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Tonicizations, Periods, and Period-Like Structures in the Music of Dvořák

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TONICIZATION, PERIODS, AND PERIOD-LIKE STRUCTURES IN THE MUSIC OF DVOŘÁK

by

XIEYI (ABBY) ZHANG

A dissertation submitted to the Graduate Faculty in Music in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York

2019
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This manuscript has been read and accepted for the Graduate Faculty in Music in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

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ABSTRACT

Tonicization, Periods, and Period-Like Structures in the Music of Dvořák

by

Xieyi (Abby) Zhang

Advisor: Poundie Burstein

Discussions of the tonal construction of parallel periods usually focus on the standard eighteenth-century layout in which the cadence at the end of the antecedent is either an imperfect authentic cadence (IAC) or half cadence (HC) in the main key. In exceptional cases, antecedents may deploy a reinterpreted HC—i.e., a perfect authentic cadence (PAC) in V that is reinterpreted as a tonic-key HC. Especially in music of the nineteenth century, however, one also often finds periods in which the antecedent concludes with a PAC in a key other than V. In these modulating antecedents, cadences of the antecedent and consequent establish their hierarchy of cadential strength not by cadence type, but rather by key. Though this alternate possibility has been underexplored in the music theory literature, it carries significant consequences for the study of musical form in the nineteenth century.

This dissertation investigates the use of modulating antecedents in the music of Antonín Dvořák, who utilizes these devices with surprising frequency. Through analyses of various periods in which foreign-key cadences in the antecedent are answered by home-key ones in the consequent, I investigate this layout in the music of Dvořák and propose a new model that allows understanding
a foreign-key cadence as reinforcing not only its own key, but also the home key. Chapter 1 outlines this formal phrase type and situates it within current literature on musical form.

In the process of studying the modulating antecedent, numerous related questions arise, a number of which are addressed in Chapter 2. This chapter draws on historical music-theoretical concepts and current-day formal principles to re-examine the standard cadential hierarchy. The revised hierarchy proposed in this dissertation incorporates the foreign-key perfect authentic cadence. It also reassesses the cadential strength of the imperfect authentic cadence, suggesting that the IAC is particularly flexible, allowing it to take on a variety of cadential strengths through its dialogue with IAC-like guises.

Chapter 3 outlines several instances in which formal theme types are called into question by the modulating antecedent. These include a curious phenomenon that commonly appears in the music of Dvořák in which the consequent concludes with the same foreign-key perfect authentic cadence as did the antecedent. Additionally, this chapter investigates periods with modulating antecedents that appear in the context of a larger sentential-theme type or as framing the outer sections of a small ternary form. Lastly, this chapter studies situations in which the modulating antecedent is deployed within a modulating period. This formal deployment calls for an overview of Dvořák’s harmonic language with respect to his antecedent modulations, especially regarding which elements differentiate key choices for the modulating antecedent from those in a standard modulating period. To this end, this chapter examines Dvořák’s preferred key choices in these modulating antecedents and argue for a connection between his music and that of Russian composers.

Chapter 4 explores these formal components in Dvořák’s music through analyses of three works that utilize the modulating antecedent. These analyses explore implications of the
modulating antecedents that reverberate throughout the movement, as well as across movements of a multimovement cycle, in ways that impact the deep level harmonic structure as well as the understanding of the larger formal design. Studying these properties sheds light on both the analytical study of Dvořák’s music and formal issues in the nineteenth century and beyond.
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CHAPTER 1

ANTECEDENT-CONSEQUENT PERIODS AND DVOŘÁK’S MODULATING ANTECEDENT

The opening theme from the second movement of Dvořák’s Op. 65 piano trio (Example 1.1) presents a paradoxical situation. On the one hand, this theme fulfills all general requirements of what could be classified as an antecedent-consequent parallel period. That is, this theme embraces a repeated phrase pair in which the first phrase sounds somehow incomplete and the second sounds more complete. The theme thus satisfies the condition that in a properly formed period “an initial unit ending with a weak cadence is repeated and brought to a fuller cadential close” (Caplin 1998, 12). On the other hand, the cadence with which the theme closes its antecedent is highly unusual.

Example 1.1: Period with modulating antecedent in Dvořák, Piano Trio Op. 65/ii, mm. 1–25.
Unlike in standard periods where antecedents end with one of two possible weaker cadences in the home key, the half cadence (HC) or the imperfect authentic cadence (IAC), in this one the antecedent concludes with a foreign-key PAC, thereby creating a modulating antecedent. Stranger yet, this modulating antecedent moves into the strikingly distant key of $b$VII.

Themes with such layouts are by no means uncommon in the music of Dvořák. That is, many of Dvořák’s themes meet the general definitions of antecedent-consequent construction but involve antecedents that modulate to a foreign key. The specific mechanism through which these periods fulfill the requirement of “the weak cadence” in the antecedent thus differs significantly from what is witnessed in standard constructions of the period. These formal layouts are summarized in
Example 1.2: Layouts of the antecedent-consequent period.

<table>
<thead>
<tr>
<th>Traditional period layout:</th>
<th></th>
<th>Consequent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antecedent</td>
<td>contrasting idea</td>
<td>basic idea</td>
</tr>
<tr>
<td>I</td>
<td>or</td>
<td>I, HC I</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Alternate layout:</th>
<th></th>
<th>Consequent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antecedent</td>
<td>contrasting idea</td>
<td>basic idea</td>
</tr>
<tr>
<td>I</td>
<td>X, PAC I</td>
<td>I, PAC</td>
</tr>
</tbody>
</table>

Example 1.2. Such periods with modulating antecedents appear to violate two commonly accepted notions of the theme type. First, whereas typical periods remain in the home key, these variant periods modulate almost immediately to some foreign key. Second, while periods create a hierarchy of weak and strong points of closure by using differing cadence types, such as the half cadence and the perfect authentic cadence, both antecedent and consequent phrases in these periods by Dvořák summarized in Example 1.2 conclude with the same cadence type. (That is, they both conclude with a perfect authentic cadence.) These issues raise a host of questions surrounding not only the present-day conception of the antecedent-consequent period, but also in regard to tonal music in general.

Typically, modulations in periods are confined to the consequent, as otherwise “the home key, expressed only by the tonic prolongation supporting the initial basic idea, could not compete in prominence with the subordinate key” (Caplin 1998, 55). Yet Dvořák’s theme cited in Example 1.1 directly violates this principle, since it opens with a modulating antecedent. This raises the question: how can a modulating antecedent preserve the integrity of key within the period? Additionally, how are such modulations into the new key framed from a tonal perspective? Taking the abovementioned theme as an example, how does the jarring (albeit diatonic) key of bVII play into the overall tonal structure of the theme? Is the subtonic to be interpreted as the final chord in
the progression, or does one take the bass’s eighth-note B# in m. 10 as an indication that the chords proceed to and conclude on the dominant (however modified) as in a typical progression?\(^1\) Finally, does such a striking modulation have ramifications that point to moments later in the work?

Further questions surrounding cadential hierarchy are raised when a modulating antecedent concludes with a cadence of the same theoretical strength as the consequent. How does this non-conforming cadential relationship between antecedent and consequent affect the currently accepted hierarchy, in which there is a clear order of increasing cadential strengths from the HC, through the IAC, to the PAC? Furthermore, unlike these three cadences, the foreign-key PAC is far from a monolithic cadence type. Rather, the plethora of key options available for a foreign-key PAC presents yet another question: do all foreign-key PACs, regardless of the choice of subordinate key, carry the same cadential strength? While the answer to this question seems to lean heavily toward the negative, a follow-up question remains: which keys are stronger than others in this subhierarchy for the foreign-key PAC? Relatedly, which keys are especially frequent in modulating antecedents, whether in the music of Dvořák or in that of other composers? Are Dvořák’s key choices for modulating an idiolect of his style, or are they commonplace in instances of modulating antecedents in music by others as well?

This dissertation investigates these matters through detailed analyses of works—mostly by Dvořák, but occasionally by other composers—that contain periods with modulating antecedents. I examine these periods from several music-theoretical perspectives, probing them through the

\(^1\) Charles Smith (1996) evaluates Schenkerian analysis’s approach to formal aspects and proposes readings in which form determines tonal structure. This approach creates striking analyses such as those in which an interruption occurs over IV, or ones such as in Beethoven’s Funeral March or Chopin’s “Revolutionary” Etude, in which Stufen such as bIII and bVII are taken as more structurally significant than an ensuing V. The latter is especially relevant to Dvořák’s Op. 65/ii. On the one hand, a conventional analysis might take V to close off the harmonic progression; on the other hand, bVII is significantly more emphasized in the music, so a Smithian analysis might better reflect the qualities of the music.
lens of form studies, Schenkerian analysis, neo-Riemannian transformations, etc. This multifaceted approach allows for an in-depth understanding of this variant of the antecedent-consequent period. This study also explores three ways in which this period-type impacts musical form and tonal structure. First, it examines strategies by which the modulating antecedent allows for composers to play with the norms of the period as it is traditionally understood. Second, it offers a revision of the accepted model of cadential hierarchy to include the foreign-key PAC, as it re-evaluates the cadential strengths of traditionally defined cadences, especially the imperfect authentic cadence (IAC). Finally, this dissertation proposes a tonal hierarchy of keys in the music of Dvořák while also considering the relationship of these keys to the music of the nineteenth century more generally.

This dissertation seeks to accomplish three main tasks: (a) expanding the theoretical possibilities of the antecedent-consequent period by exploring the extent to which a modulating antecedent and a foreign-key PAC might be able to function as the first part of a period; (b) examining the relationship of the foreign-key PAC to the accepted cadences for antecedent phrases, such as the HC and the IAC; and (c) exploring a hierarchy of keys that allow the foreign-key PAC to reinforce not only its own key but also the home key. This dissertation tackles each of these issues individually and in this order. To this end, I begin by outlining current theoretical literature on the period, as well as ideas on how weak and strong cadences are established. Following this initial survey, I explore some common variants of the standard period in the nineteenth century and demonstrate how the possibilities offered by these variants, when taken in conjunction, introduce the likelihood of a modulating antecedent. I then dissect modulating antecedents into three distinct categories, two common and one rare: (a) modulating antecedents where the foreign key is followed by an ancillary home-key dominant; (b) modulating antecedents where the tonic
of the foreign key forms the final Stufe with no following harmony; and (c) modulating antecedents where no cadence appears at all. Each chapter wraps up with some analyses that demonstrate the principles explored within.

THE PERIOD IN THE EIGHTEENTH AND NINETEENTH CENTURIES

Standard constructions of the parallel period, mostly in the eighteenth century, have received no shortage of attention from music-theory scholars and pedagogues. As has been noted, in its most common form, the period begins with a four-measure antecedent that concludes with a half cadence. Following this HC, the consequent repeats the four measures of the antecedent, modifying the cadential gesture so as to close with a PAC. William Rothstein (1989, 16–17) connects this formal construction with the Schenkerian concept of the interruption:

The antecedent-consequent relation generally involves an interruption of this sort [that is, an interruption on 2 over V, corresponding to the half cadence], with a descending linear progression starting from 3 or 5. Thus a definite melodic tension is added to the harmonic tension of the half cadence. Both tensions, harmonic and melodic, are resolved by the full cadence at the end of the parallel period. (Rothstein 1989, 18)

This formal setup presents the most common manifestation of the period’s internal cadence. The reason for its frequency has been posited through various theoretical angles by several scholars. For instance, Caplin draws on the unique weakness of the half cadence and the role it plays in cadential differentiation: “Of the two [the HC and the IAC], the half cadence, with its combination of harmonic and melodic incompleteness, is decidedly weaker than the imperfect authentic cadence, which results in melodic incompleteness alone. The vast majority of antecedent phrases end with a half cadence, no doubt to magnify the sense of cadential differentiation” (1998, 51).

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2 Caplin (1998, 49) provides more detail on the construction of these four measures. He proposes that a period normally begins with a two-measure basic idea, in the same manner as a sentence (see Caplin 1998, 9–12 for an overview of the sentence). This is followed with a two-measure contrasting idea, which “achieves its ‘contrast’ with the basic idea most obviously by means of melodic-motivic content [and] introduces motives distinctly different from those of the basic idea.”
Rothstein, Aldwell and Schachter, and other Schenkerians, on the other hand, attribute the half cadence’s prevalence to the tonal tension set up by the antecedent’s V, which is not resolved until the I of the final PAC: “The first phrase closes on V; the tension produced by this semicadence [or cadence on V] is not dissipated by the tonic of bar 5, which is a new beginning, not a goal. Not until the arrival of I and î in bar 8 is tonal equilibrium restored” (Aldwell & Schachter 2011, 190).

In addition to this most standard construction, other possibilities exist in which the antecedent closes with an imperfect authentic cadence. That this is less common is likely a result of the harmonic closure afforded by the arrival on tonic harmony, thereby making the IAC sound more definitive than a half cadence. In short, when an IAC concludes the antecedent, cadential differentiation is minimized, rendering the IAC less effective for closing the antecedent. From a tonal perspective, the issue of the IAC-antecedent has generated much attention. Michael Baker (2010) uses this paradigm as his main argument for a possible interruption on scale degree 3. Such an interpretation, which usually involves a period whose upper voice is framed as a 5-line, argues that the IAC of the antecedent often closes with 3 over I, thereby forming an interruption analogous to that of 2 over V within an HC-antecedent. The consequent then returns to the Kopfton and descends to 1, usually skipping over the 3 that closed the antecedent. Several other scholars follow Schenker’s analysis in Figure 91, no. 4 of Free Composition, in which the IAC represents an

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3 These differences between Schenkerian and Caplinian theoretical perspectives are subtle, but they carry important consequences for other categories of periods, as I will demonstrate presently. The Schenkerian idea that the arrival on î in the consequent literally resolves the V at the end of the antecedent is not present in Caplinian readings; instead, the formal interpretation would simply contend that the harmonic and melodic openness prompts a rebeginning that leads to a stronger cadence, one that is not directly connected—but rather only loosely associated—with any weaker close. These differences affect interpretations of other types of periods. Since the Schenkerian principle of interruption seemingly applies only to 2 over V being resolved by 1 over I, periods that conclude their antecedents—or even consequents—with cadences other than this most common one will appear to operate under a different category. For Caplin, the looser, more associative definition does not preclude, for example, a period that concludes either its antecedent or its consequent with an IAC. On the conclusion of the consequent with an IAC, Caplin says, “If the antecedent is closed with a half cadence, the consequent may end with an imperfect authentic cadence, although this weaker form of closure rarely occurs” (1998, 53).
arrival onto the *Kopfton*, while the consequent closes off the *Ursatz*. In contrast to Baker, Schenker’s end-oriented analysis prioritizes points of arrivals.

In both HC- and IAC-antecedents, the consequent closes with a perfect authentic cadence—the strongest cadence type. Since the IAC is thought to be stronger than the HC, it is also theoretically possible for the consequent of a period to conclude with an IAC, provided that the antecedent closes with a half cadence. However, perhaps owing to the consequent’s lack of definitive closure, examples of this construction are rather difficult to find. One rare example can be seen in Louise Reichardt’s *Der Sänger geht* from her *Zwölf Gesänge* (1811). In this song, mm. 3–6 contain an antecedent ending in a half cadence, and mm. 7–10 respond with a consequent that closes in an IAC (Example 1.3). While this piece is relatively unproblematic from a formal standpoint, the Schenkerian interpretation would have to be adjusted to account for this non-resolution onto ¹ in the consequent. This scenario offers a number of possible interpretations. For
instance, it is conceivable that the “interruption” at m. 6 occurs in an inner voice while the top voice remains on 5, only to descend to 3 at m. 10 (Example 1.4). Alternatively, given what happens later in the piece, one may hear these measures as involving an initial ascent (Anstieg) in which 2 arrives at m. 6 with the half cadence, ultimately leading to 3 at the end of the period (Example 1.5). This interpretation accounts for the climactic moment at m. 15: following this period, the melodic

Example 1.5: Voice-leading interpretation of Der Sänger Geht in which the period forms part of an Anstieg.
ascent continues as it arpeggiates through $\hat{5}$ and $\hat{1}$, ultimately reaching the high G# as Kopfton at m. 15.

In addition to the standard eight-measure period, several common variants have been discussed and debated among scholars. These variants include the compound period, the double period, the modulating period, and periods that use a reinterpreted HC. The compound period constitutes a scenario where the antecedent and consequent are both complete theme types in themselves. A typical example of this nested phrase structure can be found in the finale of Beethoven’s Piano Concerto No. 2, Op. 19 (Example 1.6). In the opening theme to this finale, the

*Example 1.6: Compound period in Beethoven, Piano Concerto No. 2, Op. 19, mm. 1–16.*
antecedent and consequent both individually constitute sentences. As in a simple period, the antecedent concludes with a half cadence, while the consequent alters the cadence to end in a PAC.

Caplin (1998) speaks of three common types of the compound period. The antecedent and consequent may each comprise (a) a sentence, (b) a “hybrid 1” (antecedent plus continuation), or (c) a “hybrid 4” (compound basic idea plus continuation). The second of these often constitutes what other scholars have described as a double period, or “period within a period.” This formal design has been discussed in textbooks such as those by Berry (1986), Green (1979), and Kohs (1976). A double period may feature three half cadences in a row, all in the same key. This raises the question of how consecutive cadences of the same type may be differentiated. In most discussions of the double period, the authors have not addressed this issue adequately. Furthermore, most discussions of the double period do not insist that the lower-level phrase pairs function as complete periods. Instead, the phrase pairs need only resemble period-like two-phrase constructions motivically: there must be a rhetorical pause (perhaps coinciding with a cadence, whose strength is unspecified) around the fourth measure in each of the phrases. The most common scenario can be found at the beginning of Beethoven’s Piano Sonata Op. 26 (Example 1.7), where the lower-level “period” within the large-scale antecedent contains minimal cadential differentiation: the HC of m. 4 is answered by another HC in m. 8. The latter HC is arguably stronger because the dominant arrives on the downbeat in the bass; in m. 4, the dominant arrives on the weaker second beat. Although it is difficult to call mm. 1–8 a period, the first HC (m. 4) more than fulfills the condition of a rhetorical pause, and the standard definition of a double period is thus satisfied.

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4 This example is presented as a parallel double period in Kostka & Payne (2018, 159), given the parallel nature of m. 1 and m. 9. Given the contrasting nature of the lower levels, however, and following Caplin’s terminology, this might better be considered an instance of hybrid 1 (antecedent + continuation) within a compound period; see Caplin (1998, 67–8).
A similar example is presented in Berry (1986) from the finale of Mozart’s String Quartet K. 458, where three half cadences are answered with a PAC (Example 1.8). Whereas the strengths of half cadences in Beethoven’s theme were arguably differentiated through metrical placement, Berry’s example invokes this hierarchy through the bass evasion of the weaker half cadences, turning the cadential dominants into four-two chords. While this cadence-evasion technique allows for the internal half cadences at m. 85 and m. 93 (the fourth and twelfth measures of the theme) to be weaker than the half cadence at m. 89, it raises questions of their cadential candidacy.

As previously mentioned, Berry does not require that the two eight-measure periods function as true periods through cadential differentiation. For him, the only construction that requires a hierarchy of cadences is the large-scale period with a weaker cadence at m. 8 and a stronger one at m. 16. As he claims, “Since the two ‘periods’ which comprise the double period exist in the same relationship as the two phrases of a single period, an incomplete cadence ends the first two-phrase element, as well as the first and third phrases” (Berry 1986, 24). This sentence illustrates...
the many ways in which Berry does not consider the lower-level phrases to be true periods, such as his use of scare quotes around “periods” and the subsequent adoption of “two-phrase element” to refer to the same span of music. Instead, he suggests that a two-phrase antecedent simply resembles something period-like. Later, Berry presents the theme of the Allegretto from

Example 1.8: Double period in Mozart, String Quartet K. 458, mm. 82–97.
Beethoven’s seventh symphony, which he hears as a double period concluding on an IAC. Here again, no explicit cadence appears at mm. 4 or 12 of the example.

A similar example to Beethoven’s symphony is discussed by Green (1979), for whom the period-like qualities of the first and third phrases in a double period need not conclude with harmonic cadences. Example 1.9 presents Mendelssohn’s *Song without Words* Op. 85, No. 1, which Green interprets as a double period in which “both the antecedent and the consequent have

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5 Given the lack of harmonic parallelism, a more fruitful reading in this case might be a binary construction, with the first eight measures modulating to III and the second modulating back.
been extended into two phrases” (62), with no implication that the lower-level phrase pairs must be complete periods in themselves. However, unlike Berry’s latter example, Green’s more clearly illustrates harmonic-cadential content at m. 4 and m. 12. That is, although Green does not appear to read them as cadences, these phrase endings nonetheless do contain the harmonic content of an IAC. In this case, hearing these pauses as cadential might well disrupt the order of cadences in a period: adopting the IAC in m. 4 would mean that a stronger cadence in the antecedent (IAC) is answered with a weaker one (HC). While seemingly strange, such readings do exist in the scholarly literature. For instance, consider the analysis by Caplin of Mozart’s Sonata in F Major, K. 332/i, mm. 41–56 (Example 1.10). In this interpretation of the sonata’s subordinate theme, the small-

*Example 1.10:* Compound period (after Caplin 1998, 267 n. 21) in Mozart, Piano Sonata K. 332/i, mm. 41–56.

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See Caplin 1998, 267 n. 21. While this footnote does not explicitly state the non-standard nature of the compound period’s cadential hierarchy, that Caplin reads this theme as a compound period in which the antecedent and consequent both constitute an antecedent + continuation hybrid necessarily implies that there are four real cadences within the theme. These cadences surely are to be understood as the IAC at m. 44, the HC at m. 48, the IAC at m. 52, and the PAC at m. 56.
scale antecedent (mm. 41–44) concludes with an IAC, while the small-scale consequent (mm. 45–48) closes with an HC.7

The periods examined immediately above remain in the same key throughout. Two common exceptions where this is not the case in music of the eighteenth century bear special mention. First, the modulating period, or modulating consequent, provides the most common type of modulation within the period. In modulating periods, the consequent phrase modulates into a foreign key, most frequently the dominant in major keys and the relative major in minor keys. Usually these periods do not constitute independent themes, but rather form one part of a small binary or small ternary theme.

Whereas in the modulating period, the modulation occurs only within the consequent phrase, periods using the reinterpreted half cadence provide the most common example in which the modulation occurs in the antecedent. In a period with a reinterpreted HC, the antecedent modulates to the key of V and a PAC in this key concludes the antecedent. After this cadence, the modulation is abandoned, and the consequent picks up back in the home key, concluding with a PAC in the tonic. That the modulation must move exclusively to the dominant is crucial to the harmonic integrity of this theme and is the reasoning behind the term “reinterpreted HC.”8 In other words, the modulation to V-as-key becomes reinterpreted as V-as-chord when the music resumes with the opening material. By initially hearing the key as V, we hear a PAC in the dominant that concludes on a local I chord, but retrospectively hearing the final chord of this cadence as V in the home key

7 Like the previous Berry example, this theme can also have the problem rectified if one considers the cadential material at m. 44 and m. 52 as carrying no cadential function, in which case the theme would constitute a c.b.i. + continuation hybrid. This interpretation is bolstered by the lack of a complete cadential progression in either examples; both move directly from their initial tonics to the dominant, which is more often heard as prolongation and not cadential.

8 This necessary reinterpretation perhaps has consequences for the mode of the dominant in minor keys. Whereas several examples allow for a turn to the minor dominant, moving to the minor dominant in an antecedent would preclude the ability for such an HC reinterpretation.
allows it to be reinterpreted as a half cadence. In this sense, the cadence at the end of the antecedent functions as both types of cadence, and in both keys.

The discussions directly above focus on the antecedent-consequent period in the eighteenth century. In the nineteenth century, three relatively common variants are seen. First, as Janet Schmalfeldt notes, it becomes increasingly common for half cadences in the nineteenth century to conclude on a V\textsuperscript{7}, a phenomenon for which Schmalfeldt coins the term \textit{nineteenth-century half cadence} (19cHC): “a local form-defining arrival on the dominant that, unlike the typical goal of classical half cadences, includes its seventh” (Schmalfeldt 2011, 202–3). Poundie Burstein (2014, 2015) has argued that the nineteenth-century half cadence is also a possibility in music of the eighteenth century. Responding to theorists like Caplin who claim that the inclusion of a seventh would render the dominant “too unstable to function as a cadential goal” (Caplin 1998, 79), Burstein says the following:

Yet instability is hardly foreign to the half cadence. On the contrary, half cadences are intrinsically unstable. Various features might add to this instability, including the lack of a caesura, a volatile texture, an acceleration, or the presence of an inverted V or V\textsuperscript{7}. In certain situations, these destabilizing features might well argue against the labeling of a half cadence—that is, unless these features are sufficiently counterbalanced by other elements that more solidly assert the dominant harmony’s closing role. The question here is whether just one of these destabilizing elements—specifically, the presence of an inverted V or V\textsuperscript{7}—should by itself prevent the labeling of a phrase ending as a half cadence, regardless of the strength of other contextual features. (Burstein 2015, 97–98)

This assertion, followed by citations of historical treatises and a vast table of eighteenth-century repertoire, argues not only that progressions containing the dominant seventh may be considered half-cadential, but also that those ending with an inverted dominant may likewise constitute a (half) cadence. Indeed, cases exist in nineteenth-century music—including works by
Brahms, Dvořák, and Léhar—where a theme resembles a standard period in every way, except that the cadence of the antecedent employs an inverted dominant.

A third variant seen in the nineteenth century concerns periods employing tonal progressions that do not open with tonic harmony. For example, Beethoven’s Piano Sonata Op. 101 opens with a dominant pedal, and the antecedent phrase (mm. 1–4) arguably constitutes a dominant prolongation (Example 1.11). Still, the sense of a half cadence at the end of the antecedent is unmistakable. In several situations involving periods with non-tonic openings, the tonal interpretation is nonetheless relatively clear, as the tonic enters soon after. Such is the case with


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Formally, this antecedent resembles a “grand antecedent” (Hepokoski and Darcy 2006, 77–80). The grand antecedent refers to a main theme passage that ends on a half cadence, while the transition opens with main-theme material. In the case of Beethoven’s extremely brief sonata, the “grand antecedent” is not so grand, occupying only the length of a regular antecedent, and the arrival of transition material as soon as m. 5 is almost entirely unexpected, thus generating the expectation that this theme will be a period whose opening harmony is V.
two of Chopin’s Op. 24 mazurkas, given in Example 1.12.10 Other examples, however, can be problematic. Example 1.13 gives the scherzo from Beethoven’s Piano Trio Op. 1, No. 1, which begins on the submediant and proceeds to a half cadence in the antecedent. The consequent returns

*Example 1.12:* Chopin, Mazurka Op. 24, nos. (a) 1 and (b) 3, both have phrases beginning on V.

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10 See Chopin’s Mazurka Op. 24, No. 1 and No. 3. Both pieces begin on dominant harmony, with the tonic arriving in the second measure. Carl Schachter (2004) remarks on this aspect of Chopin’s mazurkas, probing the potential for the delayed onset of I to also set back the arrival of the hyperdownbeat. Owing to the accent markings and the hypermetrical regularity of the B section, Schachter concludes that these measures “permit no other possibility” outside of a metrical interpretation that takes the initial V as hyperdownbeat.
to the opening submediant and progresses to the tonic with a PAC at m. 16. This example illustrates the potential ambiguity that such a period opening outside the tonic may generate. At the end of the sixteen measures it becomes clear that an interrupted auxiliary progression—an auxiliary progression with a standard interruption on 2—was in effect. However, a moment-to-

\[\text{Example 1.13: Off-tonic opening in a period from Beethoven, Piano Trio Op. 1, No. 1, mm. 1–16.}\]

\[\text{Antecedent}\]

\[\text{Violin}\]

\[\text{Cello}\]

\[\text{Piano}\]

\[\text{Ex: VI or Cm: I}\]

\[\text{II: V HC}\]

\[\text{Consequent}\]

\[\text{Vln.}\]

\[\text{Vc.}\]

\[\text{Pno.}\]

\[\text{Ex: VI II V7 I PAC}\]

\[\text{[VII: V I] PAC}\]

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11 The interrupted auxiliary progression most closely resembles the first category for off-tonic returns in Burstein 2005a, 312. Complete examples of these off-tonic returns are rare for eight- and sixteen-measure periods, with the
moment listening may well have taken the opening harmony as tonic, creating for a moment the effect of a I–bVII progression in the antecedent. (See the second line of roman numerals in Example 1.13.) It is not until the arrival of the tonic (for the first time) at m. 16 that we receive definitive confirmation that the piece is indeed in E♭ major with an off-tonic opening.

In Beethoven’s piano trio, the tonic does not arrive until the end of the consequent; for the entirety of the antecedent, the tonic is only hinted at. Should the music stop at the end of the antecedent, even greater tonal ambiguity would have arisen. Poundie Burstein (2005b) speaks of a similar phenomenon in an analysis of Schubert’s Piano Sonata Op. 42, where

Schenker notes the V and VI chords ‘are without direct relationship; V closes like a dividing dominant, and a new attempt at a cadence begins with VI.’ This new phrase soon leads back to the home key, as though to form a VI–V–I auxiliary cadence in A minor. The motion to the tonic is interrupted, however, as this phrase ends on a half cadence punctuated by a caesura. (Burstein 2005b, 179–80)

While the moment in question does not resemble a period, Burstein’s description of the tonal plan is applicable to period layouts where no tonic can be heard until the final cadence. These situations create what may be called an interrupted auxiliary progression. The first half of this interrupted progression approximates Burstein’s auxiliary divider.\textsuperscript{12}

Whereas the above three variants—the use of V\textsuperscript{7}, the inverted dominant, and the non-tonic opening—represent the most common alterations to the standard period layout in the nineteenth century, examples by Dvořák that employ a modulating antecedent are arguably even more unusual. Still, through the course of the nineteenth century, they become increasingly common. The modulating antecedent can most readily be related to the reinterpreted HC, where the antecedent modulates and cadences with a PAC in the new key. However, a crucial difference is

\textsuperscript{12} See Burstein 2005b, 179–80 for a detailed description of the auxiliary divider.
that what justified the reinterpreted HC—hearing the dominant as both V-as-key and V-as-chord—is no longer an option for the modulating antecedent: whereas the reinterpreted HC modulates exclusively to the dominant, which is then reinterpreted as a tonic-key HC, the modulating antecedent moves to other keys, which exclude the possibility for the reinterpretation into a half cadence. These cadences cannot function as half cadences at any level, but rather retain their status as foreign-key PACs.

**Modulating Antecedents with an Ancillary Dominant**

The PAC at the end of a modulating antecedent may function within one of two possible tonal scenarios. In the first and arguably the more tonally expected scenario, the tonicized *Stufe* that appears toward the end of the antecedent is not the ultimate, but rather the penultimate harmony. In these situations, the sense of tonal coherence is generally preserved, as the phrase begins on the tonic and ends on the dominant, the only difference being that some *Stufe* that appears immediately before the final dominant is emphasized through a cadential progression.\(^{13}\)

These forms of antecedent modulations may represent what might be understood as a subcategory of the reinterpreted HC. That is, much as with the standard reinterpreted HC, a foreign-key PAC becomes recast retrospectively as a part of a half-cadential progression. With a standard reinterpreted half cadence, the local tonic of the foreign-key PAC is reinterpreted into the half-cadential dominant. In contrast, antecedent modulations into keys other than V in this scenario require a subsequent chord to serve as the half-cadential dominant. With the standard reinterpreted HC, a single moment possesses the harmonic content to function as two different types of cadence.

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\(^{13}\) Charles Smith (1996) has spoken of this tension between tonal structure and form. Just as in many of his examples, a less formally significant dominant follows a previous harmony that assumes an important formal function. In many of his analyses, even with a dominant available to conclude a progression, Smith opts to take the V as passing on account of its formally passing nature, while some non-dominant harmony is given the status of a deep-level harmony. In these cases, I prefer to preserve normal tonal syntax in my graphs, while acknowledging with formal labels where formal segments begin and end.
(V: PAC and I: HC). When an antecedent modulates to a key other than V, and V follows, two potentially cadential moments exist. It is the placement of the functional point of closure of the phrase, rather than the function of the phrase’s final chord, that is reinterpreted.

