants and secondary leading-tone chords. These chords act as dominants and leading tones to scale degrees other than the tonic.

Secondary Dominants

Secondary dominants are chords that are altered to sound like dominants. This means changing triads to make them major and changing seventh chords to make them major-minor. Any major or minor diatonic triad may be preceded by a chord that is, in effect, its dominant or leading tone.

In Figure 14.1a, the vi triad is preceded by iii, but in Figure 14.1aa, vi is preceded by its own dominant. The ii triad (E–G–B) is transformed into a secondary dominant simply by making it major (E–G[#]–B). The E major triad sounds like the dominant for A minor even though the A minor triad exists in C major as vi.

Figure 14.1

C: iii vi V/vi vi vi ii V/ii ii ii⁷ V V⁷/V V

Characteristics of Secondary Dominants

1. To be a secondary dominant, a chord must be either a major triad or a major-minor seventh chord. When you see the slash (/), read it as the word “of.” The symbol V/vi means V of vi.

2. Secondary dominants are called *altered chords* because they contain nondiatonic tones—tones that are not found in the prevailing key. Secondary dominants are created out of diatonic chords that have been changed to make them major and major-minor.

Figure 14.2

| | | | | | | | | | | | |
|----------|--|---------|--|-----------------|--|-------------------|--|--------------------|--|---------|--|
| Diatonic | | Altered | | Diatonic | | Altered | | Diatonic | | Altered | |
| | | | | | | | | | | | |
| m | | M | | mm | | Mm | | d | | M | |
| C: ii | | V/V | | ii ⁷ | | V ⁷ /V | | c: ii ^o | | V/V | |

3. Secondary dominants, because they are temporarily raised to the status of dominant, naturally resolve to their temporary tonic, just as *primary dominants* (V) resolve to tonic (I). Thus, most often secondary dominants move in circle progressions V/vi to vi, V/ii to ii, V/iv to iv, and V/V to V.
4. In circle progressions, the chord to which secondary dominants progress is called a *tonicized chord*. When V/ii progresses to ii, the ii triad is the tonicized chord. Notice that only major and minor chords can function as tonicized chords. This process of creating the effect of a temporary tonic is known as *tonicization*.

Figure 14.3

| | | | | | | | |
|-----------------|--|-----------------|--|-----------------|--|-----------------|--|
| Tonicized Chord | | Tonicized Chord | | Tonicized Chord | | Tonicized Chord | |
| | | | | | | | |
| C: V/vi | | vi | | C: V/ii | | ii | |
| | | | | c: V/iv | | iv | |
| | | | | | | V/V | |
| | | | | | | V | |

5. Secondary dominants may occasionally follow other secondary dominants. In these cases the progression is frequently based on circle progression root movement (see Figure 14.4).

Figure 14.4

Diatonic circle progressions:

| | | | | | |
|---|--|--|--|--|--|
| | | | | | |
| C: vii ^o iii vi ii V I | | | | | |

Same chords changed to secondary dominants:

C: V/iii V/vi V/ii V/V V I

6. Infrequently, a secondary dominant will resolve unexpectedly to a chord that does not follow circle progression root movement. In Figure 14.5, the secondary dominant (V^7/V) progresses to a triad (iii) whose root is a step above that of the secondary dominant. The effect is similar to that of a deceptive cadence where the dominant sidesteps its natural progression to the tonic.

Figure 14.5

Irregular resolution of a secondary dominant:

C: I V/V iii V_3^4 I

7. Just as primary dominants may be inverted, so also may secondary dominants.

Figure 14.6

Secondary dominants in inversion:

D: I V_6^6/ii ii V I I V_3^6/ii ii V I

8. In major keys, the secondary dominant triad of IV is simply the tonic (I), so it is not called a secondary dominant (no altered pitches). However, V^7/IV (in C major, C–E–G–B \flat)

does contain an altered note, so it is listed as a secondary dominant. In minor keys, both V/iv and V^7/iv include altered pitches and are considered secondary dominants.

