A Theory of Motives for Prokofiev's Music

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This article develops a theory of motives that provides insight into Prokofiev's chromatic language. Although Schenkerian theory can account for the idiosyncratic chromatic slides in Prokofiev's music, it does not adequately explain why the chromaticism is there. The theory builds upon Schenkerian and Neo-Riemannian principles, and explores the theoretical and analytic implications of three different types of motives, called *systemic, functional pitch-class,* and *non-functional pitch-class.*

Because of its eclectic mix of traditional and 20th-century sounds, Prokofiev's music has been interpreted from many different points of view, including both tonal and non-tonal analytic methodologies. Schenkerian approaches tend to emphasize the traditional aspects of Prokofiev's music, such as classic phrase structures and conventional cadential goals.[1] Non-tonal approaches, such as that of Neil Minturn, tend to focus on Prokofiev's idiosyncratic chromatic language.[2] Minturn's analyses, for example, invoke set-theory to explain Prokofiev's chromatic slides and to associate unordered pitch-class collections. I also focus on Prokofiev's unusual chromatic moments, yet in contrast to Minturn's *unordered* set motives, I advance a theory of motives that considers pitches as *ordered* linear progressions —progressions that can have varying degrees of connection to tonal structure.

Example 1, from the third movement of Prokofiev's Violin Sonata op. 94, demonstrates a typical chromatic shift within an otherwise predictable phrase structure.[3] The background structure, shown in Example 2(c), can be understood as an antecedent phrase in an interrupted structure; the opening tonic moves to a half cadence at m. 17. In measure 8, an F♯-minor harmony, shown with an asterisk, seems sudden and out of context in relation to the surrounding F-major tonic and dominants. Many scholars have called chromatic shifts such as this *wrong notes.*[4] It is an unfortunate term because there is, of course, nothing wrong about these particular notes. I believe the term has prevailed for more than fifty years because it captures an incongruous effect that many of Prokofiev's chromatic shifts create—as if they don't belong in their tonal contexts. In Example 2, the harmonic motion from F major to F♯ minor—as triads—seems to snub conventional tonal syntax. Although such chromatic excursions may be uncharacteristic of an eighteenth-century tonal style, they can often be modeled by conventional Schenkerian methodology. The F♯-minor harmony of

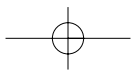
I would like to thank Brian Alegant and Allen Cadwallader for their helpful comments and suggestions.

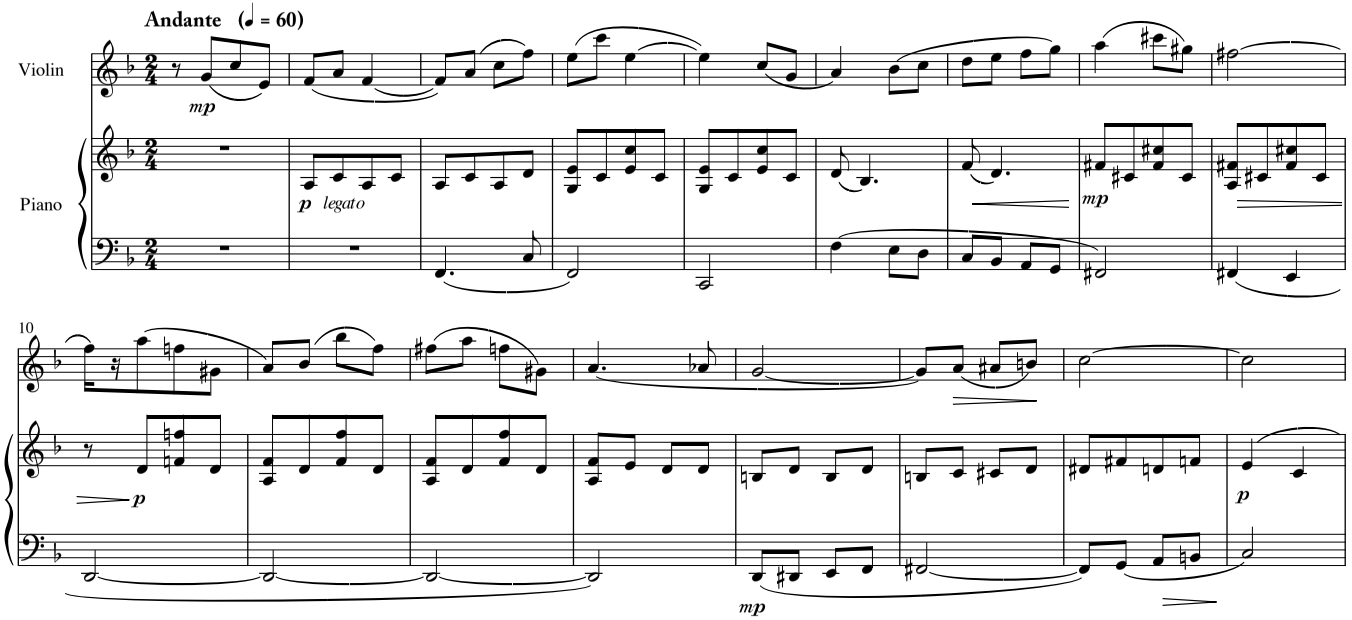
1 Schenkerian interpretations of Prokofiev's music include Ashley 1963, Bass 1988, Kaufman 1987, and Salzer 1962, 204.

2 Minturn 1997.

3 This piece is also known as the Flute Sonata, op. 94. Prokofiev wrote versions of the work for both violin and flute.

4 A chronological list of scholars who use the term *wrong note* includes Austin 1956; Ashley 1963; Kaufman 1987; Bass 1988; Kramer 1988; Minturn 1997; and Rifkin 2000 and 2001.





example 1. *Score of Prokofiev, Violin Sonata op. 94, third movement, mm. 1–17.*

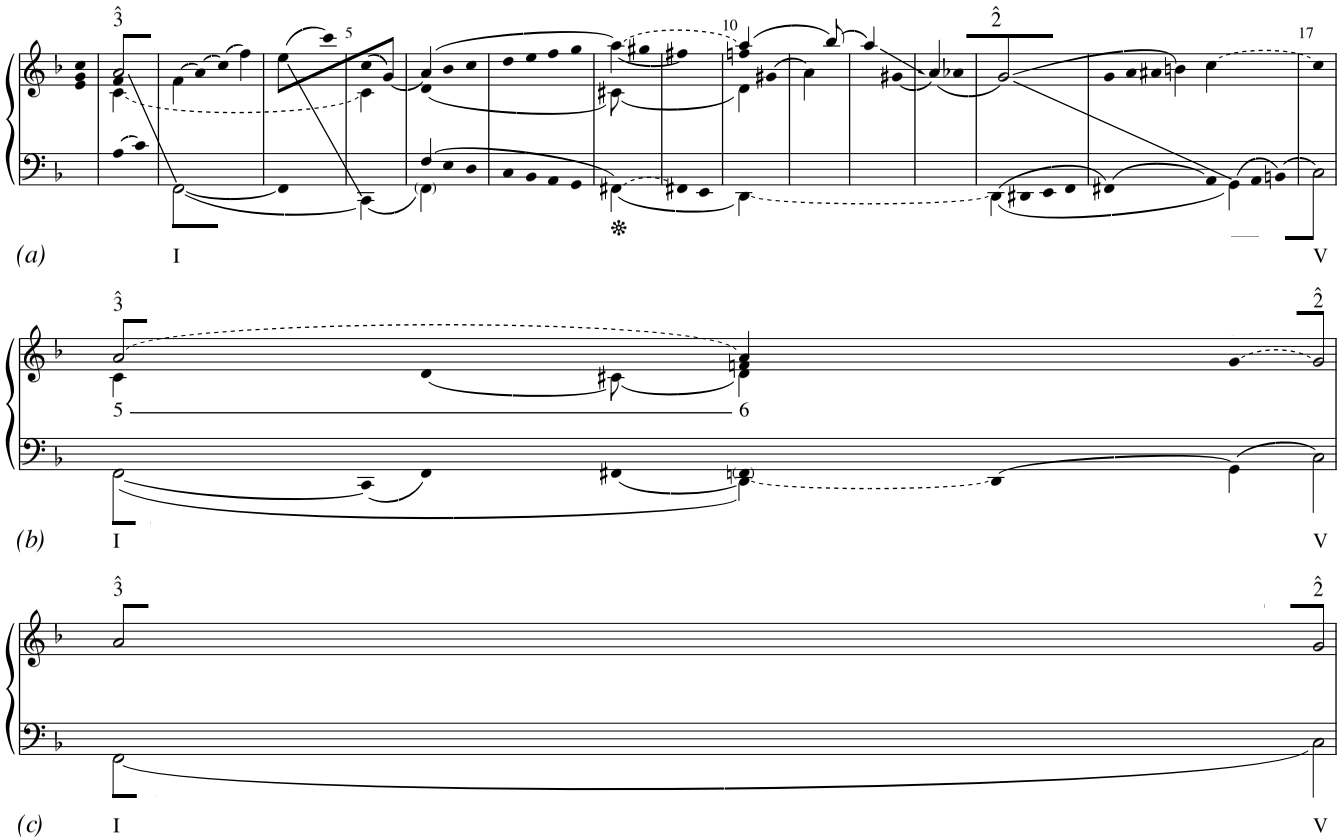
m. 8 can be interpreted as a confluence of chromatic voice-leading events: C♯ is a lower neighbor to D; F♯ arises from an unfolding of the modally-mixed submediant harmony. In general, Prokofiev's quirky shifts involve either ascending chromatic passing tones, or chromatic lower neighbors—voice leading transformations available at any level above the first middleground. Although Schenker's system can account for the chromaticism, it doesn't adequately explain it. Motivic analysis can provide further insight into Prokofiev's chromatic language. (Later, I provide a motivic analysis for the passage in Example 1.)

For present purposes, a *motive* is an ordered progression of pitches that is repeated within and across musical levels. I am most interested in associations created by a repetition of a surface event at a middleground level. This concept of *motive* derives from a Schenkerian procedure called *motivic enlargement*;[5] my approach builds on previous work by Beach, Burkhart, Cadwallader, Laitz, Pastille, and Schachter in order to shed light on Prokofiev's idiosyncratic chromatic language.[6]

To this end, I explore the theoretical and analytic implications of three different types of motives, called *systemic, functional pitch-class,* and *non-functional pitch-class.* Part one of this

5 Schenker uses the term *Vergrösserung,* which Charles Burkhart translates as "enlargement." See, Burkhart 1978, 146–49. For another discussion of *motivic enlargement* see Alegant and McLean 2001.

