CHAPTER 6

Techniques of Melodic Prolongation

A fundamental structure consists of the most essential harmonic and voice-leading elements in a passage or piece of music. In this sense it may be compared to the skeleton that supports the human body and provides its shape. But for Schenker the essence of composition lay in the process of *composing-out* (*Auskomponierung*), or expansion of the fundamental structure in various ways and on different levels. The techniques discussed in this chapter include some of the most common ways in which tonal structures are expanded, varied, and transformed. Since the role and meaning of these techniques can only be fully understood in specific contexts, every technique is defined in conjunction with the discussion of one or more musical examples.

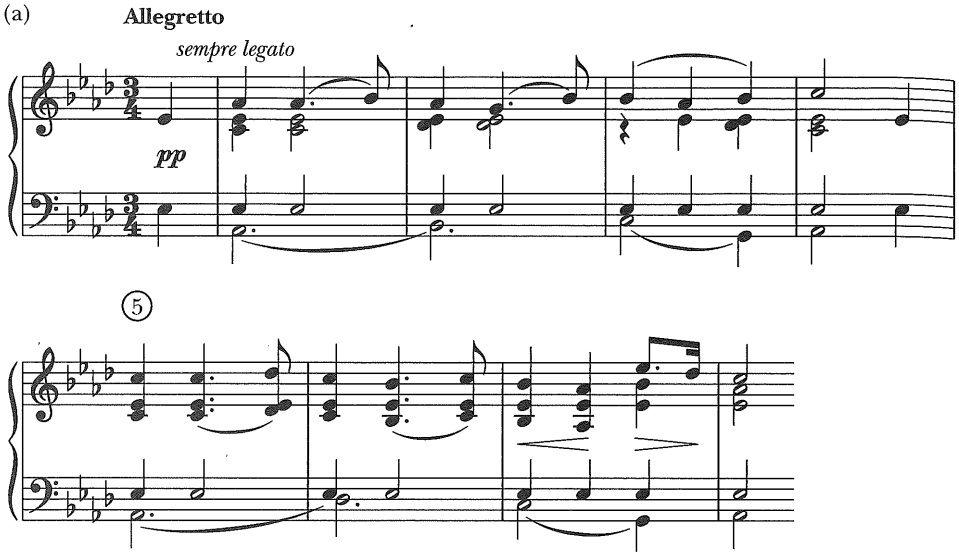
The Initial Ascent

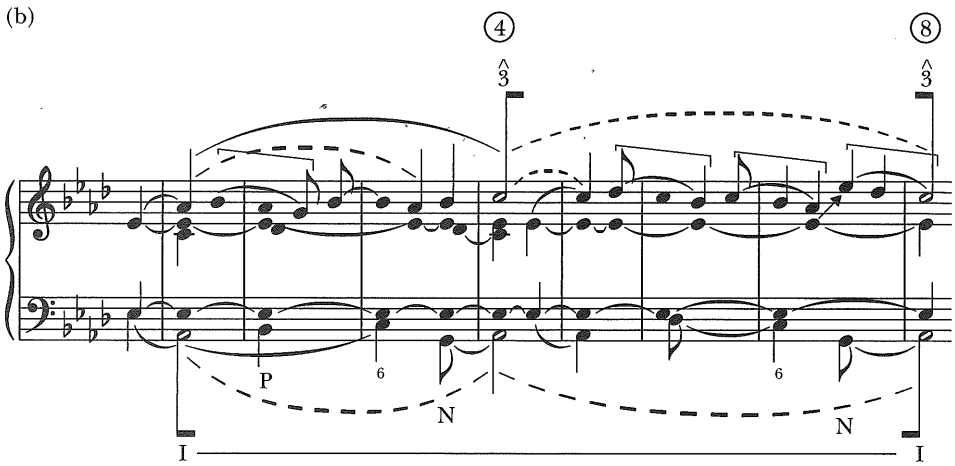
As we have seen, Schenker regarded the *Urlinie*—the top voice of the *Ursatz*—as a descending line. On the middleground and foreground levels, however, both ascending and descending linear progressions are common. Rising linear progressions occur in a variety of contexts; one important possibility is a motion, usually beginning on the tonic note, that leads to the first or *primary* tone of the fundamental line. This type of linear progression, which Schenker termed an *initial ascent* (*Anstieg*), rises through the tones of the tonic triad from the root to the third or fifth. Because it postpones the arrival of the first tone of the *Urlinie,* an initial ascent represents a delay of that tone. The delay may be brief, or it may extend over a considerable span of a work.

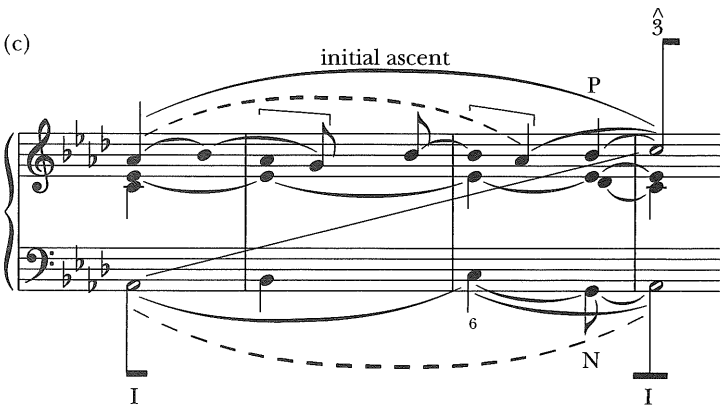
The beginning of Schubert's Impromptu in A♭ is presented in Example 6.1a. As indicated in the graphs (6.1b and c), the initial ascent rises from A♭ in bar 1 (which is introduced with an ascending leap from E♭ on the anacrusis) to

Example 6.1

(a) Schubert, Impromptu, Op. 142, No. 2, bars 1–8; (b) foreground reduction; (c) initial ascent







B♭ in bar 3 and C in bar 4 (C is then prolonged through bar 8). Because the *initial ascent* leads to and therefore delays the first tone of the fundamental structure, this C embodies a twofold function—the culmination of the ascent itself, and, on the background level of structure, the beginning of the *Urlinie.*

The term "initial ascent," by definition, always implies a motion to the *first* tone of the *Urlinie.* Linear progressions that lead to other tones of the *Urlinie* are defined in different ways, as this chapter will describe.

The graph also indicates a number of other features related to the initial ascent. Before the ascent to $\hat{3}$, a double neighbor figure prolongs the top-voice A♭ in bars 1–3. Notice that $b♭^1$, which functions as a dissonant neighbor in bar 1, recurs twice thereafter, each time on a different level of structure: as a consonant upper neighbor in bar 2, resolving to A♭ in bar 3, and as a passing tone to C (bar 4). Because the function of each B♭ is different, the many repetitions of this tone do not produce monotony in the upper voice.

As indicated in Example 6.1c, the accented dissonances and their resolutions in bars 2 and 3 are "marked for consciousness" as descending seconds, even though the A♭ in bar 2 is an accented passing tone in the descending third B♭–G. The association of these two descending figures is highlighted by their position on the downbeat, and by the sarabande-like rhythms of the opening theme.

The Arpeggiated Ascent

Another way in which the appearance of the primary tone may be delayed is through an *arpeggiated ascent.* This technique is similar to an initial ascent, but instead of a stepwise linear progression, an arpeggiation through the tones of the tonic triad leads to the first tone of the fundamental line. The specific length and nature of the arpeggiation may vary, depending upon the tone on which it begins, and on whether $\hat{3}$ or $\hat{5}$ is the goal.

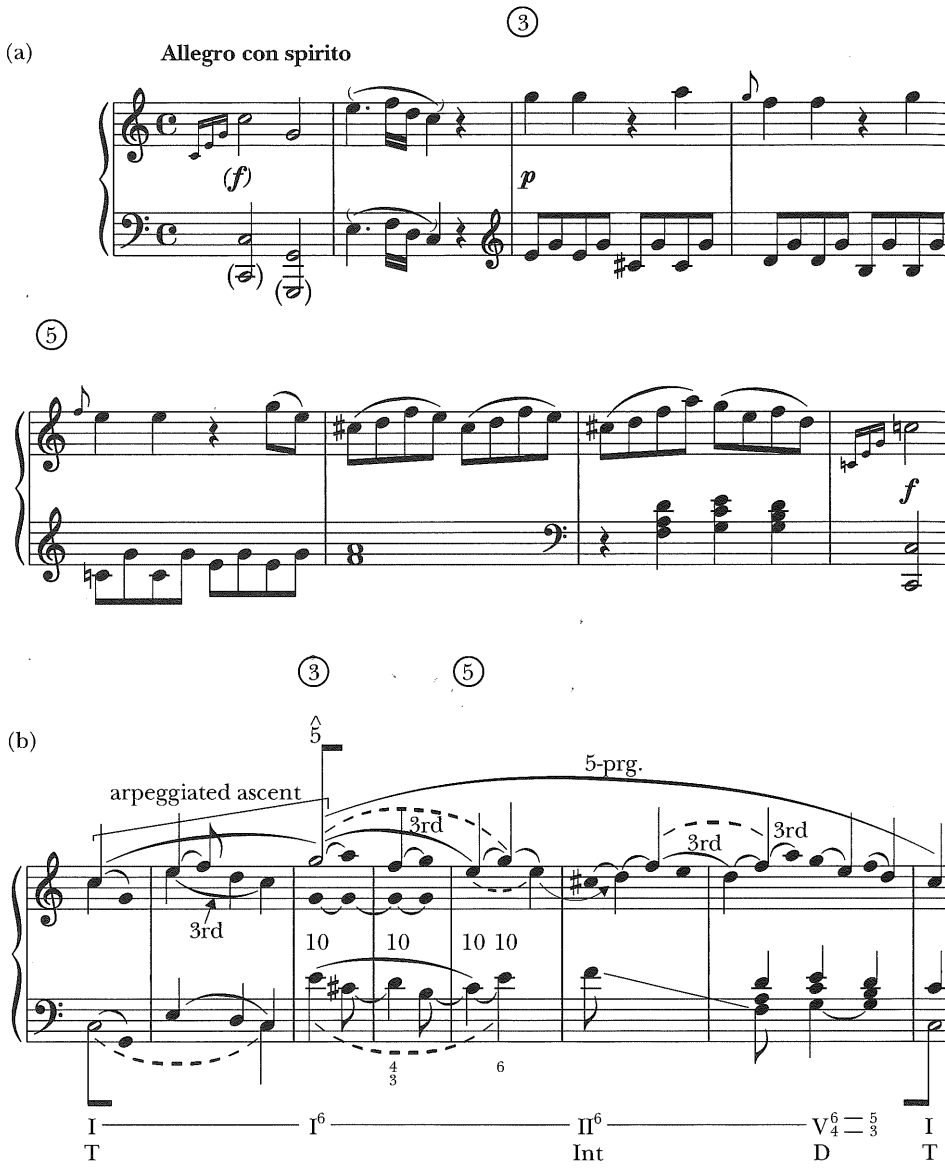
Example 6.2 shows an arpeggiated ascent through the tones of the tonic triad to the initial tone G ($\hat{5}$), followed by a stepwise descent to the tonic note at the end of the phrase. The unison texture in bars 1–2 recalls the opening tutti passages that characterize many Classical symphonies (such as Mozart's "Haffner" Symphony). Notice a beautiful compositional detail, the initial grace note figure that anticipates the arpeggiated ascent of the melody. Schenker's student Oswald Jonas remarked about this passage: "How marvelous the arpeggiation in the right hand's grace-note figure, which finds its continuation as though in a great arc!"[1]

The orchestral quality of this phrase is also reflected in the contrast of registers that develops in the bass from I to I^6 in bars 1–3 (from the "small" to the "one-line octave" in the left hand). The return to the lower register in bar 7 articulates the beginning of the cadence, and frames the phrase through its association with the opening bass register. Notice also that the descending third-motion in bar 2 (E–D–C) is echoed on a higher structural level in bars 3–5 (G–F–E); thirds recur prominently in the elaboration of the descending line in bars 5–7.

Another work by Mozart (Example 6.3) incorporates both arpeggiated and stepwise motion in approaching the first structural tone. An arpeggiation from

Example 6.2

(a) Mozart, Piano Sonata, K. 309, I, bars 1–8; (b) foreground reduction

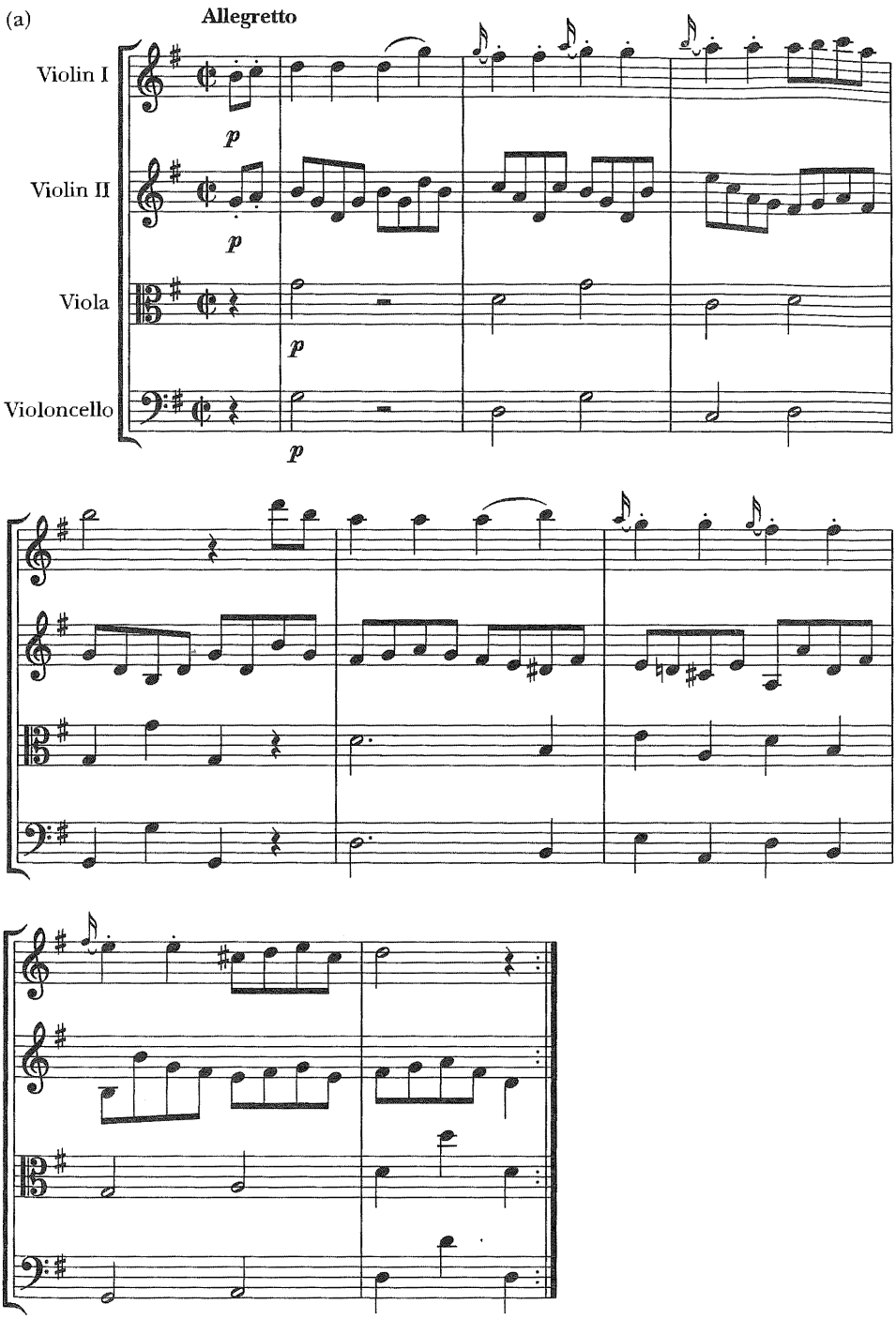


D to G leads to the structural tone B ($\hat{3}$); the third between G and B is filled in with the passing tone A, which creates a stepwise motion from $\hat{1}$ to $\hat{3}$ within the larger arpeggiation. The arrival on the first tone of the *Urlinie* is followed immediately by a motion to A, which is the beginning of a descending fifth-progression to D ($\hat{5}$–$\hat{1}$ in the key of the dominant).

