

Bridging Common Practice and the Twentieth Century: Cadences in Prokofiev's Piano Sonatas¹

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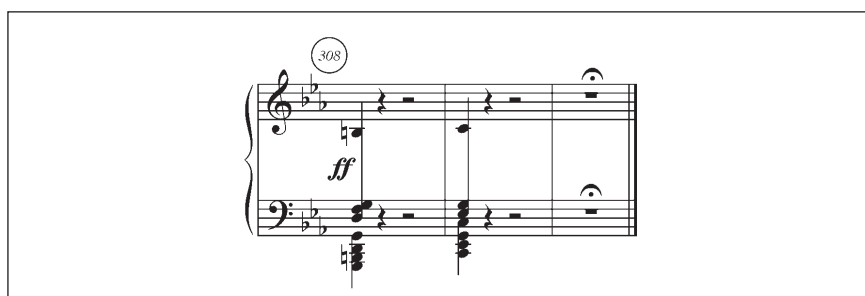
In the typical freshman-sophomore theory sequence, space is a precious commodity. This is especially true in degree plans where more advanced courses are available to students only on an elective basis. The desire of theory instructors to incorporate a broad range of musical styles into these two years must always be measured against the need to give students a strong grounding in tonal music of the common-practice era. A fundamental curricular dilemma is that the students, while steeped in the routines of classical tonality in theory classes, are at the same time studying and performing a much wider variety of music in applied lessons and ensembles. While we may not be able to make room for the independent coverage of many different styles, taking the opportunity to discuss elements of those styles within the context of traditional tonal practice can help students begin to develop an understanding of the connections, as well as the discontinuities, among different approaches to tonal composition.

Consider, for example, the twelve-bar blues progression. In Memphis, where I teach, students hear these chord connections every day on street corners and in clubs. The opening measure of the progression can be described as tonic prolongation with emphasis on plagal motion (I-IV-I); the various chords that may appear in the eighth measure all function as preparation for the dominant in the ninth measure; and the retrogression (V-IV) in mm. 9-10 represents a departure from classical harmonic practice. What students can learn from such a discussion is that more recent composers often incorporate aspects of older music into their own works, yet there are other elements of their tonal language that distinguish it from earlier styles. Bringing these types of relationships into the study of theory not only enriches, but also reinforces students' understanding of tonal music.

¹ Many of the examples used here originate from an earlier study: Courtenay L. Harter, "Phrase Structure in Prokofiev's Piano Sonatas" (Ph.D. diss., University of Connecticut, 2003).

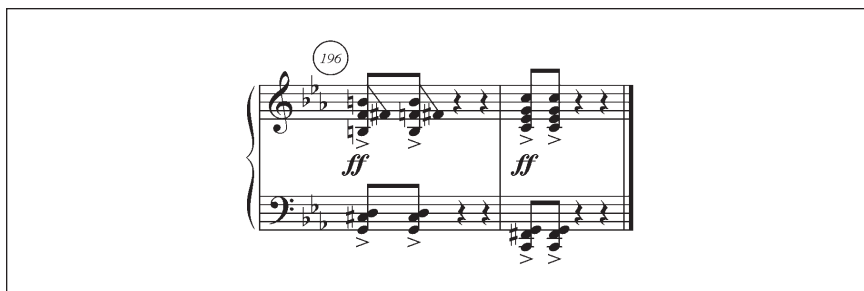
In the music theory curriculum, cadences are encountered at different times: first, as harmonic formulae typically introduced among the earliest progressions covered in the study of diatonic harmony; and later, as tonal punctuation and delineators of structure in the study of musical form. An understanding of cadences is essential in identifying small-scale formal units such as phrases, sentences, and periods, and also important in defining larger formal relationships expressed through contrasting themes, keys, and sectional divisions. Because they are such a fundamental element of tonality, cadences provide unique insights into how early twentieth-century composers retain certain conventions of common-practice tonality within their own harmonic language.

Using Sergei Prokofiev's piano sonatas as a resource, this study offers terminology for and systematic categorization of early twentieth-century cadence types that can facilitate their integration into the undergraduate theory curriculum. There is no attempt to organize this information sequentially in terms of level of difficulty, but the relationship of the various cadence types to those found in the study of common-practice harmony is generally obvious. It is assumed, then, that each type can be introduced to good effect whenever a similar, traditional cadence type is encountered.



