HOW TO BUILD A DEVELOPMENT SECTION: A SCHENKERIAN PERSPECTIVE

TIMOTHY CUTLER

It is difficult, especially for younger generations of music theorists, to imagine a world in which Heinrich Schenker’s theories were not at the forefront of tonal musical thinking. For this reason theorists—and all musicians in general—owe a debt of gratitude to Allen Forte. Among his extensive accomplishments, Forte’s seminal essay entitled “Schenker’s Conception of Musical Structure,” published in the Journal of Music Theory in 1959, was a central catalyst for the gradual dissemination of Schenker’s ideas to American and other English-speaking audiences. In his article, Forte posits “five unsolved problems in music theory,” among them improving music theory instruction. He perceptively observes that “ineffective theory instruction often can be attributed to a failure to recognize the importance of nonconsecutive relations,” and he argues that Schenker’s theories would have an enormous and positive impact on music theory pedagogy. Undoubtedly, events of the past fifty years have proved Forte to be right.

The following essay, inspired by his pivotal work, examines the tonal structure of the development section of an unnamed composition (whose identity will be revealed later) with two goals in mind: (1) to demonstrate an underused pedagogical method for explicating a finished analysis, and (2) to stress the necessity for developing the ear’s ability to hear long-range voice leading, or, in Forte’s terminology, “nonconsecutive relations.” The recognition of distant relationships within a composition, including the ability to make strong and accurate aural connections between the background, middleground, and foreground, is among the primary goals of all musicians who use the Schenkerian approach to gain a better hearing of a piece of music. As with any good music theory, a balance must be found between intellectual and aural considerations. One who relies solely on the ear can be deceived by surface elements that obfuscate the structural underpinnings of a composition. Nor can one make long-range musical connections using the mind alone. More so than most tonal theories, Schenker’s approach often rewards deep and imaginative hearing; ultimately, however, the ear must be the final guide. As the pianist Murray Perahia expresses it, “Schenker’s theory was the only one that I felt took account of the line—the long lines that hold the pieces together so that the details can add up. But the key is that for Schenker it’s the ear, not the mind, that’s the guiding principle.”

Schenker himself regarded perceptive musical hearing as its own form of art. In his writings, he urged musicians to improve their aural capabilities, to increase their “accuracy of aural perception,” and to train young children to hear simple linear progressions. In “The Art of

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Listening,” from the third issue of *Tonwille*, Schenker advises, “Again and again it must be stressed . . . that it is high time to guide the ear toward better listening,” and he warns his readers to avoid theory not based on valid musical principles, such as those of Hugo Riemann, to whom Schenker refers as an “obfuscator of the ear!” Schenker continues with a colorful analogy: “Just as a field needs manure, so, too, must today’s ear, an ear that has become completely barren, be supplied with fertilizer, so to speak, in order to improve its productive capacity. And what could be better suited to this end than to guide the ear down those paths along which our great masters have created such novel and ingenious varieties and prolongations of the fundamental laws?”

Wilhelm Furtwängler believed that Schenker’s greatest discovery was the concept of *Fernhören* or “distance-hearing.” The notion of distance-hearing can refer not only to musical connections severed by chronological remoteness, but also to the conceptual space that extends from the composition itself to its background structure. Not all musicians possess an easy ability to hear the aural connections that bind together a piece of music from its background through the middleground and toward the foreground, and yet little has been written on how to develop this skill. Although Schenker believed that musical geniuses possess “the gift of improvisation and long-range hearing,” he also stated that “Anyone who, like the genius, can create the smallest linear progressions of thirds, fourths, and fifths abundantly and with ease, need only exert a greater spiritual and physical energy in order to extend them still further through larger and

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larger spans, until the single largest progression is attained: the fundamental line.”

Figure 1 shows a familiar picture: a deep middleground Schenkerian voice-leading graph in minor mode; $\hat{5}$ is the Kopfton and there are two branches, the first ending with a dividing dominant and an interruption, and the second with closure on the tonic. This structure is familiar to anyone who has studied Schenkerian approaches to sonata form. In this essay, only a small portion of the graph will be examined: the descent of the Urline from $\hat{3}$ to $\hat{2}$ within the first branch, which in this case corresponds to the development section of a sonata form; see Figure 2. The focus will be on structure, or large-scale voice leading, rather than on other approaches to sonata form and development sections in particular. From Schenker’s perspective, the only true

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13 Schenker, *Free Composition*, 18–19.
14 Or anyone who has studied sonata forms, sonata style, sonata principle, sonata procedure, sonata theory, and so on.
function of the development is to complete the stepwise melodic descent of the *Urlinie* to the supertonic or to prolong this scale degree.\(^{15}\) Using this concept as a point of departure, this essay will demonstrate one specific route by which the top voice’s C (♯3) descends to B (♯2). (Accordingly, a not entirely facetious alternative title to this essay could have been “How to Descend by Half Step: A Schenkerian Perspective.”)

