

- F. Write a progression in D minor in which the closing D tonic sounds more like a dominant than a tonic. (*Hint: A Picardy third alone does not imply a reciprocal process.*)
- G. Write a progression in C major that opens with a plagal progression, tonicizes E $\flat$  major, and closes in E $\flat$  major with a different plagal progression.

## The Diminished Seventh Chord and Enharmonic Modulation

Beginning in the eighteenth century, composers used the diminished seventh chord both as a powerful goal-oriented applied chord and as a dramatic signpost. For example, a strategically placed diminished seventh chord could underscore a particularly emotional image from the text of a song. A vivid and painful example is heard in the last moment of Schubert's "Erlking." Immediately before we learn of the fate of the sick child ("and in [the father's] arms, the child . . ."), the previous 145 measures of frantic, wildly galloping music come to a halt. The fermata that marks this moment, and which seems to last forever, is accompanied by a single sustained diminished seventh, underscoring this crucial moment (Example 28.8). We learn immediately thereafter that in spite of his valiant attempts to rush his sick son home by horseback, the father was too late: The child was dead.

### EXAMPLE 28.8 Schubert, "Erlking," D. 328

144

Recit.

Hof mit Müh und Noth; in sei-nen Ar - men das Kind war todt.

Andante

*ff* *fp* *pp* *p* *f*

$g: \text{vii}^{\circ} \frac{4}{3}$   $I^6$   $\text{vii}^{\circ} \frac{7}{V}$   $V^7$

$\flat II$

Even before the time of Bach, composers also used the diminished seventh chord to create tonal ambiguity. Ambiguity is possible because the chord in any of its inversions partitions the octave into four minor thirds (using enharmonicism). For example, given the diminished seventh chord in Example 28.9A, its three inversions produce no new intervals. This is not the case for other sonorities, such as the major triad, which contains six intervals through its inversions (m3, M3, P4, P5, m6, M6). See Example 28.9B. Chords that possess this special ability to partition the octave into identical intervals are known as **symmetrically constructed harmonies**.

**EXAMPLE 28.9** Intervallic Characteristics of Symmetrical Harmonies

A. all m3s/A2s B.

M3, m3, P5    m3, P4, m6    P4, M3, M6

Composers exploit the potential of symmetrically constructed harmonies by using them to access both close and distant key areas. Example 28.10 contains a diminished seventh chord that implies C minor or C major. When we spell the same chord a bit differently (Example 28.10), it leans toward a different tonic: A minor.

**EXAMPLE 28.10**  $vii^{\circ 7}$ : Symmetry and Enharmonicism

A. B.

C:  $vii^{\circ 7}$  i A:  $vii^{\circ 6}_5$  I<sup>6</sup>

Consider the ramifications of what we've just seen: Within a given chord, *the inaudible enharmonic alteration of a single note (here, A<sup>b</sup> becomes G<sup>#</sup>) allows the chord to function in two remotely related keys.* C minor and A major (six accidentals apart) both become instantly accessible by virtue of this single respelled pitch. In fact, through **enharmonic reinterpretation**, the  $vii^{\circ 7}$  becomes a vehicle that can modulate to many other key areas. This technique is similar to the reinterpretation of the German augmented sixth chord (respelled as a  $V^7$  in Chapter 24); given that the German sixth is not symmetrical, its access to remote keys is limited.

Example 28.11 shows four different spellings of our diminished seventh chord, along with its resolutions. The diminished seventh is a remarkable pivot chord that can access distant tonal areas, even keys that lie a minor third or a tritone away from each other. A good way to determine the four accessible keys is to interpret each of the four pitches in the diminished seventh chord as a leading tone, as shown in Example 28.11.

**EXAMPLE 28.11** Enharmonic Reinterpretation of  $vii^{\circ 7}$

A. B. C. D.


C:  $vii^7$  I    A:  $vii^{\circ 6}_5$  i<sup>6</sup>    f#:  $vii^{\circ 6}_4$  i<sup>6</sup>    Eb:  $vii^{\circ 6}_2$  V<sup>6</sup><sub>4-3</sub> I

### Analysis

When analyzing tonicizations that result from the enharmonic reinterpretation of a diminished seventh chord, use the same pivot chord technique that we employed in Chapters 19 and 22. It is important to show how the chord functions in both the original key and the new key. Example 28.12 begins in G major and ends with a tonicization of B $\flat$  major ( $\flat$ III). Note that the first appearance of the diminished seventh chord functions as a passing chord (m. 1). Arrows reveal the resolution of the root (F $\sharp$ ) and seventh (E $\flat$ ). The enharmonically transformed diminished seventh chord in m. 3 is initially still heard as  $\text{vii}^{\circ 6}_5$ ; but because of where it progresses, it actually functions and is notated as a root-position  $\text{vii}^{\circ 7}$  in the new tonal area.