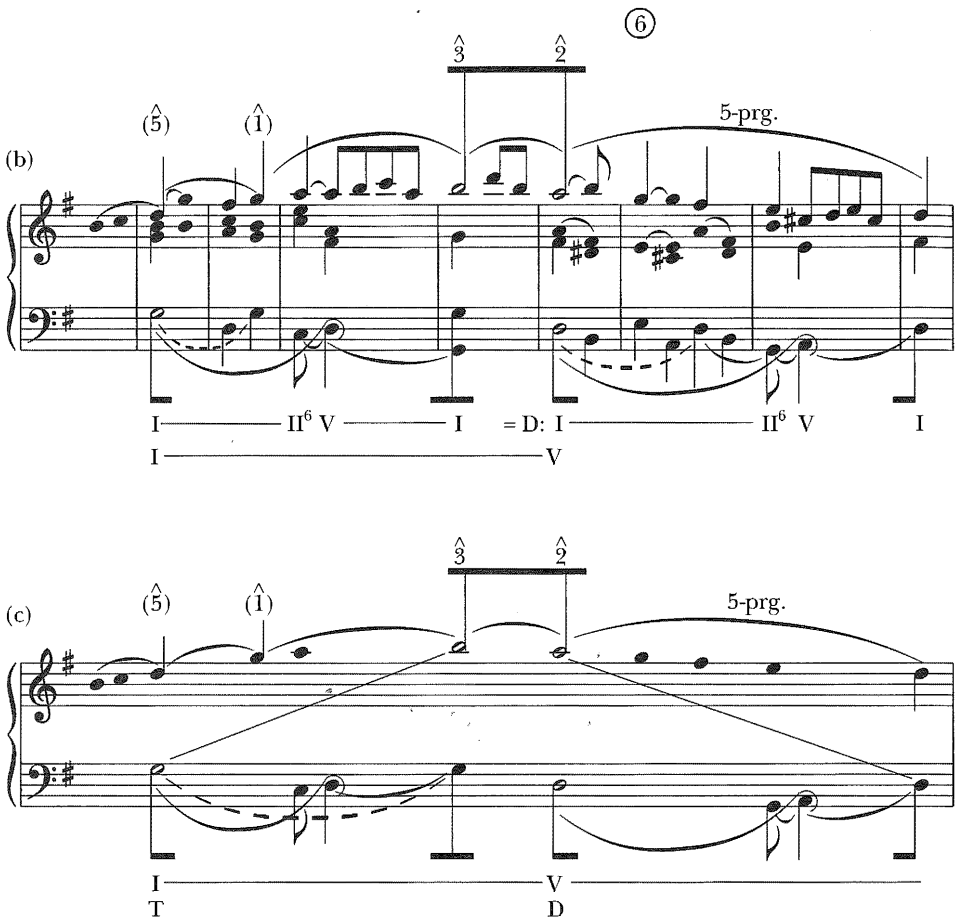
Example 6.3c shows the structure of the period in simplified form. It is divided into two symmetrical four-bar phrases, the first establishing I, and the sec-

Example 6.3

(a) Mozart, Piano Concerto, K. 453, III, bars 1–8 (strings only); (b) foreground reduction; (c) middleground reduction



Example 6.3 *continued*



ond prolonging a tonicized V. Each concludes with a similar cadence, in the tonic and dominant key areas respectively. This reduced example clearly shows the archlike shape of the melody, in which the arpeggiated ascent to B ($\hat{3}$) is balanced by the descending fifth-progression.[2]

Unfolding

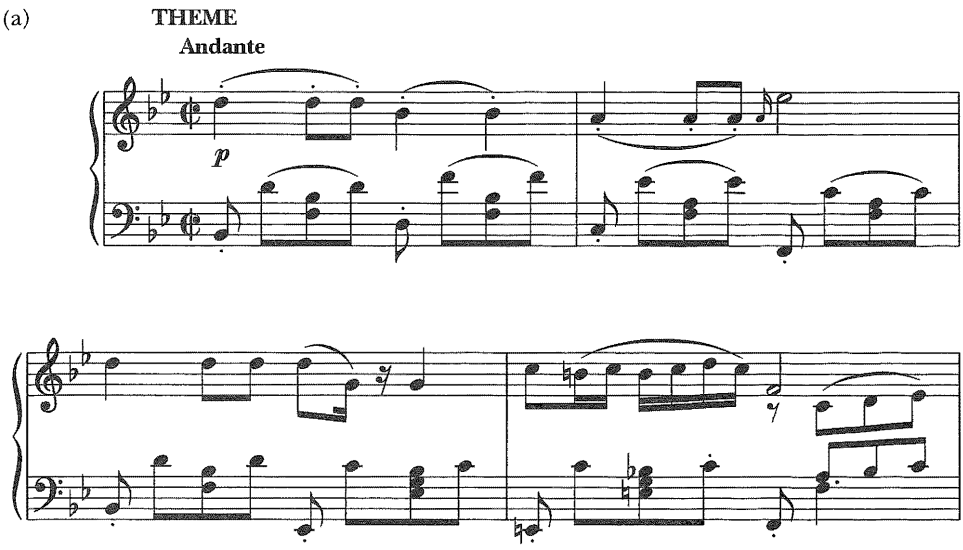
In polyphonic melodies, two or more voices may be related through stepwise motion, leaps, or both in combination. One distinct type of motion between two voices is termed *unfolding*. This technique, which generally linearizes a pair of intervals, offers rich compositional possibilities (Example 6.4).

In bars 1–4 the melody in the right hand outlines two voices (compare Examples 6.4b and c). In bars 1–2, the pattern "top-inner, inner-top" emerges

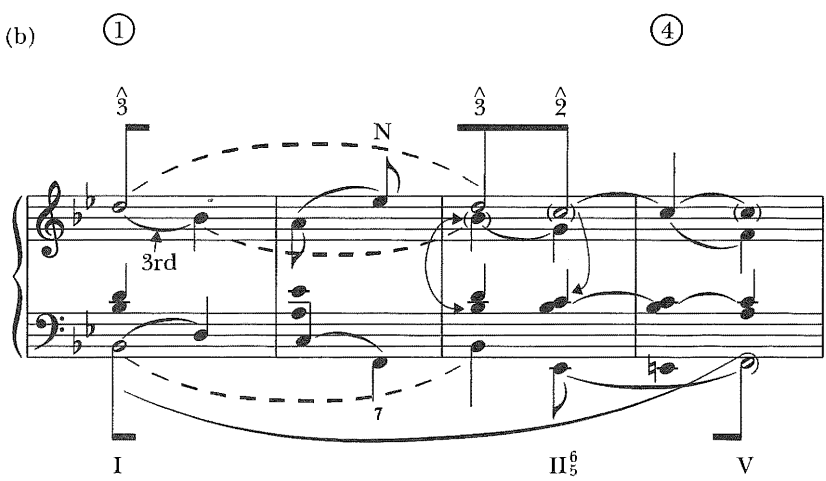
Example 6.4

(a) Schubert, Impromptu, Op. 142, No. 3, bars 1–4; (b) foreground reduction; (c) middle-ground reduction

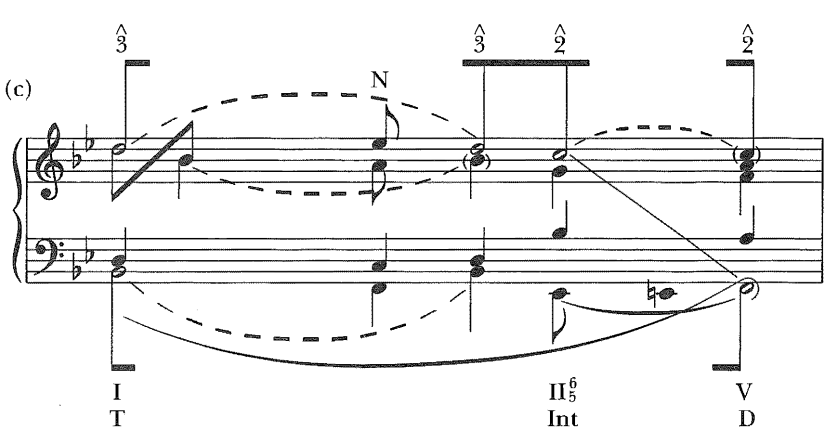
(a)



(b)



(c)

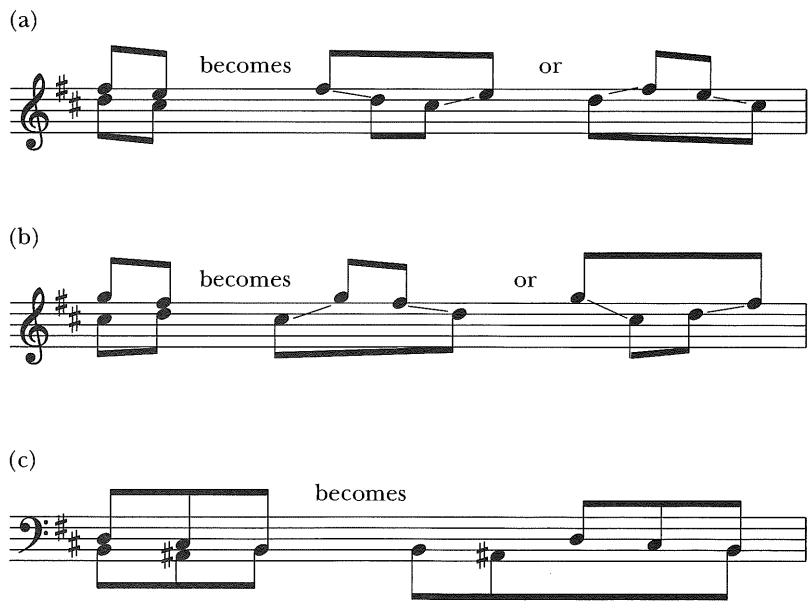


(D–B♭ is followed by A–E♭). Notice also that the bass has a complementary unfolding pattern: B♭–D followed by C–F. In bars 3–4 a different unfolding pattern occurs in the right hand: "top-inner, top-inner" (D–G, C–F). Though the type of unfolding that occurs in bars 1–2 is a characteristic form of this technique, various other patterns can occur, either between tones of the same chord (as in bars 1 and 2) or between tones of different chords (as in bars 3 and 4). Regardless of the specific pattern, however, unfolding always involves a change of direction.[3] The outer/inner-voice nature of unfolding is revealed in Example 6.4b. In bars 1–3, for instance, the right hand plays the upper voices of a B♭-major triad (with D as the soprano), followed by the upper tones of the V^7 chord (with E♭ in the soprano). In this way you can actually *feel* the vertical intervals (between "soprano" and "alto") linearized through unfolding. In the Appendix, we discuss more thoroughly the graphing techniques associated with unfolding.

When the unfolding is associated with more than one chord, melodic and harmonic ambiguities can occur. In bar 3, the top-voice tone D is repeated over the bass note E♭ before the leap to G, suggesting that the resulting chord may be IV^7. Yet the uppermost part of the left-hand accompaniment (the "tenor" voice), which doubles the top-voice D at the beginning of the bar, moves to C over the bass E♭. Since the accompaniment specifically establishes each chord of the harmonic succession, it clarifies the role of d^2 in the right hand as a dissonant suspension against the underlying II^6_5 chord (Example 6.4b). The tone of resolution that would normally follow—C in the two-line octave—does not occur immediately because of the unfolded leap to G (though it is present in the left hand).

Example 6.5

Unfolding Patterns



The upper voice supplies this tone at the beginning of bar 4 in the appropriate register as a kind of delayed resolution: the c^2, in effect, has been displaced by the unfolding.

Many such interrelationships occur in the passage between the right-hand melody and the left-hand accompaniment. In the graph, the associations between tones that are implied in the right hand (but not expressed because of the unfolding or harmonic movement) and the left-hand doublings that actually contain these tones are indicated with arrows. Finally, a diagonal line connects the F bass note of the V with the c^2 in bar 3, indicating the underlying association of these tones despite the displacement in the foreground.

Example 6.5 illustrates several other characteristic types of unfolding. As indicated in Example 6.5a, a descending motion in parallel thirds might be integrated into a single line as "top-inner, inner-top" or "inner-top-top-inner." Example 6.5b illustrates similar alternative possibilities with a pair of voices moving in contrary motion from a diminished fifth to a major third. Finally, the two voices in Example 6.5c alternate in pairs of notes before converging onto a unison.[4]

Motion into an Inner Voice

A melody can incorporate two or more voices in various ways: sometimes this will happen with leaps (as in an unfolding), and sometimes the voices will be connected with stepwise motion. Frequently the melody will move from an established top-voice tone into an inner voice through a linear progression, a technique referred to as *motion into an inner voice.* This is one of the most frequent of all compositional techniques used to expand a top voice; it is also common in the bass voice, where rising linear progressions can move from the structural bass line into the tenor register. This technique can occur on various levels of structure, and frequently serves to create an independent section within a larger form.

Example 6.6 presents bars 1–4 of Schubert's G♭-major Impromptu, Op. 90, No. 3. The lyricism of this composition is established in part by the rich polyphony in the upper voice. Following the leap from the initial B♭ to G♭ in bar 2, A♭ is prolonged in bar 3 through motion into an inner voice (a descending fifth-progression) before it moves to G♭ in bar 4. On a higher level, the descending third B♭–A♭–G♭ participates in a voice exchange with the bass, in a motion from I to I^6 (see Example 6.6c).

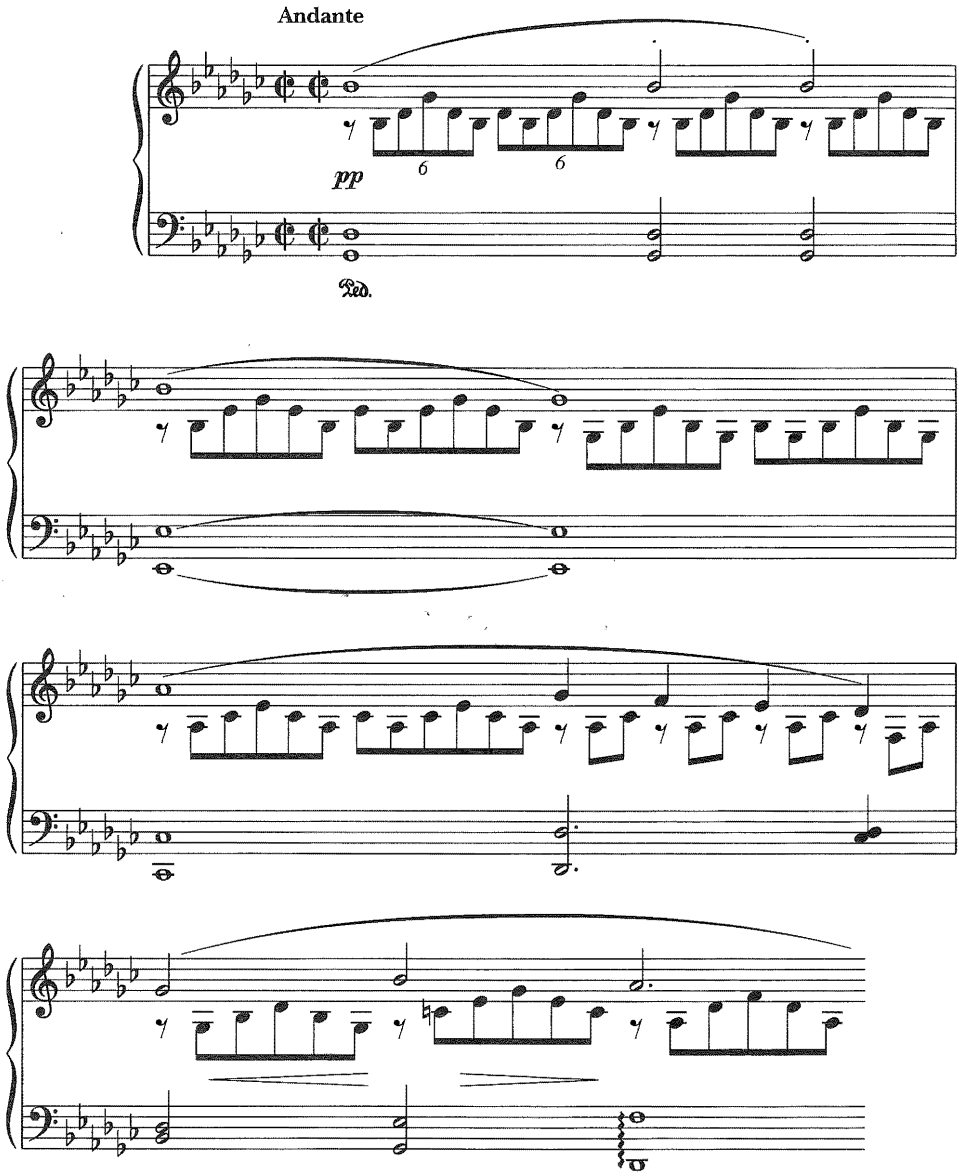
The local harmonic motions in bars 2 and 3, therefore, occur within an embracing tonic prolongation. The third-progression B♭–A♭–G♭ moves from the third to the root of tonic harmony in the upper voice of bars 1–4. (Notice that the tones of the descent echo in expanded form the descending-third leap B♭–G♭ of bar 2.) This four-bar motion into the inner voice (B♭–A♭–G♭) and its elaborations as discussed above form much of the content of the phrase.