Example 1 Beethoven, *Sonata No. 8*, Op. 13, I, mm. 308-310
(score excerpt)²

² Beethoven, Ludwig van. *Complete Piano Sonatas*, Volume 1. Edited by Heinrich Schenker. New York: Dover Publications, Inc., 1975.



Example 2 Prokofiev, *Sonata No. 4*, I, mm. 196-197
(score excerpt)³

As a point of departure, consider the progressions shown in Examples 1 and 2. Both of these cadential extensions exemplify the dominant to tonic progression in C minor: the lowest voice in both examples moves from the fifth scale degree to the first scale degree, and the highest voice incorporates the resolution of the leading tone to tonic. Both also incorporate the seventh of the dominant chord, correctly resolving the F down by step. But there are extra notes in Prokofiev's progression: the F-sharp in the dominant harmony could be considered a split-note function, which resolves by ascending to G.⁴ There are two altered fourths in the left hand of both chords, but considering these as added notes in each harmony does not effect the overall motion and function of the chords. Instead, they can be considered as one of Prokofiev's harmonic innovations that extend beyond the conventions of common-practice tonality.

Various music theory texts explain the role of cadences within the domain of musical form:

- "Cadence types are the tonal composer's primary means of articulating form."⁵

³ Prokofiev, Sergei. *Complete Piano Sonatas*. Moskva: Izdatel'stvo "Muzyka," 1967. Reprint, New York: Dover Publications, Inc., 1988. This and all subsequent score excerpts are reproduced from this source.

⁴ Stefan Kostka, *Materials and Techniques of Twentieth-Century Music*, 3rd ed. (Englewood Cliffs, NJ: Prentice-Hall, Inc., 2006), 55. Kostka identifies "split-note" chords as those that contain chromatic added notes, resulting in two versions of a chord member separated by semitone, i.e., root plus raised root, major and minor thirds above the root, perfect and diminished fifths, or major and minor sevenths.

⁵ Janet Schmalfeldt, "Cadential Processes: The Evaded Cadence and the 'One More Time' Technique," *The Journal of Musicological Research* 12, nos. 1-2 (1992): 10.

- "...a kind of musical punctuation, usually both melodic and harmonic, conveying a sense of close or of interruption in the rhythmic motion of the musical line."⁶
- "Cadential progressions confirm an implied tonality."⁷
- "Cadences are the immediate goal of a phrase, the chords that bring it to a close, a degree of finality expressed in terms of relative strength."⁸

Cadences, as points of structural articulation, delineate phrase lengths and emphasize tonal function. The identification of cadential formulas creates hierarchical relationships as described by their closure type. Cadences that require continuation and ultimate resolution are described below as "open" or "progressive," while the terms "closed" and "conclusive" will refer to cadences that complete a formal structure. This more generalized terminology allows for the inclusion of cadences that reflect distinctive style characteristics of early twentieth-century composers. Douglass Green summarizes some practices found in twentieth-century music that can further qualify any cadential category:

1. Addition or substitution of tones in the cadential chords
2. Omission of tones in the cadential chords
3. Contrivance of new penultimate chord made up of notes that resolve stepwise into the final tonic
4. Approach to final tonic by systematic descent or ascent of seconds, thirds, or fourths⁹

These categories further illuminate Prokofiev's cadential procedures.

⁶ Wallace Berry, *Form in Music*, 2nd ed. (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1966), 8.

⁷ William E. Caplin, *Classical Form: A Theory of Formal Functions for the Instrumental Music of Haydn, Mozart, and Beethoven*. (New York: Oxford University Press, 1998), 27. See also William E. Caplin, "The Classical Cadence: Conceptions and Misconceptions," *Journal of the American Musicological Society*, 57/1 (Spring 2004): 57-117.

⁸ Douglass M. Green, *Form in Tonal Music: An Introduction to Analysis*, 2nd ed. (New York: Holt, Rinehart and Winston, 1979), 8.

⁹ Green, 10-11.