Brahms’s Op. 6, No. 3, *Nachwirkung*, excerpted in Example 1.14, provides a demonstration of this principle. The song consists of three strophes, each of which presents the period layout discussed immediately above. The antecedent here closes with a PAC on the supertonic. However, this supertonic progresses to a dominant harmony immediately thereafter. Furthermore, the ambivalent strength of the inverted dominant here poses an analytical challenge, as it now raises a question of its cadential status relative to the previous PAC: on the one hand, the perfect authentic

*Example 1.14: Period with modulating antecedent (with ancillary V) in Brahms, *Nachwirkung*, Op. 6, No. 3.*
cadence in II might serve as the functional cadence, or it might be better thought of as part of a half cadence in which an emphatic II chord precedes the final V. This interpretive dilemma highlights the tension between the tonal expectation of V and the formal weight of the PAC typically found in this type of period. While both readings are possible—that is, the antecedent concludes either on II or on V—neither is completely satisfactory. On the one hand, the inverted dominant in m. 9 fails to definitively suggest a half cadence at the end of the antecedent. On the other hand, the reading of a II: PAC is also unsatisfactory, due to the readiness with which II unfolds into V. And perhaps more strikingly, the words “Gedanken,” “versäumend,” and “versunken” in all three strophes of the vocal parts end not with II, but with V. Example 1.15,

which produces a voice-leading interpretation of the passage, attempts to capture both possible cadences. Using the Schmalfeldtian “becoming” arrow, this interpretation hears the II: PAC as becoming a half cadence.

In some cases, the presence of a briefly stated V toward the end of the antecedent complicates a period’s phrase boundaries. That is, in certain cases it may seem as if the chords within the thematic boundaries may have been shifted. Accordingly, although V in these situations nearly always closes off the tonal progression as a reinterpreted HC, it is often equivocal as to whether the phrase is more heavily associated as an end to the phrase that precedes it, or a pickup to what follows. Scenarios such as those in Example 1.14 further heighten the conflict between these two potential parsings. On the one hand, a standard antecedent phrase ends in a half cadence, which is an option in such situations. On the other hand, the most symmetrical hearing would take the foreign-key PAC as the functional cadence. In situations such as these ancillary dominants, the reading of a piece according to standard harmonic conventions often runs against the apparent symmetry of the phrase rhythm.
A celebrated example of this situation can be found in Chopin’s D-major prelude, which is graphed in Example 1.16.¹⁴ This piece opens with four measures of dominant harmony, which leads to the tonic of m. 5. At m. 13, the antecedent phrase arrives on a dominant of the relative minor, which is itself tonicized with a series of surface-level perfect authentic cadences, resulting in a PAC in the key of the mediant. At m. 17, the opening dominant returns, except this time, the once surface-level dominant now functions as the end of the antecedent’s harmonic progression. Thus, even though it formally marks the onset of the consequent, this V’s *tonal* function caps off the progression that went from I to III. In the consequent, the same set of cadences that was once in III now returns transposed to the tonic, bringing the piece to its conclusion with a PAC in the home key.

Standard tonic–dominant polarity is captured in Chopin’s prelude as a result of the V serving as part of a reinterpreted HC. However, the reading that most effectively preserves the symmetry

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¹⁴ This piece was analyzed by Carl Schachter (1994) where he also contrasts between formal design and large-scale harmony. One significant difference between mine and Schachter’s analyses concerns the dominant harmony of mm. 17–20. Schachter interprets the dominant as resolving with the following tonic whereas I opt to hear an interruption. The resolution into the tonic at m. 21 is, by my reading, a surface-level event, while the deeper-level resolution coincides with the arrival on tonic harmony at the end of the prelude (cf. Burstein 2005a).
of the period would indicate that the V of m. 17 does not conclude the antecedent’s tonal progression, but rather begins the consequent. By this latter reading, the mediant of mm. 13–16 is cut off from the dominant at m. 17, and therefore no reinterpretation takes place.

**Modulating Antecedents without an Ancillary Dominant**

Antecedent modulations with an ancillary dominant, are surprisingly rare in Dvořák’s musical output. Most of Dvořák’s modulating antecedents do not conclude with a home-key dominant inserted immediately after the foreign key PAC. With these types of modulating antecedents, the local tonic of whichever key is tonicized in the antecedent simply turns back to the tonic without any mediating harmonies. This direct return can be very abrupt. However, much like the previous instances, the tonal interpretation can be one that involves a tonicization of a Stufe at a higher tonal level.

Periods such as these do not carry the potential for reinterpretation of the antecedent’s final harmony as part of a half cadence. It is in this subcategory of the modulating antecedent that the problem of cadential hierarchy becomes most prominent: how does cadential hierarchy manifest itself in situations where both the antecedent and consequent appear to close with a PAC? Despite the absence of a functional half cadence, these antecedent modulations nonetheless maintain a similarity with the reinterpreted HC. Just like the reinterpreted HC, the tonicized Stufe in the modulation is immediately reinterpreted in reference to the governing key of the period upon the entrance of the consequent. Due to this immediate return, it is easy to hear the local tonic of the PAC at the end of the antecedent as governed by the larger tonal context. Here, the cadence provides a high degree of closure, while its situation in a foreign key—which is made audible by the abrupt return to the home key—clarifies the role of the local tonic within the encompassing cadential hierarchy.
The absence of the dominant in this layout, however, poses a problem for the tonal interpretation of this type of modulating antecedent. On the one hand, the music in these scenarios often clearly indicates that the phrase concludes with some harmony other than I or V; on the other hand, these “ultimate” harmonies are often so charged with potential energy that they give rise to the urge to move somewhere. Schenker himself grappled with this problem in *Free Composition*, where a non-dominant *Stufe* appears simultaneously to move to V (usually upward), while at the same time returning to I. Example 1.17 reproduces Schenker’s Figure 131, which summarizes the opening sixteen measures of Chopin’s “Black Key” Etude, Op. 10, No. 5. Strikingly, the two slurs in the bass appear to contradict each other. Whereas the downward slurs and the accompanying roman numerals appear to indicate a reading in which III is wholly contained within the surrounding I chords, the upward slurs on top seems to suggest that the second I is subordinate to the motion from III to V. In this situation, Schenker appears to equivocate, refusing to take a definitive stance on how the tonal hierarchy plays out.

This tension between a formal ending and an urge to continue creates two conflicting interpretations. The first interpretation takes both tonics of the antecedent and consequent literally. This interpretation reads the *Stufe* at the end of the antecedent like the back-relating dominant; it connects not with what follows, but rather with harmonies that came before, albeit on a harmony other than V. This back-relating *Stufe* turns directly to I, perhaps through a surface-level connection, with the onset of the consequent. The second interpretation draws influence from...
Schenker’s own analyses of periods with an IAC in the antecedent. Example 1.18 reproduces Schenker’s Figure 91, nos. 2–4. These examples fall under Schenker’s concept of the “free interruption” which, rather than arriving on scale degree 2, has its main melodic motion interrupted on other scale degrees by the return of opening material. In both of Schenker’s examples, the melody arrives onto scale degree 3, where it is interrupted by a surface-level I in the consequent.

Example 1.19 summarizes the two hypothetical interpretive possibilities for such situations. Two pieces by Dvořák provide examples for both possibilities. In the first case, mm. 113–20 of Dvořák’s Piano Quartet Op. 87/iii provide an instance where one might interpret the passage according to the reading in Example 1.19a, owing to the strength of the tonic return, as well as the brevity of the cadence. In the second example, Dvořák’s first Slavonic Dance from Op. 46, the

**Example 1.18**: Examples of the free interruption in Schenker, *Free Composition*. (Used with permission.)

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**Example 1.19**: Hypothetical voice-leading graphs of an antecedent-consequent period with a modulating antecedent, showing interpretations with (a) a back-relating *Stufe*, and (b) a free interruption.
paradigm in Example 1.19b provides a convincing reading of the tonal structure. Taking the reading of the free interruption highlights the $5\rightarrow 4\rightarrow 3$ motions in the melody for each quarter of the theme.

Example 1.20 quotes a period in Dvořák’s Piano Quartet, Op. 87/iii. The movement is set in a ternary form; the period cited here serves as the main theme of its contrasting B section. As the example demonstrates, the section begins in B major and concludes its antecedent with a deceptive resolution to VI, which, given its placement at the end of the antecedent, arguably functions as a deceptive cadence. However, after this (non)resolution, this deceptive cadence is tonicized with its own cadential progression, turning it into a foreign-key PAC at the last moment. In the consequent, the opening idea returns untransposed, and this time—being no longer derailed by the deceptive cadence—it cadences in the tonic key. The tempo of this piece illustrates my earlier point regarding the tonicization of a non-tonic $Stufe$. In this period, the tempo is quick enough that, as the VI: PAC resolves, the sense of deception from the V–VI motion has not yet left the listener’s ear. At this moment, while the VI: PAC is perfectly audible, it was not long at all after the initial deception was heard. Thus, at the moment of resolution, there is still no doubt that the current chord functions as a submediant, rather than as a stable tonic.

Owing to the mutable cadence at this moment (one which can best be described as DC $\Rightarrow$ VI: PAC), there arises an interesting question regarding what serves as the main operative cadence for this phrase. Potentially, how one opts to hear this cadence may affect how one hears the theme itself. In most cases, deceptive cadences do not end an antecedent; rather, they relaunch part or all of the phrase’s continuation. According to this reading of the deceptive cadence, the apparent consequent of this phrase may not be a true consequent but part of a passage extended by a
deceptive cadence. This reading is problematic, however, as it is as rare for an entire theme to be repeated following a deceptive cadence as it is for a deceptive cadence to convincingly end a phrase.

*Example 1.20: Modulating antecedent in Dvořák, Piano Quartet Op. 87/iii, mm. 113–20.*
On the other hand, if one reads the operative cadence here as being the VI: PAC, the period reading would conform rather well to the model that I propose in this dissertation. There remains the question of how to integrate this deceptive harmony into the larger tonal progression. Example 1.21a provides my preferred interpretation of this passage. This reading interprets the passage as involving a back-relating submediant Stufe, where the tonics of the antecedent and consequent are prioritized, while the tonicized submediant harmony is given a status of tonicized Example 1.21:

Two voice-leading interpretations of Dvořák, Piano Quartet Op. 87/iii, mm. 113–20, illustrating (a) a back-relating VI and (b) a free interruption.
back-relating submediant *Stufe*. I prefer this interpretation over the alternative—that which uses a free interruption (see Example 1.21b)—due to the repetition of the entire consequent after the

*Example 1.22:* Modulating antecedent in Dvořák, Slavonic Dance Op. 46, No. 1, mm. 1–17.
deceptive resolution. In contrast to most deceptive progressions, which demonstrate their need for immediate resolution by repeating only the cadential portion of what came before, the one here—by opting to repeat the entire phrase—appears not to have any immediate urge to correct itself. For this reason, I do not hear the VI as being immediately related to the harmonies that follow, but as a back-relating VI.

The second example comes from Dvořák’s Slavonic Dance Op. 46, No. 1 (Example 1.22). In this opening period, too, the antecedent ends in the key of the submediant, while the consequent closes in the tonic key. Although its tonal layout is similar in certain ways to the previous example, my tonal interpretation here adopts the free-interruption model. My voice-leading interpretation of this passage (provided in Example 1.23) highlights the prominent $5 \rightarrow 4 \rightarrow 3$ melodic motives, which are replicated on several levels. In the first four measures of the example, the melody arrives on $3$, which concludes the compound basic idea within the antecedent. In the following four measures, Example 1.23: Voice-leading interpretation of Dvořák, Slavonic Dance Op. 46, No. 1, mm. 1–17.

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15 This passage is best interpreted as a compound period in which both the antecedent and consequent take the form of a compound basic idea + consequent hybrid.
the apparent 3–2–1 motion in the home key is played entirely over A minor, turning this into another 5–4–3 gesture, albeit in the key of the submediant. Here, an authentic cadence in the key of the submediant closes off the antecedent. In the consequent, the same 5–4–3 from the opening measures returns the music onto the deeper-level 3, which resolves down to 1 with the arrival of the PAC at m. 17.

**ANTECEDENTS WITHOUT A CADENCE**

In the strangest scenario, a period’s antecedent may appear without any cadence. Such antecedents may appear to depart significantly from the modulating antecedent; given that there is no cadence, these antecedents by definition do not modulate to any foreign key. The problems

*Example 1.24: Ambiguous cadential status of the antecedent in Chopin, Mazurka Op. 6 No. 1, mm. 1–16.*

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16 There is a potential problem with the VI: IAC. At m. 5, there appears to be a I: IAC, which, if true, would be theoretically stronger than the VI: IAC at the end of the antecedent. I discuss the analytical issue of the IAC in greater detail in Chapter 2 of this dissertation. Here I suggest that, while apparently easy to fit between the HC and PAC, the IAC is in reality a far more complicated and mutable entity: I argue that it is able to adopt many guises and cadential strengths. In the present example, the apparent IAC at m. 5 does not truly function as a cadence, but rather an unassuming tonic prolongation. The VI: IAC at the end of m. 9, however, functions as a true cadence, given its parallel to m. 17, which contains a clear I: PAC that ends the phrase.
posed by these formal units nonetheless resemble those with an antecedent modulation and therefore warrant discussion here.

The most oft-discussed example of such a period is found in Chopin’s Mazurka Op. 6, No. 1 (Example 1.24). Discussions of excerpt demonstrate the tonal-formal tension exhibited by the lack of explicit cadential content. A tonally coherent interpretation of this passage would be inclined to read the II\(^3\)\(^4\) sonority at m. 8 as leading directly into the dominant of m. 9.\(^{17}\) However, formally speaking, the latter harmony clearly initiates the consequent phrase, much as the analogous moment initiated the antecedent in m. 1. Because of this formal parallel, Caplin (2018, 16) has argued against an interpretation that elides the boundary between the antecedent and consequent phrases. Instead, he interprets mm. 1–8 as an antecedent phrase that genuinely concludes without a cadence.

To be sure, elements of both interpretations are supported by the piece, and such a tension between tonal and formal events lies at the heart of an excerpt like this one. The presence of a dominant harmony at the start of the consequent phrase simplifies the analysis to a degree, because it allows for the II\(^3\)\(^4\) chord to progress to V in a relatively unproblematic fashion: the harmonic syntax is conventional, even if the formal syntax is not. Dvořák’s Humoresque Op. 101, No. 8 (Example 1.25) presents an example that is far more challenging as a result of its harmonic sparseness. Much like Chopin’s mazurka, the antecedent of the Humoresque concludes with the bass on 6 and no functional cadence. Unlike in the mazurka, however, no dominant follows this submediant harmony.

\(^{17}\) For literature on such a view, see Rothstein 1989, 46–7. The dominant openings of these phrases bear resemblance to the Chopin mazurkas discussed earlier in this chapter.
From a formal standpoint, the resulting theme type closely resembles what Caplin (1998) describes as hybrid 4 (compound basic idea + consequent), the hybrid theme-type that he regards as the closest to the antecedent-consequent period. Since a compound basic idea differs from an antecedent only owing to its lack of a concluding cadence, such a labeling of the opening phrase of the Humoresque would be quite appropriate. Something unaddressed by such a reading, however, is that most instances of hybrid-4 themes involve little to no harmonic acceleration toward the end of the first half. This lack of harmonic acceleration produces the impression that no cadence is expected in the first place. The same cannot be said for the opening phrase of the

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18 See Figure 5.1 in Caplin 1998, 63.
Humoresque. Here, the harmony remains on tonic until the very last beat before the non-cadence, at which point there is a quick acceleration leading to VI. Although such an acceleration of harmonic motion by no means invalidates the formal reading, it creates at least the expectation of a cadence. The expectation that the phrase will be part of a true antecedent-consequent period is also thus created, even if it is not realized.

From a tonal standpoint, the problem of the phrase’s closing on VI can also be addressed by using one of the two methods I outlined in my discussion of the modulating antecedent without an ancillary dominant. Example 1.26 provides two interpretations of Dvořák’s Humoresque. The first one (a) treats the non-cadence as a back-relating VI, whereas the second (b) utilizes free
interruption. Of the two, the free-interruption model arguably better captures the downward trajectory of the bass; the motion down to VI strongly signifies a descending tetrachord, which is realized with the free-interruption reading of the passage.

Example 1.27 provides the most striking example of a period with no cadence at the end of its antecedent. The theme contained in Dvořák’s Festival March, B. 88, mm. 52ff contains all the melodic and harmonic gestures that hint at a layout that involves a modulating antecedent. However, this layout is complicated by the presence of a double period and a lack of internal cadences. As mentioned earlier in this chapter, current definitions of the double period do not typically require that the first and third phrases conclude with a cadence. This flexibility only avoids problems when the large-scale antecedent does close with some cadence. Since a cadence almost always offers a more definitive close than a non-cadence, the requirements surrounding
cadential hierarchy may arguably be satisfied in such a case. In this example, however, the large-scale antecedent also fails to reach a cadence. Furthermore, whereas the first and third phrases close on tonic harmony, the large-scale antecedent closes on the mediant. This non-cadence on a non-tonic degree poses a quandary: if a tonic-closing cadence is stronger than a non-tonic-closing cadence, should not a tonic-closing progression be stronger than a non-tonic-closing progression? Yet, the mediant at m. 59 offers a clear sense of arrival onto something new, which—along with the octave doubling that follows—suggests a stronger sense of closure at m. 59 than at m. 54.

The four phrases of this double period each open with the same basic idea. The first time the basic idea is stated, the melody comes to rest on 3 at m. 55. This would appear to suggest an IAC, if not for the bass’s stepwise descent, which denies any potential for a functional cadence (with root-position V and I) here. Instead, these four measures appear to be something more akin to a

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It is also possible to interpret this closing gesture as a cadence that operates contrapuntally. Here, the bass contains what Gjerdingen (2007) calls a tenor clausula and the melody contains the auto clausula.
compound basic idea. The second time the basic idea is heard, the music modulates to A minor, at mm. 58–59. Here, the melodic profile—especially with the use of B♭, as well as with the arrival on the local 3 in the new key—also seems to suggest that the transition into A minor should be understood as something more substantive than just a change of harmony. Much like the previous four measures, however, this melodic close is not confirmed by an authentic cadence. From a formal standpoint, the lack of a cadence here proves far more problematic than in the first four measures. Since the missing cadence in the previous four measures resulted in a compound-basic-idea interpretation, the reinitiation of the opening idea at m. 56 would suggest that hybrid 4 is on its way to being realized. However, this hybrid reading—and indeed any reading at this point—would require a cadence by the eighth measure of the phrase. The lack of a cadence at m. 59 means that these eight measures cannot properly be understood by conventional phrase types.

After the non-cadence at m. 59, the music once again returns to the basic idea, this time coupled in octaves, and it arrives at the same non-cadential melodic 3 at m. 63. This arrival seems slightly stronger than the one at m. 55, owing to the presence of the tonic root on the downbeat in the bass. Upon the fourth statement of the basic idea, the melody finds its way to 1, mimicking a PAC. Even this final melodic close is not supported with a root-position V–I motion in the bass; the tonic octave with a leading-tone suspension (m. 67) is as strong a close as Dvořák will give us. Thus, even by the sixteenth measure, not a single satisfactory cadence, either authentic or half, has been heard.

As discussed above, the identification of this theme as a period is thus called into question, since not one of the internal repetitions concludes with a true cadence supported by root-position harmonies. The lack of a true cadence in turn calls into question the duple pairing of these four statements: reading this theme as a double period would require pairing the first two statements
into a larger antecedent phrase, and the last two statements into the larger consequent phrase. But given the lack of a convincing cadence in any of these four phrases, there is no harmonic confirmation that the end of the second and fourth statements are any more capable of closing off a larger unit than what are found in the internal divisions. Furthermore, the closure of m. 59 on a non-tonic harmony would suggest that the closure at the end of the second phrase is even less stable a close than the first.

The reading offered in Example 1.27 helps untangle the potential confusion. Rather than based on the harmonic cadences alone, this reading takes into account the melodic trajectory as well as instrumental cues. The orchestration of this passage resembles several other orchestral periods in Dvořák where the octave doubling of the melody in the consequent seems to provide indication that a consequent has been initiated. In this piece, the first two phrases (mm. 52–59) are orchestrated identically, while the latter two (mm. 60–67) both contain a thicker texture with the melody doubled in a higher register, thereby sounding like a consequent of the first two statements. Using this similarity to establish the pairing of phrases, one notices that this theme resembles that of Dvořák’s Humoresque. As in the Humoresque excerpt, the antecedent in this one leads to a foreign key that is not confirmed by a cadence, while the consequent closes in the home key.

Interpreting the voice leading in this passage poses some particularly intriguing challenges. Since this theme is not marked by any obvious cadences, how might its tonal structure be understood? In addition to the large-scale formal cadential issues, the tonal voice leading of certain surface-level features also deserves attention, such as the apparent motion from V to IV in m. 53 and m. 61.

Example 1.28 offers one possible hearing of the passage. On the large scale, this reading frames the theme as governed by a standard interruption on V by taking advantage of the various
returns of the theme and its striking initial dominant. The opening V adopts a different role in each of the four contexts in which it returns (cf. Example 1.16 above). In the first two statements of the basic idea within the large-scale antecedent, this dominant functions as a surface-level feature. Upon first phrase of the consequent (m. 60), however, this same V is reframed as the structural close that caps off the first attempt to complete the *Urlinie*. Within this first motion from I to V, the key of A minor—which concludes the antecedent, as noted in the discussion above—becomes cast as an intervening III. In the consequent, the dominant iteration at m. 64 serves as the large-scale V, which resolves upon the arrival of the final tonic at m. 67. The problem of the almost-IAC is resolved to some extent by this interpretation, through its reading of the dominant in m. 54, along with the 5–4–3 motion, as a prolongation of tonic harmony. The apparent motion from V to IV at the theme’s opening is interpreted as providing harmonic support to the arpeggiation leading to the dominant’s chordal seventh. That the seventh arrives on a downbeat, resolving one beat later, gives both it and the accompanying IV chord the quality of an appoggiatura.

**ANALYTICAL EXCERPTS**

In what follows, I provide analyses from two pieces from Dvořák’s *œuvre*. In addition to demonstrating the prevalence of the theme types discussed above, these analyses serve to illustrate a few issues that will be discussed at greater length in the following chapters. In the first analysis, the four-part theme provides yet another instance of a double period, an idea that will be addressed in detail in Chapter 2. The second analysis explores the question of what happens when a period appears to conclude with *two* foreign-key PACs. This question offers two solutions: (a) the period may involve an auxiliary progression, in which case what appeared to be the tonic harmony turns out to be an off-tonic opening, or (b) the period may be a modulating one. The analysis in this chapter illustrates the first case, while the second possibility will be addressed in detail in Chapter 3.
String Quartet No. 13, Op. 106/iii

Example 1.29 provides the opening theme from the third movement of Dvořák’s String Quartet Op. 106. This opening theme is cast in the form of a thirty-two-measure period containing a VI: PAC at the end of the antecedent at m. 16. In the consequent, a similar cadence returns, now transposed up a minor third so as to conclude in the home key. In regard to its formal structure, this period contains four phrases and qualifies as a double period of the type described by Berry.

Example 1.29: (Double) Period with modulating antecedent in Dvořák, String Quartet Op. 106/iii, mm. 1–32.

20 Given that cadences fall in mm. 15 and 31, and pseudo-cadences in mm. 7 and 23, one might adopt a reading where one real measure is two notated measures (R=2N). This reading effectively transforms the music into a regular sixteen-measure period, a far more standard length for the double period.
Green, and Kohs. Additionally, from the perspective of key relationships, this theme offers a remarkably striking modulation, as it modulates not to the diatonic submediant but to the parallel major. Example 1.30 provides a voice-leading interpretation of this passage.

This period owes its extraordinary length in part to its four-phrase layout. Each of the four phrases occupies eight measures and contains a basic idea and a contrasting idea. The theme owes its relatively standard period classification to the fact that its first and third phrases lack a true functional cadence. Instead, these phrases begin and end on tonic harmony, with no motion in the bass and merely neighboring motion in other voices. Measures 15–16 and 31–32 present the only two cadences: the large antecedent closes with a VI: PAC and the large consequent with a home-key PAC.

The inclusion of this far less common excursion into the minor #VI in a minor home key presents a striking moment in the music. This moment proves to be so jarring that the problem of the VI chord persists as the piece progresses. A contrasting musical section is found immediately following the consequent, beginning at m. 33. This contrasting section begins and ends in the home

Example 1.30: Voice-leading interpretation of Dvořák, String Quartet Op. 106/iii, mm. 1–32.
key of B minor, exactly where the consequent of the period had left off. However, this contrasting section plays itself out completely over a dominant pedal in the bass, imbuing the entirety of this middle section a mood of unsettledness.

At m. 79, the opening theme returns, and just like the first time, the antecedent of the theme cadences in the minor raised submediant. But this time, unlike in its first statement, the music no longer glosses past this point, instead getting stuck on this awkward chord. Seemingly unable to move beyond this unconventional modulation, the music cuts the period short, as though opting to expand this section by introducing a new theme in the minor submediant’s parallel major key— that is, A$b major (= G# major). This expansive development of the new key presents yet more problems, as the change from G# minor to A$b major presents one more unit of distance from the home key. These units of distance can be expressed in neo-Riemannian terms. In the diatonic scenario, the motion from I to VI can be described with a leading-tone exchange, or L. In the present piece, the work must first undergo a motion to the parallel major, before then moving to its relative minor, resulting in a PR transformation. Here, with an additional P transformation to go from G# minor to A$b major, the motion from B minor to A$b major becomes a PRP transformation. These motions are summed up on the Tonnetz in Example 1.31.

At m. 151, the opening theme returns, in the manner of a renewed attempt to a cadence in the home key. This time the piece has just as little luck getting past the minor submediant. Much as in the previous attempt, this antecedent lands on a minor #VI chord, followed in m. 167 by a restatement of the theme from the original contrasting section. Owing to the previous theme’s inability to conclude in the tonic, the contrasting theme now returns completely in the minor submediant. What was originally heard in the home key now returns transposed, having been affected by the exacerbation of the initial period’s inability to find the home tonic (cf. mm. 167ff.).
Example 1.31: Trajectory of tonal motions on a neo-Riemannian Tonnetz of Dvořák, String Quartet Op. 106/iii.

However, this transposed return now presents a way to resolve this tonal issue. Since the first statement of the contrasting theme has its bass entirely over a dominant pedal, the literal transposition here also sees the bass return over the local dominant. Thus, throughout the entirety of this contrasting section, the bass now articulates D#. The D# eventually recontextualizes itself as the major mediant of the home key. The G# minor six-four makes its way (though not immediately) to an augmented sixth chord on Eb at m. 209, which—its bass note having been reinterpreted as D#—proceeds to the dominant at m. 211; the home tonic follows at m. 213, completing the bass arpeggiation D#–F#–B. At this point, the tonal issue presented and developed through the initial period has been fully resolved, and the jarring VI chord never again appears in any substantial way. All subsequent entrances of this theme—even those following the piece’s brief excursion into a new, meno mosso section—remain in the home key.
Poetic Tone Poems, Op. 85, No. 11, mm. 38–45

Example 1.32 provides the eleventh piece in Dvořák’s Poetic Tone Poems, Op. 85, which presents the modulating antecedent in a context that resembles a period containing two foreign-key PACs. The theme begins in B♭ minor, which arrives onto its subtonic by the end of the four-measure antecedent, closing with a PAC. The consequent initiates the same theme in A♭, turning the period into a sequential one, ultimately concluding with a similar PAC in F minor. In the context of these eight measures alone, this construction poses a problem in that neither the antecedent nor consequent appear to close with a home-key PAC; instead, both the antecedent and consequent phrases close with what appears to be a foreign-key PAC, contradicting the cadential hierarchy required for a period. However, the larger context provides some clarification: since the

Example 1.32: Period with auxiliary progression in Dvořák, Poetic Tone Poems, Op. 85, No. 11, mm. 38–45.
overall tonic of the piece is F, it is possible to hear the initial B♭ as a subdominant opening, and the key at the end of this passage as the true tonic. By this interpretation, both the antecedent and consequent sections of the period are framed by auxiliary progressions resembling Beethoven’s piano trio in Example 1.13 above. In this sense, the opening B♭ is not heard as a local tonic but as the subdominant of the background key of F; A♭ functions as the mediant of this same key.

Based on this interpretation of the harmony, Example 1.33a provides a possible tonal voice-leading graph. This interpretation illustrates an overarching IV–V–I auxiliary progression with a III embedded between the subdominant and dominant harmonies as support for a passing tone in the melody. This interpretation reflects the overall harmonic profile of the piece by tracing out the opening and closing sonorities of the piece. However, a weakness in this interpretation is that one of the structurally defining features of this period—the cadence in A♭—is given the lowest degree of structural weight. Due to the auxiliary nature of this cadence, an end-oriented hearing can be posited whereby the opening harmony is less structural, and the first cadence is of greater structural importance.

Example 1.33b provides this alternate interpretation, one that emphasizes A♭ as the deeper-level harmony. This interpretation results in two independent auxiliary cadences: the first one traces out a II–V–I progression in the key of A♭, while the second one takes the same A♭ and reinterprets it as the mediant in a deeper-level III–V–I progression. In addition to highlighting the first cadence, the two-part structure of this graph also more readily illustrates the periodic nature of the phrase: the first auxiliary cadence frames the antecedent, while the second frames the consequent. While these two readings differ from both the back-relating Stufe and free-interruption

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21 There are parallel octaves in the middleground of this interpretation, which, it can be argued, is more motivation for the piece to include the cadence into this section. The surface-level inclusion of E♭ also functions in this context to break up the parallel octaves.

models, the underlying logic remains consistent. One interpretation emphasizes the beginnings of phrases, while the other (the free interruption) prioritizes the point of cadential arrival. The same
distinction can be made here, despite the ways in which these graphs diverge significantly from these two models. That is, Example 1.33a prioritizes the key of the opening, by extension placing more weight on the beginning of the period, much like the back-relating Stufe interpretation. Example 1.33b, on the other hand, shows the passage as framed by two auxiliary cadences, both of which take the arrival of the goal chord of each half of the period as the most structurally significant event. This also lines up with the free-interruption model, where the arrival at the end of the antecedent leads to an arrival on the Kopfion.

CONCLUSION AND OUTLINE OF REMAINING CHAPTERS

The present chapter has introduced the modulating antecedent into the category of antecedent phrases in the music of Dvořák. As the two above analyses have illustrated, the introduction of the foreign-key cadence into the list of possible cadences for the antecedent prompts further questions regarding several formal and tonal issues. The following chapters are dedicated to examining each of these aspects.

First, the introduction of modulating antecedents calls for a revision of cadential hierarchies in general. This exploration aims to fit the foreign-key PAC within the currently accepted cadential hierarchy of HC, IAC, PAC, while also questioning this hierarchy. I begin Chapter 2 by examining historical treatises such as Reicha’s Traité de mélodie (1814) to place the foreign-key PAC in between the half cadence and the home-key PAC. I follow this with a discussion of the standard theoretical notion of the IAC as a cadence of medial strength and how this view often differs from what is seen in practice. I accomplish this by listing four common IAC-like phenomena, each of which has the potential to be mistaken for a cadence, even although none truly functions as such. Following this explanation, I show in each case how the IAC interacts with these variants to create IACs of varying strengths.
My repertoire is mostly limited to the music of Dvořák for two reasons. First, he seems to employ the modulating antecedent more often than most other composers. Second, the tonal relationships Dvořák engages in differ from those of most other composers. However, the discussion of cadential hierarchies has ramifications beyond Dvořák’s œuvre and prompts me to draw from the larger corpus of western music.

Chapter 3 follows this generalized investigation of cadences with a detailed study of Dvořák’s harmonic idiom and how he uses the modulating antecedent. In this chapter, I examine three common variants of the period employed by Dvořák and explore the problems posed by each one. In the first case, I discuss a theme type commonly used by Dvořák in which the modulating antecedent is repeated without alteration to the cadence in the consequent phrase. In the second, I discuss modulating antecedents that appear as part of another theme type, such as the sentential presentation or small ternary. Both of these constructs resemble the period in their own ways but are nearly always presented in recent theoretical literature as being entirely different. Finally, I address the common phenomenon of the modulating period, and how its structure is complicated by the presence of a modulating antecedent.

The last of these three period-like forms raises questions regarding the nature of key relationships. How is cadential hierarchy maintained when the consequent that responds to the foreign-key PAC is itself a foreign-key PAC? I address this question by comparing the keys frequented by Dvořák’s modulating antecedents against his large-scale modulations, such as those used for subordinate themes in sonata forms. In this section, I use scholarship by Russian theorists such as Iavorskiĭ, Sposobin, and Miasoedov to discuss the concept of tonal mutability. I argue that Dvořák’s antecedent modulations function in much the same way as described by discussions of

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22 This difference relates to a recent article by Áine Heneghan (2018) in which she discusses Schoenberg’s sentence and period as a somewhat porous.
the concepts of mutability. They are therefore best interpreted within a separate category from the larger modulations that, for example, characterize eighteenth- and nineteenth-century sonata-form modulations.