Bear in mind that this example illustrates *two* motions into an inner voice, which occur on different structural levels. The first is more local and moves

Example 6.6

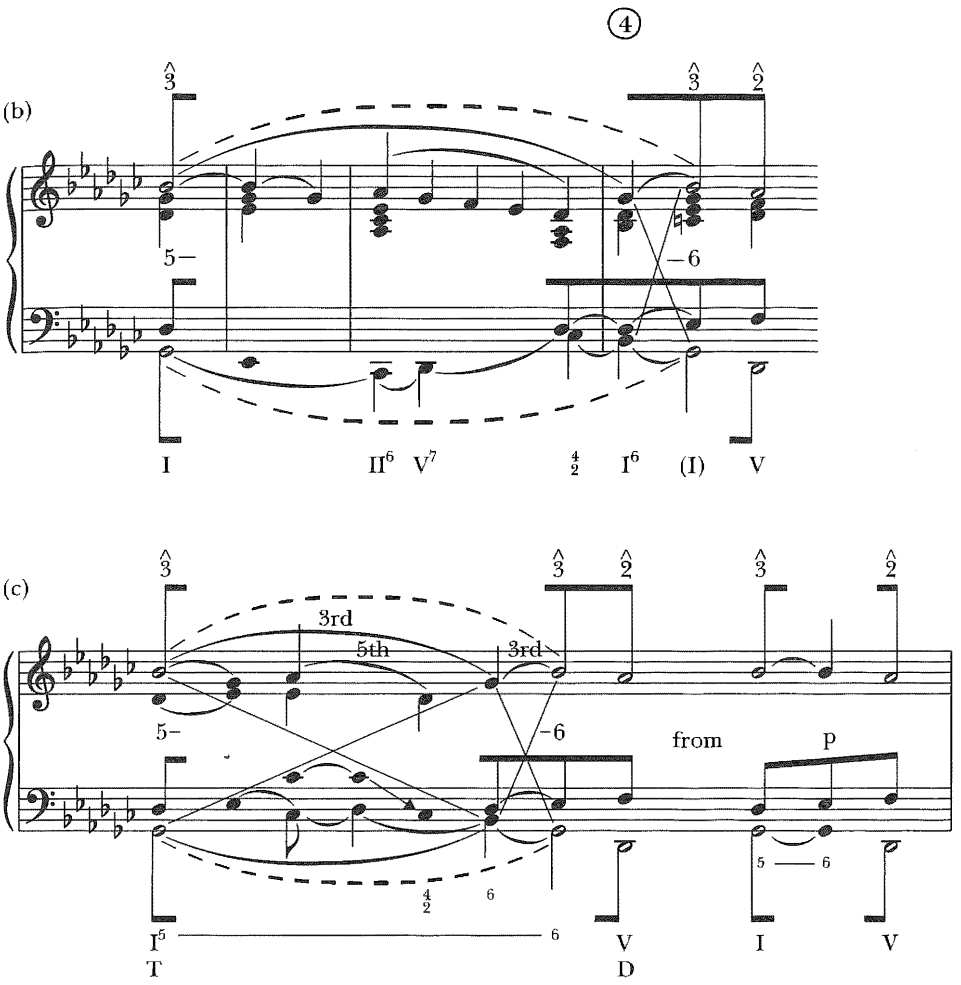
(a) Schubert, Impromptu, Op. 90, No. 3, bars 1–4; (b) foreground reduction; (c) middle-ground reductions

(a)



from A♭ to D♭ in bar 3, from the fifth to the root of the V^7 chord; at a higher level of structure, the descending third B♭–A♭–G♭ spans bars 1–4, supported by the motion from I to I^6 that prolongs the tonic. In Example 6.6b, the Roman I in parentheses (bar 4) indicates that the chord on beat 2 represents tonic harmony. The *root* of tonic harmony is restated, as is scale degree $\hat{3}$ in the soprano,

Example 6.6 *continued*



but notice also that some of the tonic notes in the inner voices are replaced by passing tones. Thus the second chord of the voice exchange is an outgrowth or transformation—at a deeper level—of the initiating tonic, the *boundary* of a prolongational span. See Chapter 12 for more on the meaning of prolongational spans.

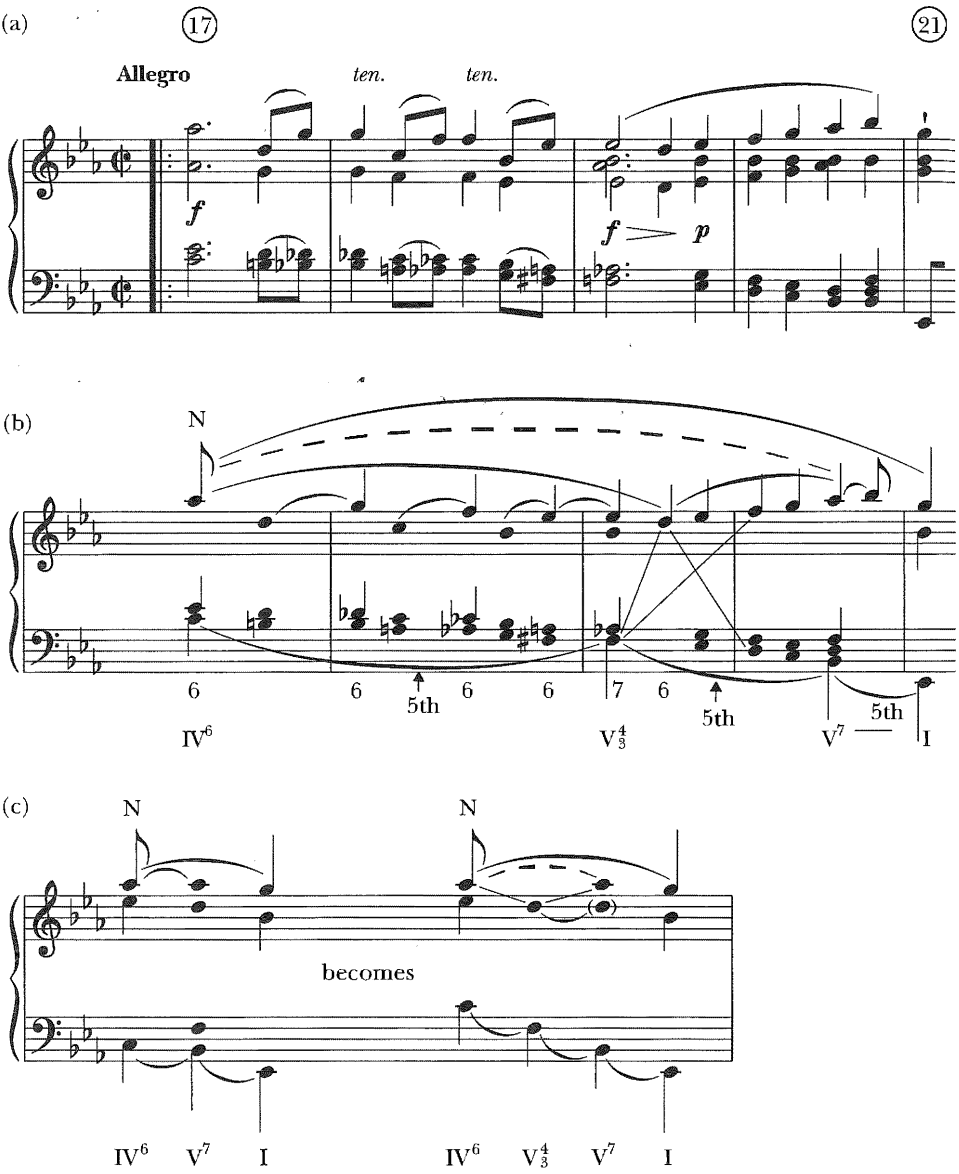
Motion from an Inner Voice

In contrast to motion into an inner voice, melodies also frequently move from an inner voice to regain a structural top-voice tone by means of a rising linear progression.

Example 6.7 presents the beginning of the Allegro section from one of Beethoven's piano sonatas. The beginning is striking in that it begins, not with a tonic chord, but with IV^6. This "nontonic" beginning is related to the preceding slow introduction, which ends with the same chord, thus creating a smooth transition between the Adagio and Allegro sections. In the example we see a motion from IV^6 to V^7–I at the cadence in bar 21.

Example 6.7

(a) Beethoven, Piano Sonata, Op. 81a, I, bars 17–21; (b) foreground reduction; (c) imaginary continuo reduction



Also retained from the Adagio is the A♭ in the upper voice. As Example 6.7b indicates, the chromatic bass descent and the chordal skips in the upper voice elaborate a descending motion in parallel sixths. With the arrival on V^4_3 (bar 19) the pattern changes: the bass descends without further chromaticism to B♭, the root of the V^7 chord. The upper voice changes direction and ascends by step to A♭, which now functions as the seventh of V^7. The ascent continues one step further to B♭; however in view of the prominence of A♭ at the beginning of the Allegro, and its harmonic importance as the seventh of V^7, the B♭ is understood as an incomplete neighbor that elaborates the seventh before it resolves to G.[5]

The imaginary continuo in Example 6.7c clarifies the polyphonic nature of the upper-voice motions supported by the progression IV^6–V^4_3–V^7–I. The top-voice A♭ of IV^6 moves into the alto register D over the V^4_3, but is prolonged at a deeper level because it belongs to both chords (the parentheses symbolize the implied and mentally retained D). As the bass descends from V^4_3 to V^7, the soprano regains the upper-voice A♭ (the seventh of V^7) through a stepwise ascent, in effect connecting the alto with the soprano registers. The technique of leading from an inner to an outer voice is called *motion from an inner voice* (the opposite procedure of motion into an inner voice).[6]

Voice Exchange

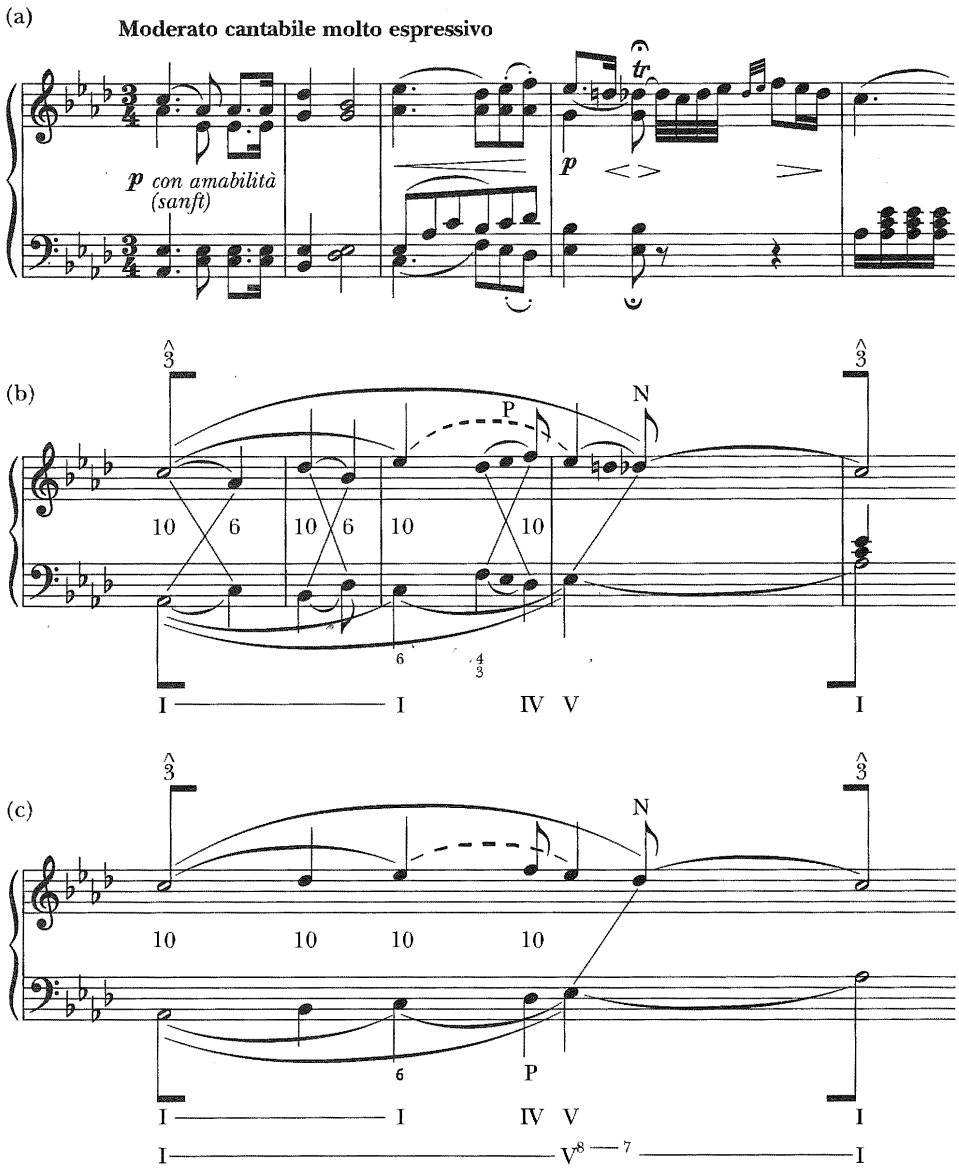
Voice exchange is a common technique we have already seen in several examples, including bars 5–6 and 14 of Example 3.16, and bars 1–3 of Example 4.17. Beethoven's Piano Sonata, Op. 110, begins with a series of voice exchanges that expand the tonic and intermediate harmonies in bars 1–3 (Example 6.8). Perhaps the most characteristic type of voice exchange occurs in bars 1 and 2, where the soprano and bass exchange two tones within the same chord. In bar 3, the voice exchange occurs between two intermediate harmonies, II^4_3 and IV. Notice that this motion is filled in with passing tones (Example 6.8b). The complementary thirds of a voice exchange are often elaborated with passing tones, which (as here) may support a passing chord.

As in the expansion of tonics and dominants, two (or more) intermediate chords often function to expand a single intermediate harmony. Most frequently the first chord of the pair is the "main" harmony; sometimes, however, circumstances will suggest that the second chord of the expansion is primary. As indicated in Example 6.8b and c, the deeper outer-voice motion consists of ascending parallel tenths until the arrival on V in bar 4. Because of the way in which this pattern shapes and guides this progression, we hear the harmonic organization of the phrase as an expansion of I (I–I^6), followed by a motion to V. The most direct (stepwise) connection of the outer voices, from the I^6 to the V, is through the IV. The $\frac{4}{3}$ chord is therefore a "detour" that expands the motion from I^6 to IV (compare Examples 6.8b and c).

