

## Expansion of Modal Mixture Harmonies: Chromatic Modulation and the German *Lied*

Chapter 21 introduced the concept of mixture, and presented examples in which the mixture sonorities lasted only a moment or so and served to color a progression. Yet surely modal mixture can be extended for more than a single chord. Remember the Mascagni example (Example 21.1), in which F minor intruded for several measures. Think back also to the discussion of applied chords versus mixture, which showed that when an applied dominant precedes a mixture chord, the two together serve as a mini-tonicization of a chromatic harmony.

In this chapter, we explore **chromatic modulations**. This is based on the assumption that  $\flat$ VI and  $\flat$ III are the most commonly tonicized chromatic harmonies in eighteenth- and nineteenth-century music. Composers less often tonicize VI (e.g., C major to A major) and III (e.g., C major to E major), but we consider these relations as well.

We explore first the means by which composers move smoothly from diatonic harmonies to expanded chromatic harmonies within progressions, then learn how chromatic modulations function within the harmonic progressions of entire works.

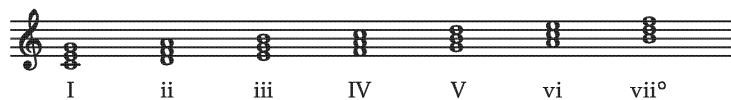
### Chromatic Pivot-Chord Modulations

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In order to move smoothly from one key area to another, composers usually employ a pivot harmony that is common to both keys. When searching for a suitable pivot for chromatic modulation, however, there are no triads common to both keys. For example, there are no chords in common between C major and  $A\flat$  ( $\flat$ VI; see Example 22.1). However, the knowledge that a major key often borrows from its parallel minor lets us reenvision our move from C major as one from C major/minor to  $A\flat$  major (Example 22.2).

**EXAMPLE 22.1** Absence of Common Chords Between C and A $\flat$ 

triads in C major:

triads in A $\flat$  major:**EXAMPLE 22.2** Common Chord Between C Major/Minor and A $\flat$ 

triads in C: {

major: I ii iii IV V vi vii°

minor: i ii° III iv v VI VII

triads in A $\flat$  major: iii IV V vi vii° I ii

Permitting modal mixture to enter into the equation causes four potential pivot chords to emerge in Example 22.2. We can formulate the following rule for **chromatic pivot-chord modulations**:

In a modulation to a chromatic key that results from modal mixture (such as  $\flat$ III or  $\flat$ VI), the pivot chord must be a mixture chord in the original key.

This rule holds so consistently for music of the nineteenth century that the presence of modal mixture—particularly of the tonic—often signals an upcoming tonicization of a chromatic key. This is true because, owing to the modal shift, the tonic loses its anchoring power and instead begins to act as a pre-dominant to an upcoming  $\flat$ VI or  $\flat$ III. Listen to Example 22.3A and note how the modal shift from E major (I) to E minor (i) nicely prepares the motion from E major to C major ( $\flat$ VI). The E-minor chord functions as iii in C major and as a bridge that connects the two distantly related keys.

**EXAMPLE 22.3 Chromatic Third Modulation (E → C) Through Modal Mixture**



A.

E: I V<sub>3</sub><sup>4</sup> I V<sub>3</sub><sup>4</sup> I — i V<sub>3</sub><sup>4</sup> i

♭VI: iii I vi ii<sup>6</sup> V<sup>7</sup> I

(C)

Now listen to Example 22.3B to see how Beethoven artfully uses this very same harmonic progression in his E-major piano sonata, considerably expanding it.

B. Beethoven, Piano Sonata no. 27 in E minor, op. 90, *Nicht zu geschwind und sehr singbar vorzutragen* (To be played not too fast and yet very songfully)

97

102

107

112

E:

I → i

i

♭VI: iii PD — V<sup>7</sup>

(C)

V<sup>7</sup> I V<sub>3</sub><sup>4</sup> I<sup>6</sup> ii<sup>6</sup> vii<sup>o7</sup>/V V<sub>4</sub><sup>6</sup> — 5/3

### *An Analytical Interlude: Schubert's Waltz in F Major*

Listen to Example 22.4 and determine the following:

1. Which chromatic harmony is the goal of the modulation:  $\flat$ III or  $\flat$ VI?
2. What is the pivot chord used to change to the chromatic key?
3. When does the original key return?
4. What is the function of the chromatic modulation in the overall harmonic plan of the work?

