CHAPTER 12

The Leading-Tone Seventh Chords

TOPICS

Leading-Tone Seventh Chords
Diminished-Minor
Half Diminished
Diminished-Diminished
Fully Diminished
Prolongation

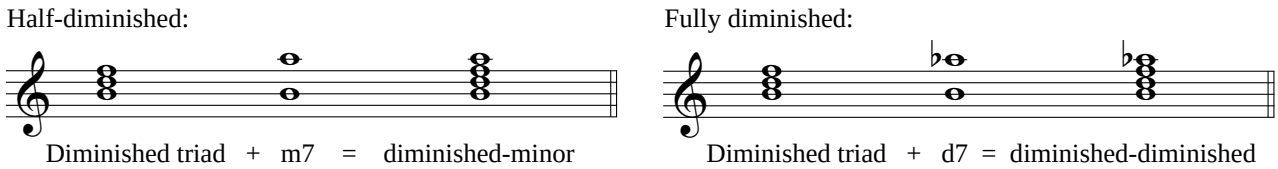
IMPORTANT CONCEPTS

Closely related to the dominant seventh chord are the *leading-tone seventh chords*. Like their triad counterpart, these leading-tone seventh chords often function as dominant substitutes but can also appear as harmonic embellishments in linear passages.

Leading-Tone Seventh Chords

Diatonic *leading-tone seventh chords* are built on the seventh scale degree of the major, harmonic minor, and ascending melodic minor scales. In major keys, the quality of the chord is *diminished-minor* (dm). Diminished-minor is also known as *half-diminished*. In minor keys, the quality is *diminished-diminished* (dd), but the name is usually abbreviated to *diminished* or *fully diminished*.

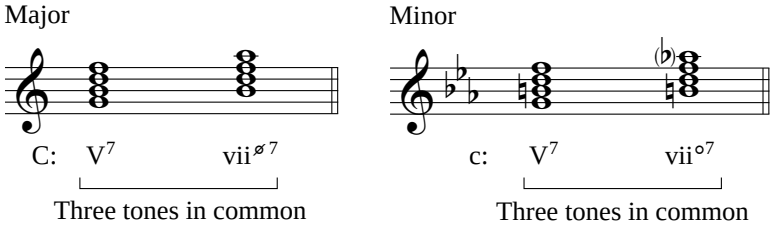
Figure 12.1



Leading-tone seventh chords are represented by vii^{ø7} and vii$^{\circ 7}$ in Roman numeral analysis. In vii^{ø7}, the vii indicates a chord on the seventh scale step, the ^{ø} shows that the quality of the chord is diminished-minor, and the ^{7} means that it is a seventh chord. The $^{\circ}$ in the vii$^{\circ 7}$ designates a diminished-diminished seventh chord. The vii^{ø7} is used in major keys and the vii$^{\circ 7}$ in minor keys.

Both the vii^{ø7} and vii$^{\circ 7}$ are associated very closely with the dominant seventh chord because they have three notes in common with the V^{7}.

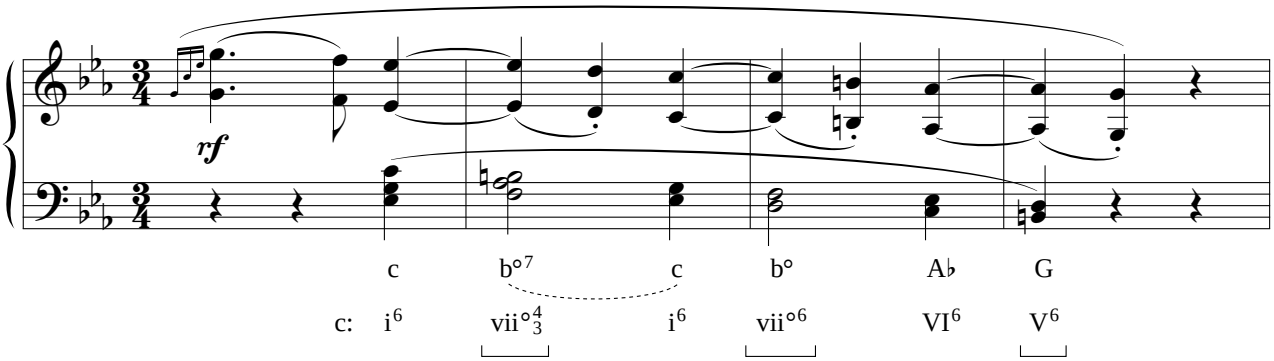
Figure 12.2



Composers frequently substitute leading-tone triads and seventh chords for the dominant in the interest of variety and diversification. In Figure 12.3, Beethoven alternated the vii°$^4_3$, vii°^{6}, and V^6 freely to represent dominant harmony.