The large-scale harmonic motion I–V–I, and the associated top-voice motion C–D♭–C, are indicated by the lower line of roman numerals and the large slur in Example 6.8c. It might seem more appropriate to regard E♭ as the principal

Example 6.8

(a) Beethoven, Piano Sonata, Op. 110, I, bars 1–5; (b) foreground reduction; (c) middleground reduction



top-voice tone over V. The strongly dissonant D♭ (the seventh of V^7), however, is highlighted by the fermata, trill, and dynamic marking. Once again we see a seventh that is decorated from above. At a deeper level of structure, the D♭ is an upper neighbor to C of bar 1 (Example 6.8c).

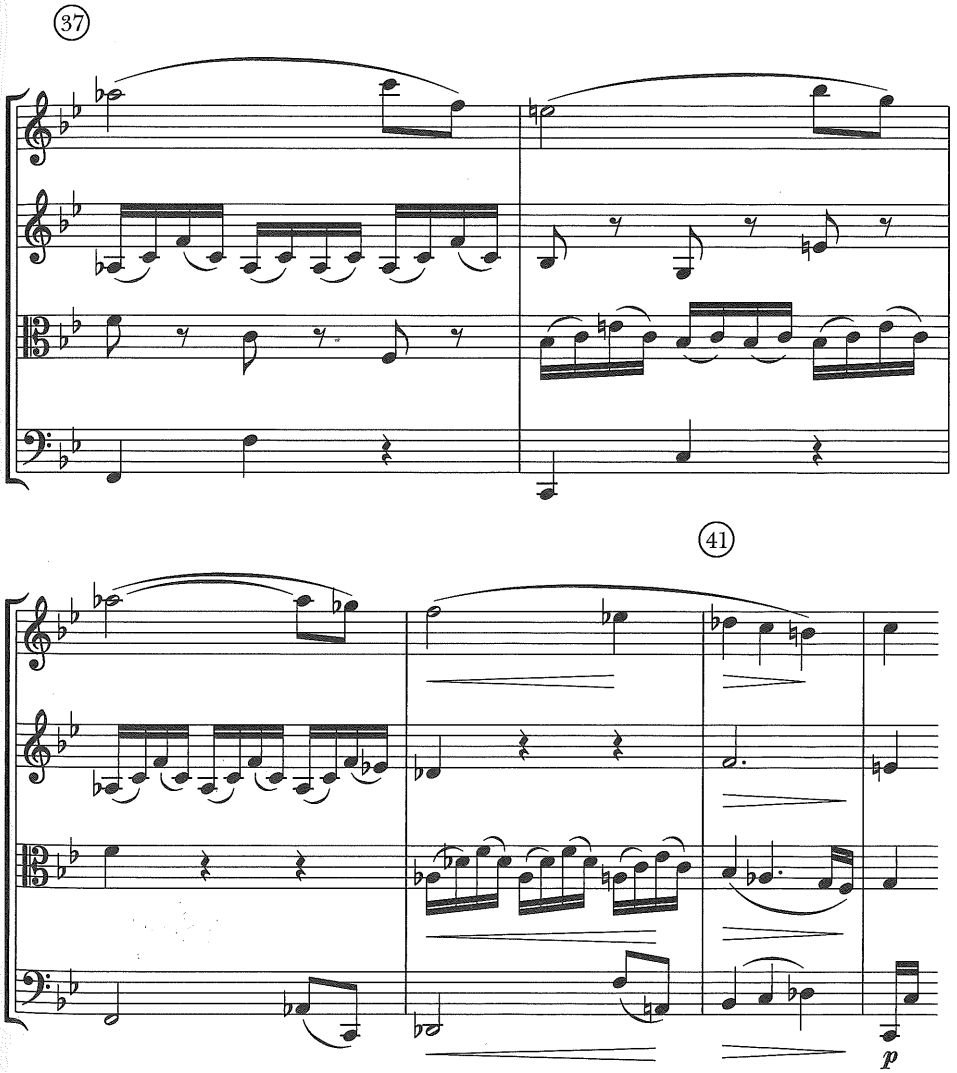
In Example 6.8 the voice exchanges involve diatonic pitches. One or both tones in a voice exchange, however, may be altered chromatically, forming a

chromaticized voice exchange. In Example 6.9, the essential harmonic structure is I–IV–V in F minor. At the cadence (bars 41–42), the motion to V is intensified through its leading tone, B♮, in the upper voice, and through its upper neighbor, D♭, in the bass. The augmented sixth chord that contains these tones is associated with a chromaticized voice exchange that prolongs the intermediate IV of the deeper bass progression (Example 6.9c).[7] Chromaticized voice exchanges often signal an important point of arrival in a passage or section of a composition.

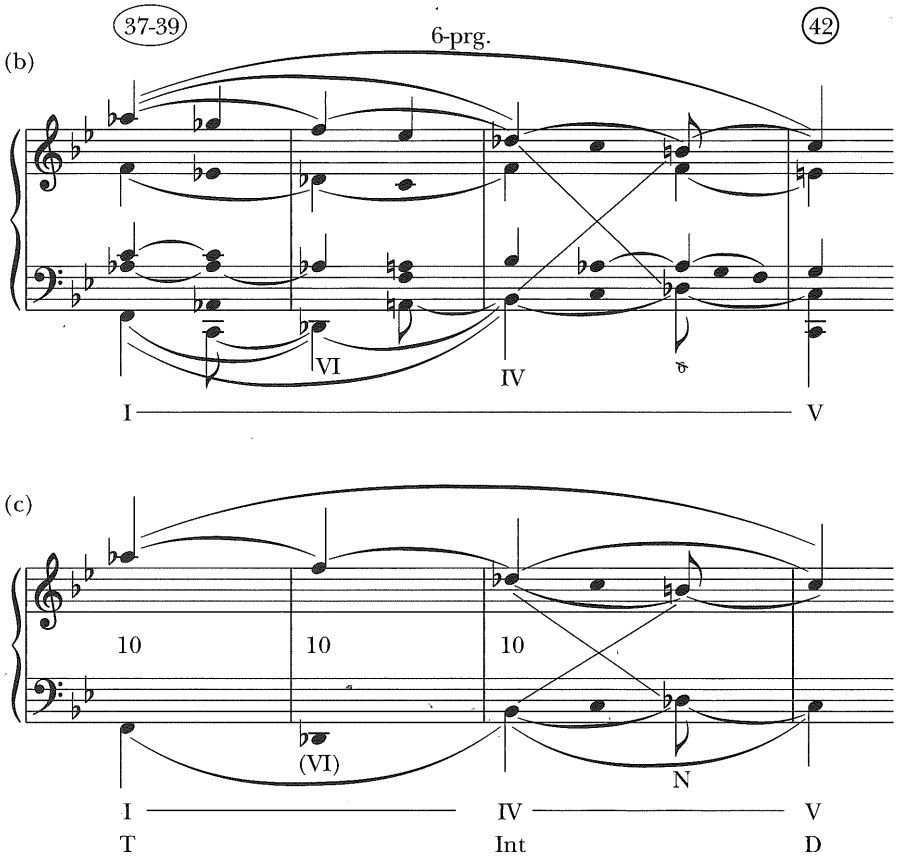
Example 6.9

(a) Haydn, String Quartet, Op. 64, No. 3, I, bars 37–42; (b) foreground reduction; (c) middleground reduction

(a)



Example 6.9 *continued*



Shift of Register

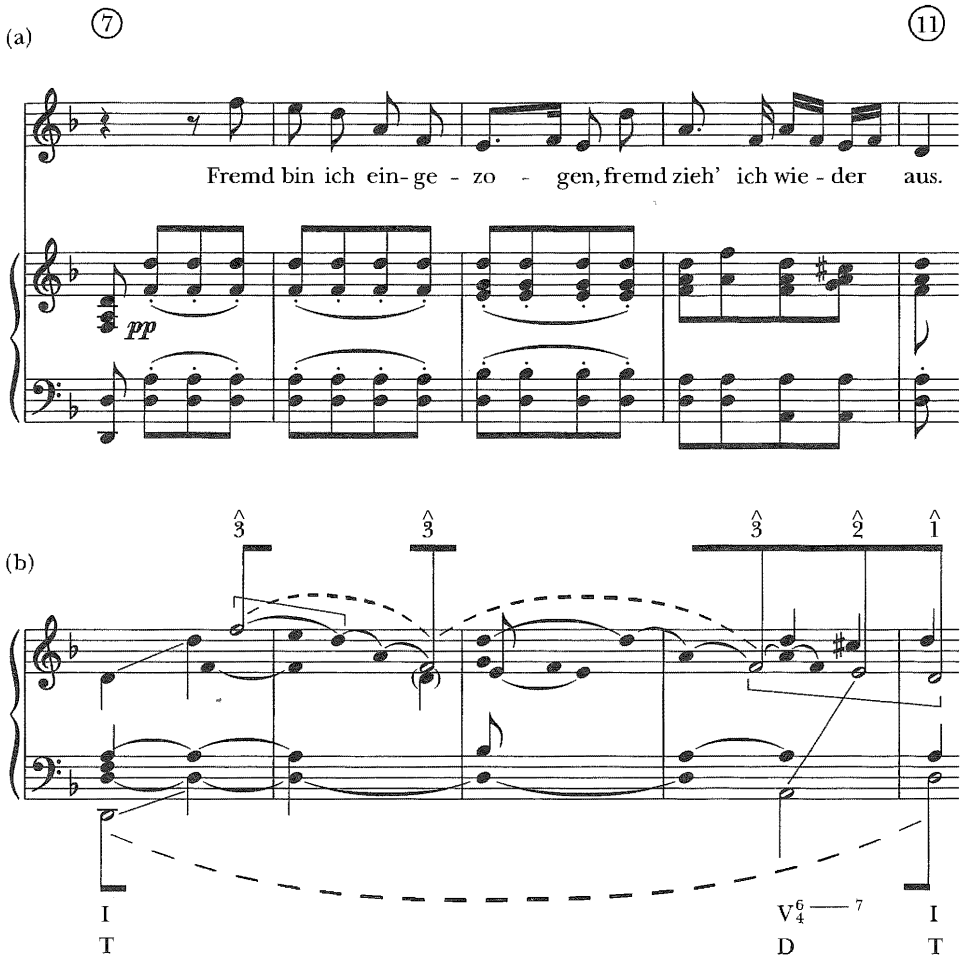
Some of the most common elaborations and transformations of a structural line involve motion to a higher or a lower register. This can occur in various ways, among which are octave displacement, the inversion of an interval (such as the inversion of a falling second to a rising seventh), or a change in the relative position of two voices. We now consider several techniques that involve such shifts of register.

Descending and Ascending Register Transfer

Example 6.10 presents bars 7–11 of Schubert's song "Gute Nacht" from *Winterreise.* You will notice that the vocal melody is represented as the principal top-voice line: in listening to an accompanied song, our attention is usually given primarily

Example 6.10

(a) Schubert, "Gute Nacht" (No. 1 from *Winterreise*, Op. 89), bars 7–11; (b) foreground reduction



to the vocal melody. As a rule, therefore, the vocal line will be heard as the principal melody, even if the accompaniment lies in a higher register than the voice.

The vocal line in Example 6.10 begins in the two-line register (on f^2), then descends an octave through a combination of stepwise and arpeggiated motion before pausing briefly on e^1 in bar 9 (a ninth below the starting note f^2).[8] The second subphrase returns to d^2 (which has been sustained in the piano accompaniment), initiating another arpeggiation that leads again to f^1 and, finally, to d^1 in bar 11. A change of register that is accomplished by a descent through an octave, as in the descents from f^2 to f^1 in this example, is called a *descending register transfer.*

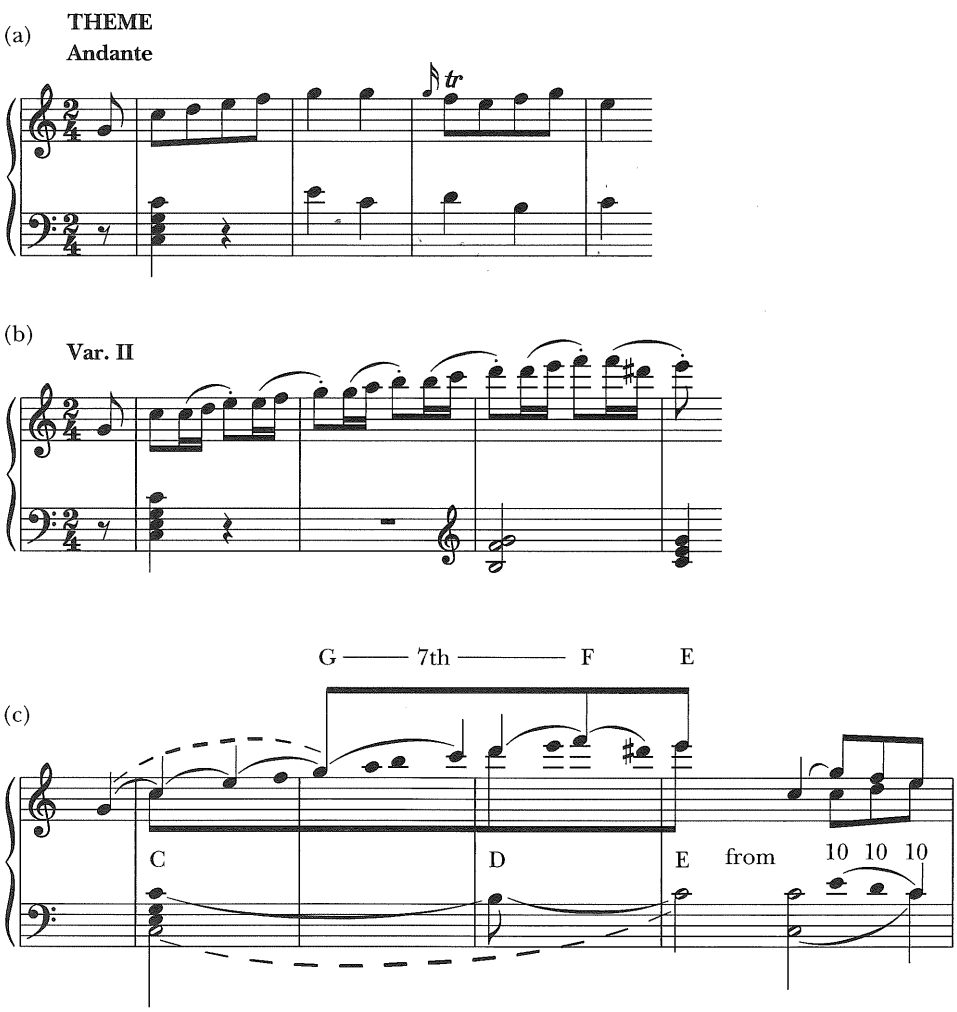
The play of register in this passage gives the melody much of its character: the principal line F–E–F–E–D is elaborated by means of registral shifts, which are in turn composed out through a combination of arpeggiated and stepwise motion. The association of the two registers is reinforced by the motivic association

between the notes F–E–D in bars 7–8 (bracketed in the example) and the more expanded descent through these tones in the lower register at the cadence (bars 10–11). The connection of the two registers is also prepared by the ascending leap from d^1 to d^2 in the piano (bar 7). Thus a register transfer may occur by means of a single leap through an interval (like the ascending octave in bar 7), or it may involve an elaborated motion through an interval (as with the arpeggiations in the vocal melody in this example). Although Schenker describes motions through the interval of an octave as the basis of the concept of register transfer, the technique is not limited to this interval alone, as the next examples will demonstrate.[9]

The technique of register transfer is frequently associated with the inversion of an interval. In Example 6.11, compare the opening of the theme of Mozart's

Example 6.11

Mozart, Variations on "Lison dormait": (a) Theme, bars 1–4; (b) Variation 2, bars 1–4; (c) foreground reduction



Variations on "Lison dormait" with bars 1–4 of the second variation. The theme begins with a rise to the tone g^2, followed by an elaborated descending third to e^2 (g^2–f^2–e^2). In the variation the descending second from g^2 to f^2 is inverted to a rising seventh (g^2–f^3), which is filled in with passing tones.[10] The original descent then concludes with the arrival on e^3 in the newly gained register.

The examples we have seen so far illustrate what Schenker calls a "direct" transfer of register, expressed either as an unfilled leap, or composed-out through figuration (arpeggiation, passing tones, and so forth).[11] Schenker discusses a second type of register transfer that is "indirect," occurring over a longer span of time with intervening motions. We shall see examples of more extended uses of direct and indirect register transfers later in this book.

