Chapter 3

Semitone-Related Keys II: Other Types of Scale-Degree Transformation

3.1. Upward and Downward Leading Tones

Though I have concentrated on the modulation using the scale-degree $\hat{7}$ and $\hat{1}$ transformation so far, my approach offers potential for insight into Chopin's other semitonal relationships as well. Like the semitonal relationships discussed earlier, these may be highlighted as key areas; but they differ from leading-tone modulations in that they entail other scale degrees. In this chapter, I will discuss these other types of semitonal modulations, focusing in particular on scale-degree transformation between $\flat\hat{6}$ and $\hat{5}$.

Before proceeding to analyses, and as a way to relate the techniques to be discussed in this chapter to those in the previous chapters, it would be useful to examine briefly the topic of the leading tone in a more general context. It seems that Chopin has a distinct approach to transformation between a leading tone and a tonic, which I have designated as a leading-tone modulation. Chopin's frequent use of this type of modulation suggests that he might recognize the special characteristics of the upward leading-tone motion from $\hat{7}$ to $\hat{1}$. Although he employs other types of scale-degree transformation such as $\flat\hat{6}$ to $\hat{5}$, these transformations do not occur as often as the transformation between $\hat{7}$ and $\hat{1}$, and Chopin treats them quite differently from

leading-tone modulations. Analysts might ask, therefore, whether Chopin regards the semitone from $\hat{7}$ to $\hat{1}$ as distinct from other semitonal motions.

As a bridge from the discussion of $\hat{7}$-$\hat{1}$ transformation to that of $\flat\hat{6}$-$\hat{5}$ transformation, I will begin by examining different types of semitones. In this section I will introduce general features of tones that may be considered as leading tones and discuss distinctions that may be drawn between upward and downward leading tones.

The singular characteristic and effect of the leading tone has been a challenging issue to scholars. According to Anderson (1992), who examines the concept of the leading tone in his dissertation,[1] the leading effect is related to the "relative rarity of the semitone" in the diatonic system (61), and he points out that the use of a leading tone can be traced back as early as the fourteenth century:

> The instructions for forming the *clausula vera* cadence, a cadence in two voices, in most counterpoint treatises of this time and later required the octave to be preceded by a major sixth. If the parts are inverted, a minor third is to precede the unison. While the rules describe the progression in terms of the intervallic relationship between the parts, it must be noted that the formulation makes inevitable a linear relationship, in one voice or the other, of a semitone either above or below the cadential pitch class. (65)

Figure 3.1 shows the *clausula vera* cadence to which he refers. He continues to discuss the necessity of the specific interval, sometimes with the need for *musica ficta*, concluding that even early theorists noticed the leading effect of the semitone.

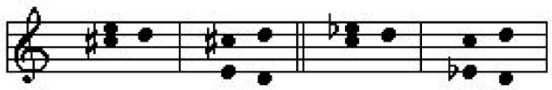


Figure 3.1. Clausula vera *cadence (Anderson 1992, 65, Figure 24)*

[1] His dissertation deals with development of early major-minor tonality and discusses the leading tone as its own topic. See Anderson (1992, 60–66) for more details.

However, this discussion about the leading effect of the semitone does not fully explain distinctiveness of an upward leading tone from $\hat{7}$ to $\hat{1}$, since it raises the question of the other, downward leading tones (also called upper leading tones), such as semitones between $\hat{3}$ and $\hat{4}$ in the major key and $\hat{5}$ and $\hat{6}$ in the minor key. The cadence in Figure 3.1 illustrates both upward and downward leading tones.

At this point it would be useful to explore some work by the early twentieth-century theorist Ernst Kurth, since explanations of this kind are reminiscent of Kurth's notion of leading-tone tension. As McCreless (1983) points out, Kurth stressed the melodic process in music, that is, a linear progression, when interpreting chromatic harmony, and among the various melodic motions, I would like to draw attention to leading-tone tension as the most relevant to the present project.[2] A useful definition of leading-tone tension appears in the dissertation by Youn Kim:

> In contrast to this [dualistic explanation of Riemann], Kurth provided an explanation of major and minor based upon the attracting forces between tones, which he named "gravitation" (*Gravitation*). There are attracting forces of all tones for all other tones. Among the various forms of these gravitations, particular[ly] noteworthy is the gravity (*Schwerekraft*) that can be felt as a "weight upon its root," the force that pulls a tone toward its root. . . . On the other hand, "leading-tone tension" (*die Leittonspannung*) is the force that attracts a tone to the upper or lower adjacent scale-step. (Kim 2003, 296)

As the statement above implies, Kurth devoted special attention to each note in a melody; this he describes as kinetic energy, compared to the potential energy in chords. In addition, Kurth takes note, in particular, of the energy that the leading tone delivers.

[2] It does not seem to be appropriate to deal with the extensive, intricate theory of Kurth in detail here, so I would rather point out only the aspects of his theory directly related to our concerns in the present chapter. For further discussion of Kurth, see the dissertations by Rothfarb (1985) or Youn Kim (2003). McCreless (1983) also provides an insightful application of Kurth's ideas when analyzing chromatic music.

A more detailed interpretation of this issue appears in an article by Geoffrey Chew (1983). While discussing the role of the semitone, particularly between the leading tone and the tonic, he interprets Kurth's statement about the leading-tone tension as follows:

> Tension increases *to* the leading note and is released in the ascent *from* leading note to octave. And other pairs of notes separated by a semitone exhibit the same tendency: like the ascent through the leading note, but to a lesser degree, the ascent through the third degree of the major scale to the fourth generates increased tension to the third degree, and this is released *from* third to fourth. Thus the third degree of the scale, in such a (melodically determined) context, partakes to some extent of the nature of a leading note. (37, italics by author)

An intriguing feature of Chew's discussion is his observation that, although Kurth does not specify the melodic direction of the leading-tone tension, "Kurth's primary illustration of the release of tension" is an "ascending major scale" (1983, 37–38).[3] From his statement, I infer that Kurth might consider an upward motion as a more intrinsic and natural motion and a downward motion as an alteration of the upward motion. Thus, the issue of direction would be one reason why the $\hat{7}$ to $\hat{1}$ relationship is different from the $\hat{4}$-$\hat{3}$ or $\hat{6}$-$\hat{5}$ relationships, which are usually conceived as downward motions.

In addition, what makes the transformation between $\hat{7}$ and $\hat{1}$ more effective might be the harmonic context in which it is involved. In other words, this relationship often involves the V-I cadential progression which enhances the sense of tonality.

Chew continues by saying that, according to Kurth's viewpoint and the cadential theory from the seventeenth-century writers, the effect of the leading note is related to the fact that it belongs to the dominant chord. More interestingly, Chew supports Kurth's idea about the primacy of the leading tone (42); the leading tone effect is not caused by its belonging to the

[3] It is also interesting that Chew compares Kurth's emphasis on an ascending motion to Schenker's notion of descending motion as release of the tension as seen in the fundamental line (*Urlinie*). For more details, see Chew (1983, 37).

dominant, but rather the opposite (see Figure 3.2). He states, "The model cadences that theorists of this period offer invariably include a $\hat{T}$–$\hat{L}$–$\hat{T}$ [tonic-leading tone-tonic] motion: they often, but not invariably, include a $\hat{3}$– $\hat{2}$– $\hat{1}$ motion; and they sometimes include a I-V-I motion (necessarily only in association with the 4–3 suspension)." That is, whereas leading tone to tonic motion is inevitably required in the cadence, other progressions are not necessary but optional. Chew concludes that this explanation strongly supports Kurth's idea: "$\hat{T}$–$\hat{L}$– $\hat{T}$ is the structure that governs and generates the bass arpeggiation" (42).

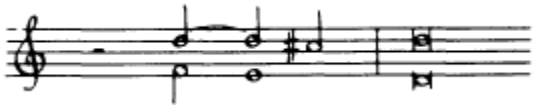


Figure 3.2. *The model of a cadence (cadenza composta) by seventeenth-century writers (Chew 1983, 42, Example 7)*

To buttress his claim for the primacy of the melodic leading-tone progression over the dominant-tonic harmonic relationships, Chew appeals to historical context: 1) In sixteenth-century music, the leading notes involving the suspension take fundamental theoretical importance; 2) In early twentieth-century music, the semitonal progression does not necessarily involve I–V–I motion; and 3) In a period of major-minor tonality, even though "it is generally difficult to differentiate the roles of I-V-I and $\hat{T}$–$\hat{L}$–$\hat{T}$ structures directly in tonal music, since the two structures almost invariably occur in conjunction with one another," as seen in the V in a minor key, "V with a major third is required for the cadence precisely because $\hat{L}$ determines V and not *vice versa*" (42).

Chew's approach to the difference between $\hat{7}$–$\hat{1}$ motion and other semitones, in terms of harmony, is also useful for my discussion. He deals with the questions of other semitones since,

as he notes, "Kurth extends the notion of a 'leading note' to notes which descend a semitone to their goals." Regarding $\hat{4}$–$\hat{3}$ motion, he notes, persuasively, that "[the] $\hat{3}$–$\hat{4}$–$\hat{3}$ progression does not obey the laws of note-against-note strict counterpoint, since scale degree 4 is not supported by a consonance" (43). That is, $\hat{4}$–$\hat{3}$ motion produces the interval of a seventh from a bass unlike $\hat{7}$–$\hat{1}$ motion which produces a consonant interval with a bass. In this way, Chew distinguishes the $\hat{1}$–$\hat{7}$–$\hat{1}$ progression from other progressions, using the term "fundamental $\hat{T}$–$\hat{L}$–$\hat{T}$ leading-note progression."

Of course, as he mentions, scale degree 4 might be able to receive consonant support in the case of the plagal cadence. But the progression from IV to I is usually regarded as having a cadential (or more often post-cadential) effect that is not as strong as that of a perfect cadence. Daniel Harrison (1994) attributes the weaker effect of the subdominant to "a kind of historical oppression of Subdominant function." Harrison states:

> Briefly put, the exploitation in much tonal music of what has been called the *Tonic-Dominant axis* has discouraged the solid theoretical formation as well as the compositional use of an independent Subdominant function enjoying the same prerogatives as the Dominant. In its place is commonly installed a syntactic something called predominant or dominant preparation. In this regime, $\hat{4}$ (and the function it expresses) is moved below the salt, as it were, and heard as hierarchically weaker than $\hat{1}$ and $\hat{5}$. (48–49)

This discussion also sheds light on cases where a downward leading tone occurs together with an upward one (for instance, in the progression of V7–I or VII7–I). In the excerpt from the Nocturne in B♭ Minor, Op. 9, No. 1 (Chapter 1, Example 1.2), there is $\hat{4}$–$\hat{3}$ semitonal motion as well as $\hat{7}$–$\hat{1}$ motion since the second chord is the V7. However, in this case, as Harrison notices in general, the strong dominant function almost absorbs $\hat{4}$ in its function (49). In this sense, Anderson's statement, "even if the upward leading tone cannot be taken as necessarily being a

tonic indicator at the earliest stages of its use, there can be no doubt that it ultimately acquired this characteristic," seems proper, supporting Harrison's historical evidence.

Other semitones, such as the ones between $\hat{3}$ and $\hat{2}$, and $\hat{6}$ and $\hat{5}$ in the minor keys, can be explained by difference in their harmonic context as well, since these semitones often function in the context of moving to V. In addition, Chew accounts for them as having a descending character in the fundamental structure (1983, 43–44).

So far I have examined the elements of what makes upward leading-tone motion from $\hat{7}$ unique in terms of melodic direction and harmonic context. Before closing this section, I would like to touch on Kurth's view on chromaticism, which is relevant to the discussion here. Kurth seems to perceive as distinct the nature of a chromatic event which causes tonal disruption, when he states that intentional, upward semitonal motion on other scale-degrees produces stronger effects than it does on the seventh degree.[4] Chew clarifies:

> Incidentally, a paradox is suggested by Kurth's remark that the tension of the diatonic leading note is weaker than that of chromatically altered notes. On the one hand, the tension of the fundamental $\hat{T}$–$\hat{L}$–$\hat{T}$ progression must be stronger, in a tonal sense, than any localized tensions, if its dissipation is to create a sense of formal completion; on the other hand, non-diatonic leading-note progressions, whether of the $\hat{T}$–$\hat{L}$–$\hat{T}$ pattern or not, may justifiably be thought to be stronger, in an anti-tonal, disruptive sense, than any diatonic pattern. (45)

[4] See Kurth's *Grundlagen des linearen Kontrapunkts: Bachs melodische Polyphonie* (1948, 50): "leading note is not restricted only to the usual position tending toward the goal of the octave of the tonic in an ascending scale. In every chromatic alteration, the same effect is transferred to the other notes within the course of the melody; further leading notes are created, directed (whether upwards or downwards) towards scale degrees other than the tonic. . . . But one experiences the leading-note effect in these contexts the more strongly where originally, in the blandest and most hackneyed form of the scale, no semitone occur; for this reason, every chromatically altered note has an effect even stronger than the chromatic tension of the leading note in its normal position, in the seventh degree rising to the octave of the tonic." Translated in Chew (1983, 45).

This interpretation supports the idea that a leading-tone modulation, as a representative example of non-diatonic leading note progression, could produce tonal disorientation. Although leading-tone modulation includes a diatonic motion from a leading tone to a tonic, albeit a temporary one, it is striking because the leading tone is transformed from the tonic of the preceding chord. Even though the transformation occurs on the same note, it gives an impression of "chromatically altered note" due to a sudden interpolation of the leading tone of the new key. McCreless also notices the destructive power of the leading tone, stating "in Kurth's evolutionary historical view, the leading tone was the 'seed of destruction' embedded within the tonal system, so that its use beyond the traditional diatonic constraints became the primary factor in the chromaticization and eventual demise of the system" (1983, 59); and "in an extraordinary imaginative interpretation of stylistic change, he theorizes that just as the Classical style is, for him, based fundamentally on the consonant triad, so is the Romantic style based on the melodic 'tension' of the leading tone—its tendency to break bonds of chordal constraints" (71). Thus, we might say that Chopin's leading-tone modulation shows tonal disruption through an instant alteration from stableness of the tonic to tension of the leading tone on the same note in a local context, even though the tonal sense is restored later by a large-scale diatonic progression, but also that usages like Chopin's contributed to an ongoing experimentation with tonality that would continue into the next generations of composers.

The examples of leading-tone modulation in earlier chapters have already illustrated the composer's preference for the upward leading tone, since the motion from the leading tone has more natural and stronger directional energy going to a tone a semitone apart, which leads to

establishing a new tonal center.[5] More investigation is needed to discover whether Chopin works with a particular theoretical background in mind or not; he might have acquired knowledge on the characteristics of each scale-degree as a part of his musical training, or he might have just assumed that the upward leading tone is categorically different from the downward leading-tone according to his empirical observation, then mastered the preferred technique. In either case, we can infer that he clearly recognized features according to the different types of semitones and made use of them in a way that is the best suited to each work.

This also explains why I use the term "leading-tone modulation" for just one type of semitonal modulation involving scale-degree transformation between $\hat{1}$ and $\hat{7}$. Strictly speaking, a "leading-tone motion" may include both upward and downward semitonal motions. However, I limit the term to the upward motion involved with transformation between a leading-tone and a tonic, in order to emphasize the special quality of the progression; I use the term "semitonal modulation" for other cases, to which I will devote the following section.

3.2. Scale-Degree Transformation between $\flat\hat{6}$ and $\hat{5}$

In the previous section, I discussed the special effect of the leading tone and Chopin's inclination towards using leading-tone modulation. Now I would like to return to Chopin's practice of enharmonic modulation/leading-tone modulation pairing, since it will become a good starting point to discuss other types of scale-degree transformation. Chopin frequently pairs leading-tone

[5] See Dineen (1987) for the discussion of an opposite case where a leading tone does not proceed to the tonic. Dineen states that, according to Schoenberg's concept of neutralization, "a chromatic pitch and its diatonic counterpart are separated by an adjacent 'neutral' pitch" (13), and when a chromatically raised pitch does not ascend to a note above but takes a direction down, it signals moving to a different key area.

modulation with enharmonic modulation in order to move to another key or to get back to an original key. It seems that Chopin most often uses leading-tone modulation to a key by a half step up, whereas, to attain a key a half step down, it is common for him to use enharmonic modulation.

In particular, enharmonic modulation using the augmented sixth, based on a scale-degree transformation between $\flat\hat{6}$ and $\hat{5}$, is a strategy frequently used by Chopin. Prior to Chopin, it had long been common for composers to use the augmented sixth as a juncture of modulation, but in the nineteenth century, composers employ this strategy to an extent that pushes the limits of the tonality, and we can say that Chopin is one of the composers who cleared the way for more extended uses of this chord. In his book *A Chord in Time*, Mark Ellis (2010) begins the chapter titled "Triumph and Ambiguity," which deals with the use of the augmented sixth in the early nineteenth century, as follows: "The augmented sixth was reinvigorated in the first half of the nineteenth century; new facets were discovered as composers probed 'the fringe of tonality'" (183). He continues, pointing out a special usage of the augmented sixth in nineteenth-century music:

> However, by far the most important Romantic development was the exploration of the ambiguous resolution, which almost became a hallmark of music in the 1840s. Sometimes the ambiguity would be expressed as *an augmented sixth resolved as though a dominant seventh*, but more commonly, it was the reverse: *a dominant seventh resolved as though an augmented sixth*. (Ellis 2010, 183, italics mine)

Ellis's statement here effectively describes two common ways to create ambiguity in music. A good example illustrating harmonic ambiguity caused by the augmented sixth is found in his discussion of Schubert, which includes the following harmonic outline of "Pause" from *Die schöne Müllerin* (Figure 3.3). As this example shows, the alteration of a dominant seventh chord

to an augmented sixth causes the semitonal shift of the key. Ellis interprets the dominant seventh chord on G♭ in C♭ major (m. 65) as changing to the German sixth by means of enharmonic F♭/E♮. This chord prompts to return the music to B♭ major.

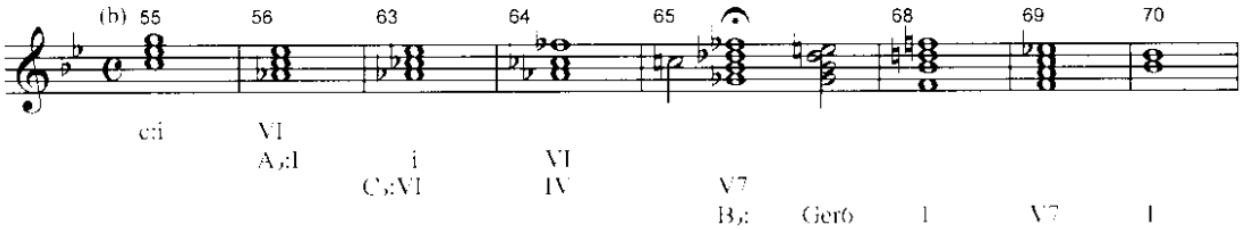


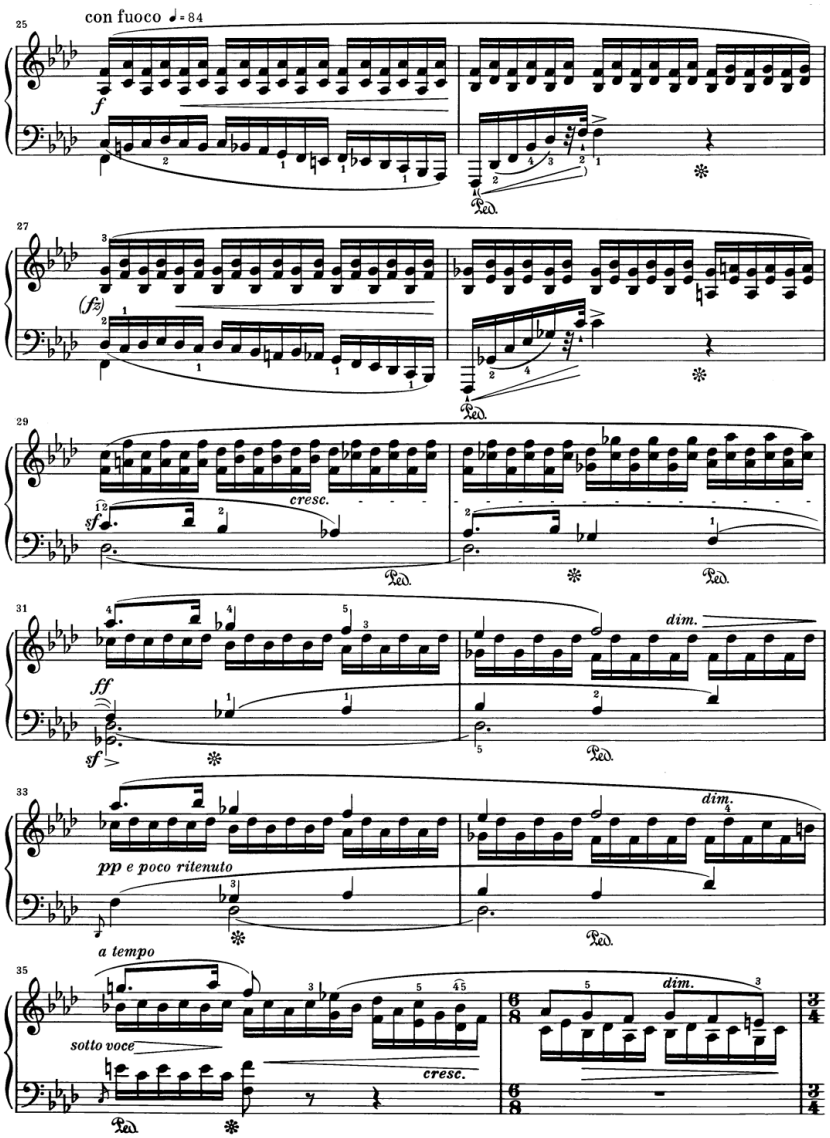
Figure 3.3. *Harmonic outline of "Pause," mm. 55–69 (Ellis 2010, 196, Example 8.9b)*

As seen in this example, a reinterpretation of this kind usually involves a tonal shift between keys a semitone apart (in this case, C♭ major and B♭ major), and, on this point, I think it is useful to look at similar examples in the Chopin repertory. Here I will present some of Chopin's uses of the augmented sixth that range from those analogous to other composers' practices to those opening up new possibilities. For instance, Example 3.1a is from the middle section of the Nocturne in F Major, Op. 15, No.1. It shows an approach to the key a semitone apart similar to that in the Schubert example above, using the augmented sixth. The middle section begins in F minor and proceeds to G♭ major through sequential motion from m. 29. Example 3.1b summarizes the harmonic progression of the passage. As Oswald Jonas states in the *Introduction to the Theory of Heinrich Schenker*, the F-G-A♮ in the beginning of the middle section (mm. 25–28) is connected from the opening section (mm. 1–24).[6] In this case, Chopin does not directly modulate to the key a semitone above, but rather leads the music to the

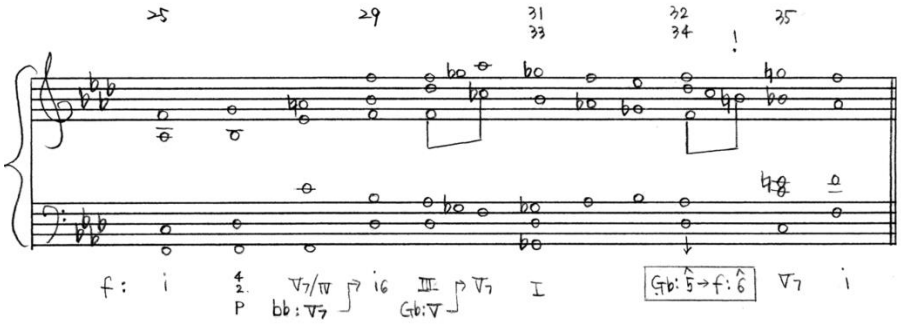
[6] Jonas uses this piece to illustrate "linkage technique." See Example 13 from Jonas ([1934] 2005, 10).

subdominant key through a secondary dominant in mm. 28–29, and then moves again to G♭ major, the submediant of the B♭ minor.