Chapter 4 of the dissertation concludes the investigation with a series of analyses in which the modulating antecedent plays a role. In this chapter, I outline the analytical and interpretive capabilities that such modulating antecedents allow within the period. On the whole, these examinations seek not only to gain a better understanding of Dvořák’s music, but also to engage with formal and tonal issues of the nineteenth century, allowing for a wider set of possibilities for interpreting this music.
CHAPTER 2
CADENTIAL HIERARCHY REVISITED

The differing weights accorded to the various cadence types serve an important role in helping to shape musical form. The general attitude regarding the classification of relative cadential weight has been articulated by William Caplin, who asserts in no uncertain terms the order of cadential strength of the three main established cadence types:

The strongest tonal confirmation is achieved by an authentic cadential progression; a weaker confirmation, by a half-cadential progression. [...] Authentic cadences are further subdivided according to the extent of melodic closure achieved at the cadential arrival. In a perfect authentic cadence (PAC), the melody reaches the tonic scale-degree in conjunction with the onset of the final tonic harmony. In an imperfect authentic cadence (IAC), the melody is left open on the third scale-degree (or, very rarely, the fifth degree).\(^{23}\) (1998, 27–43)

Example 2.1 offers a depiction of this hierarchy. This level of specification enables a seemingly uncontroversial hierarchy of cadences: the perfect authentic cadence is stronger than the imperfect authentic cadence, both of which—since they conclude on tonic harmony—are stronger than the half cadence. While this classification appears to be logically sound, real-life scenarios suggest a far more complicated relationship among these cadences.

Most notably, the proposed hierarchy fails to take the key of its cadences into account. Yet as was argued in the previous chapter, cadential strength may be established not just by cadence type, but by key as well. This equivocation by key leads to the outcome that a PAC can be stronger than, equal to, or even weaker than another PAC.

*Example 2.1: Conventional cadential hierarchy.*

\[
\begin{array}{ccc}
\text{HC} & \text{IAC} & \text{PAC} \\
\text{weaker} & \text{weaker} & \text{stronger}
\end{array}
\]

\(^{23}\) Emphases are in the original.
Furthermore, even when all cadences are in the same key, the relationship between the IAC and HC are often more equivocal than in the ordering suggested in Example 2.1. Especially considering the IAC’s potential to appear in a context in which cadential function is absent, surely it is possible for an IAC (or at least something that appears to be an IAC) to be weaker than an ensuing half cadence.

The present chapter probes the complications of the standard cadence hierarchy as depicted in Example 2.1 and proposes an expansion of the paradigm that takes into account the keys of cadences. I begin by focusing on the foreign-key perfect authentic cadence. As I shall argue, the cadential strength of the foreign-key perfect authentic cadence lies in between that of the home-key HC and PAC, as depicted in Example 2.2, a notion that resonates with ideas proposed by Anton Reicha (1814). Using this revised paradigm, I propose a new form of compound period, one that is used consistently within Dvořák’s œuvre.

This chapter also re-examines the position of the IAC within the hierarchy of Example 2.1. While some cases of the apparent IAC allow its constituent harmonies to appear weaker than a half cadence, complications at times allow an IAC to appear in guises that make it as strong as the PAC. Due to the relatively universal nature of these cadences, examples will be drawn from a

*Example 2.2: Proposed cadential hierarchy.*

![Diagram of cadential hierarchy]

- Hardest: (1/4C)  
-  
- Weakest: I: PAC

**Cadential strength:**

<table>
<thead>
<tr>
<th>Hardest</th>
<th>Weakest</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1/4C)</td>
<td>I: PAC</td>
</tr>
</tbody>
</table>

**Standard IAC:**

- Deceptive PAC
- Covered PAC

**"Not a cadence"**
variety of composers from the eighteenth and nineteenth centuries. Where applicable, however, I relate these issues to the music of Dvořák as specific case studies.

**HIERARCHY OF HC, FOREIGN-KEY PAC, AND HOME-KEY PAC**

The notion, expressed in the previous chapter, that a foreign-key PAC is weaker than a home-key PAC relates to the hierarchy of chords within any key. For instance, if two chords lie on the same structural level, and one of the chords is a tonic harmony, the tonic chord would generally supersede the non-tonic one. Likewise, if one PAC is in the key of V and another is in the key of \( bVII \), the PAC in the key of \( bVII \)—as the more distant key—under normal circumstances should be understood as the weaker one.\(^{24}\) Note that this proposed hierarchy is not established by the type of cadence, but rather by the keys in which cadences appear and their relationship to the home tonic of the work. A more complicated matter is determining the relative strength of foreign-key PACs to other types of cadences in the home key. For instance, should a PAC in the key of vi be understood as stronger than a HC in the home key, or weaker? In this section of the chapter, I propose such a hierarchy using the theories of Reicha (1814). Following this, I discuss some implications of this proposed hierarchy for understanding the form of a period within a period—a paradigm that I will call the *compound nested period*.

Let us first consider the relative strength of a foreign-key PAC to a home-key half cadence. Does the non-tonic key choice make the foreign-key PAC weaker than the home-key HC? Or does the local melodic/harmonic closure of the PAC make it stronger than the latter? Here, the idea of the modulating period provides insight into where these cadences stand with respect to each other.

\(^{24}\) In the case of Dvořák’s periods with a modulating antecedent, this issue is further complicated when combined with the modulating period in which the consequent modulates as well. This issue is addressed in detail as part of the following chapter, in which I illustrate two different types of modulation: one in which the modulation is closer to a tonicized harmonic shift, used for modulating antecedents, and one with long-lasting tonal implications, as is used in typical modulating periods.
The excerpt shown in Example 2.3, from the finale of Haydn’s Symphony No. 99, provides an excellent standard example that demonstrates one such possibility. In the type of period seen here, a half cadence closes the antecedent in the home key, while the consequent modulates to the new key, where it cadences with a PAC. Arguably, the term “modulating period” is not detailed enough a description to capture the mechanisms and specific location demanded of the modulation, as a modulating period can more effectively be understood as a “modulating consequent,” since in these modulatory constructions the antecedent “always closes in the same key in which it begins” (Caplin 1998, 55). With this layout, a home-key half cadence is always juxtaposed with a foreign-
key PAC. Given its placement at the end of the antecedent, the half cadence is heard as being more open-ended than the consequent’s foreign-key PAC.

With this in mind, Example 2.4 proposes the following hierarchy: a home-key PAC functions as the strongest cadence; a foreign-key PAC follows in second place; the half cadence is weakest, being the most open of the cadences. This hierarchy relates to the degrees of closure these cadences provide. The home-key PAC ends on the tonic in both melody and harmony, providing both harmonic and melodic closure. By contrast, the half cadence ends on V, which necessarily means that the melody also fails to close on the tonic; this cadence provides neither harmonic nor melodic closure. The foreign-key PAC, on the other hand, provides both harmonic and melodic closure through the arrival of the melody and bass on the tonic scale degree, but this closure is only heard on a local level, because of its excursion to a foreign key. Because it provides only a local form of closure but offers no such sense in the larger context, it fits squarely between the half cadence and the perfect authentic cadence.\(^{25}\)

Example 2.4: Hierarchy of the I: PAC, V: PAC, and I: HC.

\(^{25}\) In this sense, the foreign-key PAC offers a contrast to traditional interpretations of the home-key IAC in that they each provide one form of closure but not the other. Furthermore, each provides the complement of the other: the IAC provides harmonic closure, but the melody fails to arrive on the tonic; while the foreign-key PAC provides melodic but not harmonic closure. This comparison raises the tricky question of where the home-key IAC might fit within this paradigm, an issue that is explored in detail in the next section of this chapter.
This interpretation of the cadential hierarchy follows one described in Reicha’s *Treatise on Melody* (1814). Reicha’s treatise focuses primarily on writing melody, and as such, it tends to underemphasize aspects of harmony. As a result, Reicha devises cadential terminology based on different kinds of melodic closure.

Reicha’s terminology, summarized in Table 2.1, demonstrates a strong inclination for hierarchization. Each cadence is named as some fraction of the perfect cadence. The quarter cadence, being the weakest, ends a two-measure segment that Reicha calls the *figure*. The half cadence, while not always ending on a note of the dominant harmony, usually corresponds to the current notion of the term. For Reicha, this cadence often appears in the fourth measure of a period—halfway through—and ends a phrase segment called a *member*.  

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Table 2.1: Reicha’s cadence terminologies with original and modified definitions.

<table>
<thead>
<tr>
<th>Cadence (abbrev. are my own)</th>
<th>Reicha’s definition (1814)</th>
<th>Adapted definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter cadence (1/4C)</td>
<td>[Also] resting point, is weaker than a half cadence, and separates one melodic figure from another.</td>
<td>Not a harmonic cadence. It is a melodic break at the end of the basic idea.</td>
</tr>
<tr>
<td>Half cadence (HC)</td>
<td>Separates a member or a rhythm from another, and should therefore be stronger than a quarter cadence.</td>
<td>A standard cadence ending on the dominant.</td>
</tr>
<tr>
<td>Three-quarters cadence (3/4C)</td>
<td>Stronger than a half cadence and weaker than a full cadence, but can terminate a period just as well as the latter, <em>the only difference being the key in which it finishes.</em> (Emphasis my own.)</td>
<td>Stronger than a half cadence: PAC in a non-tonic key.</td>
</tr>
<tr>
<td>Perfect (authentic) cadence (PAC)</td>
<td>Ends the period in a definite and unmistakable manner. It does not impede the addition of other periods if they are considered appropriate.</td>
<td>Strongest cadence: PAC in the tonic key.</td>
</tr>
</tbody>
</table>

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26 Reicha’s definitions of phrases and cadences are somewhat circular, in that each is dependent upon the other. On the one hand, cadences are in part dependent on the part of a phrase they conclude: the quarter cadence is weaker than a half cadence and concludes a figure; the half cadence concludes a member of a period; the three-quarter and perfect cadences conclude the period. On the other hand, the phrases are also defined mostly by the cadences with which they end: the figure is the segment that ends with a quarter cadence; the member ends with a half cadence; the period ends with a perfect cadence. By way of harmonic content, these cadences are not rigorously defined. However, one significant point of entry into this circular definition is proportional: for Reicha, two or three figures make up one member; any number of members (including one) make up a period.
Although these definitions help to establish a context that enables the cadential hierarchy, Reicha’s three-quarters cadence is the one that most directly pertains to the current discussion. Reicha suggests that the three-quarters cadence is “stronger than a half cadence and weaker than a full cadence, but can terminate a period just as well as the latter, the only difference being the key in which it finishes” (Reicha 1814, emphasis mine). Reicha suggests here that the foreign-key PAC not only stands between the half cadence and perfect authentic cadence in terms of its cadential strength, but also (as is suggested by his fractional nomenclature) that it falls exactly in between the half and perfect cadences.

More strikingly, Reicha’s paradigmatic construct is an antecedent-consequent period—that is, an eight-measure unit, with the cadential succession of quarter cadence, half cadence, quarter cadence, and perfect cadence, spaced two measures apart. In this paradigm, as in many others, the quarter cadence corresponds to the end of the basic idea in a standard sentence or Caplinian period; the half and perfect cadences are—by extension—mostly the same as what today would be likely labeled as the HC and PAC. To turn this standard period into one whose antecedent

Example 2.5: Period construction à la Reicha, also illustrating the process of converting from a conventional cadence to one with a modulating antecedent.

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27 Given Reicha’s emphasis on cadence points in this section, there is no indication as to whether these periods conform to what theorists might today consider the parallel period.
concludes with a foreign-key PAC, we need only to replace the half cadence in the middle with a three-quarters cadence as in Example 2.5. While Reicha himself never discusses such a possibility, the gradational nature of his nomenclature suggests the ease with which these phrases might be altered to give rise to such a scenario.

This cadential hierarchization can be applied quite effectively to a number of periods that were discussed in Chapter 1. Example 2.6 reproduces the opening of Dvořák’s Piano Trio Op. 65/ii, annotating the cadences using Reicha’s nomenclature. As this example demonstrates, simply altering the half cadence found in conventional antecedent constructions into a three-quarters cadence turns a standard period into the type of period examined in Chapter 1.28

Example 2.6: Dvořák Piano Trio Op. 65/ii, mm. 1–26, cadences labeled according to Reicha.

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28 The final cadence at m. 25 prompts several questions about the relationship between the PAC and other PAC-like units leading up to this measure. While the most definitive cadence takes place at m. 25, an argument could be made for the V–I progression at m. 19. Taking this earlier progression as a PAC results in the following measures being heard as postcadential repetitions. That the melody eschews 1 at the moment of resolution makes m. 19 less convincing as a PAC. However, several examples exist in the literature where a failure to arrive immediately on 1 may not automatically disqualify the event from PAC-candidacy. Furthermore, the melody at m. 18 suggests a voice leading in which 1 is not evaded, but merely covered. Similarly, mm. 21 arguably also evades the cadence, but the tendency tone at m. 20 suggests a voice leading that only delays the onset of 1. The covering and deferral in these earlier moments raise the question of the varying functions of the IAC. It may function as a deceptive PAC or a covered PAC. Both these and other alternate possibilities will be discussed in a later part of this chapter.
Reicha’s hierarchy of cadences allows for a captivatingly nuanced description of cadential candidacy. This is especially true when combined with the current-day approach to cadences. The three accepted cadences today—PAC, IAC, and HC—often simply classify a progression as “a cadence” or “not a cadence,” with little room for moderation. However, holding these cadences in
dialogue with Reicha’s theory allows for a progression to be considered a cadence on one level, but one that might recede in cadential valence on the next.  

Although Reicha’s melody-oriented terminology does not precisely correspond to current music-theoretical concepts of the cadence, his approach nonetheless resonates in many ways with modern theories of formal function. One of the most significant of these resonances is the notion that a cadence’s function depends not only on its content but also on its context. For Reicha, something containing an arrival onto scale degree 1 in the melody with V–I in the bass does not automatically qualify as a perfect cadence. Rather, its placement within the figure, member, and period plays a central role in defining a harmonic/melodic gesture as a cadence. At certain points, Reicha’s preference for contextual interpretation of cadences is more extensive than is typical nowadays. Examples K and L in Reicha (1814), reproduced in Example 2.7a and b, illustrate this point. Example 2.7a gives Reicha’s Example K, where Reicha labels as a quarter cadence the gesture followed by a pause in the second measure, despite its half-cadential content. In Example 2.7b (Reicha’s Example L), the perfect-cadential content is given a label of quarter cadence, since it ends what Reicha regards as a figure, while the half cadence ends a four-measure member at m. 4. These readings by Reicha correspond to typical modern interpretations of such passages, which interpret a V–I motion appearing at the end of a phrase’s second measure as marking the end of a non-cadential subphrase.

However, the end of Example K illustrates how Reicha’s emphasis on position exceeds what is typical today. Present-day approaches would label m. 4 of this example as either a perfect cadence or something else.

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29 This notion of a cadence losing its function at a higher level is similar to Caplin’s (2004) concept of the cadence of limited scope, in which a progression may exhibit cadential function on one level but lose it in the next larger level. A crucial difference between Reicha’s definition and Caplin’s is that Reicha considers as cadences certain harmonic progressions that are not allowable as cadences for Caplin on any level.

30 Compare this with Caplin, who says, “Passages of cadential content do not always function as syntactical cadences” (2004, 56).
...cadence, or—depending on the music that follows—as a non-cadential articulation ending the presentation of a sentence. In other words, this ending would need to be read as either a cadence or not; no middle path is possible. Because of its harmonic content—that it ends on I and not V—this phrase could not be labeled as ending on a half cadence according to modern terminology. In Reicha’s interpretation the harmonic content seems not nearly as important as the placement: because it appears in m. 4 and ends a member, it is a half cadence, regardless of its constituent harmonies.

The utility of this emphasis on a cadence’s placement within the phrase or period becomes apparent when one considers a cadential progression’s capacity to function as a real cadence at any given point within the musical context. This provides for a more nuanced view than simply reading a progression as a bona fide cadence or not, as is typical of modern approaches. Thus, for instance, a harmonic gesture appearing at the end of a basic idea within a sentence could be...
understood as a cadence of sorts—that is, as a quarter cadence. On a larger level, a harmonic gesture that appears in m. 4 could be read as a true cadence within an eight-measure period, but recede to a quarter cadence within in a sixteen-measure period.

The opening of Dvořák’s Op. 65/ii helps to demonstrate this concept. As Example 2.6 (above) illustrates, m. 6 and m. 14 both contain the harmonic material for a half cadence. Note that both are placed where one might expect the end of a basic idea. Hearing a functional half cadence at these moments would not violate the cadential hierarchy demanded of the phrase. One may opt to hear the harmonic gestures of mm. 6 and 14 as articulating functional cadences or not, as neither labeling would drastically alter the formal interpretation of the theme. While current analytic approaches encourage us to decide on the cadential status of these measures, it is arguably more suggestive to claim that these passages present half cadences that function on the eight-measure level, where they are part of the lower-level period, but lose their cadential function (or recede to quarter cadences) when the music is viewed from the sixteen-measure level.

**Compound Nested Period**

Reicha’s concept of the hierarchy of cadences, along with the notion of the possible plurality of cadential functions, or cadential multiple meanings, can be applied to the analysis of a multilayered compound period. In a multilayered compound period, a period in its entirety forms the antecedent of a yet larger period. In current-day analytical literature, the idea of a compound period with the antecedent and consequent comprising independent theme types have been accepted where the smaller units are made from sentences, as well as with various sentential hybrids. However, the notion of a period within a period is a trickier matter, since it demands a
clear concept of cadential hierarchy. In other words, the cadences of the lower-level antecedents must be weaker than both of their consequents, while at the same time, the cadence of the higher-level antecedent must—in addition to being stronger than that of the lower-level antecedent that precedes—be weaker than that at the end of the large-scale consequent. In most cases where one might argue for the presence of a compound period, the second of its cadences turns out to be the same as the first one, thus making the first half no longer a stand-alone period. In what I consider a true compound nested period, the first period must be able to stand alone as a period. In other words, the lower-level consequent must fulfill its function of resolving its antecedent, while also requiring some form of later resolution, thereby fulfilling the role of the same cadence as an antecedent’s cadence.

According to the cadential hierarchy à la Reicha, we can analyze the presence of nested period by using the three-quarters cadence to form a modulating period in the antecedent, and a non-modulating one in the consequent. In this way, within a sixteen-measure compound period, the half cadences at m. 4 and m. 12 form the ends of the lower-level antecedents, while assuming a quarter-cadential function (falling off the cadential map by many current-day definitions) within the larger periods, much as the quarter cadences do in the more common types of periods. The three-quarters cadence at m. 8 and perfect cadence at m. 16 then form the harmonic cadences for

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31 See Chapter 1, and a discussion below, for a concept known as the “double period.” In short, authors who discuss the double period offer little consistency between them; some do not highlight the required hierarchy of cadences (Laitz 2008, and Clendinning & Marvin 2011), while others do not hold to the idea that all four phrases must end in functioning cadences (Green 1986). In this way, the double period represents more accurately a period whose antecedent and consequent each contains two phrases (or subphrases) each, rather than conveying the notion of a period within a period.

32 The traditional hierarchy of cadences does also admit of one possibility for a nested period: an antecedent with a HC and IAC, followed by a consequent’s HC and PAC follow this progression just as well; see, for instance, the discussion in footnote 22 in Caplin (1998, 267). Some examples of this type of nested period are discussed below in Example 2.16.
The large period. At the eight-measure level, the cadences are HC–3/4C at mm. 1–8, and HC–PAC at mm. 9–16. (See Example 2.8.)

Given the ample number of both modulating and non-modulating periods in the literature, it is easy to see that both individual periods within such a layout function in their expected manners, and both are capable of resolving their own antecedents. At the sixteen-measure level, the half cadences recede into the background, and the 3/4C and PAC form the cadential succession of weak to strong as discussed in Chapter 1 with the modulating antecedent. Due to this compound period’s inherent layout, wherein one level contains two periods nested in a larger level, I use the term nested period to describe this multilayered phenomenon.

An example of this by Dvořák may be witnessed in his Waltz in A major, Op. 54, No. 1. At the opening of the piece, a nested period contains a cadence in the submediant. Another example may be found in his posthumously published Polonaise for cello and piano, B. 94. In this work, the main theme contains a modulation to the mediant. The following section explores these passages in detail, examining the formal layout of these periods, along with suggesting their possible tonal interpretations and (in the case of the Polonaise) possible long-range implications.
The opening piece in Dvořák’s Op. 54 waltzes begins with a nested period. More remarkably, each small period within this nested period is itself a compound period comprising a sentence within both the antecedent and consequent. Example 2.9 provides the score of the passage. As this example demonstrates, the sentential framework of the lower-level antecedents also does well to highlight Reicha’s quarter cadence. That is, at the end of the presentation stage of the sentence,
the pause in the melody dictates the presence of a quarter cadence.\textsuperscript{33} The appearance of this quarter cadence in turn results in Reicha’s order of cadences for the lower-level periods: quarter, half;

\textsuperscript{33} Owing to the sentential layout of these lower-level antecedents and consequents, a reading that follows Reicha may well read the lower-level periods as consisting of two members, each of which are composed of three figures. For example, Reicha’s interpretation of the period in mm. 1–20 would see each member (antecedent and consequent) break into three figures: mm.1–2, mm. 3–4, and mm. 5–8 in the antecedent, and mm. 9–10, mm. 11–12, and mm. 13–
quarter, three-quarters in the first period, and quarter, half; quarter, perfect in the second. One level higher, the quarter cadences recede (as shown in brackets in the example), and the paradigm for the large-scale period becomes half, three-quarters; half, perfect. At this higher level, the half cadences assume the role of the quarter cadences in the eight-measure periods. Similarly, the three-quarters cadence now fulfills the role of the conventional half cadence, closing off the antecedent.

Example 2.10 suggests two possible tonal interpretations for such a multilayered phrase. The first one (Example 2.10a) emphasizes the openings of each lower-level antecedent and consequent. In this reading, the tonic harmonies associated with each thematic return are prioritized, while the cadences are somewhat attenuated, functioning as back-relating V and VI. The second reading (Example 2.10b) emphasizes the opposite, as it attempts to bring out the cadence points. Here, the initial tonics are deemphasized in favor of the points of cadential arrival. The VI: PAC at m. 20, being a crucial moment in the period, underlines the main predominant harmony, while the following half cadence forms the V that establishes the true interruption on 2 over V.

In short, the first of these readings emphasizes the return of the opening material, while the other reading prioritizes the key choices. Each of these readings has its own advantages. The first reading captures the experience of hearing the theme return, and the formal emphasis on each cadence. However, it reads each arrival of V as close to the surface, and more crucially, it relegates the modulation into VI—arguably the most salient event in the section—to an upper neighbor with a cast-out root. While Dvořák’s preference for such a neighboring gesture does appear to lend support to this interpretation of VI, it nonetheless arguably produces an interpretation that feels oddly static, one that suggests that the tonic harmony is never truly left until the second-to-last measure of the phrase.

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20 in the consequent. Since Reicha’s figures close with at least a quarter cadence, these weak melodic cadences will come at the end of each of these segments.
The second reading addresses the problems mentioned above, but in doing so presents other issues. This interpretation avoids the sense of stasis by hearing the motion into VI as a true departure from tonic harmony. Accordingly, all remaining tonics are read as appearing on the surface level, functioning either as parenthetical insertions or lower-level replications of the Ursatz. While the first dominant of the first half cadence is read as a back-relating V, as in the first reading, the dominant of the second half cadence takes on a far more elevated role as the main V of the interrupted Ursatz. A potential conflict in this interpretation is that it suggests a hierarchy of cadences that departs significantly from the formal reading, which claims that the half cadence—especially the second one—ought to be weaker than the 3/4C at the end of the large-scale

*Example 2.11:* Dvořák, Polonaise in A Major for Cello and Piano, B. 94, mm. 30–46.
antecedent. In other words, this interpretation reads the HC at m. 28 as stronger than the 3/4C of m. 20. Furthermore, it interprets the two identical half cadences as significantly different from one another: while one is an extension of the previous tonic, the other underlines the theme’s main V.

*Example 2.11 continued.*

Dvořák’s Polonaise for cello and piano, B. 94 also utilizes a nested period as its main theme. This piece opens with a slow introduction presented over dominant harmony. Upon the arrival of the main theme (shown in Example 2.11), the cello enters emphatically, and cadences four measures later with an HC. The theme repeats starting in m. 34, but this time leads to a PAC in the key of the mediant, completing the consequent of the modulating period (mm. 30–37) and the antecedent of the larger one (mm. 30–45). In mm. 38–45, the theme returns again, as one might
expect in a period. Except this time, however, the consequent leads to a cadence in the tonic key. Example 2.11 provides cadence labels using Reicha’s terminology. The quarter cadences of mm. 39 and 43 recede into the background on the next level, where the HC functions as the new quarter cadence.

Two features of this reading bear special mention. The first one relates to the bass in the half cadence, and the second relates to the level of perfection in the authentic cadence at m. 45. The half cadences in this piece all appear to end on the chordal seventh in the bass, giving this particular chord an apparent four-two quality. Under typical circumstances, the tonally volatile $V_2^4$ would lack the stability required to establish a cadence. Although half cadences tend to be established in a rather freer fashion in the nineteenth century than in the eighteenth century—and thus one is more likely to find a $V^7$ marking a half cadence in music composed after 1800—having a cadence established by a $V_2^4$ admittedly is extreme, and thus such a cadence should likely be disallowed without strongly mitigating factors. Nonetheless, I do feel such mitigating factors are present in this case, and thus read this moment as a half cadence for three reasons. First, the cello—a standard bass instrument—suddenly leaps down to the root of the chord upon the arrival of $V$, and gives the impression that it takes on the role of a bass. While it is not the literal lowest note, it is the most sonorous low note at that moment. Second, real lowest note—the chordal seventh—fails to resolve as such. Instead, it serves as a series of passing tones filling in the space from $V$ to $I$. My interpretation of this chordal seventh’s resolution (or lack thereof) is given in Example 2.12. Finally, the $V$’s placement at the end of a phrase, immediately preceding the start of a consequent further argues for reading the $V_2^4$ as marking a half cadence.

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34 For discussions on the use of $V^7$ and inversions of $V$ as cadential harmonies, see my discussion in Chapter 1, as well as Burstein 2014 and 2015.
The cadence at the end in m. 46 also requires explanation. If the listener follows the cello as the melody to the end of the phrase, then the cadence would not conclude with the melody on 1 so as to form a perfect authentic cadence. Rather, the melody would conclude on scale degree 3, forming an imperfect authentic cadence. This IAC then poses a problem for the period, as the piece now trades the tonal closure of m. 37 for melodic openness here—that is, arguably neither cadence is more closed than the other, and the theme’s functionality as a period is suddenly thrown into question. However, note that, in m. 46, the piano suddenly leaps up into the high register in a way it has not done previously. This upward leaping gesture argues for hearing the piano’s right hand as carrying a structural role, thereby closing off the theme with an IAC that is itself covered with the piano’s 1 in order to function as a PAC.\footnote{The function of the cello here is to repeat the E(\#)–D(\#)–C\# gesture in m. 37. Having been contextualized as 3–2–1 in the antecedent, this theme now returns, and the same notes are recast as 5–4–3. This melodic ploy recalls Steven Vande Moortele’s (2009) concept of the covered PAC, except this time, it is an IAC that becomes covered to resemble—and as I argue, to function—as a PAC. I discuss this form of ambiguity between PAC and IAC later in this chapter, where the present excerpt will return.} Going by this interpretation, we then see a nice complement between the cello dipping down to take the bass at the HC in mm. 33 and 41, and the piano leaping up to take over the melody at the end of the passage in mm. 45–46. Thus, at the end
of every subphrase here, the instruments assume new roles to mark the completion of a part of the larger phrase, adding a creative touch to each of the cadences.

Tonally, the situation is similar to what was seen in the Op. 54 Waltz. Example 2.13 presents two readings of the polonaise. In the first one, the initial tonics are emphasized, while the cadential points are back-relating V and III. In the second reading, the III of m. 37 forms the main intermediate harmony arpeggiating from I to the V in m. 41. Just as is the case with the Waltz, the
first reading emphasizes the moments of thematic return, while the second directs one’s attention to the points of cadential arrival.

It may be noted the closure of the antecedent on III has ramifications later on in the piece. The prominence of this mediant harmony can be seen in the form of third modulations in two particular locations, both of which are highlighted in Examples 2.14–15. More specifically, there are two significant aspects to the modulation to III at m. 37 that reappear in later moments in the work: first, the modulation prefers the major third over the minor, and second, the new key is in its major mode. This particular move is not diatonic to either modes of the home tonic, and may be best described as a neo-Riemannian LP motion: while L takes the work from the home key to the diatonic mediant through a leading-tone exchange, P transforms this chord out of A major’s diatony by replacing its new minor third with a major one.

The first of the two passages that play on III is found in the retransitional section at mm. 64–82 (Example 2.14). The modulatory trajectory here outlines two consecutive major thirds. Divided into two parts, this section first traverses from the home key of A major to its upper third, then moving up another major third to F, before returning to the home key again by means of the home dominant. Both modulations here, just like the modulation in the antecedent, modulate to the major key built on the work’s major third, which—in conjunction with the return of the main theme that

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36 Around the turn of the century, music theorists often discussed the parallel major and minor modes not as two separate key, but rather a single, larger, key. Schenker was the first theorist to describe such a system in which the major and minor modes of the key coexist in a larger system. A similar concept can be found in Schoenberg’s theory of “monotontality,” the parallel minor mode was not a separate key, but rather a region immediately adjacent to the major. This idea has particular relevance to the Polonaise. The slow introduction, presented over V, often utilizes minor 3 as its upper neighbor, suggesting A minor. However, the arrival of the main theme at m. 30 immediately opts for A major. In this sense, the major triad built on the minor third degree would be diatonic to the larger major/minor tonality. In the present theme, its modulation to III considers not the major/minor modality of the home key, but rather the new key. At this moment, while the C♯-ness of the new key belongs unequivocally to A major, the major quality of this C♯ offers a Schenkerian or Schoenbergian interpretation of tonality.
Example 2.14: Cycle of thirds in Dvořák, Polonaise, B. 94, mm. 64–82, using (a) a neo-Riemannian and (b) a Schenkerian interpretation.

follows—creates a complete neo-Riemannian LP cycle (Example 2.14a). While this neo-Riemannian perspective does well to address several features within this passage, a framework prioritizing tonic-dominant polarity, such as would be encouraged by a Schenkerian reading, would provide a somewhat different perspective into these harmonic events. While my neo-
Example 2.15: Nested thirds in Dvořák, Polonaise, B. 94, mm. 93–110.

Riemannian interpretation prioritizes the F as part of the LP cycle, the Schenkerian interpretation (Example 2.14b) is better understood as being framed by the home dominant that follows, encasing the harmonic progression within a I–III–V motion. In this Schenkerian reading, the first modulation to III functions as the middle of a bass arpeggiation up to this dominant, with F functioning as an upper neighbor.\textsuperscript{37}

Example 2.15 presents the second of these passages, which runs from mm. 93–125. Whereas the section examined in the previous example replicated the chromaticism of the LP gesture from the initial modulation at m. 37, the section in mm. 93–125 preserves the music’s diatony by isolating the two aspects of the modulation—the major third, and the major mode—presenting each one independently, displaying these modulations across multiple levels of the tonal structure. Each of these modulations and the properties they preserve are summed up in Table 2.2. The

\textsuperscript{37} Also possible is an interpretation that takes F as the main predominant harmony. I nonetheless opt for C# for the reason that it comes at a point of formal emphasis as well: whereas F appears in the middle of the B section, C# is stated right at its outset.
Table 2.2: Description of modulations in Example 2.14 and Example 2.15.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Preserves M3</th>
<th>Preserves Mode</th>
<th>Chromatic/Diatonic</th>
<th>Motion</th>
</tr>
</thead>
<tbody>
<tr>
<td>37</td>
<td>✓</td>
<td>✓</td>
<td>Chromatic</td>
<td>LP (I–III#)</td>
</tr>
<tr>
<td>64–71</td>
<td>✓</td>
<td>✓</td>
<td>Chromatic</td>
<td>LP (I–III#)</td>
</tr>
<tr>
<td>72–82</td>
<td>✓</td>
<td>✓</td>
<td>Chromatic</td>
<td>LP (III#→VI)</td>
</tr>
<tr>
<td>30–125</td>
<td></td>
<td>✓</td>
<td>Diatonic</td>
<td>R (i–III)</td>
</tr>
<tr>
<td>93–110</td>
<td>✓</td>
<td></td>
<td>Diatonic</td>
<td>L (I–iii)</td>
</tr>
<tr>
<td>93–96</td>
<td>✓</td>
<td></td>
<td>Diatonic</td>
<td>L (I–iii)</td>
</tr>
<tr>
<td>97–100</td>
<td></td>
<td>✓</td>
<td>Diatonic</td>
<td>R (i–III)</td>
</tr>
</tbody>
</table>

passage highlighted in Example 2.15 comes after the return of the main theme, and immediately modulates into C major, the key of the lowered-III within the global key of A major. As the example shows, this section preserves the I–III–V–I motion in its largest context, spanning the entirely of mm. 30–125. Note that although the large-scale bass arpeggio outlines a minor triad (A-C-E), each of the keys that articulate this large arpeggio are in the major key. Within the C major area, a bass arpeggio outlines a major triad, but the mediant key here is a minor key, E minor. (See the second line of roman numerals in Example 2.15.) Finally, on the most local level, both the C major and E minor sections become their own tonal centers when zoomed in, and each features a modulation, once again, to their diatonic mediants. At mm. 93–94, E minor enters as C major’s mediant harmony, while G major, E minor’s mediant harmony, enters at mm. 97–98. Once again, each of these harmonies isolates one of the significant aspects of the modulation. While m. 94 preserves the major-third degree and changes the mode, m. 98 preserves the mode, but changes the major third modulation to a minor third. In this example, all three levels—encompassing all four instances of the modulation—serve to highlight the salience of the modulation up a third. These modulations all point back to the initial modulation that appeared at m. 37.
THE PROBLEM OF THE IAC—THE IAC AS A WILD CARD

In the previous categorization of cadences, I have entirely left out the IAC. In the remainder of the chapter, I tackle this issue, and attempt to consider its place in a proposed hierarchy of cadences. I begin with a summary of conventional uses of the IAC, as well as several possible guises of the apparent IAC. Unlike the previous section, I resist the temptation here to locate an exact place to fit this cadence; rather, I demonstrate through the use of various examples the surprisingly fluid nature of this cadence. Given the various guises of this cadence as described above, there are several possibilities for manipulating the interpretation of the IAC so that it can be placed anywhere in strength between Reicha’s quarter cadence and the perfect authentic cadence. This proposed model of the imperfect authentic cadence seemingly goes against the accepted notion that it fits squarely between the half cadence and PAC in terms of its cadential strength. However, it is more accurately conceived as a broadening out from this previous notion. In my proposed model, the more flexible IAC does not exclude the accepted deployment of the IAC, but rather includes the standard IAC as one of its categories.