Coupling

The technique of register transfer often involves a linear progression connecting two different registers. In Example 6.11, Mozart transforms the line g^2–f^2–e^2 into g^2–f^3–e^3 (the initial interval of a second becomes a seventh), a process that activates two registers in the musical texture. The next technique that we shall consider, *coupling,* is related to register transfer, but is generally associated with the interval of the octave.

Coupling occurs when a single pitch, such as the primary tone of the *Urlinie,* is transferred between different registers an octave apart. The transfer of register in coupling usually occurs more than once, and embraces connective motions within the octave transfers. This process consequently establishes an *alternation* of registers: one becomes "primary," the other plays a supportive role (Schenker referred to the latter as the reinforcing, "coupled" octave). This technique, therefore, differs from "simple" register transfer in that it utilizes differentiation of register in a more structural manner. It may occur on various levels, and sometimes forms an essential aspect of the compositional plan for an entire work.

Portions of the Alla Turca movement from Mozart's Piano Sonata, K. 331, are shown in Example 6.12a. As may be readily observed in the music and the graph, the movement begins with an arpeggiation from c^2 to c^3 over tonic harmony. (The initial motion on the upbeat is a consonant skip that decorates c^2.) Scale degree $\hat{2}$ over V follows in bar 5, and the phrase concludes with closure in the dominant; notice the fifth-progression from b^2 to e^2 ($\hat{5}$–$\hat{1}$ in E minor) that helps to establish the tonicized dominant region. In the concluding parallel phrase (bars 16–24), the coupling involves the transference of the primary tone twice between two registers: c^2 leads to c^3 (bar 20), followed by a return to c^2 (bar 23). Melodic closure for this section of the piece (b^1–a^1) occurs in the lower register before the double bar.[12]

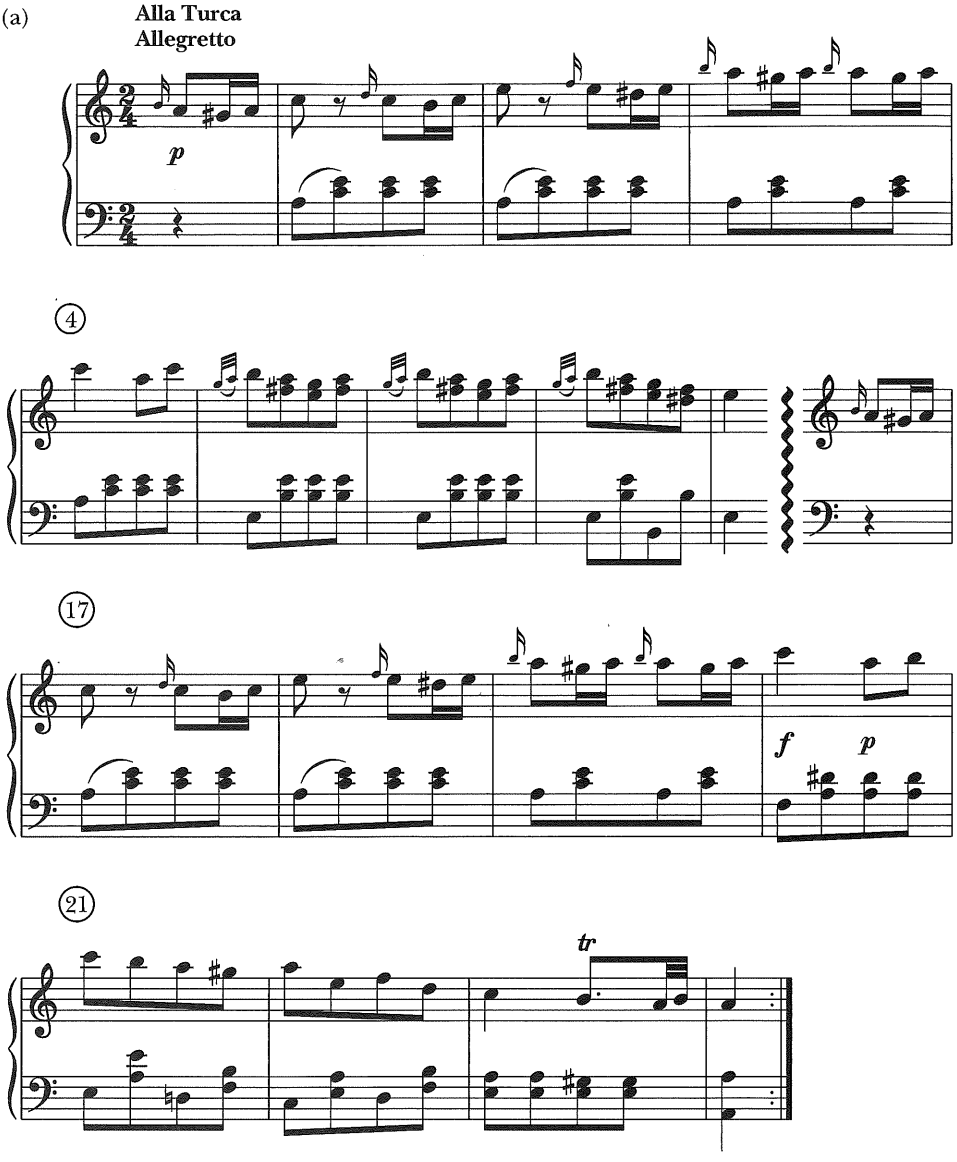
As we have seen, the purpose of a coupling is to connect two registers. Bear in mind, however, that this technique necessarily involves a composing-out of the connective passage, and that a fleeting association between octaves does not represent a coupling.

In the Mozart the juxtaposition of the two registers becomes a significant aspect of the composition. The arpeggiated ascent to the higher register in bars 1–4 opens a registral space (or span) in which the connective motions occur

Example 6.12

(a) Mozart, Piano Sonata, K. 331, III, bars 1–8 and 17–24; (b) middleground reduction

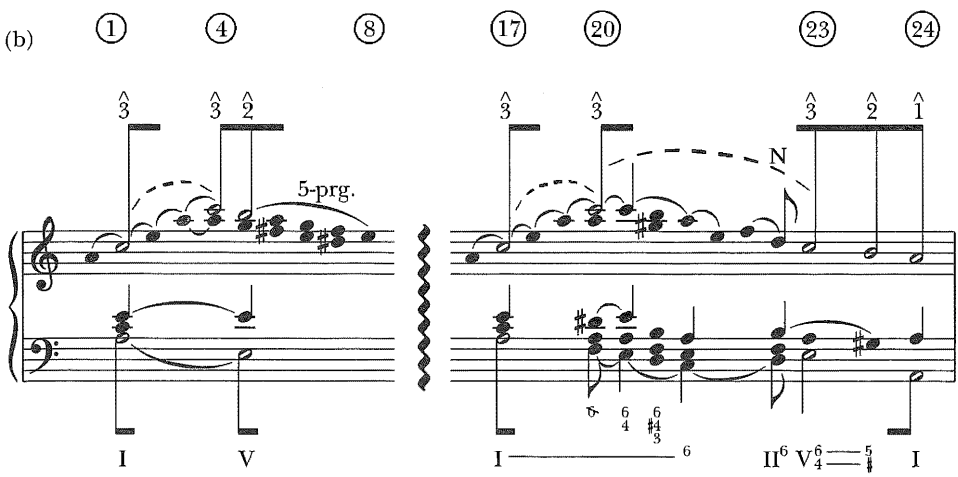
(a)



throughout the passage. In addition, the return to the initial register in bars 22–24 provides a sense of completeness and closure, because this section ends in the same register in which it began.

Schenker believed that, although a structural line may be disposed in different registers, a single register will usually be primary. He called this primary structural register the *obligatory register* (*obligate Lage*). In Example 6.12b, the upper voice concludes in the lower register, which emerges as primary.

Example 6.12 *continued*



Superposition

Another compositional technique that incorporates elaboration and transformation of a structural line through transfer of register is *superposition,* in which one or more inner-voice tones are shifted above the principal top-voice line.[13]

The opening of Mozart's Piano Sonata, K.332, is presented in Example 6.13. The right-hand melody unfolds with remarkable freedom, soaring upward in register in bars 3–4, only to return through a series of leaps in bars 5–7. This ascending and descending motion is then echoed in the final bars of the phrase. Also notice that the texture changes frequently in these opening bars, creating a quasi-orchestral quality that enhances the dramatic effectiveness of the passage.

The right hand begins (bars 1–2) by arpeggiating the tonic triad, F–A–C, which is answered in bars 3–4 with the motion B♭–G–E (notice the change of direction in this arpeggiation!). Example 6.13c simplifies the register and reveals a series of *unfolded* harmonic intervals: F/C, B♭/E, F/A; the "main" notes of this series form the third-progression C–B♭–A (Example 6.13c). Because of the interplay of register, however, the *inner-voice* tones E and F (circled on the graph) appear in the higher register; they are *superposed* above the guiding third-progression C–B♭–A in this polyphonic texture. Notice also that the final unfolded interval is expressed as f^2 *down* to a^1, a motion that reestablishes the original register and completes the third-progression C–B♭–A (Example 6.13c).[14]

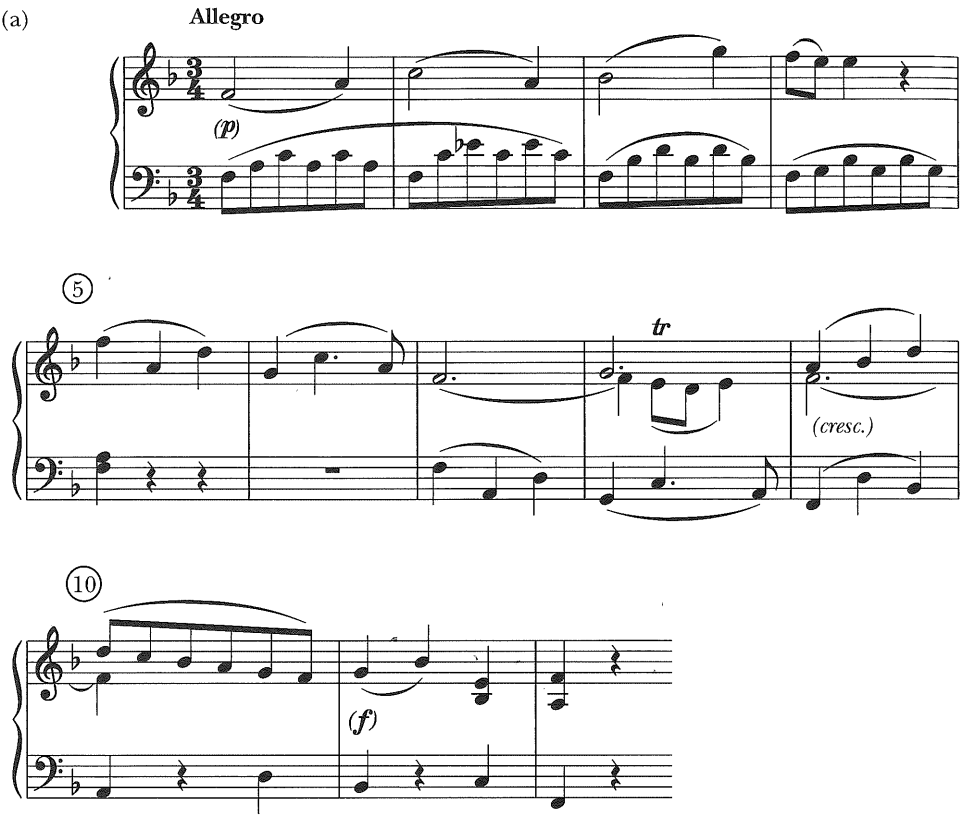
Reaching Over

Reaching over (*Uebergreifen*) is related to superposition, in that it involves, in a general sense, the transfer of inner-voice tones to a higher position. You might also think of it as a technique by which a *descending* tone succession decorates and prolongs a single tone or expands a broader *upward* motion, such as an

Example 6.13

(a) Mozart, Piano Sonata, K. 332, I, bars 1–12; (b) foreground reduction; (c) unfolded harmonic intervals

(a)

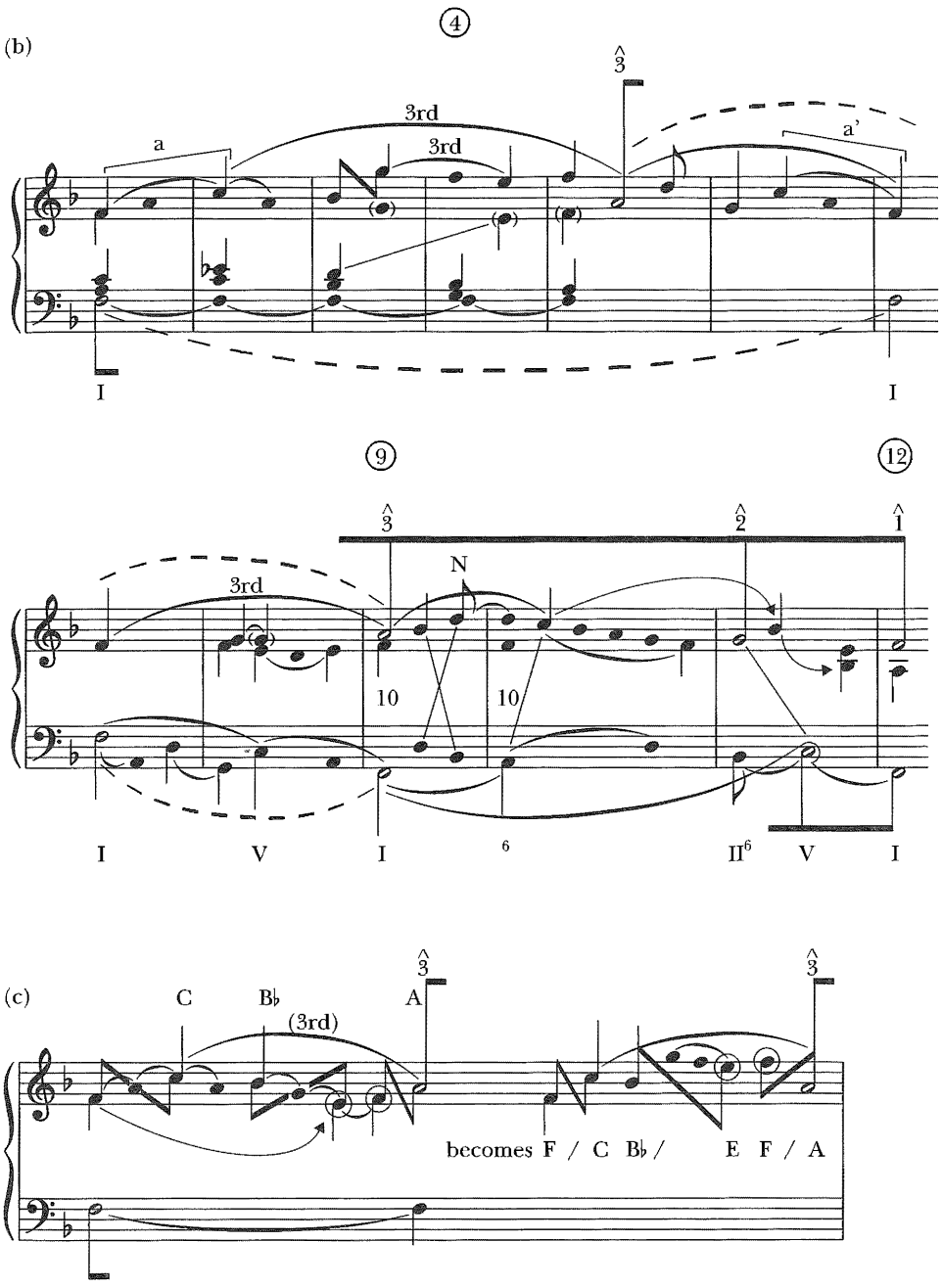


arpeggiation, an upper neighbor figure, or a rising linear progression. Example 6.14 presents bars 18–28 and two reductions from the second movement of Schubert's Piano Sonata in B♭ major (1828).