Then, retrospectively, this G♭ major is interpreted as Neapolitan since the passage proceeds to the V of F minor at m. 35. In this procedure, B♮, the last note of m. 34 plays a crucial role since the augmented sixth from the bass note D♭, $\hat{5}$ in G♭ major, is transformed into $\flat\hat{6}$ in F minor.



Example 3.1a. *Chopin, Nocturne in F Major, Op. 15, No.1, middle section*



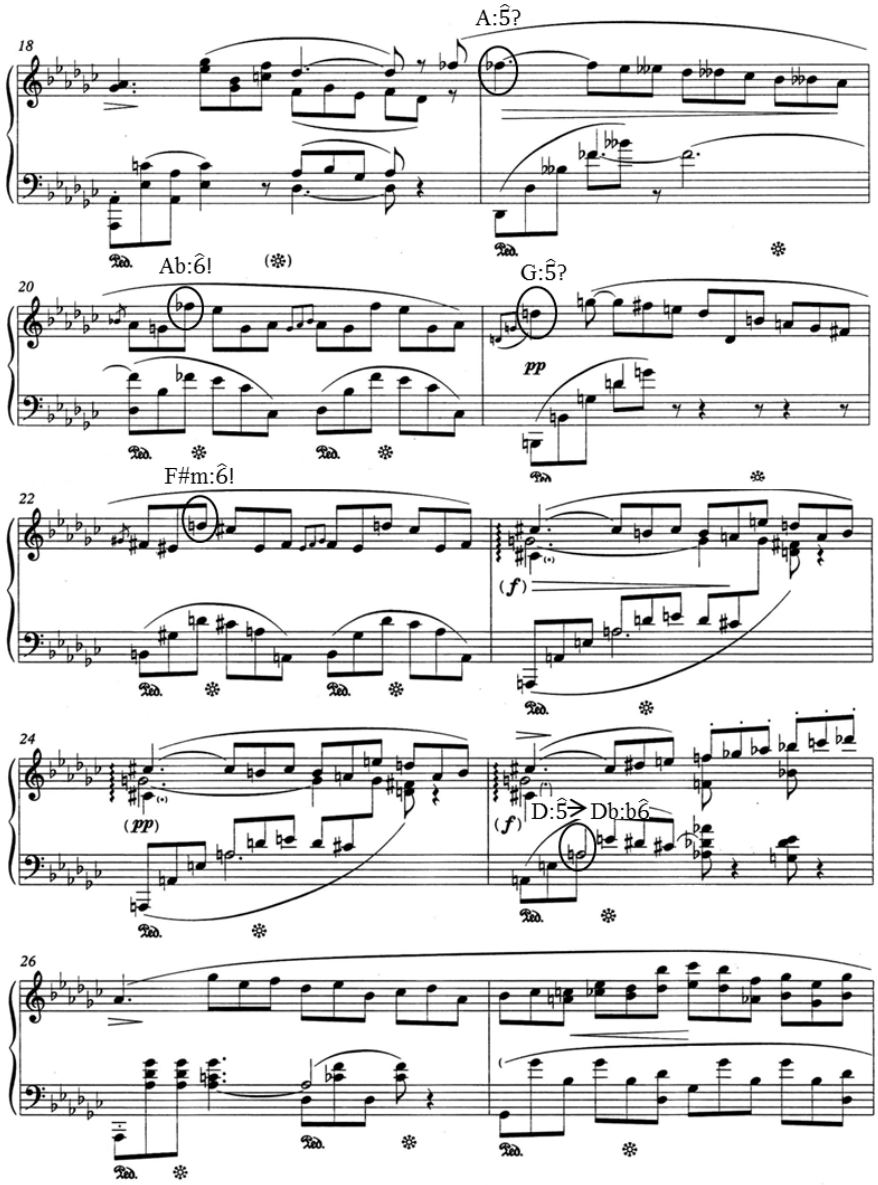
Example 3.1b. *Chopin, Nocturne in F Major, Op. 15, No. 1: Harmonic outline of mm. 25–36*

A similar but slightly modified technique is found in the Impromptu in G♭ Major, Op. 51. As is typical of Chopin's handling of the impromptu genre, this entire piece is in ternary form. However, the construction of the first section is what Rothstein calls a "quatrain" form, A-A-B-A.[7] The main theme consists of an eight-measure phrase, comprising mm. 3–10. When the phrase is repeated in mm. 11–18, the Impromptu introduces new figuration, and a few changes to accommodate the additional inner voice, but these measures have the same harmonic structure as measures 3–10. Both phrases modulate to the dominant, D♭ major. Therefore we can label first two identical passages as A A.

However, the next passage from m. 19 proceeds differently (Example 3.2). What follows right after the cadence of D♭ major is the triad on B𝄫, heard over the sustained bass note D♭ from the previous measure. Because of the arpeggio and scalar texture of m. 19, this measure might be heard in the tonal area of A major. The first, long-valued note in the upper part of m. 19 then becomes $\hat{5}$ of the A-major triad although this note is notated as F♭. Chopin, however, thwarts the expectation of listeners by immediately moving to A♭ minor in the next measure. At

[7] Rothstein defines a *quatrain* as "a two-period form in four phrases, using the thematic pattern A A B A" (see his 1989 book *Phrase Rhythm in Tonal Music*, 107–8).

m. 20, the F♭ turns out to be $\hat{6}$, proceeding to E♭. In other words, for one fleeting moment, we may heard a scale-degree transformation between $\hat{5}$ and $\hat{6}$.



Example 3.2. *Chopin, Impromptu in G♭ Major, Op. 51, mm. 19–27*

The same two-measure structure appears a whole step lower in mm. 21–22. This time the D in the upper part of m. 21 appears to be $\hat{5}$ of G-major triad, but turns out to be $\hat{6}$ of F♯ minor. Thus far the unit of the sequence is two measures; but the next one involving a similar

transformation is longer, a four-measure unit. From m. 23, the key of D major is established by repeating a V–I progression. But the A, the dominant of D major, is treated enharmonically as ♭$\hat{6}$ of D♭ major, at m. 25, and this German sixth chord proceeds to a perfect cadence in D♭ major. Somewhat curiously, at the end of this passage, in m. 26, Chopin uses the same kind of lead-in that he had used before in m. 10. But this time, on arriving at the tonic of D♭ major, C♭ is added to the chord, which signals the change of function of the chord as it proceeds to the tonic of the original key, G♭ major. It is unusual for Chopin to use the same cadential idea for both the B and A sections in this quatrain forms. For the last A section, starting at m. 27, Chopin introduces a phrase expansion so that the section can close in the home key.

As seen in Example 3.2, this section comprises a continuous downward semitonal shift, as Chopin uses scale-degree transformation between $\hat{5}$ and $\hat{6}$. Although other scale degree transformations are present, such as a transformation between $\hat{1}$ and $\hat{2}$, I call this a $\hat{5}$-$\hat{6}$ transformation because I hear this as the most salient scale-degree transformation in the texture (highlighted by the long tones in the upper voice).

Another example in this category is from the Rondo in E♭ major, Op. 16. This Rondo includes an extraordinary introduction that begins in C minor and prepares the beginning of the Rondo in E♭ major. Colorful and virtuosic passage work appears complicated on the surface, but the basic harmonic motion proves to be mostly a prolongation of the dominant of E♭ major, through chromatic ascending motion to D♭ and descending back to B♭ (mm. 23–51).

Of particular importance for my purposes is how the bass reaches the dominant B♭ from the beginning of the introduction. The introduction starts in C minor, the relative key of E♭ major. Whereas the opening phrase, mm. 1–8, expresses a typical sentence structure (typical, that is, except for its use of a plagal IV-I ending instead of an authentic or half cadence), the next phrase

takes an unusual path. After the presentation and repetition of the motive, or basic idea, in B♭ minor, the phrase is interrupted; an unexpected *agitato* passage, based on a C♭-major harmony, follows, beginning in m. 13. Although the harmony at this point is not complicated, the tonality of the passage is unclear since the passage is simply grounded on a C♭-major triad, and there is no clear-cut presentation of the dominant harmony of C♭ major. Even the melody in the right-hand part, beginning in m. 15, is essentially formed of scalar motion, showing, to some extent, the characteristics of an improvisation.

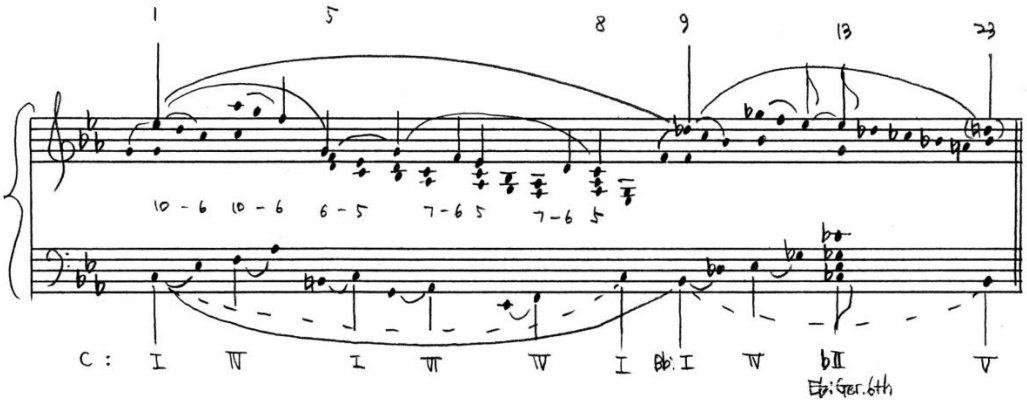


Figure 3.4. *Voice-leading graph of the Rondo in E♭ major, Op. 16, introduction*

As Figure 3.4 illustrates, I consider that the E♭ in the top voice of the first measure goes to the D♭ in m. 9 as the bass moves from the C to the B♭. Then, the second E♭ in m. 13 is supported by C♭ major, the Neapolitan of the B♭ minor key that precedes it; but ultimately, C♭ turns out to function as $\flat\hat{6}$, the bass of the augmented sixth, proceeding to B♭ in the *più mosso* section. Here Chopin gives the C♭ such emphasis that listeners might recognize it as a new tonic. But as mentioned, this C♭ then changes its function to the $\flat\hat{6}$; the remaining chord members of the German sixth appear more indirectly by means of the abrupt registral change and rapid scalar motion in m. 22 that follows the introduction of the augmented-sixth interval, A♮ over C♭ in m.

21. Finally, the B♭-major triad, the dominant of the E♭ major, arrives at m. 23. As the next figure suggests, there might be another way to interpret the relations among bass motions. Whereas my graphs (Figure 3.4) indicates the C and the C♭ as neighboring motions to B♭, as shown in Figure 3.5a, the alternative reading, which reads the overall bass motion as C-C♭-B♭ as in Figure 3.5b, is also possible.

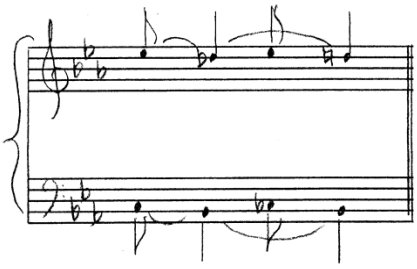
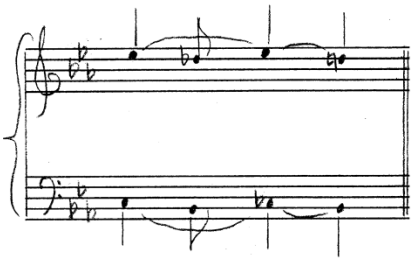


Figure 3.5a. *Overall progression of Op. 16, Introduction*



3.5 b. *Alternative reading of Op. 16, Introduction*

On the other hand, there are examples that demonstrate Chopin's manner of semitonal changes of key that are less direct, more implied. The Mazurka in B Minor, Op. 33, No. 4 (from 1837/38), would be a case in point. Here the extended use of the Neapolitan chord is reminiscent of that in B-Minor Prelude discussed in the previous chapter. What draws our attention first is a distinctive phrase structure; the first part is a tonally closed four-measure unit, but the second part is expanded to eight measures which moves to F♯ minor and ends in the dominant of the original key at m. 12. When this twelve-measure phrase is repeated in mm. 13–24, the music moves to C major. Since it is a modulation from a minor to a major key, tonal disorientation is not strong. Still, C major is well-established as a key in the middle of phrase, since the V–I progression of C major is repeated for several measures.

In *Free Composition*, Schenker mentions this Mazurka when he discusses how the Phrygian $\hat{2}$ is used diatonically and corrected later: "The special effect of this whole Mazurka

depends upon the following fact: that the tension of ♮$\hat{2}$ persists until the last measure, where the diatonic ♯$\hat{2}$ finally appears" (1979, 71). As seen in Figure 3.6 (*Free Composition*, Fig. 74,2), ♮$\hat{2}$ in B minor, which appears in the early stage of the work, provides momentum, which leads toward ♯$\hat{2}$ at the last moment.

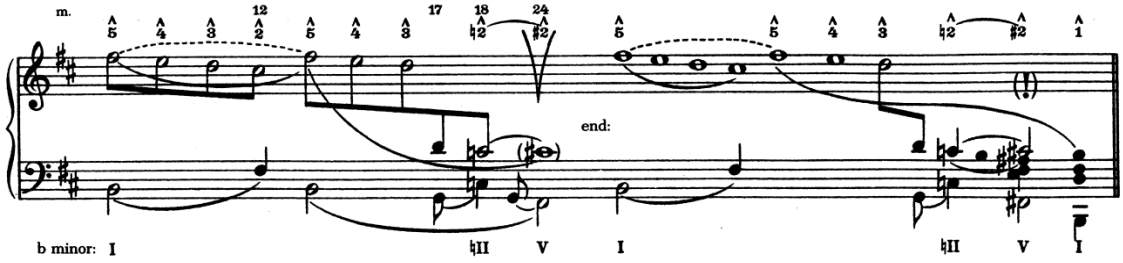


Figure 3.6. *Schenker's graph of the Mazurka, Op. 33, No. 4 (*Free Composition, *Fig. 74,2)*

Because this Mazurka relates directly to my topic, it is worth addressing in more detail the way in which ♮$\hat{2}$ is first presented and later recedes. After the C-major tonality is established from m. 17, the music returns to B minor in m. 25. It is only two notes in unison (at mm. 23–24) which prompt the tonal change: G, $\hat{5}$ in C major, changes to $\hat{6}$ in B minor, which proceeds to F♯. As Schenker's graph demonstrates, the rectified $\hat{2}$, C♯, is left unstated; so is the third of the dominant chord (A♯). That is, Chopin facilitates the change of key by a half step using notes that are only implied. Still, on hearing the F♯, the scale-degree transformation between $\hat{5}$ and $\hat{6}$ occurs in the listener's mind on the previous note G. Though it is just a semitonal motion in the bass, experienced listeners would catch the delicate alteration of tonality surrounding these notes. The low register and a *diminuendo* marking promote the change at that moment. This example shows that, among diverse ways to use the scale-degree transformation between $\hat{5}$ and $\hat{6}$, Chopin opts for something highly individual, by using only one member of the chord and emphasizing

the note involved in the scale-degree transformation while just implying the other members of the chords. The fact that a scale-degree transformation is isolated to this extent suggests strongly the importance of the scale-degree reinterpretation, which functions here to link two keys a semitone apart, in Chopin's music generally.

This mazurka also includes a semitonal shift from B minor in the first section to B♭ major of the second section. Joyce Yip (2010) provides a detailed voice-leading analysis in her dissertation,[8] and she writes regarding the moment of the modulation to B♭ major:

> At bar 48, Chopin rewrites F♯ as G♭, leaving the section tonally open in a new way. G♭ will now become the upper neighbor to F♮, which functions as the enharmonic dominant to the ensuing Section B1 in B♭ major (♭I). The G♭-F♮ neighbor motive will then dominate the upper voice throughout Section B1. At the chromatic voice exchange in bars 62–64, G♭ turns back to F♯; Chopin therefore changes F♯ to G♭ to get into Section B1, and reverses the process to get out of the section. (131)

Here Yip traces a scale-degree transformation between $\hat{6}$-$\hat{5}$, although she does not use this term. Also notable is that in the second round Chopin employs the transformation twice in a row; not only G changes from $\hat{5}$ in C major to $\hat{6}$ in B minor but also G♭ (=F♯) changes from $\hat{5}$ in B minor to $\hat{6}$ in B♭ major.

Yip deals with Chopin's manipulation of these notes as a predominant neighbor motive of the piece, related to the C-C♯ idea.[9] I will not repeat the details of the motivic elements here, but should perhaps say a word about the last moment of the piece, if only to prepare the discussion of our next example. The expanded phrase based on C major is repeated several times in this Mazurka, but C♯ supported by the dominant is not marked until the last moment of the

[8] See Yip 2010, 130–34; also Example 6-6, 271–75. For the semitonal shift between B minor and B♭ major, see Samson 1985, 117, Example 31 as well.

[9] Yip states that "this distinctive ending captures the essence of the mazurka by prolonging the tension of the C♯-C♮ and pairing it with G, the neighbor note from the F♯-G-F♯ motive that organized so much activity in the top voice" (2010, 134).

piece. The C-major phrase is expanded even more, right before the ending of the piece.[10] Alternation of the two notes, G and C, with a diminuendo marking, appears to signal that the music might be ready to end in C major. However, in the second to last measure, the composer confirms the position of C as ♮$\hat{2}$, rectifying it with the real $\hat{2}$, C♯, as if the piece is called back to reality.

This kind of abrupt return to the home key leads us to the Nocturne in G Minor Op. 15, No. 3, whose highly unusual ending may be considered a more extreme case of such a last-minute return. This Nocturne consists of two parts, which is unusual for the genre, compared to the typical three-part construction. The first part of the Nocturne is in G minor. The second part then proceeds to F major via the transitional section in F♯ major. In this work, Chopin demonstrates a semitonal shift only with $\hat{5}$-$\hat{6}$ transformation, without an enharmonic chord. I think that the Mazurka in B Minor and the Nocturne in G Minor have in common the active exploration of a semitonal relationship in tonal design expressed through a dramatic reduction in texture right at the moment of modulation. The Nocturne in G Minor deserves a closer analysis with respect to my topic of semitonal relationships, the details of which I turn to in the following section.

[10] Burkhart's term "concluding expansion," would also apply to this work. In a 1997 article, Burkhart discusses phrase expansion as an "element of [Chopin's] style," stating that Chopin often employs "the phrase that concludes the main body of the composition (or a large closed section of a composition) [as] an expanded form of a phrase stated earlier (sometimes the one just preceding, sometimes an earlier one)" (97). Joyce Yip (2010) also notices the irregular phrase expansion in C major, saying that "instead of prolonging the cadential dominant, the Mazurka in B Minor, Op. 33/4 stands on the Phrygian II in bars 185–99 before a perfect authentic cadence arrives at bar 200, forming a similar expansion [to those of other mazurkas] but with a more remote underlying harmony" (128).

Nocturne in G Minor, Op. 15, No. 3

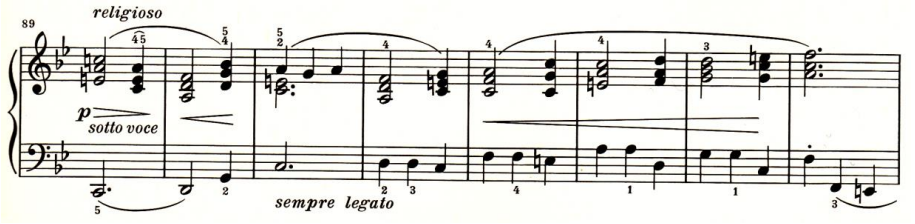
Diatonic modality in the F-major section

In discussing this Nocturne in G Minor, I think the F-major section from m. 89 would be a good place to begin. This Nocturne contains a number of peculiar elements,[11] and above all, I think that the second half, the chorale section, is the most interesting section of the Nocturne from the point of view of tonal analysis; its main key, F major, is remote from G minor, a ♮VII. The diatonic writing of this F-major section will also provide a useful point of comparison with the chromaticism of the large-scale semitonal motion, G-F♯-F, through which the section is approached.

The construction of this F-major section is novel, in how it raises expectations of resolution. Even before listeners are surprised by the remote key ♮VII, it blurs tonal boundaries. It starts on $\hat{5}$, but not as the dominant—rather as the mediant in first inversion, which moves to VI at m. 90 (Example 3.3). Through the circle of fifths, the bass reaches $\hat{5}$ again at m. 91, but III6 falls on the strong beat once again, and the dominant appears on the second beat. Even here, the top voice moves from A to G and back up to A, so this dominant sounds just as much like a neighboring chord. VI comes on the downbeat of m. 92, passes through the tonic and the mediant, before reappearing at m. 94. Finally, at the end of the phrase, the melody goes up to the F to produce a II-V-I cadence. Although a cadence arrives, the way in which the bass deviates from the tonic at m. 96 still leaves room for a more satisfactory motion. As a result of these harmonic

[11] In his article "The Rhetoric of Genre: Chopin's Nocturne in G Minor," Kallberg (1988) describes it as being "idiosyncratic," "unorthodox," and "extraordinary." He points out that this Nocturne is unusual in all respects—melodies, accompaniment, rhythmic stress, large-scale tonal plan, and formal design—while exploring the associations indicating the genre of the mazurka and the chorale as well as the nocturne: "The generic ambiguity that results from the elastic play of expectation of the nocturne, mazurka, and chorale is integral to the meaning of the piece" (252).

choices, this passage emphasizes the minor triads on D and A, which express modal elements. Modality in this section would help evoke the religious atmosphere which Chopin specifies through the indication *religioso* at the beginning of the section. As Kallberg (1988) points out, "The choice of key, the unadorned melodic style, the lack of dissonance, the imitation of organ swells and diminuendi, and the 'modal' sound—all of these are textbook features of the archaic style" (246).