Figure 12.3

Beethoven: Sonata in C Minor, op. 10, no. 1, I: Allegro molto e con brio, mm. 13–16.

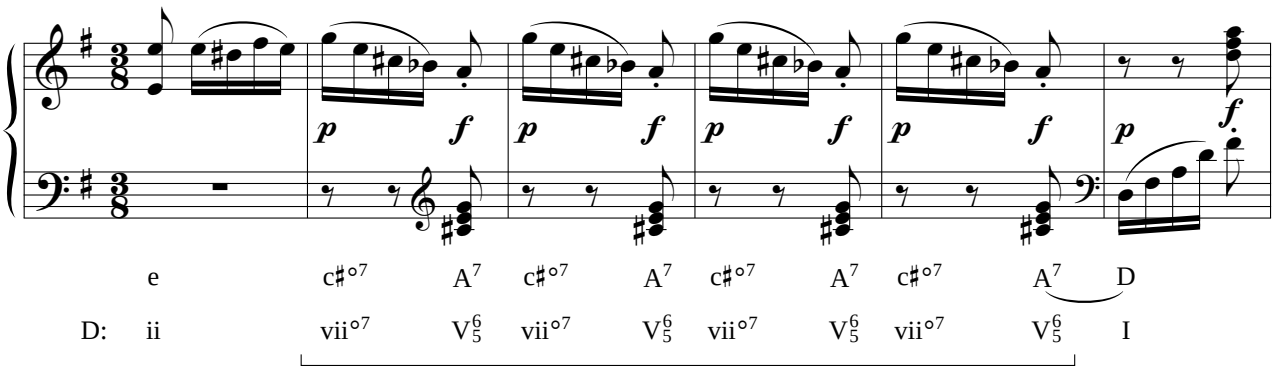


All three of these chords represent dominant function.

Since V^7, vii^{ø7}, and vii°^{7} all represent dominant harmony, composers intermixed them freely. This is particularly true for the subtle half-step fluctuation between vii°^{7} and V^7. In Figure 12.4, the seventh (B-flat) of the vii°^{7} moves down to the root (A) of the V^7 chord. This blended use of vii°^{7} and V^7 results in a reiteration and elongation of the prevailing harmony—also known as a *prolongation*.

Figure 12.4

Mozart: Sonata in G Major, K. 283, III: Presto, mm. 64–69.



Dominant Prolongation

Progressions from vii^{ø7} and vii°^{7}

Like the dominant seventh, with which they share three common tones, vii^{ø7} and vii°^{7} usually resolve to the tonic (I or i), either directly (Figure 12.5a–b) or through the dominant seventh (Figure 12.5c–d).