6 See Beach 1984; Beach 1988; Burkhart 1978; Cadwallader 1983 and 1984; Cadwallader and Pastille 1992; Laitz 1996; and Schachter 1983.



example 2. *Tonal structure of Violin Sonata op. 94, third movement, mm. 1–17.*

essay illustrates each type of motive with an analytic example. Part two discusses more complicated analytic situations, and shows the breadth and limits of the analytic approach.

i. introduction to the three types of motives

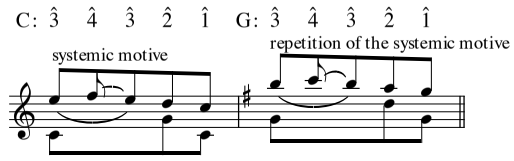
Systemic Motives. When Schenkerian theorists discuss motivic parallelisms or concealed motives, they often describe a process that involves *systemic motives.* Cadwallader and Pastille offer a useful Schenkerian description of what I refer to as a *systemic motive.* They argue that motives are diminutions of middleground linear patterns, such as arpeggiations, stepwise progressions, or neighbor motions.[7] This perspective links the pitches of a motive to tonal *functions,*

7 Cadwallader and Pastille 1992.

and asserts that a motive is defined by the repetition of a function, and not by the repetition of pitch classes. In other words, a recurrence of a *systemic motive* may involve different pitch classes, so long as the respective motivic elements are contextually similar. To illustrate, the beamed notes in Examples 3(a) and 3(b) show a hypothetical *systemic motive* and a repetition of it. Although the pitch classes in (a) and (b) differ, the corresponding elements of each motive share identical harmonic and contrapuntal properties. The first note of each motive, the primary tone of a descending third progression, is decorated by an unsupported upper neighbor; the third note returns to the initial tone; the fourth pitch is a passing tone that receives consonant support; and the final note concludes the linear progression and the prolongation of the initial harmony. These functions are not only aspects of voice leading; they are also grounded in the underlying harmonic context of each pitch. As Burkhart states, "Schenkerian motivic parallelism is indissolubly wedded to the harmony of the passage in which it occurs."[8] As a shorthand, I shall refer to a *systemic motive* by its scale degrees; it should be noted, however, that such a motive is defined by harmonic context, and not just by linear motion. Harmonic support and context are essential elements of a *systemic motive*.

This definition of a *systemic motive* is a particular type of *motivic parallelism*. I require the foreground presentation of a *systemic motive* to be a literal figuration or diminution of a deep middleground event. A *systemic motive* embodies normative tonal paradigms derived from the *Ursatz* or deep middleground levels.[9] Because they are figurations of deep-level progressions, most *systemic motives* involve diatonic progressions, although chromatic *systemic motives* can arise from modal mixture.

Readers familiar with the broader definition of motive outlined in *Free Composition* might wonder why my definition of a *systemic motive* is so restrictive. By confining *systemic motives* to the deepest middleground paradigms, I am able to assert that *systemic motives* replicate the roots of the tonal system itself. In contrast, many of the kinds of motives that Schenkerians discuss, while prevalent in tonal music, are not enlargements of deep middleground processes. Instead, they replicate events on more surface levels, where more diverse tonal transformations are available. Even such paradigmatic processes as voice exchanges and lower neighbor-note motions do not belong to the first middleground level. Just as Schenkerians differentiate between tonal transformations of the middleground and foreground, I differentiate between motives of the middleground and foreground.[10]



example 3. *A hypothetical systemic motive and its repetition.*

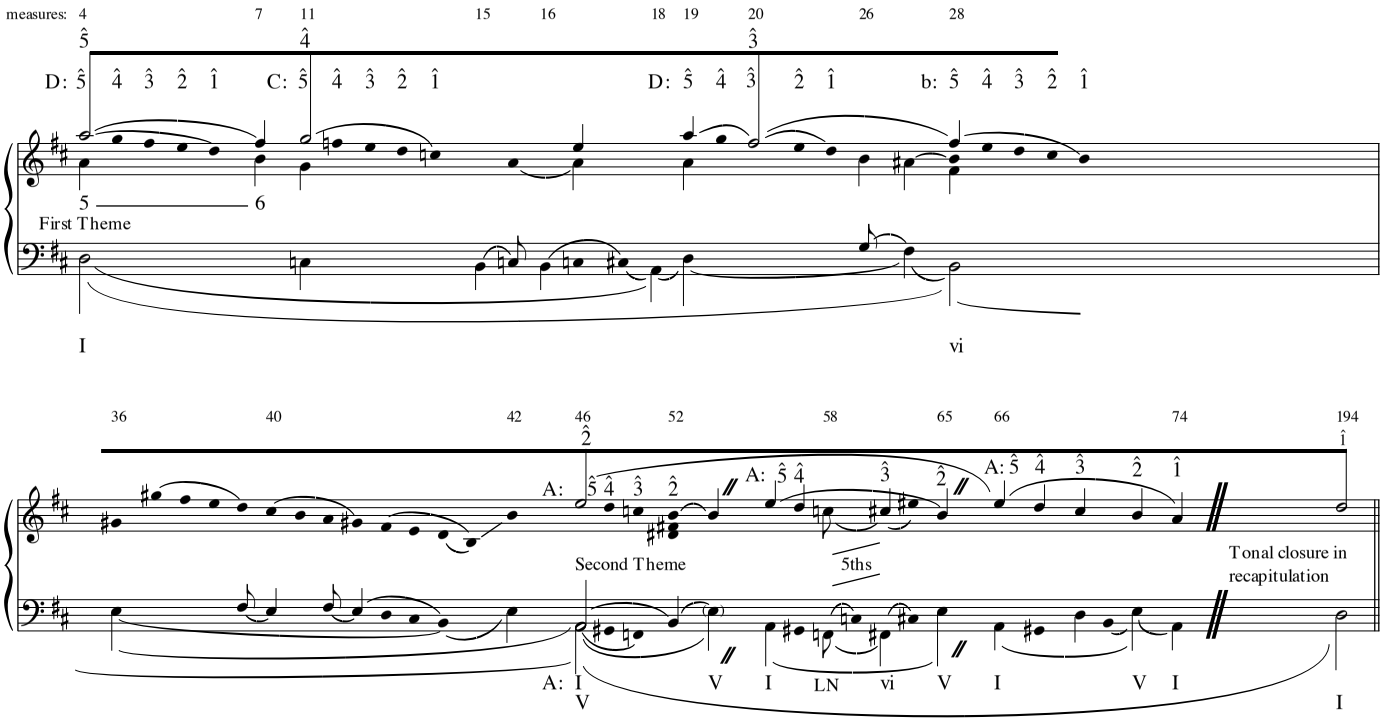
systemic motives in the "classical symphony"

The "Classical Symphony," a piece composed in a self-confessed neo-classical style, provides a good example of *systemic motives*. Many aspects of the first movement's exposition conform to classical expectations of sonata form. As shown in Example 4, the tonic of the first theme (m. 1) moves to the dominant of the second theme (m. 46) through an intermediary submediant harmony (m. 28). Although

8 Burkhart 1978, 167.

9 For a sampling of what I mean by tonal paradigms see Schenker 1979, figures 15, 16, and 32.

10 For a discussion of the types of transformations available at the middleground level, see Schenker 1979, pp. 29–52, 68–111.



example 4. *Systemic motives in the "Classical Symphony," i, exposition.*

there are some unconventional moments (such as the augmented second in the bass from G♯ to F♮ in the second theme), most of the exposition can be modeled by Schenker's principles of scale-step progression.[11]

In addition to its traditional middleground structure, this exposition features a deep-level descent from 5̂ to Î. The fundamental melodic descent, beamed in the example, is the

11 Although the number of parallel fifths that support the tones of the *Urlinie* is certainly unusual, I would argue that these parallels do not contradict Schenkerian principles of tonal structure. In each case, the middleground parallels are mitigated by foreground voice leading. As Schenker states, "Often it is the task of the foreground to circumvent a succession of fifths which threaten in the middleground"(Schenker 1979, 60, see Figure 54, no.15). Schenker is unequivocal on this subject: "[parallels are forbidden on the foreground] when the tones which form the octaves or fifths relate as unequivocally to one another as in strict counterpoint. But where such danger does not exist, voices at the foreground level, even the outer ones, can form octave or fifth successions with impunity . . . Conversely, the middleground frequently displays forbidden successions; it is then the task of the foreground to eliminate them" (Schenker, 1979,56, Figures 51 and 52). Other examples in *Free Composition* that include parallels on the middleground level are: Figures 20, no. 3; 75, no. 5; 95d; and 136, no. 2.

deepest presentation of this motive.[12] The motive recurs at the middleground level not only in the tonic key of D major, but also in A major, C major, and B minor.[13] In each of these local tonicizations, the motive retains its harmonic meaning as a prolongation of tonic. Every presentation of the motive features a descending fifth progression that can be summarized in terms of scale degrees: $\hat{5}$–$\hat{4}$–$\hat{3}$–$\hat{2}$–$\hat{1}$.

Because *systemic* and *pitch-class motives* relate differently to chromaticism, it will be useful to clarify my interpretation of the chromatic elements of this passage in order to contrast it with subsequent discussions of Prokofiev's chromatic language. From a motivic standpoint, the most significant chromatic alternations in this passage are the C♮s in mm. 11–16 and 46–61. These C♮s participate in voice-leading progressions. In mm. 11–16, the C♮s are part of the prolongation of the initial tonic harmony, accomplished by a stepwise descent to the dividing dominant in m. 18, D–C♮–B–A. To put it simply, the C-major harmony of mm. 11–16 derives from a passing tone. Although a C♯ would have been diatonic to the key, C♮ can be understood as mixture of the seventh scale step. As Patrick McCreless points out, this type of linear explanation, which is typical of most Schenkerian analyses, shows how a particular chromatic event fits into the linear-harmonic unfolding of a piece, but it does not explain why that particular chord or note is there.[14] I interpret the role of chromaticism in a *pitch-class motive* in a slightly different manner in order to provide a fuller explanation for the effect of a particular chromatic note.

My restrictive definition of *systemic motives* covers a mere fraction of the kinds of motives available in tonal music. Many tonal analyses invoke what I call *pitch-class motives*. It is important to keep this distinction in mind: a *systemic motive* is a replication of the roots of the tonal system; a *pitch-class motive* is an associative recollection of more surface events.

pitch-class motives

Pitch-class motives are ordered progressions of pitch classes that occur on surface and middleground levels of music. To be more specific, *pitch-class motives* are not diminutions of the deepest levels of tonal motions. As opposed to a *systemic motive,* which occupies a diatonic space, a *pitch-class motive* can associate chromatic events. Not all recurring pitch-class patterns, however, are motivically significant. In order to invoke motivic meaning, a progression of pitch classes must be marked as a salient and memorable melodic event, which, when repeated, is recollected as a version of the original statement. Because of their anomalous character, Prokofiev's quirky chromatic motions are well suited for motivic associations. The very quality that makes them conspicuous in diatonic contexts also makes them recognizable motivically. *Pitch-class motives* associate such chromatic melodic gestures across structural levels.

Because *pitch-class motives* are restricted to the middleground levels above the first level, they are not as grounded in the tonal system. However, motivic associations created by chromatic voice leading *within* middleground levels abound

12 The final $\hat{1}$ of the *Ursatz* motive occurs at the conclusion of the piece in mm. 194, not within the exposition. This is a special kind of *systemic motive* because it consists of repetitions of the *Ursatz*. Burkhart provides a specific name for this phenomenon: *Ursatz parallelism* (Burkhart 1978, 153). Schenker also discusses this concept under the heading of *Übertragung der Ursatzformen (Transference of the Ursatz form);* see Schenker 1979, 87.