The Standard IAC and its Guises

The standard IAC as commonly accepted by music theorists is weaker in strength than the PAC because of its melodic non-closure, while its harmonic closure as a result of concluding on tonic harmony gives it a status that is stronger than the half cadence. (Refer to Example 2.1 above.) This use can be most effectively seen in the case of the antecedent-consequent period, as the IAC is the only one of the three accepted cadences that can functionally close both the antecedent and consequent. One relatively rare example of a compound period where the IAC serves both purposes can be found in Mozart’s K. 481/i (Example 2.16), where the IAC at m. 76 functions as the consequent’s cadence for the lower-level period (mm. 69–76) and also closes off the antecedent
of the sixteen-measure period (mm. 69–84). In standard cadential scenarios such as these, the melodic non-closure provides the openness that allows the PAC to be a stronger cadence, while its harmonic closure on I makes it more final than a half cadence.

In addition to its standard use, the IAC is also subject to four distinct alternate guises, where it may appear to resemble the IAC, but fail to function as such. These guises include (a) the apparent IAC without cadential function, (b) the “Prinner cadence,” (c) the deceptive IAC, and (d) the covered PAC. Each of these ideas has been briefly described by music theorists, but a summary here would allow for each of these to be placed in context with one another.

*Example 2.16: Mozart, Violin Sonata K. 481/i, mm. 69–84.*

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38 Caplin (1998, 267 n.22) cites this as an example of a double period in which a composer “use[s] a simple period to build the antecedent and consequent units of a compound period” (67).
As described above, both Reicha and current day music theorists agree that the harmonic content of a cadence does not necessarily indicate the presence of a syntactical cadential function. Rather, its function also depends in part on where it is placed. This possibility that cadential harmonic content is present without its syntactical function of closure is especially common for the IAC, as its content requirements are especially general. The only requirement for the IAC’s harmonic content is simply that V is followed by I—the two most commonplace harmonies in tonal music—with no restrictions on the melody. Due to its nonspecific nature, plenty of examples exist where the harmonic/melodic material for an IAC are present, but its function as a cadence is
altogether absent. Example 2.17 presents Mozart’s Sonata in B♭, K. 333/i, where in the opening four measures the harmonic progression meets the most rigorous harmonic definitions for a cadence—complete with an initial harmony and a predominant to set up the essential V and I—but its harmonic function is nonetheless absent. Instead, this passage is best heard as a four-measure presentation or compound basic idea.\[39\]

In a recent essay, Caplin (2015) incorporates Gjerdingen’s (2007) concept of the *Prinner* into his theory of cadences, resulting in a *Prinner* cadence (PrC). Being most commonly seen in the music of the Galant style, this cadence simultaneously satisfies all definitions of the IAC, as

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39 On the issue of presentation vs. compound basic idea, there is certainly some room for debate here, as mm. 3–4 are neither similar enough to claim a true repetition, nor different enough to perfectly justify calling it a contrasting idea. Details aside, the formal ambiguity of this section does not alter the interpretation that no cadence appears at m. 4, as neither reading enables a cadence at the end.
Example 2.18: The cadential Prinner, as a PrC and an IAC (Pr).

![Example 2.18: The cadential Prinner, as a PrC and an IAC (Pr).](image)

well as that of the Prinner: the cadence concludes with V and I, while also tracing out 6–5– 4–3 in the melody, which is matched with 4–3–2–(5)–1 in the bass. The model for a Prinner cadence is shown in Example 2.18. In addition to the PrC, Caplin also coins a Prinner-type IAC, or IAC (PR), in which the bass ascends to 5, but the melodic profile is nonetheless the descending tetrachord of the Prinner. While for Caplin the case of the PrC and the IAC (Pr) stand as separate cadences, I argue that they are both variants of the IAC, as both meet the requirements for the IAC’s harmonic and melodic content. In the same way as the apparent IAC, the PrC and IAC (Pr) stand in as variants on the conventional IAC; while they appear similar, they are deployed differently from one another.

Given that this cadence is most commonly associated with music of the Galant style, an issue of placement of the cadence should be addressed. In current-day form theories, which deal primarily with music of the late eighteenth century and beyond, cadences are most often interpreted with respect to an eight-measure normative model. With the exception of the period and other hybrids involving the antecedent, most cadences are found in the eighth measure of a theme, while those at m. 4 are often dismissed as non-cadential in function, unless there is strong indication that an antecedent phrase is operative. The Prinner cadence, however, ought to differ from this setup.
significantly, since it deals with music that is much earlier than that of the high Classical style.

Many treatises of the eighteenth century, most prominently the treatise by Koch, indicate that a phrase can and often do end in four measures.

Most common, and also, on the whole, most useful and most pleasing for our feelings are those basic phrases which are completed in the fourth measure of simple meters. For that reason they are called four-measure phrases [Vierer]. They may actually appear as four measures in simple meters or in compound meters in the form of only two measures.40 (Koch 1782–93 [1983], 11)

And due to the similarity of the Kochian Grundabsatz and the Caplinian PrC, it is expected that this Prinner cadence should—given the different repertoire that utilizes it—engage with a slightly different phrase model, and therefore be found in different locations from that of the high-classical and romantic IAC.

The IAC can also function deceptively. Rather than appearing as a cadence proper, it can also appear to thwart a stronger cadence. In these situations, the appearance of an IAC does not


40 Emphasis and original German parenthetical are both as they appear in Baker’s translation.
Example 2.19 continued.

indicate the presence of a required cadence, but rather the lack of a stronger one. The three excerpts of Example 2.19 provide instances of this common phenomenon by (a) Haydn, (b) Mozart, and (c)
Beethoven, wherein each deploys the IAC at m. 8 as a phrase-prolonging gesture to effect a “one more time”-like technique, building up to the final cadence at m. 12.  

Markus Neuwirth (2015) offers up commentary on the IAC’s deceptive potential, as he suggests that the IAC in many contexts functions as a melodically deceptive PAC. In this article, Neuwirth considers the many ways in which any cadence may be deceptive and argues that the possibilities for a deceptive cadence extend beyond the traditional V–vi. In his discussion of the IAC, Neuwirth refers to Riepel’s falsche und betrigende Cadenz, which proposes a deceptive cadence through purely melodic means. In Riepel’s example, the music, which is expected to conclude on scale degree 1, instead turns suddenly to scale degree 3. On this point, Neuwirth adds the following:

The subtlety of Riepel’s interpretation becomes even more evident when it is compared to modern analysis: because the harmonic progression that can be inferred from the given melody is V–I, and because the ultimate chord has the third in the soprano, most analysts would be inclined to view this as an instance of an imperfect authentic cadence. However, such a reading would conflate two different types of imperfect authentic cadences: those in which a perfect authentic cadence is expected, and those in which no such expectation has been generated. The latter is the case with the Prinner cadence, in which the third scale degree is actually the expected melodic goal. This is not merely a terminological issue; rather, it reflects significant differences in formal expectations, as demonstrated by what usually follows these two types of cadences in a given compositional context: whereas the [IAC as a] melodically deceptive PAC cannot stand on its own and is therefore almost invariably followed by a phrase repetition that brings about a satisfactory PAC, the Prinner cadence can indeed function as a Kochian Grundabsatz—concluding a self-contained thematic unit that, especially in the galant

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41 Interestingly, the deceptive IAC in the Mozart example also takes part in a Prinner. It can be considered both a Caplinian PrC and a deceptive IAC. That this Prinner can be considered as both a PrC and deceptive IAC is perhaps due to the form-functional ambiguity brought about by the expanded cadential progression. Beginning at the onset of the continuation, this Prinner opens with a sequential function (see Caplin 2015, 27–30). However, taking the PrC reading would suggest that this sequence closes with as a cadential Prinner. That this same progression carries both functions is perhaps what allows for this PrC also to be interpreted as a melodically deceptive—or at least incomplete—cadence. This melodically deceptive PrC presents an exception to Neuwirth’s assertion that the Prinner cadence is an IAC in which 3 is expected, and therefore not deceptive.
style, is usually followed by a transitional unit ending with a half cadence in the tonic key.42 (Neuwirth 2015, 129)

In addition to Riepel, Neuwirth’s observations on the IAC as a deceptive device is also evident in Reicha (1814). In this treatise, Reicha introduces the interrupted cadence (*cadence interrompue*) as one that “falls on another note instead of on the tonic, or suddenly jumps from the tonic to another note” (Reicha 1814, 34). This kind of deception can occur on any scale degree, as his Example L2 demonstrates. However, the ones ending on scale degree 3 (reproduced here as Example 2.20) all resemble Neuwirth’s first description of the IAC: “those in which a perfect authentic cadence is expected” (2015, 129).

Neuwirth’s assertion on the IAC’s deceptive potential provides a broadening out from standard notions of the IAC’s deceptive potential, which is often limited to the subordinate theme group:

Since subordinate themes almost always close with a perfect authentic cadence, the appearance of an imperfect authentic cadence signals that the theme has not yet reached its true end. Typically in such cases, the preceding phrase […] is repeated, leading this time to a perfect authentic cadence. (Caplin 1998, 101)

In this context, the subordinate theme must always end with a PAC, and assuming this is true, the IAC being different from a PAC signals the need for the music to continue so as to locate this stronger cadence. This argument relies on the imperfect authentic cadence not being as strong as its perfect counterpart: because it is weaker than what is necessary in this case, a stronger variant

*Example 2.20: Reicha’s Example L2, showing interrupted cadences.*

![Example 2.20](image)

*Also present in Example M2.

42 It is also worth noting here that for Neuwirth, as for me, the instances of the non-deceptive IAC in the Classical style very often take the form of a Prinner cadence. This departs once again from Caplin’s suggestion that the PrC is different from a true IAC.
must inevitably follow. While the use of the imperfect authentic cadence as a cadential extension in the subordinate theme is a common feature, its evasive properties are—as Neuwirth and Riepel have shown—not exclusive to this part of sonata form; the same evasive maneuver can often be found in the main theme of a sonata form or in movements that deploy different formal strategies altogether. Furthermore, the plurality of such a deceptive IAC is particularly striking, as it appears to be far more prevalent than the conventional IAC as a weaker cadence in the late eighteenth century. Hardly a single example of a tight-knit theme in Caplin (1998) concludes with a true IAC; rather, every instance of the IAC is inevitably followed with a subsequent PAC as replacement. Even in the main theme, where a half cadence is sufficient to bring the theme to a close, the appearance of an imperfect authentic cadence seems rare.

Finally, several examples exist where an IAC is heard as such only when one takes the literal highest note in the harmony at the moment of resolution, but all other musical elements indicate that the melodic note actually arrives on a PAC in some inner voice. In such scenarios, the melody arrives on the tonic to achieve the desired perfect authentic cadence, but another voice (concrete or abstract) concludes its countermelody a third or fifth above. In such situations, while the phrase ends in a perfect authentic cadence, the presence of an upper voice over the melody provides a sense that an IAC may also be a somewhat valid interpretation.

An example of the covered PAC can be found in Haydn’s Symphony no. 64/iii (Example 2.21). At the end of both (a) the minuet and (b) the trio, strings conclude with the bass and melody on the tonic, but the horn and oboe parts contain notes a third higher, cadencing above the violin on the third of the key. Here, timbral differences help to highlight the strings as carrying 43

Caplin’s Example 3.5 (1998, 38) appears to show an IAC in Mozart’s K. 330/i, mm. 1–8. However, this IAC is—like the examples in Example 2.19—one that leads to a PAC in m. 12. Examples 3.15 (46) and 5.6 (62) demonstrate truer cases of the IAC. However, in both cases, one might argue a PAC underlying these cadences, as both end up on scale degree 1.
the true melody, and by consequence helps to define the cadence as a PAC. However, the existence of the wind parts on the third scale degree nevertheless highlights the potential of the cadence as an imperfect authentic cadence.

The term “covered PAC” is first described by Steven Vande Moortele in Two-Dimensional Sonata Form (2009). In the book, he describes an ambiguous perfect authentic cadence in Berlioz’s King Lear as being “not an IAC, in spite of the 4–3 in the first flute, which I consider to be merely covering the more structural 2–1 in the first violins” (58). He brings up the same concept more recently in an analysis of Rossini’s overture to La Cenerentola. Here, in the final cadence leading
up to the codetta, he claims, “It is easy to mistake the PAC at m. 201 for an IAC. The 3 in the upper woodwind, however, covers a structurally more important 1 in the violins (hence my term ‘covered PAC’)” (Vande Moortele 2017, 53). In both pieces, Vande Moortele argues a difference between the literal highest voice, and the most “structural” voice. While he does not state this explicitly in either case, the identification of both structural voices appears to be driven by the timbral cue of the first violins.

The idea of a decorative voice covering a more structural one—and to be sure, the very word “structural”—harkens to the writings of Heinrich Schenker. In *Free Composition*, Schenker briefly discusses the cover tone as being “a tone of the inner voice which appears above the foreground diminution. It constantly attracts the attention of the ear, even though the essential voice-leading events take place underneath it” (1935 [1979], 107). Schenker’s definition of structural voice subtly differs from Vande Moortele’s. First, timbral cues need not be present, but rather may be indicated by certain voice-leading properties. Second, the covering voice can be so prominent for Schenker that it “attracts the attention of the ear” while in Vande Moortele’s case the structural melody often remains the object of attention. At cadence points, this idea may be used to describe a more general variant of Vande Moortele’s covered PAC, where timbral cues are no longer necessary to distinguish between a structural and a decorating voice. Such a modification opens the doors to many questionable cadences where both an IAC and PAC are possible. In some cases, the audibility of the structural voice must depend on the performer bringing out what is written on the score. And in the most extreme cases, even the score itself may deny the interpreter a definitive answer as to the operative structural voice within the cadence.
Having provided an exposition on each of these IAC variants, I now illustrate some issues that are present in attempting to pin down this cadence’s cadential strength. In addition to the original problem of the foreign-key PAC replacing the IAC as the intermediate cadence, these alternate (non-) IAC possibilities outlined in the previous section raise yet more problems in this attempt to determine the IAC’s cadential strength. In each case, I will illustrate through examples that the IAC, more than any other cadence, exhibits the ability to play with its alternate guises, resulting in situations where it appears to adopt a completely different cadential strength from its conventional setup.

As I have previously demonstrated, the new foreign-key PAC takes the place of the traditional IAC in that both are considered to be weaker than the PAC and stronger than the HC. And so, the first—and most apparent—question that arises when dealing with the imperfect authentic cadence, and its comparison with the foreign-key PAC, comes from the inherent conflict between its key and its level of melodic closure: is a cadence in a foreign key stronger than a cadence in a home key, or is a cadence that closes the melody stronger than one that leaves the melody open? At first glance, the issue might appear to be a simple matter of figuring out which of these two intermediary cadences are stronger. Reicha’s treatise, which focuses almost exclusively on melody, would favor the latter option. Looking at his Example M2 (reproduced here as Example 2.22), which lists a set of 60 half cadences in the key of C, at least 12 suggest that his definition of the half cadence also includes what today would be called the imperfect authentic cadence. For Reicha, the cadence ending on a note of the tonic harmony, but not the tonic itself, appears to be not strong enough to end an entire period, but only a member thereof. However, the

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44 Example M2, nos. 5–7, 12, 39, 48, and 51–56 all conclude with the melody on the third degree.
three-quarters cadence, which ends on the local tonic, is strong enough to end a period. This categorization would naturally also make the IAC weaker than his three-quarters cadence. On the other hand, however, that the cadence is in the home key is at least as convincing a reason to argue that this cadence is stronger than a cadence in the foreign key.

However, while the above example may seem to have answered the question in favor of the foreign-key PAC being the stronger cadence, it actually reveals a larger issue. That the IAC can be considered as weak as the HC goes against conventional notions of the cadence. And indeed the problem is further exacerbated when we take into consideration all of the guises of the IAC. Given its ability to interact with its counterparts, it may appear to range in its cadential strength from weaker than an HC to as strong as a PAC.

*Example 2.22: Reicha’s Example M2, listing his half cadences.*
Examples of nested periods by Mozart demonstrate one aspect of this complicated issue created through the IAC’s dialogue with a cadentially non-functional progression, as well as the Prinner. In these contexts, the IAC can be seen as both stronger and weaker than the half cadence.

A central issue with the idea of a nested period, or traditionally the double period, lies in that each of the lower halves must constitute periods in their own right. It is partially for this reason that Caplin (1998, 49) underemphasizes the possibility of a period within a period. This requirement automatically denies candidacy to examples that have three half cadences and one perfect authentic cadence, such as those outlined in textbooks like Berry (1986) and Kostka & Payne (2018). For Caplin, the antecedent’s half cadence, answered with the “consequent’s” half cadence, cannot constitute a lower-level period in the examples outlined in these textbooks.

As noted previously, Mozart’s K. 481/i (Example 2.16 above) demonstrates an uncommon example of a period in which the IAC takes its place in both the small-scale consequent and the large-scale antecedent. Caplin asserts, quite rightly, that this well-ordered series of cadences is an
anomaly. In his textbook based on *Classical Form*, Caplin more directly confronts the cadential layout of these compound phrases:

In order to create a pattern that conforms to the most “syntactical” distribution of cadential weights, the following scheme would seem obvious: the use of a weak HC for m. 4, a stronger IAC for m. 8, a matching weak HC at m. 12, and the strongest cadence, a PAC, at m. 16. But curiously, this pattern is rarely found, most likely because and IAC rarely ends any kind of antecedent. Instead, a variety of cadential patterns are typically found, some of which might seem to violate the normal syntax, as when, for example an opening HC at m. 4 is followed by another HC at m. 8. (Caplin 2013, 184)

Although this section addresses the mild violation of cadential hierarchies through the use of the *same* cadence for the antecedent and consequent, there remains a more severe—but still strikingly common—scenario where an IAC at m. 4 is followed by a half cadence at m. 8. This apparent violation of cadential hierarchy is particularly severe by common current standards, as depicted in Example 2.1 above, because the antecedent’s seemingly stronger cadence (IAC) is being answered by a weaker one in the consequent (HC).

Mozart’s K. 309/ii, mm. 1–16, provided here as Example 2.23a, illustrates such a phenomenon through its compound period. In order for the cadential hierarchies not to appear violated, this period would need to constitute a compound period where the large-scale antecedent and consequent both take the form of a compound basic idea and continuation hybrid. However, the possibility also exists for the antecedent being an antecedent-plus-continuation hybrid. The only thing preventing such a reading here would be the issue just raised regarding the relative weights of the IAC and HC. In other words, if the cadential content at m. 4 were taken as functional, then its strength—according to standard explanations—would supersede the half cadence at the end of m. 8. To avoid this contradiction, the conventional formal reading would be forced to hear
this tonal progression that concludes in m. 4 as one that does not function as a cadence. However, one can easily recompose this into a regular period, as I have done in Example 2.23b. Here, the same material is no longer taken as a progression without cadential function, but instead it must become a *bona fide* IAC. Nothing at all changes about the IAC itself, but rather only an event that happens four measures later determines this cadence’s outcome.

*Example 2.23*: Mozart, Piano Sonata K. 309/ii, in (a) original and (b) recomposition.

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45 One might argue that the inversion of the dominant—the literal abandonment of the cadence—in the large-scale consequent lends support to reading this measure as a non-cadence. While it is true that the consequent is no longer a cadence, several of Caplin’s own examples illustrate the same thing. In his footnote 21 (1998, 267), Caplin points to the finale of Mozart’s K. 465 String Quartet as an example of a compound period with antecedent-plus-continuation as the lower-level themes. However, the return of the antecedent is met with an evaded cadence at m. 12, turning it into a non-cadence in the same way as the example here. The same thing happens in Chopin’s Mazurka Op. 7, No. 2: the IAC at m. 4 resolves deceptively upon its return at m. 12. The reason for this alteration in the consequent may be due to that, in its second iteration, the music is already expected to deviate from the lower-level consequent, and the cadence is already stripped of its function before it has even sounded. Furthermore, while current-day analysis places great emphasis on the (non-) inversion of the dominant, both m. 4 and m. 12 would easily be taken as a Kochian Grundabsatz which do not require the presence of a root-position V as the penultimate harmony. As such, both can be understood as forming a closing gesture, which can translate into a weaker cadence by today’s terminology.
The cadence at m. 4 of Mozart’s K. 309/ii heavily resembles the PrC. The *Prinner* cadence raises an issue for Caplin in a similar example as Mozart’s, where a PrC is followed by an HC four measures later in a Haydn sonata. This apparent violation is a primary reason for which Caplin argues that the PrC—though similar in appearance to an IAC—is completely different from the imperfect authentic cadence. As Caplin explains, this cadential layout is made possible due to the half cadence coming one closer to reaching scale degree 1 than the PrC does: “Insofar as the PrC at m. 4 only achieves melodic closure on 3, the HC cadence leading to 2 seems to present a next step—a stronger step—in the melodic descent that will eventually lead to 1” (2015, 41).

While this separation keeps the status of the IAC intact, it is tenuous for several reasons which I describe below. As such, rather than separating the PrC from the IAC, it is arguably more
appropriate to interpret the PrC, as well as the IAC (Pr) as variants of an expanded category of IAC—one that allows for a wider spectrum of cadential strengths.

First off, the prevalence of the PrC and the IAC (Pr) in the eighteenth-century literature appears to indicate that very many examples of the IAC are exactly one of these two variants on the Prinner. Caplin himself struggles in Classical Form to find a piece ending with a bona fide IAC that shows otherwise. With only two exceptions, all his IACs fall under Markus Neuwirth’s category of the IAC as a deceptive cadence, rather than a cadence proper.46 These last two

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46 The two exceptions are in his Examples 4.2 (1998, 50), which gives the opening of Mozart’s Piano Sonata K. 281/i, and 5.12 (66), which presents the first movement of Haydn’s Op. 74, No. 1, mm. 3–18. And to be sure, both take part in a Prinner, and can be labelled a PrC, or at least an IAC (Pr). In all other examples, the IAC is either a deceptive cadence, or there is doubt as to whether such cadences are IACs, PACs, or in a single case, a reinterpreted HC. These excerpts are found in his Example 3.15 (46), 4.16 (58), 5.6 (62), and 6.11 (82).
convincing IACs come in the form of a PrC. If the PrC is eliminated from IAC candidacy, then so too would many examples of IACs in current-day analysis of eighteenth-century music.\footnote{In the nineteenth century, a common voice-leading prototype can be found in the IAC—especially in Mendelssohn—where the melody ascends from 1 over a cadential six-four, through 2 over V, to 3 over the tonic. However, this technique does not appear as often in eighteenth-century music.}

Secondly, while Caplin’s concern that the PrC often operates as a weaker cadence than the HC is well taken, the particular example he uses does not entirely capture the problem at hand. The cadential arrangement of a PrC followed by an HC is highly commonplace in music of the early Classical period, as many pieces that arguably carries a Kochian Grundabsatz at m. 4 followed by a Quintabsatz at m. 8 would appear by current-day analytical perspectives to contain this paradoxical cadential layout. However, in such situations, these two four-measures phrases would not constitute a single part of the form, but rather they would far more often map onto the main theme and transition of a sonata form. As such, the second “cadence” might better be heard as an arrival on the dominant, rather than a functional HC. To say that such a cadential setup is problematic would be comparable to claiming that the standing on the dominant of a transition creates a problem if the main theme itself ends on an IAC or PAC.

Additionally, resolving this problem by separating the PrC from the IAC actually creates an equally pressing issue, as the argument that the PrC is different from the IAC still fails to make sense of Grundabsatz–Quintabsatz pairs where the Grundabsatz forms what current-day analysis considers a more definitive cadence. Haydn’s Symphony No. 14/ii provides such an example (Example 2.24). While the Kochian interpretation of the opening eight measures would not differ at all from a standard model of a Grundabsatz followed by a Quintabsatz, a reading such as the one Caplin adopts would be far more troublesome. Given the apparent PAC at the end of m. 4, the end of this Grundabsatz has no possibility of being heard as a PrC, and by all accounts it must
remain stronger than the cadence at m. 8. However, its *function* would be no different from that of a Caplinian PrC. If the PrC should be different from an IAC, then this cadence should also somehow be different from a PAC. But here, no difference in harmonic material actually exists between this cadence and the standard PAC: it appears to be exactly the same.

Finally, one of the most compelling reasons against the PrC being considered separately from the IAC is that, every logical argument that PrC is possibly weaker than the HC—and thus different from the IAC—can also be applied to the IAC itself. These distinctions do not come from the *differences* between the PrC and IAC (such as the descending bass) but rather on the melody, which shows no discernible difference between the two cadence types. Thus if the PrC can possibly be weaker than the HC, (such as the reasoning that landing on \( \frac{3}{2} \) is less definitive than proceeding to \( \frac{2}{2} \),) then so too must the IAC have the possibility of being weaker than the half cadence, eliminating the significance of any differences given.\(^{48}\)

\(^{48}\) These counterarguments notwithstanding, Caplin’s reasoning suggests a possibility for the PrC (or the IAC) to function as a tonally interrupted or premature cadence. These IACs are often standard from a phrase-rhythmic standpoint, given that they usually appear in m. 4 or m. 8 of a formal unit. These melodic arrivals on \( \frac{3}{2} \), however, indicate a melodic prematureness, suggesting in their presence only that we have yet to reach \( \frac{1}{2} \). This possibility for the cadence closely relates to another of its guises: the IAC’s deceptive potential, which will be discussed below.
The subordinate theme of Mozart’s F-major sonata, K. 332/i (Example 2.25) provides another interesting interpretation and reveals an equivocal relationship between the HC and the IAC. One hearing for this theme—one that Caplin (1998) adopts—interprets mm. 41–56 as a compound period comprising two antecedent-plus-continuation halves. Taking this interpretation would necessarily mean that the IACs at m. 44 and m. 52 would need to be weaker than the higher-level HC at m. 48 in order to preserve the common cadential hierarchy. In this piece, even a non-PrC variant of the imperfect authentic cadence demonstrates such a troublesome interpretation.

One way to resolve this issue of cadential hierarchy in both Mozart’s K. 309/ii and his K. 332/i without admitting of the IAC’s potential to be weaker than the HC is to strip the IAC in the fourth measure of its cadential function upon confirmation of the half cadence at the end of the

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49 It would be more convincing to hear the V–I motions in m. 44 and m. 52 as progressions that carry no cadential function, where the cadential content, despite containing all the essential material of a cadence, does not actually function as such. In addition to these IACs not having an active predominant harmony, which makes the cadential claim here less convincing, this reading would also turn the antecedent into a compound basic idea, eliminating the issue created by the hierarchy of cadences. Even so, the interpretation as proposed by Caplin illustrates the potential for an IAC to appear in a setting that makes it weaker than the half cadence.
large-scale antecedent. However, even this solution demonstrates the IAC’s uniquely equivocal cadential status, as the ambiguity of an event in the fourth measure of the phrase is clarified not from what happens at or even leading up to those measures, but rather almost exclusively from what happens after. At the moment of the imperfect authentic cadence itself, there is no way to know whether or not it really functions as a cadence; any designations can only be retroactively assigned, at least four measures after the cadence has already been heard. If the cadence four measures later happens to be a perfect authentic cadence, then we are safe to read the one in m. 4 as a true IAC; but if it so happens that a half cadence follows, we have no choice but to think of m. 4 as tonic prolongation, rather than a cadence—that is, we must do so if the IAC is always understood to be stronger than an HC.50

This problem highlights the issue that makes the IAC such a tricky case. The imperfect authentic cadence is particularly susceptible to the problem of this uncertainty in interpretation due to its harmonic-melodic material. Beginning and ending with tonic harmony, with no specifications on the melody, this cadence’s essential content is nearly identical to that of any typical tonic prolongation. No additional requirements help to distinguish the functional cadence from a simple progression. The opening four measures from Mozart’s Sonata in B-flat, K. 333 demonstrated this exact issue: the first four measures present the chords and melody of an imperfect authentic cadence, and yet it can only be a tonic prolongation, given its placement.

50 One might be inclined to use the “becoming” arrow (⇒) to describe such a scenario, a symbol that indicates a reinterpretation of sorts and which has been suggested in Schmalfeldt (2011). In some cases, one might indeed hear and IAC ⇒ non-cadence, or in others, one might hear a non-cadence ⇒ IAC. However, the situations I describe here are more radical than a simple retrospective reinterpretation: at the moment the cadence is articulated, there is no inclination whatsoever to side with one or the other. In these examples, the possibility for cadence or non-cadence is exactly half and half. The best description might be “inconclusive ⇒ IAC” or “inconclusive ⇒ non-cadence.” If anything, this might be considered a retrospective interpretation, where no opinion is altered, but rather one is formed.
Due to this multiplicity of meaning, material that resembles an imperfect authentic cadence can be both stronger and weaker than a half cadence, depending on its context: when the music places it before an HC, its resemblance to a tonic prolongation makes it weaker; on the other hand, when the music places it after said HC, its ability to function as a harmonically conclusive cadence allows it to be stronger.

This ambiguity is particularly noticeable in the finale of Haydn’s Symphony no. 46.\(^{51}\) Example 2.26 provides the opening antecedent-consequent parallel period, and the transition section. By the standard notion of cadential hierarchy, this opening period is far from extraordinary:

*Example 2.26: Haydn, Symphony No. 46/iv, mm. 1–8 and mm. 19–28.*

\(^{51}\) See also Burstein (forthcoming), in which this piece is discussed.
a four-measure antecedent ending on an imperfect authentic cadence is followed by the same phrase, which now closes with a perfect authentic cadence, as well as the functional section of the main theme. (The remaining measures, mm. 9–18, may be thought of as a postcadential extension on the previous section.) At this point, there is no doubt as to the viability of either cadence; as soon as the cadence continues with a repetition of the opening basic idea, the interpretation of an IAC–PAC parallel period is formed. At no point was the cadence at m. 4 really in doubt. However, at the transition, what was an ordinary period becomes something rather extraordinary. The same opening motive launches the transition at m. 19, concluding with the same antecedent cadence at m. 22. Given its previous cadential setting, one would expect to interpret this one also as a cadence. However, its consequent immediately proceeds to a half cadence that ends the non-modulating transition. Here, the antecedent’s IAC is met with the consequent’s half cadence. Judging from the PAC that came immediately before at m. 18, the sudden change of texture in what follows, as well as the ensuing modulation to V, it is necessary to consider this section as the transition, or at least the first part in a two-part transition. However, neither of these readings do justice to the problem that, under the current hierarchy of cadences, the cadence in the middle of the phrase appears to be a more harmonically decisive break than that at the end. And since the status of the IAC was never in doubt the first time at m. 4, it would only seem inappropriate to strip only this second IAC at m. 22 of its cadential function, since nothing changes between the previous iteration and the current one. The only remaining explanation seems to be that this particular IAC is actually weaker than the half cadence that follows it.

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52 The end of the Quintabsatz in V at mm. 31–43 end up denying the possibility of the latter reading, as the close on its dominant is much briefer than the one at mm. 28–30. Still, an in-the-moment hearing of the piece preserves the possibility at the moment of the cadence.