Figure 12.5

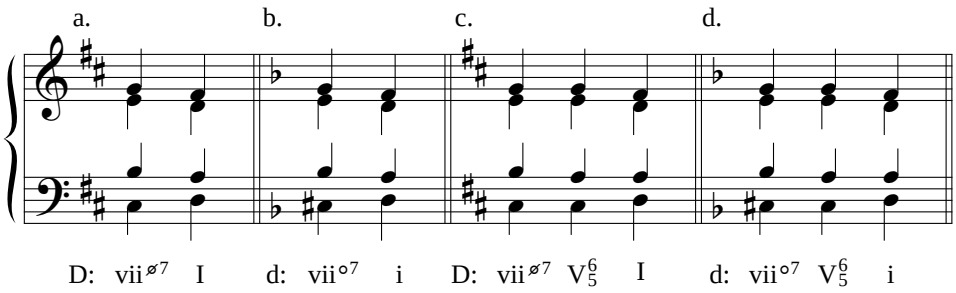
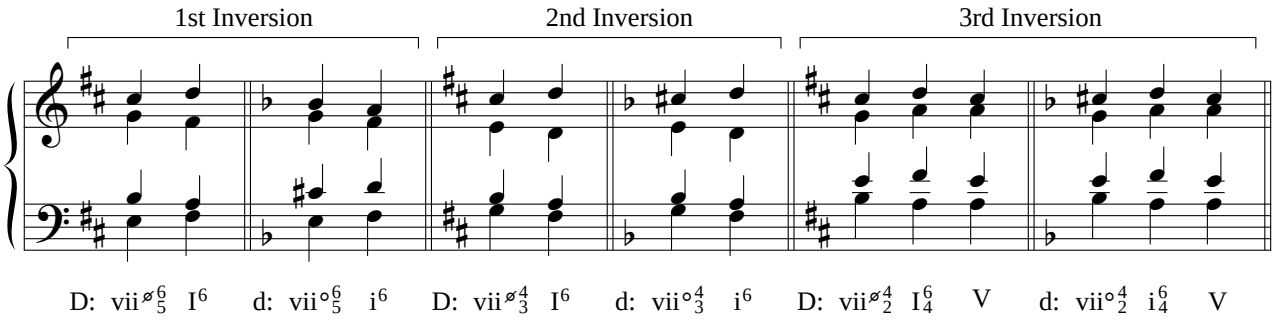


Figure 12.6 shows resolutions of the leading-tone seventh chords in all three inversions.

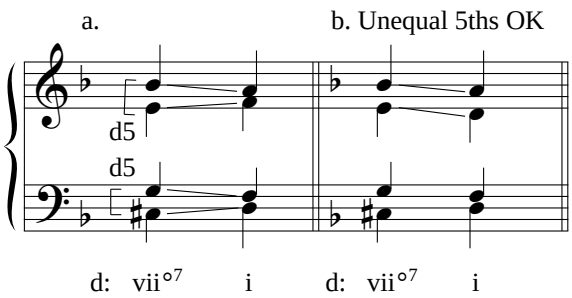
Figure 12.6



Resolution of Tritone and Seventh Factors

The fully diminished seventh chord (vii°7) contains two diminished fifths, which tend to resolve inward. If both are resolved, the result will be a doubled third factor on the tonic chord (Figure 12.7a), but composers often prefer the normal doubling, as shown in Figure 12.7b.

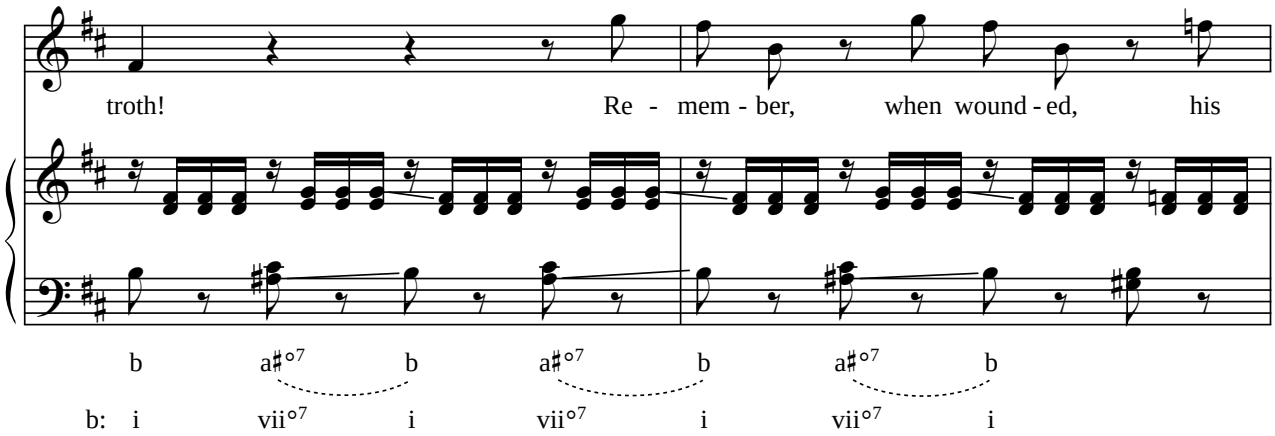
Figure 12.7



The two tones in the leading-tone seventh chords (vii⌀7 and vii°7) that are nearly always resolved are the root of the chord (the leading tone), which moves upward to the tonic note, and the seventh factor, which resolves downward by step.