Figure 14.7

No altered notes: B altered to B \flat : E \flat altered to E \natural : E \flat altered to E \natural :

C: I IV V 7 /IV IV c: V/iv iv V 7 /iv iv

Part Writing
Secondary Dominant
Chords

The voice leading of secondary dominant chords is the same as for primary dominant chords. Secondary dominant triads require that you carefully maintain recommended doublings because the third of the chord has the function of a leading tone and should not be doubled. All other conventional part-writing practices apply.

Resolve the seventh of the $V^7/$ chord down one scale degree in the same voice. It is important to remember that all four factors of the $V^7/$ are usually present, but for smoothness of voice leading, the fifth may be omitted and the root doubled.

Figure 14.8

Voice leading for secondary dominant triad: Voice leading for secondary dominant 7th chord:

C: I V/V V I I V 7 /V V I

Do not double the 3rd Resolve the 7th

Secondary Leading-Tone
Chords

Because leading-tone chords are often used as dominant substitutes (see Chapter 12), they also may function as temporary leading-tone chords—leading-tone-sounding chords in a key other than the prevailing key. The primary leading-tone triad in C major is B–D–F (vii°), but any major or minor triad (ii, iii, IV, V, or vi) in C major may have its own leading-tone triad or seventh chord—called a *secondary leading-tone chord*. In Figure 14.9a, the vi triad is preceded by V^7 , but in Figure 14.9aa, vi is preceded by its own leading-tone seventh chord. The V^7 is transformed into a secondary leading-tone seventh chord simply by making it a diminished seventh chord (G \sharp –B–D–F), so it sounds like a leading-tone seventh chord to the A minor triad (the A minor triad is vi in the key of C major).

Figure 14.9

Diatonic progressions:

C: V⁷ vi I⁷ ii IV⁷ V

Same progressions with secondary leading-tone chords:

C: vii^{°7}/vi vi vii^{°7}/ii ii vii^{°7}/V V

Characteristics of Secondary Leading-Tone Chords

1. Secondary leading-tone chords have only three qualities:

Diminished triad—vii[°]/

Diminished-minor seventh chord—vii^{°7}/

Diminished–diminished seventh chord—vii^{°7}/

2. Like secondary dominants, secondary leading-tone chords are called altered chords because they contain *nondiatonic tones*. Secondary leading-tone chords are created out of diatonic chords that have been changed to make them diminished, diminished-minor, or diminished-diminished (Figure 14.10). Notice in Figure 14.10c that a fully diminished seventh chord resolves to a major triad. Fully diminished seventh chords are more common as secondary leading-tone chords than half-diminished seventh chords and may precede either a minor or a major chord.

Figure 14.10

Bb: I vii^{°6}/V V I vii^{°7}/V V I vii^{°7}/V V

3. Because they are temporarily raised to the status of leading-tone chords, these chords naturally resolve to their temporary tonic, just as primary leading-tone chords resolve to their tonic. Thus, secondary leading-tone chords do not normally move in circle progressions but resolve to a major or minor triad whose root is a half step above that of the secondary leading-tone chord.

| Chord | Resolution |
|-----------------------------------|------------|
| $\text{vii}^{\circ 7}/\text{ii}$ | ii |
| $\text{vii}^{\circ 7}/\text{iii}$ | iii |
| $\text{vii}^{\circ 7}/\text{IV}$ | IV |
| $\text{vii}^{\circ 7}/\text{V}$ | V |
| $\text{vii}^{\circ 7}/\text{vi}$ | vi |

4. Secondary leading-tone chords create a leading-tone relationship with diatonic major and minor triads:

In major keys: ii, iii, IV, V, vi

In minor keys: III, iv, V, VI

Figure 14.11

a. $\text{g: i vii}^{\circ 7}/\text{V V}$

b. $\text{VI vii}^{\circ 7}/\text{VI VI}$

c. $\text{i}^6 \text{ vii}^{\circ 7}/\text{iv iv}$

5. When secondary leading-tone chords resolve in a conventional manner, the resolution chord is called a tonicized chord. When $\text{vii}^{\circ 7}/\text{V}$ resolves to V, the V triad is the tonicized chord.