The first category, for example, can account for the “wrong notes” in Prokofiev’s harmonic vocabulary.¹⁰ Many of these chords are found in cadential extensions at the end of various movements, as in Example 3, the conclusion of the “Allegro molto sostenuto” of *Sonata No. 4*. The additional notes create a disturbance in the quality of the cadence implied by the dominant-to-tonic bass motion. While the dominant harmony typically contains a single tritone interval between the third and seventh (B-natural and F-natural in this example), the addition of another tritone between the G and the C-sharp increases the tension. The use of both F-natural and F-sharp produce a split-note chord on the dominant harmony. The F-sharp, while resolving to G in the right hand, is contained in the final chord; this added tension in the tonic harmony is a result of the parallel motion in the left hand.

Example 3 Prokofiev, *Sonata No. 4*, I, mm. 196-197
(score excerpt and bass-line summary)

¹⁰ The term “wrong notes” is consistently used in reference to Prokofiev’s music; its first usage is attributed to Patricia Ashley, “Prokofiev’s Piano Music: Line, Chord, Key” (Ph.D. diss., University of Rochester, 1963), 12; in his book *The Music of Sergei Prokofiev*, Neil Minturn summarizes Suzanne Moisson-Franckhauser who argues that the “wrong notes” in Prokofiev’s music are surface elements (New Haven: Yale University Press, 1997), 5-6; Israel Nestyev, in his biography *Prokofiev*, refers to the composer’s use of the tritone with terms such as “seasoned,” “sticking grace notes,” and “sound that is stuck.” (Stanford, CA: Stanford University Press, 1960), 479-481.

AUTHENTIC CADENCES

The conclusive cadence in the common-practice repertoire typically refers to two types of authentic cadences: the perfect (PAC) and the imperfect (IAC).¹¹ In Prokofiev's music, there are some instances of the traditional perfect authentic cadence, such as that found at the end of the exposition in Prokofiev's *Sonata No. 1* (Example 4). This progression exhibits root position dominant-to-tonic motion in the bass with the upper voices moving in a conventional stepwise descent, $\hat{3}-\hat{2}-\hat{1}$. Prokofiev's added note (F-flat) occurs on the downbeat of m. 92 within a cadential six-four function.

Example 4 Prokofiev, *Sonata No. 1*, mm. 90-93 (score excerpt)

Harmonic inversion is not as important in Prokofiev's music as other relationships, such as harmonic function. Thus, the general category of *authentic cadence* (AC) can be used as a more inclusive designation of dominant-to-tonic resolution. These arrivals can be classified as "progressive" or "conclusive" depending on the hierarchical placement in a composition.

Example 5 illustrates another non-traditional cadence in its omission of chord tones (Green's second type). While both the dominant and tonic chords are missing their respective thirds, the progression implied by the bass-line movement clearly indicates an authentic cadence. The open fourths and fifths in these measures create a sound that contrasts with the more routine tertian construction. This type of construction is also highlighted through the use of the parallel fifths in the lower voices. The A common tone in the upper voice of the dominant harmony is precisely where one

¹¹ Green's conclusive cadences fall into two categories: those with a leading tone (authentic and related: V-I, VII-I, III-I) and those without a leading tone (plagal and related: IV-I, (b)VI-I, (b)II-I), 9.

might expect the leading tone to appear in an ordered progression of predominant, dominant and tonic functions. The F-sharp in m. 231 implies the use of melodic minor, creating the expectation of the leading tone with the $\hat{1} \rightarrow \hat{7} \rightarrow \hat{1}$ upper voice-leading formula. While the anticipated raised $\hat{7}$ is thwarted, the cadence still implies functional harmony.

The image displays a musical score excerpt for Prokofiev's Sonata No. 3, measures 230-232. The score is written for piano, with a treble and bass staff. The key signature is one flat (B-flat major). The time signature is 2/4. The music features a series of chords and melodic lines, with a circled '230' at the beginning. The bass line is summarized below the score, showing a progression from i to IV to V7 to i, with an 'AC' (authentic cadence) symbol at the end.