13 There are other surface presentations of fifth descents (namely, F♯–E–D–C♯–B in mm. 5–7, and E–D–C–B–A in mm. 13–15), but they do not preserve the harmonic context of the progression as a fifth unfolding within a tonic harmony. Consequently, I do not consider them instances of a *systemic motive*.

14 McCreless 1990, 138–45.

in tonal music. I assign a different label to motives that involve these less-rooted transformations. Because the derivational aspects of these motives are limited, I prefer to focus on the actual pitch classes, instead of their derived tonal function.[15] Thus, I can distinguish between motives that are rooted in the tonal system and those that are merely planted within it.

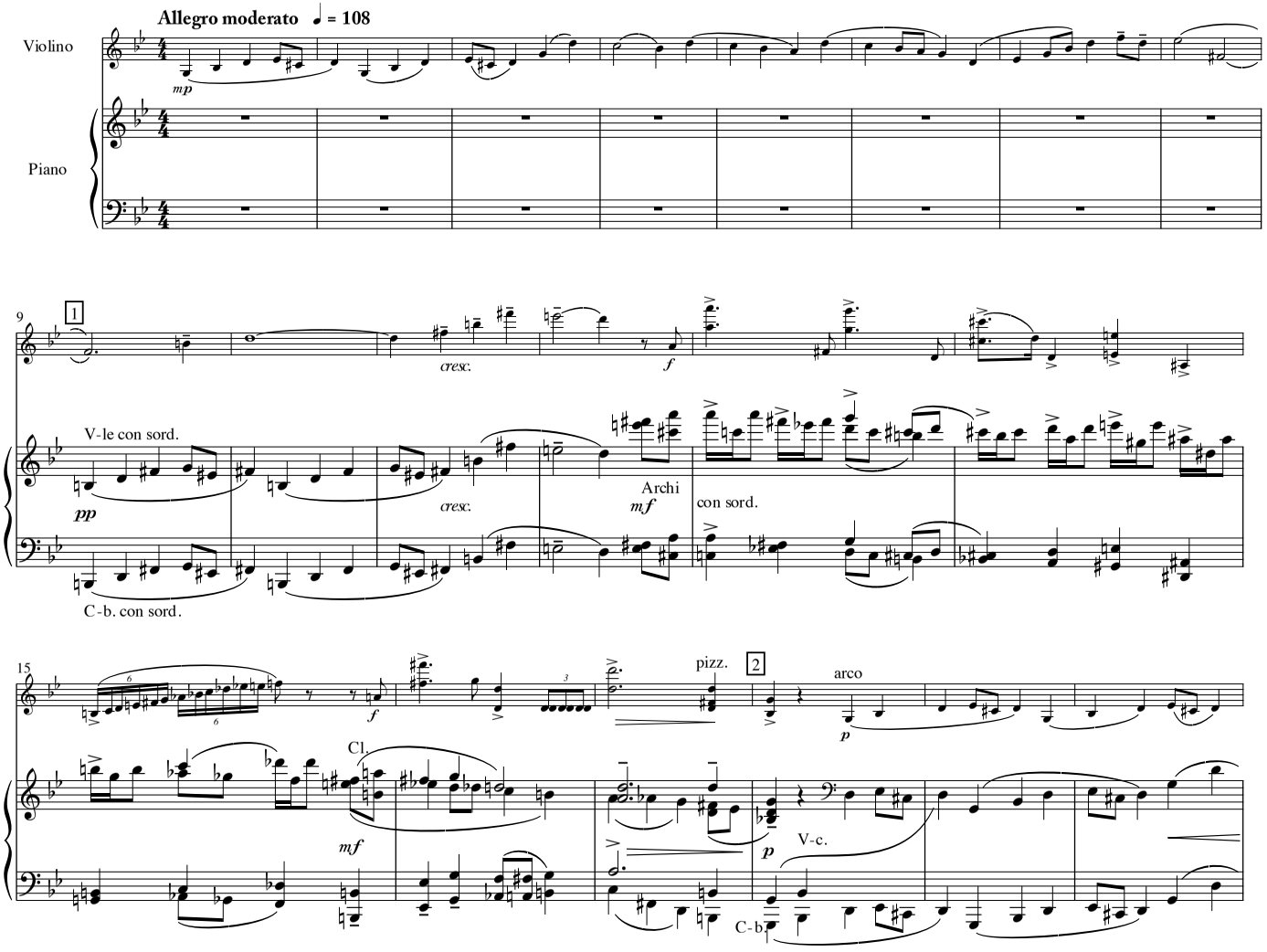
non-functional pitch-class motives

Some *pitch-class motives* are able to associate elements independent of tonal structure. I call such motives *non-functional pitch-class motives*. Example 5, from the first movement of the Violin Concerto No. 2, illustrates such a motive. At the beginning of the piece, the violin solo establishes the tonic harmony by simple arpeggiations, (G–B♭–D), and by chromatic neighbor motions that emphasize $\hat{5}$, (E♭–C♯–D). The phrase concludes with a descending seventh, E♭–F♯. When F♯ is first heard in m. 8 of the solo violin introduction, it does not sound anomalous: it seems to function in a conventional capacity as a leading tone. If this leading tone were conventionally supported with a dominant, the opening could be viewed as an antecedent phrase of a period. One might then expect a consequent phrase to begin in m. 9. Instead, the orchestra enters in m. 9 with a B-minor harmony that supports the lingering F♯ from the end of the violin solo. This B-minor harmony initiates eight measures of harmonic ambiguity. Harmonic functionality resumes in m. 17, where a dominant-seventh chord prepares the tonic of the next thematic statement beginning in m. 18.

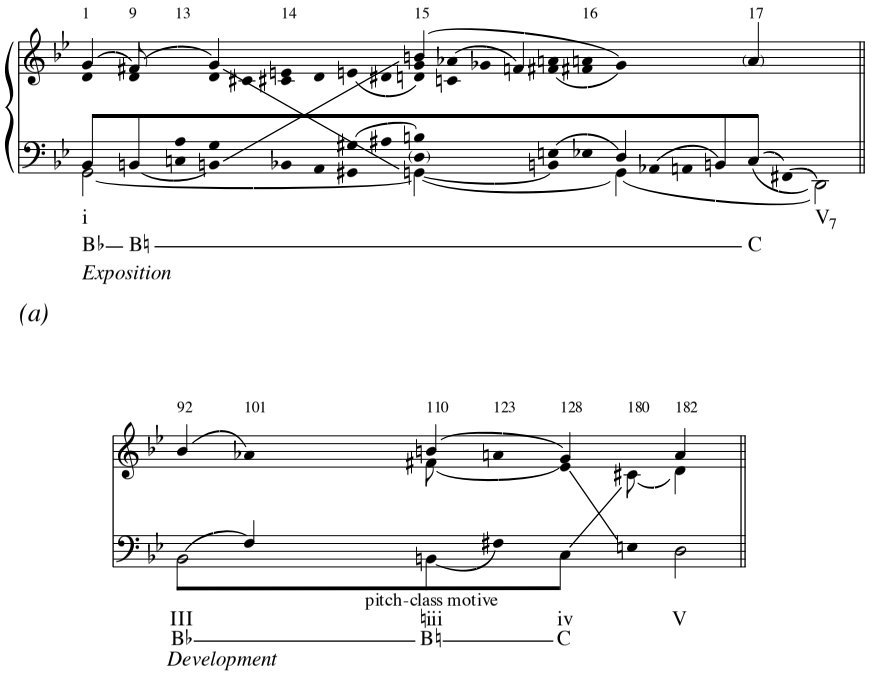
The B-minor harmony of this passage is intriguing. Despite the thematic references of mm. 9–12, this B-minor interlude sounds unusual, especially when followed by the return of the tonic in m. 18. There could be many reasons why B-minor sounds odd in this context. Most notably, B♮ is surprising because it displaces the B♭ of the G-minor tonic. Although it can be integrated into the middleground as a modally-mixed mediant chord (♮iii), this structural interpretation does not explain *why* B-minor harmony appears.

The notion of a *non-functional pitch-class motive* helps explain the role of B minor in this movement. Example 6(a) shows a voice-leading graph of mm. 1–17, which normalizes register and maximizes stepwise voice leading. Obscured by intensely chromatic passing motions and frequent shifts of register, the underlying harmonic progression of the passage is a prolongation of tonic harmony, which moves to a dominant-seventh chord in measure 17. The beam connecting the pitch classes B♭–B–C on the graph draws attention to a linear motive of the movement. The enigmatic B-minor harmony of measure 9 introduces the chromatically altered B♮. After the chromatic manipulations of mm. 9–16, this B♮ ultimately passes to C in measure 17. Despite the obscuring effect of mm. 9–16, the B♮–C passing motion becomes transparent at the very last moment in mm. 16–17, where B leads prominently to C in the contrabass part. This ordered progression of pitch classes, (B♭–B–C) is subsequently enlarged. At a deeper middleground level, the pitch classes of this

15 Schenker, in his analysis of Chopin's Etude op. 18, no. 12 (1979, 100), makes special mention of a motivic association of pitch-classes. In Fig. 119, 14(a) and (b), he notes that the pitch classes G–A–G recur with different harmonic support. He writes, "Here we have the repetition of a mere neighboring note figure which *maintains its pitch position* while the harmonic degrees (V–I …) change; yet precisely this feature [the pitch-class retention] contributes greatly to the cohesiveness of the whole" (p. 100, emphasis added). I mention this example to show that what I call *pitch-class motives* are prevalent in tonal music and are freely acknowledged by Schenker. Although one could focus on the tonal function of this G–A–G progression as a neighbor-note figure, I believe Schenker's special mention of the different harmonic support emphasizes the pitch-class recurrence, not the tonal functions of the pitches. Some contemporary Schenkerian scholars have also noted the cohesive properties of what I call *pitch-class motives*. In chronological order: Schachter 1982; Cadwallader 1983 and 1984; Beach 1988; and Laitz 1996. For a related discussion, see Cohn 1992.



example 5. *Prokofiev, Violin Concerto No. 2, i, mm. 1–20.*



example 6. *Pitch-class motives in Violin Concerto No. 2, i.*

motive are reiterated as tonicized keys of the development section. Example 6(b) shows the deeper-level presentation of this motive.

If this were a *systemic* motivic enlargement, one would expect consistent harmonic support between pattern and repetition. For example, in the surface presentation shown in 6(a), pitch-class C is a dissonant seventh within a V^7 harmony. If the dissonant aspect of the C were retained in the middleground, then some aspect of its tonal function would be preserved between the motivic presentations. As shown in Example 6(b), however, C is given consonant support on the middleground within a C-minor harmony. Despite the different tonal functions of the pitches in these two presentations of the motive, the recurrence of the melodic line itself encourages associative recollection. The point I wish to stress is that *non-functional pitch-class motives* associate pitch-classes, not tonal processes.