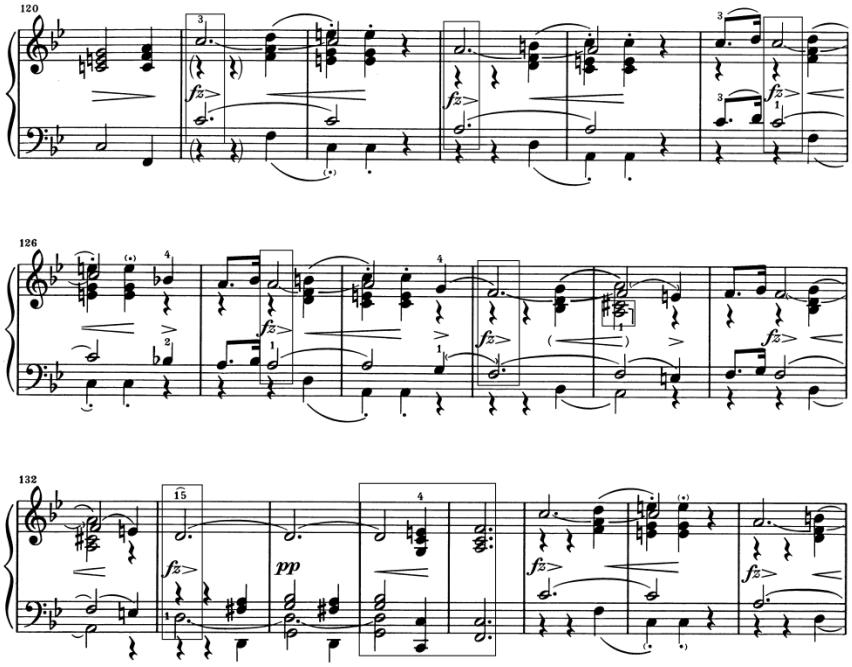


Example 3.3. *Chopin, Nocturne in G Minor, Op. 15, No. 3, F-major section, mm. 89–96*

The following phrase, mm. 97–104, consists of sequences—each suggesting a different tonality. The first two measures imply A minor, the second two-measure unit implies D minor, then the rest seems to express F major, though still avoiding a decisive cadence. As a result, listeners have a sense of F major tonality in general, but even this remote key is mixed with modal elements and other keys. At m. 104, with phrase overlap, the first phrase is repeated. By the end of the repetition of the passage, listeners feel release when V–I motion in F major appears twice (at mm. 117–20).

It seems that this F-major section is supposed to end here, in m. 120. When the music continues to the dominant chord again with long-valued note C at m. 121 (Example 3.4), at first it sounds like a codetta which extends and strengthens the V–I motion just heard in the cadence at m. 120. However, it soon oscillates again between the C-major chord and the A-minor chord, continuing to evoke the modal sound of the previous chorale section. Register also negates the

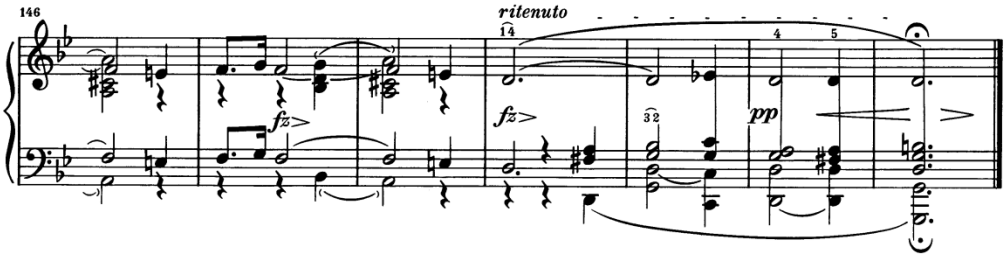
diatonic ascending motion. From m. 130, when we hear C♯, the music gives the impression it will go further and further, and it makes a cadence in D minor (m. 133), but moves back to F major (m. 136). Even though this passage provides brief relaxation to listeners by showing the perfect authentic cadence in F major at mm. 135–6, it soon departs again from the key and repeats the descending third skips C-A-F-D again from m. 137. In this way, a sense of both D minor and F major is created throughout this section. The music seems delicately poised between two keys, as if it is ready to change to either one at any moment.



Example 3.4. *Chopin, Nocturne in G Minor, F-major section, mm.120–39*

However, in the second statement of the descending third progression, after the top voice stops at D, Chopin dramatically changes the musical context of the four measures that follow. Whereas the G-minor harmony at m. 135 functions as II of F major, this very same harmony at m. 150 is treated as a new key. Then, to a listener who wonders how much farther it could go, the

passage informs him or her that this is the end of the piece (Example 3.5). The way in which Chopin ends the piece is quite unusual; the music seems to conclude in D minor but suddenly adds a few measures in G minor as if it is a kind of after-thought. Still, in terms of the progression and atmosphere, it is enough music to make the piece close. Kallberg describes this ending as a "conflict between prospective and retrospective hearing." According to him, the F-major section has a dual function in that listeners perceive it as a middle section of a ternary form but realizes its concluding role after the music ends (1988, 250).[12]



Example 3.5. *Chopin, Nocturne in G Minor, ending*

Nevertheless, throughout the chorale section, Chopin keeps the G-minor sound alive, referring to it often as a chord common to both keys, like a kind of pivot, bringing it into immediate contact with the dominant of F major as II (mm. 90 and 95) and the subdominant of D minor (mm. 100, 101, and 103). This reverses the relationships in the first section, where D minor and F (as V of III) appear within a G-minor context, which I will examine further when

[12] This "dual function" becomes clearer when we compare it to the middle section of Chopin's other G-Minor Nocturne (Op. 37, No.1). The end of the chorale-like middle section in the Op. 37, No.1 (mm. 64–65) is very similar to the ending of the Op. 15, No.3. The melody hovers around E♭, even with fermatas, as if it signals the end of the music in E♭ major. However, through the pivot chord C-minor triad between E♭ major and G minor, the music suddenly proceeds to the dominant of G minor at m. 65. That is, unlike the Nocturne, Op. 15, No. 3, the retransitional passage in this Nocturnes completes its function as a middle section.

discussing the first section. Thus Chopin has prepared the ear, albeit subtly, to accept a G-minor triad as a possible ending for the piece.

Figure 3.7 shows the overall voice leading of the F-major section. The first note C, taken from the last note of the bass in the transitional section, lingers throughout most of the section. Although the top voice ascends and descends between F4 and F5, C5 functions as the center of melodic motion. The graph shows that the first note C is prolonged up to m. 137 where the successive third skips starts. It then goes to B♭ at the very end. Although the bass begins on C, it ultimately reaches to the F at m. 93 and prolongs the tonic of the section until it moves to the G, supporting the top voice, B♭, at m. 150. At that measure, the G-minor chord functions a pivot chord between F major and G minor, and this chord directly proceeds to the V–I cadential progression.

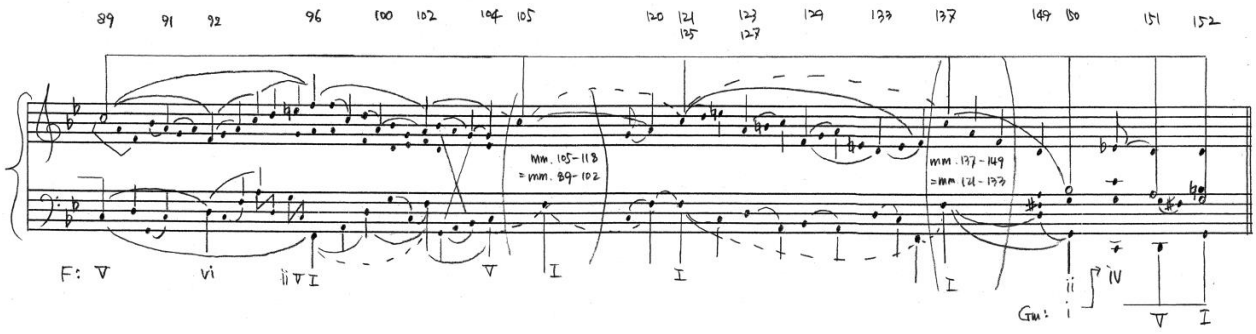


Figure 3.7.*Voice-leading graph of the Nocturne, Op. 15, No. 3, F-major section*

As for the last chord, Chopin uses not the G-minor triad, but G-major. One might argue that Chopin just utilizes the old idiom of the Picardy third by switching the expected minor tonic chord to a major chord at the end of the piece. I admit that he definitely understands, or even adopts the technique from Baroque music, as Chopin would have known well from his study of J. S. Bach, whom he so admired. However, in a manner different from the normal usage of the

Picardy third,[13] the G-major triad that ends this Nocturne does not intensify the cadential motion but rather weakens it. Moreover, while in most cases the Picardy third does not typically alter the overall character or affect of the piece, in this case the last chord subverts the whole listening procedure. If one interprets it as a type of the Picardy third, then one would have to re-define or broaden the meaning of the term "Picardy third" to something which involves not only alteration of the triadic quality but emotional or dramatic effects.[14]

When we listen to the G major at the end, it is so unexpected that it almost sounds like a wrong key.[15] It may make listeners wonder whether the real end of the piece has been reached. The last-minute return to G minor does not have the usual effect of a return to the tonic, or of closure in the tonic, and the Picardy third only reinforces that impression. It is not the home key anymore, but rather far beyond G minor.[16]

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[13] A representative definition of Picardy third is that given in *Grove Music Dictionary*, "[t]he raised third degree of the tonic chord, when it is used for the ending of a movement or composition in a minor mode in order to give the ending a greater sense of finality." Julian Rushton. "Tierce de Picardie." *Grove Music Online. Oxford Music Online*. Oxford University Press. Web. 21 Sep. 2013. http://www.oxfordmusiconline.com.proxy.lib.umich.edu/subscriber/article/grove/music/27946

[14] As seen at the end of this Nocturne, Chopin uses mixed-mode endings as a creative compositional method. These kinds of new compositional technique appear elsewhere, in such examples as the C♯-Minor Nocturne Op. 27, No, 1, F-Minor Nocturne, Op. 55, No. 1, F♯-Minor Nocturne Op. 48, No. 2, and C-Minor Mazurka, Op. 56, No. 3. I found Chopin's use of major-minor pairing interesting enough to be a topic for separate research since Chopin's pieces use major-minor dichotomy, not all in the same way, not all in the manner of "common practice," but as a site of creative invention that works itself out differently in different pieces. In addition, there is the case of the Nocturne Op. 32, No. 1, where a minor mode ending is found in a major key; it is quite rare, but nevertheless gives an interesting point to explore.

[15] The sudden return to G minor/major at the end results in an unexpected closure although it is in the home key. Kallberg (1988, 250) describes that this "abrupt quality" of the ending is caused by the brevity of the modulation, the wrenching of formal expectation, and incomplete sense of closure.

[16] We might relate this feature to narratives of the Romantic period such as transcendence or longing for an eternal world.

Still, the G-major ending seems appropriate, as we consider the sonority and atmosphere of the chorale section. In other words, it is not just the sudden or instant change of the last chord, but the cumulative effect of transformative procedures. Although the G-major chord is not used, implied, or hinted at before, except for the ending chord, this effect has built up gradually throughout the section.

In the article previously mentioned, Chopin scholar Jeffrey Kallberg (1988, 248–50) notices that this G-Minor Nocturne is not exactly in binary form, which would be a rare formal design for the genre of Nocturne, and he points to an interesting sketch of the concluding section of this Nocturne. Kallberg points out that most parts of the sketch correspond with the final published version of the Nocturne, but the last four measures show that Chopin might once have planned the piece in ternary form (see Figure 3.8) Although Kallberg's discussion about this literal *da capo* return is to support the elements of a Mazurka, the sketch itself gives valid evidence of Chopin's attempt to change the last passage on purpose. The sketch reveals that Chopin recognized how different his ending was from a conventional one for a piece of this kind, and how unusual it was.

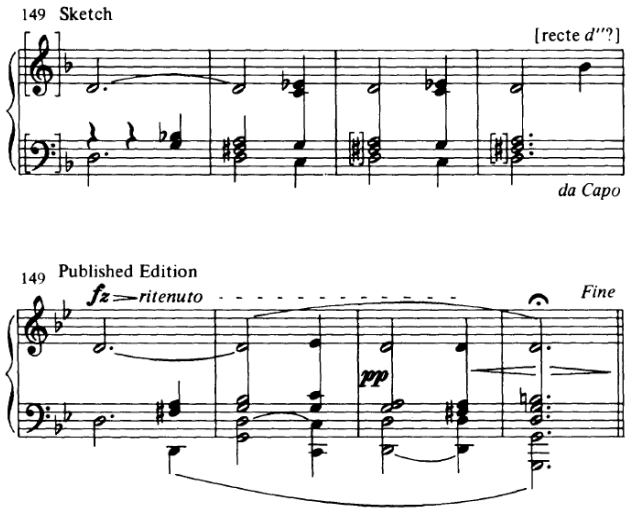


Figure 3.8. *Ending of the Nocturne, Op. 15, No. 3 (Kallberg 1988, 248)*

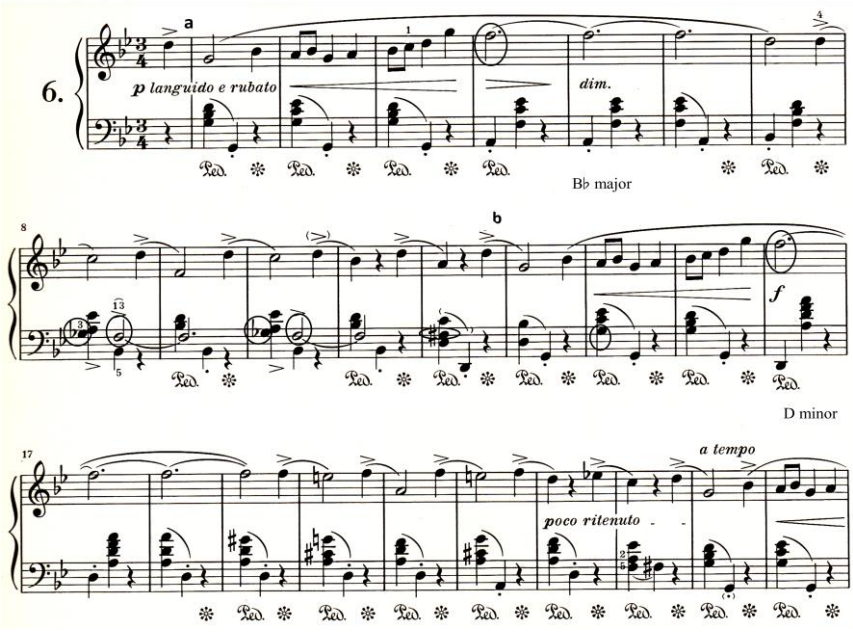
As discussed so far, Chopin not only employs a key remotely related to the home key in the second half of the Nocturne but also shows the ambiguous tonality and the careful avoidance of a conventional return and closure in G minor. In addition to these novel elements, this section leads to another question, how we could interpret this section within the entire structure of the Nocturne. In order to explore tonal continuity of this piece, I will examine the first section and transition next, as a comparison to the diatonic F-major section.

First section and Transition

As noted, the G minor - F major relationship in this Nocturne is sufficiently unusual as an overall key scheme to call attention to itself. As it turns out, by the time F major arrives in the second section, the music has already established a close relationship between the two notes G and F, setting off these two pitches in particular as a distinctive feature early in this piece. In spite of this tonal remoteness between the two main sections, each section of the Nocturne displays a close, complementary relationship to the other. The first G-minor section, measures 1–50,

consists of the four subsections (a b a' b'), as the whole progression (a b) is repeated, although with the harmony varied in the repetition of the second subsection (mm. 13–23). As Rowland mentions with regards to "irregularity and unpredictability of the phrasing" (1992, 47), each subsection begins not with a conventional four-measure phrase, but with a phrase seven measures long, since the melody sustains a long F from m. 4 to m. 6 before finally falling to D (Example 3.6). In the first phrase, the music briefly touches on B♭ major, the relative major, introducing F in the left hand as well from m. 4.

Whereas Chopin emphasizes the note F, he carefully manipulates the use of F♯ in this section. Although F♯, the leading tone of G minor and the enharmonic equivalent of the first chromatic note of the Nocturne, is present in the first section, it appears just briefly and is treated very carefully—and even in a hidden way. In the first subsection, Chopin introduces G♭ as a chord member of the secondary leading-tone seventh chord of III at m. 8. This G♭ decorates the F, which is a continually restated note in the left hand when the III is tonicized. Then, F♯ briefly appears as a chromatic passing tone in F-F♯-G motion in mm. 11–14, to return to G minor. In other words, here Chopin employs the enharmonic G♭ first as an ornament of the F and later reverses that progression to F-F♯-G.



Example 3.6. *Chopin, Nocturne in G Minor, first section*

In the second subsection of the first G-minor section, beginning at m. 13, the F5 remains as a highest note of the section as if it is sustained to be picked up later (See Figure 3.9). D minor is tonicized in this subsection, but the melody still displays the same G to F motion to approach F5 for the long note of the right-hand melody. Whereas F is the fifth of the B♭ major triad, in the first subsection, now it is the third of the D-minor triad. The reharmonization in measures 16–19 allows the F to last even longer than before (four measures rather than three), and the design of the melody that follows—the sighing note figures—allows the D-minor phrase to emphasize the F5 even more. The note F finally becomes a key area later in the piece, and we can trace the hint for how Chopin gradually develops the idea of the unusual F in time. Thus, the repetitive emphasis on the F anticipates the later F-major section.

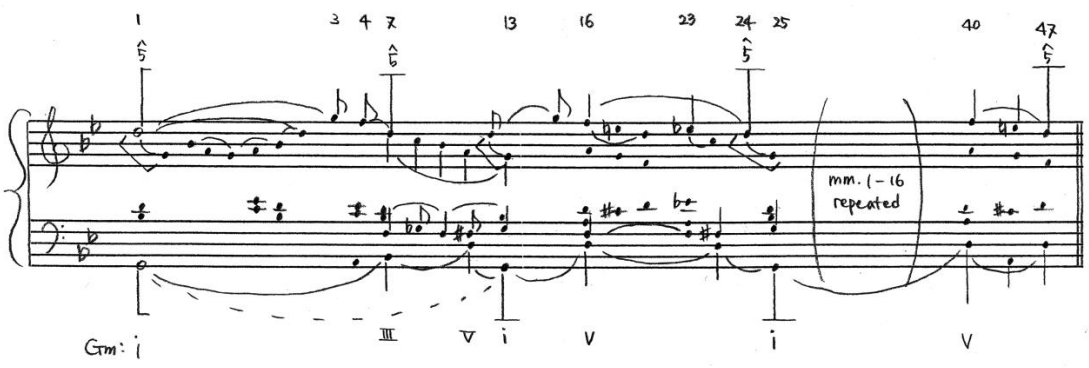


Figure 3.9. *Voice-leading graph of Op. 15, No. 3, G-minor section*

By contrast, the transitional section in mm. 51–88 between G minor and F major is based on F♯, not F, and the F♯ now appears not only as a marked melodic pitch but as a key area. This emphasis on F♯ has been carefully prepared by the chromatic lines to and from F in the previous music, as we just saw, yet its use now as a key contrasts with the use of closely related keys and harmonies in the earlier section by presenting a deeply chromatic tonal center. The highly chromatic passages in this F♯-major section also contrast sharply with diatonicism of F-major section that will follow.

It is worth tracing the path from G minor to F major. After the first G-minor section ends in D minor at m. 50, it proceeds to F♯ major through sequential motions from m. 51, reaching the cadential 6/4 chord in F♯ major at m. 63. Despite the complexity of the harmonic changes on the surface, the overall progression of the top voice in this section descends chromatically from D to G♯. As illustrated in the middleground graph in Figure 3.10, after the top voice reaches to A♯ at m. 62, it does not proceed directly to G♯ but extends the passages through the sequential motion of the semitone, registral change, and temporal change.

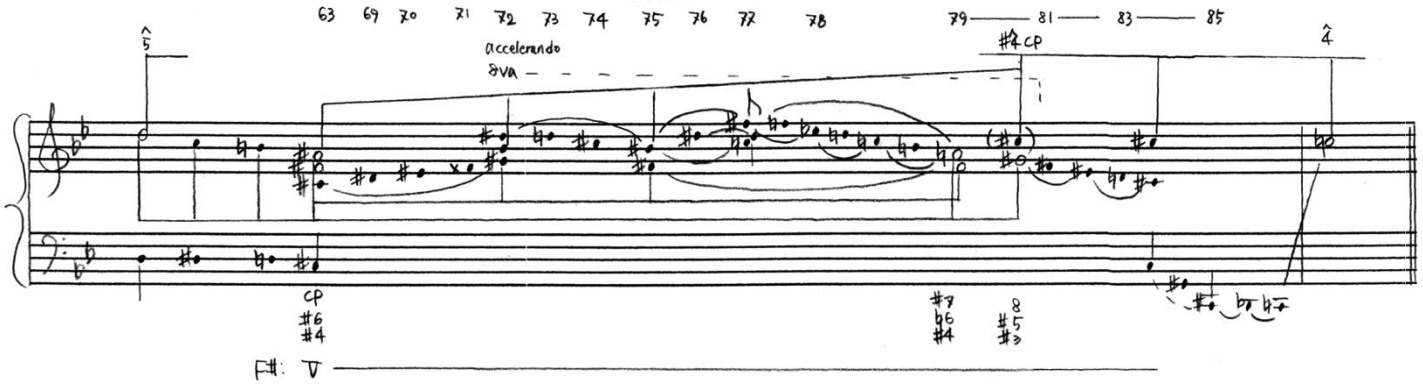
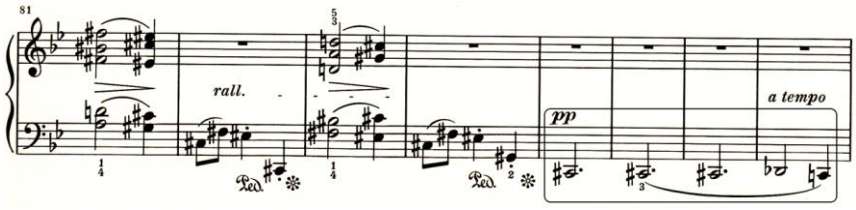


Figure 3.10. *Voice-leading graphs of Op. 15, No. 3, F♯-major section*

G♯, supported by the dominant harmony of F♯ major, first appears at m. 79, followed by ten most extraordinary measures. First, this dominant is extended to m. 87, and the process of registral descending through the combination of semitone sequence and arpeggiation of the dominant leads the G♯5 in the top voice to C♯2 in the lower register. The music slows down at the same time, as if it dissolves into the dominant harmony of the F♯ major.

However, this dominant C♯ bell at mm. 85–87 discharges its dormant energy not into a tonic entity, but into a tonal entity of a different type at m. 88. Chopin simultaneously employs a semitonal relationship and enharmonic renotation to modulate to F major, which is represented in the bass progression, C♯=D♭ → C. Even though a semitonal progression sometimes appears in other transitional passages, the one here is in some ways even more striking than in more conventional usages, since it does not involve any mediating operation and creates sudden tonal distance between C♯ and C. We could say that this tonal distance indeed makes this moment a turning point of the piece.