But this is not an abstract investigation: Figure 2 is the genesis for the development section of an actual composition, and many readers will undoubtedly recognize it along the way. This investigation of a descending semitone will touch upon numerous topics that are central to the Schenkerian approach to tonal analysis, and I hope to affirm that it is indeed possible to respond to Forte’s challenge of striving for a greater awareness of remote musical connections within a composition, and in doing so teach music theory “more and more efficiently.”\(^{16}\)

In order to demonstrate how I hear the voice-leading structure of the development section of this composition in A minor, Figure 2 will serve as the starting point from which a note or two at a time will be added, working through the middleground and toward the foreground. Throughout the process it is crucial to stress the melodic and contrapuntal motivation behind each tone, that is (to adopt Schenker’s terminology), it is essential to define the *will* of the tones. It should also be evident how their changing environments affect these tones. If done correctly, a demonstration such as this should satisfy Forte’s assertion that “a good complete analysis will show clearly the components of each level and, beyond that, will indicate precisely the way in which all the levels interact to create the complete musical work.”\(^{17}\)

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\(^{15}\) See Schenker, *Free Composition*, 136.


\(^{17}\) Allen Forte and Steven E. Gilbert, *Introduction to Schenkerian Analysis* (New York: W. W. Norton, 1982), 387.
The notion of *Fernhören* is especially relevant here because the path from C to B is long and complex. In the opinion of Felix Salzer, “The development sections of movements in sonata form are particularly suited to demonstrating the necessity for large dimension hearing.”\(^{18}\) The pedagogical approach demonstrated in this essay, of working slowly from the background toward the foreground, is not novel, but it is not encountered as often as one might expect. Journal articles and conference presentations typically cover large quantities of music, often many pieces, and there is neither space nor time to explain in detail how one gets from higher to lower levels or vice versa. Often it is not possible to present graphs of more than one structural level, which leaves it to the reader or audience member to infer analytical choices from dense and complicated voice-leading graphs (including those that are not accompanied by the score of the composition).

Additionally, Schenkerian analysis is typically considered an exercise in reduction. From the analyst’s point of view, one begins with something “complex” (the actual composition) and reduces it to something “simple” (the *Ursatz*). But the art of Schenkerian analysis is not a unidirectional process. At the least, one needs an intuitive sense of where one is headed, and this can only be accomplished by a multidirectional approach. Carl Schachter has written about this topic and persuasively explains how the road to a background reading of Schubert’s song “Ihr Bild” cannot be attained by pure mechanical reduction.\(^{19}\) The same disclaimer should be made regarding my background-to-foreground approach for teaching analyses based on Schenker’s method:


many, but not all, analyses will flow logically from the background to the foreground by adding one or two notes at a time.

Nor does this pedagogical demonstration imply that Schenkerian analysis involves the predetermination of a fundamental structure followed by the twisting and contorting of a composition to fit its predestined structural mold. Rigid presumptions about the fundamental structure of a composition rob an analysis of the wonderful flexibility afforded by the Schenkerian approach. In this respect, I disagree with Charles J. Smith’s insistence that a Schenkerian theory of form should always align certain background structures with specific forms. This essay does not represent an analytical methodology; it is a pedagogical approach to sharing and explaining a finished analysis.

If analysis does not necessarily begin with the background, then why begin the discussion of the development section of this mystery composition with Figure 2, instead of first looking at the score of the actual piece? I would not advocate relying solely on this pedagogical approach, but when teaching the inner workings of a composition using Schenkerian concepts, it is often easier to hear long-range connections by beginning with something small and straightforward rather than something complex. Fuxian species counterpoint is modeled in this manner. In Free Composition, Schenker first introduces elements of the background, followed by the middleground, and last the foreground. In Structural Hearing, Felix Salzer comments that “By

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20 Such an approach would support the “Thee blind mice with a college education” accusations leveled against Schenkerian analysis; see Schachtet, “Analysis by Key,” in Unfoldings, ed. Joseph N. Straus (New York: Oxford University Press, 1999), 134. Similarly, Schenker makes it clear that his theory of structural levels “by no means claims to provide specific information about the chronology of creation” (Schenker, Free Composition, 18).

21 See Charles J. Smith, “Musical Form and Fundamental Structure: An Investigation of Schenker’s Formenlehre,” Music Analysis 15/2–3 (1996), 242. I was studying Schenker with Allen Forte at Yale when I first became aware of the notion that inner and outer form need not align with one another. The article that introduced me to the marvelous friction that can exist between voice-leading structure and traditional formal implications was Felix Salzer’s “Chopin’s Nocturne in C# Minor, Op. 27, No. 1,” Music Forum 2 (1970): 283–297.
enlarging a simple progression in various stages using various techniques, the ear receives valuable training.”\(^{22}\) Furthermore, he advises his readers to read the graphs from background to foreground—the reverse order in which they appear: “By this procedure the listener will be enabled to keep in mind the main single progression and its direction, which in turn offers him the possibility to abandon himself to the fascinating play of the prolongations.”\(^{23}\) Beginning with the background, listeners can lock their ears into the main structural components of the composition and not be misled by the numerous surface complexities and other potential traps. By adding only a note or two at a time to the fundamental structure presented in Figure 2, the path from the background to the foreground is made smoother, and this approach has the additional advantage of demonstrating how various levels of structure are woven together.