The harmonic context of the passage (in the local key of E major) consists of a prolonged tonic—over a pedal—followed by a brief prolongation of the dominant. The elaborations of the upper voice can be considered in three parts (Example 6.14b). In bars 18–21 G♯ moves down to F♯, after which the line "reaches over" to A, the upper neighbor to the local primary tone G♯ in bar 21 (the A is an incomplete neighbor at the surface and a complete neighbor at the foreground).

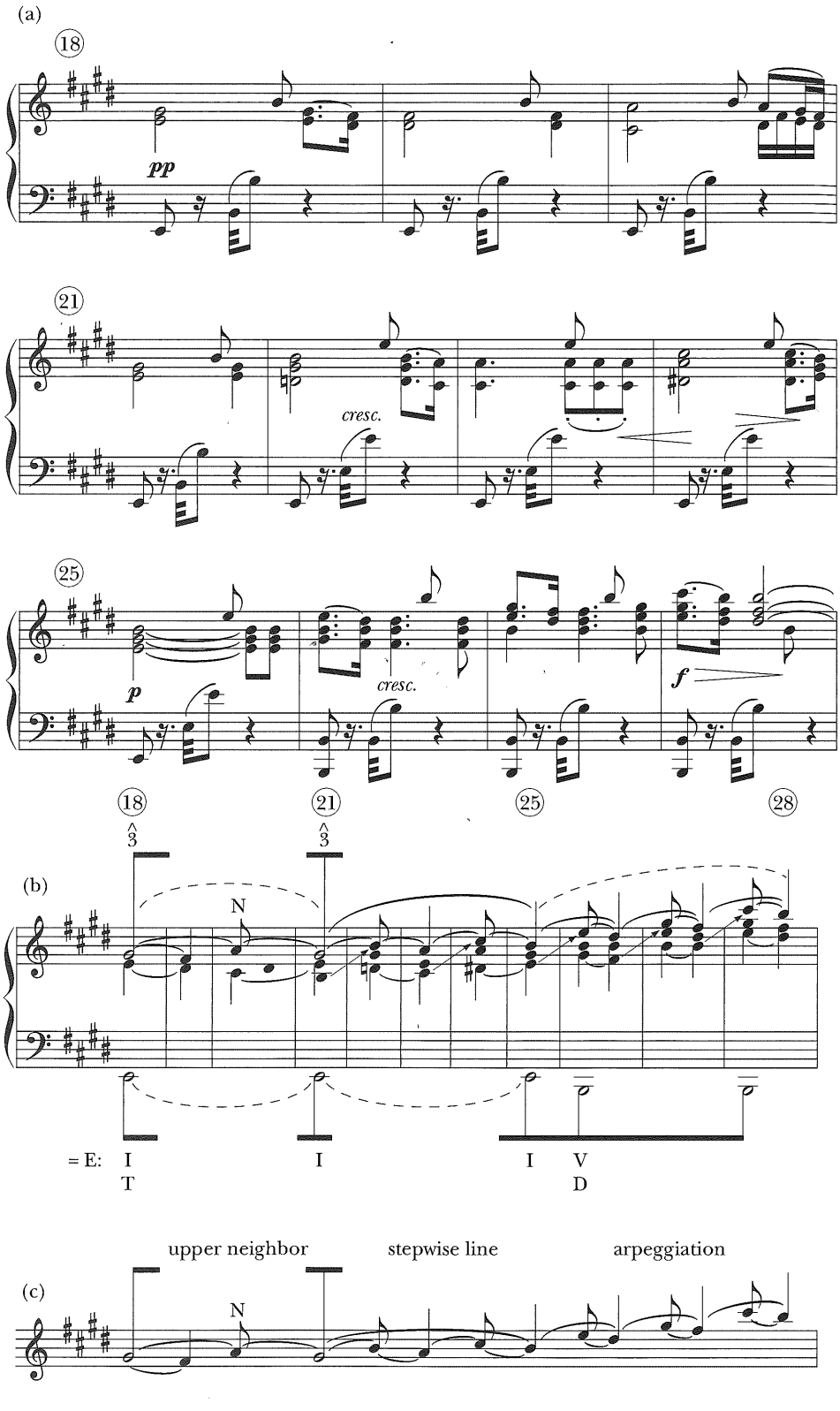
The upper voice in bars 21–25 exhibits a different elaboration, the characteristic "up a third, down a step" motion that here decorates the underlying stepwise line G♯–A–B; notice that the top tones of the reaching-over figures are tones superposed from an inner voice (indicated by the arrows). In the final segment (bars 25–28) the underlying line consists of an arpeggiation through the tones of the underlying V. The top notes of the reaching-over figures are either common

Example 6.13 *continued*



Example 6.14

(a) Schubert, Piano Sonata in B♭ major (1828), II, bars 17–28; (b) foreground reduction; (c) surface figures



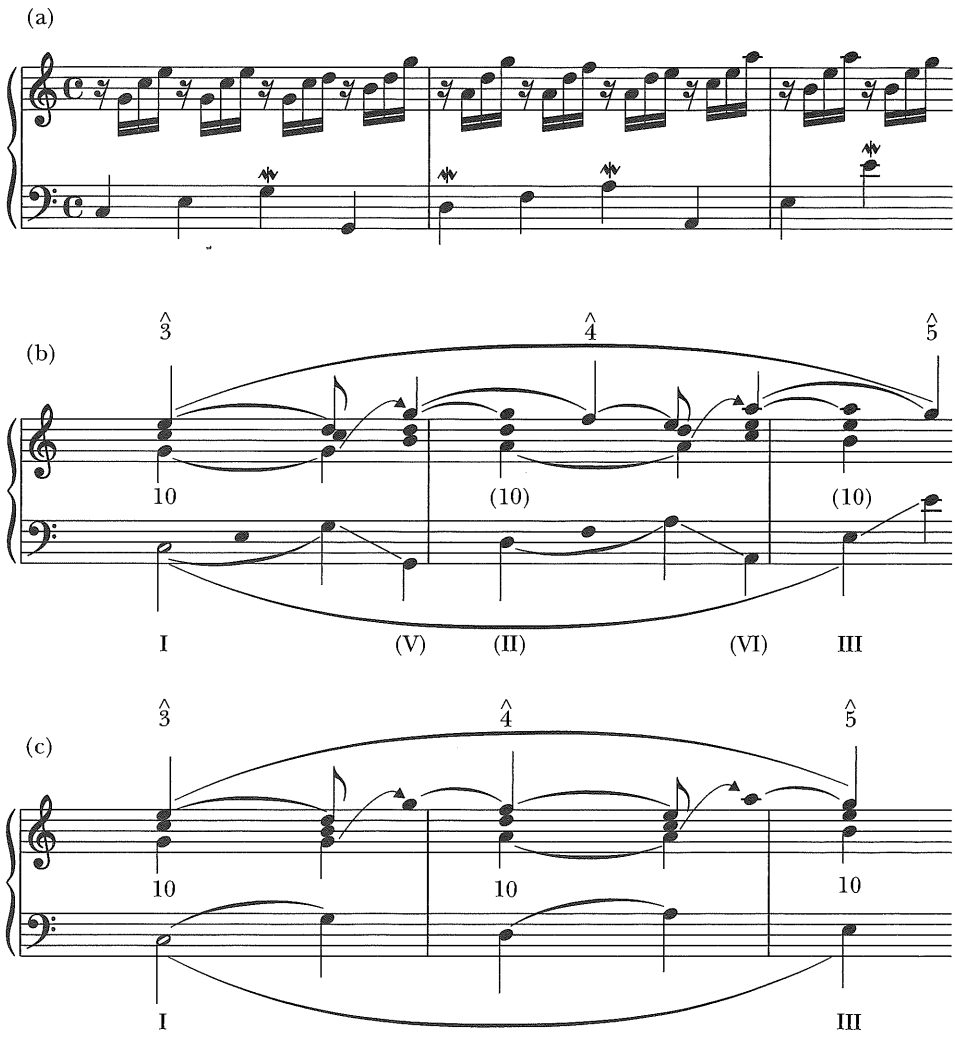
tones (from the previous chords) or neighbor notes transferred to the higher register through superposition. Example 6.14c summarizes the melodic figures.

A more complex instance of reaching over appears in the opening of Bach's Little Prelude in C major, from the Wilhelm Friedemann Bach *Klavierbüchlein* (Example 6.15). In the ascending-fifth sequence of bars 1–3, the chords are grouped in pairs: I–V, II–VI. The broader motion of the sequence is from I to III. The chords on the downbeats support a series of parallel tenths between the outer voices: E–F–G in the upper voice over C–D–E in the bass.

The chords on the downbeats unquestionably would not appear in direct succession, because of the resulting octaves and fifths. The intervening chords prevent the faulty voice leading, and also allow the tones of the main line (E–F–G) to be decorated from above. In this process the top voice falls a step before leaping to the higher position (in bar 1, E down to D, then up to G). As

Example 6.15

(a) J. S. Bach, Little Prelude in C major, BWV 924, bars 1–3; (b) and (c) foreground reductions



indicated in Example 6.15c, the leaps in bars 1 and 2 result from the transfer of inner-voice tones to a higher register (through ascending register transfer); these tones then move down by step to the next tone of the underlying ascending line. Example 6.15b indicates the further embellishment of the reaching-over motions through suspensions on the downbeats of bars 2 and 3.[15]

The technique of reaching over involves various forms and melodic patterns. Our examples show one type in which an inner-voice tone reaches over the top voice and then moves down by step. Sometimes, however, the *top* note is the main tone. Hence it is useful to consider a more general description that accounts for many of the forms in which this technique may appear. In an editorial commentary in the English translation of *Free Composition,* Ernst Oster writes that *Uebergreifen* "means literally reaching over, or across the top voice, in order to get hold of the following higher tone."[16] In general, reaching over is a means of elaborating a broader rising motion through a melodic pattern involving an upward leap followed by a descending step.

Example 6.16 presents representative reaching-over figures. Example 6.16b shows a situation in which only a single reaching over occurs. In some cases, the reaching-over motion returns to the initial tone (Examples 6.16a, f, and g). The patterns in Examples 6.16d and e are similar. Whether the first or second tone of a two-note pattern is considered the "main" tone depends on harmonic and other contextual features.

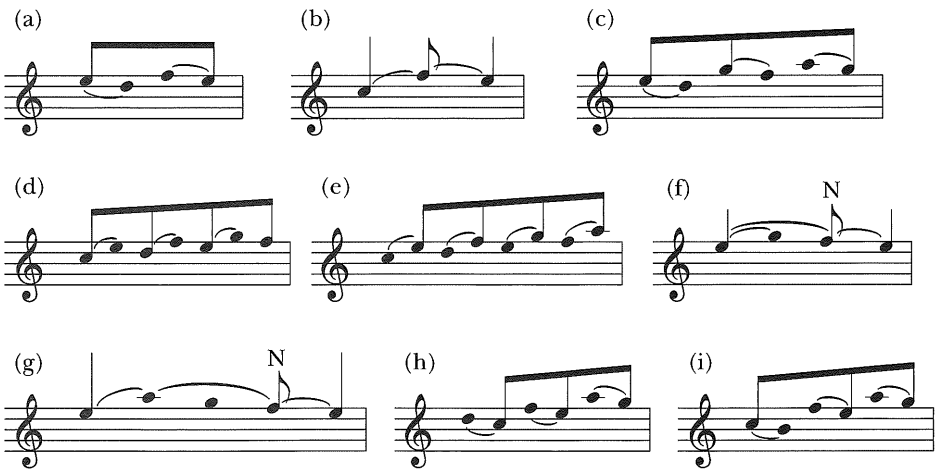
Cover Tone

A *cover tone* is an inner-voice tone which is superposed above the principal top-voice line; it remains for a period of time, in the manner of a *discant* tone.

The final bars of Schubert's Moment Musical, Op. 94, No. 2, are presented in Example 6.17. This section follows the final cadence and the arrival of the

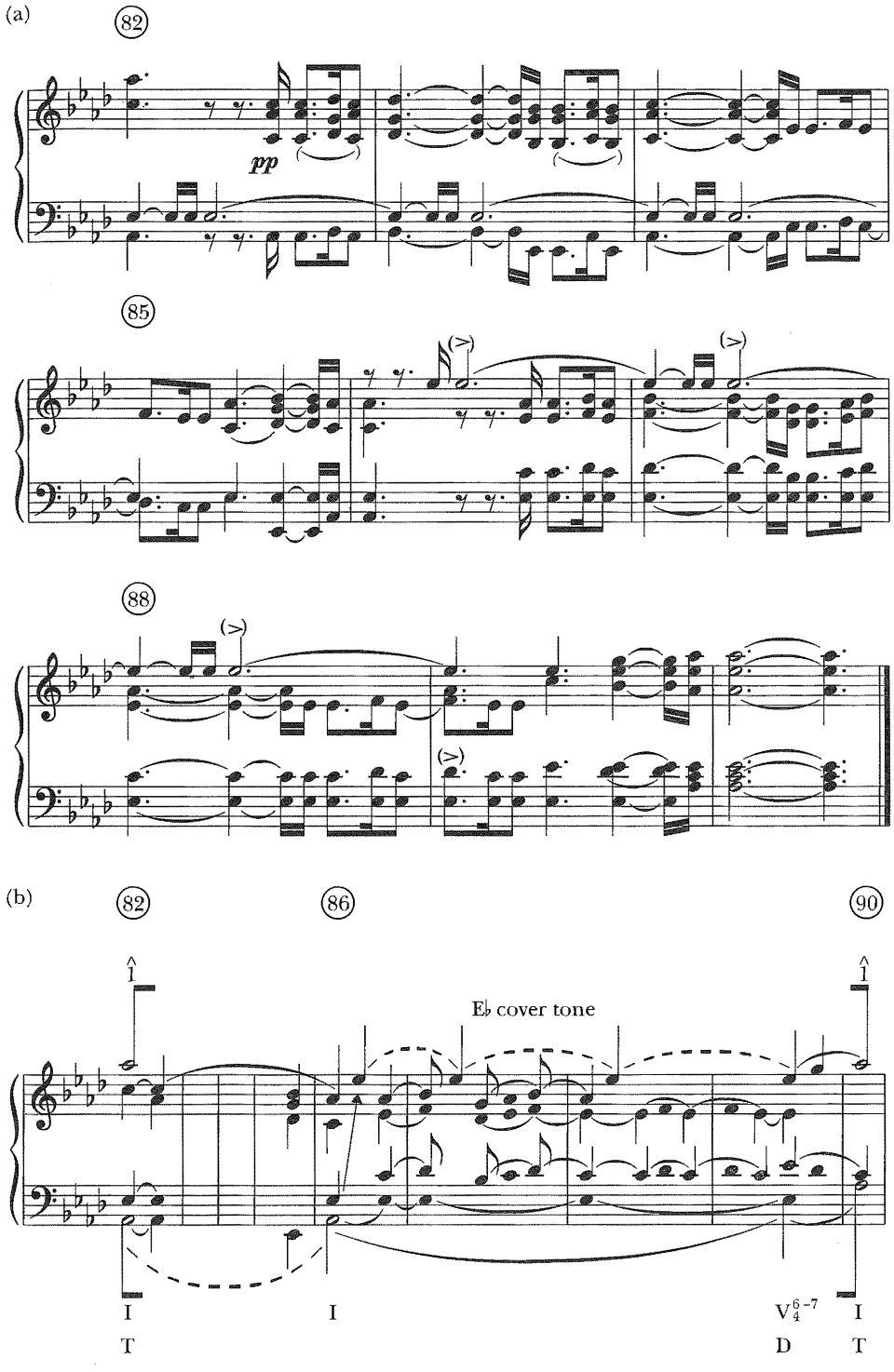
Example 6.16

Reaching-over figures



Example 6.17

(a) Schubert, Moment Musical, Op. 94, No. 2, bars 82–90; (b) foreground reduction



Urlinie on $\hat{1}$ (bar 82), and serves as a coda for the work. Bars 82–85 recall the opening theme, and return to $\hat{1}$ over I in bar 86. At this point the inner-voice tone E♭, which has been prominent throughout the piece, shifts above the top-voice A♭. The E♭—a cover tone—then remains poised in the higher register, struck occasionally like a bell, while more active voice leading continues underneath. Despite its relative independence, a cover tone will often be related to other aspects of the voice leading: notice, for example, that the final statement of $\hat{1}$, now in the two-line octave ($a^{\flat 2}$), is attained through an arpeggiation from the cover tone (bars 89–90).