6. Secondary leading-tone chords occasionally follow other leading-tone chords. In Figure 14.12, chord 2 proceeds to another diminished seventh chord. In these cases, conventional resolution is often impossible.

Figure 14.12

c: VI $\text{vii}^{\circ 7}/\text{V}$ $\text{vii}^{\circ 4}/3$ i^6

Part Writing
Secondary Leading-Tone Chords

The voice leading of secondary leading-tone chords is the same as for primary leading-tone chords. For $\text{vii}^{\circ 6}/$ there is no established voice-leading pattern, but the bass note should be doubled, avoiding skips of a tritone, and all voices should move with as much stepwise movement as possible. Avoid doubling the root of a secondary leading-tone triad because the root functions as a leading tone and should never be doubled.

For the secondary leading-tone seventh chords, resolve the seventh of the $\text{vii}^{\circ 7}/$ or $\text{vii}^{\circ 7}/$ (and inversions) down one diatonic scale degree. Resolve the tritone (root to fifth) inward if a d5th and outward if an A4th. However, it is not possible to do so in all situations.

Figure 14.13

Voice leading for secondary leading-tone chords:

C: $\text{vii}^{\circ 6}/\text{V}$ V^6 $\text{vii}^{\circ 7}/\text{V}$ V $\text{vii}^{\circ 6}_5/\text{V}$ V $\text{vii}^{\circ 4}_3/\text{V}$ V

Do not double the root

Chord 7th and lower tritone of each resolve

Macro Analysis

Macro analysis can be used to pinpoint secondary dominants and leading-tone chords in tonal compositions. The macro letter symbols draw attention to chords that differ from diatonic harmonies and the circle progression slurs emphasize tonicization. Beyond these fundamental basics, macro analysis can be used as a preparatory step to completing a Roman numeral analysis that includes nondiatonic chords.

To identify secondary dominants and leading-tone chords using macro analysis, follow these steps:

1. Analyze all of the chords using the macro analysis letter symbols. Do not attempt to add circle progression slurs or Roman numeral analysis symbols at this stage.

Figure 14.14

Beethoven: Sonata in G Major, op. 14, no. 2, II: Andante, mm. 17–20.

G^7 C A^7 d B^7 e G^7 C d^7 F C G^7 C

- Next, identify the macro letter symbols that represent nondiatonic harmonies. This step assumes you are familiar with the diatonic symbols. In Figure 14.14, the key signature and final cadence confirm that the excerpt is in the key of C major. The diatonic triads and seventh chords for the key of C major are listed in Figure 14.15.

Figure 14.15

Triads

C d e F G a b°

Seventh Chords

C^{M7} d⁷ e⁷ F^{M7} G⁷ a⁷ b^{ø7}

Notice that two chords in the excerpt, A⁷ and B⁷, are not listed with the diatonic chords for C major. Both A⁷ and B⁷ are nondiatonic chords in the key of C major.

Figure 14.16

Beethoven: Sonata in G Major, op. 14, no. 2, II: Andante, mm. 17–20.

G⁷ C A⁷ d B⁷ e G⁷ C d⁷ F C G⁷ C

- The third and final step is to complete the macro analysis with slurs. Roman numerals and inversion labels can also be added at this stage. Remember that nondiatonic chords will require a nondiatonic analysis—in this case, secondary dominants. Notice how the process of tonicization becomes evident with the addition of the circle progression slurs. For just an instant, the harmony moves away from the established key.

Figure 14.17

Beethoven: Sonata in G Major, op. 14, no. 2, II: Andante, mm. 17–20.

G^7 C A^7 d B^7 e G^7 C d⁷ F (C) G^7 C
 C: V⁷ I V⁷/ii ii V⁷/iii iii V₃⁴ I ii₃⁴ IV (I₄⁶) V⁷ I

History

The historical use of secondary dominants and leading-tone chords varied in the style periods. Until the baroque period and the development of functional harmony, secondary dominants and leading-tone chords as such were not found, but cautious use and conservative part writing of these chords marked the style of baroque period usage. Illustrated in Figure 14.18 is V⁷/V. What would be the analysis of chord 6 without the A-sharp?

