rhythmic consonance
rhythmic dissonance
substituted beat division
superimposed beat division
syncopation
displaced accent
metrical consonance
metrical dissonance

A BRIEF REVIEW SELF-QUIZ

1. Match the appropriate letters to the numbers:
   1. Syncopation
      A. Lento
      D. Vivace
   2. Complex duple meter
      B. 3 3
      E. 4 4
   3. Compound single meter
      C. 3 3 3
      F. 3 3 3 3 3
   4. Hemiola
      G. 2 2
      H. 2 2
   5. Superimposed beat division
      I. 2 2 2 2 2
      J. 2 2 2 2 2 2 2
   6. Superimposed meter
   7. Quintuple meter
   8. Displaced accent
   9. Divided beat
   10. Change of meter

2. In the space provided, identify the rhythmic or metrical device employed in each separate measure.

Example 18.20

The Leading-tone
Seventh Chord and Other
Seventh Chords

In this chapter we will complete our survey of the diatonic seventh chords by first examining some characteristics of the leading-tone seventh (vi7°) and its inversions in both minor and major modes. In the minor mode, the chord tones of the leading-tone seventh are all notes of the diatonic scale; in the major mode, however, the seventh of the vi7° is an altered note, the flat sixth scale degree (6♭). The main use of this chord in both modes is as a substitute for the V7 and its inversions. We will begin our discussion with the leading-tone seventh in the minor mode, and then treat its counterpart, the vi7° in the major mode. Later in the chapter we will examine the remaining diatonic seventh chords—I, IV7, III7, VI7, and VII7.

The Leading-tone Diminished-seventh Chord
in the Minor Mode

The vi7° is a diminished seventh chord customarily found in the minor mode. It is constructed of three consecutive minor 3rds on scale degree 6♭ or the leading tone (B D F Ab in C minor). Since this sonority shares three common scale degrees with both the vi7 and V7, we will classify it with the
family of embellishing dominant harmonies (Example 19.1a). The bass notes of the various vii\(^{7}\) inversions (2, 4, and 6) function as active neighbors to the more stable chord members of the minor tonic triad (1, 3, and 5), as shown in Example 19.1b.

Example 19.1

A. 

B. 

Since the vii\(^{7}\) and its inversions normally function as embellishing harmonies within the phrase, we will leave them unstemmed in our models and voice-leading reductions and place their Roman numerals in parentheses. This chord is symmetrical; it divides the octave into four equal intervals, each consisting of three half-steps. Therefore, this chord has a very weak sense of root. Its embedded pair of tritones and ambiguous tonic properties convey a greater sense of tonal tension than the V\(^{7}\). Play the two passages in Example 19.2 and note the difference between the V\(^{7}\)'s in the first and the vii\(^{7}\)'s in the second.

Example 19.2

A. 

B. 

Since the vii\(^{7}\) is closely linked to the V\(^{7}\) because of their similar pitch-class content, we shall relate the inversions of the vii\(^{7}\) to inversions of V\(^{7}\) through the bass scale degrees they share in common.

The vii\(^{7}\)

Both the V\(^{7}\) and vii\(^{7}\) have the leading tone in the bass (Example 19.4a). The three models in Examples 19.4b through d show some typical bass contours, ranging from the stepwise neighbor motion 5-7-5 through the tritone descent 4-7-5 to the downward leap of a diminished 7th (6-5-7-5). Notice that a doubled 3rd is used in the last tonic triad.

Partwriting with the vii\(^{7}\) in the Minor Mode

As was the case with other seventh chords, the chordal 7th (65) of the vii\(^{7}\) and its inversions is usually prepared by suspension, neighbor, or appoggiatura figuration and resolved downward by step. In certain situations, the stepwise motion found in the chord’s resolution to the tonic may produce unequal 5ths between the soprano and bass or the upper voices (Example 19.3a). Composers usually make an effort to avoid these by doubling the chordal 3rd of the tonic triad (Example 19.3b). However, in the case of the vii\(^{7}\), a close cousin to the vii\(^{7}\), numerous instances of unequal 5ths do occur in the literature (Example 19.3c).

Example 19.3

A. 

B. 