#### EXAMPLE 22.4 Schubert, Waltz in F major, 36 *Original Dances*, D. 365, no. 33



The musical score for Schubert's Waltz in F major, measures 1-26, is presented in a grand staff format. The key signature is one flat (F major). The score shows a progression of chords: I (F major) in m. 1, V (C major) in m. 2, and a chromatic modulation to  $\flat$ III (A $\flat$  major) in m. 13. The modulation is achieved through a pivot chord (A $\flat$  major) which functions as i in the chromatic key. The original key returns with a V<sup>7</sup> (G<sup>7</sup>) chord in m. 25. The score includes dynamics like *p*, *pp*, and *f*, and articulation marks like accents and slurs.

After an alternation of I and V in F major, the major tonic is converted to minor in m. 13, where it functions as a pivot leading to A $\flat$  major ( $\flat$ III). The original key returns with a V<sup>7</sup> chord in m. 25. Given that chromatic modulation participates in the overall harmonic progression of a passage, the tonicized  $\flat$ III is actually part of a large tonal arpeggiation: I– $\flat$ III–V<sup>7</sup>–I.

A motive that appears early in a work and on the music's surface may reappear later at a deeper level. Even the most common progressions or fleeting nonchord tones can provide the means for later development. This is just the case in Schubert's *Waltz*, which opens with a melody projecting the upper-neighbor motive C–D–C. The same upper-neighbor motive is restated in the parallel minor (C–D<sup>b</sup>–C at mm. 13–14) to prepare the entrance of <sup>b</sup>III. Notice also that the neighbor motion has been transferred to the harmonic domain at mm. 13–14 where the bass F falls to E<sup>b</sup>.

### Writing Chromatic Modulations

There are no new part-writing rules, but keep the following in mind:

1. Add the necessary accidentals in the new key, or, rather than writing many accidentals for several measures, simply add a new key signature.
2. The pivot chord must always result from modal mixture. Often, it is effective to use minor *i* (as *vi* or *iii* in the new key).
3. Try to create a seamless musical process by expanding the PD in the new key, either through inversions or a brief tonicization. This postpones the cadence in the new key and therefore allows the listener to become acclimated to the new tonal environment.

Study the following model analysis (Example 22.5).

- C major is established with an EPM. Note that mixture is already hinted with the  $ii^{\circ 4}_2$  chord.
- The pivot chord is a mixture chord in the original key ( $iv^6$  in C major) and a diatonic chord in the new key ( $vi^6$  in A<sup>b</sup> major).
- In the new key, the submediant is elaborated (with a  $V^4_3/vi$  chord) in order to postpone the cadence.
- This is followed by the cadential dominant and tonic, with a PAC in A<sup>b</sup> major.

### EXAMPLE 22.5 Composing a Modulation from C → A<sup>b</sup>

C: I     $ii^{\circ 4}_2$      $V^6_5$     I     $V^4_2/iv$      $iv^6$   
 T ————— PD

A<sup>b</sup>:  $vi^6$      $V^4_3/vi$     *vi*     $ii^6$      $V^6_4 = \frac{5}{3}$     I  
 (<sup>b</sup>VI) (T) ————— PD — D — T

EXERCISE INTERLUDE



WORKBOOK 1  
22.1–22.2

SOLVED/APP 6

22.1

Answer the following questions.

1. Given the following major-key modulations, what pivot chords are possible? (Use modal mixture in the first key.)
  - a. D to F (♭III)
  - b. G to B♭ (♭III)
  - c. E♭ to C♭ (♭VI)
  - d. A to F (♭VI)
2. Complete the following chart.

In what key is the triad . . .

triads	I	III	IV	V	♭VI
D major	D major	B♭ major	A major	G major	F♯ major
C major					
E major					
B♭ major					
F major					
A major					

WRITING

22.2 Figured Bass

SOLVED/APP 6

Realize the figured bass below in four voices and analyze.

22.3

The following short progressions end with a chromatic pivot chord. To which chromatic keys could the chord lead? Choose one of your solutions for each example, and write a convincing bass voice that secures the new chromatic key.