Example 3.7. *Chopin, Nocturne in G Minor:The last moment of the F♯-major section, mm. 81–88*

After the bells toll in the bass, the tempo resumes, and the music proceeds with the chorale-like F-major section. In the midst of the interplay between chromaticism and diatonicism within the Nocturne, Chopin incorporates the semitonal shift with the musical topic of church bell to juxtapose completely two different sections. Charles Rosen describes the last section as

"where an offstage chorus is heard softly chanting a hymn after a tolling bell has sounded," pointing to an element of Italian opera (1995, 345). Considering the calm and unworldly atmosphere of the section, Rosen's mention of the offstage chorus seems to be very evocative and persuasive.

As Rowland also suggests, the historical style of this F-major section plays an important role in some of Chopin's later pieces, such as the hymn-style middle sections in Op. 37, No.1 in G Minor and Op. 48, No.1 in C Minor (1992, 48). In spite of these stylistic similarities, the boldness of the tonal design in the early G-minor Nocturne from Op. 15 sets it apart from others.

In the discussion so far I have noted that each section of the Nocturne shows individual features but that certain elements are also closely intertwined; the G-F motive is used not only for the melody on the foreground but for the overall harmonic structure, with the insertion of an F♯-major section to bridge the motion from G to F. Although it is highly effective tonally, this unusual design G minor-F♯ major-F major challenges analysts, raising important questions about the overall tonal structure of the piece.

Figure 3.11 shows a voice-leading graph of the entire Nocturne. In spite of the ending's abruptness, as we noted in the earlier discussion, it is possible, and I think convincing, to find $\hat{3}$ and the structural dominant with $\hat{2}$ of the *Urlinie* where the Nocturne returns to and makes a cadence in G minor at the end of the piece. The overall tonal motion of first section is from G minor to D minor, and within this section, there are no points for emphasized $\hat{4}$ or $\hat{3}$. The primary tone D, which is the first and the last note of the first G-minor section, may be heard as prolonged to the beginning of the F-major section when the top voice finally moves to the C, $\hat{4}$, at m. 89. The manner in which the D is prolonged in the F♯-major section from m. 47 up to 89 is remarkable. I consider the chromatic motion D to G♯ as a motion to an inner voice which moves

to A at the moment C comes in the top voice. The lower part of the analysis illustrates the semitonal shift from C♯ (=D♭) to C♮ discussed earlier as one of the Nocturne's defining features.

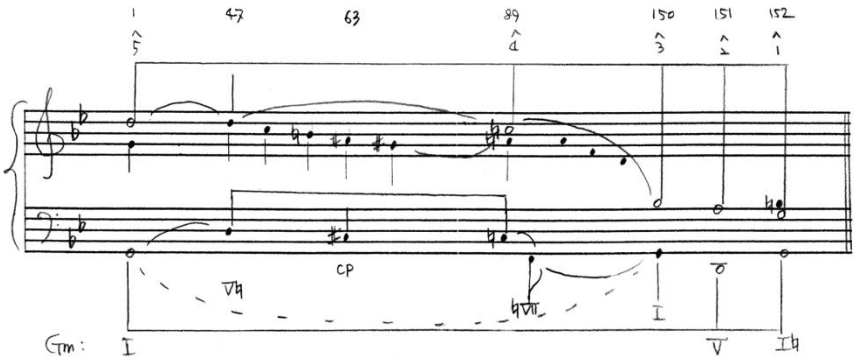


Figure 3.11. *Overall tonal structure of the Nocturne, Op. 15, No. 3*

In his article "Compatibility in Chopin's Multipartite Publications," Kallberg (1983) examines the interconnections among the Nocturnes in the Op. 15 set.[17] What merits attention from the perspective of my dissertation is his discussion of the tonal connection in multipartite opuses. As one of the representative examples, Kallberg argues how symmetrical design of keys, F major (No. 1) - F♯ major (No. 2) - G minor (No. 3), and tonal recall throughout the set support the view of Op. 15 as an integral unit. In particular, he states that the third Nocturne in G Minor "assure[s], in stunning fashion, the integrity of the opus as a whole" (400). As he noted, the two keys—F♯ major and F major—correspond with the tonics of preceding two Nocturnes. He continues:

[17] See Kallberg 1983. By examining documentary and musical evidence, Kallberg tries to show that Chopin's work in sets of two or more pieces was part of composer's purpose. To investigate the link between the numbers in a set, Kallberg looks into aspects of tonality and closure, since Chopin rarely uses any obvious thematic link. The three Nocturnes in Op. 15 were published in 1833 as a set. According to Kallberg, the documentary evidence shows that Chopin willingly allowed performances of individual numbers or movements. But I strongly agree with him that the musical structure itself is a different matter from performing practice. For the discussion of the Nocturne, Op. 15, No. 3, see 398–401.

> Either the tonal structure or the formal layout could have assured a special place for this Nocturne in Chopin's canon. But that he redoubled the individuality of the harmonic realm with a unique formal structure suggests that Chopin had a very special purpose in mind, namely to underline, with utmost clarity, the design of the opus as an artistic whole. Nothing in the G-minor Nocturne itself can adequately explain the key scheme so highlighted by the unusual form; only in terms of the preceding two Nocturnes do the chosen keys make sense. (1983, 400)

Kallberg's study thus suggests that the semitonal relationships in the third Nocturne of Op.15 not only contribute to the distinctive quality of the piece; Kallberg also considers that quality part of the piece's function within the whole set. The use of F♯ major, for instance, which is not a frequently used key, for the transitional section of the third nocturne associates with the other Nocturnes in the set. Although it is surprising how Chopin handles the F♯-major section in the G-Minor Nocturne itself, as Kallberg points out, all three Nocturnes actively employ some form of F♯ major (401); F♯ major is obviously the key of the second Nocturne, and it is the enharmonic tonic of the salient G♭-major section in the first Nocturne.

To Kallberg's useful discussion one might add that the F♯-major section in the third Nocturne implies a similarity to the second Nocturne, in F♯ major, in terms of not only the choice of the key but the musical surface itself. The melody in the F♯-major section of the third Nocturne—perhaps the most memorable, but certainly the most conventionally organized—implies the descending sixth motion A♯-C♯, which is the characteristic interval of the opening theme of the second Nocturne. And the successive descending seconds in octaves are certainly analogous to the end of middle section of the second Nocturne.[18] In this sense, we might even

[18] On the other hand, Kallberg (1988) rather links the F♯-major section to mm. 17–24 of the second Nocturne; he argues that while "the section takes on a dynamic sheen wholly unlike the passage in the F♯-Major Nocturne," it functionally corresponds to the passage in mm. 17–24 in that "it serves to lead from the main theme to the prospective 'middle section,' or chorale" (252). However, I view the F♯-major section in the third Nocturne as a more combined, compressed one of the first and the middle sections in the second Nocturne.

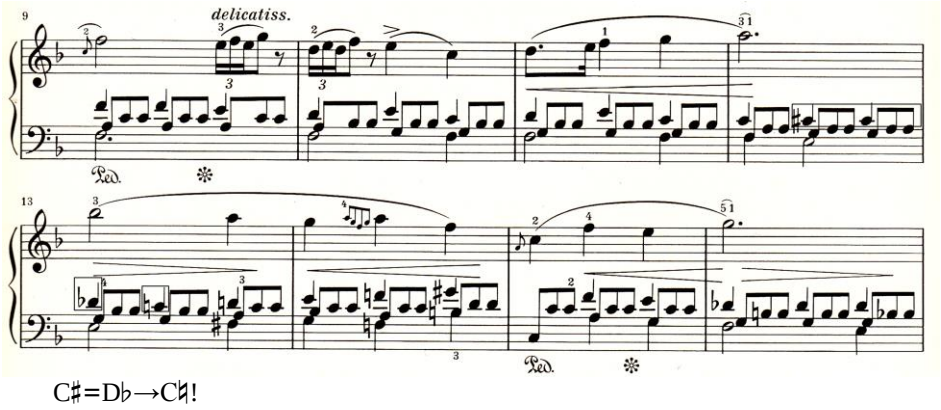
say that the F♯-major section in the G-Minor Nocturne is a kind of a condensed form of the second Nocturne.

In addition to the key associations mentioned above, there are other possible connections among the Nocturnes in the set. I will not go into this topic in depth, since it is not my main concern in this section, but I do want to mention those that relate to the semitonal motions in the first Nocturne, Op. 15, No. 1. In the left-hand progression that begins in m. 4, a semitonal progression consists of the successive chromatic motions in the tenor and the bass up to the arrival of the F on the first beat of m. 9.[19] One might say that it is just one of the typical chromatic descending progressions that Chopin often employs, like those in the Prelude in E Minor. Nevertheless, a bold, and even blatant, progression such as the one in the left hand from m. 16, suggests that Chopin intended to mark the idea of chromatic motion in this Nocturne.

The second period in the F-Major Nocturne, mm. 9–23, shows even more striking connections to other Nocturnes of the Op. 15 set. The first four measures are the same as in the first period, except for the minor decorative figures, but from the last beat of the m. 12, the music takes a different path, as seen in Example 3.8. The tenor C goes to C♯ at that measure, and it stays on that note. Listeners probably expect the C♯ to ascend to D as the V4/3 of VI resolves to VI, as happened at m. 4. Contrary to this expectation, the C♯ is held and undergoes an enharmonic change to D♭, leading to C♮ at the next measure. This moment at m. 13 is profound but mysterious. It makes listeners wonder why Chopin particularly chooses the D♭, resulting in the perhaps somewhat awkward diminished seventh chord on E; the tenor could have moved directly to the D♮ or even to the C♮. I do not believe that, after examining the semitonal motions

[19] The chromatic descending in the opening phrase leads to the unusual cadential progression at the end of the phrase. Kallberg interprets it as one of the cases of the prevalent but implied A-minor harmony throughout the set (1983, 399–400).

in the third Nocturne, it is an arbitrary choice; the C♯-D♭-C♮ motion is an exceptional, memorable point in the third Nocturne. And it suggests that Chopin may have devised the harmonic scheme for semitonal shifts throughout the set by giving the listeners delicate hints in the opening Nocturne of what will come in the final one.



Example 3.8. *Chopin, Nocturne in F Major, Op. 15, No. 1, mm. 9–16*

The second period is expanded as the last part of the second phrase is repeated in the following measures. This time the linear motion of the tenor changes to D♭-C♯-C♮ at mm. 17–18. In spite of the slight difference, it presents the same enharmonic change and the semitonal motion. Furthermore, the E♭ instead of E♮ propels the harmonic adventure, anticipating what follows later, since the surprising harmony, ♭VII7, which eventually goes to the V of F major, coincides with the large-scale harmonic progression in the third Nocturne.

I will not go further into details of the relationships among the Nocturnes in the Op. 15 set, but what I do wish to underscore is how Chopin marks the semitonal shifts enough to bind the whole set of Nocturnes together beyond their general stylistic affinities. That Chopin appears to have designed the G-Minor Nocturne with the whole set in mind shows his remarkable ability to fashion the irregular to bring it into harmony with the whole.

Polonaise, Op. 53: Blending a Leading-Tone Modulation with ♭$\hat{6}$-$\hat{5}$ Semitonal Shift

Before moving to the next chapter, I will briefly consider one further piece, a work that combines the leading-tone modulation with the ♭$\hat{6}$-$\hat{5}$ semitonal shift. There is obviously a great deal that one could explore in Chopin's Polonaise in A♭ Major, Op. 53, but I will focus on the tonal structure of the middle section in relation to the topic of this chapter. Kallberg (1985) points out the unusual nature of the central section in this Polonaise, stating that the middle section consists of "three distinct segments" (the first in mm. 81–120, the second in mm. 120–28, and the third in mm. 123–54) that display an innovative "linear thematic profusion" (271).[20] I agree with his view that these non-repeated, diverse thematic sections within the central section contribute to an increase of musical tension. Kallberg states that "by comparison with their predecessors in the genre, the irregular constructions at the centers of Opp. 44 and 53 seem designed to increase musical tension," compared to more lyrical or relatively static characteristics of middle sections in earlier polonaises.

Although Kallberg argues that the first segments presents greater stability, moving to the more unstable later two segments, I want to call attention to the ways in which semitonal shifts in the first segment achieve an overall increase in musical tension; the theme in E major consists of sixteen measures, and in the last four measures, it modulates to D♯ major. As illustrated in Figure 3.12a, Chopin employs an enharmonic modulation through an inverted French sixth chord to modulate the key a semitone below. This modulation may be heard as enharmonic because the French sixth also sounds as an inverted V7 of IV in E major with ♭5 (B♭). The D♮ and B♭ change

[20] Kallberg deals with Chopin's experiments in the middle sections of the Polonaise in A♭ Major, Op. 53, and the Polonaise in F♯ Minor, Op. 44, as a path to the Chopin's last style which is represented in the Polonaise-Fantasy, Op. 61. See Kallberg 1985, 271–72.

to C𝄪 and A♯, respectively. On the other hand, when the music returns to E major, the tonic of D♯ major changes to the leading tone of E major (Figure 3.12b).

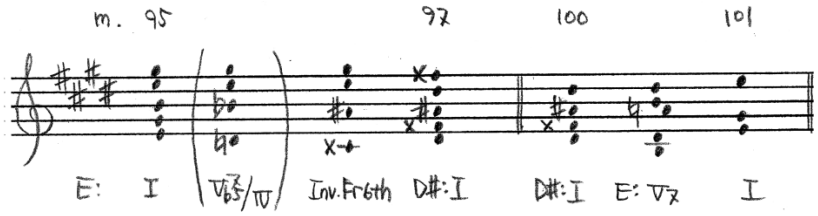


Figure 3.12a. *Polonaise, Op. 53: Enharmonic modulation* 3.12b. *Polonaise, Op. 53: Leading-tone modulation*

In addition to this enharmonic modulation / leading-tone modulation pairing, this D♯ major eventually becomes E♭ major, the V of the home key A♭ major, at the end of the first segment, and, retrospectively, the preceding key E major is an incomplete neighboring motion, ♭$\hat{6}$-$\hat{5}$, in the home key. That is, Chopin plans the tonal structure of the middle section based on a semitonal motion ♭$\hat{6}$ to $\hat{5}$. I will not go further into motivic relationships throughout the piece, but it is worth addressing that the ♭$\hat{6}$-$\hat{5}$ gesture is marked throughout the piece, such as in the beginning of the piece, the main theme in the outer sections, and even the transitional section to the return of the first section.[21] In this way, this Polonaise combines the leading-tone modulation with the ♭$\hat{6}$-$\hat{5}$ motion. Thus, it is an impressive instance where a semitonal shift involving the enharmonic modulation / leading-tone modulation pairing turns out to be a ♭$\hat{6}$-$\hat{5}$ motion on a large scale in the home key.

[21] For a discussion of the close relations between the tonal and motivic structure of the entire piece and the introduction, see Mark Joseph Spicer's dissertation (1994), Chapter 4. For instance, he states that the semitonal shift between E major and D♯ major in the middle section is derived from the F♭-E♭ motion in the beginning of the work.

3.3. Enharmonicism without Scale-Degree Transformation

Before proceeding to the next chapter, I will explore one more operation with regard to semitonal modulations. Whereas a semitonal modulation usually involves scale-degree transformation and enharmonic renotation together, there are cases which do not involve one of these two procedures. These cases are rare, but they do exist, according to the composer's choice of notation and the mode (major or minor) in which a passage is written. For instance, when $\hat{3}$ in A major becomes $\hat{4}$ in G♯ minor, the note is the same C♯, without any enharmonic respelling, but the scale-degree changes according to the change of the key. The example from Beethoven's *Appassionata* Sonata (Example 2.1) belongs to this type as well; $\hat{6}$ in F minor becomes $\hat{5}$ in G♭ major, but no enharmonic change occurs.

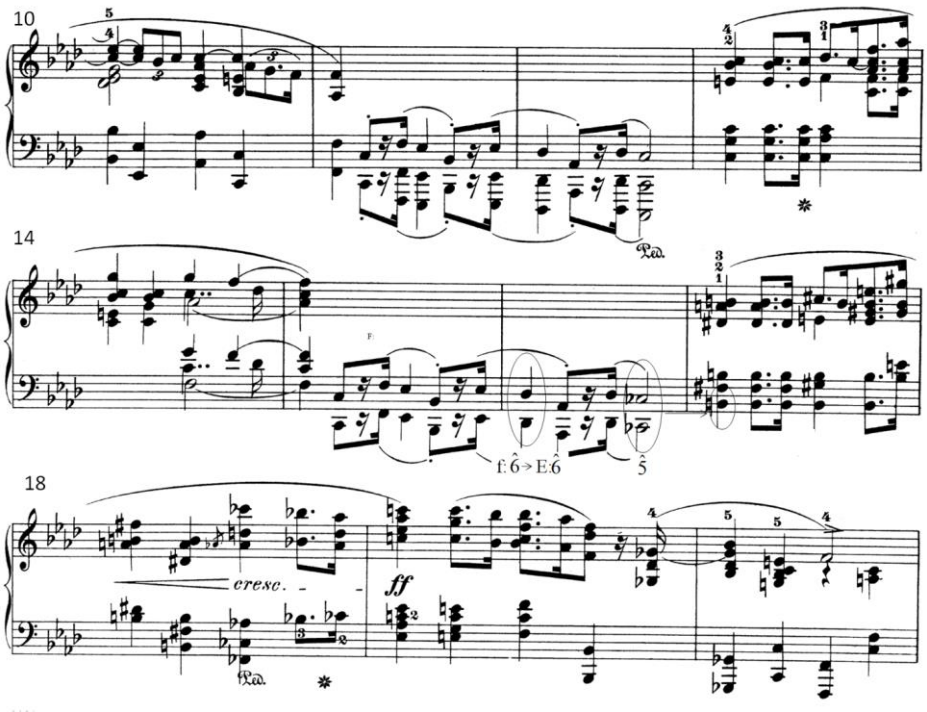
On the other hand, there are also cases when enharmonic respelling occurs without scale-degree transformation. For example, both G♯ in E major and A♭ in F minor are $\hat{3}$, with only enharmonic change. In some cases, moreover, a semitonal modulation involves neither enharmonic change nor scale-degree transformation, such as the case of D♭ major and D minor when the common tone is the F (the note is $\hat{3}$ in both keys without enharmonic respelling).

This section of Chapter 3 will address the second of these situations, in which enharmonic respelling does not result in scale-degree transformation. The Fantasy, Op. 49, provides an example of semitonal shift without scale-degree transformations, the type just mentioned, and shows employment of a wide range of semitonal relations throughout the work. The complexity and individuality of this work are well known, but I will limit my discussion to

the conflict between F and E♭ and chromatic motions between the two notes (F-E♮/F♭-E♭), focusing on the opening march and the first cycle of the Fantasy.[22]

Example 3.9 is drawn from the beginning section of the Fantasy. After the first four measures are repeated from m. 11, the music shows a short but striking tonal disorientation to E major; this modulation does not involve scale-degree transformation, only enharmonic renotation between D♭ and C♯. Here, $\hat{6}$ in F minor is transformed to $\hat{6}$ in E major, a key a semitone apart. Chopin utilizes a common tone between two keys; it is a motion between a minor key and a major key a semitone below it, and there are two notes, $\hat{3}$ (G♯/A♭) and $\hat{6}$ (C♯/D♭) which the composer can choose as a common tone without scale-degree transformation.

[22] The term "first cycle" is borrowed from Schachter's sectional divisions in his article (1988), which provides thorough voice-leading graphs of the piece. He clarifies that the aim of the article is to examine the "Fantasy's tonal structure by pointing out the strategies that tends to establish A♭ as main tonic" (222) and gives a detailed explanation about the introductory march, transition, and three cycles section-by-section. My analysis, to the large extent, is based on Schachter's outstanding analysis, although I will not reproduce all of his discussion, focusing instead on the discussion of semitonal relationships in the work.



Example 3.9. *Chopin, Fantasy, Op. 49: tonal disorientation to E major in the opening march*

As illustrated in the example, at m. 16, the D♭ transforms to $\hat{6}$ of E major, as the last note of the descending fourth motive, C, is replaced by C♭. In the first hearing, listeners may regard the first three notes as a repetition of the same motive and be surprised at the last note; it is interesting to note how these common-tones (D♭-C♭) in the motive are later taken over as a part of the scale in the passage that follows (C♯-B).

One might say that this C♭ is just a brief, preparatory change for the augmented sixth at m. 18 by presenting the pedal point over the dominant of the augmented sixth chord, but this change is surely enough to give a sense of E-major tonality no matter how long the passage is. In this passage, before the note E functions as ♭$\hat{6}$ of A♭ major, the note E, the leading tone of F minor, changes to the tonic of E major first. The short diversion to E-major is a decisive moment,

functioning not only to distance itself from F minor but also to move toward the dominant of A♭ major. Thus, E major is a kind of mediator for the conflict between F minor and A♭ major.

Even though the music comes back to F minor at the end of the phrase, the E-major harmony is not a sudden interpolation, but precursor of what occurs later. As Schachter describes, "the drive toward A♭ resumes in the fourth phrase with greater urgency, but the promise of A♭ is not yet to be fulfilled. . . . Yet this urge toward A♭, frustrated for the moment, is the opening phase of a process that will ultimately topple the ostensibly unassailable F minor of the march" (228).

As suggested in the statement above, Schachter's main focus is the "struggle between F minor and A♭ major," particularly as a way to fulfill "the promise of A♭" (228). From the beginning of the Fantasy, these two key areas are presented clearly; while the first phrase (mm. 1–5) shows the F-minor tonality, the second one and its extended measures (mm. 5–11) demonstrate the short excursion to the A♭-major key. In the first phrase the descending fourth motive, F-E♭-D♭-C, and harmonic setting of the following measures clearly indicate F minor. In the second phrase, however, the motto entails a link to E♭, and briefly implies the tonality of A♭ major, which is not completed yet as the music returns to F minor, bringing up E♮ again (m. 10).

Schachter points out, in addition to harmonic progressions, that the motivic design of the Fantasy is closely related to the tonal plan of the work (288); for instance, the first motto (mm. 1–2) has great emphasis on the note E♭, and its change to E♮ (mm. 3–4) in the four-part writing shows an altered function of the note below the tonic to become a leading tone of F minor. The subtle chromatic relations between E♭ and E♮ are delicately suggested in the section up to m. 20. How Schachter describes the two notes in the opening march would be worth citing here: "This chromatic relationship—here more hinted at than expressed overtly—becomes a decisive factor

in the later unfolding of the Fantasy; the process begins in bar 10, and continues in bars 18–19, where E♮ and F♭, its enharmonic equivalent, are the principal tonal agents of the march's climactic event—the frustrated move toward A♭ major and subsequent resolution in F minor" (231). Thus, F, E♮ (F♭), and E♭ are closely bound together not only as key areas but also as melodic contents in the opening section.

Whereas the E major - A♭ major progression draws our attention in the march, in the first cycle Chopin shows another way to explore E♮ as a bridge between F and E♭ through a C major - A♭ major progression. Referring to the procedure to reach the A♭ major at m. 77, Schachter states that "the origin of the A♭ chord is contrapuntal rather than harmonic. It results from an interval-progression 5–6 above C accompanied by the chromatic inflection E♮-E♭" (237). That is, this time F-E♮-E♭ motion appears in the tonal context of F minor-C major-A♭ major.[23]

In the first cycle, another noteworthy semitonal motion comes after the E♭-major tonality is firmly established at m. 109. Here, as a means to prolong the V in E♭ major, the bass shows a B♭-B♮-B♭ motion. Schachter states that the first move of this passage (at m. 119) is associated with C minor and implies the previous "struggle between C minor and E♭." Along a similar line, I would add that the next change of chord recalls the previous E-major chord from the opening march. The second chord of m. 121 is four-three chord on B♮, as the F in the right-hand part changes to E♮. This dominant seventh chord rooted on E, with the same sonority as the augmented sixth on F♭ at m. 18, may signal to listeners that issues raised in the march continue to influence the course of the Fantasy.