Although the chromatic elements of the B-minor passage in the exposition can be explained as passing or neighboring tones (F♯ as lower neighbor to G; B♮ as passing tone to C),

they also create extra-systemic associations, which I refer to as *pitch-class motives*.[16] Because B minor recurs prominently in both the exposition and development of the Second Violin Concerto, it gains an associative meaning beyond its participation in voice-leading structures. *Pitch-class motives* associate chromatic events such as this across structural levels. Patrick McCreless has a similar description for an associative motive, "It [a motive based on association] requires voice leading to be worked into the musical structure, but it is 'detachable' as a motive and cross-referenced in a way that voice leading is not."[17]

functional pitch-class motives

In the Violin Concerto No. 2, the pitches of the foreground and middleground versions of the motive have different tonal functions. Consequently, the B♭–B–C motive is not dependent on tonal structure. Sometimes, however, a *pitch-class motive* has a tonal "feel" to it, despite the fact that it is not a diminution of a deep middleground tonal paradigm. I call such a motive a *functional pitch-class motive*. With a *functional pitch-class motive,* an ordered progression of pitch-classes embodies a functional voice-leading pattern, even though the motive's harmonic support is not a direct diminution of the deepest middleground.

My conception of a *pitch-class motive* draws upon the theoretical model of scale-degree functions proposed by Daniel Harrison in *Harmonic Function in Chromatic Music*.[18] Harrison's theory of scale-degree functions provides a basis for illuminating tonal associations created by voice leading connections. He systematically describes scale-degree functions by disassembling the traditional harmonic unit, the triad, into its constituent elements. Based upon its role in the primary triads, each scale degree is ascribed a function. As shown in Example 7, each primary triad contains three scale-degree functions—a *base,* an *agent* and an *associate*. Voice leading is a motion *between* these functional states. The functional aspect of some *pitch-class motives* is based upon the tonal associations created by the discharge of *agents, bases* and *associates*.

1	5	2	*associates*	←
6	3	7	*agents*	←
4	1	5	*bases*	←
Subdominant	Tonic	Dominant		

example 7. *Scale degrees and their functional descriptions (from Harrison, 1994, 45, Fig. 2.1).*

functional pitch-class motives in "the young juliet"

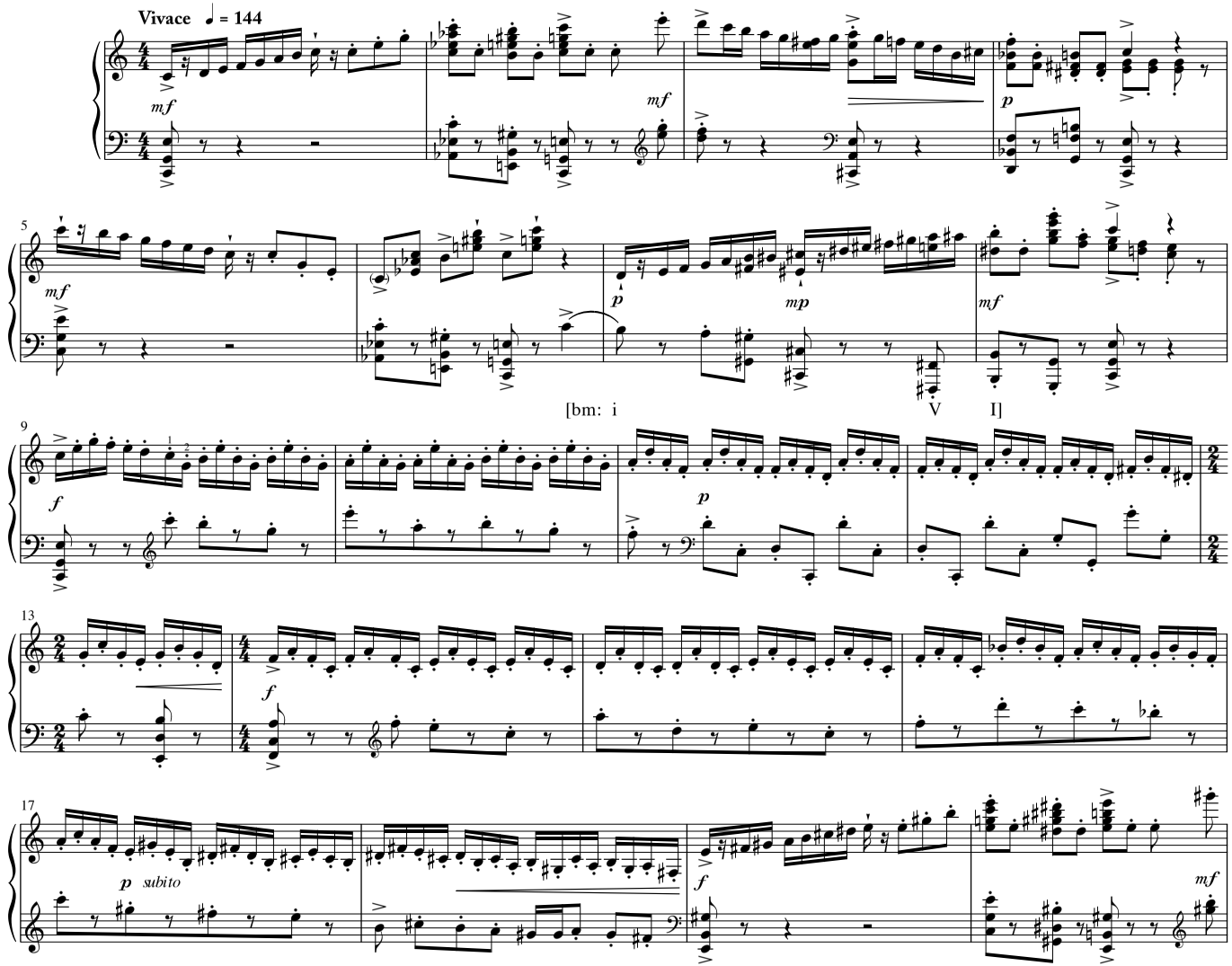
A clear example of a *functional pitch-class motive* occurs in Prokofiev's "Young Juliet" from *Romeo and Juliet,* shown in Example 8. This example is especially useful because it highlights several kinds of harmonic support for the motive in question. The first eight measures of the piece can be divided into two four-measure phrases, each ending with an authentic cadence. Within each phrase, the bass descends by major thirds, featuring a succession of major triads built upon C, A♭, E, and C. In both cases, this progression is marked by a sudden change of surface design: the texture shifts to a chordal style, the harmonic rhythm accelerates dramatically, a higher register is introduced, and the harmonies receive special emphasis.

The distinctive surface realization endows this chromatic gesture with the potential for association. The gesture is, in a manner of speaking, *marked*. Indeed, the B–C discharge of

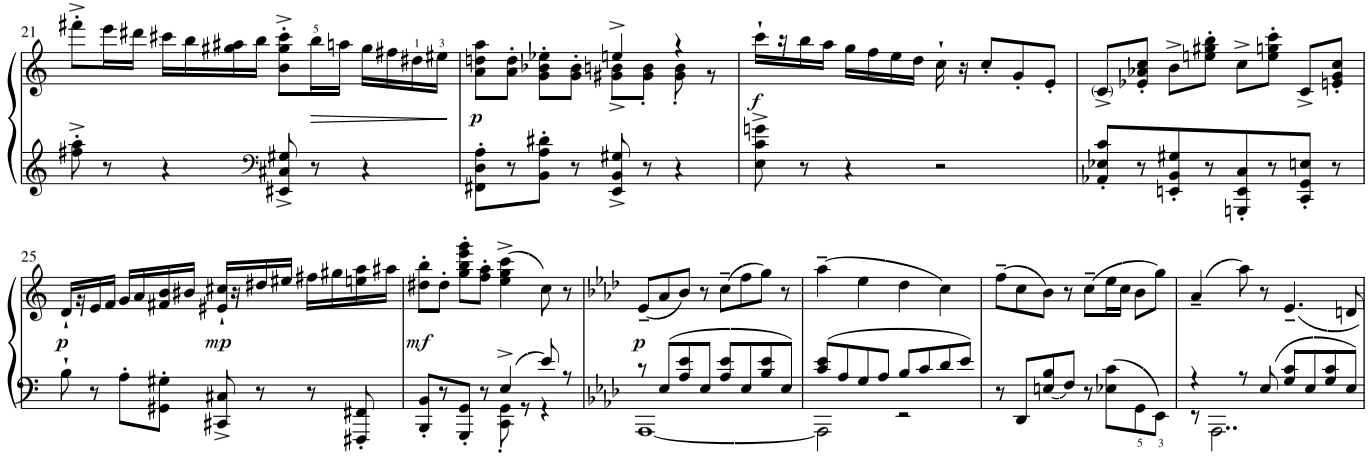
16 For a similar analytic strategy, see McCreless 1990, particularly his discussion of Brahms's "Wie Melodien zieht es mir," and Schubert's 'Pause'."

17 McCreless 1990, 131.

18 The following discussion is based upon the theory of scale-degree harmonic functions found in Harrison 1994, 43–72.



example 8. *Prokofiev's piano transcription of "The Young Juliet" from Romeo and Juliet, op. 75, no. 4, mm. 1–30.*



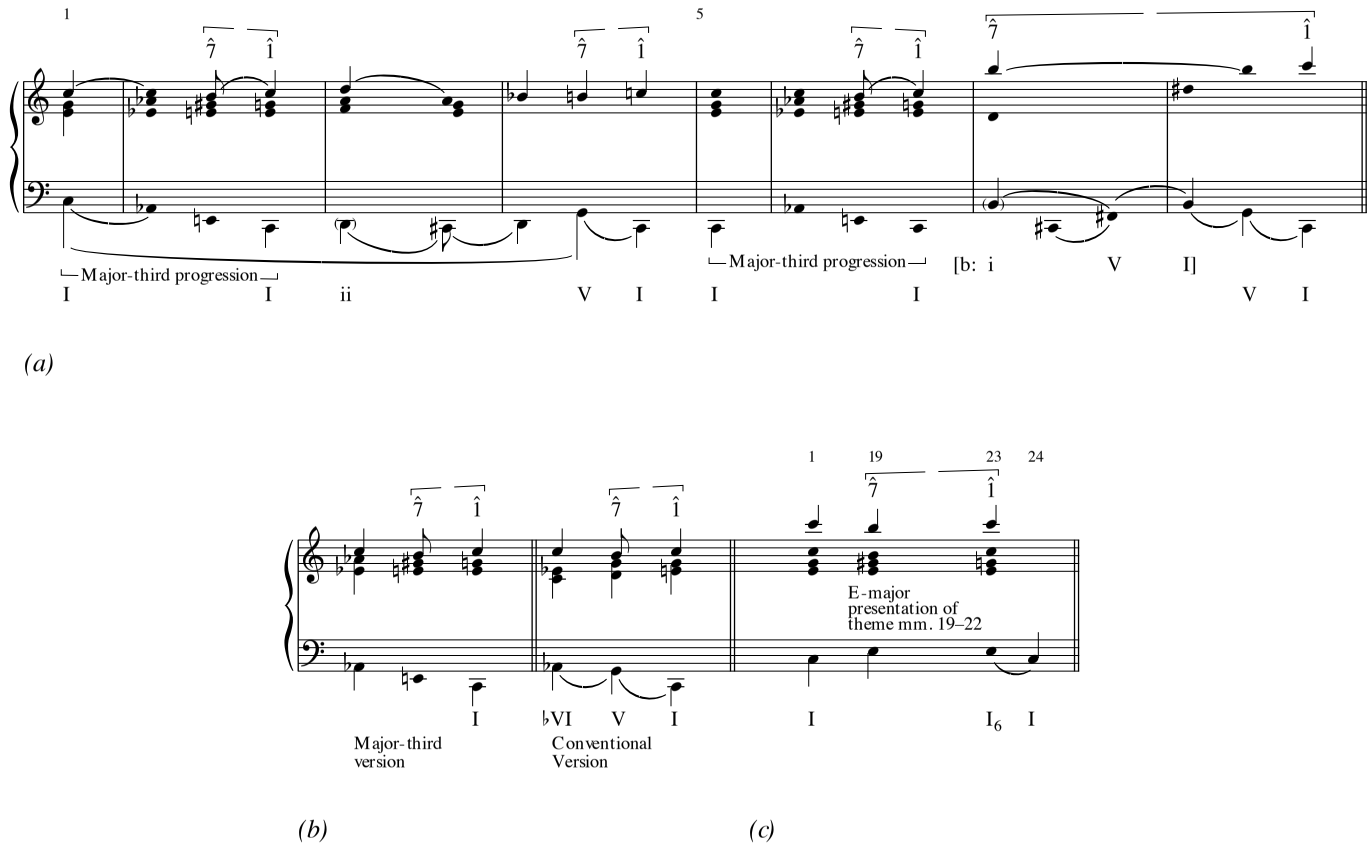
example 8. [*continued*]