SOLVED/APP 6

- Example:* C major: I–I<sup>6</sup>–iv  
*Answer:* iv in C major can be vi in A♭ major (♭VI) or ii in E♭ major (♭III).  
 D major: I–V<sup>6</sup>–I–V<sup>7</sup>–♭VI  
 F major: I–♭VI–V<sup>4</sup><sub>3</sub>/iv–iv  
 A major: I–V<sup>6</sup>/♭III–♭III

## Unprepared and Common-Tone Chromatic Modulations

Unlike tonicizations achieved smoothly by means of a harmony that simultaneously functions in multiple harmonic contexts, **unprepared chromatic modulations** (sometimes referred to as *direct modulations*) occur without the aid of a pivot chord.

Listen for the unprepared chromatic modulation in Example 22.6. The opening 11 measures could be interpreted in two ways: as a single phrase that is divided into subphrases (I–V<sup>7</sup>, V<sup>7</sup>–I), or as a two-phrase parallel continuous period. After a grand pause in m. 12, the opening theme abruptly enters in A<sup>b</sup> (♭VI).

### EXAMPLE 22.6 Haydn, String Quartet in C major, op. 54, no. 2, Hob III.58, *Allegro*

The musical score for Example 22.6 is presented in three systems, each with four staves (Violino I, Violino II, Viola, and Violoncello). The first system (measures 1-11) starts in C major (C: I) and ends with a grand pause (G.P.) at measure 11. The second system (measures 12-12) begins with a grand pause (G.P.) at measure 12 and ends with a grand pause (G.P.) at measure 12. The third system (measures 13-16) begins with a grand pause (G.P.) at measure 13 and ends with a grand pause (G.P.) at measure 16. The key signature changes from C major to A-flat major (♭VI) at measure 13. The score includes dynamic markings (f, p) and 'G.P.' (Grand Pause) markings. A CD icon is visible in the top right corner.

Most chromatic modulations are not as abrupt as that of Example 22.6. Often the composer will communicate by rhetorical means that a chromatic departure is approaching by providing the listener with a thread that connects the two keys.

Listen to Example 22.7, in which Schubert juxtaposes D major (I) with B $\flat$  major ( $\flat$ VI). Even though there is no hint of the upcoming motion to  $\flat$ VI, the pitch D in the violins is common to both keys: It is heard in retrospect as  $\hat{1}$  of D major and is reinterpreted as  $\hat{3}$  in B $\flat$  major. This type of modulation, which usually links two nondiatonic keys lying a third above or below one another, is called a **chromatic common-tone modulation**.

**EXAMPLE 22.7** Schubert, String Quartet no. 3 in B $\flat$  major, D. 36, Menuetto-Trio



Both chromatic common-tone modulations and motivic development are common in nineteenth-century music. Listen to Example 22.8, the opening of Schubert's last piano sonata, written just weeks before his untimely death in 1828 at the age of 31. Identify the location and type of chromatic modulation. The opening tune repeats in the key of G $\flat$  major ( $\flat$ VI) in m. 20, and it returns to the tonic in mm. 36–37. The chromatic common-tone modulation in mm. 18–20 is surprising; a written-out trill (in the bass) is all that separates I and  $\flat$ VI (except for C $\flat$  and A $\flat$ , which help to prepare G $\flat$  major).



The written-out trill was in turn prepared by the preceding mysterious trill on  $\flat\hat{6}$  in m. 8. Thus, the  $G\flat$  seed that Schubert planted in the trill germinates when the trill is written out in m. 19 and blossoms in the modulation in mm. 20–35. When Schubert boldly heads the tonicized  $G\flat$  major back to  $B\flat$  in mm. 36–37, the listener is transported back to the initial measures of the piece and the moment when the neighbor motive,  $\flat\hat{6}-\hat{5}$ , was born.

**EXAMPLE 22.8** Schubert, Sonata in  $B\flat$  major, op. posth., D. 960, *Molto moderato*



The musical score is presented in six systems, each with a treble and bass clef staff. The first system begins with a *legato* marking and a *pp* dynamic. The second system is marked with a '5' above the first measure and a *pp* dynamic. The third system is marked with a '10' above the first measure. The fourth system is marked with a '14' above the first measure. The fifth system is marked with a '19' above the first measure and a *pp* dynamic. The sixth system is marked with a '21' above the first measure. The score features various chordal textures, arpeggiated patterns, and melodic lines, with some measures containing trills and tremolos.