[23] Schachter has noticed that even though this A♭ episode is a temporary passage within a prolongation of a C-triad, it shows "a critical point in the struggle of A♭ to assert itself as the governing tonic of the Fantasy" (241).

One more thing I would like to mention is a deceptive cadence at the end of the first cycle from m. 143. After the heroic theme in E♭ major, the music does not end with a perfect authentic cadence but proceeds to a four-two chord on the bass note A. This chord immediately arouses the question of tonality, whether the music will move to E major. This progression, however, turns out to be a deceptive cadence on ♭$\hat{6}$ of E♭ major which helps lead the music to the second cycle. I have mentioned the corresponding passage in A♭ major at the end of the Fantasy, m. 311, in the preceding chapter (section 2.3), stating that it recalls and summarizes the semitonal motions of the entire piece. Schachter discusses this final moment in that "it expresses the Fantasy's primary chromatic element, F♭, and makes good the promise of the opening march's frustrated moves toward A♭" (251). Thus, it confirms for listeners the enharmonic change from E♮ to F♭ which indicates a take-over by the A♭ major from F minor after a long struggle: E♮ finally loses its position. And Chopin's careful motivic treatment of semitonal motions accumulates until the very end of the piece. As Schachter says, "the F♭ of the penultimate chord seals the victory of E♭ and of the A♭ harmony to which it belongs—no trace of F♮ remains!" (253).

In addition to the F♭, Schachter points out two more prominent chromatic notes in the Fantasy. His investigation into the three crucial chromatic inflections—F♭, C♭, and G♭—is insightful not only in terms of the notes themselves, but also in terms of semitonal motion that these notes initiate throughout the piece. Using chromatic conflicts involving F♭, C♭, and G♭, Chopin takes the tonality of the Fantasy to new place. We can even say that semitonal motions from these notes actually determine how the music unfolds. Schachter states:

> Of course the Fantasy, like just about any of Chopin's major works, will explore many different chromatic paths. It is a characteristic of tonal chromaticism, however, that a single altered note (often in association with its enharmonic transformation) will tend to function as the primary chromatic element of a given piece. (231)

The other chromatic notes, G♭ and C♭, are not my primary concern here since I am emphasizing the semitonal shift from F to E, but this does not mean that they have relatively insignificant roles. For instance, Schachter notices how C♭ functions as a member of the augmented sixth chord on D♭ which resolves to the C major at the end of the transition (mm. 64–67): "There is, I think, a significant association between this C♭(=B♮), and the uses of D♭/B♮, also members of augmented sixth chords, in the march (bars 18, 27, 35); the sonority of the augmented sixth and the rising semitone of its resolution mark many of the critical junctures in the Fantasy's development, and take on a motivic meaning" (233). As for the G♭, in the second cycle, the G♭ major is the key which brings up the *Lento sostenuto* in B major, and at the end of the section, based on the enharmonic change between the dominant seventh chord (on F♯) and the German sixth (on G♭), the music proceeds to the third cycle.

So far I have discussed the semitonal shift between F, F♭/E♮, and E♭ and its implications for the overall tonal structure of the piece. Particularly, I have focused on the function of the note F♭, relating to its enharmonic reinterpretation to E♮. I have pointed out a shift from F minor to E major in the opening march as an example of enharmonic change without scale-degree transformation among Chopin's diverse uses of semitonal modulations. And, as discussed so far, the semitonal motion F-F♭/E♮-E♭ stands out throughout the first cycle of the Fantasy.

Schachter characterizes the genre "fantasy"' as "pieces designed to sound like improvisations, abounding in evaded cadences, abrupt modulations, and unexpected juxtapositions, and tending strongly to emphasize flux and surprise at the expense of stability and order" (221). Even though this piece shows all the features that Schachter mentions, it is remarkable when we discover, as we have seen in Chopin's treatment of chromatic notes, that even these features are a result of carefully planned compositional techniques.

Chapter 4

Further Use of Semitonal Relationships in an Analytical Context

4.1. Indirect Use of Semitonal Relationships

The preceding chapters have focused on examples in Chopin's work that contain a semitonal shift between adjacent sections or passages, where the shift occurs between successive musical events, in a fairly direct manner. A different category of semitonal relationships, other than a direct modulation technique, also deserves examination, however, namely cases where two keys are *indirectly* related by a semitone within a piece. Since Chopin often employs third relations among the various sections of his pieces, the use of minor third and major third relations in the same piece will sometimes result in such indirect semitone-related key areas.

For instance, the Impromptu in F♯ Major, Op. 36, moves to D major first in the middle section, a major third distant from the home key, then begins the next section in F major, a minor third from D major. This F-major section, a semitone from the home key F♯ major, is of interest since, in this unexpected key, Chopin brings back the main theme. Semitone-related keys arise in the Second Scherzo, Op. 31, through a similar kind of process, where consecutive key changes by a minor third and a major third result in keys a half-step apart. In this work—a complex piece that also features directional tonality—the semitone-related keys, B♭ minor and A major, that begin the opening section and the middle section, tend to suggest less an underlying B♭-

minor reading than a reading in the concluding key, D♭ major, when they function as VI and ♭VI. Finally, in the Prelude, Op. 45, third-related keys and their semitone-related keys are highlighted as harmonic poles and a leading force in the work.

In this section, I will explore individual functions of the semitone-related keys in each of these works, beginning with the F♯-Major Impromptu. My discussion will cover possible reasons for and methods of Chopin's indirect use of semitonal relationships.

The Impromptu in F♯ Major, Op. 36: Thematic Return in a Key by Semitone

Introduction / First Section (mm. 1–38)

The Impromptu Op. 36, from 1839, is Chopin's third attempt in this genre. This work is generally referred to as his Second Impromptu since Chopin did not publish the earliest of his four impromptus, the so-called Fantaisie-Impromptu in C♯ Minor, published posthumously as Op. 66. In a 1990 article, Jim Samson states about this genre, "For Chopin the impromptu was a short character piece of flowing instrumental lyricism, avoiding both virtuosic and affective extremes, cast in closed contrasted sections of two types—figurative and melodic—in a ternary design" (300). As Samson also admits, however, the F♯-Major Impromptu contains more than that. This work sums up Chopin's mature compositional techniques such as manipulation of remote keys and different formal elements while still adheres to a condensed form.

This work begins with the tonic of F♯ major in an octave in a very low register. Not only does this octave help establish the key, it also contributes to an atmosphere of calm and restfulness in the first section. The six-measure introduction in the left hand (mm.1–6) forms the accompaniment pattern for the first section. According to Samson, the ostinato-variation

technique in the first section foreshadows what would become an important stylistic feature of Chopin's later works, manifested in the Berceuse and the Barcarolle.[1]

Figure 4.1a shows the outline of the introduction. The left-hand duet shown in this figure may be only six measures long, but it nonetheless contains many of the Impromptu's essential elements. The lower line of the duet itself lays out a three-part compound melody. As the half note F♯ in the figure suggests, the lowest part of this compound melody prolongs the tonic. The middle part centers on C♯, supporting the tonic as the fifth of the triad but also supplying energy to the monotonous bass by implying the dominant off and on. In addition to the F♯ in the lowest part and the C♯ in the middle part, the third voice outlines a falling fourth, marked as *x*, from F♯ to C♯. The brief introduction is then smoothly passed to the opening theme when the right hand enters in m. 7. This theme in the right hand shows how economically and effectively Chopin constructs the phrase using just three main motives: the falling fourth *x*, the falling third *y*, and the ascending second *z*. Figure 4.1b demonstrates some of the motivic connections of the opening theme with the introduction. Indeed, the theme shows the same motives and their inversions but beautifully rearranged to carry the piece forward.

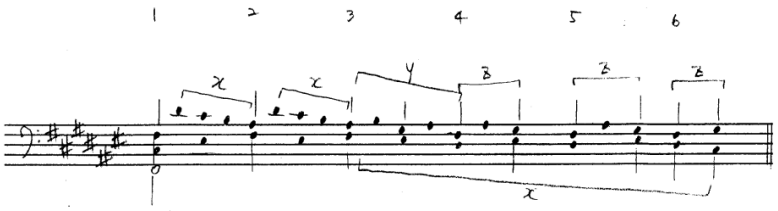


Figure 4.1a. *Chopin, Impromptu in F♯ Major, Op. 36: Outline of the introduction, mm. 1–6*

[1] Samson 1990, 301–2. Samson regards this Impromptu as "an important harbinger" of the composer's new style in later works.

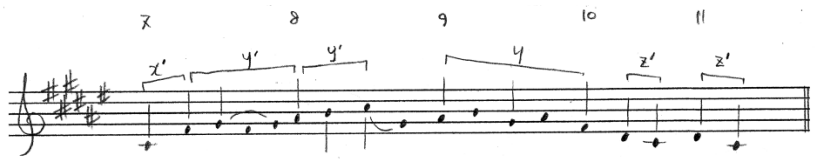


Figure 4.1b. *Impromptu in F♯ Major, Op. 36: Outline of the opening theme, mm. 7–11*

As for the left-hand part, the six-measure introduction repeats exactly in the first (mm. 7–12) and the third phrase (mm. 19–24). As illustrated in Figure 4.2, however, in the second phrase, the music briefly moves to III, the somewhat unusual key of A♯ minor, and leads to a V–I cadential progression in F♯ major. The fourth phrase also serves a cadential function, through a (V7/IV)–IV–V–I progression, but contradicts listeners' expectations at the close of the section, when it veers back to V and prolongs that V up to the first beat of m. 37. The section finally makes a cadence on I in that measure. Afterwards, the music continues to a short codetta, and the V, with a fermata, appears again within a deceptive cadence, this time to connect to the next section in D major. Figure 4.2 suggests that overall the first section of the Impromptu prolongs the tonic, showing a $\hat{3}$-$\hat{2}$-$\hat{1}$ linear motion on the middleground level.

Middle Section (mm. 39–60)

Even though the key of the middle section shows a chromatic third relation—that is, a PL relation—the modulation process occurs smoothly since it involves the deceptive cadence to ♭VI at the end of the first section. Features of the new section then contrast with the first section in terms of rhythm, dynamics, and register; the dotted rhythm throughout the section creates a heroic and powerful affect, with the dynamic, primarily *forte*, and a wide range of register intensifying it. Still, this section seems to contain a hidden sadness beneath the surface that comes to the fore at the end of the section. After the climactic moment of the second phrase in

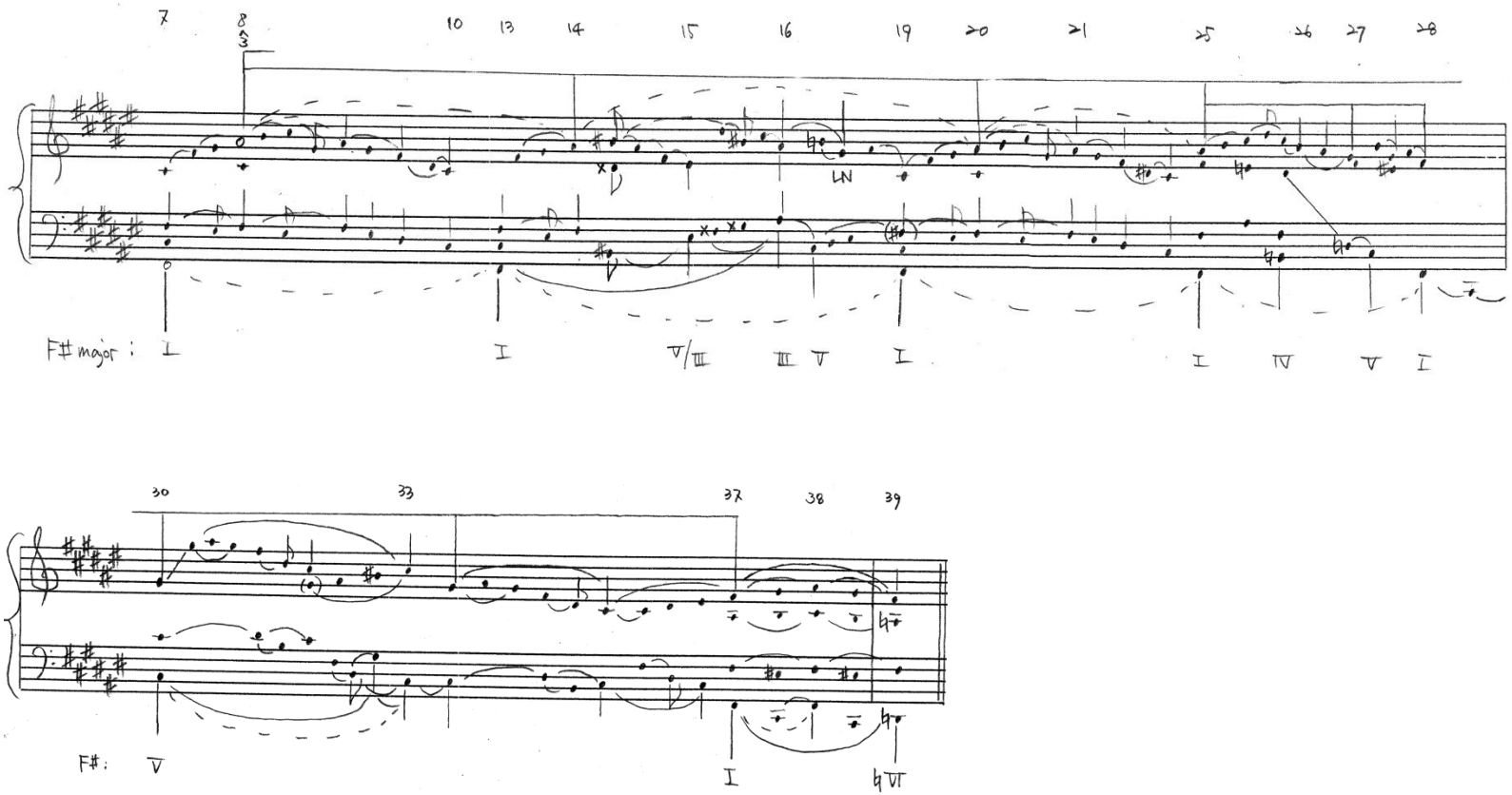


Figure 4.2. *Impromptu in F♯ Major, Op. 36: Voice-leading graph of the first section*

fortissimo, the music begins to wane: The dynamic decreases, the melody descends, and the tempo slows. At the section's close, the music proceeds to a mysterious transitional passage.

This transitional passage preceding the reprise might be the most attractive to analysts because its singular harmonic progression is so strange and mystifying. In his article "Schenker's Theory of Levels and Musical Performance," Charles Burkhart describes these transitional measures as a "strange little transition leading from a march-like section in D major that unexpectedly breaks off to a fantasy-like return of the opening theme in the 'wrong' key of F major" (1983, 102–3). The F and G♯ on the first beat of m. 59, following B♮ and D on the last beat of m. 58, imply the diminished seventh chord on G♯. As illustrated in Figure 4.3, the more likely, expected motion would be a resolution to the dominant harmony, or, if not the dominant, the tonic, which might yield a return to the F♯-major triad through an LP relation this time (a). However, the diminished seventh chord here takes an unexpected direction; the G♯ is transformed to A♭, which changes the chord to the leading-tone seventh chord of the dominant in F major (b). As the D in an inner voice moves by a semitone, the next chord forms an inversion of a German sixth chord. More interestingly, D♭ ($\flat\hat{6}$) does not resolve to C in the same voice directly, but the C occurs in the bass at m. 61 before the inner voice descends to its resolution.

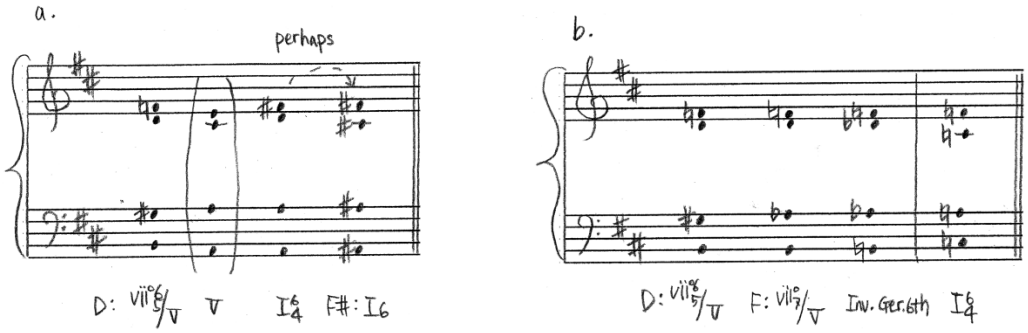


Figure 4.3. *Impromptu in F♯ Major, Op. 36: Harmonic progression of the transitional measures*

As illustrated in Figure 4.4, the middle section can be interpreted as a prolongation of D, the tonic of the section. Even though the key is established firmly from the beginning of the section, the most structurally important top-voice note is delayed until m. 51, the A reached by an arpeggiated ascent. In the middleground voice-leading graph, after the I–V–I progression in the first phrase, the IV is marked by its duration and register, but retrospectively, the B in the upper part is a neighboring note to the A. This B eventually moves back to the implied A at m. 61, when the F-major section starts, the A then being regained in the top voice at m. 62. At the moment of the reprise, the prolonged note D in the bass proceeds to C. It is worth pointing out that the D does not return to C♯, the dominant of F♯ major, but to C♮, which suggests that this is not a termination of the prolongation of the D.

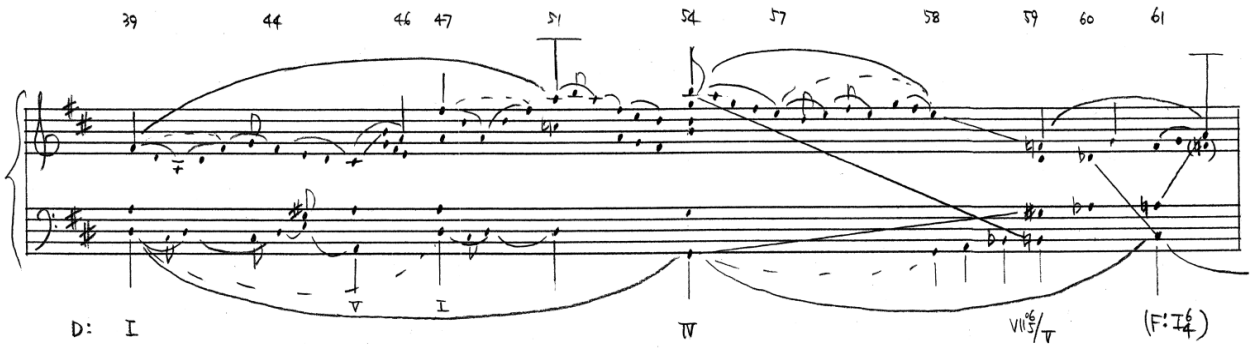


Figure 4.4. *Impromptu in F♯ Major, Op. 36: Voice-leading graph of the middle section*

Last section / Coda (mm. 61–110)

As mentioned above, the main theme returns in the reprise in F major, a half-step lower than the original key, before moving back to F♯ major. Samson refers to this juxtaposition of two keys as a "tonal wrench" (302) or "tonal dislocation" (303). He continues:

> The awkwardness of the junction points between these tonal platforms has puzzled pianists and commentators alike. Now an informal analysis might refer to a deliberate ambiguity at the beginning of the reprise or to Chopin's desire to counterbalance the harmonic stasis created by an ostinato technique with a widely-spanning tonal scheme. (1990, 303)

The effect is certainly disorienting, as one hears the familiar theme in a key a half-step low, right at the point where it would conventionally appear in the home key. But besides relating by semitone to the main key, the F-major tonic also relates by third to the previous key, D major; and, as the theme reprises its modulation to III (formerly A♯ minor, now A minor) in its tenth measure, another third, from F to A, produces a large motion by rising fifth: D–(F)–A, allowing the D of the Impromptu's middle section to remain prolonged until it reappears as the root of the secondary dominant of II at m. 72 (see Figure 4.5). Only then, by the means of the enharmonicism between the dominant seventh chord of II in F major and the German sixth chord in F♯ major, does the music eventually return to the home key. The tonic of the F-major reprise thus serves as a stage in an arpeggiation D-F-A, with the D regained at m. 72 and resolving to the dominant of the home key, F♯ major.

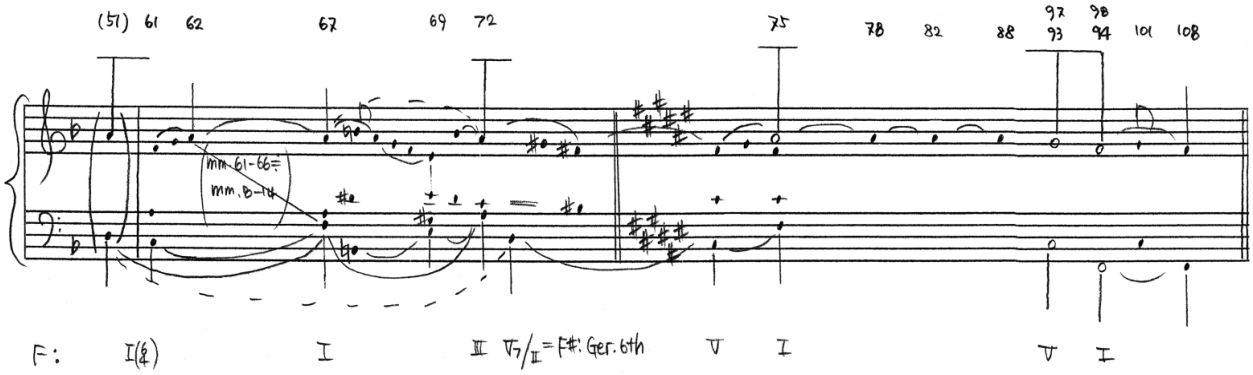


Figure 4.5. *Impromptu in F♯ Major, Op. 36: Voice-leading graph of the last section*

After m. 73, the overall tonal structure hues closely to that of the first section, at least initially, even though the composer reinvents it by means of triplet figures and diminution. The main difference in structure is that this section breaks into the thrilling thirty-second note passages, deferring the final cadence V-I with the completion of the *Ursatz* to m. 93 (repeated in m. 97). The location of the structural dominant is quite clear, and the rest of the section (and the coda) extends the tonic of the home key.