C.
**Example 19.4**

### A.

\[
\begin{array}{c}
\text{c: } V_7^6 \\
\text{vi}^7
\end{array}
\]

### B.

\[
\begin{array}{c}
\text{c: } \text{i (vi}^7\text{)} \\
i
\end{array}
\]

### C.

\[
\begin{array}{c}
\text{c: } \text{i (iv vi}^7\text{)} \\
i
\end{array}
\]

### D.

\[
\begin{array}{c}
\text{c: } \text{i (iv vi}^7\text{)} \\
i
\end{array}
\]

---

**The vii\(^6\)_3**

The vii\(^6\)_3 is closely related to the vii\(^6\)_7 and V\(^7\)_3 (Example 19.5a). They share not only the common scale degree 4 in the bass but the same function as passing chords between i and I. As is the case with the other two harmonies, unequal 5ths are characteristic of progressions involving the vii\(^6\)_3 (Examples 19.5b and e). One can avoid them by doubling the 3rd of the tonic triad, as Haydn does in Example 19.5d.

---

**Example 19.5**

### A.

\[
\begin{array}{c}
\text{c: } V_7^6 \\
\text{vi}^6 \\
\text{vi}^6
\end{array}
\]

### B.

\[
\begin{array}{c}
\text{c: } \text{i (vi}^6\text{)} \\
i
\end{array}
\]

### C.

\[
\begin{array}{c}
\text{c: } \text{i (vi}^6\text{)} \\
i
\end{array}
\]

---

**Example 19.6**

### A.

\[
\begin{array}{c}
\text{c: } V_7^6 \\
\text{vi}^6 \\
\text{vi}^7
\end{array}
\]

### B.

\[
\begin{array}{c}
\text{c: } \text{i (vi}^6\text{)} \\
i
\end{array}
\]

### C.

\[
\begin{array}{c}
\text{c: } \text{i (vi}^6\text{)} \\
i
\end{array}
\]

---

D. **Haydn: Piano Sonata in E-flat Major, Hob. XVI:38, II**

E. **(reduction)**

---

**The vii\(^6\)_3**

Scale degree 4 appears in the bass of both the vii\(^6\)_3 and the V\(^7\)_3 (Example 19.6a). Like the V\(^7\)_3, the vii\(^6\)_3 may be found either as a neighboring chord (Example 19.6b) or as a passing chord when moving from a I\(^6\) (Example 19.6c). In coda or closing sections the vii\(^6\)_3 can also suggest an extension of the plagal cadence, since both have 4 in the bass. In the Bach excerpt (Examples 19.6d and e), the upper G\(^4\) acts as an inverted tonic pedal.
The vii\(^{7}\)

Since the chordal 7th (96) of the vii\(^{7}\) is in the bass, it must resolve downward to 5, the root of either a V\(^{7}\) or a 4\(^{6}\) (Examples 19.7a and b). As a result, it is the least common inversion of the leading-tone seventh. The Tchaikovsky passage makes use of both a vii\(^{7}\) and vii\(^{7}\) (Examples 19.7c and d).

Example 19.7

A. 

\[ \begin{array}{c}
\text{c. (vii}^{7}\text{)} \quad V^{7} \\
\text{b. (vii}^{7}\text{)} \quad 3 \quad 5 \quad 7
\end{array} \]

B.

\[ \begin{array}{c}
\text{c. (vii}^{7}\text{)} \quad V^{7} \\
\text{b. (vii}^{7}\text{)} \quad 3 \quad 5 \quad 7
\end{array} \]

C. Tchaikovsky: Symphony No. 6 ("Pathétique"), I

D. (Reduction)

The symmetry of the diminished seventh chord is apparent if we observe how the bass and soprano lines mirror each other around scale degree 3 (E\(^{b}\)) in Examples 19.8a and b, producing the effect of a long-range voice exchange indicated by the crossed lines. Bach puts this inversional symmetry to good use near the end of his B\(^{b}\) minor Fugue, quoted in Example 19.9a. Study the reduction in Example 19.9b. Note that the thirds in the tenor and bass are an inversion or mirror of the thirds in the soprano and alto, delayed by one beat, and that D\(^{b}\) 3 of B\(^{b}\) minor, is the axis or common note around which the two inversional strands revolve.