Continued

24

27 *pp*

30

33 *cresc.* *f*

34 augmented sixth chord

36

### Analytical Challenges

Some chromatic modulations pose interpretive challenges. Listen to Example 22.9. The trio begins in  $D^b$  major, with its first section closing strongly with a PAC in m. 58. A sudden shift to the parallel minor (m. 59) is followed by a section in A major. How should we interpret the modulation to A major ( $\#V$ )?

#### EXAMPLE 22.9 Schubert Impromptu in $A^b$ , from *Four Impromptus*, D. 935, Trio

Trio

*p*

$D^b$ : I



51

55 *decresc.* *pp*

59 *F<sub>b</sub> will become E<sub>b</sub>*

63 *cresc.* *8va*

67 *ff* *f<sub>s</sub>*

vi V I

i	(D <sub>b</sub> )
iii	(C <sub>#</sub> )
(A)	

Consider Schubert's dilemma. He obviously felt that this piece in D<sup>b</sup> major should modulate to <sup>b</sup>VI, which is B<sup>b</sup> major—with a painful nine-flat key signature. He might have considered tonicizing some other scale degree, but his artistic sensibilities and the piece's unity demanded that the music move to <sup>b</sup>VI. What to do? For over two centuries composers have employed a simple and elegant solution to this problem: write in the enharmonically equivalent key. So, instead of composing a section of music in B<sup>b</sup> major, Schubert wrote it in A major—a much easier key to navigate.

Therefore, we interpret the relationship between D<sup>b</sup> major and A major as I going to <sup>b</sup>VI (and not <sup>#</sup>V). This is confirmed when the diatonic dominant (A<sup>b</sup> major) returns: A<sup>b</sup> remains a structural pillar and is never altered. We have a chromatic pivot-chord modulation: The shift to D<sup>b</sup> minor in m. 59 is a pivot that links D<sup>b</sup> to its <sup>b</sup>VI key.

**EXAMPLE 22.10 Schubert, “Der Flug der Zeit” (“The Flight of Time”), op. 7, no. 2, D. 515**


Etwas geschwind ♩. = 112

Es floh die Zeit im Wir-bel-flu - ge  
Time flew by in a swirling flight

8 und trug des Le-bens Plan mit sich. Wohl stür - misch war? es auf dem  
And took with it the plan of life It was quite stormy during the journey,

15 Zu - ge, be - schwer - lich oft und wi - der - lich. So ging — es  
Often exhausting and unpleasant.

22 fort — durch al - le — Zo - nen, durch Kin - der - jah - re, durch Ju - gend glück, -  
Thus it went forth through every age, Through childhood years, through youthful happiness

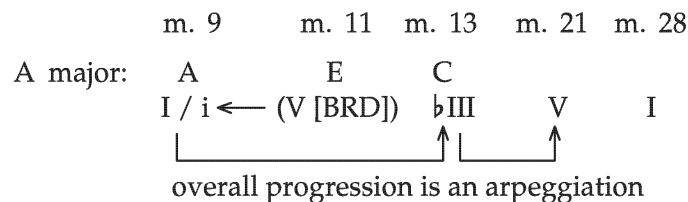
Now consider Example 22.10, which has an extended tonicization of C major in mm. 13–20. How does C fit into the overall progression? There are two potential interpretations:

1. There is a modulation from A major to E major in mm. 9–12, and E major goes to C major through a chromatic common-tone modulation.

2. The first 12 measures stay in A major. The E-major chord in m. 12 is a back-relating dominant and is followed by an extended tonicization of C major ( $\flat$ III).

The best interpretation of C major rests on the fact that, while V is a point of arrival in m. 12, it is one that involves being “on” rather than “in” V. Accordingly, V is understood as back-relating, and C major is connected to A major as its  $\flat$ III. This interpretation is supported by the fact that C major is prepared by the modal shift to A minor in m. 9. Study Example 22.11, which presents a tonal summary of “Der Flug der Zeit.”

### EXAMPLE 22.11 Schubert, “Der Flug der Zeit”: Tonal Interpretation



## Modal Mixture and the German *Lied*

We now examine songs written by two of the most important composers of the nineteenth century, Franz Schubert and Robert Schumann, to see how modal mixture functions in larger contexts. We will also explore how composers control the interaction of music and poetry to project underlying poetic meaning in their vocal compositions.