Other aspects of the reprise would certainly draw our attention, but I would like to address only one more: the variation technique. Samson suggests that the figuration pattern in the variation is similar to that in two of the other two impromptus, Op. 29 and Op. 66 (1990, 300). He also mentions that the incorporation of variation techniques with other formal principles is not unusual when we examine the similarity between the final section of the Impromptu and the reprises of the F-Minor Ballade, Op. 52, and the F-Minor Nocturne, Op. 55, No. 1. Recognizing that unsynchronized thematic and tonal returns are featured in both the Impromptu and the F-Minor Ballade, Samson asserts that variation technique also forms a critical part of the design of both pieces. In the case of the Nocturne, the theme gradually dissolves into non-thematic passagework in the reprise. He continues, "In both cases [of the Ballade and the Nocturne mentioned above], [Chopin] introduces *an element of calculated unpredictability* into the reprise, capitalising on the repetitive element in the theme itself to twist the form at the end in an unexpected and inventive way" (1990, 302, italics mine).[2]

[2] While acknowledging the insightfulness of this viewpoint, I would like to add that this variation process reminds me of some of Beethoven's variation sets as well; in the theme-and-variations movements in his late works, such as the last movement of Piano Sonatas Op. 109 and Op. 111, Beethoven uses continuous diminutions of the theme.

Considering the Impromptu as a whole, Figure 4.6 shows a voice-leading graph of the entire piece. The primary tone A♯ is picked up at m. 74 then firmly reestablished at m. 75.[3] In the meantime, the bass moves to ♭$\hat{6}$ in the middle section. It does not proceed to $\hat{5}$ but to ♭$\hat{5}$ (C), as the music temporarily settles in F major. However, F♯ major soon returns via the augmented sixth over the bass note D. That is, the D becomes ♮$\hat{6}$ in the home key, F♯ major. The brackets on the graphs display how the fourth motive from the ostinato bass in the introduction plays an active role in the piece.

So far, I have discussed the tonal structure of the piece, focusing on the way Chopin expands the tonic harmony through the combination of third relations and semitonal relations. Analyzing this Impromptu, Burkhart pays more attention to motivic features, particularly a descending-second motive.[4] According to Burkhart, this motive, which appears several times from the first section, stands out in the transitional passage, such as E-D in the inner voice (answered by E♭-D♭ then D-C as the reprise begins), and also in the bass D-C♯ from mm. 72–73. Notably he suggests as well that this D-C♯ motive is enlarged from the beginning of the march-like middle section to the point where the key of F♯ major returns, much as I also suggest in Figure 4.6.

[3] Schachter's article (1999) on the Impromptu provides a perceptive middleground graph of the piece. I agree with him that the primary tone $\hat{3}$ is prolonged to the beginning the F♯-major section. He sees $\hat{3}$ is picked up at m. 75. See Schachter 1999, 118 (Example 2).
[4] Burkhart 1983, 102–5.

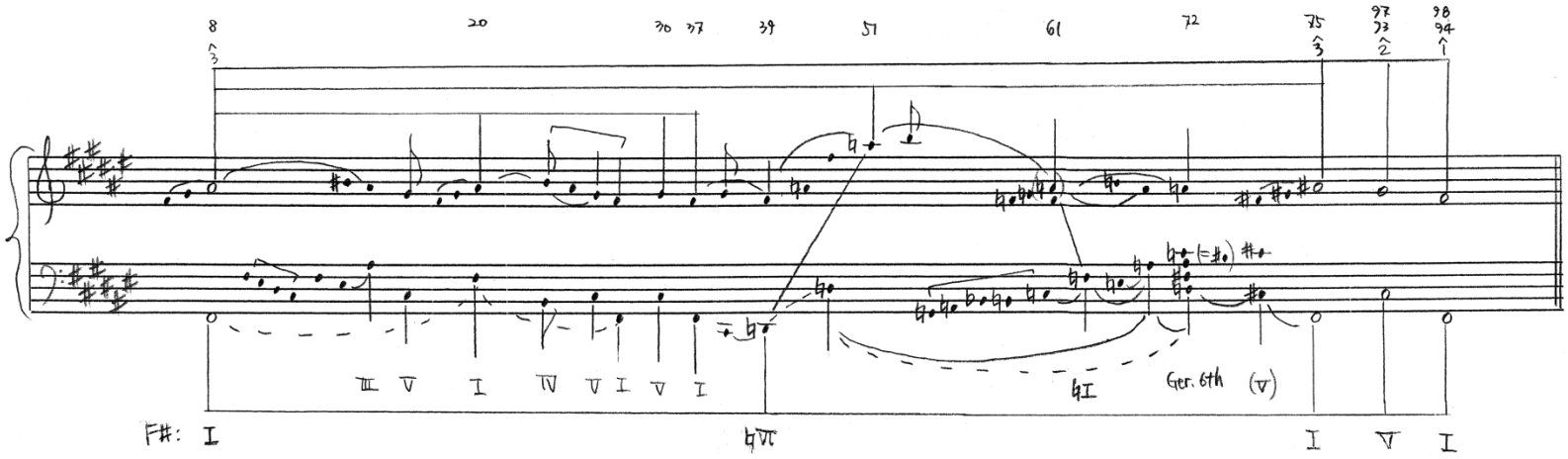


Figure 4.6. *Voice-leading graph of the entire Impromptu in F♯ Major, Op. 36*

While this interpretation of a D-C♯ enlargement allows listeners to recognize the large-scale structure, the details of that enlargement are no less striking, as Chopin integrates the F-major reprise into a composing-out of the D triad. That is, Chopin makes the F-major section a part of the large-scale arpeggiation of D-minor harmony (D-F-A). For the purpose of this dissertation, with my emphasis on semitonal relations, it is just as significant that the F-major section is so remote from the home key, and the site where the opening theme returns. I see this as one of the stylistic idioms for Chopin—that is, an active employment of the semitonal relationship just before the home key returns.[5] As we saw in similar instances from earlier chapters, Chopin explores how familiarity with the already heard and novelty from radical alteration can work together. In general, in a short character piece in a ternary form, the middle section often functions to prolong the opening tonic that is then picked up in the reprise. By delaying this moment until after thematic material returns, however, Chopin both builds up a sense of tension in the reprise and opens up the middle section to a greater diversity of possibilities.

I classify the type of semitonal relationship in this piece as an *indirect* use of a semitonal shift. Although this Impromptu includes a direct shift from F major to F♯ major in the reprise, this later moment seems to be a natural sequence within the eventual return to the home key, and this modulation is treated relatively smoothly as it involves an enharmonic change. The more surprising indirect use comes when the reprise begins in a key a half-step lower than the first section, although this shift between the keys of the two sections is mediated by a third-related key, D major. I will explore a similar but more extended approach to the tonal structure of a

[5] A similar type of semitonal shift occurs in the reprise of the Mazurka in A Minor, Op. 59, No. 1. Joyce Yip (2010) discusses the tonal structure of the Mazurka, dealing with Chopin's choice of G♯ minor in the reprise (see Yip's dissertation, 58–61)

work, employing a third relation and semitonal relation together, by analyzing the Second Scherzo, Op. 31, in the next section.

The Second Scherzo, Op. 31: Semitone Relationships in Directional Tonality

> The evolution of tonal practice between the music of Beethoven and Schubert in the 1820s and the post-tonal works of Schoenberg and Berg written a century later poses challenges that traditional analytical methodologies and theoretical systems have not fully met. One such challenge is the phenomenon of musical works beginning in one key and ending in another or otherwise embodying the practice of directional tonality, tonal pairings, or the double-tonic complex. (Kinderman 1996, 1)

As William Kinderman suggests in this passage, nineteenth-century composers not only heighten the range and intensity of their modulations, as is well known; they may also expand the scope of modulation to cover entire pieces by using an intentional diversion from the opening key when concluding a work. In the Chopin repertory, analysts have drawn attention to several works, such as the Second Scherzo Op. 31, the Fantasy Op. 49, the Second Ballade Op. 38, and the second movement of the Sonata Op. 35, as representative examples of one technique mentioned by Kinderman, directional tonality.

When dealing with such works, an analyst frequently confronts challenges in interpreting tonal closures, challenges that raise the questions whether the individual pitch events are connected within a hierarchy, and if so, how we can understand that hierarchy. Directional tonality, in a sense, seems to contradict the idea of monotonality, as embodied, for example, in Schenker's mature theory, which states that a single tonic triad is composed out across any structurally complete piece. For this reason some might doubt whether we can apply Schenkerian tools to our understanding of pieces with multiple tonalities. Many Schenkerians respond by arguing that there is a "leading tonality" in the piece, such that one tonality is subordinate to the

other. As Krebs observes, Schenker himself, and most analysts working in that tradition, solve this issue of directional tonality in one of two ways: off-tonic beginning through auxiliary motion, or incomplete ending (1991, 48). The former solves the problem of tonality by regarding an auxiliary motion as initiating the piece, the kind of incomplete harmonic progression described in Schenker's *Free Composition*.[6] The latter supposes an intentional tonal digression at the end of the piece for certain effects. Even assuming this basically monotonal perspective, however, scholars may still disagree on which possibility best represents a particular piece. In the case of the Second Ballade Op. 38, for example, Korsyn (1996) interprets the piece as exhibiting directional tonality, the main key emerging as A minor, while Jonathan Bellman (2010) considers the Ballade to be in F major with an off-tonic ending, a feature that can be explained for programmatic reasons.

In either case, whether one reads such a piece as involving a non-tonic beginning or a non-tonic ending, we can easily imagine that such an unusual kind of piece would require a composer to devise special tactics, and my discussion in this section is about those procedures in the Second Scherzo. I will not discuss the directional tonality itself in depth, but will instead focus on the work's accompanying semitonal relationships, interpreting those relationships from the perspective of this dissertation. More specifically, I will deal with the ways in which the semitonal relationships, in the realms of harmony and motive, contribute to the process of tonal change. Thus, this section explores the techniques that Chopin employs in order to effectively shift the tonal gravity away from the initial key toward the second one.

[6] For more details on Schenker's term *auxiliary cadence*, see L. Poundie Burstein's article (2005a) "Unraveling Schenker's Concept of the Auxiliary Cadence."

With respect to the topic of tonality, many scholars agree that D♭ major, the concluding key, is the tonic key of the Second Scherzo. Representative in this regard is the analysis in Schenker's *Free Composition*, Fig. 102,6, which provides the graph of the entire Scherzo within a single tonality D♭ major, suggesting that this work, like others of Chopin, features a nontonic beginning (Figure 4.7).[7] Schenker regards the B♭-minor opening as presenting a key that is weakened later, a temporary key area that ultimately functions as VI of D♭ major.[8] As demonstrated in the graph, Schenker interprets the tonic of central A major section as ♭VI of D♭ major, using the mixture at $\hat{3}$ in the *Urlinie*. As elsewhere in Chopin (for example, the Mazurka in A♭ major, Op. 17, No. 3), $\hat{3}$ (F in the Scherzo) is prolonged, via ♭$\hat{3}$ (F♭), until the last D♭-major section returns in the Scherzo, reinstating the diatonic $\hat{3}$ and bringing closure to the structure with the restatement of the main D♭ music. As in his reading of the Mazurka, Schenker reads a ternary form as the basic design of the Scherzo, albeit a more complex three-part form, since the central section is not harmonically self-contained.

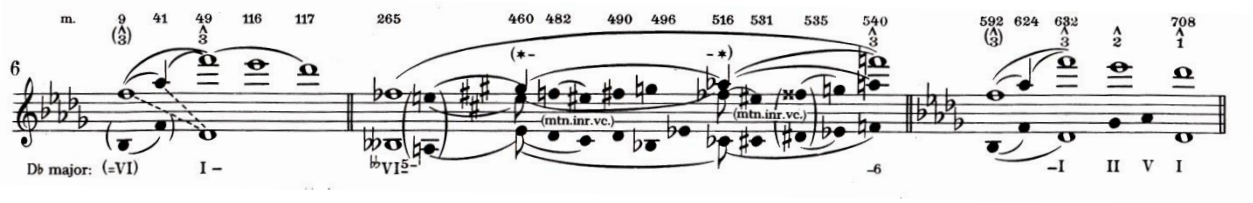


Figure 4.7. *Schenker's analysis of Chopin's Scherzo, Op. 31 in* Free Composition *(Fig. 102,6)*

[7] William Kinderman also considers the tonic of the Scherzo to be D♭ major, pointing out that A major and E major in the central section are "quite unrelated" to the initial key of B♭ minor (1988, 60).

[8] The change from the subordinate key to the main key usually takes the form of a harmonic progressions by ascending third, where $\hat{5}$ over the initial tonic becomes $\hat{3}$ over the final tonic. Directional progression by descending third is less common, but employed in some songs by Schubert or Wolf. For more details, see Pomeroy 2004, 88–89.

In a response to Schenker's analysis, Harald Krebs remarks that it is "aesthetically pleasing that both the initial B♭-minor and the central A-major harmonies are labeled as submediants within D♭ major" (Krebs 1991, 49). But he challenges Schenker's view that once D♭ major arrives in m. 49, it thoroughly replaces B♭ minor. Krebs's alternative reading (Figure 4.8), and his accompanying discussion, claim that a reading in B♭ minor remains viable for a longer span of music, continuing through the large repeated opening section, establishing D♭ major as III,[9] and reaching further through the central section into the reprise, along the lines of a sonata-allegro form in B♭ minor.[10]

On Krebs's hearing, two fundamentally different large-scale designs, the ternary and the sonata-allegro, remain at play throughout the piece as the priorities among the two keys, B♭ minor and D♭ major, remain undecided, allowing one to "look upon the work as a fusion of two keys and two forms, within which particular harmonies would have two tonal functions at once and particular sections would perform two formal roles at the same time" (59). For Krebs, then, the Scherzo is no ordinary form, and both the form and the question of the main key remain unsettled until very late in the piece, much later than in Schenker's reading.

[9] He states that "given the clarity with which the tonic of B♭ minor has been laid out in the preceding measure, a hearing of the prolongation of D♭ major in mm. 49–132 as mediant harmony is perfectly feasible" (51).

[10] Krebs makes it clear that he tries not to replace Schenker's reading but to provide another valid reading, one that presents alternatives in such matters as the tonality, fundamental line, melodic details, and form. In other words, Krebs tries to suggest the listener's chronological experience of the work, along with the listener's retrospective analysis (59).

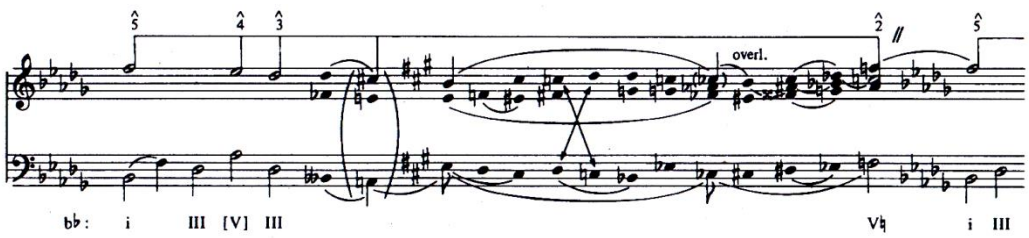


Figure 4.8. *Krebs's alternative interpretation of the Scherzo, Op. 31 (1991, 50)*

An additional feature of Schenker's graph (Figure 4.7), one that Krebs's alternative reading cannot support as well, because of its different upper-voice structure, concerns some bold motivic parallelisms among the Scherzo's contrasting sections. Schenker hears an arpeggiation from F through A♭ to the high F as organizing the upper voice when the opening B♭ minor yields to D♭ major; for Schenker, this arpeggiation governs the more lyrical D♭ theme as well (this is shown in Schenker's Fig. 119,13, not reproduced here); and, most remarkably, a chromaticized version of the motive organizes the central A-major section (as shown by the asterisks in Fig. 102,6). The peak notes of these arpeggiations associate strongly with each other through the use of the extreme high register, through strong dynamics, and perhaps additionally through the surface diminution (rapid falling arpeggiations from the peak note).

On the other hand, Krebs's reading focuses more on the motivic unity between the arpeggiating figure on the foreground and the overall, large arpeggiation of B♭-minor tonic. Since his alternative reading interprets most of the sections in a B♭-minor tonality, it shows the B♭-D♭-F motion—the main notes in the quick four-note triplet figure that opens the Scherzo—being expanded for quite a long time until listeners realize that this B♭ minor is subverted by the different ending in the last part of the Scherzo. Krebs's thematic reading (54ff.) also focuses on surface motivic parallelisms among patterns he calls a "*nota cambiata* figure"; this focus bolsters

Krebs's argument for a sonata-allegro structure as the Scherzo features a type of motivic process typical of that form.[11]

A fuller evaluation of Schenker's analyses in *Free Composition* may have to await a future date, since it turns out that those graphs are extracted from a larger, more comprehensive analysis that Schenker began preparing for a sequel volume to the celebrated *Five Graphic Music Analyses*.[12]As Antonio Cascelli (2013) has discussed, Schenker taught this piece during the 1920s and worked out a detailed reading, probably in the years 1930–31, which is preserved in a fair copy by Angelika Elias, in the Oster Collection, File 32. A curious feature of Schenker's work noted by Cascelli, is that Schenker had referred to the Scherzo as being in "B♭ minor" in the early 1920s, replacing that view with the D♭ reading only during his later work on the piece.[13] This term for the Scherzo's key might suggest that Schenker had sensed some of the

[11] In a letter to the editor of *Music Theory Spectrum*, Agmon (1992) responds to Krebs that the principal motive can be described as a double neighbor figure rather than the term *nota cambiata*. Agmon supports his idea that "in the so-called 'nota combiata' figure of species counterpoint, incidentally, one cannot leap to a tone dissonant in relation to the cantus." The double neighbor figure comprises a lower neighbor, main tone, upper neighbor, and main tone—the secondary upper neighbor is added in the trio section. Moreover, he points out that the opening phrases in the scherzo and the trio share the rhythmic (what he called the second-beat syncopation) and harmonic features as well, to the extent of saying that the relationship is "one of thematic transformation" (115). For more details of Agmon's argument, see Agmon 1992, 114–16.

[12] See Schenker [1932]1969, 17. In the introduction, Felix Salzer states that he and other students had an informal seminar with Schenker from 1931 until shortly before Schenker's death in 1935, and that Schenker planned to publish analyses of the pieces that they studied. Salzer provides the list of compositions that they were to analyze. The list includes the Chopin's Scherzo in D♭ Major (see Schenker's list of compositions on pages 18–19). See also Felix Salzer, Heinrich Schenker, William J. Mitchell, Arthur Maisel, and Hedi Siegel (1990). In the introduction, Hedi Siegel provides useful information about the seminar at Schenker's house.

[13] The information about the specific date from which Schenker decided to change his initial thought was not unclear, but it seems that it would be before 1930 when Schenker referred to the Scherzo as the one in D♭ major. Cascelli assumes that it would be in 1926, based on Schenker's Lesson Book (2013, 66). However, I question that it might a little bit later than 1926, in consideration of his diaries. For instance, the diary entry for October 24, 1925 includes the "Chopin Scherzo in B-flat minor" on the list of the works which he listened on the radio. Several

Scherzo's unusual features of form and key definition noted by Krebs before Schenker arrived at the view presented in *Free Composition*. By any measure, the Scherzo is a boldly original work, one with many aspects worth attending to.

For the purpose of this dissertation that explores semitonal relations specifically, I believe still more can be said about the close relationships between the B♭-minor and A-major sections, especially given the strong motivic links between these sections noted by Krebs (1991) and Agmon (1992). Consider, for example, the sketch of the Scherzo's middle section in Figure 4.7, which shows how Schenker interprets the link from the middle section to the reprise. The graph shows the F at the end of the middle section as a part of 5–6 motion with respect to the bass note A that remains in effect as a root through the section. Schenker sees the complicated harmonic changes that effect the 5–6 motion as a "motion from the inner voice."[14] This perspective on the large-scale, contrapuntal motion on the note A enables Schenker to effectively interpret the dramatic change from A major and F major as an inner-voice motion.

Still, I believe that the semitonal relationship between A♮ and B♭ is worth exploring further. According to Schenker, the bass note A (B𝄫 in his notation) continues on the deep middleground level to D♭, rather than to B♭, and the contrapuntal reading of a 5–6 shift removes, at that level, the root F, the dominant of B♭ minor. The B♭ at the return of the scherzo section also receives less emphasis in Schenker's graph than I believe is warranted, because the long-range third-relation from ♭VI to I in D♭ major subsumes the immediate connection from A to the

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years later, in another diary entry for February 4, 1928, Schenker still recorded the title of the work as "Scherzo in B♭ minor." For the sources, see the following pages;
http://www.schenkerdocumentsonline.org/documents/diaries/OJ-03-07_1924-10/r0025.html
http://www.schenkerdocumentsonline.org/documents/diaries/OJ-04-01_1928-02/r0004.html

[14] This example belongs to the section titled "Motion from the Inner Voice." He states that "Direct chromatic steps and a direct enharmonic change are avoided by a motion from the inner voice." See Schenker 1979, 83.

B♭ that starts the reprise. Here I would argue that the emphasis on F, as dominant of B♭, at the end of the middle section calls attention to its structural importance; the F is the point where the accumulated tension comes an explosion. As demonstrated in Figure 4.9, after E major, the dominant of the A major, is prolonged until it appears in second inversion on the enharmonic C♭, the bass ascends to the F in a manner of intensifying tension. In a continuous ascending gesture, the unusual whole-tone progression B-C♯-E♭-F approaches this F in the bass, and increasing dynamics support the move toward F. Then, tension is released at the moment of arrival on F. Afterwards, the F-major harmony is prolonged from m. 540 to m. 583 until the scherzo section returns.

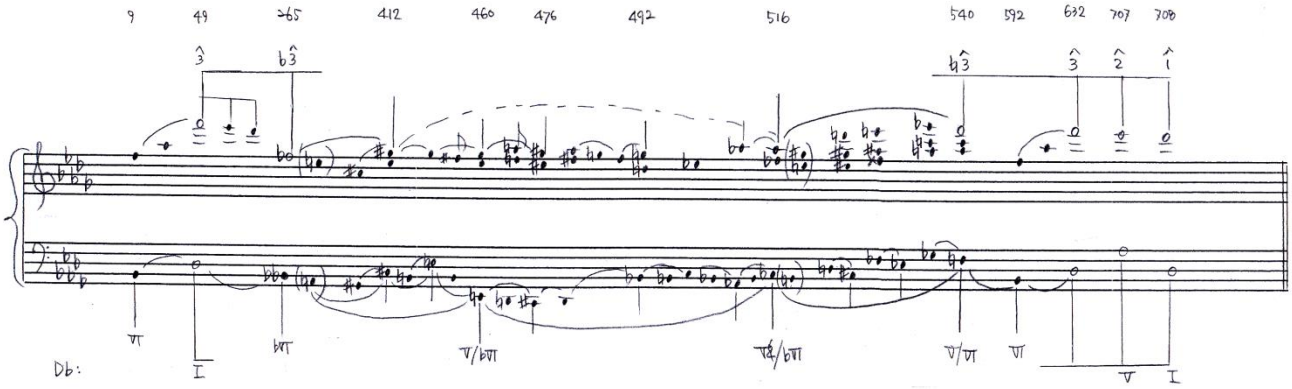


Figure 4.9. *Overall structure of the Scherzo, Op. 31*

In addition, since the B♭-minor section is repeated exactly, not omitted or truncated, listeners perceive a direct connection from F to B♭ as a V–I progression. In other words, although admitting the long prolongation of the tonic of the work in D♭ major, listeners may bear the progression A-F-B♭ in mind at the same time, which can make the listening process richer and

more attractive (Figure 4.10).[15] Here, as we have seen elsewhere in this dissertation, we find the leading-tone modulation which Chopin often uses in a middle section, but now in a large-scale version.