Example 5 Prokofiev, *Sonata No. 3*, mm. 230-232
(score excerpt and bass-line summary)

One variation of Prokofiev's authentic cadence alters or substitutes the typical bass progression by a half-step displacement of the dominant (e.g., an authentic cadence in C would replace the dominant note G by either F-sharp or G-sharp). The symbol **subAC** describes these situations where a substitution is made for the traditional dominant chord, as in the second phrase of the first movement of *Sonata No. 8* (Example 6). Despite Prokofiev's "wrong notes" in this periodic structure, the opening and closing harmonies, as well as the dominant harmony in mm. 4-5, firmly ground this structure within the B-flat major tonality. The movement revolves around B-flat major and exhibits some harmonic innovations that become evident in m. 3: reinterpreting the G-sharp as A-flat creates a parallelism with the progression in the consequent phrase (m. 8).

The image displays a musical score excerpt for Prokofiev's Sonata No. 8, I, measures 1-9. The score is written for piano and includes a bass-line summary. The key signature is B-flat major (two flats). The time signature is 2/4. The first system (measures 1-4) begins with a piano (*p*) dynamic, followed by mezzo-piano (*mp*) and then piano (*p*). The second system (measures 5-8) begins with mezzo-forte (*mf*) and ends with piano (*p*). The bass line summary at the bottom indicates the following chord progression: I (B-flat major), bvi⁷ (F minor), #5 (F# major), and I (B-flat major). An upward arrow labeled 'subAC' points to the final I chord.

Example 6 Prokofiev, *Sonata No. 8*, I, mm. 1-9
(score excerpt and bass-line summary)

The harmonies in m. 9 illustrate the predominant, dominant, and tonic functions typically found in classical harmonic progressions. The C ($\hat{2}$) represents a predominant harmony, even though the notes in the upper voices do not form a conventional chord-type (a second-inversion F-minor triad and a third inversion D dominant-seventh chord). A cross relation in this beat (F to F-sharp in the right hand) foreshadows the dominant substitution. The use of the raised fifth scale degree in place of the diatonic note, F, creates a highly expressive tritone leap in the bass. All other pitches in these two beats resolve to tonic as expected: A and C move to B-flat; C-sharp moves to D, and the E-natural descends through E-flat to D. With its rhythmically dissonant melodic closure, this is a more progressive cadence in relation to one found on a strong beat: tonic harmony does not arrive until the fourth beat in the measure, thereby weakening the overall cadential effect, with a new section beginning in m. 10. This same structure occurs in mm. 26-34 as the

third part in a small ternary structure, as well as in the recapitulation of the complete movement (mm. 205-213).

A further modification of the authentic cadence is Prokofiev's use of multiple half-step resolutions to the tonic harmony without the dominant-to-tonic motion in the bass voice. These cadences are designated here as leading-tone authentic cadences (ltAC), as in Example 7. A sense of tonal ambiguity is created at the outset of Prokofiev's *Sonata No. 6* as the tonic (A major) is harmonized with a split third (both C-sharp and C-natural), while the bass alternates A with D-sharp, a substitute for the dominant.

The image displays a musical score excerpt and a corresponding bass-line summary for Example 7, Prokofiev's *Sonata No. 6*, I, mm. 1-6. The top system shows measures 1-3, and the bottom system shows measures 4-6. The bass line is highlighted in the bottom system, showing a split third (C# and C natural) and an alternating bass (A and D#). The bottom system is labeled '(sub) ltAC' and shows the bass line with a split third (C# and C natural) and an alternating bass (A and D#).

Example 7 Prokofiev, *Sonata No. 6*, I, mm. 1-6
(score excerpt and bass-line summary)

On the downbeat of m. 4, the harmony used to approach the cadence includes a split root: the dominant pitch, E, as well as an E-flat (an enharmonic respelling of the opening D-sharp). The arrival point on beat 3 includes an ascending dominant-to-tonic motion in the upper voice, while two lower

parts resolve concurrently by half step to the final chord of the phrase: the tonic in the lowest voice is approached from above by a half step (B-flat → A), while the other half-step resolution, G to F-sharp, results in an added sixth within the harmony. At this initial point of repose, the unstable resolution is congruent with the ambiguity of the opening. The instability is somewhat reconciled as the same progression is repeated in m. 6. This progressive cadence occurs numerous times during the course of this movement, and eventually takes on the role of an expected resolution: mm. 1-4 are repeated as a parallel structure (mm. 8-11), and again to close the primary section of the sonata form (mm. 20-23). These structures are repeated exactly in the movement's recapitulation.