Be aware that composers are not consistent in the way they notate enharmonic modulations using diminished seventh chords. They may notate the chord either as it functions in the new key or as it functions in the old key (in which case it would appear to have an unusual resolution).

### EXAMPLE 28.12 Analyzing Enharmonic Modulations Using $\text{vii}^{\circ 7}$



G: I — 6     $\text{vii}^{\circ 6}_5$  I — 6    V —  $\frac{4}{2}$     I<sup>6</sup>     $\text{vii}^{\circ 6}_5$  /  $\text{vii}^{\circ 7}$  I    ii<sup>6</sup><sub>5</sub> V<sup>7</sup> I

I            P    I            V            I            I    PD V    I

I ————— 6

### Analytical Interlude

Example 28.13 illustrates two distant modulations from the literature that rely on the enharmonic potential of the diminished seventh chord. Example 28.13A, from the first movement of Beethoven's "Pathétique" sonata, is the passage that leads from the exposition to the development. The excerpt begins in G minor, yet it moves with little effort quickly into the remote key of E minor. Notice how m. 134 begins identically to the previous measure; but as the voice exchange unfolds, C<sup>5</sup> leads not to E $\flat$ <sup>5</sup> but to D $\sharp$ <sup>5</sup>. This inaudible change has powerful ramifications, for the resulting enharmonic spelling sets the stage for E minor to enter. What was  $\text{vii}^{\circ 4}_3$  in G minor has become  $\text{vii}^{\circ 4}_2$  in E minor.

Example 28.13B contains a particularly bold modulation using  $\text{vii}^{\circ 7}$  enharmonically in A minor that allows a tonicization of the tritone-related key, E $\flat$  major. This example is particularly intriguing, given that not only is the enharmonic conversion inaudible, it is also not visible to the players! The excerpt begins with  $\text{vii}^{\circ 7}$  that apparently continues in the next measure. However, the motion to V $\frac{4}{2}$  of E $\flat$  major in m. 3 indicates that we have already made it to E $\flat$ . We not only didn't hear the modulation, but we didn't see it. The pivot, then, must be in m. 2. To be sure, Schubert has transformed the  $\text{vii}^{\circ 7}$  of A minor into  $\text{vii}^{\circ 4}_3$  in E $\flat$  major, only implying the correct spelling of the  $\text{vii}^{\circ 4}_3$  chord.

**EXAMPLE 28.13** Sample Analyses

## A. Beethoven, Sonata in C minor, op. 13, i

132 *Grave*

*fp* *fp* *p*

*Allegro molto e con brio*

*decrec.* *p* *cresc.* *f*

$g: i \quad vii^{\circ 7} / V \quad vii^{\circ 4}_2 \quad vii^{\circ 4}_3 i^6 \quad vii^{\circ 4}_2$

$e: \begin{matrix} vii^{\circ 4}_3 \\ vii^{\circ 4}_2 \end{matrix} \quad \begin{matrix} 8 \\ V^6 \\ 4 \end{matrix}$

$\begin{matrix} 7 \\ 5 \\ \# \end{matrix} \quad i$

## B. Schubert, String Quartet in A minor, D. 804, I

$Bb$  not rewritten as  $Cb$

$G\#$  not rewritten as  $Ab$  (until after pivot)

$a: vii^{\circ 7}$

$Eb: \begin{matrix} vii^{\circ 7} \\ "vii^{\circ 4}" \\ 3 \end{matrix} \quad V^4_2 \quad I^6$

**Tonal Clarity Postponed: Off-Tonic Beginning**

Nineteenth-century composers often postpone tonal stability to create a sense of ambiguity and heightened expectation. Rather than beginning a piece (or an important subsection) with the tonic and its prolongation, composers may begin on a harmony other than the tonic. We have already seen examples of such an **off-tonic beginning**.

For example, Brahms's song "Parole" in Example 28.7 began on an extended PD that occupied the entire introduction. In the Classical period, off-tonic beginnings were approximated in the slow introductions of works in which a weakly stated initial tonic was quickly displaced by chromatic harmonies that veered into distant regions, as in the Beethoven excerpt in Example 28.6. The tonal goal of the slow introduction was almost always the dominant, and the strong arrival on the tonic was postponed until the following allegro section.

Off-tonic beginnings were often a mainstay of popular music in the twentieth century. The G-major refrain of “Sweet Georgia Brown” (Example 28.14) begins far away from the tonic; a series of applied dominants ( $E^7-A^7-D^7$ ) finally leads to G in m. 33.