Substitution

Composers frequently choose (for reasons pertaining to variety or voice leading) to substitute one tone for another that would normally be expected in a given context. This technique, called *substitution,* occurs in situations where the absent tone is clearly implied by the imaginary continuo.

Example 6.18a is a passage from a string quartet by Haydn. In the cadence which concludes the passage, the resolution of the cadential $\frac{6}{4}$ chord in bar 88 is delayed by the cadenzalike figuration in the first violin. After it reaches the final note of this cadenza passage (e^4 in bar 90), the first violin makes an astonishing leap downward to b^1 (over V^7) followed by c^2 (over I, bar 91).

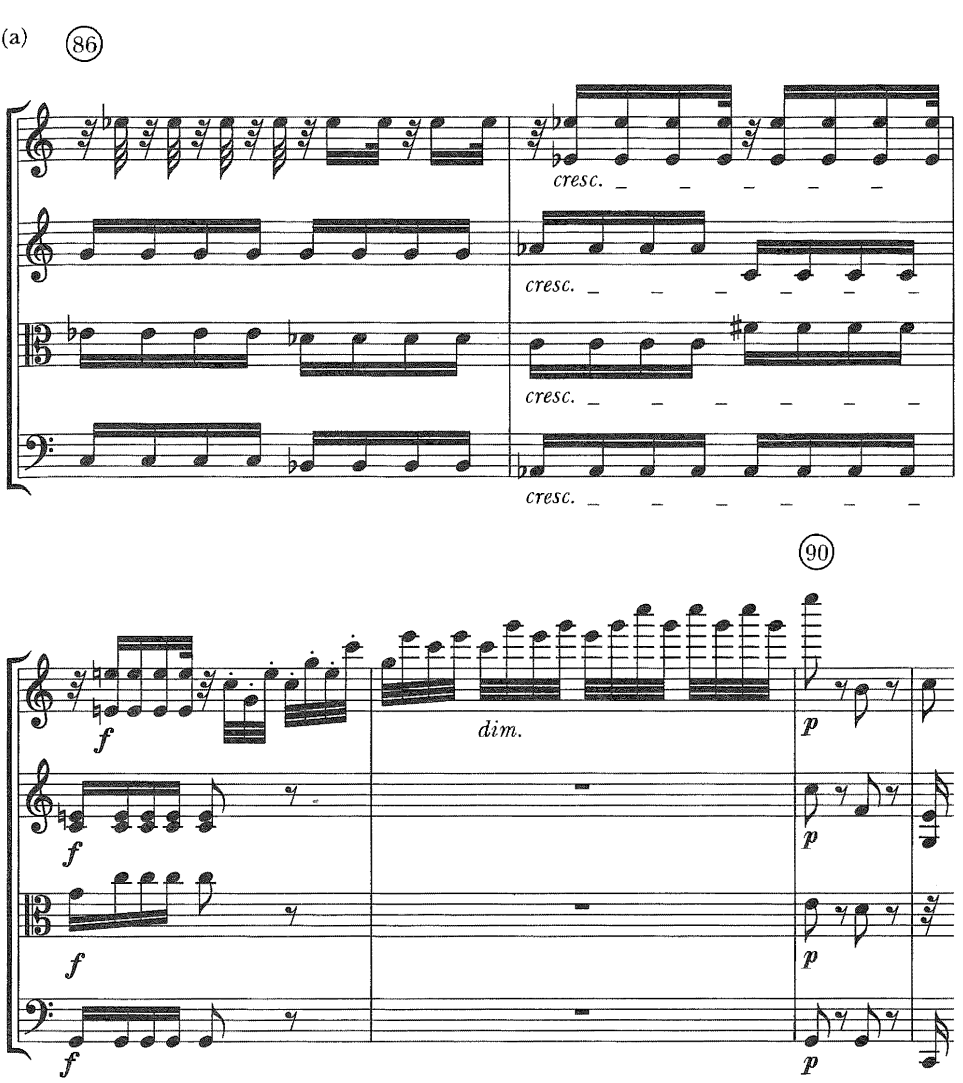
Example 6.18b illustrates the voice leading that forms the basis of this passage. Just as the high register of e^4 is left unresolved (in this passage), the tone D—which would typically follow E in the resolution of the cadential $\frac{6}{4}$—does not appear in the first violin part. Instead, the inner-voice tone B ($\hat{7}$) appears, enhancing the dramatic quality of the passage at this point. The "detour" does not nullify the descending nature of the line; the leading tone simply *substitutes* for scale degree $\hat{2}$, which is shown in parentheses to indicate both its role in the descent and its literal absence from the violin line. Note that the tone D does appear an octave lower in the viola part, in the tenor register, in Example 6.18a; when a substitution occurs, the absent tone will frequently appear in another voice. Bear in mind that the implied tone and the tone literally stated normally belong to the same chord. Thus thinking in terms of the imaginary continuo can help you to recognize tones that are expected, but not literally stated.[17]

In Haydn's passage, scale degree $\hat{2}$ does not literally appear in the upper voice, but is represented implicitly by the leading tone. A related pattern, shown in Example 6.18c, also occurs frequently in tonal compositions. Following $\hat{3}$, scale degree $\hat{2}$ appears over intermediate harmony and then moves to $\hat{7}$ over V. In Chapter 2 we observed that in two-part, first species counterpoint, the measure before the final tonic contains both scale degrees $\hat{2}$ and $\hat{7}$. Because of their stepwise relationship to the tonic, these are the tones with the greatest melodic tendency to move to and therefore establish the tonic. In free composition, $\hat{2}$ and $\hat{7}$ are often combined into a characteristic harmonic idiom. Scale degree $\hat{2}$ belongs to the intermediate supertonic harmonies: II, II^6, and II^6_5; *both* scale degrees $\hat{2}$ and $\hat{7}$ belong to V and V^7. Hence the harmonic progression from II to V allows both leading tones to occur at a half or authentic cadence. You can see in

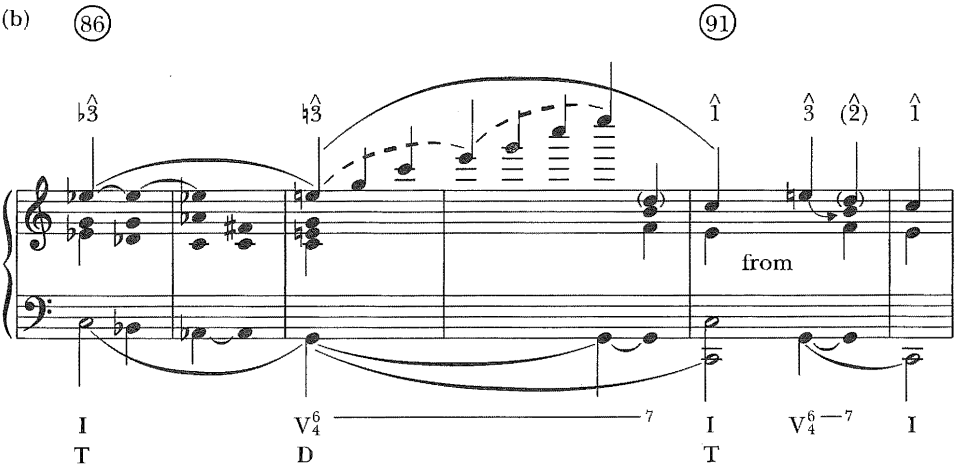
Example 6.18

(a) Haydn, String Quartet, Op. 76, No. 1, II, bars 86–91; (b) foreground reduction; (c) substitution of $\hat{7}$ for $\hat{2}$

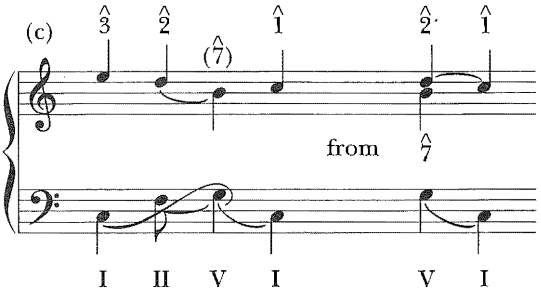
(a)



(b)



Example 6.18 *continued*



Example 6.18c that the succession $\hat{2}$–$\hat{7}$ represents motion into an inner voice, with the leading tone substituting for $\hat{2}$ (over V).

The Phrygian $\hat{2}$

The use of chromatic tones—whether through modal mixture or other types of chromaticism—for melodic prolongation is a multifaceted subject. One chromatic chord with particular importance for voice leading on higher levels of structure is primarily associated with the minor mode: the Neapolitan sixth chord, which contains $\flat\hat{2}$ (or *Phrygian* $\hat{2}$). (This chord is also known as the *Phrygian II* chord, because of the association of $\flat\hat{2}$ with the Phrygian mode.) This chord will serve as a representative example of the replacement of a diatonic scale degree with a chromatically altered form of the same scale degree, a frequent compositional technique.[18]

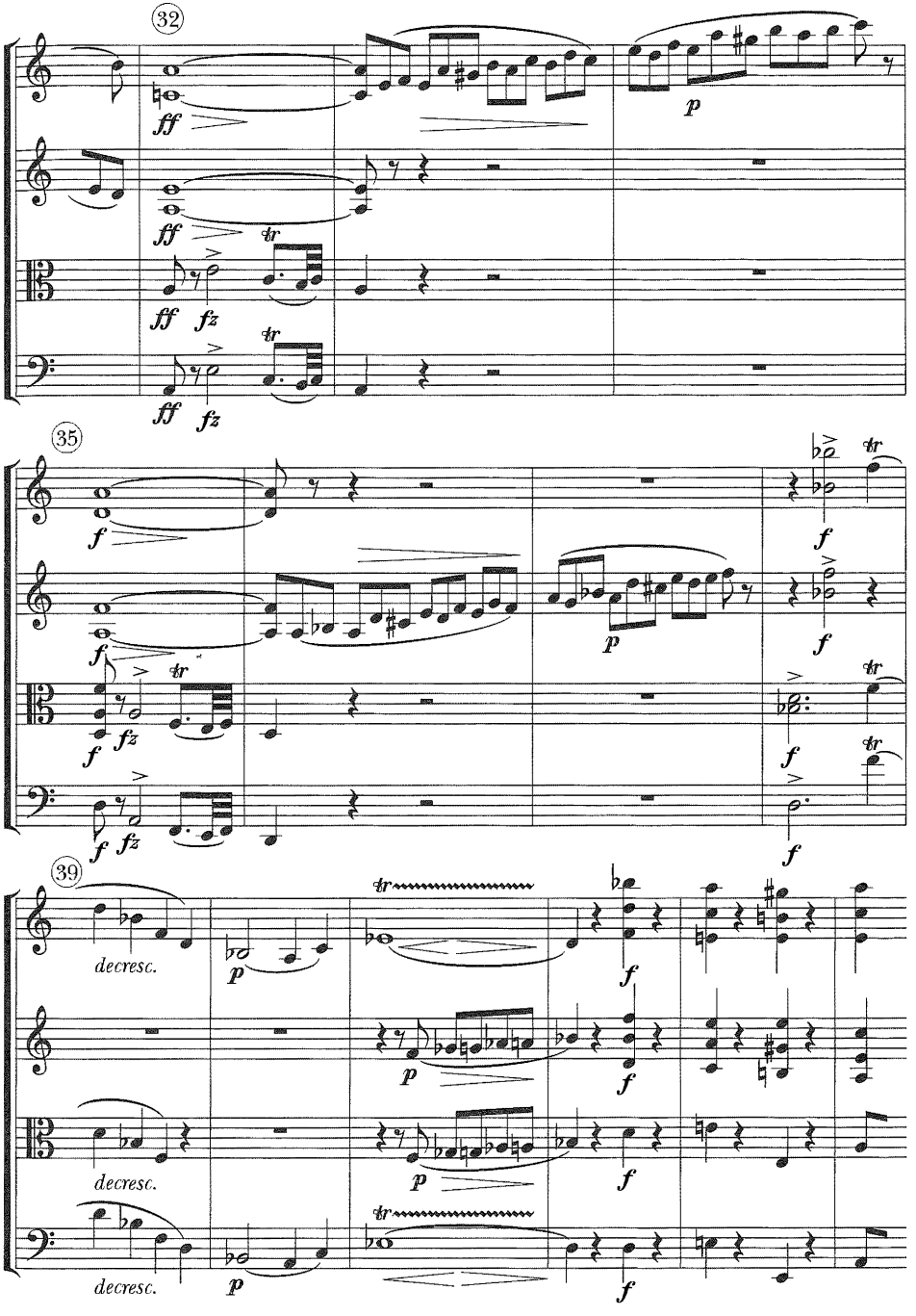
The Neapolitan sixth is an expressive sonority that has many compositional uses. It often sounds unexpected and—despite its major quality—can sound strikingly dark and somber, particularly in the minor mode. An altered form of II^6 (which sometimes appears in $^5_3$ or $^6_4$ position), it frequently occurs as an intensifying element in cadences. One of its voice-leading characteristics is the tendency of $\flat\hat{2}$ to descend a diminished third to the leading tone, and not to ascend directly to the diatonic form of $\hat{2}$ (a direct chromatic succession that tends to sound awkward).

Example 6.19a shows bars 32–44 from Schubert's String Quartet in A minor, Op. 29. From the beginning of the movement Schubert writes two phrases (not shown), each of which concludes with intensified half cadences, leaving the listener expecting closure at a local level. Finally, in bars 31–32, he fulfills the expectation in the third phrase (and at a local level) with a perfect authentic cadence. Our discussion focuses on the passage that confirms $\hat{1}$ over I.

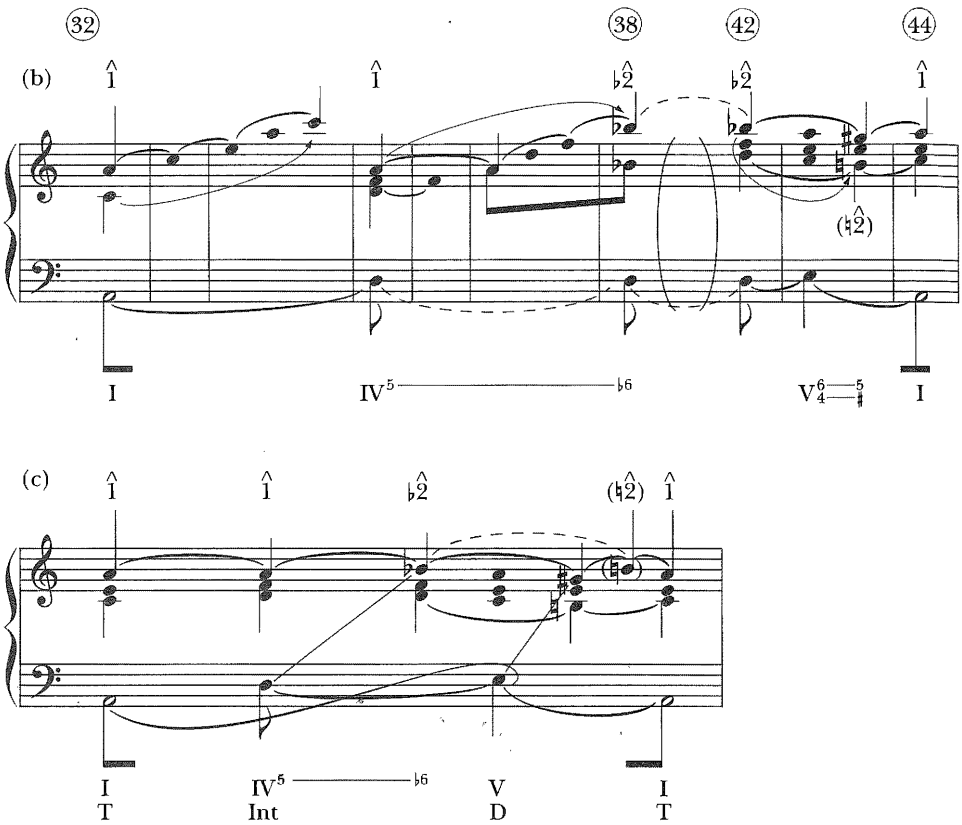
The reductions at (b) and (c) show a motion from I to IV, the intermediate harmony of the T–Int–D–T structure. Notice that IV is transformed into a Neapolitan sixth chord (bar 38) through a 5–$\flat$6 shift; in many cases the

Example 6.19

(a) Schubert, String Quartet in A minor, Op. 29; (b) foreground reduction; (c) middleground and imaginary continuo reduction



Example 6.19 *continued*



Neapolitan sixth develops in a manner similar to the transformation of IV into II^6 (through a diatonic 5–6 motion). This moment in bar 38 is striking not only because of the sound of the B♭-major triad in the minor context, but also because B♭ occurs in the highest register attained in the piece thus far. Our analysis indicates a prolongation of the Neapolitan, the specifics of which are omitted for clarity (the parentheses in Example 6.19b indicate the omission).