Figure 3 shows a straightforward illustration of this approach, one that I use when teaching basic tonal harmony. After informing students that IV is a predominant harmony, it may surprise some to learn that I–IV–I is a common harmonic progression. It is not sufficient merely to inform students that there are “exceptions,” or that sometimes IV happens to return to the tonic. Why does this progression make sense? It is an excellent introductory example for illustrating the basics of Auskomponierung and prolongation, as well as for demonstrating that the linear function of a chord may equal or supersede the importance of its harmonic role. Here, the

\(^{22}\) Salzer, *Structural Hearing*, vol. 1, 216.
\(^{23}\) Salzer, *Structural Hearing*, vol. 1, 211–212.
main motivation for the pitches in the IV chord stems not from harmonic but from *contrapuntal* considerations: to embellish the tonic triad with upper neighbor notes. Figure 3 begins with a C-major tonic triad; $\hat{5}$ is then embellished with a trill, and the result should be perceived as the ornamentation of a single harmonic entity (the tonic triad) and not as an alternation of two harmonies (I and VI$^6$). Already, with the simple addition of a trill, the concept of prolongation is demonstrated: G remains in effect although it is literally present only half the time. The second measure of Figure 3 also demonstrates another tenet of Schenkerian theory: not every vertical sonority is deserving of a harmonic label. In the following measure a second trill, on $\hat{3}$, is added to the C-major triad. Prolongation remains operational (the harmonic label IV$_6^4$ has little meaning), and the two tones above the stationary bass, F and A, are both melodically unstable (as upper neighbor tones) and harmonically unstable (by forming a dissonant $6_4$ triad). In the final measure of Figure 3, the neighbor tones are given consonant support in the bass, which partially obscures their dissonant characteristics in both a visual and an aural sense. Meanwhile, the composing-out of a C-major tonic triad yields a root-position IV chord within a I–IV–I harmonic progression. On the surface there appear to be three consonant triads, but the *context* of the IV chord ensures that this three-chord progression can never fully shed itself of some sense of dissonance. The subdominant harmony still feels unsettled; its contrapuntal motivation is to support two upper neighbor tones that are destined to descend to their starting positions. In other words, in this specific context the IV chord cannot escape its neighbor-tone origin. Should one progress further into the composing-out process, the unstable melodic origin of the subdominant harmony must not be forgotten.\footnote{Neighbor notes such as these can also explain the contrapuntal and melodic motivation for other harmonic progressions, including some instances of I–VI–I, I–V–I, or V–I–V, in which the seemingly stable tonic triad is merely present to decorate the dominant harmony.}
Figure 4 uses the techniques of composing-out and prolongation in a more sophisticated manner and presents the ear with a greater challenge. In a beautiful passage from Schubert’s “Du bist die Ruh,” D. 776, mm. 54–60, the structural foundation consists of an upper voice descending by whole step while the harmony moves from the tonic to the subdominant in the key of Eb major. Unlike the three-chord progression in Figure 3, distance-hearing is an important issue here. Even with the continual addition of melodic and contrapuntal techniques, maintaining an accurate aural connection from the beginning of the composing-out process to its conclusion should be a primary goal. From the last measure of Figure 4, it would take only a few more steps to recreate the actual score; see Figure 5. Among the many wonderful features of this excerpt, it is worth pointing out how one of the song’s initial pitch motives, B♭ ascending to C, is transformed into an ascending semitone motion, B♭ rising to C♭, at the beginning of the phrase. Simultaneously, the initial upper-voice B♭ has a registral connection with an inner-voice C♭ that arrives at the end of the passage. The motive of the ascending step—the first a half step and the second a whole step—frames this beautiful and intricate excerpt.

Returning to Figure 2 and the composing-out of a descending half step, the concept of distance-hearing becomes even more crucial: unlike the brief harmonic progression shown in Figure 3, or the seven measures of “Du Bist die Ruh” in Figures 4 and 5, the development section that will ultimately arise from Figure 2 spans approximately thirty measures. Already it is worth mentioning the relative status of consonance and dissonance in Figure 2. C is supported by a mediant harmony, and B is harmonized by the dominant. While both tones receive consonant support, in a broader context neither harmony is entirely stable. In a higher sense, all of the tones of the Urlinie, except for the first and last, are passing, with the final pitch of the first branch, B,
functioning, in the words of Carl Schachter, as a kind of “frustrated” passing tone.\textsuperscript{25} The mediant and dominant harmonies, while consonant triadic sonorities in the abstract, must always be heard in relation to the tonic that brings the piece to life. As Fred Lerdahl and Ray Jackendoff put it,
“the tonic is in some sense implicit in every moment of the piece.”

This idea can be extended from the tonic note to the governing tonic triad as well. “The coherence of the whole,” Schenker comments, “which is guaranteed by the fundamental structure, reveals the development of one single chord into a work of art.”

Embellishing Figure 2 begins with the addition of a passing tone in the bass, just as one might encounter when transforming first species counterpoint into second species; see Figure 6.