Another leading-tone authentic cadence is shown in Examples 8a and 8b. The finale of *Sonata No. 7* is a type of perpetual motion, articulating each of the seven eighth-note pulses in every measure. Repetitions of a two-measure rhythmic pattern create hypermetrical symmetry in the beginning of the movement. This symmetry is disturbed somewhat by the presence of nine two-measure groupings in the opening section. Balance is regained in m. 19, however, when the ninth two-measure unit ends as the next phrase begins—an overlap that creates a cadence point. The ensuing repetition of the structure includes some interpolations (encompassing mm. 19-45); the same opening structure is repeated in mm. 127-147.

Example 8b demonstrates the voice-leading motions from each two-measure grouping to the concluding harmony. The notes in the left measures function as preparation for the reiteration of members of the tonic harmony, shown on the right. By using common tones together with half-step resolutions to members of the tonic triad, Prokofiev in this instance assembles a type of leading-tone authentic cadence (**ItAC**) over the course of the phrase. The respelling of the left-hand's recurring C-sharp as D-flat creates a split-third relationship within B-flat tonic harmony (contextually less dissonant than Prokofiev's actual spelling: $\hat{1}$, $\sharp\hat{2}$, $\hat{3}$, $\hat{5}$). Harmonic tension builds in mm. 15-18 with the presence of the leading tone, A-natural, in the soprano. The chord in the right hand expresses a dominant function: A, E-flat and G are all pitches found in the *vii*^{o7}. Each of these pitches resolves to a member of the tonic harmony via a whole- or half-step motion, yielding an authentic cadence. The left hand also prepares for this point of resolution by using the fourth eighth-note in every second measure to lead to this cadence, as indicated by the slurs in Example 8b.

Example 8a shows a musical score excerpt and a phrase diagram for Prokofiev's Sonata No. 7, III, mm. 1-19. The score is in 7/8 time, key of B-flat major. It consists of five systems of staves. The first system (mm. 1-2) is marked *mp* and has a circled '1' above the first measure. The second system (mm. 3-4) has a circled '3' above the first measure. The third system (mm. 5-8) has a circled '7' above the first measure. The fourth system (mm. 9-12) is marked *mf* and has a circled '11' above the first measure. The fifth system (mm. 13-16) has a circled '15' above the first measure, is marked *cresc.* and *f*, and ends with a fermata. A phrase diagram with dashed lines connects the first measures of systems 1, 2, 3, and 4. A bracket labeled 'ItAC' is at the bottom right.

Example 8a Prokofiev, *Sonata No. 7*, III, mm. 1-19
(score excerpt and phrase diagram)

The image displays five systems of musical notation in a bass clef, each representing a pair of measures (m. 2, m. 4 & 6, m. 8 & 10, m. 12 & 14, and m. 16 & 18). Each system features a slur connecting the two measures. A vertical dashed line is positioned to the left of the first four systems. An arrow labeled "resolution m. 19" points down to the first system. An arrow labeled "ltAC" points up to the fifth system.

Example 8b Prokofiev, *Sonata No. 7*, III, mm. 1-19
(voice leading to leading-tone authentic cadence)

DECEPTIVE CADENCES

The *deceptive cadence* (DC) denotes motion from dominant to a harmony other than tonic, most often the submediant. This progressive cadence is typically found in the middle of a phrase group. Prokofiev uses this cadential formula in a manner similar to earlier composers, such as in the third phrase of the *Fourth Sonata* (Example 9).

In addition to the deceptive resolution to the submediant in this passage, a hemiola in the harmonic rhythm helps to create tension, beginning with the arpeggiation of tonic on the second beat in m. 9. The predominant harmony, implied by scale-degree $\hat{2}$ in the bass at m. 10 is also held for two beats, inviting the early arrival of scale-degree $\hat{5}$ to continue to the duple accent pattern. The leading tone (B-natural) finally arrives above the prolonged dominant bass note (G) one beat before the progressive resolution; this delay until the end of m. 11 creates more tension and heightens the impact of the deceptive cadence at its resolution.

Example 9 shows a musical score excerpt and a bass-line summary. The score is in 3/4 time, key of B-flat major. It features a piano (p) and a piano-piano (pp) section, with a *poco rit.* marking. The bass-line summary below the score indicates a progression from the tonic (i) to the dominant (V) and back to the tonic (VI).