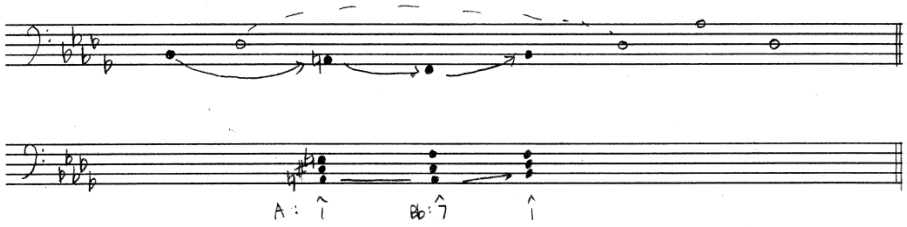
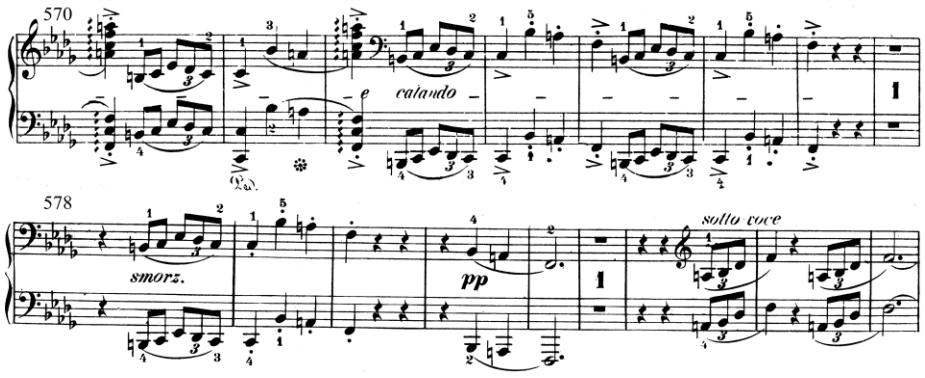


Figure 4.10. *Key-relations and the leading-tone modulation in the Scherzo, Op. 31*

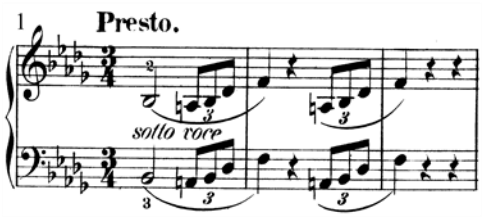
The black noteheads on the top staff in Figure 4.10 besides capturing elements of the overall tonal structure, also correspond with the notes that are continually repeated in the retransition. As seen in Example 4.1, during the long span of dominant preparation for the return of B♭ minor, the three-note figure B♭-A-F, represented by the last three notes of the retransition, is emphasized in a number of ways; it appears in both hands, is separated from what follows by a pause, and gradually moves in a lower register from m. 573. The figure vividly depicts the path that the music takes in B♭ minor, and it seems to be enough of a summary to remind listeners of the framework of the B♭-minor tonality.

[15] Krebs observes, "the thread of B♭ tonality is clearly picked up again when the central section of the work strongly arrives on the dominant of B♭ in m. 540, and when that harmony is prolonged for over 40 measures (to m. 583)" (1991, 51).



Example 4.1. *Chopin, Scherzo, Op. 31: Retransition to B♭-minor section*

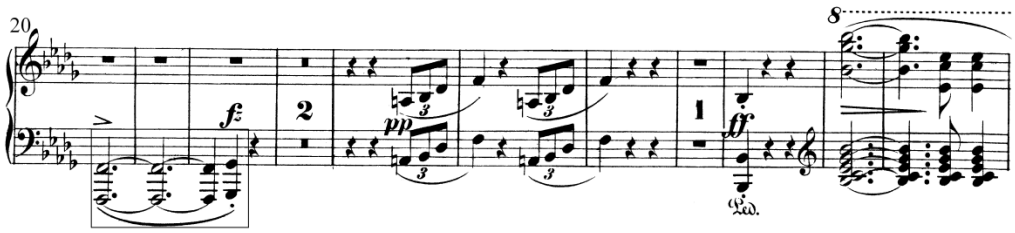
Furthermore, this emphasis on the semitone connection highlights the progression from A *through* B♭ to D♭. This is significant, I think, because the principal key areas mentioned so far accord with the melodic contents of the characteristic figure at the very beginning of the Scherzo (A♮-B♭-D♭-F, Example 4.2). This relationship to the first motive suggests that Chopin plans the tonal structure and the motivic contents to be woven together and that Chopin may have had the semitone motive in mind, employing it intentionally on different levels of tonal activity. Whereas Krebs (1991) places more emphasis on the arpeggio motive (B♭-D♭-F), I think it is noteworthy that Chopin adds one more note A♮ to it. Moreover, I believe that by adding A♮ to the arpeggiation of the B♭ minor triad, the composer makes this triplet motive more individual and distinctive. And it seems more than coincidental that this A-B♭ motion from the beginning reappears in the central section, with its move from A major to the reprise that begins in B♭ minor.



Example 4.2. *Chopin, Scherzo, Op. 31: Characteristic figure at the opening*

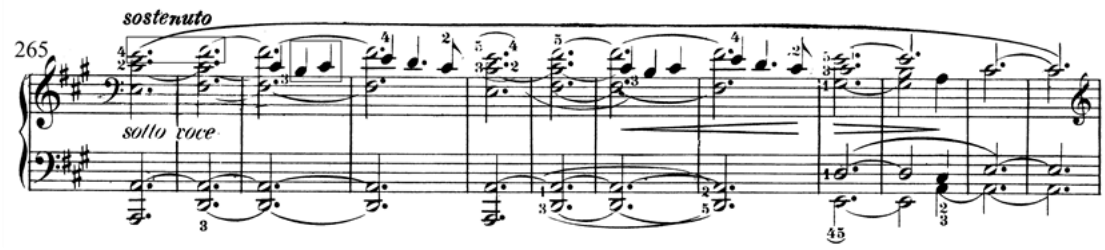
Additional semitone relations appear throughout the Scherzo, and although they may not have the same long-range implications as those just described, Chopin grants them prominence continually, and they participate in an evolving network of motivic relations that works together with the long-range tonal plan. I will begin by discussing those semitonal motives and their transformations, then we will see how they help express the unusual tonal plan for the entire piece.

In the opening phrase, for example, there is another semitonal motion that Chopin seems to add to the A♮-B♭ motion: the F-G♭ motion ($\hat{5}$-$\hat{6}$). As seen in Example 4.3, the F-G♭ motion in mm. 20–22 stands out in terms of register, dynamics, and note values. Here Chopin reverses the usual semitonal motion $\hat{6}$-$\hat{5}$; now the gesture rises, $\hat{5}$-$\hat{6}$. A sudden pause on $\hat{6}$ gives a sense of incompleteness to listeners and makes them wait for the following resolution to $\hat{5}$. However, after the long pause, the music moves only indirectly back to $\hat{5}$ in a different register as the music comes back to the characteristic triplet figures of the opening.



Example 4.3. *Chopin, Scherzo, Op. 31:* $\hat{5}$-$\hat{6}$ *motion in the opening section*

These two prominent motives, involving $\hat{7}$-$\hat{1}$ and $\hat{5}$-$\hat{6}$ motions, are preserved in the melodic surface of the middle section even though the overall atmosphere and the key of the section drastically change. As seen in Example 4.4, it is apparent from the musical surface that the first two notes E-F♯ present an idea quite similar to the $\hat{5}$-$\hat{6}$ motion of the first section. Even though the semitone motion is transformed into a whole tone according to the change to the major mode, the particular quality of the $\hat{5}$-$\hat{6}$ motion suggests a connection with that of the opening B♭-minor section.



Example 4.4. *Chopin, Scherzo, Op. 31: The opening of the A-major section*

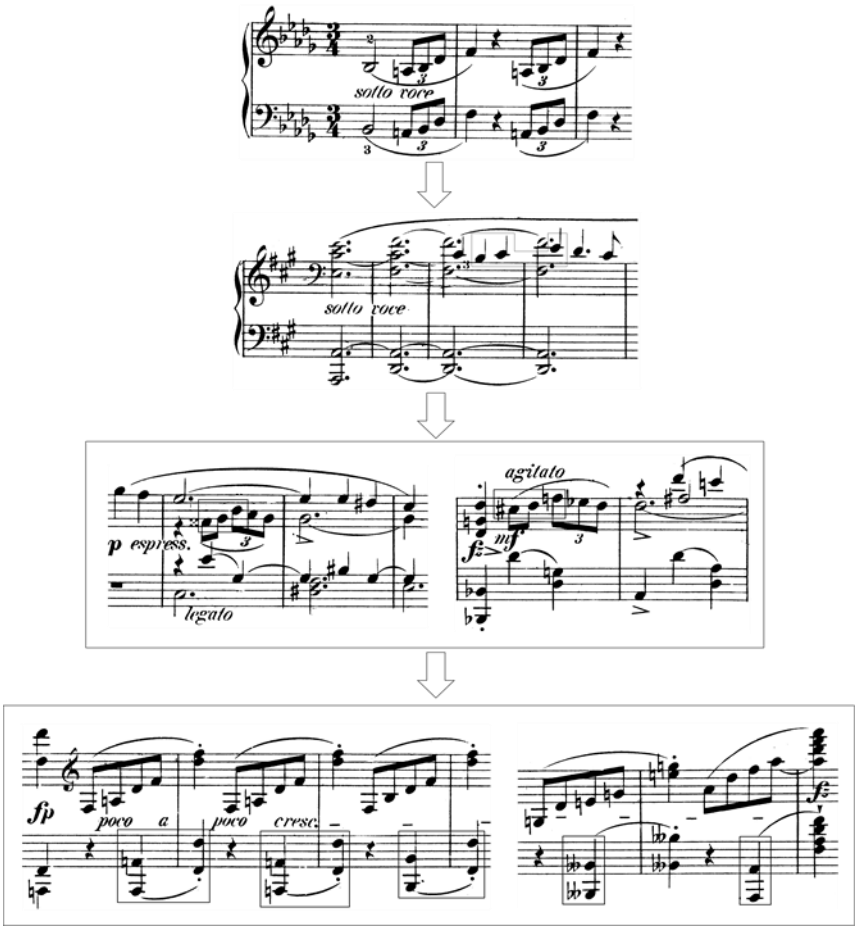
In addition, the neighboring tone B to C♯ in the inner voice reminds us of the incomplete neighboring tone A♮ to B♭ from the first section. According to Agmon (1992), the motives in mm. 1–4 and in mm. 265–69 are in a different category, since he regards the figure in mm. 265–69 as a double neighbor, circling around the C♯, and derives it from the *fortissimo* pattern of measure 8–9. He then asks the rhetorical question whether "is it really meaningful to say, therefore, that mm. 1–4 and (for example) 265–69 embody the same motive?" (116) Whereas I admit that B-C♯-D-C♯ in the trio section is indeed related to the E♭-F-G♭-F in the scherzo section, I still think that, certainly, the motivic shape of the melody B-C♯-E reminds listeners of the A-B♭-D♭-F in the opening, despite the intervallic change from the semitone to the whole tone. A

stepwise upward motion and a leap to the third up are distinctive enough to be retained in listeners' minds when they are impressed upon the ear by the ways they are presented and confirmed through repetition. In addition, $\hat{5}$ on the downbeat reinforces the link between them; the first motive in B♭ minor directs toward $\hat{5}$ (F), and the second one also shows an emphasis on $\hat{5}$ by inserting the E within the inner-voice neighboring motion.[16]

Furthermore, the continuation of the middle section supports the close connection between these two motives since the so-called neighbor figure keeps appearing in several minor keys. We can trace the semitone motive throughout the following part of the Scherzo's middle section. For instance, as the music modulates to C♯ minor, the intervallic change from semitone to whole-tone resumes, and F𝄪-G♯ and B♯-C♯ motions are prevalent from m. 412. Example 4.5 shows an evolving network of motivic relations as the piece progresses, the point being to trace how the similar type of those motives gradually changes as the music unfolds. In order to shed light on the intertwined motivic connections but to avoid terminological confusion, I separate the two notes, such as A♮-B♭ and B-C♯, from the other notes of the figure, rather than examining the figure as a whole, and focus on the function of the two notes in the given context. That is, I put more stress how the similar type of the motives gradually changes in time.

[16] Here Krebs and Kinderman emphasize the C♯ rather than the E in different contexts. As seen in Figure 4.8, Krebs's reading captures the D♭-C motion in the *Urlinie* ($\hat{3}$-$\hat{2}$) by relatively giving weight to the note D♭/C♯ rather than to the top voice F♭/E emphasized in Schenker's reading. He recognizes that "the melodic D♭ with which the first section ends is not left hanging" and that "the most active voice immediately after the double bar, the alto, revolves around C♯, the enharmonic equivalent of D♭" (52). Thus, he brings out the enharmonic change between D♭ and C♯. In addition, he hears that "A delay of the motion from $\hat{3}$ to $\hat{2}$ in the upper voice results in the alignment of D♭/C♯ with A, and hence in the A major harmony" (52), which turns out to be the third of the dominant in B♭ minor ("a consonant skip attached to F"). One result of this difference is that Krebs's analysis features an interruption (a divided *Ursatz*) while Schenker's does not.

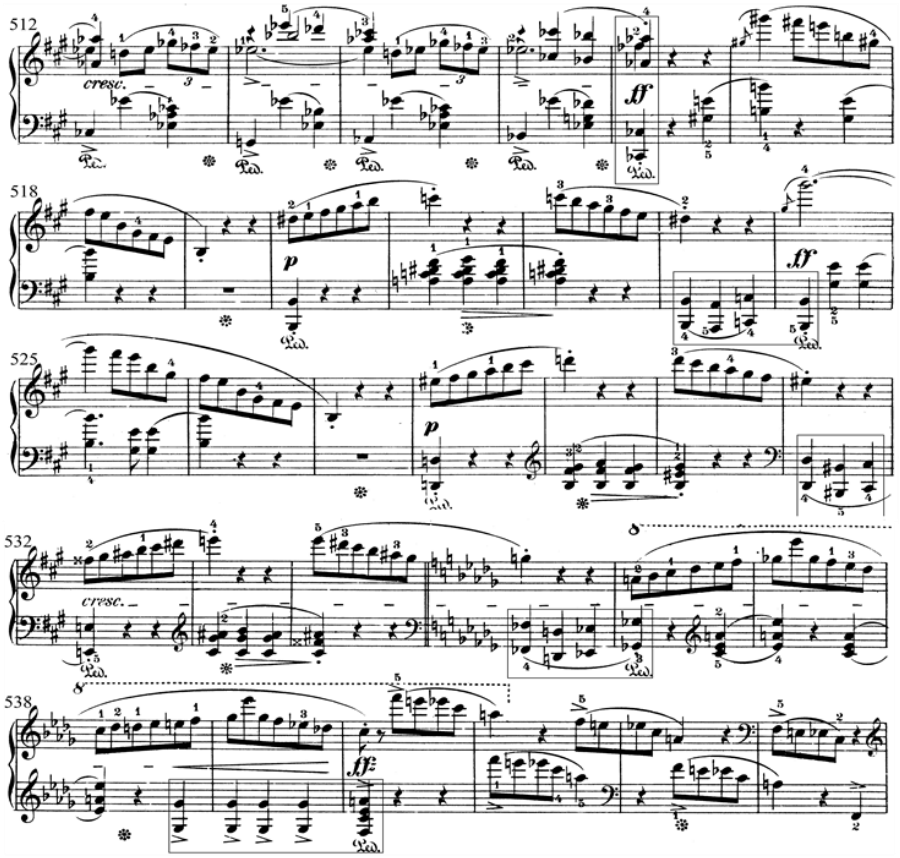
On the other hand, Kinderman also mentions that "the pitch C♯ is consistently sustained above the note A in the bass" (1988, 62). He even goes further by explaining the overall framework of the Scherzo as the circle of descending major thirds: D♭(C♯)-A-F-D♭.



Example 4.5. *Chopin, Scherzo, Op. 31: Evolving network of motivic relations*

Before looking at the last stage of Example 4.5, let me return to our discussion of the other motive, the $\hat{5}$-$\hat{6}$ motion, since a most intriguing feature occurs towards the end of the middle section. Chopin starts to incorporate the $\hat{6}$-$\hat{5}$ motion into the music as it returns to B♭ minor (Example 4.6). The passage in A♭ minor arrives at the deceptive cadence (♭VI6/4) at m. 516, and it is enharmonically reinterpreted as V6/4 in E major. This is a crucial moment when the main theme, originally in D♭ major, comes back after the long journey based on several keys. Then, Chopin adds local $\hat{6}$-$\hat{5}$ motions to the whole-tone progression rising in the bass from m. 516 to 540, separating for emphasis the final one, G♭-F, to mark the arrival on the dominant of

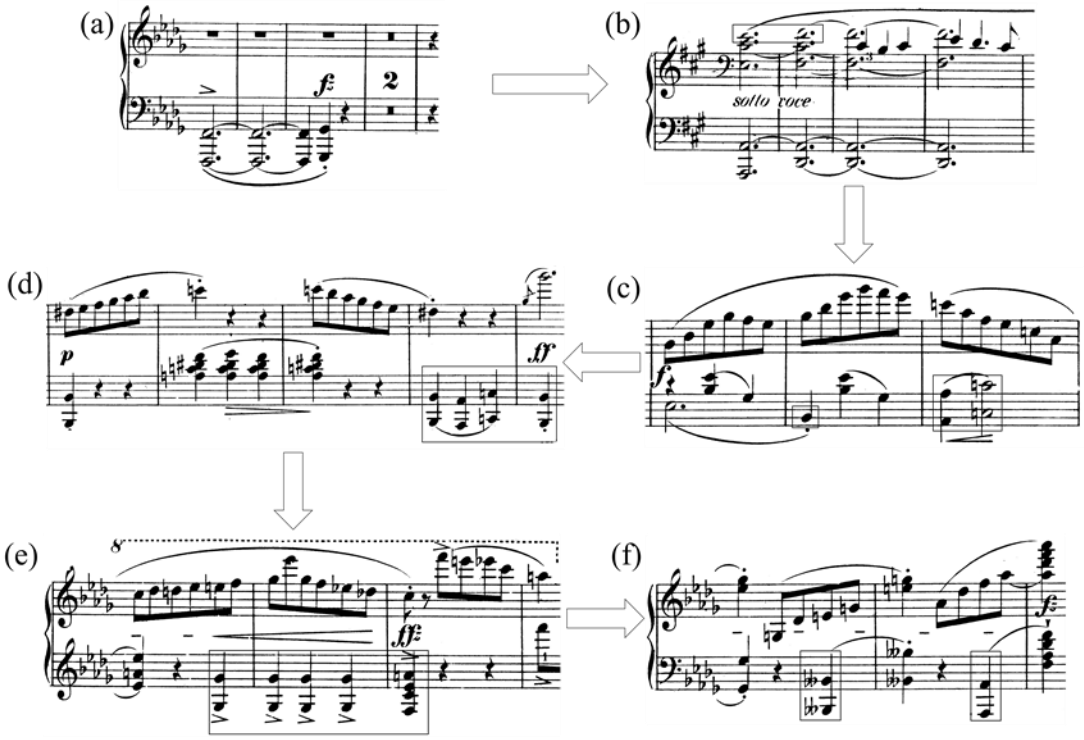
B♭ minor. As seen in the left hand of the example, beginning with C♮-B, the bass sequence D-C♯ and E(F♭)-E♭ leads to the culminating G♭-F motion. The final $\hat{6}$-$\hat{5}$ motion in B♭ minor at mm. 536–40 is strongly emphasized with repeated notes and dynamic markings. Therefore, I believe that, in terms of the motive, a significant motion to change the tonal direction already begins before the reprise, and that this reversal of the $\hat{5}$-$\hat{6}$ motive to $\hat{6}$-$\hat{5}$ foreshadows what will come toward the end of the piece.



Example 4.6. *Chopin, Scherzo, Op. 31:* $\hat{6}$-$\hat{5}$ *motion at the end of the middle section*

Example 4.7 illustrates how the $\hat{5}$-$\hat{6}$ motion gradually changes to $\hat{6}$-$\hat{5}$ motion. After it appears in B♭ minor (a) and in A major (b), the two notes are separated by $\hat{4}$ in the E-major passage (c). Then, as just mentioned, at the end of middle section, Chopin introduces the $\hat{6}$-

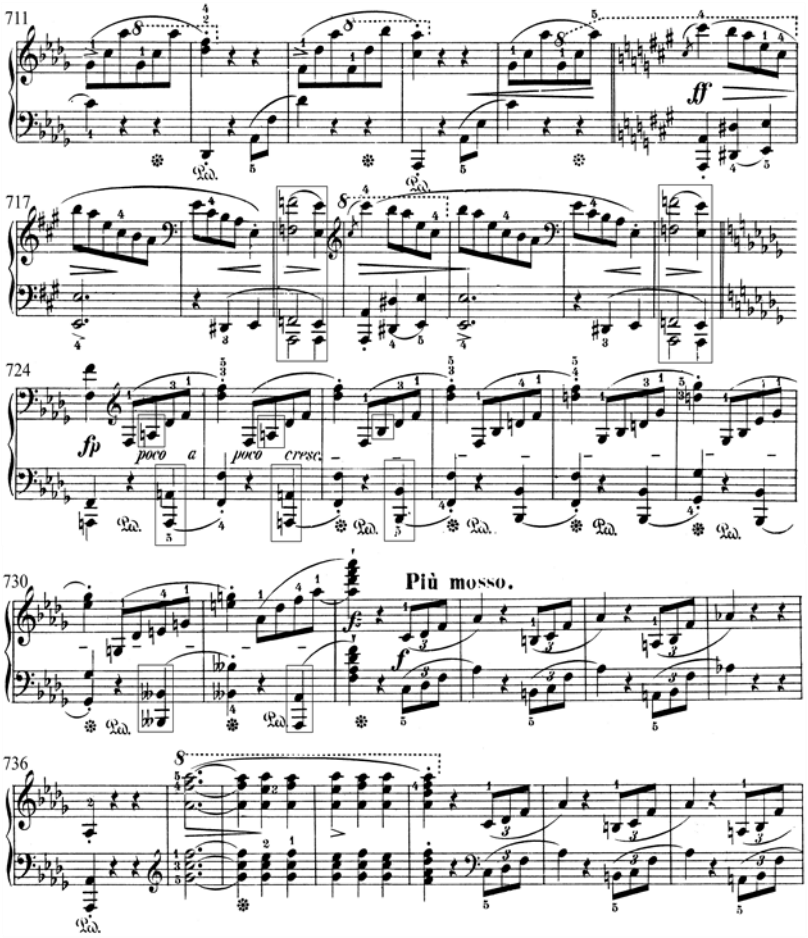
$\hat{5}$ motion by adding $\hat{5}$ to the previous $\hat{5}$-$\hat{4}$-$\hat{6}$ motion (d). Finally $\hat{6}$-$\hat{5}$ breaks away, forming the climactic point of the piece and announcing the return of B♭-minor through its dominant (e).