### EXAMPLE 28.14 Pinkard, “Sweet Georgia Brown”

21  
No gal made\_ has got a shade\_ On Sweet Geor-gia Brown.

*p f*

G:  $V^7/ii$  →

25  
Two left feet\_ but oh so neat\_ has Sweet Geor-gia Brown,

$V^7/V$  →

29  
They all sigh\_ and wan na die\_ For Sweet Geor-gia Brown, I'll tell you just why,

$V^7$  → I

### Double Tonality

Sometimes you may encounter pieces in which two keys vie for supremacy simultaneously. Often the ambiguity is acute, and the analyst has little choice but to interpret the piece in the key in which it ends. Some analysts conclude that highly ambiguous pieces are being controlled not by a single key but by the two keys juxtaposed throughout the piece. Such pieces display **double tonality**. For example, some of the songs by Schubert, scenes and acts of operas by Wagner, and orchestral works of late nineteenth-century composers, including Liszt, Mahler, and Strauss, fall into the double-tonal category. Most of the time, double-tonal pieces are better interpreted as being in a single key: the key in which the piece closes. One might consider Brahms's song “Es hing

der Reif" (see Exercise 28.1C) to be a double-tonal example, given that C major and A minor are set in conflict throughout. Although the interior cadences and tonicizations are all in C major, the closing key of the piece suggests that the song might best be interpreted in A minor.

## EXERCISE INTERLUDE

## WRITING



WORKBOOK 1  
28.2–28.5

## 28.3 Enharmonic Modulations Using the Diminished Seventh Chord

Complete the following tasks on a separate sheet of manuscript paper.

- Given the diminished seventh chord B–D–F–A $\flat$ , list the possible keys in which it and its enharmonic spellings can function. Then write and analyze (using pivot notation) two progressions, each of which employs the diminished seventh chord as an enharmonic pivot that helps move to a distantly related key. Begin the first progression in C major or C minor and the second in A major or A minor.
- Begin three progressions in A minor and include a  $vii^{o7}$  chord. Then enharmonically reinterpret the diminished seventh chord in order to move to the three distantly related keys that lie minor thirds and a tritone away from A minor.
- Harmonize the following soprano fragments, each using an enharmonically reinterpreted diminished seventh chord on the pitch that occurs in boldface print in order to modulate to a distantly related key.
  - Begin in F major: A–B $\flat$ –A–G–G–F $\sharp$ –E
  - Begin in D: D–C $\sharp$ –D–G–F–E $\flat$ –D
- Complete the following enharmonic modulations, based on the given key and the harmonic model ( $vii^{o7}$ –I–V $^7$ –I). See the sample solution.

Sample solution:

d:  $vii^{o7}$

F:

A $\flat$ :

b:

## ANALYSIS



## 28.4

Following are excerpts that either modulate using enharmonically reinterpreted diminished seventh chords or begin off-tonic. Analyze each. Mark the pivot in enharmonic modulations.

A. Schumann, Symphony no. 2, op. 61, *Allegro Vivace*

Be aware of the possibility of enharmonically reinterpreted Ger  $\flat_6$  chords.

## Allegro vivace

The musical score for Schumann's Symphony no. 2, op. 61, *Allegro Vivace* is presented in three systems. The first system begins with a mezzo-forte (*mf*) dynamic. The second system features a crescendo (*cresc.*) marking. The third system includes a forte (*f*) marking and a first ending bracket. The score shows various chord progressions and melodic lines in both hands.

B. Tchaikovsky, *Sleeping Beauty*, act 1: *La Fee des Lilas*

## Tempo di valse

The musical score for Tchaikovsky's *Sleeping Beauty*, act 1: *La Fee des Lilas* is presented in two systems. The first system begins with a fortissimo (*ff*) dynamic. The second system starts at measure 6. The score shows a waltz-like melody in the right hand and a supporting bass line in the left hand.

## C. Lamm, "Saturday in the Park"

The musical score is for a piano accompaniment in G major, 4/4 time. The right hand (treble clef) features a series of chords: G major, A major, B major, C# major, D major, E major, F# major, G major, A major, B major, C# major, D major, E major, F# major, G major. The left hand (bass clef) features a series of chords: G major, A major, B major, C# major, D major, E major, F# major, G major, A major, B major, C# major, D major, E major, F# major, G major. The score is enclosed in a double-line border.

**TERMS AND CONCEPTS**

- enharmonic modulation
- enharmonic pun
- enharmonic reinterpretation
  - $\text{vii}^{\circ 7}$
  - $\text{V}^7/\text{Ger}_5^6$
- off-tonic beginning
  - double tonality
- plagal relation
- reciprocal process
- semitonal voice leading
- symmetrically constructed harmonies
- tonal ambiguity