Figure 12.8

Mozart: *Don Giovanni*, K. 527, act I, scene XIII, mm. 116–117.



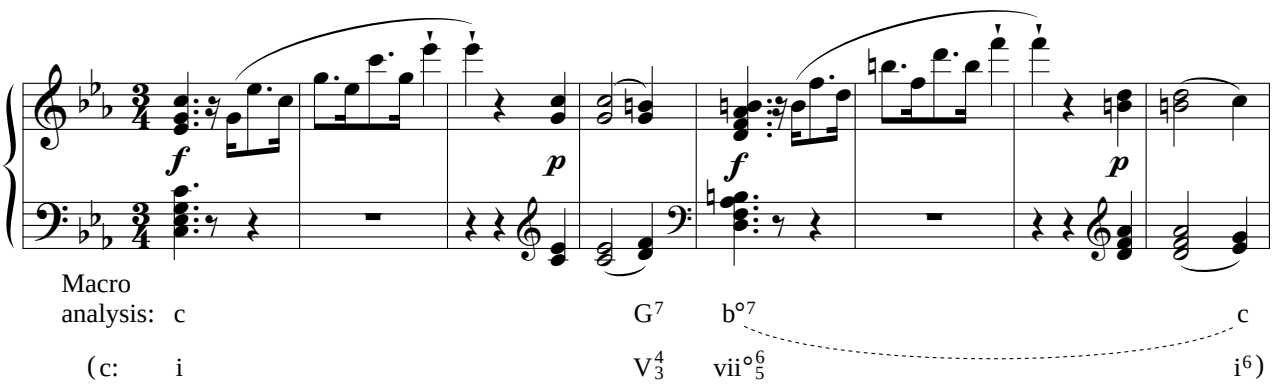
Macro Analysis Symbols

The macro analysis symbols for the leading-tone seventh chords are similar to the vii^{ø7} and vii$^{°7}$ of Roman numeral analysis, but the vii is replaced with a lowercase letter representing the root of the chord (b^{ø7} or b$^{°7}$, for example). It is not necessary to include inversion indications with your leading-tone seventh chord labels in macro analysis. The purpose is to identify larger harmonic elements.

Because leading-tone seventh chords frequently function as dominant substitutes, macro analysis emphasizes the relationship by adding a dotted slur to progressions exhibiting leading-tone to tonic harmonic motion (b^{ø7}–C, for example). Figure 12.9 illustrates the typical application of the dotted slur.

Figure 12.9

Beethoven: Sonata in C Minor, op. 10, no. 1, I: Allegro molto e con brio, mm. 1–8.