53 Another interpretive possibility exists that would eschew the problem created with the IAC in the first cadence. This interpretation may be closer to one that Koch might adopt for such a passage. For Koch, the first four measures would constitute the first Absatz, with the following four measures making up its repetition, ending with a stronger close. This is followed by a nine-measure insertion at mm. 9–18 (note shown in Example 2.26). At this point, this reading
Another example of such an ambivalent use of the IAC’s cadential function is even more striking in a previously mentioned piece by Dvořák, as an apparent home-key IAC appears to be weaker than even a foreign-key IAC, given this flexible nature of the cadence type. In the first of Dvořák’s Op. 46 Slavonic Dances, an apparent IAC at m. 5 concludes the first four-measure group, while an IAC in A minor completes the large-scale antecedent. However, by the logic I presented at the outset of this dissertation, if a PAC in a home key is stronger than a PAC in a foreign key, then so too should a home-key IAC be stronger than a foreign-key IAC. Once again, this creates the issue that a cadence a quarter of the way through a compound period is stronger than one half way through. But again, this problem rendered inert by the IAC’s potential to function not as a tonic-confirming cadence, but rather as a tonic-establishing progression. The only two cadences of concern here occur at m. 9 and m. 17; the first one closes in A minor, establishing the antecedent, while the second closes the theme, concluding the period.

I have thus far demonstrated the ambiguity that can appear due to an IAC’s ability to take on no cadential function or adopt the form of the Prinner cadence. Whereas these scenarios result in the IAC functioning as a weaker cadence than the HC, its interactions with other IAC variants allow it to be placed in places where a PAC might be expected. In what follows, I probe the interpretive possibilities that arise from the IAC’s ability to function as a deceptive cadence, in which an IAC stands in for an expected PAC. As I mentioned above, rather than being a weaker
does not depart significantly from the one presented above. However, at m. 19, rather than beginning the Quintabsatz, Koch might continue to read the next four measures as part of the Grundabsatz, and only hear a brief Quintabsatz in mm. 23–28. Following this interpretation, one might hear the main theme as governing mm. 1–22, with mm. 23–28 constituting the entirety of the transition. While this reading avoids the problem of the IAC appearing weaker than the half cadence, it creates two new—and much more problematic—issues. First, the formal parallel between the main theme proper and the main theme-like transition is sacrificed in this reading. And second, while the issue of the IAC appearing weaker than a half cadence is resolved, it is now traded in for an IAC that appears stronger than both PACs at m. 8 and m. 18. While this reading is technically possible and may be closer to how Koch might interpret such a passage, it appears far less convincing in current-day terminology and creates several more pressing issues in cadential hierarchy.

54 See Chapter 1 for a detailed analysis of this piece.
confirmation of tonal arrival, this particular subset of IACs thwarts that very goal, and forces the music to repeat and find a truer cadence. However, sometimes this repeat goes as equally awry as the initial deception, and results in an IAC—initially thought of as a failed PAC—that functions as the true cadence, in place of the PAC itself. In what follows, I show that the IAC’s ability to take on both functions so readily is taken advantage of for musical interest.

Comparing Neuwirth’s deceptive resolutions (mentioned above) with Example 2.22 (which reproduces Reicha’s list of half cadences, or his M2) further exemplifies Neuwirth’s point that the same cadence can be placed in two different contexts. Cadential figures 12, 39, and 48 in Example 2.22 are found exactly as is in Example 2.20 (Reicha’s L2 which shows the interrupted melodic cadences on 3). This indicates that there is no quantitative difference between Reicha’s half cadence and his interrupted cadence, and that the labeling of these cadences must strictly be contextual. On the other hand, several cadential figures in Example 2.22—no. 6, for instance—are exclusively half-cadence material, whereas figures 1, 5, and 6 in Example 2.20 are purely interrupted material. In these situations, the former fall firmly under Neuwirth’s second category of IAC, where no expectations of a PAC are generated and the IAC function as a true cadence, while the latter instances fall under his first category wherein the IAC is entirely deceptive.

However, I am interested in the three examples that do not fit neatly in either category. It is in these situations that the IAC most effectively shows off its ability to function as either a deceptive IAC, or a true one. When these situations appear, judgement must be withheld until after the music passes, and a subsequent event, usually four measures later gives indication of which interpretation to take.

One example from Dvořák’s music is particularly fascinating in this regard. In the Mazurka in C major, Op. 56, the IAC’s potential as either a deceptive cadence or a truly functional one
seems to lie at the heart of the musical drama. Example 2.27, which provides the opening 12 measures, demonstrates the issue. This excerpt contains four sections that might comprise material for an IAC. The first one at m. 2 occurs too early and, given the arrival at the tonic on the weakest beat, it is most appropriately taken as a tonic prolongation. The second one repeats the same material, turning the first four measures into a sentential presentation; clearly, there is no cadence here either. However, the progression at m. 8 appears rather equivocal: it appears in a location that may function as a true cadence, but in being an IAC, it naturally has the potential to be deceptive. At this point, judgement must be withheld, as the next four measures will determine what function this IAC will take. And indeed, the repeat of the continuation does make the listener think that this

*Example 2.27: Dvořák, Mazurka Op. 56, No. 2, mm. 1–12.*

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55 This example exhibits the similarities between a deceptive IAC and a tonally premature IAC. The presence of 4 in the melody indicates that an IAC is the most likely outcome. The expectedness of this IAC, however, does not make it any more satisfying as a cadence.
IAC was not good enough, and was rather a PAC gone wrong, prompting a second attempt in mm. 9–12. This attempt, however, is no more successful, as m. 12 also concludes with an IAC.

In this example, neither cadence is heard as such in the moment: one is too early, and the other is too late. At m. 8 of the example, the listener is inclined not to take this as the operative cadence, due to the repetition that immediately ensues: having heard the repeat of the continuation come in again, the listener holds off the urge to give m. 8 cadential status, and expects the real cadence to come at m. 12. However, having arrived at m. 12, the cadence also cannot function as the true cadence, since the same cadence has already happened four measures earlier. Just like the previous issue of the IAC’s cadential potential being unclear, the same question arises here regarding whether the cadence should be taken as deceptive. At m. 8, the listener expects the real cadence to come at m. 12, but upon the arrival of m. 12, the listener realizes the cadence was in m. 8 all along; m. 8 is not yet a cadence, while m. 12 is no longer a cadence. Both phenomena are brought on by the complicated potentially deceptive nature of the IAC.

Lastly, on the strongest end of the cadential spectrum, the IAC can appear to be stronger than the most definitive PACs when it interacts with the covered PAC. While in many cases the difference between a true IAC and a covered PAC is clear, several examples exist in the nebulous zone, where the cadence could be either an IAC or a covered PAC. This is especially so for works using instrumentations such as the piano or string quartet, where timbre does not help to identify voices in a composition. In these examples, the difference between the PAC and IAC’s strengths is tested. Such covered PACs may often take place where one may traditionally require a standard PAC. In the most serious scenarios, these might lead to an apparent IAC that exhibits all the qualities and strength of a true PAC.
Even the clearer situations—ones where the cadence is clearly identifiable as a PAC—can lead to very striking observations. Despite being unequivocally a PAC, the highest voice’s conclusion on the third or fifth scale degree nonetheless allows for some level of ambiguity and can often be used for dramatic or programmatic effect. Schubert’s *Am Meer* (Example 2.28) offers an example of such a phenomenon where the cadence in question is not particularly ambiguous.

*Example 2.28: Schubert, Am Meer, mm. 1–11.*
This piece opens with a parallel period, with the antecedent ending in a half cadence, and the consequent ending on a PAC. However, for the entire length of the opening measures, the piano hovers a third over the voice. And in the likely scenario that a male singer is the performer of the song, then the third of the piano sits literally higher than the voice, adding an upper third to the PAC at m. 10. In this case, the cadence at m. 10 must certainly be heard as a PAC, due to the timbral differences that serve to clarify and emphasize the voice as the melody. However, a repetition in the piano alone follows the cadence at m. 10. Here, the piano’s E is still the highest note, but this time, the lack of the voice prevents the listener from hearing arrival onto the tonic a second time. In this postcadential expansion, the same material in the piano alters the PAC into an IAC through nothing more than pure repetition. Once again, although the impact of the perfect authentic cadence is unquestioned here, its potential upon a literal repeat to become an IAC already begins to demonstrate the covered PAC’s power to equivocate the conventional cadential hierarchy.

In all previous examples of the covered PAC—both in Am Meer and in Haydn’s symphony above—timbral differences between the main melody and the accompaniment leaves no doubt as type of the final cadence. In what follows, I present far more ambiguous scenarios, where the differences between the IAC and PAC become increasingly subtle. I first present two pieces where the intention of the PAC is made somewhat clear by the voicing at the cadence, but timbre does little to help distinguish between structural and decorating voices. I follow these examples with two even more equivocal situations, where even the instrumental forces may serve to obscure the cadence in question. In these two latter pieces, there is a legitimate question as to whether the cadence is truly a PAC or IAC, as both interpretations may be equally valid. I conclude this discussion by revisiting the ambiguous cadence at m. 45 of Dvořák’s Polonaise in A major, B. 94 in order to demonstrate its potential as both an IAC and PAC.
The first of these examples can be found in Scarlatti’s Keyboard Sonata, K. 523. Example 2.29 provides the portion of the music that contains what Hepokoski and Darcy might identify as the EEC. The cadence at m. 37 is the most likely place for the EEC, given that it is the first to move onto new material. (The PAC prior to this at m. 29 defers the EEC through repetition of the same material.) However, as the example demonstrates, this PAC here is far from definitive. As the phrase resolves onto the tonic, a new voice enters a third above scale degree 1, which elides into the closing group’s new melodic idea. While this entrance of the new voice gives the

*Example 2.29: Scarlatti, Keyboard Sonata K. 523, mm. 21–43.*
impression that an IAC is in effect here, in subsequent statements of the same cadence, the new motive does indeed enter below the structural melody, affirming the cadence’s status as a PAC. In this case, the clarity of the voice’s motion to ȇ in m. 37 is made evident, just like the previous examples. However, unlike the previous works, all voices are performed on the same instrument, and by the same performer. In this piece, no timbral differences exist to demarcate the structural and covering voices. Depending on the performance, it is easy to hear this moment—one that is arguably “the most important generic and tonal goal of the exposition” (Hepokoski and Darcy 2006, 117)—as an IAC.

And to be sure, a comparison of performances attests to the ambiguity in this section, as different performers treat this cadence differently. Here, one might emphasize it as a deceptive IAC, or as a point of arrival, where the PAC is more prevalent. These differences in interpretation can be heard in Marcelle Meyer’s (1954) and Mikhail Pletnev’s (1995) recordings. At the cadence, Meyer’s continued drive and persistent forte dynamics suggest an interpretation where the cadence was avoided and does not arrive until two measures later. In her performance, the dynamics and the drive toward the absent cadence only reaches its goal at m. 39. Pletnev’s recording, on the other hand, arrives at this moment of resolution at m. 37, where his dynamics die down immediately. This performance indicates that the perfect authentic cadence has already arrived at this point, and that the remaining cadences only function as part of a codetta to reinforce the resolution that has already taken place.

Example 2.30: Mozart, Piano Sonata K. 331/ii, mm. 31–41.
Like the Scarlatti passage excerpted in Example 2.29, Mozart’s Piano Sonata K. 331/ii demonstrates a similar PAC-covering technique. Here, the covering appears in the recapitulatory section of the work. At m. 41, the music repeats the opening ten measures of the piece. While these opening measures conclude the first phrase with a definitive PAC, the recapitulated version (Example 2.30) relegates the scale degree 1 of the PAC to a grace note, while the new melody immediately enters on 5. This new melody on 5 then elides the previous melody with what was mm. 10–11 of the expositional part. In the same way as Scarlatti’s sonata, the present movement illustrates a resolution to scale degree 1 while a new voice, played by the same instrument, enters on top. This piece, however, is slightly more abstracted from the previous, in that now the voices here are visually less concrete: whereas Scarlatti’s sonata clarifies the entrance of a new voice through separate stemming, Mozart’s old voice is merely a grace note on its way up to the new melody. Still, the PAC function of the cadence here is made clear through the presence of the tonic scale degree in its expected register, as well as its analogue in the expositional portion of the movement.

The opening movement of Schumann’s String Quartet Op. 41, No. 1 presents a particularly fascinating deployment of this ambiguity. This example contains a cadence at the end of its subordinate theme group that appears already to be a very convincing IAC. Vande Moortele opts to hear this cadence as an IAC, despite coining the term “covered PAC” in the footnote immediately prior. He says, “Here, the subordinate theme group ends on an IAC and is followed by a regular closing group (mm. 137–144) and a retransition to the exposition repeat (mm. 145–150)” (2009, 58). And indeed, the music does blend voices in such a way that it is hard to locate the main melody, as Example 2.31 demonstrates. By this reading, the first violin part appears to

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56 This movement, while not necessarily a full-fledged sonata, contains sonata-like elements.
violate voice-leading conventions by leaping from 7 to 3. However, the second violin doubles that same leading tone, and does resolve onto the tonic. Given this doubling and resolution, it is also plausible—and arguably more musically intuitive—to hear this passage as a covered PAC. This interpretation is provided in Example 2.32. As this example displays, as the first violin leaps down to the B at m. 136, it also leaps down to the same melody as the second violin, which does resolve onto the tonic scale degree just as a leading tone should. At the same time that this resolution occurs, a new melody enters, also in the first violin, which elides with the previous moment of resolution. On the surface this creates the effect of an apparent IAC, but slightly beneath the surface lies the perfect authentic nature of the EEC. Further supporting this interpretation is the layout of the second violin part four measures later, in m. 139. Here, the resolution onto scale degree 1 is
included in the notes of the second violin, with the closing motive entering above in the second violin part as well. Even so, this covered PAC is a very intricately disguised one, and the idea of the structural “voice” is already highly abstracted. In addition to the lack of timbral cues, the performers themselves do not stay within a single voice, but rather leaps between several. While the moment can quite plausibly be interpreted as a covered PAC, it certainly already gives the impression of an IAC that fully stands in place of its PAC counterpart.

Beethoven’s String Quartet Op. 59, No. 2 provides one of the most extreme cases of such a cadence. Much like the Schumann example, this piece concludes its exposition with an apparent IAC at m. 65 (Example 2.33). However, unlike Schumann’s string quartet, there is no obvious resolution onto scale degree 1 in any melodies, and the second violin’s resolution can at best be implied through abstract voice-leading. Based on this lack of direct resolution, it would appear that the cadence here is a true IAC that stands in for a PAC.

Still, the use of scale degree 5 in the first violin suggests that an IAC interpretation would be premature, since the use of scale degree 5 in a melody at a cadence is also rare, even—and especially—for an imperfect authentic cadence. This scale degree gives the impression that it really is covering something. Furthermore, the proper resolution of a dominant seventh chord—
what is lacking in the second violin on the surface—is not only a requirement just for the PAC, but rather also for any dominants. As such, the second violin’s lack of proper resolution onto $\hat{1}$ should not necessarily be an argument against a PAC: its tendency tones ought to resolve somewhere in the ensuing I chord, so the necessary pitches must at some level be present. As a result, the possibility of hearing the section as a covered PAC exists in this piece and is supported by the use of $\hat{5}$ in the first violin, which is frequently used as a covering tone, rather than as a structural part of a melody at cadence points. In either interpretation of the cadence, this piece demonstrates the multiplicity of interpretive possibilities concerning the IAC and the covered PAC. Both possibilities here are fully plausible, yet neither are fully satisfactory. The interpretation of a covered PAC, while fitting for the EEC, lacks a direct resolution onto scale degree $\hat{1}$, a crucial part of the PAC. On the other hand, the interpretation of a covered IAC means a strange IAC with scale

*Example 2.33:* Beethoven, String Quartet Op. 59, No. 2, mm. 58–70.
degree 5 as its melody, and also—like many previous examples—results in the strange scenario of an IAC that fully functions in place of a perfect authentic cadence.

Having discussed these ambiguous instances of the covered PAC, I now return to Dvořák’s Polonaise in A major, B. 94 (see Example 2.11 above), which demonstrates a striking example of a similar covering phenomenon. In this case, however, rather than using timbre to clarify the cadence, as Am Meer and Haydn’s Symphony No. 64/iii have done, the timbral features here actually serve to obfuscate the cadence. As I have discussed earlier in this chapter, the sixteen-measure compound nested period concludes with scale degree 3 in the cello at m. 45, projecting an imperfect authentic cadence. However, the emphatic upward gesture of the piano at this moment seems to draw attention away from the cello, indicating that the piano carries the melody at this point. Taking the piano as melody—which I am inclined to do, as I mention in the previous discussion—would suggest that this section really is a perfect authentic cadence. Once again, the melodic timbre is covered by a higher accompanying timbre. But this time, rather than a covered PAC, where the structural melody on scale degree 1 is covered by an upper third or fifth, the example here appears more like a covered IAC, where the structural melody does not close on scale degree 1, but is covered by a higher voice that does. This type of cadence achieves the same effect as the covered PAC: both elements of the IAC and PAC are present at the cadence point, and depending on the emphasis in performance, either interpretation might be valid. As such, given its melodic content, as well as its placement as the end of a sixteen-measure phrase, it is conceivable that this apparent IAC can fully take the place of a PAC.

In this portion of the chapter, I have demonstrated the utility and ambiguity of the IAC. While often this cadence can certainly adopt its accepted function between the half cadence and the PAC, several scenarios are present where it can take on several other cadential roles. Its ability
to readily carry no cadential function enables it to appear weaker than a half cadence; its ability to come out of an expected PAC allows it—as Riepel, Reicha, and Neuwirth describe—to function as a melodically deceptive cadence; and its resemblance to a covered PAC also allows several scenarios where it can appear as strong as a full perfect authentic cadence. In each of these cases, the IAC takes on a guise that departs from the standard definition given to this cadence and adapting a broader view of the cadence would help better understand its function and context.

CONCLUSION

The traditional hierarchy of cadences—one that places the perfect authentic cadence as strongest, the imperfect authentic cadence as next strongest, and the half cadence as weakest—in general makes much sense, and there are no shortages of examples to back up this traditional hierarchy. However, there nonetheless exist many scenarios where such a hierarchy fails to produce a convincing interpretation. In this chapter, I have outlined ways in which a revised understanding of cadential hierarchy may aid in better understanding of a piece. Following Reicha’s model of cadences, I presented a system by which the foreign-key PAC stands in between the home-key PAC and the HC in cadential weight. I then demonstrated the utility of this through the analysis of compound nested periods. Finally, I completed this discussion by looking at the various ways in which the IAC departed from the traditional paradigm.

My revised model of cadential hierarchy appears to be a considerable change from the currently accepted model. However, this revised hierarchy also permits the accepted one, as my initial Example 2.2 demonstrated. In order to recreate the old model from the revised, one needs only recognize that the IAC—which may be found anywhere along the spectrum of cadential strengths—can exist between the half cadence and the PAC. In this way, this new model serves
not as a drastic departure from what has now been thought of as common knowledge, but rather works as a broadening out or expansion from the latter.

Although this new model appears to be—with the sole exception of the imperfect authentic cadence—as rigid as the previous, there are certainly scenarios where the same cadence can be used to conclude both the antecedent and consequent, but with some other musical elements to give a stronger sense of closure. These cases are especially noticeable in Green’s (1986) and Laitz’s (2012, 317) double periods, wherein all three cadences preceding the PAC are nominally the same type, making it especially difficult to suggest that the cadence at the end of the large-scale antecedent is no stronger than the two concluding the lower-level antecedents. In addition to these examples, modulating periods also become an issue in the case of a modulating antecedent, as the PAC that concludes the consequent in these cases are by definition foreign-key PACs. Problems such as these—as well as those that “seem to violate the normal syntax” (Caplin 2013, 184)—demonstrate a situation where cadences of the same type may or may not exhibit the same level of cadential strength. Issues surrounding phrase pairs closing off with the same cadence with apparently differing strengths, as well as other issues related to period candidacy, form a part of the following chapter. Still, the revised hierarchy of cadences proposed in the current chapter hopefully enables more nuanced interpretations of musical form and enriches musical understanding in theory and performance.
CHAPTER 3
PERIOD CANDIDACY, PSEUDO-PERIODS, AND KEY RELATIONSHIPS

In most situations, cadential hierarchies in Dvořák’s periods are clear-cut: through the negotiation of either keys or cadence types, one cadence in a two-cadence phrase—usually the latter—comes out on top as the more definitive point of closure. However, there lies a large collection of themes in Dvořák’s music that plays on the potential ambiguities in the period’s cadential layout. In these situations, two cadences may either be identical, or the cadences present a set of key choices that fail to immediately differentiate between the stronger and weaker key. These situations invoke the so-called “failed period construction,” in which the consequent fails to close off the theme with a stronger cadence.57 However, the prevalence of these theme types in Dvořák’s music suggests that describing these themes as failed may be premature. Such pseudo-periods are so commonplace in Dvořák’s music that they are more appropriately thought of in their own right, rather than as deformed versions of a more conventional form type.

This chapter investigates such pseudo-periods in Dvořák’s music. I discuss three common situations that resemble periods. In the first type, the antecedent is repeated verbatim or nearly verbatim, creating a theme type that I call a “repeated antecedent.” In the second, a period with a modulating antecedent may exist as part of a larger formal construct such as a large-scale sentence or a small ternary form. A third case involves a modulating antecedent in the context of a modulating period.

57 See Caplin’s analysis of Haydn’s Symphony No. 45 (2004, 80). The consequent fails to arrive at a stronger PAC, thus resulting in a “failed” consequent.
REPEATED ANTECEDENT

In several instances, Dvořák’s themes begin with a modulating antecedent, and what follows continues as though it were going to begin the consequent. In other words, the same material from the first measure of the theme follows what appears to be an interruption, so that there is an expectation for a tonic to appear at the end of the second phrase. With a repeated antecedent, however, the second phrase concludes with the same foreign-key perfect authentic cadence that appeared at the end of the first phrase. Rather than completing the period, the second phrase becomes a literal repetition of the first.

Examples of the repeated antecedent abound in Dvořák’s music. A representative case can be found in the waltz Op. 54, No. 5, the score of which is given in Example 3.1. The antecedent spans mm. 1–8. In the opening four measures, the harmonies exemplify a standard I–IV–V–I progression in the key of B♭. In the four measures that follow, a similar progression is transposed

*Example 3.1: Dvořák, Waltz Op. 54, No. 5, mm. 1–16.*
to the key of G minor, where a PAC closes off the first eight measures. At m. 9, the music resumes as it did in m. 1, with limited surface-level embellishments. At this point, the expectation is that a period with a modulating antecedent may be under way. However, the I: PAC does not arrive in m. 16 as expected but is replaced by another VI: PAC—a literal repetition of the cadence that closed the antecedent. Upon arriving at this second foreign-key PAC, the second phrase concludes as a second statement of the antecedent, thereby turning mm. 1–16 into a repeated antecedent phrase structure.

The case of repeated antecedents raises several interesting issues. First and foremost, how does this situation differ from one in which the layout is understood to involve a written-out repeat? In other words, how are these themes different from a repeat of the phrase that is written out due to some added embellishments? Second, since both cadences are identical, and neither is stronger than the other, the question of thematic integrity arises: can we consider this a single theme with

Example 3.2: Beethoven, Piano Sonata Op. 57/ii, mm. 1–16 and 49–80, illustrating (a) a binary form with repeats and (b) a binary form with written-out repeats.

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58 The cadential content in m. 4 is more akin to the quarter cadence discussed in Chapter 2. The placement of this phrase in the context of an opening thwarts any attempt to hear a full cadence at m. 4. Alternatively, given subsequent events in the theme, the cadential scope of the cadence at m. 4 is limited to these measures. These measures thus function as an opening tonic prolongation with the final tonic completing the progression. In mm. 5–8, the repetition, the motion away from the initial tonic and the closure onto the local 1 in the melody support a more definitive reading of cadential closure.
the second phrase answering the first, or are mm. 1–16 part of a longer theme? Finally, given that the phrase consistently begins in one key and concludes in another, neither key can automatically be ruled out as the phrase’s governing tonal center (a matter that might have been clarified had the second phrase concluded in a different key than the first). Example 3.1, for instance, could be in the key of B♭ that modulates to VI, or else it could be in the key of G minor that begins on III. In what follows, I address each of these issues.

Repeated Antecedent, Repetition, and the Written-Out Repeat

First, let us address why a theme such as that in Op. 54, No. 5 should not be heard as an eight-measure theme with a written-out repeat. An example of the latter type is provided in Example 3.2, which provides (a) the theme and (b) the final variation from Beethoven’s Piano

Example 3.2b.
Sonata Op. 57/ii. In the theme, the sections of a small binary from are marked with repeat signs. These repeats are written out in the final variation so as to accommodate the changes in figuration.

Indeed, a Schenkerian interpretation of Dvořák’s repeated antecedent (Example 3.3) would likely propose precisely the same treatment as the written-out repeat: namely, that the second phrase is not reinterpreted, but rather collapsed into a single eight-measure strain. This tonal interpretation is not only the most commonplace option for such a layout, but it is also intrinsic to the term “repeated antecedent” that I have coined for theme type. Such a tonal interpretation does not necessarily indicate that the theme functions formally as a literal repeat of its first half, however.

For purposes of clarity, in the following discussion I distinguish between a repeat and a repetition. I use the term “repeat” initially to designate passages that are heard a second time owing to the presence of repeat signs; I later extend the concept to restatements that are heard as if repeat signs existed. The term “repetition” is neutral, referring to the general situation in which any
A segment of music is restated, regardless of the notational means employed or the formal meaning involved. Where a repetition is somehow essential to the meaning of a passage, I use the term essential repetition. “Repeat” and “essential repetition” stand at opposite ends of a continuum.

Repetitions in music are manifest in numerous ways. While some result from section repeats, others create different meanings, depending on the musical context and the lens through which listeners opt to examine them. For a given repetition, a formal perspective may differ from a strictly tonal one. I begin by probing three treatments of repetition from these differing perspectives. First, I discuss repeats from both a formal and a tonal stance. Second, I examine repetitions that are taken as such from a tonal perspective but are understood to support structural elements from the perspective of musical form. Finally, I discuss repetitions that are irreducible from both formal and tonal perspectives.

Example 3.2 above gave a demonstration of the first category. The repeat signs in a simple binary form or an eighteenth-century sonata form provide the clearest examples of repetitions that are heard as repeats—that is, as the same music twice—in both formal and tonal settings. Through both of these perspectives, the repeated section is typically interpreted as a duplication of
something already presented. It is against this backdrop that the written-out repeat came to be understood, beginning perhaps with C.P.E. Bach’s keyboard sonatas and short pieces *mit veränderten Reprisen* (“with varied repeats”). Even though the repeats are written out, we typically understand that these are duplications of what came before; the embellishments that necessitate the renotation do not interfere with the overall interpretation. Despite the renotation, both formal and tonal interpretation identify these as written-out repeats, the significance of which affects neither the form nor the tonal structure at the deepest level.

Some repetitions, such as those in Example 3.4, presents instances in which a tonal interpretation and a formal one may differ. This main theme, from the opening movement of Mozart’s Piano Sonata K. 330, illustrates a repetition that would be read as a repeat in a

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Schenkerian voice-leading analysis—that is, as a duplication that could have been omitted—but would be considered essential in a form-functional analysis. Although the repetition of mm. 1–2 in mm. 3–4 does not significantly alter a tonal interpretation of the passage as a tonic prolongation, it has significant bearing on the formal designation of the theme as a sentence. Measures 3–4 present the repetition of the basic idea, without which a significant portion of the sentence paradigm would be missing. As a result, the repetition would be considered tonally dispensible but formally essential.

Finally, some repetitions are built in as an indispensable component of both formal and tonal paradigms. The parallel antecedent-consequent period serves as the most relevant and compelling example. Regardless of whether this paradigm is taken as an interrupted Ursatz replica (following a Schenkerian reading) or as a tight-knit theme (following a form-functional interpretation), both hearings treat the repetitions as essential and irreducible. To be sure, these “repetitions” deploy different endings. However, numerous examples exist in which repeat signs—repeats from both form-functional and tonal perspectives—are given first and second endings. The difference in ending does not exclude the possibility of notating with repeat signs. It is entirely possible to write out an antecedent-consequent period using repeat signs, as I do in Example 3.5, but that does not

Example 3.5: Renotation of Beethoven, Op. 31, No. 3/ii, illustrating the potential for a period to use repeat signs.
turn the repetition into a repeat according to the definitions used here. Despite being technically possible, that most antecedent-consequent periods do not involve repeat signs suggests that their repetitions constitute a crucial component of the form.

The three types of repetition discussed above (true repeats, repetitions of crucial formal import, and repetitions essential from both tonal and formal perspectives) illuminate vital theoretical and conceptual differences between repeats on the one hand, and theme types that include an essential repetition on the other. This, in turn, raises the subject of reducibility. Whereas repeats—whether in the form of a set of repeat signs or in a written-out repeat—are a reducible part of a form, theme types with repetition, such as the period or the basic-idea pairs in a sentence, are less prone to having their paired statements reduced to a single statement. Several issues help determine the reducibility of repetitions; most are based on the context in which repetition takes place.

First of all, themes employing repeats, like those who perform them, may choose to omit the repetition, whereas themes containing essential repetitions usually do not invite this option. Although there are many sonata forms in which expositions or development–recapitulation pairs are repeated, there are also many in which these sections are not repeated. Even written-out repeats are usually non-mandatory components of a form. Themes with structural repetitions, on the other hand, will almost always deploy these repetitions in ways that are essential to the underlying form. In the case of the sentence, for example, all standard instances of the theme type contain a repetition of the basic idea. Similarly, all parallel periods necessarily repeat music from the

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60 Mark Richards (2011) discusses the possibility of the monofold sentence in which the presentation gives only one iteration of the basic idea. While such themes do exist, they exist as highly exceptional cases to the norm, which retains two iterations of a basic idea. Reducible repetition, on the other hand offers a much higher percentage of comparable forms that do not contain repetition.
antecedent. In these cases, the repeated music is a necessary component of the theme’s formal identity: omit the repetition, and the formal type changes.

Second, themes employing written-out repeats often present the repetition fairly strictly, with differences between the initial statement and its repetition limited to surface-level embellishment. Themes containing essential repetition also have the option of being less than literal in employing internal repetitions. Repetitions within sentential presentations and periods, for example, typically contain far more variety than the written-out repeats in sonata or binary forms. For instance, in addition to exact basic-idea repetitions, we also often find repetitions that are deployed over a different harmony or harmonies, sequential repetitions, or even repetitions that involve melodic inversion of the basic idea. The possibility of such altered repetitions suggest that these repetitions should be understood as relatively autonomous from the initial statement. It is not a matter of the same thing happening twice, but of something new (yet related) being added to something old.

Most cases of the repeated antecedent fall under the category in which a Schenkerian reading would be inclined to collapse the initial statement and its repetition into one entity. However, the formal deployment of the repeated antecedent is quite consistent throughout Dvořák’s output, and I maintain that a repeated antecedent often functions as an essential repetition, not as a repeat.\footnote{This stance is supported by the change in dynamic markings in Example 3.1, which further contributes to the impression that this repetition is essential.}

In what follows, I address three categories of the repeated antecedent. First I provide examples in which, due to what follows, it is entirely appropriate to analyze the theme as having a written-out repeat. Second, I examine themes in which the second iteration is drastically different from the first, forming an antecedent-consequent pair despite the similarity of modulatory and cadential structures. Both of these situations are relatively unambiguous. The most common situation, however, falls ambiguously between these categories: despite the identical layout of the

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61 This stance is supported by the change in dynamic markings in Example 3.1, which further contributes to the impression that this repetition is essential.
two statements, the deployment of the theme within the larger context argues for a true repeated antecedent phrase structure. I argue that this third scenario falls under the second category described above: a repetition that is tonally collapsible but irreducible from a formal perspective.

Example 3.6 displays the opening of the third movement of Dvořák’s String Quartet Op. 105. This movement begins with an eight-measure strain that modulates to the key of the mediant. In the subsequent eight measures, the same music comes back with the melody transferred to the second violin while the first violin plays a higher countermelody. When it reappears, this theme once again cadences in the mediant. Given its formal setting, mm. 9–16 are best heard as a written-out repeat of the \textit{a} section. The music that follows reveals the form of the section to be a small ternary.

\textit{Example 3.6:} Dvořák, String Quartet Op. 105, mm. 1–29, illustrating a small ternary with written-out repeats.
ternary. After the second cadence in the mediant (m. 16), the music proceeds to prolong the dominant in a thematically contrasting phrase, what form-function theory would call a contrasting middle. After these four measures, the opening musical motive returns in the cello and cadences in the tonic with a PAC (m. 28). Following this PAC, the \(b + a'\) section repeats, once again embellished by a countermelody in the first violin. This pattern of repetition and variation lends support to the interpretation that mm. 9–16 and 29–40 (not shown) are to be heard as written-out repeats. Significantly, the small ternary returns later in the movement (mm. 69–88) with both repeats omitted.
In contrast, the treatment of the repetition in Dvořák’s Mazurka Op. 56, No. 4 (Example 3.7) points strongly to the interpretation that the second statement ought to be heard as a consequent. This D-minor piece begins with two sentences; the first cadences in F major. In the second sentence, another III: PAC concludes the theme, resulting in a repeated-antecedent structure. However, the second sentence is harmonically quite different from the first, and it arrives at its final tonic almost a measure sooner. The second sentence then carries out a series of repetitions of its cadential gesture to further confirm the cadential arrival; such repeated cadential gestures were absent from the first statement. Both the technique of truncation (the early cadential arrival) and that of postcadential expansion exclude the possibility of hearing this consequent as a repeat of the first, despite the similarity of their cadential goals.