the progression is a key component of several motivic repetitions throughout the movement; these are bracketed in Example 9. Initially, B is supported by an altered mediant (III♯); in m. 4, it is supported by a cadential dominant; and a few measures later, it is tonicized by a i–V–I progression (mm. 7–8.) The root of the B harmony acts as a dominant *agent* to the C harmony that ends the phrase in m. 8. The deeper-level repetition of the motive, shown in Example 9(c), occurs in mm. 19–23, where the theme is presented in E major—a key that refers to the fleeting E-major harmony in m. 2.

Despite the fact that the *pitch-class motives* in "Young Juliet" occur in different harmonic contexts, the melodic function of the motive never changes; in every recurrence, B acts as a dominant *agent* to C. Conventionally, a dominant agent is supported harmonically within a dominant triad, as in m. 4 and m. 8. In Prokofiev's descending major-third versions, the dominant agent is supported as the fifth of the mediant triad (E major). Example 9(b) compares these progressions. Observe that each progression features consonant support of a melodic neighboring motion, and each includes a discharge of the dominant *agent,* $\hat{7}$–$\hat{1}$. Regardless of its harmonic context, when a dominant *agent* discharges to a tonic *base,* it contributes a melodic tonal association by reproducing a strong element of the tonal motion from a dominant chord to a tonic chord.[19]

In this excerpt, the motivic repetition involves not only a recurrence of pitch classes, but also a recurrence of scale-degree discharge, which imbues the motive with some degree of tonal affect. By introducing scale-degree functions, it may seem as if I am blurring the distinction between the functional basis of a *systemic motive* and the associative basis of a

19 Some may be inclined to call the descending major-third progression a *wrong-note* progression because of its bold chromatic shifts. Although the term does capture an insouciant character of the music, there is nothing tonally transgressive about this progression. Schenker presents a similar descending arpeggiation by major thirds in *Free Composition,* Fig. 100, 6. As Example 9 shows, the progression also participates in normative voice-leading patterns. Because the term *wrong note* is particularly misleading, I refrain from using it.



example 9. *Functional pitch-class motives in "The Young Juliet," Romeo and Juliet.*

pitch-class motive. The functional aspects of a *pitch-class motive* are limited, however, unlike those in a *systemic motive*. The harmonic progression from C major–A♭ major–E major–C major cannot exist at the first middleground level; consequently, any functional aspect of the motive derives from more surface tonal events. In addition, the B♮s in Example 9 function as either chromatic ascending passing tones, or as lower neighbors—again, transformations unavailable at the first middleground level. The functional aspect of a *pitch-class motive* derives from its melodic discharge of a scale-degree function, irrespective of its harmonic support. By divorcing the voice-leading motion of a *functional pitch-class motive* from its harmonic context, the motive manifests only one aspect of tonal association—a tonal allusion, so to speak.

In contrast, *systemic motives* reify the roots of the tonal system. Although the *systemic motive* demonstrated in the "Classical Symphony" is expressed in several different keys, it can always be heard locally as an expansion of tonic harmony—its harmonic context remains unchanged. In the *functional pitch-class motive* of Example 9, the harmonic context changes.

In summary: *systematic motives* are diminutions of first-level middleground progressions; *non-functional pitch-class motives* are ordered progressions of pitch classes; and *functional pitch-class motives* are ordered progressions of pitch classes with scale-degree functions. I have provided three analytic examples to demonstrate each type of motive. The "Classical Symphony" illustrates an example of a *systematic motive,* in which the fundamental descent is repeated in different keys and at different structural levels. In the Violin Concerto No. 2, a *non-functional pitch-class motive,* B♭–B–C, is repeated at different structural levels, and the notes in each occurrence of the motive have different tonal functions. In "Young Juliet," a *functional pitch-class motive* is also repeated at different structural levels, but each recurrence features a dominant *agent* that discharges to a tonic *base.* Despite varying harmonic contexts, this motive's voice leading reproduces a strong element of the tonal motion from a dominant chord to a tonic chord.

ii. a closer look at pitch-class motives

This section explores more complicated examples of *pitch-class motives,* paying particular attention to the interaction between tonal process and motivic design. *Pitch-class motives* can model associations among events, including notes that are not privileged in a structural manner; notes that are emphasized by motivic relationships can differ from the notes emphasized by the tonal structure. To demonstrate this phenomenon I will re-examine the third movement of the Violin Sonata op. 94, and compare a structural interpretation of the opening phrase with a motivic interpretation.

As described earlier in Example 2, the opening of the movement features an antecedent phrase within an interrupted structure. Despite its conspicuousness, the F♯-minor harmony in m. 8 does not contribute significantly to the harmonic syntax of the phrase. From a structural perspective, the most important mid-phrase harmony is the D-minor harmony of m. 10. As shown in level (b) of Example 2, D minor results from a 5–6 motion above F.

This structural interpretation coexists with an alternate reading that is based on motivic relationships. Example 10(a) shows three chromatic ideas of the first and second theme areas: x, C–C♯–D; y, F–F♯–G; and z, B♭–B–C. The F♯-minor harmony in m. 8 supports pitches in both motives x and y. As part of motive y, the opening bass F moves to F♯ in m. 8. Because it is the leading tone to the G-major applied dominant, one would expect this F♯ to resolve to G. This resolution, however, is delayed by the D-minor harmony and is not achieved until m. 16. In this interpretation, the D-minor harmony is not a goal but rather a parenthetical insertion. Thus, a structural interpretation emphasizes D minor whereas a motivic interpretation de-emphasizes D minor in favor of the G-major harmony (the resolution of the motive's F♯ leading tone). Aspects of both readings are supported by surface elements. D minor is highlighted by a stepwise bass descent to D (m. 9), after which this harmony is sustained for four measures. In a motivic reading, the parenthetical feeling of the D-minor harmony is reinforced by a sudden change to a softer dynamic level and to a less active bass. (The dynamic level and bass activity resume after the D-minor insertion.)

combinations of pitch-class motives

Pitch-class motives can also inform interpretations at the middleground level. A comparison between a tonal and motivic analysis of this same movement proves instructive in this regard. Each section of the ternary form is clearly delineated by sharp contrasts on the surface. The opening A sec-

tion (mm. 1–34) features a lyrical melody; the B section (mm. 35–64) features a frenetic and stuttering violin solo; the A′ section (mm. 65–94) returns in the distant key of G♭ major. From a tonal perspective, G♭ major is an unusual harmony for the return of the main theme. Although there are many notable exceptions, thematic recapitulations often begin with the resumption of tonic harmony. However, it is extremely rare for a thematic return to occur in the *Neapolitan,* or ♭II. As Example 10(b) shows, we can explain this harmony as the by-product of modal mixture, a neighboring tone, and passing tones—although it is indeed unusual for a ♭II chord to lead to a diatonic II.[20] Although a Schenkerian interpretation accounts for the G♭ harmony as a chromatically-altered II chord, it does not fully explain the unusual setting of the thematic return.

As described previously in Example 10(a), the first two themes contain references to motives x, y, and z. Example 10(c) shows the interaction of these motives at a middleground level. As the example shows, each of the three motives is enlarged. Moreover, the enlargement procedures overlap at m. 66, the return of the initial theme. This remarkable moment features modal mixture, thematic return, and a multi-level integration of these motives. Thus, I would argue that motivic design helps explain the unusual key of the thematic return, relating the quirky F♯ harmony of the first phrase to the middleground G♭-major return of the opening theme. While a tonal interpretation would tend to relegate the G♭-major harmony to a subsidiary function (one that would be subsumed by the structural tonic and dominant harmonies), a motivic interpretation highlights this harmony as the point of coincidence—the "nexus" between the three chromatic ideas. In summary, an analytic strategy that includes *pitch-class motives* can offer explanations for Prokofiev's chromatic language that differ from interpretations based solely on tonal structure. Thus, a motivic interpretation adds an extra-systemic association that enriches our understanding of chromatic events.

20 Schenker (1979, 41 and 71) discusses this chromatic expansion.

functional pitch-class motives—a closer look

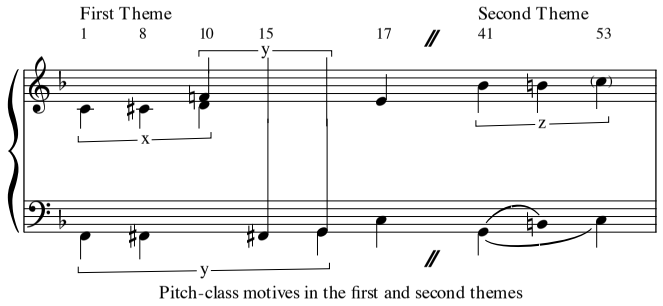
While the previous discussion highlights the independence of *pitch-class motives* from tonal structure, the following discussion takes a closer look at *functional pitch-class motives* and their special connection with tonal structure. An examination of several excerpts demonstrates that tonal associations created by *functional pitch-class motives* can vary in strength. In other words, some motives sound more "tonal" than others. The strength of a motive's tonal association depends upon the type of scale-degree function it contains, and the degree to which that function is harmonically supported.