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27 Schenker, *Free Composition*, 112.
Initiating this process with a dissonant passing tone—the first type of dissonance introduced in species counterpoint—is logical because the passing tone is widely considered the most fundamental type of dissonance. Tonal music as we know it could not exist without this contrapuntal technique; it is the descending passing tone that makes the linear unfolding of the *Urlinie* possible. In Figure 6, D is unstable and binds together two pitches of greater stability, C and E. It also ornaments a larger unfolding: the linear arpeggiation of the tonic triad (A–C–E) in the bass, as shown in the first branch of Figure 1. Although the addition of a single passing tone may not seem significant at the moment, it will have a great impact on the way one hears, analyzes, and performs the composition. Even when the composer makes this passing tone a temporary goal within the development section, no matter how the development is shaped, no matter how consonant the D and music stemming from it are made to sound, its essence will remain that of an unstable, dissonant passing tone, and this region of music ultimately must seek a place of greater repose.

In his unfinished book *The Art of Performance*, Schenker insists that diminutions such as passing tones need to be played expressively.\(^\text{28}\) While it is not the role of music theory to impose

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a simple formula for interpreting these embellishing tones in performance, a musician should be aware of the function of these notes, whether they exist as single passing tones,\(^{29}\) such as the D in Figure 6, or as much larger regions that grow from a single tone. An effective performance will depend on the performer’s understanding of the function of such a section of music. Even if a composer takes a dissonant element, such as a passing tone, and makes it appear consonant on the surface, Oswald Jonas reminds us that the composer “does not forget to lead it forward as a mere passing event.”\(^{30}\) And Schenker underscores why analysis is so vital to all musicians: “the foreground, with its greatest freedom, shows voice-leading events which are not understandable as passing motions unless one refers to relationships in the middleground and background.”\(^{31}\)

Performers who cannot grasp this idea “always play . . . only on a single surface, so to speak—merely in a planimetric way—where they should play in several dimensions, as though in a stereometric way.”\(^{32}\) With so much of a composition in a region governed conceptually by passing motions, Schenker rightly insists that a performer must feel and convey the continual sense of tension brought upon by the structural underpinnings of the music.\(^{33}\)

The second step in the composing-out process illustrates a central concept in Schenker’s philosophy of musical understanding. Dissonance derives its meaning from a tonal world governed by consonance, and a fundamental way to expand a musical idea is to take a dissonant

\(^{29}\) A beautiful example of this can be heard in Sergei Rachmaninoff’s interpretation of the passing tones within the opening measures of Grieg’s Violin Sonata No. 3 in C Minor, op. 45, second movement (RCA Victor 09026-61265-2). It is also worth listening to the contrasting approach to the same music played by Rachmaninoff’s playing partner Fritz Kreisler.


element from a higher level and transform it into a consonance at a lower level. Beyond surface ornamentation and other basic techniques of elaboration, one will eventually reach an impasse trying to extend a dissonance. By transforming a dissonance into a consonance, composing-out on a larger scale becomes possible. Oswald Jonas attributes this in part to musical kinetics: “If composing out is to be applied to a dissonance, it must temporarily be divested of its character of driving toward a goal; that is, the dissonant tone must be transformed into a consonance.” There are numerous ways to transform a dissonant element into an apparent consonance, although no matter how much one dresses a dissonant passing tone in consonant garb, beneath the surface its true essence as an unstable entity will forever remain. As with the I–IV–I progression and neighbor notes shown in Figure 3, one can lend a passing tone consonant support in the lower voices, as Haydn does in the opening measures of the Quartet in G Major, op. 76/1; see Figure 7. There one finds a tonic–dominant–tonic harmonic succession, but a more linear viewpoint conceives one of the primary contrapuntal motivations of the second chord as being support for the dissonant passing tone, A, which binds together two stable tones, G and B, in the top voice. Furthermore, contrapuntal techniques, which in Schenkerian theory represent a higher art form than harmonic procedures, have the ability to override “textbook” rules of harmony, as shown in Figure 8. In the third movement of Vivaldi’s “Autumn” Concerto, op. 8/3, B♭ appears as the seventh of the V7 chord and should resolve down by step to A, mostly due to its origin as a descending passing tone. But in this context, its function as an ascending passing tone is more

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35 See Schenker, Free Composition, 61.
37 The second harmony also supports neighbor tones in the second violin and viola and facilitates a partial arpeggiation of the tonic triad in the cello. The opening of J. S. Bach’s Fourth Brandenburg Concerto, BWV 1049, begins almost identically.
**Figure 7.** Supporting a passing tone: Haydn, String Quartet in G Major, op. 76/1, movement 1, mm. 1–4

**Figure 8.** The ascending seventh: Vivaldi, Violin Concerto in F Major, op. 8/3 ("Autumn"), movement 3, mm. 14–22
important. Vivaldi takes care to avoid the concurrent resolution of the leading tone to the tonic, which would create an unwanted °5–P5 intervallic succession.\(^{38}\)