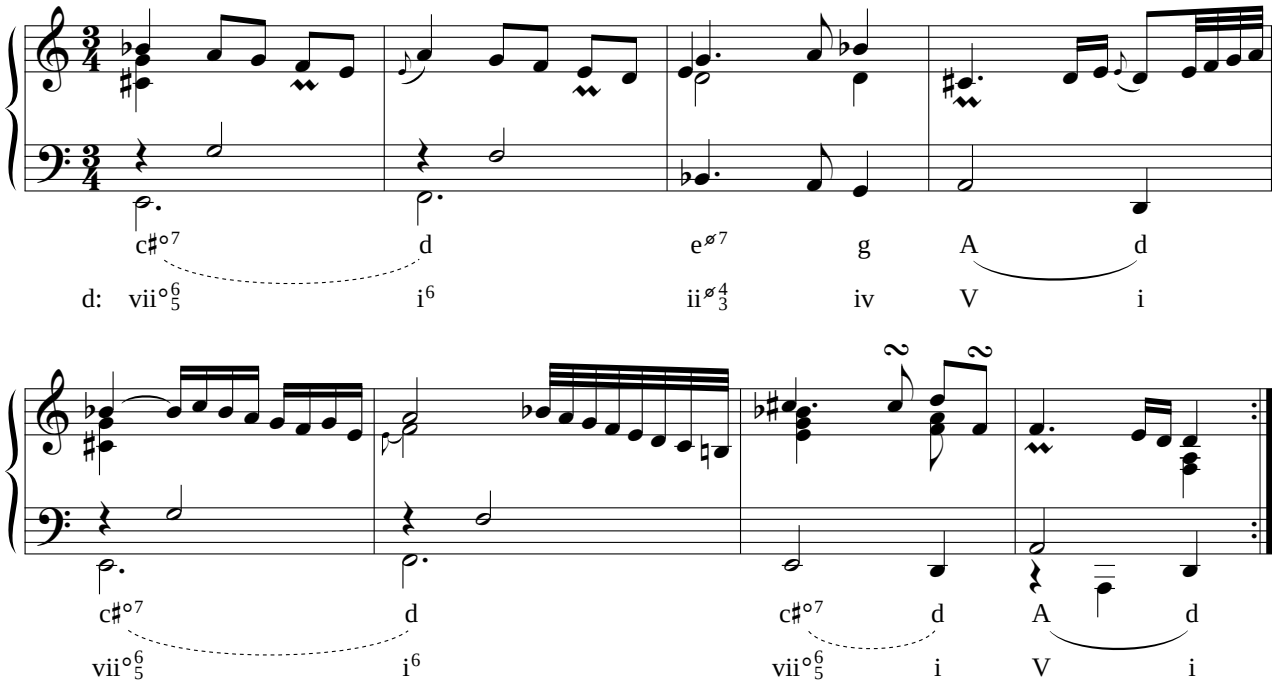


History

Leading-tone seventh chords were not characteristic of the music of the Renaissance period, but with the ascendancy of the major–minor tonal system in the baroque era, leading-tone seventh chords took their place as part of the harmonic vocabulary. Figure 12.10 shows typical use of the vii$^{°7}$ during the baroque period.

Figure 12.10

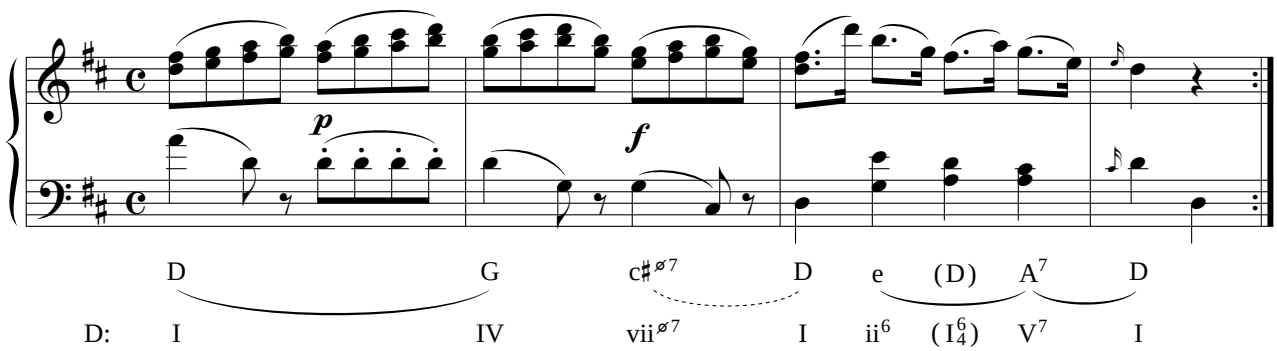
Elisabeth Jacquet de la Guerre: Sarabande from Suite in D Minor, mm. 21–28.



The classical period continued the use of leading-tone seventh chords with little change in approach from the baroque. The illustration by Mozart in Figure 12.11 is representative of the use of these chords in the classical period.