The *functional pitch-class motives* of the "Young Juliet" example feature dominant *agent*s. As the strongest communicators of scale-degree function, *agent*s control much of the perception of tonal motion in these motives. An *agent*'s tonal force is based upon its singularity of purpose. $\hat{6}$, $\hat{3}$, and $\hat{7}$ function solely as *agents* (refer to Example 11). Unlike *agent*s, *base*s and *associate*s share scale degrees with other functions, and are therefore more dependent upon context. As shown in Example 11(a), $\hat{5}$ can be both a dominant *base* and a tonic *associate*. $\hat{7}$, on the other hand, always functions as a dominant *agent,* regardless of context.[21]

Not only do *agents* have a singular purpose, but they also have consistent behaviors. As Example 11(b) shows, the dominant *agent,* $\hat{7}$, normally discharges to $\hat{1}$ both in progressions to tonic function as well as progressions to subdominant function. Similarly, the subdominant *agent,* $\hat{6}$, normatively discharges only to $\hat{5}$.[22] Since *agent*s have consistent

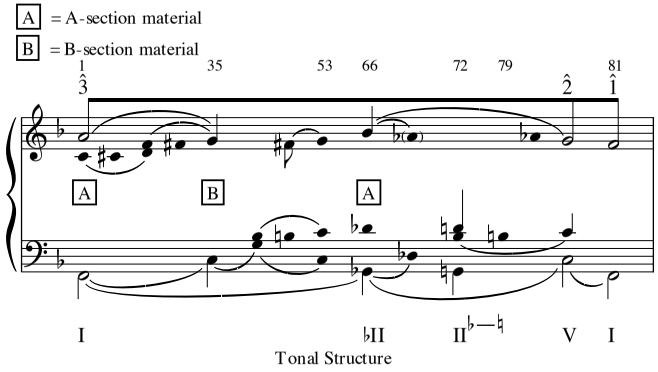
21 Scale-degree functions are determined by the primary triads (I, IV, V). When $\hat{7}$ is heard in other triads, such as a mediant harmony, it still functions as a dominant *agent*. See Harrison's discussion of functionally mixed chords, Harrison 1994, 60–72.

22 Harrison 1994, 91–96.



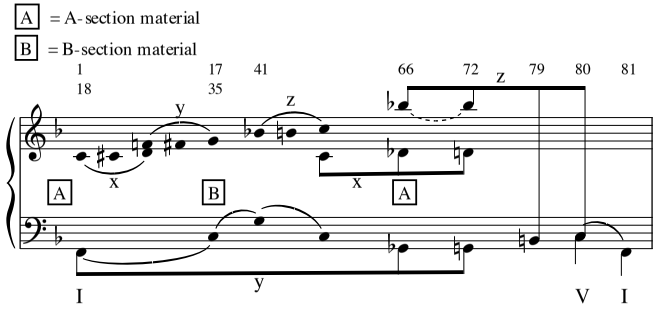
Pitch-class motives in the first and second themes

(a)



Tonal Structure

(b)

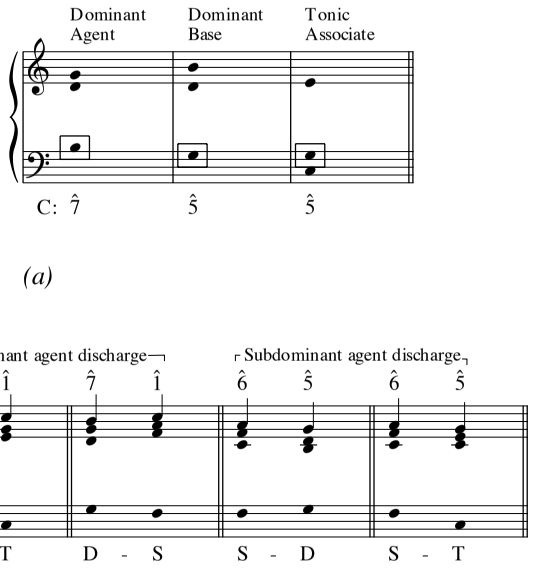


Pitch-class motives in Violin Sonata op. 94, mvt. 3

(c)

example 10. *Tonal structure and pitch-class motives in Violin Sonata op. 94, iii.*

normative resolutions, they can create an expectation for a specific voice-leading motion. As demonstrated in the "Young Juliet" example, the presence of $\hat{7}$ can incite an expectation for a resolution to $\hat{1}$. Other scale-degree functions do not share the *agent*'s clarity of function or discharge; therefore *agent*s, with their singularity of purpose and behavior, are the strongest ambassadors of tonal function. When a note discharges as a functional *agent*, it contributes a tonal association because it embodies normative tonal melodic motions.



example 11. *Unique agent function and agent discharges.*

combinations of scale-degree functions

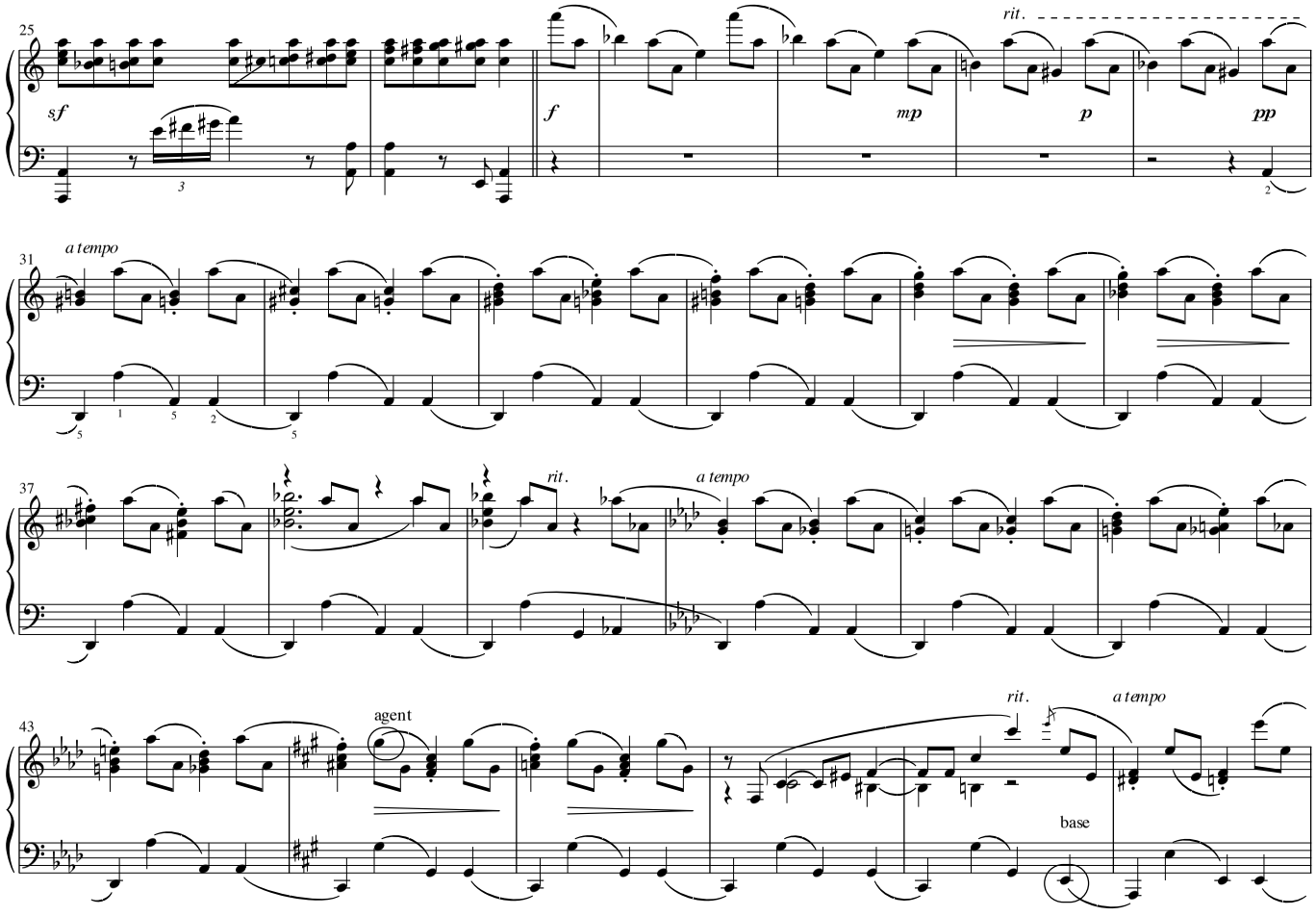
The tonal association of a *functional pitch-class motive* can be strengthened if the *agent* function is supported by another scale-degree function of the same primary triad. For example, if a motive contains a dominant *agent,* the tonal association will be greater if the *agent* is also supported by a dominant *base.*

Example 12, from the Piano Sonata No. 2, illustrates the discharges of both an *agent* and a *base* dominant function and demonstrates the strongest possible tonal association for a *pitch-class motive.* The middle of the scherzo movement is framed by a beginning D-pedal point in m. 31 and an ending A-pedal point in m. 48. Despite the lack of an explicitly stated D-minor triad in mm. 31–34, there is a tangible D-minor "feel" to these measures, owing to the pedal point, the D–A interval between the outer voices, and the inner voice's outline of the triad A_4–F_5–D_5. Given these implications and the fifth relationship between the pedal points, I interpret this passage as a progression from a D-minor tonic to an A-major dominant. At m. 40, the D of the D-minor harmony slides to D♭, which is subsequently re-interpreted in m. 44 as a C♯. As shown in Example 13, the upper voice follows the half-step slide in the bass, creating parallel fifths between the outer voices.[23] The resultant melodic A♭ of mm. 40–44 (enharmonically reinterpreted as a G♯ in m. 44), functions as a dominant *agent* to the A of the final A-major harmony implied in mm. 48. The G♯ dominant *agent,* circled in the example, is supported by an E-dominant *base,* also circled, which descends by fifths from E to A.

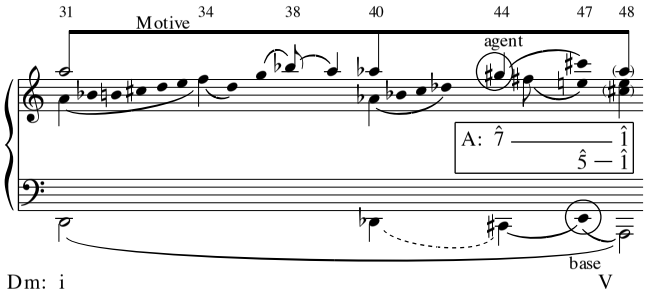
However, E is not always given a proper bass context in a lower voice; thus the supportive role of the E as a *base* function is not emphasized in the measures leading up to m. 47.[24] In fact, as the third of the C♯ harmony, E is not explicitly stated in mm. 44–46. The *base* support of E changes drastically, however, in m. 47, when E discharges by falling fifth in the lowest sounding register. This *base* position and discharge of E adds a strong dominant flavor to the C♯ harmony as it leads to A major. In fact, the discharge of both G♯ and E articulates the concluding A-major harmony in m. 48.

23 One could also interpret the D♭ harmony of m. 40 enharmonically as a ♯vii chord. This passage remains tonally ambiguous until the end of m. 47.