In order to transform the D into a consonance, we will embellish the top voice with an incomplete upper neighbor note; see Figure 9. The passing tone in the bass no longer scrapes against the C in the upper voice, but a new and apparently unwanted feature reveals itself: parallel octaves. This leads to another virtue of the Schenkerian approach to tonal analysis—a more sophisticated approach to the issue of parallel voice leading. Although some musicians gain the unfortunate impression that parallel octaves and fifths are forbidden in all styles of common-practice tonality, these intervallic successions do occur in compositions by great composers for a variety of reasons. Schenker remarks, “the way in which theory has treated the question of fifths most clearly reveals its fault of restricting itself to mere appearance, of hearing, so to speak, with the eyes where it is necessary to hear only with the artistic ear.”\(^{39}\) In his personal collection of


examples of parallel fifths and octaves, Johannes Brahms observed that parallels can be not only bad, wrong, or the result of carelessness, but also idiomatic, correct, good, and even beautiful and expressive.\textsuperscript{40} Good parallel fifths and octaves on the surface of the music can be explained by looking deeper. One’s ears sense that there is no binding vertical relationship between the parallels—they exist due to surface figuration that is not related to the essential harmonic movement. For example, the simultaneous motion of a descending passing tone and anticipation accounts for many instances of apparent surface parallels. This occurs three consecutive times in J. S. Bach’s Chorale No. 8, shown in Figure 10. Such parallel fifths live only on the surface of the music, and the laws of strict counterpoint do not always apply to these prolongations of the structural core.\textsuperscript{41}

The parallels in Figure 9, which occur in the deep middleground, will be eliminated by diminution at a lower level. True parallels can occur beneath the surface, all the way to the deep middleground (see Figure 1, for example).\textsuperscript{42} The barren octaves in Figure 9 are probably not as “real” as the fifths in Figure 1; these parallel octaves may look strange to the eye, but by listening toward the background, the ear ultimately understands that D in the bass is a passing tone on its way up to E, while D in the soprano is an incomplete upper neighbor. These deep middleground parallels do not interfere with the basic harmonic motion from III to V and the 8–5 outer-voice intervallic succession. Regarding Figure 9, Schenker might remark, “It is as if two people

\textsuperscript{40} Mast, “Brahms’s Study,” 43. Less well known are Bruckner’s pocket diaries containing analyses of consecutive octaves in Mozart’s Requiem and Beethoven’s Symphony No. 3. See Timothy L. Jackson, “Bruckner’s ‘Oktaven’,” Music and Letters 78/3 (1992): 391–409.

\textsuperscript{41} See, for instance, Salzer, \textit{Structural Hearing}, vol. 1, 197. In my experience, most apparent fifths of this type involve descending motion. An example of ascending surface fifths caused by the simultaneous resolution of the leading tone and a chromatic lower neighbor can be found in Schubert, “Du bist die Ruh,” D. 776, mm. 66–67. For an illustration of how Schubert consciously avoids another instance of ascending parallel fifths, see his Symphony No. 8 in B Minor, D. 759, first movement, mm. 328–341, specifically mm. 331 and 339.

\textsuperscript{42} “[T]he middleground frequently displays forbidden successions; it is then the task of the foreground to eliminate them” (Schenker, \textit{Free Composition}, 56).
who have no contact with one another simply pass in the street without an exchange of greetings. [. . . ] Successions of this kind are not true parallel fifths or octaves.  

These parallels are unlikely to remain on the surface of our growing structure for long, so the next step on the journey toward the foreground is to introduce a chromatic passing tone, C♯, in the upper voice; see Figure 11. Reiterating a now familiar idea, no matter how consonant a

\[\text{FIGURE 10. Three instances of parallel fifths: J. S. Bach, Chorale No. 8 ("Freuet euch, ihr Christen"), mm. 1–6}\]

\[\text{FIGURE 11. Eliminating parallels}\]

\[\text{Schenker, Free Composition, 56.}\]
setting this tone may receive later on, its origin is that of an unstable melodic bridge between C and D. It, like the D in the bass, can never seem truly stable. The new chromatic tone would create a clash with C♮ in the bass, but this can be avoided by giving C♮ temporary consonant support, A in the lower part, which makes an 8–10–8 linear intervallic progression and rids the passage of parallel octaves. While the implied A-major harmony functions as a dominant to the pitches that follow, the melodic and contrapuntal motivation for the tones of the A-major harmony is to support a chromatic passing note and eliminate parallel motion.

In Figure 12, a third line is added, this one above the Urlinie. It is a covering line that reaches over from a middle voice, beginning on G and descending by step toward the final pitch of the first branch, E. The retention of G over the chromatic passing tone creates a dissonant suspension like those of fourth-species Fuxian counterpoint. From a harmonic perspective, it destabilizes the A-major harmony with the addition of a seventh above the bass, increasing the desire of this harmony to resolve toward the D-minor chord, which is now fleshed out with the third of its triad, F. Later, it will be shown that the descending third-progression in the covering line also has motivic significance. Between the mediant and dominant structural harmonies of this development section, one first encountered a passing tone in the bass; now it has been promoted to a full-fledged passing chord. As many authors have pointed out, the progression III–IV–V is a common large-scale harmonic scheme in the development section of minor-mode sonata forms.

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44 An example of this technique can be found in Beethoven, Symphony No. 1 in C Major, op. 21, first movement, mm. 13–23.

45 By this point it is not difficult to envision the missing tones of the four vertical sonorities: the first two harmonies will be completed by the addition of E, while the latter two harmonies are missing A and G♯, respectively.