Figure 12.11

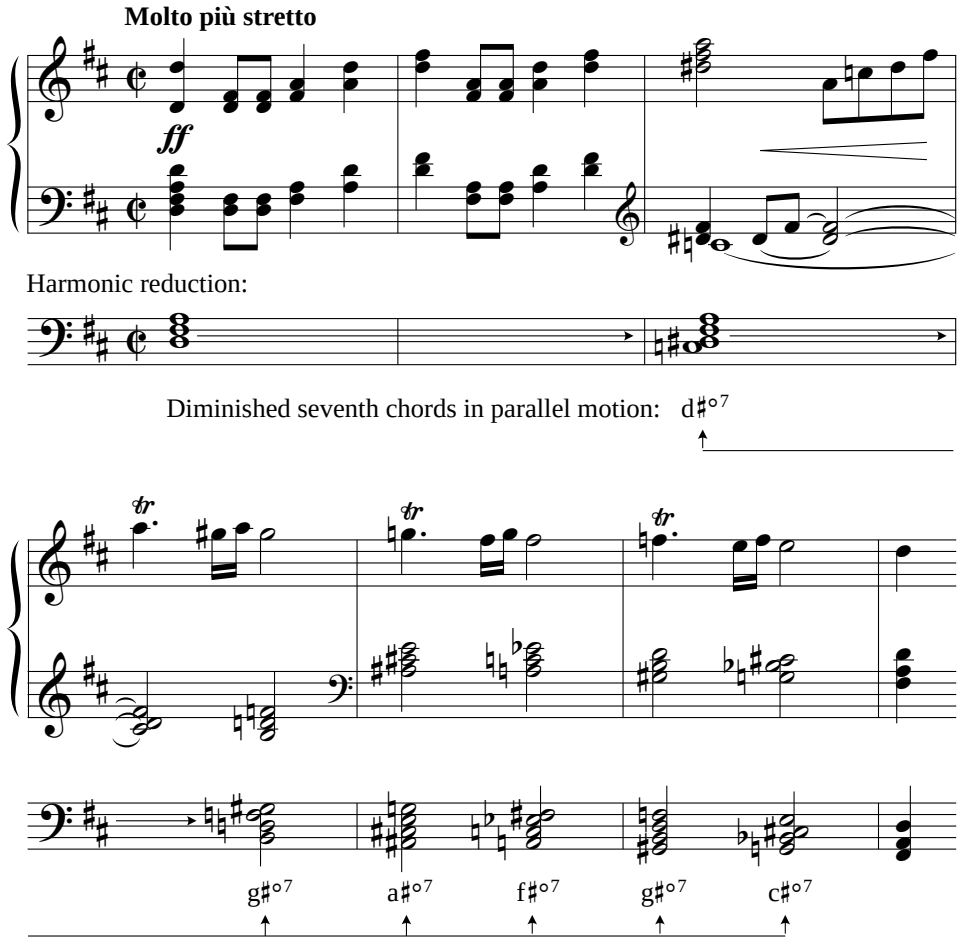
Mozart: Sonata in D Major, K. 284, III: Variation V, mm. 14–17.



The romantic period saw a more relaxed and somewhat freer use of leading-tone seventh chords. Although more traditional applications continued in the majority, one of the more frequent treatments involves successive diminished seventh chords. Figure 12.12 shows six consecutive diminished seventh chords in descending chromatic motion. Functional harmony is temporarily suspended, but the gradual buildup of tension is a direct result of the series of unresolved diminished seventh chords.

Figure 12.12

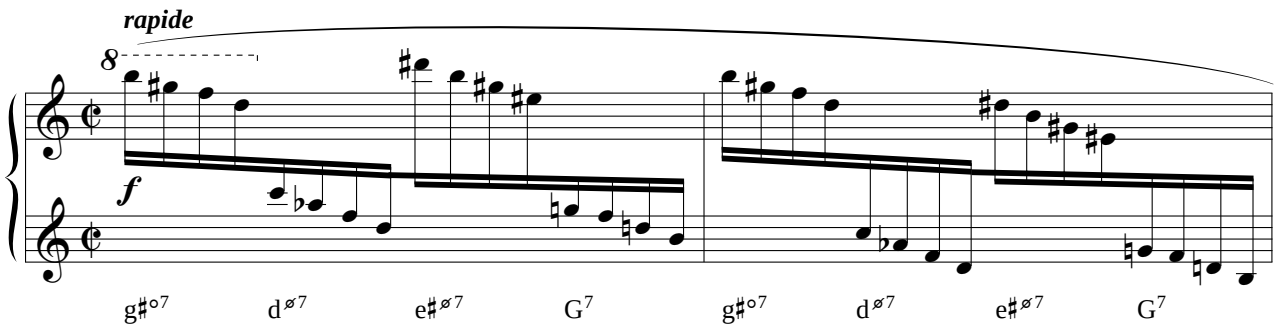
Wagner: Overture to *Rienzi*, mm. 346–352.