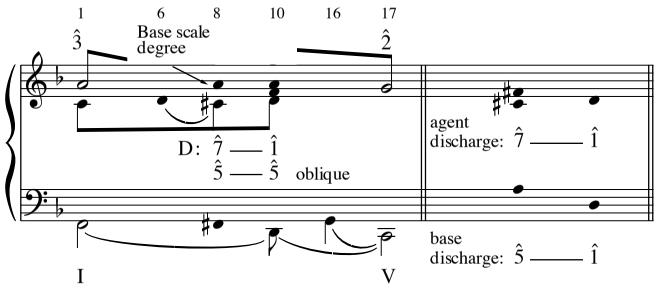
24 Unlike an *agent,* the function of a base is dependent upon its context. In order to invoke its function, a *base* must be the lowest sounding voice in a chord, or it must be accompanied by a functional *agent.* For a discussion of these conditions of *base* function see Harrison 1994, 45–47.



example 12. *Piano Sonata No. 2, Scherzo, mm. 25–48.*



example 13. *Dominant agent and dominant base, Piano Sonata No. 2, Scherzo, mm. 31–48.*



(a) *(b)*

example 14. *Dominant agent and dominant base in Violin Sonata op. 94, iii, mm. 1–17.*

The more scale-degree functions a harmony contains (i.e. the more it resembles a dominant or subdominant triad), the greater its potential for tonal associations. For example, a chord that contains one scale-degree function, such as a dominant *agent,* has the potential only to replicate one voice-leading discharge of the dominant-tonic progression, namely 7̂–1̂. A chord that contains two scale-degree functions has the potential to replicate two voice-leading discharges. In other words, voice leading creates the tonal associations in *pitch-class motives,* not the mere presence of a scale-degree function. Example 14 clarifies the distinction between the presence of a scale-degree function and the voice leading created by its discharge.

A closer evaluation of the opening of the Violin Sonata is instructive. Here, a dominant *agent* is supported by a dominant *base,* but the *base* does not discharge. As Example 14(a) shows, the opening tonic of the movement moves to a dominant half-cadence at m. 17. In the middle of the phrase, the C♯ in m. 8 acts as a leading tone to the D harmony of m. 10. C♯ is supported by an F♯-minor harmony, which contains A, 5̂ of D minor. 5̂ is not, however, in a salient *base* position in the lowest voice; the A is maintained between the F♯-minor and D-minor harmony. If a *base* is not the lowest sounding voice, it will usually *not* discharge by fifth. More likely, in terms of voice-leading conventions, a dominant *base* in an upper voice will be maintained in the subsequent tonic chord; this is shown in Example 14(a). The lack of *base* discharge (from A to D) considerably weakens its dominant support of the C♯ leading tone. A *base* that is in an upper voice can add a dominant presence to a harmony, however, if the *base* does not discharge, it cannot create tonal associations generated by voice leading motions. Example 14(b) shows a hypothetical re-voicing of the F♯ harmony that emphasizes the *base* discharge possible between F♯ minor and D minor. Were the A in the lowest voice and were it to discharge to the tonic *base* of the D harmony, it would then have a significant impact on the tonal association of the motive.

Examples 13 and 14 demonstrate varying degrees of tonal association that a *pitch-class motive* can acquire. The tonal association of the voice leading in mm. 47–48 of the Piano Sonata is stronger because the scale-degree discharge of its *pitch-class motive* is supported harmonically. By contrast,

the *pitch-class motive* in the Violin Sonata receives far less support.

weak tonal associations in pitch-class motives

The tonal associations of motives in the examples discussed thus far have been fairly clear. *Agents* provide clear tonal expectations in terms of voice-leading resolutions; these motions can be bolstered by supportive *bases*. Some *pitch-class motives,* however, form weaker associations.

"Masks" from *Romeo and Juliet* illustrates a *pitch-class motive* that has a weaker tonal reference than the motive examined in "Young Juliet" or the Violin Sonata. At first glance, "Masks" conforms to many classical tonal expectations. As shown in Example 15, its formal organization is conventional, comprising an introduction (mm. 1–4) and a ternary design: A (mm. 5–21); B (mm. 22–29); and an abbreviated recapitulation (mm. 30–39). In addition, the first phrase of the A section resembles a sentence, with a two-measure melodic idea (mm. 5–6), a loosely-varied repetition of this idea (mm. 7–8), and a four-measure continuation that culminates in tonic harmony (m. 12). Although the melodic construction of this phrase seems reminiscent of a classical style, the harmonic language is less conventional, especially the startling F♯-minor harmony in m. 7.[25]

If we were to disregard Prokofiev's spelling, we could hear the opening as a descending arpeggiation, B♭–G♭–D–B♭. Spelling notwithstanding, I hear mm. 5–9 as a prolongation of B♭, particularly with the stepwise descent of the bass. This interpretation, however, does not negate the quirky character of the passage, which is emphasized by Prokofiev's choice of spelling.

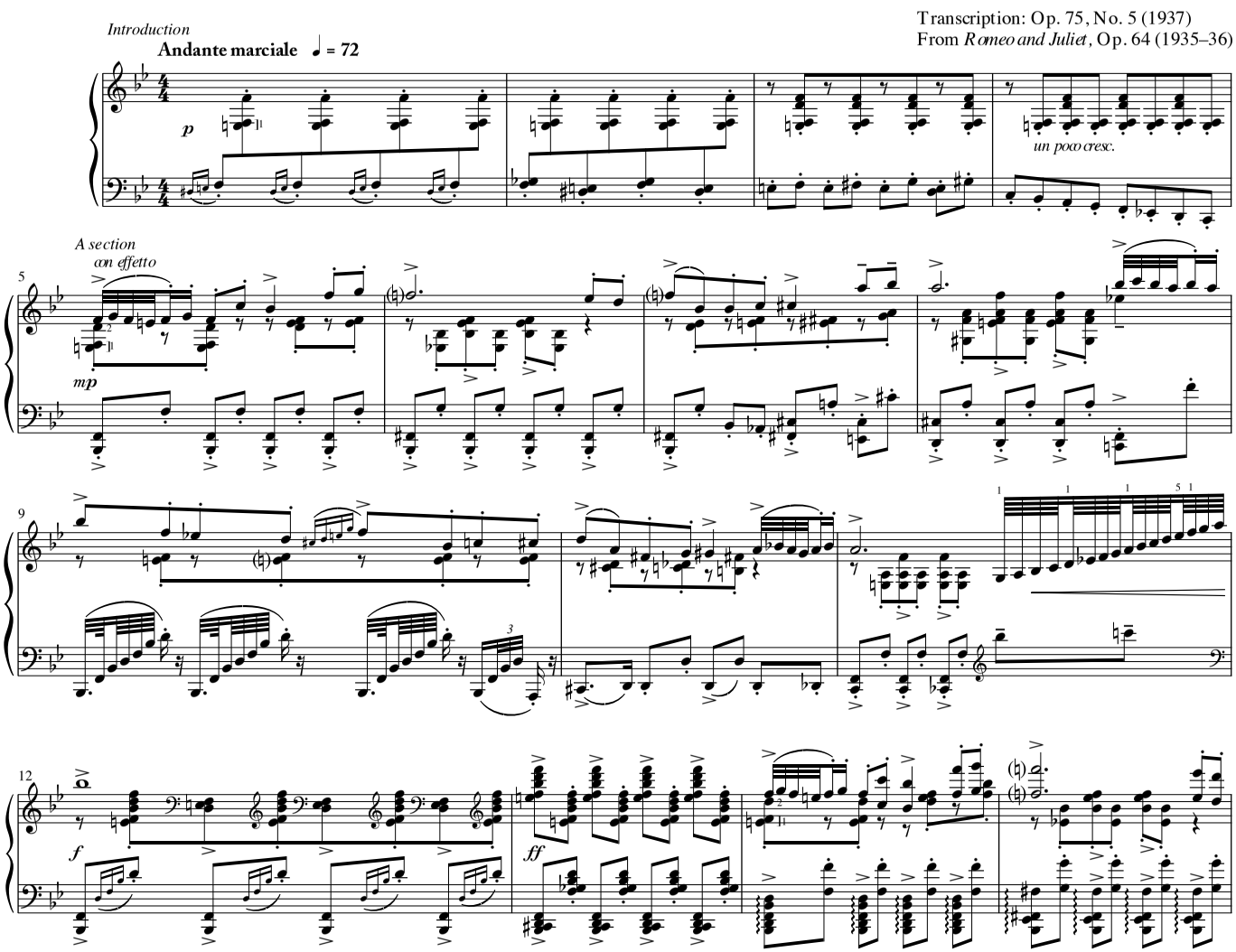
The F♯-minor harmony that occurs in the middle of the phrase (m. 7) supports the chromatic passing tone C♯. As shown in Example 16(a), C♯ is part of a *pitch-class motive* defined by B♭–C–C♯–D. Notice that the tenor voice retains the C♯ as the remaining voices progress to a D-minor chord in m. 8. This dissonant context for C♯ accentuates its "wrongness." C♯ does not resolve to D in the upper-voice register (♯$\hat{2}$–$\hat{3}$) until the B♭ harmony appears in m. 9.[26] Because the motive does not contain a dominant *agent,* the pitches of this motive are less functional compared to earlier examples. In this case, the chromatic pitch of the motive accentuates and resolves to the *third* of the following chord, instead of the root. The motion from ♯$\hat{2}$–$\hat{3}$ is not as functionally prescribed as the motion from $\hat{7}$–$\hat{1}$. Other scale-degree functions do not share an *agent*'s authority as purveyors of functional voice leading.[27]

The B section begins in m. 22 with a sudden drop to a *piano* dynamic level, and ends with the only authentic cadence of the movement (mm. 29–30). In between, there is another startling F♯-minor harmony (mm. 26–28), which supports a restatement of the section's opening measures, transposed to this unconventional key. As shown in Example 16(b), the *pitch-class motive* recurs in the B section, shortened to B♭–C♯–D (shown by the beam). The scale-degree functions (♯$\hat{2}$–$\hat{3}$) are preserved in the repetition of the motive in the B-section, creating a weak, yet still existent tonal association. The C♯ of the motive initially receives consonant harmonic support as part of the F♯ harmony in m. 26. C♯ is retained throughout the chromatic progression leading from the dominant of F♯ (m. 28) to the dominant of B♭ (end of m. 29.)