Figure 14.18

Bach: “Es ist das Heil uns kommen her” (“Salvation Unto Us Has Come”), BWV 86, mm. 9–10.

1 2 3 4 5 6 7 8
 E B A E B F# B E
 E: I V IV⁶ I V V⁶/V V I

Another baroque period example is provided in Figure 14.19, but this time with a secondary leading-tone triad tonicizing the dominant (vii^{o6}/V). How would you analyze the nonharmonic tones labeled 1, 2, and 3 in the excerpt? As (1) unaccented appoggiaturas or (2) upper-neighbor tones?

Figure 14.19

Purcell: Minuet from Suite no. 8 in F Major, Z. 669, mm. 9–13.

d C b° C⁷ F
 F: vi⁶ V⁶ vii^{°6}/V V⁷ I

In the classical period, as a natural development of the baroque period, secondary dominant and leading-tone chords are found in somewhat greater frequency. Progression of these chords to their tonicized resolutions constitutes by far the largest number of examples, but occasional nontraditional utilizations begin to appear. Figure 14.20 shows a representative example of secondary dominant and leading-tone chords in the classical period.

Figure 14.20

Mozart: Fantasia in C Minor, K. 475, mm. 91–94.

Andantino

B^b F⁷ B^b b[°] c G c (B^b) F
 B^b: I V₃⁴ I⁶ vii^{°6}/ii ii⁶ V⁶/ii ii ii⁶ (I₄⁶) V

Figure 14.21 shows a secondary dominant and a secondary leading-tone chord decorating the basic diatonic circle progression, vi–ii–V–I, in the final measures of the phrase.

Figure 14.21

Maria Wolowska Szymanowska: Nocturne in B-flat Major, mm. 1–5.

Moderato

$B\flat$: I F^7 D
 V^7 V^6/vi

g $b^\circ 7$ c (B \flat) F^7 B \flat
 vi $vii^\circ_{3/ii}$ ii^6 (I_4^6) V^7 I

During the romantic period, secondary dominant and leading-tone seventh chords increased in frequency, especially those that are seventh chords. Part writing became more daring with wider skips and seventh factors not always being resolved. Figure 14.22 illustrates successive secondary dominants—a common occurrence in romantic period music.

Figure 14.22

Chopin: Polonaise in C-sharp Minor, op. 26, no. 1, mm. 82–83.

Successive Secondary Dominants

$E\flat^7$ F^7 $B\flat^7$ $E\flat^7$ $A\flat^7$ $D\flat$ $E\flat^7$ $A\flat$
 $D\flat$: ii^7 V^7/vi V^7/ii V^7/V V^7 I V^6_5/V V

Figure 14.23 illustrates a half-diminished secondary leading-tone chord. This particular chord quality (diminished-minor) is somewhat less familiar than the more common diminished–diminished secondary leading-tone chord. The excerpt shown provides example of a decorated dominant seventh chord. The prevailing V^7 harmony is embellished with I_4^6 , $ii^{\circ 6}$, and $vii^{\circ 7}/V$.

Figure 14.23

Brahms: Intermezzo in C Major, op. 119, no. 3, m. 49–51.

G^7 C d° $f^\# \circ 7$ G^7 C
 C: V^7 I_4^6 $ii^{\circ 6}$ $vii^{\circ 7}/V$ V^7 I_4^6

Because the strong dominant-to-tonic relationship began to wane during the post-romantic and impressionistic period, secondary dominant and leading-tone chord function became less and less common. Figure 14.24 illustrates the use of a secondary dominant, which offers a fleeting suggestion of F-sharp major, a key not closely related to G major.

Figure 14.24

Debussy: *Minstrels* from Preludes, Book I, no. 12, mm. 17–20.

$f^\# \circ 7$ b $F^\#$ $C^\#$ $F^\#$ D^7 $G^{ADD 6}$
 G: $vii^{\circ 7}$ iii VII V/VII VII V^7 $I^{ADD 6}$

One of the cornerstones of popular song accompaniments is the secondary dominant. These chords appear in abundance in modern-day popular songs and may occur singly or in successions of circle progressions.