Example 9 Prokofiev, *Sonata No. 4*, I, mm. 9-12
(score excerpt and bass-line summary)

HALF CADENCES

The *half cadence* (HC) refers to a phrase ending on the dominant; this progressive cadence, like the deceptive cadence, is typically found in the middle of a phrase group, such as in Prokofiev's *Sonata No. 1* (Example 10). In the macro-rhythm of this phrase, the dominant represents the mid-point in a parallel period where the harmonic goal is the tonic. A stepwise ascent to the dominant note (C) begins in m. 11, and is embellished by the leap to D3 in m. 13. The chromatic descent from D3 to C3 intensifies the motion to the dominant with an augmented-sixth interval (D-flat to B-natural) as well as the diminished fifth (B-natural to F-natural).

Example 10 shows a musical score excerpt and a bass-line summary. The score is in 3/4 time, key of B-flat major. It features a half cadence (HC) at the end of the phrase. The bass-line summary below the score indicates a progression from the tonic (i) to the dominant (V) and back to the tonic (VI).

Example 10 Prokofiev, *Sonata No. 1*, mm. 11-14
(score excerpt and bass-line summary)

PLAGAL CADENCES

The *plagal cadence* (PC), as Caplin states, is typically used in cadential extensions and not for structural purposes in common-practice literature.¹² While it may not be necessary to teach this formula in relation to Classical composers, this construction allows

Example 11 Prokofiev, *Sonata No. 3*, mm. 24-28
(score excerpt and bass-line summary)

¹² Caplin states that the subdominant-to-tonic formula is not a true cadence in the same sense as the other cadences, because it only serves to embellish or prolong tonic harmony, *Classical Form*, 43-45. Caplin also states that he would like to banish the plagal cadence from most theoretical writings on the music of the eighteenth century, "The Classical Cadence," 113.

modern composers to differentiate their works from their predecessors. This formula should be embraced when the plagal motion used to create a sense of closure.¹³

As with the cadential formulas discussed previously, plagal cadences may be subjected to certain variants in Prokofiev's harmonic idiom. A plagal cadence with added half-step resolutions (**ItPC**) can be observed in *Sonata No. 3* (Example 11). The augmented-sixth interval formed between the B-flat and G-sharp resolves outward by half step over the $\hat{4}$ to $\hat{1}$ motion in the bass voice. This convergence creates a bi-functional harmony: the strong plagal motion implies a subdominant harmony while the augmented sixth strongly suggests an inversion of an altered dominant harmony. This end to the first thematic group creates an overlap with the rhythmic figuration of the following transition section. While the structure of the first thematic group consists of two-measure units, m. 26 represents an extension, both in terms of length, due to the time signature change, and in the completion of the harmonic motion, as it leads into the tonic harmony in m. 27.

Related to the half and plagal cadences is the arrival on the subdominant, or *plagal half cadence* (**PHC**). While defined in very few Classical treatises and contemporary texts, this term accurately describes an articulation of subdominant harmony at the mid-point of a phrase group, resembling in this sense the half cadence that ends on the dominant.¹⁴ The third movement of Prokofiev's *Sonata No. 8*, shown in Example 12, depicts this type of cadential procedure with the prominence of subdominant rather than dominant harmony.

¹³ See Green, note 11 *supra*.

¹⁴ Green defines the half cadence as a way of articulating a phrase that suggests closing but is not quite conclusive, ending on V, IV or even a "transposed augmented six-five-three chord," 14. Robert Ottman classifies cadences using the subdominant triad within the plagal category; the plagal half cadence occurs at the end of a phrase within a composition. *Elementary Harmony: Theory and Practice*, 5th ed. (New Jersey: Prentice-Hall, Inc., 1998), 108-110.

The first phrase in the period emphasizes the interval of a fourth with a two-measure expansion of the tonic through perfect-fourth leaps in the left hand: B-flat to E-flat to A-flat. Measure 4 is a cadential point for three reasons: the duration of the harmony, the reiteration of the opening motive in m. 5 at the subdominant level, and the symmetrical nature of the eight-measure grouping. This cadence marks the end of the four-measure antecedent phrase.