Typical of sonata-form development sections, too, is the dramatization of the dominant’s arrival. To this end, the next step in the composing-out process of a III–V progression is the addition of a chromatic voice exchange; see Figure 13. The voice exchange prolongs the subdominant harmony through a change of inversion, which illustrates another basic prolongational technique. Chromaticism creates additional tension, pushing the predominant harmony toward the dominant with greater intensity. Melodic lines are further embellished, and new lines

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University Press, 1998), 343–347, and 410 n. 37; and Haydn, String Quartet in B Minor, Op. 64/2 as cited in Mark Anson-Cartwright, “The Development Section in Haydn’s Late Instrumental Works” (Ph.D. dissertation, City University of New York, 1988), 106 and 271. While the underlying harmonic structures of these development sections are similar, the same cannot be said for their large-scale harmonic rhythm.

47 Measures 8–16 in the second movement of Schubert’s Symphony No. 9 in C Major, D. 944, exhibit many of the same characteristics as the composition unfolding in Figure 13, including key and mode, melodic descent to the supertonic, motion to the mediant and subdominant harmonies, and the use of a chromatic voice exchange to herald the arrival of the dominant.
begin to emerge. For example, the *Uurlinie* begins on C and works its way toward B, but there also is an ascending offshoot of this line, combining two voices to push from C through C\# to D, and from D through D\# to E. This represents a motivic continuation of the original chromatic passing tone, C\#. Concurrent with the D\#, a new inner-voice pitch, C\(\natural\), appears as a passing tone between D\(\natural\) and B, helps define the harmony as a German augmented sixth, and creates parallel fifths. The parallel fifths that can result when a German augmented-sixth chord resolves directly to the dominant chord are usually avoided by employing a cadential\(6\)\(4\) embellishment, but there are numerous other ways to evade the parallels. A different option is to leave in these so-called “Mozart” fifths and assume that the dense texture and chromatic thrust of the outer voices will obfuscate any aural deficiencies caused by the fifths.\(^{48}\) Even with these parallels, chromatic voice exchanges and augmented-sixth harmonies often are a key indicator of crucial harmonic or structural moments in development sections.\(^{49}\)

In Figure 13, material at the end of the progression was embellished. Figure 14 ornaments motion from the mediant harmony, C major, to the dominant-seventh chord that precedes IV. The new bass pitch, B, functions as a passing tone, a melodic bridge between two tones of greater stability. Prior to the chromatic passing tone C\#\(\natural\), the soprano line is embellished by three new pitches, including two enharmonic equivalents, B\(\flat\) and A\#. These nondiatonic pitches have a voice-leading function: they break up the parallel octaves that would have occurred between the

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\(^{48}\) The composer of our mystery composition will evade direct parallel fifths through the use of arpeggiation; see mm. 73–74 of the score.

\(^{49}\) Cadwallader and Gagné, *Analysis of Tonal Music*, 136; see also Anson-Cartwright, “The Development Section in Haydn’s Late Instrumental Works,” 88, 95, and 105. Anson-Cartwright shows that the unique “dominatizing” character of augmented-sixth chords is employed frequently to decorate retransitional dominant harmonies at the end of first-movement development sections, citing compositions including Mozart’s Symphonies Nos. 36, 38, and 41, String Quartets K. 465, 499, and 575; and Beethoven’s Piano Sonatas op. 10/3 and op. 14/2, and Violin Sonatas op. 12/2 and 3.
bass and middle voice (C–B). Harmonically, the B♭ suggests a dominant-seventh sonority that wants to resolve to an F-major (or -minor) triad, or VI in the key of A minor. With so many descending passing tones saturating this structure, one might assume that B♭ will resolve down by step. But looking further into Figure 14, the key of F is not a temporary resting stop along the path toward an eventual dominant divider; B♭ will soon appear in the bass, which could immediately cancel out the implied key of F. Instead, the music makes a surprising but wonderful twist by sending B♭ in an unexpected direction. Midway through the sounding of this chromatic pitch, it is rewritten in the score as A♯, transforming the dominant-seventh harmony into a German augmented-sixth chord, which pushes the bass and Urlinie toward octave B♭s. The sonority and function of the augmented-sixth chord is rendered motivic because it helps frame both the opening and ending of the development section by initiating motion away from the mediant and highlighting the arrival of the structural dominant.\footnote{In both Figures 14 and 15, G in the top voice is conceptually prolonged until the arrival of the D-minor harmony, but it is not literally present when B♭ arrives in the lower voices and the harmony changes. The more literal path of the top voice and its embellished prolongation of G are shown in Figure 16.}

Tonal composers were not always consistent with regard to enharmonic spellings; sometimes practical or motivic concerns outweighed the more theoretically “correct” approach. In the
first movement of the Piano Sonata in A Minor, D. 845, Schubert uses enharmonic respelling (Eb and D♯) to depict both the dominant-seventh and augmented-sixth functions of the harmonies and their implied keys, B♭ major and A minor (mm. 18–26). Beethoven employs two spellings to indicate the differing functions and tonal destinations of similar enharmonic equivalents (an Italian augmented-sixth chord and a dominant-seventh harmony within the keys of C minor and D♭ major) in the fourth movement of the Violin Sonata No. 7 in C Minor, op. 30/2, mm. 1–3 and 264–266. Yet in the first movement of the Violin Concerto in D Major, op. 61, Beethoven does not respell F♯ as E♯ in order to indicate to the performer that music in C major is about to make a magical move to the key of B minor, again with an enharmonic dominant-seventh/German augmented-sixth as the agent of modulation (mm. 284–304). Meanwhile, Beethoven enharmonically respells a diminished-seventh chord to inform the pianist that a modulation from G minor to E minor is occurring in the first movement of the “Pathétique” Sonata, op. 13, mm. 133–136. One might generalize that composers of this era would not employ both enharmonic spellings unless the music explicitly ventured into both implied tonal destinations, which makes the B♭/A♯ pair in Figure 14 all the more unusual: the tonal destination implied by the pitch B♭, the key of F, is never realized.⁵¹