Example 19.9

A. Bach: Fugue in B-flat Minor from Well-Tempered Clavier, Book II

Leading-tone sevenths are often used to prolong a particular harmony. In Example 19.8a the tonic triad is extended by successive inversions of the embellishing vii\(^{7}\). On the other hand, in Example 19.8b the accentuated positions of the vii\(^{7}\) chord within the measure suggest that it is now the leading-tone seventh that is extended. In arpeggiated vii\(^{7}\)s you may find instances of melodic augmented 2nds (bracketed in Example 19.8c), a melodic interval that is forbidden when used to connect two different chords.
The lengthy tonic prolongation that opens the first movement of Beethoven's C Minor Piano Sonata Op. 10, No. 1 (mm. 1–18) relies heavily on various inversions of the vii<sup>6</sup>. A voice-leading reduction is positioned directly below each line of the score in Example 19.10.
The Leading-tone Seventh Chord in the Major Mode

Because of the altered $b_{6}$ scale degree, the semitonic tone ($\text{vii}^{7}$ or $B\text{D FA}$ in C major) is more prominently than in the minor mode. Its twin in the minor mode, since their active more stable members of the tonic triad. An excerpt Mozart excerpt (Examples 19.12a and b). This when it occurs over a tonic pedal (Example 19.

Example 19.12

A. *MOZART: SONATA FOR TWO PIANOS IN D MAJOR, K.448, I*

B. (BE)

Example 19.11

The soprano first arpeggiates upward from $C\flat-E\flat-C\flat(13-5)$ in measures 1-9, using the $\text{vii}^{7}$ twice. This upper voice then makes two partial desents back to $C\flat$ or I (mm. 9-12) before finally moving stepwise through the octave to $G\flat$ or $\bar{5}$ (in measure 16). No less than four leading-tone sevenths in various inversions ($\text{vii}^{6}$ and $\text{vii}^{7}$) support this tonic prolongation (mm. 9-16). After measure 16, the music approaches the section's cadential punctuation through a stepwise descent from $C\flat$ down to $G\flat$ (5-4-3-2-1), in which the last note of each triplet group fills in the upper voice during the final bars.

The further reduction in Example 19.11 more clearly illustrates the octave descent from 5 down to 5 before the cadential formula.

Example 19.11

A second or diatonic form of leading-tone is a half-diminished seventh ($\text{vii}^{7}$) built on 7 between the root and its chordal 7th (B D F A in C chord is very similar to that of the $\text{vii}^{7}$. It is the double the chordal 3rd of the tonic chord of motion from $\bar{6}$ to 5 now involves parallel rather 19.11b). In Baroque compositions the $\text{vii}^{7}$ usual chord between IV and I (Example 19.13b). In both first extends the 7th (6) of this chord and is shown in Example 19.13c and its reduction in I.
think of this figure as a kind of 7-6 suspension over dominant harmony. Finally, in Example 19.13e, the joyful cry of the Reinemaidens employs a neighboring vii7 over a tonic pedal.

Example 19.13
A.  
B. “JEU, MEINE FREUDE”  
(BACH CHORALE HARMONIZATION)

C. vii7 1  
G. IV (vi7) 1  

C. SCHUBERT: MOMENT MUSICAL NO. 6 IN A-FLAT MAJOR

D. (REDUCTION)  
E. WAGNER: DAS RHEINGOLD, SCENE 1

MELODY HARMONIZATION

In melody harmonizations we may now harmonize the 6 scale degree in a minor-mode melody with a vi7 rather than the more usual iv. The leading-tone seventh chord also presents an alternative to using inversions of the V7.

OTHER DIATONIC SEVENTH CHORDS: THE IV7, I7

However, remember that substituting the vi7 character of the music more intense, dark, and major mode.

OTHER DIATONIC SEVENTH CHORDS: THE IV7, I7

Of the remaining diatonic seventh chords, only nant and tonic may be said to lead independent

The Subdominant Seven

There are three forms of the subdominant seventh chord possible: major, minor, and dominant minor. It appears either as a minor seventh (IV7), major-minor seventh (IV7, F A C F in C minor. The preparation and resolution of the chordal figuring. It sometimes occurs in root position in major or iv7-V in minor) with scale degree there is a strong likelihood of parallel 5ths in this also must leap down to double the chordal 5th in back up from the 5th to the octave or 7th in the minor (5-6-5-5) that avoids the danger of parallel 5