Example 3.7: Dvořák, Mazurka Op. 56, No. 4, mm. 1–16, illustrating a repeated antecedent with an altered repetition.
The above examples represent clear cases that distinguish a written-out repeat from a two-part phrase structure—a period. In most cases, however, this distinction is much trickier. Even so, in many such scenarios I argue that the music points to a two-part formal structure as opposed to the repeat of a single part.

Consider the Slavonic Dance Op. 46, No. 2 (Example 3.8). A repeated antecedent is presented in mm. 2–17, governing the slow part of Dvořák’s iconic Dumka. Measures 2–9 contain
the first statement, concluding with a cadence in the home key’s relative major. What follows is a repeat of the antecedent material, with the only elaboration being the melody’s appearance in a higher octave (there are also some new performance directions). Notably, in spite of this written-out repetition, repeat signs are placed around the entire theme, indicating that the two phrase pairs are both to be repeated entirely, resulting in four consecutive statements of the antecedent. The two statements in mm. 2–17 therefore do not appear to fulfill the role of a customary repeat. I argue that with this and similar themes by Dvořák, the use of repetition is best understood as a formally necessary part of the unique form, and that the repeat signs around the repeated antecedent offer the repeat that is customary within the larger binary context.

**Cadential Hierarchy, the “Cadence of Limited Scope,” and Unity of the Theme**

A central notion of current-day music theory regarding the period is that its first cadence is weaker than its second. This insistence on a stratified cadential structure is what allows the two parts of the phrase to “group tightly together to form a higher-level whole, a relatively complete structure in itself” (Caplin 1998, 49). From a tonal perspective, a Schenkerian interruption paradigm illustrates that the latter, stronger cadence also closes a progression that is left incomplete in the first branch; the arrival of the final tonic is both the tonic that resolves the V immediately preceding its arrival, and the one that resolves the V that left the previous phrase open.

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62 One interesting aspect of this phrase is that the first four measures concludes with what appears to be a I: PAC. While the initial urge is to hear this as an incidental V–I progression that does not serve cadential function, the return to the opening theme immediately following this gesture is nonetheless a jarring return that strongly points to some form of closure at m. 5. The alternate reading is to hear the PAC at m. 5 as being limited in its scope. However, this interpretation raises a similar issue outlined in the previous chapter where the cadential content in a cadence of limited scope alludes to a stronger cadence than the functional one at m. 9.

63 Note that the same compositional technique—the consequent doubled at the octave—is used for some examples involving a true period with modulating antecedent. This similarity further suggests that these two phrase pairs relate to each other as antecedent and consequent, not as written-out repeats.

64 In the case of an IAC, various models have been proposed, such as Michael Baker’s cases for interruption on 3. In his article (2010), Baker also notes other possibilities, such as the unfolding which creates a surface-level imitation of the Kopfton in the consequent. Schenker’s own interpretation of periods in which the antecedent concludes with an
By contrast, the repeated antecedent avoids, by its very definition, a stronger resolution within the second half of the theme. Rather than concluding what would be the consequent with a stronger cadence, the repeated antecedent features a strict repetition of most melodic and harmonic material from the previous phrase. That is, the cadence of the second phrase is identical to that of the first—it appears neither stronger nor weaker. Viewing these repeated antecedents through the lens of a period’s cadential succession necessarily results in an interpretation in which the consequents have somehow failed—it is unable to provide a stronger cadence. While the theme does carry such a potential, as I show later, the overall prevalence of this formal construct seems to suggest that it is itself a norm in Dvořák’s musical style, not a failed variant of something else. The repetitive thematic material does give some incentive to hear these two units together despite the lack of a strong cadential hierarchy. In these scenarios, the first cadence is akin to Caplin’s “cadence of limited scope,” where the cadence of the first phrase offers no cadential import beyond


IAC (discussed above in Chapter 1) utilizes the free interruption. In all these interpretations, the closure of the antecedent leaves the form somehow open, and the arrival of the PAC at the end of the consequent closes it.
the phrase’s own length. In the second phrase, the same cadence not only closes its own half of the theme, but also serves to reaffirm the original cadential goal.

**Tonal Ambiguity in the Repeated Antecedent**

In all the analyses and discussions presented above, I have assumed that the opening key served as the more structural one. While this assumption is appropriate initially, when the possibility exists for a period with modulating antecedent, it becomes more questionable once it becomes evident that the theme consists of a repeated antecedent. With a repeated antecedent in which there is a modulation, each phrase begins in one key and ends in another—the same key each time. It is not obvious which of the two keys is stronger.

Dvořák seems to exploit the resulting ambiguity in the Waltz Op. 54, No. 5, which was presented at the beginning of this section (Example 3.1). While most pieces with a repeated antecedent conclude in the key that opened the theme, this example concludes in the new key. This

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outcome is hinted at immediately following the first appearance of the main theme, as the ensuing contrasting theme of mm. 17–32 is entirely in the key of G minor.

The return of the main theme occupies mm. 33–48, with mm. 33–40 making up the first phrase, and mm. 41–48 replacing the second phrase (Example 3.9). The return in mm. 33–48, however, is altered to begin in G minor, thus tending to confirm G as the more important key. The descending-third motion that initiated the first move from B♭ major to G minor (in mm. 1–8 and mm. 9–16) remains a prominent tonal gesture here. Having confirmed that G is the main key, the theme begins a second descending-third modulation into E minor (see Example 3.10). In this second modulation, the theme is no longer structured as a repeated antecedent. Given that the

*Example 3.11:* Dvořák, Waltz Op. 54, No. 5, mm. 49–71.
theme now begins in G minor, the first phrase no longer modulates. The onset of the second phrase at m. 41 is transposed into the parallel major key, G major. This mode change then allows a quick neo-Riemannian R motion into the relative key of E minor at m. 48, completing the descending-third motion into this new key.

Measures 49–71 (Example 3.11) forms a developmental B section to mm. 33–48, which went from G minor to E minor. Whereas in the piece’s opening the music used the second of the keys as the more structural one, this second modulation into E minor is framed entirely differently. Example 3.12 gives a tonal interpretation of mm. 33–71 in its entirely and illustrates G as the overarching key for the section, with E minor being a significant but nonetheless subordinated Stufe within this larger progression. Even the final return of the main theme at mm. 99ff. no longer contains tonal ambiguity, as the entire theme now begins and ends in the key of G.

*Analytical Vignette: Repeated Antecedent as a Tonal Problem in Op. 54, No. 6*

Dvořák occasionally uses the repeated antecedent to set up an expectation of a regular period with modulating antecedent, an expectation that is fulfilled by the end of the work. Such is the case
with the Waltz in F Major, Op. 54, No. 6. The work’s opening (Example 3.13) presents a repeated antecedent: the first phrase modulates from F major to D minor, which is confirmed by a PAC. In the second phrase, the music similarly navigates to D minor, which is likewise confirmed by a PAC in this key. This completes the antecedent’s repetition but fails to arrive at the contrasting cadence required for a period in the strictest sense. Following this repeated antecedent, the music proceeds to a contrasting middle section which returns to the music of the opening at m. 39. Upon this return, the theme repeats itself. Just like in the opening, it concludes with a VI: PAC to close the expected period’s antecedent (Example 3.14, mm. 44). This time the second phrase no longer stops at its own VI: PAC (m. 51) but instead pushes on to conclude with a I: PAC (m. 57). This new cadence transforms the second phrase of a repeated-antecedent structure into a true periodic consequent. The cadence-altering suffix reaches a PAC in the home key, thereby fulfilling the requirements of a regular antecedent-consequent period.
Example 3.14: Dvořák, Waltz Op. 54, No. 6, mm. 38–57, illustrating the repeated antecedent as a period with modulating antecedent.

In addition to the repeated antecedent that initiates a period-fulfillment narrative, the modulation to VI within the opening theme sets up the contrasting section of the work. Example 3.15a quotes the music for this section, and Example 3.15b provides a voice-leading summary of it. As my summary illustrates, the entirety of the section comprises an octave progression, bisected by G at m. 28, that ultimately prolongs the VI that ended the consequent. As a result of this octave progression, the D-minor sonority at m. 14 is prolonged until m. 35, serving as the harmony that concludes the middle section with no intervening dominant before the tonic.
return. In sum, the ternary construction of mm. 1–57 contains a contrasting middle section that prolongs the submediant rather than the dominant. From the perspective of formal functions, this submediant carries all the functional significance that a standard dominant might possess in a more
typical ternary form. From a Schenkerian perspective, this part functions much like the back-relating *Stufe* discussed in Chapter 1. However, rather than applying the free interruption across the level of the period, as was discussed in the first chapter, this theme distributes it over the larger structure.

**FRAMING WITHIN A LARGER THEME**

In most instances, a period with modulating antecedent stands alone as what might be regarded as a self-contained theme. However, there exist a handful of scenarios where a period or a repeated antecedent (or an apparent period or apparent repeated antecedent) forms parts of a larger theme. In some cases—such as when it appears within the exposition of a binary form—the period or repeated antecedent can still be heard as such. However, at other times various features might challenge the ability of a passage to be heard as a period. These features may render the situation equivocal. In this section, I outline several such situations. I begin by discussing two ways by which such formal equivocation may happen with an antecedent-consequent period: (a) when a period (or apparent period) forms part of a larger sentential presentation, especially as part of a compound sentence within a subordinate theme; and (b) when a small ternary construction

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*Example 3.15b.*
forms a potential period with an expanded antecedent. I follow this presentation with an example by Dvořák that simultaneously plays with both possibilities.

The Period and the Compound-Sentential Presentation

Example 3.16 presents the first eight measures of the subordinate theme group from the first movement of Mozart’s Piano Sonata in D Major, K. 311. This theme presents a clear antecedent-consequent period, with the antecedent arriving at a half cadence in m. 20, which is answered by the consequent’s PAC in m. 24. The music following the PAC at m. 24 begins as one might expect in a codetta that comes following the subordinate theme group, but soon leads into a continuational cadential passage beginning at m. 28 (Example 3.17). Here, rather than initiating something new or postcadential, the music appears to abandon this option in favor of a continuational passage following the initial period, only arriving at a more definitive cadence at m. 36. In this example, Example 3.16: Mozart, Piano Sonata K. 311/i, mm. 16–24.
the opening eight measures of Example 3.16 can be understood as the presentation of a larger sentential layout in which the antecedent functions as the first basic idea and the consequent as the repetition of the basic idea.\textsuperscript{66}
In this scenario, the presence of two PACs—one at m. 24 and another at m. 36—poses an analytical challenge for sonata-form analysis. A form-functional reading would likely read mm. 17–36 as a subordinate theme group containing two themes. The first subordinate theme consists of a tight-knit antecedent-consequent period, occupying mm. 17–24; the PAC at m. 24 elides into the second theme in the subordinate theme group, which spans mm. 24–36. Alternatively, if one were to read the subordinate theme group as a single sentence, the first PAC at m. 24 must function as a cadence of limited scope to bypass the problem that these two PACs split up the larger passage. This reading, while unconventional, retains the sentential layout of the subordinate theme (or subordinate theme group).

Appealing to Sonata Theory, on the other hand, one would most likely argue that the first PAC at m. 24 is the essential expositional closure, while the music that follows occupies the closing theme zone. This reading, however, arguably leads to a proportional imbalance, as S zone now ends too soon. Thus, one might argue that the pseudo-covered nature of the first PAC defers the EEC, abandoning it in favor of the PAC at m. 36.

The concept of the large sentential structure has been discussed by Steven Vande Moortele (2011) in the music of Schubert. Caitlin Martinkus (2018) further addresses this phrase schema in Schubert’s music, where a large sentential layout might not become evident until the onset of the continuation section. I adapt the idea in two ways. First, I discuss how such a theme type may enable the presentation section to take on the appearance of a period. Second, the establishment of this theme type as a standard construction in the subordinate theme (rather than a coincidental result) forces us to re-evaluate the expectancy of cadence-evasion techniques in the subordinate theme; rather than viewing an evaded cadence as thwarting the end of a subordinate theme, evaded cadences in this context allow the subordinate theme to eschew a tight-knit alternative and continue to develop into a large-scale sentential layout.

Alternatively, one might opt to read everything that follows m. 24 as a codetta or a closing section. This reading better resonates with a Sonata Theory approach of taking the first PAC. From a form-functional standpoint, however, the reading is somewhat unconventional. Taking a single eight-measure subordinate theme without subsequent themes would lead to a reading in which the movement’s only subordinate theme of the sonata is as tight-knit as the main theme. While it is possible for a subordinate theme to be tight knit, it is rare for a single subordinate theme to be so tight knit as to offer no loosening techniques. Most often, as is the case here, tight-knit subordinate themes exist in a larger subordinate theme group. In these settings, subsequent themes serve to retrospectively loosen the first, tight-knit theme, balancing the expected looseness of the subordinate theme group as a whole.

This sonata has been discussed more extensively in Elements (2006) than perhaps any other sonata-form movement. Despite this, Hepokoski and Darcy do not offer their view on which PAC operates as the EEC. While it is more likely that Hepokoski and Darcy read the EEC at m. 24, the alternative reading is not without merit. This alternative interpretation is analogous to the analysis of Beethoven’s Piano Sonata Op. 53/i (152–7). In this analysis, they argue that the retention of the theme’s triplet gesture defers the PAC at m. 42. However, in addition to this motivic retention,
The above scenarios highlight the challenges when additional, often continuational, rhetoric follows a period closing with a PAC in the subordinate theme. It is perhaps in avoiding this ambiguous double-cadence complex that most composers often choose instead to elide, or evade altogether, the cadence of the consequent phrase at what seems to be the end of a tight-knit period at the outset of a subordinate theme. Whereas recent theories of sonata form have treated such cadence-evading moments as complications in the grand plan to arrive at this PAC, understanding

*Example 3.18: Mozart, Piano Sonata K. 309/i, mm. 35–54.*

the theme as a whole also carries features of the compound sentence with a period as its presentation. To be sure, the retention of triplets in the Op. 53/i offers a more concrete argument for deferring the EEC. Sonata Theory does offer some reasons to enable a deferral here: Hepokoski and Darcy maintain that “one normally expects an S-theme to display a minimally satisfactory proportion to the expanse of P and TR that has preceded it (even though the succeeding C-space will also contribute to this sense)” (2006, 163). Although no strict rules are offered to help determine the minimal length of the S-theme, the brevity of this S-theme potentially justifies an EEC deferral.
these evaded cadences alongside the convention of a large-scale sentential structure in the subordinate theme flips the narrative on its head: rather than prematurely bringing the theme to a jarringly tight-knit close, these grand presentations intentionally thwart the oncoming cadence in order to allow the subordinate theme to present itself in full as a large-scale sentence.

Example 3.18 presents the analogous moment in another piano sonata by Mozart. In the opening of this subordinate theme, the “antecedent” arrives on a half-cadential dominant. The consequent, however, fails to arrive at the PAC as might be expected. Instead, what appears to be a second HC is heard much as before in the same place, on beat 3 of the phrase’s fourth measure. After each half cadence, the left hand sounds the dominant seventh on beat 4. The second time, however, the seventh belongs to the bass voice and leads to a first-inversion tonic at m. 43, thus turning the HC into an evaded PAC; here begins an expanded continuation phrase. What seemed to begin as a tight-knit period has become a loose-knit sentence.
If it were not thwarted, the would-be cadence in m. 42 would have resulted in a subordinate theme that would have been unconventionally tight-knit. A tight-knit subordinate theme in this context often relies on a balance achieved by subsequent themes, which serve to loosen the subordinate theme group as a whole: “A period is rarely found if the exposition contains just a single subordinate theme. But in cases of multiple subordinate themes, one of the themes (usually the first but occasionally the last) may assume this tight-knit form” (Caplin 1998, 111). This reliance on subsequent themes to loosen an originally tight-knit theme suggests a level of continuity across all of the subordinate theme group; it enables us to speak of tight- vs. loose-knit not just as a quality of a single theme, but also as a property across the subordinate theme group as a whole. The evaded cadence may, from this vantage point, bridge the two levels of looseness within the subordinate theme group: by blocking a premature close and allowing the theme to loosen itself, the evaded cadence lets a single theme to attain the looseness that would otherwise require multiple themes to achieve.

Example 3.19 presents the presentation stage in the subordinate theme of Schubert’s “Unfinished” Symphony, which demonstrates yet another cadential-evasion technique that allows a sentential subordinate theme to be completed. In the “antecedent” phrase of this subordinate theme’s presentation, the music concludes with either an HC or an elided PAC; either cadential interpretation returns to the theme that came before the cadence, thus turning the clock back, as it were. As the music proceeds beyond this cadence, it gradually becomes clear that this theme is part of a large-scale sentential presentation. Given that the first attempt at a cadence is already so close to being a PAC, the second opportunity has even more of an expectation for a cadence.

69 Steven Vande Moortele (2018) analyzes various aspects of this symphony and describes the subordinate theme group as a large-scale sentential unit. While the presentation stage of this theme group is hardly a period thanks to its phrase elision and the conclusion of its “antecedent” on a perfect authentic cadence, the cadential evasion technique deployed in m. 62 is nonetheless fascinating and relates to the previous discussions on this issue.
However, arriving at a PAC would once again leave the subordinate theme too short to offer a satisfactory close to the exposition on its own. Schubert’s cadence evasion technique here is famously remarkable. At m. 62, it is as though the music has run out of ways to evade the strongly anticipated oncoming PAC; therefore, rather than continuing, the music bluntly interrupts itself.
with a full measure of rest. This measure of rest cuts the music off, as it were, freeing it from the obligation of reaching an otherwise unavoidable premature close.

Despite the clever cadence-evasion techniques witnessed in the previous two examples, both presentation sections nonetheless contain phrases that resemble a period. As I have mentioned, in these sections the period in question is denied its final cadence in an attempt to prevent an PAC that is too soon or that ends a subordinate theme that is too tight-knit. One additional example by Schubert presents an alternative possibility of evading the cadence by deploying a weaker cadence instead. In the subordinate theme group of Schubert’s Lebensstürme (Example 3.20), the period begins at m. 90 and immediately cadences with an IAC in B♭ major, the local key of II. This foreign-key IAC results in a modulating antecedent that is common in Dvořák’s music, and Example 3.20: Schubert, Lebensstürme, mm. 90–104.
ultimately follows with an IAC in the local home key (A♭ major) at the end of the consequent at m. 103. In this instance, the flexible nature of the IAC allows for this presentational period to contain a complete cadence and also allows for a stronger cadence to follow upon the conclusion of the subordinate theme group.\textsuperscript{70}

\textit{The Period and the Small Ternary}

In addition to the period’s ability to function as the presentation of a larger sentence, its tonal layout also heavily resembles that of the small ternary construction. As with the most standard type of period, a Schenkerian interpretation of a standard rounded binary or small ternary form comes out of the interruption paradigm, in which the contrasting middle either proceeds to V or prolongs it.\textsuperscript{71} Given the tonal similarity between the small ternary and the period, along with the

\textit{Example 3.21:} ST. ANTHONY Hymn, illustrating a one-measure expansion in the antecedent and consequent.

\begin{example}
\begin{figure}
\centering
\includegraphics[width=\textwidth]{example3_21.png}
\end{figure}
\end{example}

\textsuperscript{70} See the discussion in my previous chapter for the flexible nature of the IAC. In this example, Schubert’s IACs may take the form of a standard IAC whose cadential strength lies between those of the HC and the PAC. On the other hand, given that these two phrases form the presentation of a larger sentence, these IACs may also—at this larger level—interact with their guises as non-cadential progressions. In either case, the limited cadential strengths of the IACs (corroborated by their not containing a functional predominant harmony) allow for a stronger cadence to follow. Within the eight measures, an IAC in the home key is, assuming all other scenarios are equivalent, stronger than an IAC in a foreign key.

\textsuperscript{71} See Caplin (1998, 75), who says: The B section often starts on the home-key dominant and, with few exceptions, concludes with that harmony. (In some cases, the section consists entirely of a standing on the dominant. Prominent sequential progressions can reinforce this harmonic instability all the more. […] Unlike the exposition [or A section], the contrasting middle never closes with an authentic cadence in the home key. Rather, the B section most often ends with a simple home-key half cadence. The section may occasionally conclude with an authentic cadence in the dominant region. In such cases, the tonic of the subordinate key is often converted into the dominant of the home key through the addition of a dissonant seventh. Compare this statement with Schenker (1935 [1979], 132): A simple expansion of V, as, for example, in [Beethoven’s Piano Sonata Op. 27, No. 2; not reproduced here], can constitute the middle section. [Alternatively] a thoroughgoing amplification of \( \frac{2}{3} \) even more effectively produces a three-part form.

In both cases, the expansion of the dominant results in the contrasting middle of a small ternary construction.
fact that both include a return of the opening idea, it is common for the small ternary to resemble—or in some cases, even contain musical material of—the antecedent-consequent period.

The concept of expansion is fundamental to this understanding of the similarities between the period and the small ternary form. That phrases can expand beyond lengths set by normative models has been theorized by authors at least as early as Kirnberger (1776) and is no less popular today with ample discussion by Rothstein (1989), Caplin (1998), and many others. However, concepts of expansion as they apply to the period are often limited to that of the consequent, with potential antecedent expansions often being restricted to symmetrical ones in which the consequent is also expanded by the same material (as in Example 3.21).

*Example 3.22:* Beethoven, String Quartet Op. 18, No. 5, Trio, mm. 1–24 in the (a) original and (b) recomposition removing the contrasting middle.
To be sure, largely limiting the discussion of expansions to the consequent reflects what is seen in the literature: most themes currently interpreted as asymmetrical antecedent-consequent periods do indeed feature expansion in the consequent rather than the antecedent. However, this preference for expanding the consequent over the antecedent arguably results from the similarities that otherwise arise between the period and the small ternary. In other words, when the antecedent of a period is expanded too much, it may begin to resemble a small ternary. This may be witnessed in the trio from the third movement of Beethoven’s String Quartet Op. 18, No. 5 (Example 3.22a). As a standard small ternary movement, this piece cadences in V in m. 8, which then proceeds to an uneventful contrasting middle, one that simply prolongs dominant harmony. Following these four measures, the opening theme comes back, concluding the piece with a PAC in the tonic key.
Example 3.22b recomposes this piece to take out the standing on the dominant, making no further alterations; the result is a period.

In short, we may sometimes obtain a period from a small ternary simply by deleting the contrasting middle. Alternatively, we may do the reverse: we may take an antecedent-consequent period, append a postcadential suffix of suitable length to the antecedent, and the result will be a small ternary form.

Dvořák exploits these possibilities to great effect in his Slavonic Dance Op. 72, No. 1 (Example 3.23). This music opens with a sentential antecedent in mm. 1–16, ending with a PAC in the key of the submediant; the consequent follows in mm. 26–42, ending with a home-key PAC. Note that there is a nine-measure gap between the antecedent and consequent. The thematic layout

Example 3.23: Dvořák, Slavonic Dance Op. 72, No. 1, mm. 1–42.
of this theme seems to align in an A–B–A’ format, consistent with a standard small ternary construction. Accordingly, one may reasonably question whether this theme should be understood as a period with an extended antecedent or as a small ternary.

Yet at least two factors complicate the labeling of this theme as a small ternary. First, unlike a conventional middle section, mm. 17–25 repeat the harmonic progression, and part of the melody, of the preceding continuation, mm. 9–16. Second, this passage does not end on a dominant as would be expected of a standard middle section in a small ternary. Instead, it simply prolongs the
submediant harmony, giving the impression that it is more of a postcadential suffix at the end of the opening sixteen measures than a contrasting middle within a small ternary.

That the submediant is so common for a modulating antecedent in Dvořák’s music, as was seen in the examples cited above, additionally contributes to the sense that this theme functions as a period with an expanded antecedent. Whereas in most examples of small ternary form, the opening section modulates to the dominant or the mediant, in this example the opening section modulates to the submediant. This modulation sets up the expectation that a consequent might ensue, and it does, but it is delayed by an eight-measure postcadential extension of the antecedent.

Fascinatingly, this opening theme, which can itself be heard as a faux small ternary, forms the opening of a larger, more conventional ternary form. Example 3.24 provides a voice-leading interpretation to illustrate this nested ternary construction. Following the PAC in m. 42, the music descends through a series of fifths to the tonic of the key of G major, embedded within a large-scale 5–6–5 motion that spans mm. 43–56. This sequential progression concludes on II of B major,
which leads to II#, the dominant of the dominant, at m. 60. Following the arrival of the dominant at m. 64, the music returns to the consequent of the opening theme, closing with a PAC at m. 84. Unlike the faux small ternary that opened the piece, this larger ternary contains all the essential features of a ternary form’s middle section.

A nested ternary form is often difficult to distinguish from a five-part rondo. Here, however, the resemblance of the smaller ternary form to a period allows the larger ternary to appear without transforming the larger section into a rondo.

Analytical Vignette: Formal Ambiguity in Op. 34/i

The subordinate theme group from Dvořák’s String Quartet No. 9, Op. 34, exploits both the period’s ability to function in the context of a sentential presentation and its similarity to a small

Example 3.25: Dvořák, String Quartet Op. 34/i, mm. 63–144.
ternary. Example 3.25 presents this theme and illustrates the ways in which it is formally ambiguous. The subordinate theme enters in m. 63 with a four-measure basic idea followed by a contrasting idea that cadences in the mediant, A minor. The consequent in mm. 81ff. dissolves into a continuation, which ultimately cadences in the tonic at m. 138. Several aspects of this theme are unusual. First, a postcadential expansion, which becomes a contrasting middle, follows the antecedent. The expansion prolongs the A harmony (both major and minor) for several measures but ultimately moves, through a descending fifths sequence, back toward the tonic, seemingly turning a period with a modulating antecedent into a small ternary. Second, unlike examples cited

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Example 3.25 continued.

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The cadence at m. 63 is arguably an IAC or a PAC. The local scale degree 3 accompanies the downbeat arrival of the tonic, but this local arrival follows from the run initiated in the previous measure and continues to 1. I hear 1 as the primary melodic note, given the descending 5-line down to A in mm. 69–70 and the articulation markings in the first violin.
above of a large-scale sentential layout where there is a single identifiable moment of cadential evasion, this one offers no clear indication of a formal boundary between presentation and continuation. Finally, the theme’s basic idea returns at m. 121 following continuation material, turning the large-scale sentence into something resembling a still larger ternary form.

As discussed above, the differences between a period and a small ternary are often predicated on whether a significant expansion—one that involves a significant articulation of dominant harmony—follows the end of the antecedent. In mm. 71–80, prolongation of the mediant (in six-four inversion) occupies most of the passage, while the dominant of F major occurs in a seemingly incidental way, as part of a descending fifths sequence. The lack of a strong root-position dominant, articulated as the goal of a phrase, casts doubt on the formal status of these ten measures. One might conceivably regard the mediant progression as the main harmonic content and the sequence

*Example 3.25 continued.*
as mere caesura-fill. If so one might lean toward hearing the theme as a period rather than a small ternary.

Another curious aspect of this theme is the nebulous boundary between the end of the presentation and the beginning of the continuation proper. Whereas the examples cited above used various cadential-evasion techniques to eschew a premature EEC and separate the presentation from what follows, Dvořák’s Op. 34/i appears to offer no obvious signs of the impending cadence. Since at no point is there an indication that the cadence is on its way, at no point is there the impression of definitively moving into the continuation of this large-scale sentence. Still, the change of texture at m. 94 (which implies a hypermetrical downbeat), as well as the arrival on the subdominant harmony here, suggest that the continuation may be understood to begin at this
moment. This subdominant harmony initiates a descending fifths sequence; much as in mm. 71–80, this sequence indicates a continuational formal function.

It is perhaps due to this strange initial statement of the consequent phrase that m. 121 returns to the subordinate theme’s basic idea. This statement, unlike the one at mm. 81ff, remains in the key of F major. However, this return once again casts doubt on the structure of the subordinate theme as a whole. This return of the opening motive may be interpreted as a recapitulation within a “small” (but actually quite large) ternary form. However, the opening harmony at this thematic return gains a chordal seventh, thereby destabilizing it and launching it into the IV harmony that follows. Furthermore, the first-violin melody is sequential, as are the harmonies above the tonic pedal, suggesting a renewal of continuation function. The destabilization of the initial tonic harmony seems to indicate that the motivic return, tonic pedal and all, does not constitute a rebeginning, but, rather, the beginning of the end. If the pedal is disregarded, mm. 126–30 seem cadential both melodically and harmonically; curiously, though, the cello leaps from C to F only in mm. 137–8. Formal ambiguity persists to the very end of the section.

**Modulating Antecedent and the Modulating Period**

In periods with a modulating antecedent, the consequent’s return to the home key establishes the stronger cadence over the weaker one at the end of the antecedent. In a standard modulating period, the consequent is the modulating phrase, but its cadence is more definitive than that of the antecedent (usually a half cadence in the home key). If both phrases modulate, and to different keys, no cadence in the home key is heard within the period: we have a modulating period with a modulating antecedent. In this last case, both non-tonic cadences may be of the same type, each offering the same level of closure within its local key.
Example 3.26: Dvořák, String Quartet Op. 80/iii, mm. 1–14.

This excerpt, from Dvořák’s String Quartet No. 8, Op. 80/iii, presents an antecedent that begins in E major and closes in the submediant key, C# minor. The consequent, instead of returning to the tonic to offer its stronger cadence, closes in the dominant, B major. The relative status of weak and strong cadences in this example is unproblematic, given that the antecedent closes with an IAC (VI: IAC), making it weaker than the consequent’s V: PAC. The problem becomes more pressing when the internal cadence is also a PAC, as is the case with most modulating antecedents presented thus far. In this section, I examine the modulating period as it interacts with the modulating antecedent. I begin by comparing this variant of the modulating period with the
repeated antecedent discussed above. I then examine the problem of cadential hierarchy and propose hierarchy of keys that may apply to these modulations.

It is easy to see the resemblance between the modulating period and the repeated antecedent. Since the repetition of the antecedent is a consequent that modulates, the modulating period is similar to the repeated antecedent. The only difference at this point is that, whereas the repeated antecedent will always move to the same key as the modulating antecedent, the modulating period need not have the same modulatory goal in the antecedent and consequent. This distinction allows for several ambiguous situations: some examples contain elements of both the repeated antecedent and the modulating period. Consider, for instance, the mazurka cited in Example 3.7 above. On the one hand, this theme modulates to the same key in both the antecedent and the consequent, suggesting that the second phrase is a repeat of the antecedent. On the other hand, looking at the harmonies, it becomes clear that the second modulation to III is markedly different from the first. The modulation seems more definitive the second time, both in its length (fully half the consequent is in F major) and in the many repetitions of the cadential formula (which first occurs in mm. 12–13). This less literal repetition of the antecedent suggests that the theme may more closely resemble other modulating periods than it does the repeated antecedent.

The mazurka demonstrates that the difference between a repeated antecedent and a modulating period is perhaps not simply a question of whether the two cadences take place in the same key, but rather whether the second cadence is somehow of a higher structural status than the first. In the repeated antecedent, as illustrated from their voice-leading graphs, the two modulations are literally structural repetitions of one other; tonally speaking, there is no difference in status. In the modulating period, by contrast, the second modulation occupies a higher structural level. Example 3.27 provides my voice-leading interpretation of the mazurka’s theme. The voice-leading

Two Modulations: A Key Difference

Example 3.28 presents mm. 33–67 of the finale from Dvořák’s “American” String Quartet, Op. 96. Unlike the excerpt in Example 3.26, the antecedent in this movement cadences with a PAC in the mediant, whereas the consequent closes with the same type of PAC in the dominant. Aside from the choice of key, both cadences are identical, right down to the figuration of percussive eighth-note articulations in all instruments. How do we know which cadence is stronger?

While the “American” quartet poses the more pressing issue, both examples highlight an important distinction between the keys of the antecedents and those of the consequents. In both
examples, the antecedent cadences in a key that is commonly seen in Dvořák’s modulating antecedents: the Eighth String Quartet (Example 3.26) cadences in the key of the diatonic submediant, while the “American” cadences in the diatonic mediant. The consequents, however, consistently cadence in the dominant, the most expected choice for the consequent of a modulating period. This observation suggests that the modulatory goals presented in these periods differ not in degree but in kind. On the one hand, the common modulations that take place in modulating antecedents (VI, III, and occasionally VII) usually represent brief excursions to that key, and rarely
point to the new key as a goal.\textsuperscript{73} On the other hand, modulations that take place at the end of the consequent (often V) suggest a more structural move away from the tonic, as the formal area following these periods often remains in the new key (at least the new \textit{Stufe}, perhaps as an active dominant) for a significant amount of time.\textsuperscript{74} In this section, I begin by describing some of these differences through the lens of tonal mutability that has been described by several Russian music theorists. Following this discussion, I examine each of the most frequently chosen keys in modulating antecedents in an attempt to understand each key choice from the perspectives of tonal mutability and neo-Riemannian theory.