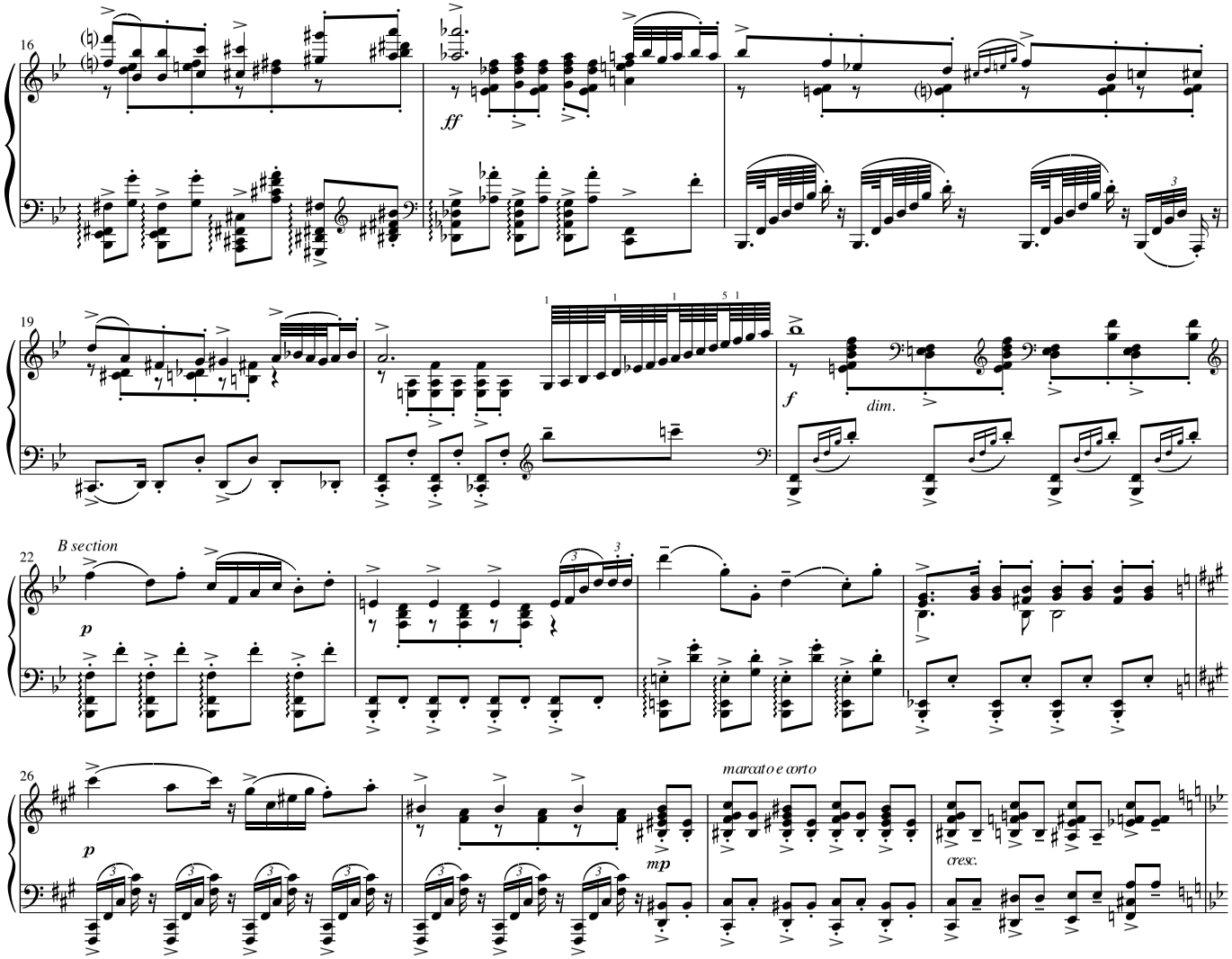
25 Another unconventional aspect of the harmonic language is the omnipresent semitonal clashes in the left-hand part, which add unsettling dissonance to the scene.

26 The C♯ of the motive receives an even more prominent emphasis in the varied repetition of this phrase that immediately follows (mm. 14–21). In the repetition of the phrase, C♯ is enharmonically reinterpreted as D♭ and supported with a D♭-major harmony (m. 17). In the first version, C♯ sounds dissonant against the prevailing D-minor harmony of m. 8, whereas in the second version, C♯ is consonant on the surface of the music because it motivates a D♭-major harmony (m. 17).

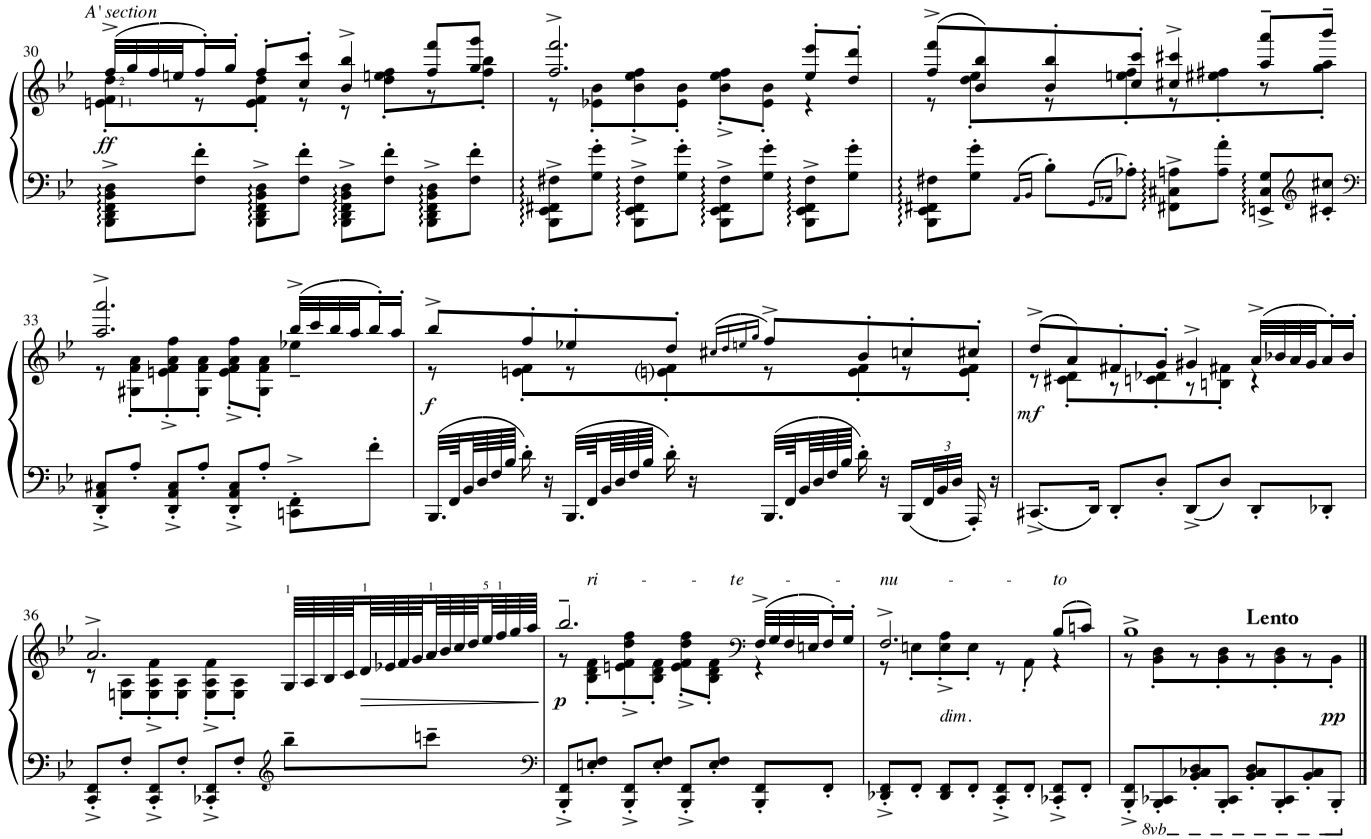
27 Harrison calls this scale-degree succession a chromatic projection of the resolution of a dominant *agent*. For a discussion of chromatic accompaniments to *agent* discharges see Harrison 1994, 106–8.



example 15. *Prokofiev's piano transcription of "Masks" from Romeo and Juliet, op. 75, no. 5.*



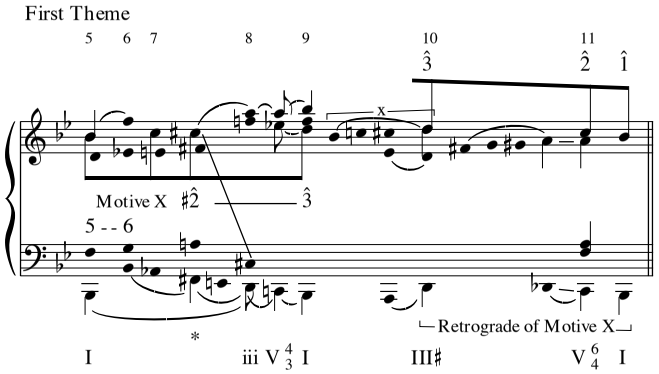
example 15. [*continued*]



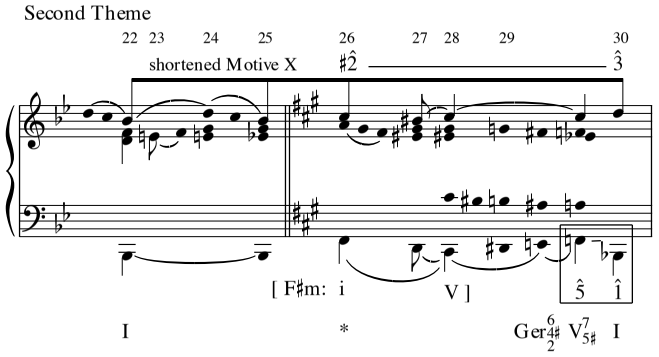
example 15. [*continued*]

Another manifestation of the motive occurs in mm. 10–12, near the cadence of the first theme. This *pitch-dass motive* occurs in retrograde in the bass voice, as shown by the bracket in Example 16(a). The motive is particularly noticeable because a *base* discharge is expected at this cadential moment. By subverting our expectations, Prokofiev draws attention to the motive at the cadence. In fact, the two dominant-to-tonic motions in the first theme avoid a root motion from $\hat{5}$–$\hat{1}$, exhibiting a lack of dominant *base* discharge. The dominant harmonies occur in second inversion, which emphasizes the linear connection from C to B♭ of the bass voice (mm. 8–9 and 10–11).

This retrograde form of the motive invokes a different kind of association than the other iterations of the motive.



(a)



(b)

example 16. *Pitch-class motives in "Masks" from Romeo and Juliet.*

The retrograde version of the motive substitutes the upward melodic resolution, ♯$\hat{2}$–$\hat{3}$, for a descent towards the tonic pitch, thus reversing the directed tendencies of the pitch-classes within the motive. Reversing the order of the pitches denies a functional association, but still creates an associative connection owing to pitch-class content.

In retrospect, Prokofiev exploits the dichotomy between two versions of $\hat{2}$, namely C♯ and C♮. The diatonic version (C♮) behaves according to tonal norms as part of second-inversion dominant harmonies. On the other hand, the chromatic version (C♯) motivates unusual harmonies (mm. 7, 16, 26), which add excitement and color. In addition, Prokofiev plays with an enharmonic pun between C♯ and D♭ (mm. 10, 17, 19.) With reference to the piece's title, perhaps these compositional features are Prokofiev's way of presenting musical "masks."

conclusion

The unusual chromatic motions that characterize much of Prokofiev's music have more than a surface effect. As seen in the examples from the Violin Concerto No. 2, "Young Juliet," Violin Sonata op. 94, and "Masks," surface chromatic progressions often have middleground references and manifestations. These embedded chromatic ideas at both surface and deeper levels of the music invite motivic recollection. However, these associative connections are different than *systemic motives,* which replicate transformations available only at the deepest middleground level. Nonetheless, some *pitch-class motives* reify well-established functional voice-leading patterns, providing them with a distinctive tonal flavor. Depending upon the functional strength of the recurrent voice-leading pattern, and the number of corroborating scale-degree functions within the harmonic support of the motive, *pitch-class motives* can manifest a wide range of tonal associations.

Pitch-class motives enrich our understanding of Prokofiev's quirky chromatic gestures. For more than fifty years, we have called Prokofiev's chromatic slides *wrong notes,* a term that highlights their disconnection with tonal structure. A motivic perspective provides an alternative viewpoint with a more optimistic reading. I would argue that Prokofiev's

chromatic excursions are not "wrong" at all. I prefer to call them "motivically optimized."

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