In the second phrase, subdominant harmony is expanded through the use of the lowered second scale degree, C-flat. The resolution to $\hat{5}$ in the bass builds anticipation for the authentic cadence, which provides closure following the preceding open-ended cadence. The phrases therefore complement one another harmonically, and their equal length emphasizes the symmetrical relationship.

The image displays a musical score excerpt and a corresponding bass-line summary for Prokofiev's Sonata No. 8, III, measures 1-8. The score is written for piano and features two systems of music. The first system (measures 1-4) is marked with a circled '1' and a piano 'p' dynamic. The second system (measures 5-8) is marked with a circled '5' and a forte 'f' dynamic. Below the score is a bass-line summary showing the harmonic progression: Bb (labeled 'Bb:'), I, IV, and I (labeled 'AC' for authentic cadence). The summary also includes a 'PHC' (perfect harmonic cadence) label above the IV chord.

Example 12 Prokofiev, *Sonata No. 8*, III, mm. 1-8
(score excerpt and bass-line summary)

ARRIVAL POINTS

In a larger sense, all cadences are arrivals; however, a cadence completes a directed tonal motion, whereas some phrases in the sonatas may simply end at a point of articulation, requiring some kind of continuation.¹⁵ Therefore, a *dominant arrival* (V) differs from a half cadence in that it does not necessarily mark an ending, but rather articulates some structural point in the music.¹⁶ This

Example 13 Prokofiev, *Sonata No. 4, I*, mm. 112-124
(score excerpt)

¹⁵ Caplin equates the cadential arrival with a cadence, stating that a cadential arrival “marks the structural end of a thematic region,” *Classical Form*, 43.

¹⁶ Caplin differentiates between a dominant arrival and a half cadence in that the arrival is equated with a non-cadential ending when the dominant would be too unstable to function as a cadential goal, *Classical Form*, 79. Caplin also uses the term dominant arrival when a subordinate theme ends on the dominant, anticipating further material leading to a perfect authentic cadence, *Classical Form*, 115.

articulation can be viewed more from a rhythmic perspective rather than a type of harmonic progression.¹⁷ The typical example of this kind of arrival may be found at the beginning of a retransition in a sonata form movement, such as the first movement of Prokofiev's *Sonata No. 4* (Example 13). Two events occur simultaneously in m. 117: the previous phrase arrives at the dominant and an extension begins, creating an overlap. The cadential effect of the anticipated half cadence in m. 117 is superceded by the prolongational function of the G, creating an elision and a dominant arrival.

Wallace Berry states that in twentieth-century music, where there is an absence of functional harmonic relationships, cadences may be achieved through various means: by a rhythmic device such as a pause on a longer note value or an actual rest, or by a descent in the melodic line, or by an arrival upon a relatively consonant harmony.¹⁸ The category of *dissonant arrivals* (**DissA**) emanates from Berry's first two conditions. These arrivals are similar to cadences and to dominant arrivals in their articulation of phrase structure. In Prokofiev's piano sonatas, dissonant arrivals typically mark the end of a formal unit and create a strong progressive function, in that they encourage an expectation for some subsequent resolution. Dissonant arrivals differ from dominant arrivals in that the harmony has no clear tonal function and typically incorporates Prokofiev's distinctive harmonic vocabulary.

In Example 14, the beginning of the first movement of *Sonata No. 2*, the dissonant arrival occurs as a prolonged harmonic event. In the basic phrase, a sequenced melody occurs as the bass descends stepwise toward its harmonic goal. The outer-voice contrary motion beginning on D minor arrives on two tones belonging to the dominant harmony (A and C-sharp); however, the inclusion of B and D-sharp creates a whole-tone tetrachord. The chromatic notes in m. 3 foreshadow this harmony. The dissonant arrival substitutes for a stable harmony, creating the anticipation of closure. The instability of the harmony is extended by a twelve-measure prolongation (mm. 8-19, not shown in the example). These nineteen measures form the antecedent phrase of an open periodic structure.

The consequent phrase of mm. 20-31 reiterates the initial eight-measure unit. However, in m. 27, the bass line continues its descent for another full measure, thus disrupting the balance of the basic phrase lengths. An expectation for harmonic closure is implied by

¹⁷ Janet Schmalfeldt, "Coming to Terms: Speaking of Phrase, Cadence, and Form," *In Theory Only* 13, no. 1-4 (Sept., 1997): 101.