Figure 14.25

Backer, Davis, Cook, and Greenaway: "I'd Like to Teach the World to Sing," mm. 1–8.

The image shows two systems of musical notation for the song "I'd Like to Teach the World to Sing." Each system consists of a vocal line (treble clef) and a piano accompaniment line (bass clef). The key signature has one flat (Bb) and the time signature is common time (C).
 System 1: The vocal line contains the lyrics "I'd like to build the world a home and furnish it with love". The piano accompaniment features chords F, F, and G7. Below the piano line, the analysis symbols are F: I, I, and V7/V.
 System 2: The vocal line contains the lyrics "Grow apple trees and honey bees and snow-white turtle doves". The piano accompaniment features chords G7, C, C, Bb, and C7. Below the piano line, the analysis symbols are V7/V, V, V, IV, and V7.

Jazz, excluding some avant-garde styles, likewise makes considerable use of secondary dominants. Secondary leading-tone chords are used only occasionally in popular songs and even less in jazz. A study of four-chord formulas, so common to the jazz and popular style, is in order.

Four-chord formulas (sequence of four chords) are a particular compositional device of jazz and popular music. Groups of four chords, played as a unit, are often used as stylized accompaniments and turnarounds for popular songs and as the basis for jazz improvisations.

Some four-chord formulas consist entirely of secondary-dominant seventh chords (for example: C⁷–A⁷–D⁷–G⁷), whereas others are a mixture of nondominant and secondary-dominant sevenths. Some of the typical four-chord formulas are:

| Typical Chord Formulas | | | | | | | | |
|------------------------|-----------------------|-------------------|----------------|---------------------------------------|------------------|------------------|------------------|----------------|
| Analysis Symbols | | | | Popular Music Symbols (in C major) | | | | |
| I ⁷ | vi ⁷ | ii ⁷ | V ⁷ | = | CMA ⁷ | AMi ⁷ | Dmi ⁷ | G ⁷ |
| V ⁷ /IV | V ⁷ /ii | V ⁷ /V | V ⁷ | = | C ⁷ | A ⁷ | D ⁷ | G ⁷ |
| I | vii ^{o7} /ii | ii ⁷ | V ⁷ | = | C | C ^{#o7} | Dmi ⁷ | G ⁷ |
| iii ⁷ | vi ⁷ | ii ⁷ | V ⁷ | = | E ^{mi7} | AMi ⁷ | Dmi ⁷ | G ⁷ |

Often the harmonic structure of a phrase consists of a succession of four-chord formulas. When used in this manner, the patterns impart a distinct orderliness and logic to the music that is immediately perceived by the listener.

One innovation relating to the dominant seventh in the popular and jazz styles is the use of a *tritone substitution*. In a circle-of-fifths progression, a major–minor seventh chord can be replaced by the major–minor seventh chord an augmented fourth below.

Figure 14.26 shows a harmonic accompaniment using the circle-of-fifths pattern exclusively.

Figure 14.26

A⁷ D⁷ G⁷ C

C: V⁷/ii V⁷/V V⁷ I

Figure 14.27 shows the same accompaniment pattern except for the substitute chord whose root lies a tritone above or below.

Figure 14.27

A⁷ D⁷ D^{b7} C

C: V⁷/ii V⁷/V Sub. I

Figures 14.28 and 14.29 demonstrate harmonic substitutions that transform a circle-of-fifths progression into a chromatic-descending progression.

Figure 14.28

Gershwin: “Nice Work If You Can Get It,” mm. 1–4.

B⁷ E⁷ A⁷ D⁷ G⁷ C⁷ A⁹ A^{7(b9)}

G: V⁷/vi V⁷/ii V⁷/V V⁷ V⁷/IV V⁷/bVII V⁹/V V⁹/V

Circle progressions with no substitution

The same composition with substitutions:

Figure 14.29

B⁷ B^{b7} A⁷ A^{b7} G⁷ G^{b7} A⁹ A^{7(b9)}

Chords reduced to simple position:

G: V⁷/vi Sub. V⁷/V Sub. V⁷/IV Sub. V⁹/V V⁹/V

Circle of P5s with A4 substitutes
(Descending chromatic progression)