The enharmonic relationship between the dominant-seventh and augmented-sixth harmonies has been exploited by numerous composers, including Brahms, who composed a passage similar to Figure 14 in his song “Meerfahrt,” op. 96/4, mm. 21–25. Whereas Brahms writes only A♯ throughout the excerpt, the composer of our growing structure first writes B♭ and then respells it enharmonically. In the actual composition there is no resolution to an F major/minor

⁵¹ The B♭ and its unrealized resolution do not represent a completely broken promise—the second movement of our mystery composition is in F major, and the “resolution” of B♭ to A occurs in the same register.
sonority whatsoever, so it was not strictly necessary to write two different spellings, and the dominant-seventh version of the harmony (with B♭) appears superfluous. From another point of view, though, it is both logical and insightful for our mystery composer to write both enharmonic versions of this pitch. This excerpt occurs within a development section, a passage rooted in the concepts of the fantasy and improvisation. In order to reflect its improvisatory nature, the dual notation of this pitch suggests to the performer, “should I turn in this or that harmonic direction?” The performer should play it as if he or she has not yet decided upon the fate of the development section’s tonal direction, and only the arrival of B♭ should clarify the hesitant state of the previous harmonic sonority. When looking at the score of the composition, one sees that there is another important enharmonic relationship, which includes the first pitch of the composition, and this is where the seed of the enharmonic idea is planted.

It would not be possible within the scope of this essay to continue in a note-by-note fashion from the deep middleground to the foreground of our mystery composition. Therefore, I will add just one more tone to our series of graphs; see Figure 15. In order to give the bass line a stronger thrust toward A♭, as well as create a more logical harmonic progression and eliminate potential inner-voice parallels, the bass passing tone, B, will first rise to E before finishing its contrapuntal mission. This new pitch functions as the dominant of the upcoming dominant-seventh harmony. A descending-fifths pattern is emerging, one whose goal is the important D-minor harmony, the IV chord, the passing tone, the first embellishment of our original structure. Consequently, the composing-out of the first portion of the development section is logically geared through a descending-fifths sequence toward the arrival of the subdominant harmony.

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52 This idea was mentioned to me by Stephen Slottow, although I have been unable to find its original source. Schenker discusses similar enharmonic restatements in *Free Composition*, 101 and Fig. 121.
Even if this harmony sounds like a relatively stable goal, or perhaps an actual key, its origin is still that of a passing tone, and it can never completely shed its dissonant essence.

By playing through the series of voice-leading graphs that depict the tonal growth of this development section, one can aurally connect the various levels by hearing the functional echoes of simpler structures in the more complex ones. An exercise such as this develops Fernhören. Some may find that the connection between Figure 15 and the actual composition is easily within their aural grasp; others may want to add more diminution to the growing voice-leading structure before hearing it in relation to the real music. Some may want to supplement these structures with an imaginary continuo (in order to include inner voices that are only implied in the voice-leading graphs) and to embellish the prolongation of G in the top voice with tones that fit the underlying harmonies, as shown in Figure 16. Whatever the case, it is finally time to reveal the source of the analysis.
Leopold Mozart, perpetually concerned with his son’s professional fortunes, wrote on 13 August 1778 to encourage him to write something simple and popular in order to “make your name known!” Leopold criticized some of Wolfgang’s recent compositions, warning him to avoid writing pieces filled with “all those artificial and for the most part incomprehensible harmonic progressions and difficult melodies.” Among the compositions to which Leopold Mozart likely was referring was the Piano Sonata in A Minor, K. 310, whose first-movement development section is the topic of this essay. (The full score of this section is reproduced in the Appendix.) Although development sections are typically thought of as loosely organized, one aim of this study is to demonstrate that every tone has a clear and logical function, whether it is viewed from a melodic, contrapuntal, or harmonic perspective. By building up the structure of the development step by step, it is indeed possible to fathom these “incomprehensible harmonic progressions and difficult melodies” and improve distance-hearing. This development section has been studied by many theorists, including Schenker, Oswald Jonas, Felix Salzer, John Rothgeb, David Beach, Allen Cadwallader, and William Pastille. Each has contributed to our understanding of the composition. My contribution has not been to challenge any of their

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54 Mersmann, “Letters of Wolfgang Amadeus Mozart,” 120.
56 For example, Jonas points out that the opening appoggiatura D♯, which later transforms into an enharmonic Eb during the transitional passage to the second key area in the exposition, is the motivic motivation for the German augmented-sixth chord at the end of the development. Others have described how Mozart expands the chromatic voice exchange at the end of the development section, which features an apparent root-position tonic harmony in m. 73. Several authors have noted that the covering line, G–F–E, which first appears in Figure 12, is also organically motivated because the same descending third-span governs the second key area in the exposition.
findings but rather to address the issue of distance-hearing by shedding light on how this development section can be taught using a systematic background-to-foreground approach.