In nineteenth-century Germany and Austria, the genre of song (*Lied*, plural *Lieder*) became an important laboratory for experimentation. The idea was to develop musically expressive forces capable of meeting the needs of communicating the emotionally rich poetry of the time. Modal mixture was often at the heart of these innovations. For example, the juxtaposition of mixture tones and harmonies against diatonic ones was almost always a sign of emotional conflicts, tensions, or contradictions. Consider the role of  $\hat{6}$  (in both raised and lowered forms) in Schubert’s song “Lachen und Weinen” (“Laughter and Tears”) (Example 22.12). Notice that each form of  $\hat{6}$  is highlighted within its respective mode, but also listen to how  $\flat\hat{6}$  occurs in the major tonic, where it is starkly juxtaposed with its diatonic counterpart.

The shift to the parallel minor prepares the listener for the substitution of  $\flat\hat{6}$  for  $\hat{6}$  at m. 25, where the new expressive tone underscores the melancholy text “and why I weep now.” The specific placement of the  $\mathbb{F}^{\flat}$ – $\mathbb{E}^{\flat}$  sigh, where the upper note is a dissonant ninth over the bass, strongly highlights the word *weep*. The next development of  $\mathbb{F}^{\flat}$  (at m. 27) transforms the pitch  $\flat\hat{6}$  into the chord  $\flat$ VI.

Example 22.12 shows where a  $\flat$ VI chord captures the protagonist’s wonder at love’s ability to arouse conflicting feelings of pain at twilight and joy at daybreak by means of a strange and wondrous-sounding chromatic harmony. In summary, the diatonic and mixed forms of  $\hat{6}$  represent these two sides of his emotions. Both forms of  $\hat{6}$  are neighbors to  $\hat{5}$ ; that they share a common genesis in  $\hat{5}$  may be analogous to the fact that love is the source of both his pain and his joy.

## EXAMPLE 22.12 Schubert, "Lachen und Weinen" ("Laughter and Tears"), D. 777



*Etwas geschwind*

La - chen und Wei - nen zu jeg - li-cher Stun - de ruht - bei der lieb - auf so  
 Laughter and tears at any hour rest on love

man - cher-lei Grun - de. Mor - gens lacht' ich vor Lust; \_\_\_\_\_  
 in so many ways In the morning I laugh with joy

undwa - rum ich nun wei - ne bei des A - ben-des Schei-ne\_\_\_\_  
 and why I weep now In the evening glow,

*pp*  
*decresc.*  
*dim.*

bVI

31 a tempo

ist mir selb' nicht be-wusst, ist mir selb' nicht be-wusst.  
I myself do not know.

**EXAMPLE 22.13** Schubert, “Die liebe Farbe” (“The Beloved Color”) and “Die böse Farbe” (“The Evil Color”), from *Die schöne Müllerin*

Ziemlich geschwind

Ich möch - te zieh'n in die Welt hin-aus, hin-aus in die wei - te \_ Welt,  
I'd like to go out into the world, into the wide world,

Etwas langsam



Continued

4

In Grün will ich mich  
In green will I

7

klei - - den, in grü - ne Thrä - nen - wei - - den:  
dress in green weeping willows

Schubert's song cycle *Die schöne Müllerin* furnishes another example of the role that mixture plays in projecting a poetic text. The drama begins with a roaming youth's discovery of a brook that leads him to a mill and ultimately to a young woman with whom he falls in love. As he begins to press his affections, he finds that she does not love him but rather someone else. What follows is the youth's downward spiral, characterized by anger, jealousy, bitterness, and finally, when nothing can quench his pain, suicide. In the second half of the cycle, the young miller points to the fact that his gifts of green objects, such as the sash from his guitar, delighted her, and her delight—and with it her love—was only intensified as nature, in all of its green beauty, resounded in him.

But with the entrance of the hunter, who symbolizes authority and physical power, the miller's idyllic world comes crashing down about him. The woman is immediately drawn to the hunter, who is dressed in traditional green. The color is now poisoned for the miller, and, as he roams through the forest nature's green only mocks him, providing a thorny reminder that his beloved's affections are directed toward someone else. In the songs "Die liebe Farbe" ("The Beloved Color") and "Die böse Farbe" ("The Evil Color"), modal mixture plays crucial roles in projecting the powerful feelings aroused by the color green (Example 22.13). In fact, vacillations between the major and the minor modes through modal mixture become an important musical metaphor for Schubert in conveying the young miller's abrupt changes of mood.