Table 3.1 presents a selected list of pieces that feature antecedent modulations; most are by Dvořák. As the table illustrates, in most cases Dvořák’s antecedents modulate to the mediant or submediant, with a few modulating to VII.\textsuperscript{75} Of the majority of cases, these transformations can be described with the neo-Riemannian transformations L or R. The frequency of these third-related modulations recalls tonal mutability, a concept developed Russian theorists in the twentieth century; their work has been summarized by Ellen Bakulina (2014). Bakulina outlines the perspectives of seven Russian theorists. Although their definitions of mutability vary a great deal, three trends are apparent. First, mutability tends to prefer third-related triads as alternating centers of harmonic focus. Second, mutable systems tend to be interpreted as lying in between tonal and modal systems. Finally, mutability, or fluidity between tonal centers is seen by Russian theorists

\textsuperscript{73} This observation does not hold for all sonata-form pieces of the nineteenth century. Several well-known examples by Beethoven, Schubert, Brahms, and Dvořák demonstrate that the mediant and submediant become common choices as the tonal space for subordinate theme groups in this time period. Nevertheless, I argue that these modulations operate on a relatively deep structural level; they exhibit many more formal and metrical markers than do the ones here. Unlike sonata-form transitions, where modulations usually play out gradually and feature melodic fragmentation and dissolution, modulations that take place within an antecedent are relatively abrupt, often appear within a single measure, and feature none of the melodic indicators of a transition. These brief excursions are, in a sense, designed to be able to return to the home key as soon as possible.

\textsuperscript{74} The D-minor mazurka (Example 3.7) presents an interesting grey area in this sense, too. The key that forms the goal for both the antecedent and consequent, F major, can be understood in both of the ways described in note 73.

\textsuperscript{75} This table excludes the reinterpreted half cadence, which has been explained satisfactorily in Caplin 1998.
as being categorically different from modulation. The first two of these ideas relate mutability to the harmonic language of Dvořák’s modulating antecedents, while the last corroborates my argument that his antecedent modulations, like Russian mutability, operate differently from modulation in its conventional sense.

Many scholars who discuss mutability agree on the prominence of third-relations. Of the theorists Bakulina summarizes, the writings of Boleslav Iavorskiĭ, Sergei Protopopov, Lev Mazel, Viktor Berkov, and Igor Sposobin demonstrate these third-relations especially effectively. Iavorskiĭ and Protopopov represent the earliest theorists to describe mutability; both examine the “mutable mode” from a melodic perspective that involves a resolution of specific pitches within a

Table 3.1: List of compositions employing the period with modulating antecedent.

<table>
<thead>
<tr>
<th>Composer</th>
<th>Work</th>
<th>Measures</th>
<th>Quality (orig./new)</th>
<th>Key</th>
<th>Ancillary V?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brahms</td>
<td>Op. 6, No. 3</td>
<td>Entire composition</td>
<td>Major/Minor</td>
<td>II (RLR)</td>
<td>Yes</td>
</tr>
<tr>
<td>Brahms</td>
<td>Op. 119, No. 4</td>
<td>217–37</td>
<td>Major/Minor</td>
<td>III (L)</td>
<td>No (?)</td>
</tr>
<tr>
<td>Chopin</td>
<td>Op. 28, No. 5</td>
<td>Entire composition</td>
<td>Major/Major</td>
<td>III (LP)</td>
<td>Yes</td>
</tr>
<tr>
<td>Dvořák</td>
<td>B. 88</td>
<td>52–67</td>
<td>Major/Minor</td>
<td>III (L)</td>
<td>No</td>
</tr>
<tr>
<td>Dvořák</td>
<td>B. 94</td>
<td>30–45</td>
<td>Major/Major</td>
<td>III (LP)</td>
<td>No</td>
</tr>
<tr>
<td>Dvořák</td>
<td>Op. 22/i</td>
<td>31–40</td>
<td>Major/Major</td>
<td>III (LP)</td>
<td>No</td>
</tr>
<tr>
<td>Dvořák</td>
<td>Op. 22/i</td>
<td>80–119</td>
<td>Major/Minor</td>
<td>III (L)</td>
<td>No</td>
</tr>
<tr>
<td>Dvořák</td>
<td>Op. 34/i</td>
<td>63ff</td>
<td>Major/Minor</td>
<td>III (L)</td>
<td>Yes (?)</td>
</tr>
<tr>
<td>Dvořák</td>
<td>Op. 46, No. 1</td>
<td>2–17</td>
<td>Major/Minor</td>
<td>VI (R)</td>
<td>No</td>
</tr>
<tr>
<td>Dvořák</td>
<td>Op. 54, No. 1</td>
<td>1–38</td>
<td>Major/Minor</td>
<td>VI (RP)</td>
<td>No</td>
</tr>
<tr>
<td>Dvořák</td>
<td>Op. 54, No. 6</td>
<td>39–57</td>
<td>Major/Minor</td>
<td>VI (R)</td>
<td>No</td>
</tr>
<tr>
<td>Dvořák</td>
<td>Op. 61/iv</td>
<td>1–8</td>
<td>Minor/Major</td>
<td>VI (L)</td>
<td>No</td>
</tr>
<tr>
<td>Dvořák</td>
<td>Op. 65/ii</td>
<td>1–25</td>
<td>Minor/Major</td>
<td>VII (RLR)</td>
<td>Yes</td>
</tr>
<tr>
<td>Dvořák</td>
<td>Op. 72, No. 1</td>
<td>1–42</td>
<td>Major/Minor</td>
<td>VI (R)</td>
<td>No</td>
</tr>
<tr>
<td>Dvořák</td>
<td>Op. 80/iii</td>
<td>1–14</td>
<td>Major/Minor</td>
<td>VI (R)</td>
<td>No</td>
</tr>
<tr>
<td>Dvořák</td>
<td>Op. 85</td>
<td>38–45</td>
<td>Major/Minor</td>
<td>III (PR)</td>
<td>No</td>
</tr>
<tr>
<td>Dvořák</td>
<td>Op. 87/iii</td>
<td>113–20</td>
<td>Major/Minor</td>
<td>VI (R)</td>
<td>No</td>
</tr>
<tr>
<td>Dvořák</td>
<td>Op. 95/iv</td>
<td>44–49</td>
<td>Minor/Major</td>
<td>VII (RLR)</td>
<td>No</td>
</tr>
<tr>
<td>Dvořák</td>
<td>Op. 96/iv</td>
<td>33–68</td>
<td>Major/Minor</td>
<td>III (L)</td>
<td>No</td>
</tr>
<tr>
<td>Dvořák</td>
<td>Op. 101, No. 8</td>
<td>1–8</td>
<td>Minor/Major</td>
<td>VI (L)</td>
<td>No</td>
</tr>
<tr>
<td>Dvořák</td>
<td>Op. 106/iii</td>
<td>1–32</td>
<td>Minor/Major</td>
<td>VI (PR)</td>
<td>No</td>
</tr>
<tr>
<td>Schubert</td>
<td><em>Lebensstürme</em></td>
<td>90–104</td>
<td>Major/Major</td>
<td>II (RLRP)</td>
<td>No</td>
</tr>
</tbody>
</table>
scale. Both authors suggest that the resolution of unstable melodic pitches to stable ones creates a “tonic” sonority that is made up of all such possible resolutions in that mode. In the examples Bakulina cites, the result is a collection of four notes spaced a third apart from one another, resembling a seventh chord. Although conceived in purely melodic terms, these third-related notes foreshadow constructs described by later theorists, who introduce third-related triads tonal centers within a mutable system.

Two such theorists are Mazel and Berkov, both of whom further adapt the concept of tonal mutability. These theorists (a) expand the concept into harmony and (b) begin to use mutability to discuss music outside of Russian folk melody. In the case of Mazel, the concept of the mutable mode is taken and adapted to work harmonically in the music of Chopin:

Therefore, a comparison between Iavorskii’s and Mazel’s concepts of the mutable mode reveals a crucial change, a paradigm shift in the understanding of mutability, which I would like to call a functionality shift. This means that Mazel brings the notion of mutability into the realm of conventional tonal music and therefore tonal theory and tonal functions. The functionality shift happens due to a difference in repertoire: while Iavorskii’s mutable modes are intended for European folk and liturgical music, Mazel deals with the music of a nineteenth-century composer. (Bakulina 2014, [9])

For Mazel, that the pitch classes G and A regularly resolve into one another, alternating roles as stable and unstable tones, creates mutability between C major and A minor. Like Mazel, Berkov further develops this harmonic stance on mutability. Bakulina argues that Berkov’s descriptions of the mutable system rely largely on the potential harmonization of a melody (even if the piece in question is monophonic). Like Mazel, Berkov indicates that modulations by thirds are preferred in these potential harmonizations. In both Mazel’s and Berkov’s accounts of mutability, third relations form the most prominent motions between keys.

The clearest illustration that third-relationships form the bulk of Russian mutability can be found in Sposobin. Sposobin classifies tonal mutability into two main types: relative mutability—
mutability from the major into the relative minor, or vice versa—and mutability of “other types.” Sposobin’s first case, relative mutability between third-related keys, is so distinguished because it is the most common form of this functional shift. For Sposobin, as for Mazel and Berkov, shifts between third-related keys outnumber those of other kinds.

In addition to the emphasis on third-related keys, more recent Russian scholars on mutability indicate that the mutable system lies in between modality and tonality. To these scholars, modality is melodically organized and exhibits weak or no gravitational attraction onto any particular pitch or pitch class. Tonality, on the other hand, is functional or harmonically oriented and is strongly centripetal around a central tone. As Bakulina illustrates, Kholopov interprets mutable tonality as a move toward this looser form of pitch organization; to him, modality necessarily implies the lack of a centric orientation:

Although both types of mutability, modal and tonal, have different degrees of decentralization […], Kholopov ultimately conceives of tonal mutability as a conceptual mediating phase between tonality and modality. He writes: ‘The weaker the force of tonal centricity, the stronger the mutability of modes [ладовая переменность] expresses itself in different ways’ (1988, 173). […] Unlike earlier theorists, for whom mutability always involves specific kinds of key relationships, for Kholopov it is a more abstract idea—the idea of a weak tonal or modal center. (Bakulina 2014, [17])

Finally, that tonal mutability is understood as being altogether different from modulation is described by Berkov and Sposobin. Berkov’s examination of relative-major and -minor tonicizations in an excerpt by Glinka outlines the difference between a mutability on the one hand and the subsequent modulation to V on the other. Taking this cue, Bakulina argues that Berkov views the “third-related and fifth-related tonal centers [as] categorically different kinds of relationships” (2014, [12]). Bakulina makes the same claim for Sposobin’s theories on mutability.

In a general sense, Sposobin’s idea is very close to Mazel’s and Berkov’s: all these writers share a reliance on tonality and tonal functions and the view of mutability as a
change of tonic (usually multiple times) in the course of a piece. This is not the same as the Western concept of modulation; changes in a mutable mode most often occur back and forth between two diatonically related tonal centers, while modulation embraces many more possibilities. (Bakulina 2014, [13])

For Sposobin, two characteristic distinctions separate mutability from conventional modulation. Mutability (a) exhibits an oscillation between two tonal centers and (b) limits this move to one between two diatonically related tonal centers. Tonality, on the other hand, often modulates with the latter key as a goal and need not limit the two tonic harmonies to diatonic relations. Bakulina further explains that, even in the case of two centers framed by a I–V relationship, this motion as a mutable relationship would be fundamentally different from a conventional dominant modulatory goal: in the case of a mutable mode, the V carries suggestions of the mixolydian mode, whereas a conventional modulation would alter the underlying diatonic collection and would contain no modal implications. Both Berkov and Sposobin separate the mutable mode from the Germanic concept of modulation.

Applying this concept to Dvořák’s antecedent modulations, it becomes immediately evident that the first two trends—the predominance of third-relations and the presence of modal characteristics—are consistent between repertoires. Using these, as well as the oscillation between keys that Sposobin refers to, I argue that these modulations function in a way similar to the Russian mutable mode, and that they function independently from the western concept of modulation.

As seen from Table 3.1 above, many of the modulations outlined in the pieces seen so far move between relative keys, while several more employ a motion of a major third in the opposite direction. While the latter case—a neo-Riemannian L—does not qualify under Sposobin’s “relative” mutability, most other Russian theorists have little problem accepting this major-third exchange of centricity.
In addition to the idea that Russian mutability represents a move toward modality, the general relationship between modality and music of the nineteenth century has been addressed by scholars such as Nicole Biamonte and Rey Longyear. As these scholars argue, the introduction of triads such as iii and vi in major as well as VI and VII in minor represent the “introduction of a so-called ‘modal’ harmony with a strong emphasis on secondary triads in the diatonic scales” (Longyear 1988, 196). Biamonte connects this idea to Fétis, who removes iii from the major key’s set of possible secondary triads due to its effect of suspending tonality. Biamonte argues from this that “the secondary triad least functional in tonal music is iii, and thus we might expect it to play a larger role in modal music” (Biamonte 2000, 80). In each of these instances, the use of mediant and submediant keys—those most frequently deployed in both Russian music and Dvořák’s modulating antecedents—may represent an exploration of a key’s modal characteristics.

Dvořák’s associations with Slavic folk traditions add yet another link between his music and the writings of these Russian scholars. As Bakulina notes, the earliest descriptions of the mutable-mode concept by Iavorskiĭ and Protopopov focus entirely on the melodic features of Slavic folk and liturgical music. Most of the examples I have drawn on in this dissertation do not originate in any sonata-form movements where Germanic elements are seen. Instead, these modulating antecedents are most commonly deployed in dances, suites, and the middle movements of works, which Dvořák often sets as iconic Slavic dances such as the furiant or dumka. The selective placement of these modulating antecedents further highlights their associations with folk elements.

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76 Much has already been said regarding Dvořák’s folk idioms. For some prominent examples, see Beckerman (1986, 61–73), Beveridge (1993, 303–25), and Branda (2014).

77 That Dvořák’s music is modeled after many folk idioms—be they real or constructed—does not rule out the possibility that a piece without explicit folk elements might also employ techniques of mutability. As Bakulina states, even though the idea originated for the purpose of analyzing Russian folk and liturgical music, it quickly transcended this genre and was used by Mazel for the music of Chopin. The quick adaptation of this method to Chopin indicates
Third-relations and modal characteristics are two related similarities between Dvořák’s antecedent modulations and Russian mutability. Given these similarities, the third trend—that mutability is categorically different from modulation—may equally apply to this music. Berkov’s argument that separates the category of modulations based on third- and fifth-related tonal centers is particularly pertinent to the present repertoire, as most modulations that occur in Dvořák’s antecedents move to a key a third from the opening key. In what follows, I outline these key choices, and contextualize them with respect to Russian theory.

The most common antecedent modulations can be represented with the neo-Riemannian R. This is the most common and straight-forward modulation in this repertoire. Two small exceptions can be found in the Waltz Op. 54, No. 1 and the String Quartet Op. 106/iii, both of which utilize the R transformation alongside P in different ways. The waltz uses an RP to move from A major to F# major. The string quartet reverses this transformation, resulting in a PR motion from B minor to G# minor. Aside from these two exceptions, most examples by Dvořák conform to the diatonic norm in which relative major and minor keys oscillate. Most instances of the R transformation go from the major to the relative minor. This preference, once again, reveals a difference in tonal procedure from common-practice modulation, as the exact opposite is true in the music of eighteenth- and nineteenth-century Austrian composers. For them, the process of going from the tonic to the relative minor is far overshadowed in practice by the reverse modulation, from a minor tonic to its relative major. This is, of course, a typical modulation for the first section of a minor-key sonata form, binary form, or small ternary. By contrast, examples of the minor-to-major R

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that it is broadly applicable to any music that suits it. Still, the close association of this technique with the folk idiom does indicate a preference for certain musical genres over others.

78 This pairing of R with P alludes to an octatonic cycle, or the RP neo-Riemannian cycle. In both cases, chords obtained through a repetition of these two transformations trace out notes of the octatonic collection.
transformation in Dvořák often result in a repeated antecedent or something that proves to be a written-out repeat. Its deployment within modulating antecedents is limited in Dvořák’s œuvre.

The second-most common motion in the modulating antecedent utilizes the L transformation, which creates a motion of the tonic by major third. Much more commonly here than in the case of R, L modulations in Dvořák’s music maintain the major mode by means of P, resulting in the double transformation LP. The motivation for the more frequent use of the major mode is possibly due to its potential use as the dominant of the relative minor. A striking aspect of this modulation from the perspective of Russian mutability concerns the differing accounts of Berkov and Sposobin. Whereas Berkov appears to suggest that all mutability at the third is categorically different from western modulation, Sposobin reserves the relative motion as a distinct and most common form. Of these two accounts, the former wholly accepts a modulation upward by a major third, whereas the latter would categorize it as belonging to a second, rarer form of mutability that includes motions into any other scale degree. Despite these accounts, the progression through L to the third of the tonic remains a frequent gesture in the modulating antecedents of Dvořák.

This prevalence may find a certain level of resonance in the writings of Iavorskiĭ and Protopopov, whose theories introduce a mutability that resembles R and another resembling L. The R-transformational setup can be seen from Iavorskiĭ’s mutable mode 1, in which the relevant resolution notes form a minor seventh chord. This four-note collection can otherwise be described as notes of two triads related by R. In the L-transformational scenario, the tonic of Iavorskiĭ’s mutable mode 2 comprises notes forming a major seventh chord which, when taken as a pair of

79 Owing to this transformation’s membership in the hexatonic cycle, there are many opportunities for manipulating the ambiguity of the gesture. As I have demonstrated in Chapter 2, Dvořák’s Polonaise B. 94 begins its main theme with this transformation but expands it into a complete LP cycle in the following theme. In this situation, the difference between mutability and modulation is also blurred: given the LP transformation’s ubiquity in both tonal mutability and nineteenth-century tonality, its appearance can be especially prone to manipulation; this ambiguity is taken advantage of by Dvořák in this work.
triads, can be seen as two triads related by $L$. Both transformations are highlighted, each with its own mode.

Finally, just as with the $R$ transformation, this progression also tends to occur from a major triad to the triad a third higher.\footnote{The resulting triad is in the minor mode when $L$ is deployed alone and major when $LP$ is deployed.} A rare exception can be found in Dvořák’s *Humoresque*, Op. 101, No. 8, which traverses from $B_{b}$ minor to $G_{b}$ major at the end of its non-cadential antecedent.

In two cases shown in Table 3.1, an antecedent modulates to the subtonic. This type of mutability is summarized in English scholarship most succinctly by Richard Taruskin (2003) in his study of Miliy Balakirev’s *Sbornik russkikh narodikh pesen* (1866), a collection of Russian folk songs. In this study, Taruskin says that Russian tunes employing mutability “often coincided with the ordinary relationship of tonic to relative minor, but just as often the relationship involved the lower neighbor to the tonic in the minor mode, a degree for which there is not even an ordinary ‘Western’ name” (2005, 471). This motion to the subtonic occupies a relatively central portion of Balakirev’s folk melodies, as Taruskin demonstrates in several examples where such mutability occurs with the melody alternating between $\hat{1}$ and the lowered $\hat{7}$ at cadence points.

One can also find theoretical underpinning behind this type of second-related mutability in the theories of Andreĭ Miasoedov. Miasoedov forms the diatonic collection by taking four-note segments of the circle of fifths and argues that these segments create the proto-harmonic system of early Russian music. He also argues that later Russian music continues to utilize these four tones as foundations. In this proto-harmonic system, these four pillar harmonies have an ability to exert gravitational influence on other notes of the diatonic collection, resulting in what is perceived as mutability. In the case of a motion to the subtonic, this type of mutability can be interpreted as a result of $II$ and $I$ functioning as conflicting tonal centers. (In this scenario, $II$ in Miasoedov’s system
is interpreted as the tonic, while I adopts the role of the subtonic.) Borrowing from this theory of proto-harmony, I suggest that antecedent tonicizations in which the tonic proceeds to VII invokes a partial proto-harmonic complex in which VII and minor I form part of a VII-I-IV-V complex; arranged in fifths, the complex could be expressed as VII-IV-I-V. In this system, the remaining two harmonies of the proto-harmonic complex, IV and V, form the dominants of the former two, which serve as tonics within their localized contexts. Each of these triads exerts its influence on pitches outside of the collection, resulting in something resembling mutability. In the two examples from Table 3.1, the proto-harmonic complex is B-c#-F#-G#(g#) for Dvořák’s Op. 65/ii and D-e-A-B(b) in the finale of Dvořák’s Symphony Op. 95. In each case, the proto-harmonic complex expresses itself as the work’s paired tonics and dominants.

This pattern, however, is not the only way this four-chord complex can be used to model major-second-related modulations. Alternatively, the triads that are perceived as tonics may occupy the upper chord pair in a proto-harmonic complex. This interpretation resonates with both

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81 Taking I and II in this system literally results in antecedent modulations to the supertonic, as is seen in Brahms and Schubert. That the same setup can model these two modulations reveals their similarity to one another. This similarly is also seen in their neo-Riemannian labels. Both modulations can be denoted using the neo-Riemannian triple transformation RLR; the tonic of a major key moves to minor II through this order of transformations, whereas minor-key tonics move to VII through the same set.

82 The term “proto-harmonic complex” or “PH complex” comes from Ellen Bakulina (forthcoming), who discusses Miasoedov’s use of proto-harmony and adapts it to the first and fourteenth movements of Rachmaninoff’s All-Night Vigil. Bakulina’s interpretation of both movements illustrates the proto-harmonic complex and its ability to manifest itself as apparent mutability between tonics—one realized as the root of a major triad, the other as minor, placed a whole step apart. Bakulina’s presentation of this proto-harmonic complex (in contrast to techniques like Schenkerian analysis) further illustrates the differences between Russian concepts of mutability and standard “western” approaches to modulation. In her examples, Bakulina names these harmonies using letter names over roman numerals because (a) the question of which harmony functions as tonic can be contestable and (b) each of her complexes refers to a specific piece. The opposite is true in my examples; given the periodic construction in which foreign-key PACs are ultimately resolved into the home key, as well as the generalized nature of the theoretical, I choose instead to adapt Miasoedov’s use of roman numerals to denote the members of a proto-harmonic complex.

83 Bakulina also addresses the mode, or quality, of these four triads. She points out that for Miasoedov the triads must be symmetrical; in other words, the complex must contain exactly two major triads and two minor triads. Bakulina qualifies this assertion, pointing out that chromaticism in Russian music—even in examples given by Miasoedov—may appear to violate this symmetrical arrangement of chord qualities. In Miasoedov’s model, the upper dominant of the minor tonic should in theory be minor. However, due to the raised leading tone, the upper dominant may manifest itself as a major triad.
of Dvořák’s examples; both suggest a possibility for VII to function as the dominant of III, the relative major. In situations where the relative major appears elsewhere in the piece, the work can be understood to take part in this alternate proto-harmonic complex. By this interpretation, the remaining two chords of the complex function as tonal regions that take these two tonics as their own dominants; put differently, the two secondary triads relate to the two principal triads as subdominants. At m. 27 of Dvořák’s Piano Trio Op. 65/ii, for example, the opening music returns following the PAC at m. 25 and is transposed into the relative-major key, E major. By this interpretation, the piece would take part in a partial proto-harmonic complex consisting of E-(f#)-B-c#.

Most of the examples I have focused on have ventured into one of the above-mentioned keys. It is, however, necessary to discuss the common reinterpreted half cadence, as its placement within the antecedent-consequent period places itself in dialogue with the modulating antecedent. From the perspective of modulation type, it is difficult to argue that this motion to V is in any way different from the standard western modulation, as this variant of the period is commonly used by Austro-German composers like Haydn, Mozart, Beethoven, etc. While Sposobin does insist that even mutability to the dominant ought to be seen as separate from standard modulations, his argument relies on two crucial tenets, neither of which is entirely applicable to the music of Dvořák. First, Sposobin’s motivations are somewhat political, attempting to mark out the differences between Russian music and the Western canon. Second, his distinction relies on the use of the mixolydian mode, meaning that scale degree 4 must not be raised to effect the tonal shift. In the case of Dvořák, most of his dominant modulations within the antecedent do indeed raise the fourth scale degree to create a local leading tone. His use of reinterpreted HCs is more often in dialogue with Austro-German compositional practice than with the Slavic styles discussed above.
Even if one were to interpret this as a conventional modulation, the problem that it creates—the ambiguous cadential hierarchy between cadences of the antecedent and the modulating consequent—is not an especially urgent one. Given that the dominant is the conventional goal for a modulating consequent, if a V: PAC is deployed in the antecedent phrase of a modulating period, it will often not result in a foreign-key PAC within a modulating period but will instead resemble a repeated antecedent or written-out repeat. In addition, situations in which this pattern appears in contexts that do not suggest a written-out repeat are sufficiently rare that we may forego the discussion for now.

Admittedly, in the nineteenth century, even third-related modulations such as L and R may be subject to question if unconventionality is claimed: sonata-form movements by Beethoven, Schubert, Brahms, and Dvořák frequent keys like the submediant, mediant, or (less often) the subtonic. Indeed, as I have shown in Chapter 2, the potentially ambiguous nature of these modulatory gestures is exploited in Dvořák’s Polonaise, B. 94, where an initial motion to III is taken first as an antecedent modulation, then as the first modulation of a binary form, and ultimately as part of a complete LP cycle. Later in the same piece, this third-relation is also expressed at several points in the music’s many motions to the dominant. While these and other uses within sonata-form works begin to entangle these tonicization as having a similar role to modulations by fifth, that they appear to be used differently in Dvořák’s modulating antecedents remains evident.

Analytical Vignette: Dvořák, String Quartet, Op. 96 (“American”), movement 4

Having concluded the discussion of cadential hierarchy in Dvořák’s modulating periods, I will demonstrate how a modulating period containing a modulating antecedent may be deployed within a piece through an analysis of the finale from Dvořák’s “American” String Quartet. The
opening theme of the finale contains several fascinating metrical and formal twists. The present
analysis will focus, however, on how the tonal goals set up in the two modulations of the
antecedent and consequent form the harmonic pillars for important tonal gestures later in the
movement.

Example 3.28 above provides the score for this excerpt (mm. 33–67). Example 3.29 is a
voice-leading sketch of the same passage that emphasizes phrase endings. This interpretation
projects a large-scale I–III–V bass arpeggiation in which each Stufe stands for one of the tonal
centers. The contrasting theme in mm. 69–99 takes advantage of this progression immediately
following the conclusion of the first period (Example 3.30a). This contrasting theme takes the form
of a standard antecedent-consequent period that uses a regular half cadence to close its first half.
However, this antecedent phrase approaches the dominant through a mediant harmony at m. 77.
The resulting harmonic progression (shown in Example 3.30b) outlines the same arpeggiating
motion from the tonic, through the mediant, to the dominant, just as was seen across the
movement’s main theme.
Both themes take part in a similar bass arpeggiation on a larger level. The contrasting theme of mm. 69–99 does not take place in the key that concluded the main theme, but instead opens a third lower in the key of Ab major. This Ab becomes the mediant in another, larger motion from
tonic to dominant, traversing mm. 33–122, as Example 3.31 illustrates. Here, the retransitional passage following the PAC at m. 99 slowly progresses up another third to the dominant of the home key, ultimately leading back to the return of main theme at m. 123. In the process of completing these ascending-third motions, another I–III–V pattern is traced in the bass.

CONCLUSION

This chapter has investigated various ways in which a modulating antecedent may participate in larger formal processes, giving rise to different formal possibilities. In some cases, modulating antecedents set up the expectation for a consequent, which is then either fulfilled or frustrated. From a tonal standpoint, leading a modulation in the antecedent to a key other than the dominant allows for new interpretations of modulation, including interpretations that draw upon Russian theories of mutability.
Thus far, this dissertation has examined cadential hierarchies and the various formal possibilities of the modulating antecedent. The next and final chapter provides a series of analyses of excerpts from Dvořák’s music to provide further demonstrations of how this formal construct is deployed. Each analysis uses the modulating antecedent in a way that interacts with one or more of the formal or tonal issues outlined in earlier chapters. Investigating them with these concepts in mind provides further insight into the inner workings of Dvořák’s musical language.
CHAPTER 4

ANALYSES

This chapter consists of three analyses, each of which builds on concepts discussed throughout the dissertation and demonstrates the capacity for a modulating antecedent to interact with several aspects of the composition. The first analysis examines the second movement of Dvořák’s Piano Trio Op. 65; this piece, introduced at the outset of this dissertation, demonstrates how an unusual modulation choice at the end of the antecedent has consequences for the remainder of the movement. The second analysis looks at two movements from the Serenade for String Instruments, Op. 22, each of which utilizes a period with a modulating antecedent in a unique way.

The final analysis centers on the transition from the finale of the Ninth Symphony, which begins with a period in which the antecedent modulates to VII. Given that the tonic-key perfect authentic cadence at the end of the period cuts directly against a transition’s goal to move away from the tonic, the period creates a strange scenario in which the theme’s tonal properties contradict its role as transition, creating a conflict that manifests itself in many guises throughout the remainder of the piece.

**PIANO TRIO, Op. 65/II**

The first excerpt examined here is the opening theme from the second movement of Dvořák’s Piano Trio, Op. 65, which was already discussed in Chapter 1. For convenience, I reproduce
Example 1.1 here as Example 4.1. This opening theme comprises an antecedent-consequent period with mm. 3–10 functioning as the antecedent and mm. 11–26 as the consequent. The antecedent closes with a perfect authentic cadence in the subtonic at m. 10 and the consequent arrives at a tonic-key perfect authentic cadence in m. 25. In this example, as in most cases of the modulating antecedent presented in this dissertation, both halves conclude with perfect authentic cadences. However, the placement of the first cadence in a foreign key establishes its weaker status, thereby maintaining the hierarchy of weak-to-strong required of periods. Thus, this period uses its choice of key rather than cadence type to establish cadential hierarchy.

The choice of VII as the modulatory goal of the antecedent is striking. Example 4.2 provides two ways of explaining this non-standard modulatory goal from a Schenkerian perspective. The interpretation in Example 4.2a reads the B major as a VII Stufe, which supports a standard interruption on 2 in the upper voice. The interruption involves both the upper voice and the bass, with 2 and VII both resolving, at the end of the consequent, to the tonic note/tonic Stufe. On the largest level, in this reading, the theme does not compose out the standard I–V–I but a far less conventional I–VII–I, while the upper voice traces a conventionally interrupted third-progression.

Example 4.2b presents a more conservative reading of the theme by taking B major as an altered upper third to an implied dominant Stufe, an interpretation that relies heavily on the presence of B# at the end of m. 10. While this reading is indeed more conventional, one might question its treatment of the B#—which sounds for only an eighth note—as having greater structural importance than the preceding B♭.

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84 This interpretation draws from Damschroder’s (2010) analyses of Schubert. Damschroder probes the use of the subtonic harmony in Schubert’s music, often reading it as a wobbled upper third to a standard dominant harmony.
As noted in Chapter 3, this descending-second modulation recalls the proto-harmonic complex represented by B-c#-F#-G#(g#). This proto-harmonic complex suggests a proto-tonal setup in which B major and C# minor exert gravitational forces on the rest of the harmonic system,
with F# and G# functioning as their upper dominants. For a brief moment in m. 10, B major wins out, effecting the tonicization at the end of the antecedent. This proto-harmonic complex, in which two tonal areas function as tonics and the other two as dominants, is not the only possible model for the passage. In addition to this complex, it is possible to draw from the various allusions to E major—such as the one in mm. 16–18 and the beginning of the following phrase in mm. 27ff.—to argue for the partial proto-harmonic complex E-(f#)-B-c#. Much like the other one, this proto-harmonic complex allows for a tension between B major and C# minor, but this complex permits an additional interpretation that takes B major as dominant to E. 85

Significantly, E major, the key implied as a possibility at the end of the opening theme’s antecedent, is the key of the next passage (mm. 27–46). This passage is also a period with a modulating antecedent. However, unlike with the opening theme, in which the antecedent modulated but the consequent concluded with a perfect authentic cadence in the home key, in the period of mm. 27–46 both the antecedent and consequent modulate so that both conclude in a different key than that in which the period begins.

Example 4.3 provides both (a) the score and (b) a voice-leading interpretation of mm. 27–46. These measures feature the same motivic idea as the opening, this time transposed to the relative major key, E. This upward transposition not only articulates a new formal section, but also further hints at the proto-harmonic complex that read the previous B major as functioning, at least associatively, as a dominant to this E major.