Example 6.19b illustrates how the intermediate Neapolitan leads to V–I of the cadence. The goal of motion from B♭ ($\flat\hat{2}$) is the leading tone G♯; the diminished third is filled in with a passing tone A supported by the cadential $^6_4$. From the perspective of the foreground, the descent from B♭ represents motion into an inner voice, with $\hat{7}$ substituting for the natural form of $\hat{2}$. You should notice that B♮ occurs in the lowest part of the second violin (in essence, $\flat\hat{2}$ is "corrected" to $\natural\hat{2}$ over V). The other possibility is for $\natural\hat{2}$ to appear literally in the upper voice over V (usually after an intervening passing and other decorating motions).

The Neapolitan sixth may appear on any structural level, from the deep middleground to a foreground progression. Because it is an intermediate harmony, it is also possible for the chord to prepare the structural dominant of the *Ursatz*

and consequently to inflect $\hat{2}$ of the fundamental line (remember that II^6, the diatonic counterpart of the Neapolitan sixth, often supports structural $\hat{2}$ before V enters). In *Free Composition* Schenker clearly shows that he does not regard the Phrygian $\hat{2}$ (or other elements of mixture) to form an actual part of the fundamental structure, which is ultimately diatonic. Rather it enters (conceptually) as a transformation on the first level of the middleground. It will inevitably revert to the diatonic form of $\hat{2}$, which is the only possibility at the background level itself.

Mixture of Scale Degree $\hat{3}$

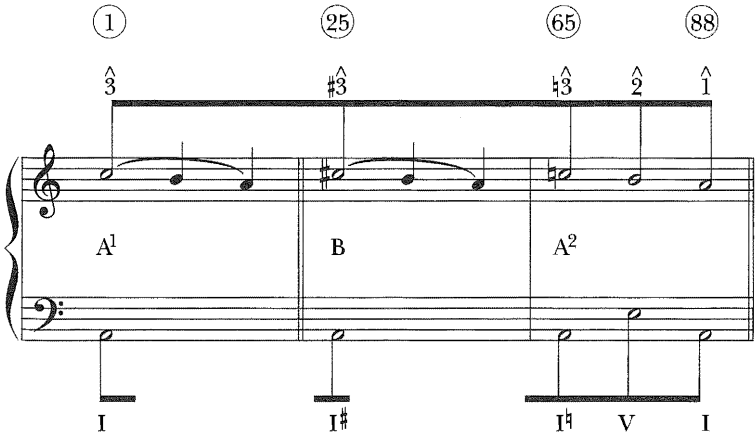
In addition to the Phrygian $\hat{2}$, another means of achieving chromaticism in the *Urlinie* occurs through *mixture of scale degree* $\hat{3}$. Example 6.20 presents a middleground diagram of the A^1–B–A^2 sections from the finale of Mozart's Piano Sonata, K. 331, discussed earlier (Example 6.12).

An important resource Mozart uses to create contrast and variety in this sectional movement is the contrast of mode (moving from A minor to A major), which temporarily inflects the primary tone $\hat{3}$ from C to C♯. In this case, the chromatic element occurs *at the first level of the middleground.* In *Free Composition,* Schenker comments on the form-producing effect of mixture, stating that it gives "form the opportunity to set off two or three sections against one another."[19] He further emphasizes that this technique does *not* represent a neighbor note to the primary tone.

Example 6.20 illustrates the raising of scale degree $\hat{3}$ in the minor mode; the reverse procedure, *lowering* the primary tone $\hat{3}$, may also occur in major-mode compositions. An example is Chopin's Mazurka in A♭ major, Op. 17, No. 3, which Schenker analyzes in *Free Composition.*[20] The B section of the Mazurka is in E major, an enharmonically respelled F♭ minor (VI in the home key). The primary

Example 6.20

Mozart, Piano Sonata, K. 331, III, bars 1–88: middleground reduction



tone C (in A♭ major) is inflected to B♮ (= C♭), which serves as $\hat{5}$ in the key of E major. The return to the tonic in the A^2 section restores the primary tone $\hat{3}$ to its natural form. As mentioned above, the chromatic element (in this case, C♭/B♮) is not a neighbor note, but a temporary replacement (inflection) of scale degree $\hat{3}$.

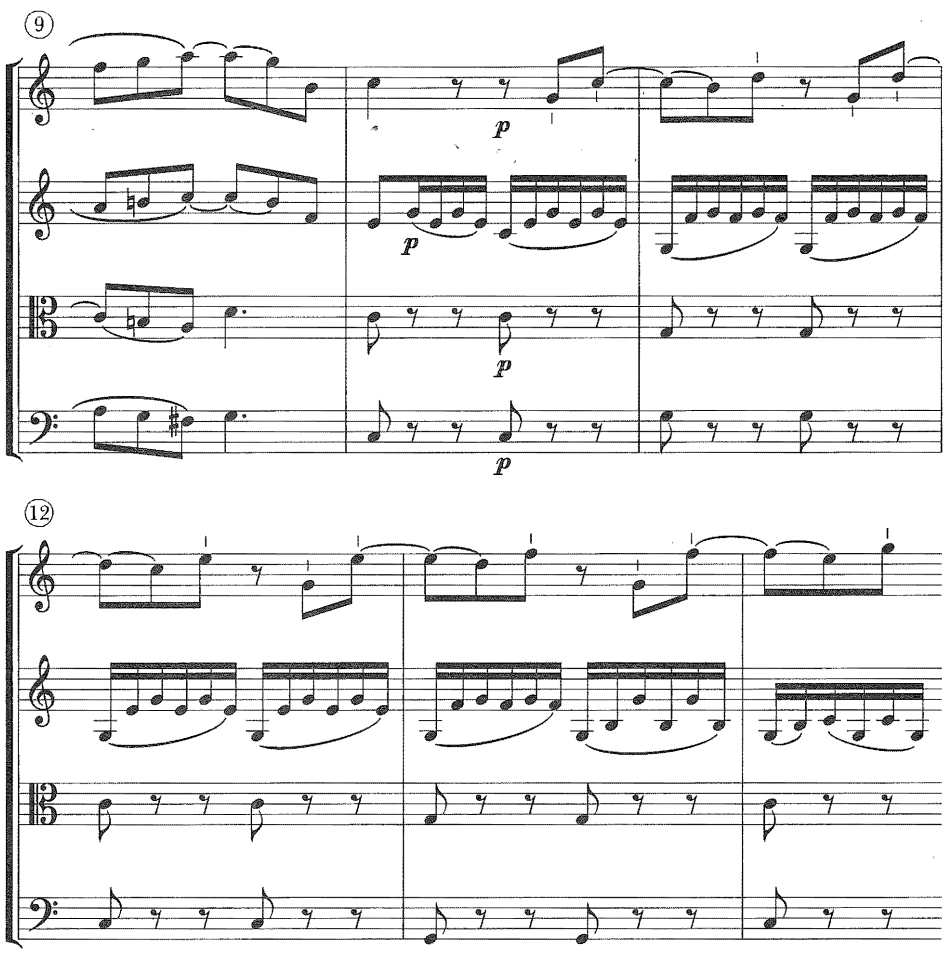
Techniques in Combination

We have examined the various techniques of melodic prolongation individually for purposes of explanation; but in actual compositions these techniques often appear in combination. Example 6.21a, from the second movement of Mozart's Piano Concerto in F major, K. 459, illustrates several melodic proce-

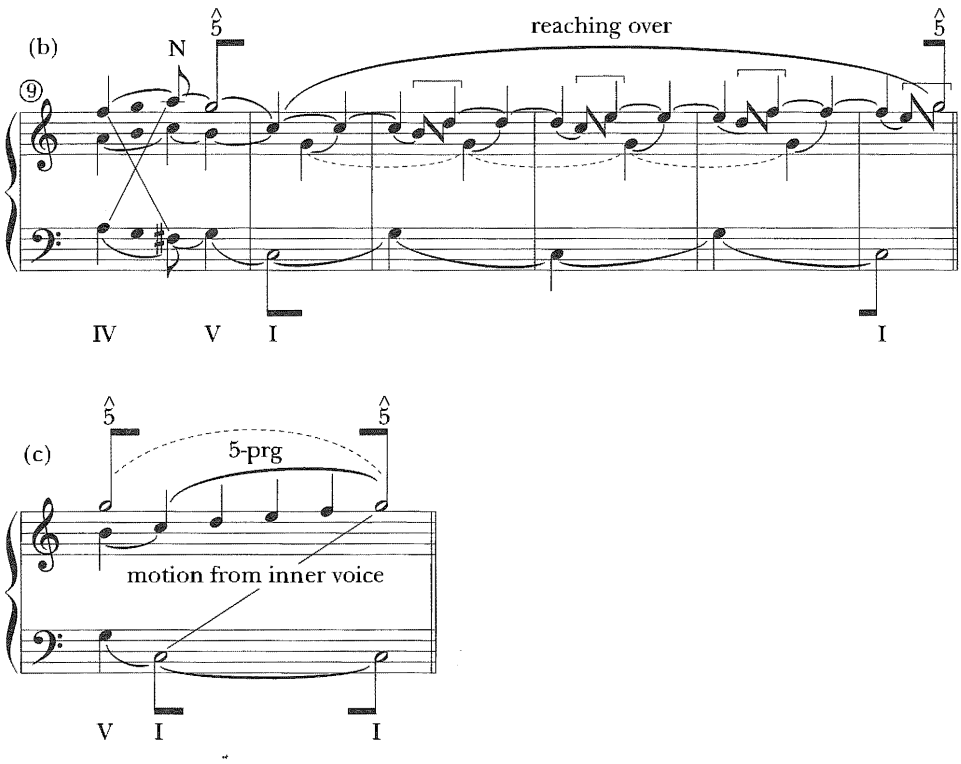
Example 6.21

(a) Mozart, Piano Concerto, K. 459, II, bars 9–14; (b–c) foreground reductions

(a)



Example 6.21 *continued*



dures working interactively (for context we include the bar immediately preceding the passage under consideration).

The first reduction indicates g^2 (scale degree $\hat{5}$) as the top-voice tone in bar 9. In the next measure, the upper voice descends to c^2 and begins an ascent that reestablishes g^2 (bar 14) through the technique of reaching over. The second reduction (Example 6.21c) reveals that the reaching-over patterns elaborate a rising fifth-progression—motion from an inner voice that leads back to the structural upper voice (Schenker's German term for this particular type of linear progression is *Untergreifzug*). This foreground line also connects two nonadjacent though related occurrences of g^2, a clear instance of a tone retained at a deeper structural level (indicated by the broken tie). Finally, notice that the reaching-over figures, the linear progression, and the retained tone are on different levels; interrelated melodic techniques frequently unify various structural levels in a tonal framework.

Exercises

For centuries composers and other musicians have copied scores, not only to obtain a personal copy, but also as a way of learning the music thoroughly. This

practice continued long after scores were commercially available. Similarly, Schenker would ask students to copy a graph so as to understand better both its notation and its meaning. It is an excellent way to improve both your understanding of graphs and your ability to create them.

Copy some or all of the graphs in this chapter. As you copy a foreground graph, consider (in the actual musical passages) how different composers realize the same technique in different ways. Finally, be prepared to discuss each graph in detail and the technique it illustrates.

Notes

1. Jonas, in Rothgeb translation, p. 41.
2. You may notice that our graph does not indicate the flute line, which leads to a higher register at the conclusion of the phrase, while the violins continue downward in the same register (bars 7–8). The motion of the flute to the higher register is an example of a variation in instrumental doubling at a moment of special importance (in this case, the cadence), rather than a true registral shift. And, in Classical orchestral music, the flute(s) often sound above the first violins even if the violins are carrying the principal upper voice.
3. Schenker also shows the unfolding of a *single* interval, but the important point to remember is that a change of direction is involved (for instance, C up to E down to C within a C major chord).
4. See *Free Composition*, Fig. 43 and ¶140–41 for illustrations of many other unfolding patterns. In its pure form unfolding involves leaps, as shown in Examples 6.4 and 6.5. These leaps, however, may be filled in at a later level, wholly or in part, by passing tones.
5. The interpolation of a tone before the resolution of a seventh is a common technique, closely related to the embellishment of the resolution of a suspension from fifth species counterpoint.
6. This technique should not be confused with an initial ascent, which leads only to the first tone of the *Urlinie*.
7. Here we see that the first chord of the voice exchange is primary, like the first two voice exchanges of the Beethoven example. The reason, in this particular instance, is that we regard the broader motion of the bass as $\hat{4}$ moving to $\hat{5}$ (IV–V), not flat $\hat{6}$ moving to $\hat{5}$.
8. When sung by a male voice, the vocal line will of course sound an octave lower than written. However, it will still be heard as the principal upper voice, regardless of the register in which it is sung.
9. *Free Composition*, p. 51, ¶147. See also Example 3.15 in Chapter 2, which provides a clear illustration of the principle opposite from that shown here, *ascending register transfer*.
10. The internal grouping of the passing tones is based on the harmonic support: G up to C is part of the tonic triad; D up to F is part of V^6_5. Always be thinking in terms of the imaginary continuo, which is actually quite explicit here.
11. *Free Composition*, p. 51, ¶149.
12. Scale degree $\hat{3}$ over a cadential $^6_4$ chord would often be interpreted as a passing tone rather than a structural return to $\hat{3}$. In this case, however, both the emphasis of C in bar 23 and the recurrence of the third motion (C–B–A) strongly suggest that C is associated with the earlier primary tone.
13. The term *superposition* is used in *Free Composition* to denote a specific form of reaching over (see below and Ernst Oster's amplification of reaching over on pages 48–49 of *Free Composition*). We use the term in a more general sense to mean the transfer of an inner-voice tone above the main top-voice line.

14. In this case, the octave shifts may also be related to ascending register transfers. Bear in mind that many of the techniques we have been describing incorporate transfer of register; consequently, two or more such related techniques may be relevant to a single example. While register transfers may involve any tone in any voice, superposition refers specifically to one or more inner-voice tones shifted above a structural top-voice line.
15. Thus, in this seemingly simple top-voice line, four different levels of structure may be discerned: (1) the principal motion E–F–G ($\hat{3}$–$\hat{4}$–$\hat{5}$); (2) the lower-neighbor tones D and E supported by the intervening chords of the sequence; (3) the reaching-over tones (g^2 and a^2); and (4) the suspensions on the downbeats of bars 2 and 3. Notice also that the tones g^2 and a^2 do not have stems in graph c, but do have stems in graph b to distinguish them from the nonharmonic suspensions.
16. *Free Composition*, p. 48.
17. The concept of *substitution* is crucial to a full understanding of voice leading in tonal fabrics. We recommend the article "On Implied Tones" by William Rothstein.
18. The name *Phrygian* does not mean that a passage incorporating the Neapolitan sixth is composed in the Phrygian mode. Rather, it refers to the presence of a tone—the lowered second scale degree—that is associated with the Phrygian mode. We will use the more familiar *Neapolitan sixth chord*, though Schenker uses the term *Phrygian* $\hat{2}$.
19. *Free Composition*, p. 41.
20. *Free Composition*, Figure 30/a. Mixture is not, of course, restricted to the deep middleground. Because *Urlinie* patterns characterize all structural levels, the inflected forms of scale degree $\hat{3}$ occur at lower structural levels.