¹⁸ Berry, 13.

The image displays a musical score excerpt and a corresponding bass-line summary for Prokofiev's Sonata No. 2, I, measures 1-8 and 20-31. The score is written in D minor, 2/4 time, and consists of three systems.

System 1 (Measures 1-8): The upper staff begins with a treble clef, a key signature of two flats, and a 2/4 time signature. It starts with a *mf* dynamic and a circled measure number 1. The melody features eighth and sixteenth notes, with a *cresc.* marking. The lower staff has a bass clef and contains triplet eighth notes. A box labeled 'd:' is positioned below the first measure of the lower staff. The system concludes with a *f* dynamic and a 'DissA' marking.

System 2 (Measures 20-28): This system continues the musical material. It begins with a *mp* dynamic and a circled measure number 20. The upper staff shows a *cresc.* marking. The lower staff continues with triplet eighth notes. The system ends with a *f* dynamic.

System 3 (Measures 28-31): The final system starts with a circled measure number 22 and a *rallentando* marking. The upper staff features a *sf* dynamic, followed by a *ff* dynamic, and ends with a *lunga* marking. The lower staff includes a *V* (Vergeltung) marking and a *iv* (iv) marking. The system concludes with a *ff* dynamic.

Example 14 Prokofiev, *Sonata No. 2*, I, mm. 1-8 and mm. 20-31
(score excerpt and bass-line summary)

the arrival of dominant harmony in m. 28, which provides some stability in relation to the dissonant arrival that concludes the antecedent phrase. Instead of resolving to the tonic, the dominant is extended for four measures, and the phrase further evades resolution with the retrogression that arrives on the subdominant. Therefore, it is the use of diatonic harmonies in the key of D minor

that creates some degree of hierarchical closure in the consequent, in relation to the dissonant arrival that concludes and extends the antecedent phrase.

Another dissonant arrival closes the exposition in the first movement of *Sonata No. 6* (Example 15). A long, descending bass-line begins in m. 81 and the repetition of mm. 83-84 in augmentation implies that a cadence is forthcoming. However, the harmonic arrival on the longest rhythmic value in the phrase, a dissonant supertonic seventh, has no clear functional identity; although the melodic arrival on A in the right hand (m. 87) implies the tonic, its function is strongly clouded by the third between B and D in the bass. This dissonance anticipates the beginning of the development section that follows.

Example 15 Prokofiev, *Sonata No. 6, I*, mm. 81-87
(score excerpt)

SUMMARY

Formal design is an accessible entry point for the understanding of an unfamiliar musical work, and this is especially true for twentieth-century music where non-traditional compositional techniques and idiosyncratic harmonic practices vary from one composer to another. The identification of cadential procedures is a first step in describing phrase structure. Like earlier tonal composers, Prokofiev relies on tonic harmony to create strong closure of multi-phrase groups. Embellishments to these progressions comprise part of Prokofiev's unique harmonic vocabulary. His nine piano sonatas belong to a body of work that provides an opportunity to integrate twentieth-century procedures within a study of the common-practice.

In discussing the value of integrating written and aural components of theory, Michael Rogers writes that...

Integration . . . has to do with making connections and establishing relationships between thinking about and listening to music and does not necessarily or automatically require a coordination of timetables for the two topics in the semester outline or a blending of results in assignment of final grades. Integration and correlation, in other words, are two different things.¹⁹

In a similar vein, integrating more modern repertoire and techniques with common-practice terminology can help students begin to make some important connections among more diverse styles. Because students routinely encounter works from a wide range of styles outside the theory classroom, the idiosyncratic harmonic vocabulary of individual composers need not hinder nor confuse their understanding of basic concepts such as cadential procedures. As students become engaged with more complex works in their applied studies, the kind of integrated approach presented here can be helpful to them in making informed interpretive decisions about the music they perform.

¹⁹ Michael Rogers, *Teaching Approaches in Music Theory: An Overview of Pedagogical Philosophies*, 2nd ed. (Carbondale: Southern Illinois University Press, 2004), 18.