85 A particular advantage that the proto-harmonic complex offers over more conventional tonal systems, especially the Schenkerian approach, is that such a connection may be made purely associatively with no implication that this B is directly connected to E in the theme that follows. B can be understood as carrying an association with E, as is suggested in the fifth-relatedness of the proto-harmonic complex, but this relationship need not be realized directly in the music.
The antecedent of this new section concludes with a perfect authentic cadence in the key of A major in m. 35, the key of IV in the local key of E major. The consequent closes with a perfect authentic cadence in the key of C# minor, which is the submediant within the newly established local tonic of E major. In other words, rather than responding to a foreign-key perfect authentic cadence at the end of the antecedent with one in the home key at the end of the consequent, in this period the consequent instead ends with a second perfect authentic cadence that is also in a foreign key. This resembles the phenomenon discussed in Chapter 1 (see Example 1.32), where an apparently modulating consequent actually reveals the presence of an auxiliary harmonic progression. Given the cadences’ relationship to the movement’s overall key, C# minor may function as the submediant of the local E major but also allude to the tonic of the movement as a secondary tonic.  

*Example 4.3:* Dvořák, Piano Trio Op. 65/ii, mm. 27–46; (a) score and (b) voice-leading interpretation.
whole. On the other hand, A major—the key achieved at the end of the antecedent—is the tonic of neither the local key nor the global one. Taking this perspective into consideration, we might hear this theme as a long auxiliary cadence in the home key, containing a VI: PAC in the antecedent, and a I: PAC in the consequent. In short, within this passage the music seems to pick up on the unusual harmonic design of the movement’s initial period and play with listeners’ expectations through the second period’s potential to function as an auxiliary progression.

Whereas mm. 27–46 play mainly with the formal/harmonic irregularities inherent in a period with a modulating antecedent, mm. 47–69 exploit the peculiar tonal nature of the opening theme’s modulation into B major (Example 4.4). The next formal segment, mm. 47–69, is embraced by a dominant prolongation, like a Galant Ponte or a Classical contrasting middle. Melodically,

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Poundie Burstein (2002, 87–102) discusses similar tonic allusions in Schubert’s music. In Burstein’s examples, appearances of the tonic key in foreign tonal regions result in the tonic sounding uncanny and foreign. The present example, however, marginally differs. Even though it is jarring with respect to what came before, the emphatic perfect authentic cadence helps the listener recontextualize the return as the home key.
however, it constitutes two parts, evoking the sense of a period: the first half spans mm. 47–56, arguably ending on a half cadence; the second half, which opens with the same motive as m. 47, stretches across mm. 57–68.

*Example 4.4:* Dvořák, Piano Trio Op. 65/ii, mm. 47–69; (a) score and (b) voice-leading interpretation.

![Example 4.4: Dvořák, Piano Trio Op. 65/ii, mm. 47–69; (a) score and (b) voice-leading interpretation.](image)
Thus far in the movement, the subtonic B major has been interpreted in a variety of ways: as a lower neighbor to the tonic, as an upper third to the dominant, and as the dominant of the relative major. Measures 47–69 play on all three interpretations of this or an analogous harmony: either B major or a local subtonic harmony is not only cast under each of these guises but also subordinates other harmonies in turn, displaying each of these three tonal functions.

The first of these deployments—lower neighbor—appears in mm. 47–49. Here, the initial dominant harmony at m. 47 is embellished by a neighboring harmony, F# minor, in m. 48, and then returns to the dominant at m. 49. While the neighboring harmony at m. 48 is not literally a subtonic chord, its function as a neighbor embellishment nonetheless harks back in the manner of a local subtonic to B major’s initial function within the opening theme, as the lower neighbor to the movement’s home tonic.

The first appearance of B major itself comes in m. 51. Here, B major sets up the potential for F# to function as an upper fifth, somewhat recalling the appearance of E major at m. 27, which
allowed for B itself to be reinterpreted as dominant. At this point, two features of the F# harmony prevent it from functioning as a true dominant of B: the initial framing of F# minor as a lower neighbor to the home dominant and the minor quality of the chord. Throughout the remainder of mm. 47–69, each of these issues is addressed as F# is fully contextualized as a dominant to B.

As Example 4.4 demonstrates, following the complete neighbor, F# appears once again in m. 50, as if to repeat the neighboring gesture. This time, rather than functioning as a neighbor as in m. 48, the F# of m. 50 instead leaps up a fourth into B, cementing its potential status as a diatonic upper fifth. At this point, the harmony that was potentially an upper fifth within the main theme becomes a harmony that receives its own upper fifth.

This F#-minor harmony, however, is not yet realized as a true dominant, owing to its minor quality. This issue is taken up in the second part, mm. 57–68, along with another of B major’s original deployments. Previously, at m. 51, B major displays its function as an upper third to the home-key dominant. As Example 4.4 demonstrates, this harmony rises out of G# only to fall back afterward. In the second half of this two-part layout, B re-enters in m. 61. This time, however, it receives its own upper third, D major. Thus, whereas B in the first part of this passage serves as the upper third to an underlying harmony a third lower, the second half of the passage flips this relationship by having B serve as the underlying harmony which is embellished by its own upper third. Additionally, this upper third initiates a complete bass arpeggiation, I–III–V–I, in which F# returns in a major mode, cementing its previously unrealized potential as the dominant of B. Following this elaboration, the music falls by descending fifths to lead into the following section. In this process, B once again establishes itself as the dominant to E, which in turn acts as dominant to A.
Dvořák’s Serenade for Strings, Op. 22 contains several striking features. The present analysis examines striking period constructions in two of its movements. In the first movement, the period within the opening section plays on features of the standard reinterpreted half cadence, and within the contrasting section a period utilizes an antecedent modulation to the key of the mediant. Additionally, both sections utilize an expansion technique either following, or within, the antecedent, each time causing the theme to resemble a small ternary. The trio section of the second movement involves a period that contains an antecedent modulation to the mediant, much as in the first movement, but the modulation here is expounded in the remainder of the trio.

Movement 1: Moderato

The first movement of the serenade is in ternary form, a diagram of which is given in Table 4.1. The main theme plays on the idea of a period with a reinterpreted half cadence. However, the completion of this period by means of a I: PAC in the consequent is not provided in the theme’s first appearance; this goal is not realized until the end of the movement.

As seen in Example 4.5, this movement begins with a sentential antecedent that modulates to the dominant, where it closes with a perfect authentic cadence. After a brief postcadential expansion, the theme returns to the tonic for antecedent modulation to the mediant. This modulation is then expanded further in the remainder of the trio.

Table 4.1: Formal diagram of Dvořák Serenade for Strings, Op. 22/i.

<table>
<thead>
<tr>
<th>Mm.</th>
<th>Section</th>
<th>Phrase</th>
<th>Cadence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1–11</td>
<td>A</td>
<td>Antecedent</td>
<td>Reinterpreted HC</td>
</tr>
<tr>
<td>11–12</td>
<td></td>
<td>Extension</td>
<td>Standing on V</td>
</tr>
<tr>
<td>13–22</td>
<td></td>
<td>Consequent</td>
<td>V: PAC (or V: IAC)</td>
</tr>
<tr>
<td>22–30</td>
<td></td>
<td>Extension (codetta)</td>
<td>V: Tonic pedal</td>
</tr>
<tr>
<td>31–35</td>
<td>B</td>
<td>Antecedent</td>
<td>III: PAC (interrupted by III: IAC)</td>
</tr>
<tr>
<td>(36–42)</td>
<td></td>
<td>(Expansion)</td>
<td>III: IAC, III: PAC</td>
</tr>
<tr>
<td>43–53</td>
<td></td>
<td>Consequent</td>
<td>I: PAC</td>
</tr>
<tr>
<td>54–63</td>
<td>A</td>
<td>Antecedent</td>
<td>Reinterpreted HC</td>
</tr>
<tr>
<td>64–65</td>
<td></td>
<td>Extension</td>
<td>Standing on V</td>
</tr>
<tr>
<td>66–75</td>
<td></td>
<td>Consequent</td>
<td>I: PAC</td>
</tr>
<tr>
<td>75–85</td>
<td>Coda</td>
<td>Coda</td>
<td>I</td>
</tr>
</tbody>
</table>
extension, the music returns to the opening basic idea of the antecedent, at which point the expectation for a period is set up. This time, however, rather than proceeding to cadence in the tonic, as one might expect in a period, the theme finds its way back into the dominant key. Even more strikingly, whereas a clear perfect authentic cadence is heard at the end of the antecedent (in m. 22), the cadence at the end of the would-be consequent is at best a covered PAC, perhaps even an IAC. Not only does this ambiguous cadence fail to achieve a stronger level of closure than its antecedent, but it is also arguably weaker than that of the antecedent. In short, the expectation of a period is established in these opening measures, but ultimately upset, as the second cadence fails

*Example 4.5: Dvořák, Serenade for Strings, Op. 22/i, mm. 1–29.*
to achieve the desired level of closure. Even the lengthy codetta studiously avoids coming to rest on the local tonic note in the melody, until the unaccompanied B in mm. 29–30 (not shown) prepares a common-tone modulation to G major.

In addition to the faux-consequent’s lack of appropriate closure, the two-measure extension following the antecedent’s perfect authentic cadence adds to the theme’s intrigue by causing mm. 1–30 to resemble a small ternary. From a harmonic standpoint, the extension perfectly satisfies the requirements for the contrasting middle in a small ternary. Like many other contrasting middles, mm. 11–12 follow a PAC in V and extend V through a standing on the dominant which ultimately sets up the return to the home key. Calling mm. 1–30 a small ternary, however, would be problematic from a phrase-rhythmic perspective; whereas the contrasting middle of most small ternaries are at least half the length of their opening sections, this one consists of only two measures, much shorter than the antecedent, which occupies approximately ten. Owing to this brevity, which
makes it difficult to hear the extension as a complete phrase, mm. 11–12 are better classified as a postcadential extension to the antecedent and not a contrasting middle.

Following the B section, the opening theme returns in m. 54. At this point, the piece begins to address the problem presented at its outset. As Example 4.6 illustrates, the desired tonic-key perfect authentic cadence at the end of the consequent is definitively attained in m. 75. Furthermore, this cadence proves so satisfactory that it functions as the structural cadence that closes the entire movement. The attainment of this cadential goal might be interpreted as the main narrative of the work: that is, having resolved the issue established at the work’s outset (namely, the non-resolution at the end of the faux-consequent), the piece accomplishes this task and is able to close.

The B section (mm. 31–50) presents yet another striking scenario. (Example 4.7) This theme is based on a period that opens with a sentential antecedent (mm. 31–42) that modulates from G. Example 4.6: Dvořák, Serenade for Strings, Op. 22/i mm. 54–75.
major to its major mediant, B major. The consequent (mm. 43–50) opens in G major but concludes with a perfect authentic cadence in the home key. Much as in the opening theme, the antecedent is expanded. This time, however, the expansion occurs internally rather than as a postcadential extension. This alteration makes it harder for this middle section to be heard as a small ternary. In the antecedent, imperfect authentic cadences function as deceptive cadences, prompting multiple attempts to reach a satisfactory close. The first attempt at m. 37 results in the first violin remaining on 5, and the second violin’s attempt to descend to 1 thwarted by its last-minute upward gesture back to 3. In the second attempt in m. 38, the second violin—arguably the main melody at this point—descends to 1. However, the first violin still covers this melody, producing the sonic effect of an imperfect authentic cadence. Only at m. 40 does an unequivocal PAC finally arrive, which in turn prompts the onset of the consequent two measures later. Because the eventual arrival on B in the melody (m. 40) follows three measures of prolonged B major harmony, the resemblance of
m. 40 to a full-fledged PAC is attenuated: one might say that the B major tonic has arrived prematurely (m. 37); the phrase is then expanded to give the melody time to catch up.
The impact on the voice leading of the consequent’s registral placement in relation to that of the antecedent is deserving of mention. Example 4.8 proposes a reading of the passage. Contrary to what would be typical in an analysis of a period, I feel that this one is best interpreted as not involving an interruption—strict or free—owing to the consequent’s beginning an octave higher than the antecedent, and with an arpeggiation up to 3, in contrast to the arpeggiation up to 5 in the antecedent. The approach to 3 during the consequent, as well as its higher register, frames the consequent as generating a melodic-registral goal for which the antecedent’s opening basic idea served as the beginning of an initial arpeggiation. According to this reading, the entirety of the period’s antecedent serves as part of an initial arpeggiation, and the Kopfton (3) arrives with the beginning of the consequent.

**Movement 2: Tempo di Valse—Trio**

The trio of the second movement also presents a period with a modulating antecedent. As Example 4.9 demonstrates, this period consists of two sentential halves, with the antecedent cadencing in the mediant and the consequent closing in the home key. Formally speaking, this
period is standard: phrase expansion of the period is limited to the consequent, and both illustrate a clear sentential layout built on a four-measure basic idea.

**Example 4.9:** Dvořák, Serenade for Strings, Op. 22/ii, mm. 80–119.
One small formal irregularity involves the length of each half, as the antecedent and consequent are 18 and 22 measures long, respectively. As annotated in the example, both the antecedent and consequent follow a clear four-measure hypermetrical layout. This consistent hypermeter means that the cadence in m. 96 initiates a new hypermeasure. However, this new hypermeasure does not see completion, but instead is cut off mid-way with the unexpectedly early entrance of the consequent in m. 98.

Example 4.10: Two voice-leading interpretations of Dvořák, Serenade for Strings, Op. 22/ii, mm. 80–119, showing (a) a back-relating III and (b) a free interruption.

These measures refer to the movement’s notated measures. For at least the trio, it is possible to hear one real measure as consisting two notated measures (R = 2N). This hearing results in the antecedent and consequent containing nine and eleven measures, respectively. The likely reason for this notation is that it maintains consistency with the meter of the movement’s opening waltz section.
Example 4.10 offers two possible tonal interpretations of this passage. Example 4.10a presents a beginning-oriented hearing that emphasizes the period’s returns to tonic harmony, while Example 4.10b proposes an end-oriented hearing, highlighting modulations within the theme. The overall tonal layout of the theme bears close resemblance to the models of Example 1.19, which provides voice-leading models for a modulating antecedent without an ancillary dominant.

Also deserving of mention are the striking formal and harmonic features of mm. 106–11. Given the lengthened consequent, mm. 106–11 may be taken as a six-measure interpolation. Interestingly, the consequent is four measures longer than the antecedent, so by removing these six measures, the consequent has its phrase length corrected not only with respect to the antecedent, but it also offers a correction of the antecedent’s own two extra (notated) measures.

This interpolation is also striking from a harmonic standpoint. At m. 106, the bass leaps from $D_b$ to $B_n$, which appears to be the dominant of E major. (One might also hear the bass descent as a whole step, in which case $B_n$ will be heard as $C_b$ and the implied key will be heard as $F_b$ major, $^b$III of the Trio’s home key.) However, this apparent E major makes little sense in the key of $D_b$. Furthermore, even on the surface E major does not arrive. Instead, the B-major chord ultimately serves as a lower neighbor to $B#$, $^7$ of the home key. (If one hears the passage as not traversing the enharmonic seam, the bass ascent is $C_b$–$C_\natural$–$D_b$ and the accompanying harmonic progression is $^b$III–V–I, with the first two chords inverted.)

Having returned to the tonic at m. 112 by means of $B#$, the music continues without hesitation to cadence in the tonic. I provide this interpretation of B as a lower neighbor in both voice-leading graphs of Example 4.10. In both graphs, I have notated $B#$ enharmonically as C to capture more effectively its passing nature back into $D_b$ major. Notice that both readings of Example 4.10 present the resolution to $D_b$ in m. 112 not as an arrival or return to the tonic Stufe,
but rather as an implied cadential six-four. My justification for this reading comes from the analogous moment in the antecedent, where this melodic material was literally introduced over $\overline{5}$ in the bass, suggesting a cadential six-four. Applying the same interpretation to the consequent, the music, after having gone through the harmonic excursion of mm. 106–11, proceeds into dominant-functioning harmony, supported by the same theme as that of the antecedent, which subsequently leads to the I: PAC at m. 118.88

The period of mm. 80–118 constitutes the opening section of a somewhat unconventional ternary form. Following this period, the music proceeds to a contrasting middle section in mm. 120ff. which plays on a particular harmonic moment presented as an outcome of the antecedent’s modulation. Specifically, whereas the C in mm. 88–95 is only retrospectively understood to functions as V of the mediant F, the contrasting section reverses this process. In m. 128, C is clearly introduced as V of F minor, but it eventually loses this association, and is ultimately recontextualized as an upper third of the home key’s dominant. Through this process, VII as the dominant of III turns into VII as an upper third of V.

The middle section begins in F minor, the original mediant key, and soon modulates to its local dominant, C minor, in m. 127. This move unequivocally establishes C as a local dominant. F returns at m. 128, this time as a first-inversion major triad that functions as a dominant in B♭ minor. This renewed interpretation for the once-tonic harmony begins a process of destabilization that ultimately arrives at a recollection of to the waltz’s opening theme. However, whereas the original theme was introduced in the key of C♯ minor (which is understood to be enharmonically equivalent to the D♭-major home key of the trio), this callback takes place a semitone lower, in C minor. Due to the complex harmonic processes prior to this return, this statement of C minor no

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88 On the inverted cadential six-four, see Rothstein (2006) and Cutler (2010).
longer bears any relationship to F minor. Instead, it appears, once again, as an out-of-place leading-tone triad that is prolonged for thirteen measures and confirmed with a set of PACs.

Following these thirteen measures of stasis on the VII triad, the music begins the process of recontextualizing this harmony through a descending sequence into Ab. Through this descending sequence, C is now heard as the upper third to a conventional dominant, which arrives at m. 158 and resolves to the tonic in m. 166, with the return of the opening period (Example 4.11).

Example 4.11: De- and re-contextualization of C in Dvořák, Serenade for Strings, Op. 22/ii.

Example 4.12: Dvořák, Symphony No. 9, Op. 95/iv, mm. 44–49.
SYMPHONY NO. 9, OP. 95/IV

The finale of Dvořák’s Symphony No. 9 contains another example of a modulating antecedent (Example 4.12). This period, which occupies mm. 44–49, contains a three-measure antecedent that cadences on subtonic harmony, followed by a three-measure consequent. This modulation harks back to Dvořák’s Piano Trio Op. 65. As with the piano trio, I read this period, on its largest level, as governed by the harmonic progression I–VII–I with an interruption on 2 over VII (Example 4.13; cf. Example 4.2a). Unlike with the piano trio, however, this example does not contain a restored leading tone following the appearance of the subtonic, D. As such, one cannot opt for an interpretation similar to what was seen in the alternate analysis of the trio shown in Example 4.2b, where VII was taken as an altered third to the more structural dominant.

Example 4.13: Voice-leading interpretation of Dvořák, Symphony No. 9, Op. 95/iv, mm. 44–49.
In addition to the jarring tonal modulation at the end of the antecedent, this theme exhibits remarkable formal ambiguity with respect to its placement within the sonata-form movement. In the following section, I detail how this formal ambiguity plays out across the movement.

Table 4.2 provides a formal overview of the movement and Example 4.14 gives the opening of its main theme. The end of this latter example illustrates an issue with the internal cadences of this theme: the bass does not outline a standard V–I progression, but descends in the style of an upper voice.\(^{89}\) The timpani is the only instrument that articulates the standard V–I progression, but it is by no means the loudest or the most tonally articulate instrument. At this (literally) striking moment in mm. 17 and 25, the cadence appears to be abandoned.

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\(^{89}\) One might opt to read this passage as an instance of a bass-line articulation of the *Urlinie* after Eric Wen (2006). I focus, however, on the absence of a bass line over the presence of the *Urlinie*. From a formal standpoint, the lack of a root-position V–I creates an uncanny effect regardless of the registral placement of the *Urlinie*.
For the remainder of the sonata form’s main theme, every subsequent cadence except the final one functions this way. As a result of this persistent (non)cadence, the stepwise descent in the bass must be taken as sufficient to articulate the phrase endings until the end of the main theme.

A new topical gesture enters in m. 44, consisting of a set of rapid triplets structured as an antecedent-consequent period and signifying the arrival of transitional material. However, the period cadences in the home key at m. 49, suggesting that this passage should be understood not as a transition following the main theme, but rather as a second part of a main theme group.\(^\text{90}\)

\(^{90}\) That the cadence at m. 49 takes place not on a downbeat but on a relatively weaker beat may be sufficient to argue that it does not function as a cadence, or at least that its function is limited in scope. I find such a reading unsatisfactory, given that the presence of the dominant with a raised leading tone already seems to imply cadential function in this movement; all deployments of non-cadentially functioning dominants (or dominant substitutes) thus far have used D\(^\flat\).
this point, the most appropriate label appears to be transition ⇒ main theme. That is, we enter m. 44 believing it to be a transition but exit realizing that the cadence makes it appear more as though it were the second part to a longer main theme group.

This reading, however, runs into a problem beginning in the very next measure. Rather than following the cadence with new material, or even a repetition of some previous initiating material, m. 50 continues into an apparent contrasting middle with a standing on the dominant. This section carries little to no initiating formal capabilities and thus resists being interpreted as the start of any formal section.91

Furthermore, the standing on the dominant soon leads back to the triplet theme in m. 54, after which the passage immediately devolves into a strange medial caesura. These new measures suggest that m. 49 did not function as a definitive cadence at the end of a large theme, but rather as a modest internal cadence within a ternary-form-like transition.92 From the standpoint of a moment-to-moment hearing, the section at mm. 44–49 is likely heard retrospectively as a main

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91 Caplin (1998, 127) articulates that the opening of a transition section may begin “with new material supported by the home-key tonic, with the opening material of the main theme, with a false closing section made up of codettas to the main theme, or with a sudden shift to a non-tonic region of the home key.” Of these four possibilities, the first two describe an initiating formal function and the third illustrates what might best be described as after the end ⇒ initiating. The final possibility depends on the specific harmony used, but in most cases this harmony “continues to function as a tonic substitute” (Caplin 1998, 131).

92 Caplin (1998, 131–2) provides one unusual example in which the transition begins on a standing on the dominant, which would appear to argue for mm. 44–49 functioning as the second part to a main theme group. In the second movement of Beethoven’s Piano Sonata Op. 31, No. 1, what appears to be a contrasting middle (featuring a standing on the dominant) follows the completion of a small-ternary main theme, as though initiating a written-out repeat. This standing on V immediately turns into the standing on the dominant that closes the transition. This example is similar to the present movement by Dvořák in that the transition in both appear to open with a standing on V. Three differences exist, however, to complicate this connection. In Beethoven’s piano sonata, the contrasting middle was already given in its entirety in mm. 9–19; the entrance of the transition at m. 29 could not have been the main middle section, but only a written-out repeat. This is different from Dvořák, where the contrasting middle at mm. 50ff. is the first time such a standing on V is heard. Second, the standing on V that opened the transition of the piano sonata is the same dominant that leads up to the medial caesura, whereas in Dvořák the V at m. 50 leads back to what would be the A section of its small ternary. Finally, and most strikingly, the main theme of the piano sonata is the only one in the movement. The period in mm. 44–49 of the “New World” Symphony, on the other hand, already comes after a relatively unproblematic main theme. These differences, and the subsequent deletion of the triplets in the recapitulation, lead me to hear the entire section as a transition that is framed by a small ternary, much like in the more standard sentential transitions.
theme ⇒ transition, the exact reverse of what it was heard as by the end of m. 49. In summary, across the entirety of this section, the most appropriate name to capture these consecutive reinterpretations would be “transition ⇒ main theme ⇒ transition.” Despite the intricacies resulting from the layers of formal reinterpretation, I will, for convenience, simply refer to this section in its entirety (mm. 44–67) as a ternary-form-like transition.

There is a complementary parallel between the main theme’s cadential setup and that of the transition. Both these themes are set up in dialogue with a ternary construction, but neither fully contains the required set of internal and final cadences. The main theme’s internal cadences lack the proper harmonic content, with only the final cadence functioning as a true cadence. The only cadence of the transition, on the other hand, is an internal one.

The music that follows the transition section raises further analytical issues. As mentioned previously, mm. 44–49 form the musical material that eventually moves into the subordinate theme group. However, as a result of the auxiliary harmonic nature of the subordinate theme group that enters in m. 68 (Example 4.15), this already striking transition concludes not with a standard medial caesura, but with a fully-diminished seventh sonority.⁹³

Alternatively, one might adopt an interpretation that transitional material stretches beyond m. 68, in which case the clarinet melody here occupies not the onset of the subordinate theme group but rather a caesura-fill to close off the transition and lead to the subordinate theme proper. Due to the brevity of what follows in leading to the subordinate theme group’s perfect authentic cadence, this interpretation leads to two likely readings of the subordinate theme group. First, one might be inclined to hear mm. 68–92 as “MC-fill ⇒ subordinate theme group,” where initially

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⁹³ The fully-diminished seventh raises the possibility for a V⁹ with omitted root. This reading is problematic given that C♯7 is not an appropriate substitute for either the dominant of a modulating (D major as V of G) or a non-modulating (B major as V of E) transition. Instead, this harmony facilitates the arrival of the D⁷ entrance of the subordinate theme, thus resembling Burstein’s (2005a) second category of off-tonic returns.
there is the impression that the passage functions to close off the transition, but retrospectively one reinterprets it as part of the subordinate theme group. Alternatively, the entire exposition may be interpreted as what Hepokoski and Darcy call a continuous exposition where, rather than having a clear medial caesura to divide the two parts of a standard two-part exposition, there is an unbroken motion to the final perfect authentic cadence in m. 92.

This latter reading is arguably less persuasive given events in the recapitulation. First, the recapitulation does contain a clear rhetorical demarcation between the close of the main theme and
the beginning of the subordinate theme, which opens with the melody at m. 68. Second, the lack of a proper cadence as a means of facilitating a subsequent off-tonic onset appears to be a recurring idea in this movement.

The formal and cadential issues presented in the exposition are further explored in the remainder of the work. The codependence of the main theme and transition is hinted at in the development section. At m. 140, the development section brings back the melody of the main theme. Five measures later, the triplets of the transition are heard as they begin to counterpoint against the main theme. This blending of the two themes, however, does not reach any climactic moment; instead, the thematic hocketing lasts until m. 154, at which point it dissolves into new material. Still, despite its brevity, these measures of alternation between the themes foreshadow a more significant moment of thematic blending in the movement’s coda.

Much like the end of the transition in the exposition, the end of the development section lacks a standing on the dominant. Instead, the recapitulation in m. 208 launches over a dominant pedal. This initial entry over the dominant turns out to be significant, as the entirety of the recapitulation seems to continue to be underpinned by this pedal until the end of the subordinate theme group, as the subordinate theme begins with the bass on 5, and the music leading up to it closes with the bass on 2.

In contrast to the thematic blending in the development, the recapitulation strikingly omits the triplet theme of the transition altogether. Instead of utilizing similar transition rhetoric to mark the end of the main theme and the start of the subordinate theme, the recapitulation omits this middle section entirely, instead moving from the main theme directly into the subordinate theme, both governed by the bass on the dominant. As a result of this omission, the main theme now lacks both its internal cadences and its final cadence. What was a problem only for an internal non-
cadence in the exposition is now magnified onto the theme as a whole, as the entire theme now closes without a cadence.

As noted earlier, the first time the tonic makes an appearance in the recapitulation is with the close of the subordinate theme group in m. 251 (see Example 4.16). This perfect authentic cadence, however, has its strength weakened by instrumental covering. As discussed in Chapter 2, the most common—and clearest—instances of covered perfect authentic cadences take advantage of a timbral distinction between an expected melody instrument and another, more ornamental timbre. In the case of orchestral works, for example, it is often the wind instruments that cover a more conventional violin melody—an instrument that also occupies a larger portion of the instrumental ensemble. In these cases, the conventional timbral rhetoric and the size difference between the number of violinists over the wind instrumentalists in the orchestra allow the melody in the violins to assert itself over the higher voices in the winds. In the passage cited in Example 4.16, however,

*Example 4.16:* Dvořák, Symphony No. 9, Op. 95/iv, mm. 247–51, illustrating timbrally reversed covered PAC.
these conventional roles are reversed. Here, the flute clearly carries the melody, but is covered by a far more prominent trill on 5 by the first violins.

In the coda, the musical material from the main theme and transition are combined once again. Unlike in the development, where the section simply dissolved into a core-like section, this time the two themes are able to land on a definitive, structural cadence. Additionally, this thematic counterpoint here reprises, but now resolves a dominant pedal similar to the one that persisted across the recapitulation.

Example 4.17 quotes the opening measures of this coda, displaying both the counterpoint between the themes and the bass pedal on the dominant. As the example shows, this statement features both themes from the exposition over a dominant pedal similar to the one that persisted for much of the recapitulation. At m. 288, this bass moves to the tonic, but one that does not result from a perfect authentic cadence; instead, this tonic comes about from the bass moving away from its pedal. The motion does from the pedal does, however, kick off a harmonic progression that ultimately does lead to a perfect authentic cadence—the last one in the symphony—in m. 299, thus providing both themes a satisfactory cadence to close off the movement.
Example 4.17: Dvořák, Symphony No. 9, Op. 95/iv, mm. 279–98, showing a coda theme with MT and TR combined, leading to a PAC at m. 298.
CONCLUSION

Despite having a rich life in American concert halls, the music of Dvořák, remains relatively underexplored by music theorists, as does investigation into nineteenth-century musical form in general.\textsuperscript{94} The present dissertation sought to address both these matters by introducing the notion of the modulating antecedent as a commonly deployed phrase type in Dvořák’s music. With this phrase type, cadences in a period establish their cadential hierarchy not only through cadence type, but also through the keys in which the cadences take place. Chapter 1 explored the formal and tonal properties of this phrase type, addressing its relations to established formal and tonal concepts in music-theoretical discourse.

In the process of introducing the modulating antecedent, several previously accepted formal and tonal conventions were naturally called into question. One question addressed in Chapter 2 concerned the question of how the foreign-key perfect authentic cadence fit into the existing cadential hierarchy. This chapter proposed a revision the ordering of cadences to include the foreign-key perfect authentic cadence. In the process of addressing this, the imperfect authentic cadence was re-evaluated, suggesting that the structural implications of this cadence are more flexible than is generally understood.

Following on this, Chapter 3 discussed another question: how are previously established formal types called into question through the introduction of the modulating antecedent? This discussion introduced and re-examined certain thematic archetypes, such as the small ternary and modulating period, in light of the modulating antecedent. The latter especially raises the question

\textsuperscript{94} Notable exceptions of examinations of Dvořák’s music include Kinton (2009 and 2016), Partridge (2012), and Smith (2018). Musical form in the nineteenth century has inspired studies by several scholars including Vande Moortele (2009 and 2017), Horton (2017), and Caplin (2018), but lack a wholistic study that parallels Caplin’s formal functions or Hepokoski and Darcy’s Sonata Theory.
of the hierarchy of key relationships. The Russian theory of mutability was invoked to help illustrate the differences between an antecedent modulation and that of a modulation across the entirety of a period.

Finally, Chapter 4 demonstrated the principles discussed in earlier chapters by applying them to analyses of three of Dvořák’s compositions. The first analysis illustrated how the key choice for the modulating antecedent returned in several moments in the piece. The second showed how similar modulating antecedents are used across many movements of a multimovement cycle. The third examined how a formal ambiguity in the period’s placement within a sonata-form finale resulted in several apparent subsequent attempts to recontextualize the theme.

Investigation of these topics in turn opens possibilities for future scholarship in a number of areas. First, the formal characteristics outlined in this dissertation could be applied to music of nineteenth century in general, beyond the works of Dvořák. While many musical features I have discussed seemed most frequently used in Dvořák’s music, they need not be limited to his discussions of his creative output. Closely related composers such as Schubert, Schumann, Brahms, Tchaikovsky, Smetana, or Wagner may all utilize these formal constructs to some degree or other.

Additionally, this research arguably broadens the concept of an antecedent-consequent period in general. Compared to the relatively rigid layout characteristic of periods in the classical style, music from the romantic period entertains a greater multitude of cadential, melodic, metrical, and formal techniques. For instance, in romantic music, periods tend to be longer, less regular in their phrase lengths, or frequently presented within many layers of nested theme types. The qualifications of what constitutes an antecedent-consequent period may exceed those generally recognized under classical conventions, and adopting this freer outlook in analyses of music of this may well prompt musical reinterpretations that carry implications for performance.
Finally, Dvořák’s cultivation of a Slavic musical style, outside of musicological discussions, bears greater attention from music theorists. Current formal categories often fall short of being able to capture the intricacies of works by Dvořák’s such as dance forms like the *furiant* or *dumka*, or song forms such as found in his Moravian duets. A more thoroughgoing study of these formal models outside the influence of sonata form no doubt will provide greater insight into Dvořák’s music. It is my hope that the current project will further examinations of this rich repertoire, along with the analytic implications that it inspires.
BIBLIOGRAPHY


———. Forthcoming. “Proto-Harmony and the Problem of Tonal Center in Rachmaninoff’s *All-Night Vigil*.” *Journal of Music Theory*.