The year before I began studies at Yale with Allen Forte, I took my senior examination as a music-theory major at the Oberlin College Conservatory of Music. I was asked by one of my professors to critique the theories of Heinrich Schenker. Although my experience with this mode of analysis was limited at that time, I directed my criticisms toward Schenker’s concept of the background: “Can one truly hear these basic structures within the context of actual compositions,” I asked, “or are they merely artificial constructs designed to satisfy the needs of an abstract theory? Can one bridge the sometimes vast gap between the background of a composition and the composition itself? If we cannot hear it, what is the point?” These were the sentiments of an inexperienced twenty-two year old, but that does not mean that one should take them lightly; esteemed music scholars have expressed similar doubts about the aural legitimacy of Schenker’s background. For example, in 1971, Charles Rosen reviewed *Five Graphic Analyses* in an essay in the *New York Review of Books*. While finding much to commend, Rosen criticizes aspects of Schenker’s approach: “In Schenkerian analysis, every work of music is reduced to a simple line . . . and under each note of the line the harmonic functions are indicated by a bass.” He continues, “What remains unclear, however, is the transition from Schenker’s graph to the music itself. . . . [I]t is neither the truth nor the importance of Schenker’s deep structure that is in question but its status—its nature and its relation to the work as a whole.” In Rosen’s opinion, Schenker “turns his principles of organization into a hidden esoteric form. [. . . T]he analysis moves in one direction, away from what is actually heard and toward a form

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58 Rosen, “Art Has Its Reasons,” 34.
which is more or less the same for every work.”

My essay does not propose a methodology for analyzing the tonal structure of music but instead demonstrates a way to explain a finished analysis. This approach addresses and hopefully blunts criticism such as Rosen’s by using diminution to embellish a fundamental structure and by conveying the contrapuntal and melodic motivation behind each new pitch. It challenges Rosen’s assertion that “The presentation of the analysis by Schenker as starting with the Ursatz and moving to the finished piece does not disguise the principle, which is always that of reduction.” At some point one must realize that the notion that all pieces boil down to the same structures is not terribly relevant. The forms of the Ursatz are “so simple that they have no artistic value at all,” as Carl Schachter observes.

Regarding the first movement of K. 310, I cannot hear Figures 1 and 2 without also hearing the echoes of the middleground and the foreground. A musical ear should be able to hear toward the background, toward the foreground, or in both directions simultaneously. A good musician never hears a level of music completely independent of what exists above and below it. This goes for the Ursatz as well; each manifestation of it exists under the unique canopy of a composition’s middleground and foreground levels. No two fundamental structures sound identical when heard in the context of the actual piece of music. Perhaps by sharing our analyses with our students and each other—and, when possible, explaining them from background to foreground, slowly, adding only a few pitches at a time—we can improve our distance-hearing. For no matter how clever we are, if we cannot hear it, what is the point?

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60 Rosen, “Art Has Its Reasons,” 38, n. 15.
61 Schachter, “A Dialogue between Author and Editor,” in Unfoldings, ed. Joseph N. Straus (New York: Oxford University Press, 1999), 10. This does not imply that the three forms of the Ursatz are insignificant, as Schachter points out that these basic structures exemplify numerous fundamental properties of tonal music.
APPENDIX

MOZART, PIANO SONATA IN A MINOR, K. 310: FIRST MOVEMENT, DEVELOPMENT (MM. 50–79)
WORKS CITED


A Music-Theoretical Matrix: Essays in Honor of Allen Forte (Part II)


ABSTRACT

More than fifty years ago, Allen Forte rightly predicted that the theories of Heinrich Schenker would have a profound impact on music theory pedagogy. In particular, Schenkerian analysis benefits Fernhören (“distance-hearing”), which relates not only to musical connections severed by chronological remoteness, but also to the conceptual space that extends from the composition itself to its background structure. This essay examines one underutilized method for strengthening Fernhören. Using the fundamental structure of an unnamed composition as a starting point, a note or two at a time will be added to the background, working through the middleground and toward the foreground. This procedure is not a methodology for analyzing the tonal structure of music, but instead demonstrates a way to explain a finished analysis. In doing so, the contrapuntal and melodic motivation behind each new pitch is clarified, the aural connection between...
nonconsecutive events as well as various levels of structure is strengthened, and the identity of the composition becomes evident. Furthermore, this approach addresses the fallacy that Schenkerian analysis represents nothing more than a unidirectional exercise in reduction.

This article is part of a special, serialized feature: A Music-Theoretical Matrix: Essays in Honor of Allen Forte (Part II).

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ABOUT THE AUTHOR

Timothy Cutler is Professor of Music Theory at the Cleveland Institute of Music. He is the creator of the Internet Music Theory Database (www.musictheoryexamples.com), a collection of approximately 2000 examples of tonal harmonic and contrapuntal techniques.

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