With the gradual breakdown of functional harmony, leading-tone seventh chords were used less. Nevertheless, nonfunctional diminished and half-diminished seventh chords were still very much a part of the harmonic vocabulary during the post-romantic and impressionistic period. Figure 12.13 illustrates the use of fully diminished and half-diminished seventh chords in a sequential but nonfunctional pattern.

Figure 12.13

Debussy: *Jardins sous la pluie* (Gardens in the Rain) from *Estampes*, mm. 118–119.

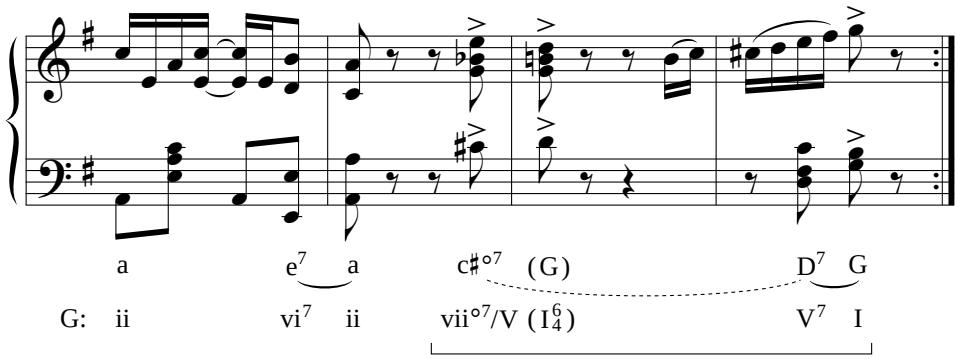


For most concert hall music of the contemporary period, leading-tone seventh chords ceased to exist except for those styles that make a conscious use of functional harmony. Despite this abandonment in the concert hall, popular songwriters and jazz artists consider leading-tone seventh chords an integral part of their style. The popular music symbol for the fully diminished seventh chord is a capital letter with °7 added (C°7); half diminished is represented by a capital letter with MI7(♭5) added (CMI7(♭5)).

Ragtime, an early twentieth-century precursor of jazz, used the leading-tone seventh chords, as shown in Figure 12.14. In this example, the leading-tone seventh chord is a secondary leading-tone chord (see Chapter 14).

Figure 12.14

Johnson: *A Black Smoke Rag*, mm. 77–80.



Common chord progression in ragtime music.

APPLICATIONS

Voice leading around half-diminished and fully diminished seventh chords is usually quite smooth. Since diminished intervals naturally resolve inward by half steps, both the vii^{ø7} and vii$^{°7}$ allow this resolution when followed by the tonic. Such a resolution also permits the seventh to descend one scale degree.

Voice Leading and the vii^{ø7} and vii$^{°7}$

The following procedures continue the list appearing in Chapters 9 and 11. (See also Appendix A.)

12. Resolve the seventh factor of the vii^{ø7} or vii$^{°7}$ (and inversions) down one diatonic scale degree.
13. Resolve the root of the vii^{ø7} and vii$^{°7}$ upward to the tonic note.

Some Pitfalls to Avoid

Avoid parallel P5ths between third and seventh factors in resolving the half-diminished seventh chord (Figure 12.15c and e). Double the third factor of the tonic triad to avoid these parallels (Figure 12.15e and f). In four-part writing, this configuration occurs only when the third is below the seventh.

Although the half-diminished leading-tone seventh chord (vii^{ø7}) contains only one tritone, the fully diminished type (vii$^{°7}$) consists of two (root to fifth and third to seventh). It is possible for both tritones to resolve properly (see Figure 12.15b). Nonetheless, parallel unequal fifths (d5 to P5) are observed in literature and are sometimes written by

composers in preference to a tonic triad with a doubled third (Figure 12.15d). When writing an unequal fifth in the vii°7 to i progression, try to resolve at least the root-to-fifth tritone whenever possible.

Figure 12.15