Example 4.7. *Chopin, Scherzo, Op. 31: Gradual change from* $\hat{5}$-$\hat{6}$ *motion to* $\hat{6}$-$\hat{5}$ *motion*

The last stage of the two figures (Example 4.5 and Example 4.7) demonstrates that the two striking semitonal motions $\hat{7}$-$\hat{1}$ and $\hat{5}$-$\hat{6}$ in B♭ minor ultimately converge on one semitonal motion, the ♭$\hat{6}$-$\hat{5}$ motion in D♭ major (B𝄫-A♭). This motivic change is confirmed when we examine how Chopin deals with the previous motions in the reprise. Example 4.8 shows the moment of convergence, which is one of the remarkable moments of the piece. After the B♭-minor section and the D♭-major section appear again in order, the music suddenly detours to A major with the materials of the main theme. The A in the left hand seems to resolve initially to B♭, thus confirming a listener's initial expectation. However, it soon negates that expectation as

an enharmonic equivalent B𝄫 goes back to A♭, $\hat{5}$ of D♭ major. Krebs points out two events that serve to underscore D♭ major in the last section of the reprise (1991, 56–57). First, the arpeggiating figures in the right hand from m. 724 show that "B♭ minor is now subservient to D♭ major" by expressing a reminiscence of the opening A♮-B♭ motion, but transforming it into the thematic materials and the key of the D♭-major section. Second, after the bass reaches back to A♭, the triplet figure from the opening B♭-minor section appear in the new key; the triplet figure still contains the A♮-B♭ incomplete neighboring motion, but the musical context is different now; it directs towards A♭. These gestures lend listeners confirmation of D♭ major as the final tonic arrival.



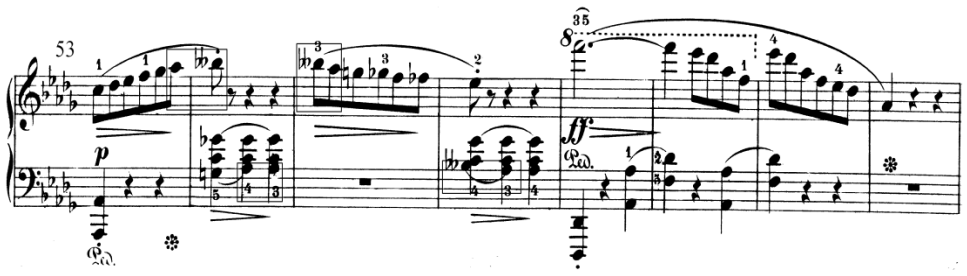
Example 4.8. *Chopin, Scherzo, Op. 31: A-major passage in the last section*

Afterwards, the B𝄫, an enharmonic equivalent of A𝄮, which resolves down to A♭ now, manifests itself in the last part of the scherzo. We may even say that it is not only the procedure of confirming D♭ as the final tonic, but also the procedure of confirming ♭$\hat{6}$-$\hat{5}$ motion in the new key. I strongly agree with Kinderman's observation about the coda:

> From this moment of the crucial semitone, whether written as A-A♭ or B𝄫-A♭, is incessantly repeated and resolved to the tonic triad. Most extraordinary, however, is the manner in which the opening progression of the scherzo is reinterpreted in the coda. The opening of the scherzo in B♭ minor had treated A as leading-note to B♭ in its first and third phrases. When this thematic material is transformed in the coda, the A is carried downward to A♭ as part of a larger linear progression, while the silent fourth bar of the theme, which was originally occupied by rests, is filled in by a third triplet configuration. (1988, 64)

This remark suggests that finally the A𝄮-B♭ motion gives way to a B𝄫-A♭ motion in accordance with the change to the concluding key of the Scherzo. At the same time the other distinguishing semitonal motive, the $\hat{5}$-$\hat{6}$ motion in B♭ minor, is replaced by ♭$\hat{6}$-$\hat{5}$ motion in D♭ major. This B𝄫-A♭ not only confirms the D♭ major as the final tonic key of the piece but also convert the previous ascending semitone motives into the descending one toward $\hat{5}$.

Knowing that the principal semitonal motives are turned into the B𝄫-A♭ motion, listeners realize or re-discover that B𝄫 had been present even in the first D♭-major section. As shown in Example 4.9, the scalar passage in the right hand reaches B𝄫 at m. 54, showing $\hat{5}$-♭$\hat{6}$ motion from the early part of the Scherzo. Although the melody displays the B𝄫-A♭ motion, it rapidly slips away to E♭ at m. 56. The bass also shows the similar A♭-B𝄫-A♭ progression, but Chopin disguises the connection between the notes by pairing G-A♭ and B𝄫-A♭. When Kinderman points out this passage, he explains it as "a tension between D♭ and A" in an early stage of the piece (1988, 63). Given what we have seen about the eventual shift of A to B𝄫, we can also interpret the passage as a hint of the motivic change which later comes to the fore.



Example 4.9. *Chopin, Scherzo, Op. 31: A♭-B♯♭-A♭ motion in the main theme*

So far I have tried to demonstrate how an investigation into a composer's tactics in using semitonal relations provides a path toward a deeper understanding of the music of Chopin. As seen in the analyses above, the semitone relationship between B♭ minor and A major, although indirect, is an important factor in this piece. Although a D♭-major reading relates these two keys as VI and ♭VI, the leading tone-tonic relation between them plays an important role in the Scherzo as well. Particularly, the leading-tone modulation in the middle section suggests a large-scale connection between these two keys and a possible underlying B♭-minor reading.

At the same time, it seems that A major also alters the character of the initial B♭-minor key. When we hear the return of the B♭-minor section, it creates a different expressive character than it had before. Experienced listeners may detect that, in spite of the return of the initial key, it does not give the impression of settling back into the home key, but rather of going toward another goal. As the section proceeds, listeners realize that it is the repetition of the same music, and they soon expect the following D♭-major section as a final destination. In this sense, the semitonal relation through A major functions to destablize or undermine the initial key B♭ minor as well.

In a 1994 article, while discussing directional tonality in the music of a later composer, Carl Nielsen, Krebs states:

> Just as significant in a directional work as the preparation of the final key is the dissolution of the initial key; if that key were still active at the end of the work, no new final key could possibly be rendered convincing. Nielsen employs various techniques of undermining his initial keys in order to pave the way for the establishment of a new final key. As was mentioned above, one of these techniques is the juxtaposition of the initial key with others related to it *by semitone or tritone*. (231, italics mine)

In a footnote, Krebs mentions a couple of examples of the undermining of the original key "by association with semitone and tritone relations" by Schubert, such as G♯ minor and G major in "Trost," D. 523, and A♭ major and A minor in "Hymne I," D. 659. And more specifically, he continues mentioning the Chopin's example: "and Chopin's Scherzo, Op. 31, in which the central A major area casts some doubt on the tonic status of the initial B♭ minor" (248).

I believe Krebs's argument makes a valid point even though the semitone-related keys are not directly juxtaposed in this Scherzo. Chopin's manipulation of semitonal relations does indeed have an effect of undermining the initial B♭ minor. We can even say that the last B♭-minor section after the central A-major section is not the same as the initial B♭-minor section in spite of the exact repetition.[17] Going through the long passages in remote keys, the initial B♭ minor, although holding some sense of the tonic, becomes weakened to the extent that listeners are not surprised when the music moves away to another realm of the key. In this respect, Chopin's choice of A major as the middle section is truly remarkable. By using a semitone-related key indirectly, he creates the section which performs a dual function; recalling the framework of the opening key and simultaneously, destabilizing the initial key.

[17] In this sense, Schachter's statement about the third cycle of the Fantasy (Op. 49) would be very persuasive: "Although the third cycle is an almost literal transposition of the first, it is in no way a mere copy. Its different position within tonal space and musical time gives it an altogether different function and meaning and even changes the local effect of some of its component parts" (1988, 250).

Furthermore, I have also claimed that Chopin's choice of the key for the middle section and the semitonal motives in the Scherzo are closely related to each other since Chopin arranges the semitonal motives in such a manner as to intensify the change of tonal direction from B♭ minor to D♭ major. The melodic contents and key relations of the piece are thus woven together. Since A, a primary chromatic tone, is a leading tone of the opening key B♭ minor and ♭$\hat{6}$ of the ultimate key D♭ major, it sets up the change of tonal gravity through semitonal motions on the surface. While the upward semitonal motion from A indicates B♭-minor tonality, the downward one from A suggests D♭-major tonality. That is, the note A plays a role in a motivic axis between two keys. In addition, Chopin incorporates a $\hat{5}$-$\hat{6}$ motion which enhances the effect of ♭$\hat{6}$-$\hat{5}$ in D♭ major later. It is amazing to see how Chopin gradually changes to motives which explode in the last part of the work. It demonstrates that Chopin sophisticatedly designs the motives throughout the work to prepare for the change of tonal center.

Like the previous case of the F♯-Major Impromptu (Op. 36), Chopin's successive use of the minor third and the major third results in the semitonal-related key, A major, in this Scherzo. As seen in the other parts of my dissertation, I believe that this type of tonal structure is not a fortuitous effect but a result of Chopin's idiomatic compositional technique. Yet, while Chopin deploys semitone-related keys as a tonic of the opening section and the reprise in the F♯-Major Impromptu, they function as the VI and ♭VI of the principal key in the Second Scherzo. Therefore, in spite of their similar appearance, their functions are entirely different. Whereas the F major from the Impromptu in F♯ Major, half-step down from the original key, brings new effects to the opening theme and delays the return of the real tonic at the same time, employment of semitonal-related key in this Scherzo contributes to combining the tonal sense of the B♭ minor

and D♭ major in the middle section. Thus, although I deal with the two works within the same category, the semitonal relationship works in each piece in its own unique way.

Prelude in C♯ Minor, Op. 45: Large-Scale Semitonal Relations as a Harmonic Outline

In this section, I will examine the Prelude in C♯ Minor, Op. 45. This prelude, composed in 1841, is not frequently performed, but it remains one of the most remarkable and adventurous works in the Chopin repertory.[18] In particular, bold harmonic progression caused by constant modulations offer much to analysts. For instance, John Rink describes this Prelude as "harmonically adventurous and generically distinct from the Preludes Op. 28" (1997, 89). In this section, I will focus my discussion on the harmonic adventures of the theme. Specifically, with relation to the topic of my dissertation, I will shed light on Chopin's diverse employment of semitonal motions, by dealing with notable direct semitonal motions and indirect ones across the large-scale plan in this Prelude.

Two essays, one by Eigeldinger (1997), and the other by Charles Smith (2005), contain thorough analyses devoted to this Prelude.[19] In spite of the many differences in these two authors'

[18] Eigeldinger states that "Op. 45 has been regarded ever since its first publication as inaccessible, even enigmatic" (1997, 235). He quoted the parts of the review by Maurice Bourges, and I think it is worth citing the passage on the Prelude here: "The Prelude in C sharp minor, Op. 45, by M. Chopin, can be included among his better works. The basic outline is nothing much in itself, merely an arpeggio phrase entrusted to the left hand, against which the right hand tosses here and there some expressive notes. Nevertheless, the directness and distinction of the modulations as well as the sustained succession of developments make this little composition a very lovely work indeed." *Revue et gazette musicale de Paris*, ix (17 April 1842), 171 (cited in Eigeldinger 1997, 235).

[19] Both articles show interesting approaches to the Prelude; Eigeldinger compares the Prelude with Beethoven's 'Moonlight' Sonata by examining the tonal and harmonic features of the Prelude. Smith analyzes this Prelude using the narrative from Bryan Singer's film *The Usual Suspects*.

approaches to this work, there are some points that both essays have in common. First, each author points out mixed characteristics in this piece. As Eigeldinger has noticed, finding a place within Chopin's repertory and considerations of genre have been primary questions about this Prelude. Mentioning diverse opinions about the genre by Niecks, Hedley, Samson, and Zieliński, he raises the question of its overall character and its relation to the Preludes Op. 28 (234–35). Smith also starts the article with a problem of the genre, questioning "[i]n what sense is this piece a prelude?" (2005, 237), and attributes the title to an improvisatory quality. He aptly describes the unusual quality of the Prelude: "Chopin's understanding of the term [prelude] was always somewhat unconventional, but the 1841 Prelude is even more un-prelude-like than any of his other preludes, with an uncanny sense of spaciousness that makes it seem longer than its ninety-two measures" (237).

Second, both authors discuss the absence of recognizable melodic tunes in the Prelude. Eigeldinger discusses "supremacy of harmony and modulation over melodic line in Op. 45" (241). He continues that the arpeggio texture is the foremost element of the theme. That is, he argues that melodic elements are derived from arpeggiation of the chords. In his words, "the harmonic formula is in fact the only 'theme' of the piece" (241).[20] In Smith's article, the author points to mm. 27–28 as the first time when a memorable melody occurs, the only such one in the piece. He says that "the surface of the Prelude is an amorphous texture of almost-imitative counterpoint, weaving long lines into an illusion of canonic pursuit" (238). According to him, "the linear organization of the harmonic language" is what gives us a clue to unraveling its

[20] This type of figuration, to some extent, accounts for the prefatory characteristic of the genre "prelude" itself. It is worth noting that, as Eigeldinger points out, similar types are found in introduction to some of Chopin's other pieces, such as Op. 49 and Op. 61 (Eigeldinger 1997, 245).

overall structure (240). Thus, both authors assign an important role to harmony as a main source in organizing this piece.

These two issues mentioned so far, involving genre and melody, lead to the question of the harmony in this piece: Then *what* harmonic principle characterizes the work?—that would become the main question and also the point where the two authors have a difference. Both of them suggest a major-third-cycle as a distinctive element, but their views on the semitonal relations differ somewhat. On the one hand, Eigeldinger explains the harmonic structure of the piece as three harmonic poles: "Thus, these three keys—C♯ minor, F major and A major—prove to be the poles around which the piece's harmony is constructed. The C♯ octave is therefore symmetrically divided into three enharmonic thirds (in a foretaste of Wagner)" (1997, 246). What deserves as much attention, from the perspective of this dissertation, is his following statement of the Neapolitan sixths of these poles. He clarifies the prominent use of Neapolitan, saying that "the use of the Phrygian second" is a contributing element to the modal-tonal ambiguities (248). In this way, he links the semitone-related keys, such as C♯ minor and D major, to each other. On the other hand, Smith proposes two separate cycles of major-third-related keys: a C♯-A-F cycle drawn from the beginning and end of the piece and a D-B♭-G♭ cycle which runs through the middle.[21]

A good place to begin, then, would be to examine these tonal areas in detail, along with the formal design of the piece. The formal principle that governs the piece is not that difficult to recognize. The Prelude comprises an opening theme presented from m. 5, its modification and modulation to several keys from m. 19, and its return in C♯ minor at m. 67. Therefore, we can interpret this work in three large sections (the first section in mm. 1–19, the middle section in

[21] For more details about the two cycles, see Smith (2005, 242–47), particularly the figures (Figure 20.3 and Figure 20.4).

mm. 19–67, and the last section in mm. 67–92). What is more unusual is the harmonic path of the theme, and it is not so simple as that. Figure 4.11 shows the harmonic outline of the opening passage in mm. 1–18. Broadly speaking, this passage shows a modulation from C♯ minor to D major. Chopin leads the music first to A major at m. 11–12 through sequential motions using a circle of fifths, then moves to D major at m. 15. This D-major harmony is a kind of fully stabilized tonal area where the music takes some time off after continuous changes of the harmony. Smith also mentions that the D-major harmony at m. 15 "stands out as special," considering it a rare case which begins the measure without an accented nonchord-tone (238). If we regard this arrival of D major as an end of the first section, it is noteworthy that Chopin employs these semitonal-related keys, C♯ minor and D major, for both boundaries of the section. In addition, the arrangement of the keys, C♯ minor – A major – D major, is one of Chopin's distinctive techniques, leading-tone modulation, in a large scale, as shown by the scale degree transformations in Figure 4.11.

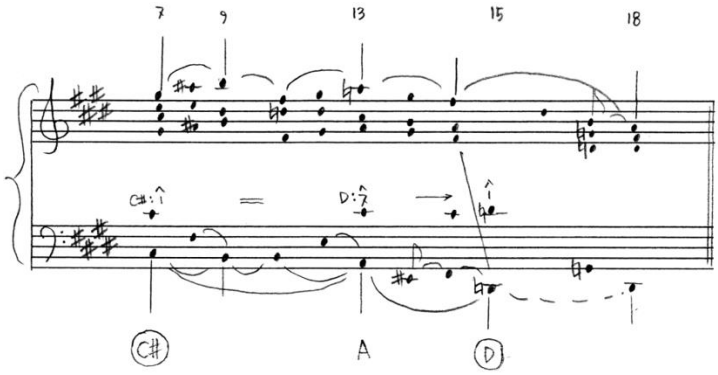


Figure 4.11. *Analysis of Chopin's Prelude in C♯ Minor, Op, 45, mm. 1–18*

The theme starts again in F♯ minor at m. 19 from which I read the beginning of the middle section. The passage shows the same progression in fifths as that of the first section, but an alteration occurs at m. 27 (Figure 4.12). Against listeners' expectation for D-major harmony

that resolves the previous seventh chord on A at m. 26, the music resolves deceptively to B♭ major. The Prelude presents subsequently the same type of progression by a half-step above, from the seventh chord on F to G♭ major in mm. 30–31, and the G♭ major is firmly established at the end of passage as a next arrival point. As a result, the passage demonstrates a process from F♯ minor to G♭ major. On this type of semitone progression, Eigeldinger describes as "interrupted cadences which introduce a dramatic foreshortening upon the appearance (bars 27 and 30–31) and then disappearance (bars 54–55) of flat keys" (246–7). This observation suggests a momentary tonal disorientation that the passage causes.

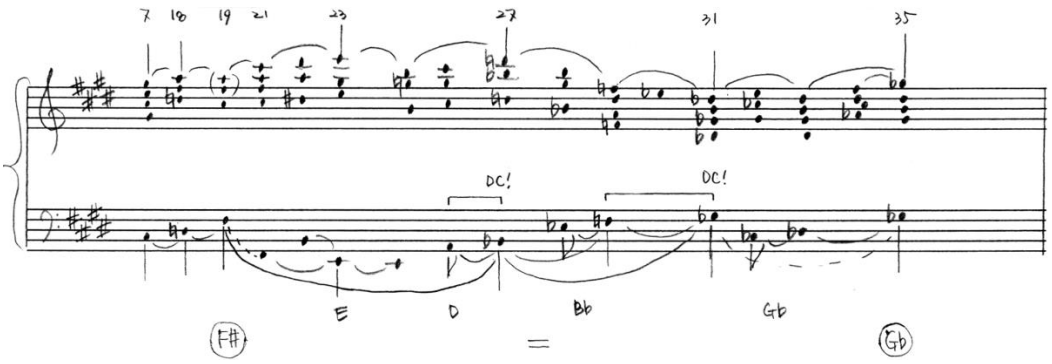
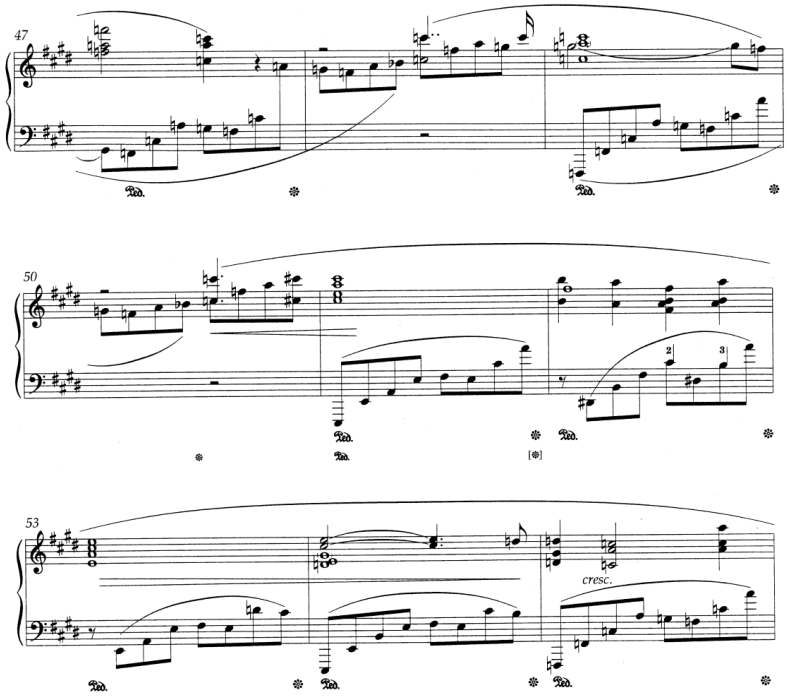


Figure 4.12. *Analysis of Op. 45, mm. 19–35*

Eigeldinger does not, however, mention the link between the F major at m. 47 and the A major at m. 51, which I believe to be the most climactic moment of the piece. This third progression creates a certain tonal chasm since listeners might wait for a strong resolution by fifth at this moment of the piece; it follows successive deceptive cadences by semitonal motions. Surprisingly, here Chopin takes an unusual path from what is expected by employing the third relation. The interesting point is that it creates another semitonal motion in the bass due to the use of the six-four chord on E at m. 51 (Example 4.10). Smith explains this A-major moment as

a same type of deceptive cadence as of the preceding ones[22]: "From here, a second pair of deceptive progressions reorients the Prelude's harmonic direction. Instead of a sequentially prepared cadence in B♭, the third deception, in m. 51, reinterprets a V of B♭ (F) as a ♭VI of A, which moves to a dominant of that key" (246). Thus, according to him, whereas the preceding cases in mm. 26–27 and mm. 30–31 are the deceptive cadences, moving to (♭)VI, this moment in mm. 50–51 is the counter-motion ♭VI–V. I think it is an insightful interpretation, and it reveals the semitonal motions which form the essence of the harmonic events in the middle section.[23]



Example 4.10. *Chopin, Prelude in C♯Minor, Op. 45: F major – A major progression in the middle section*

[22] Smith refers to the spots, where "the actual chord is a major triad a major third lower than the tonic that is expected" such as m. 27, as a "pivotal moment within the Prelude's narrative" due to a "direct consequence of its shockingly abrupt deceptive cadence" (242).

[23] Playing in *subito piano* at m. 51 is one of the ways to intensify this abrupt harmonic progression. Even though there is no specific dynamic marking, except for *crescendo*, in the score, it makes a good effect to reduce dynamics at m. 51, resulting in emphasizing the semitonal motion F♮-E in the bass and giving momentum to starting a phrase returning to F major. This is discussed in an independent study with Prof. Louis Nagel in 2013.

Afterwards, the music comes back to F major by one more deceptive cadence in mm. 54–55. As a result, the middle section shows a process from F♯ minor to F major, just as both ends of the first section are semitone-related. The abundance of the semitonal motions contributes to harmonic richness of the section, while the fifth progression at the end of the retransition in mm. 65–67 arouses an affirmative sense of resolution.

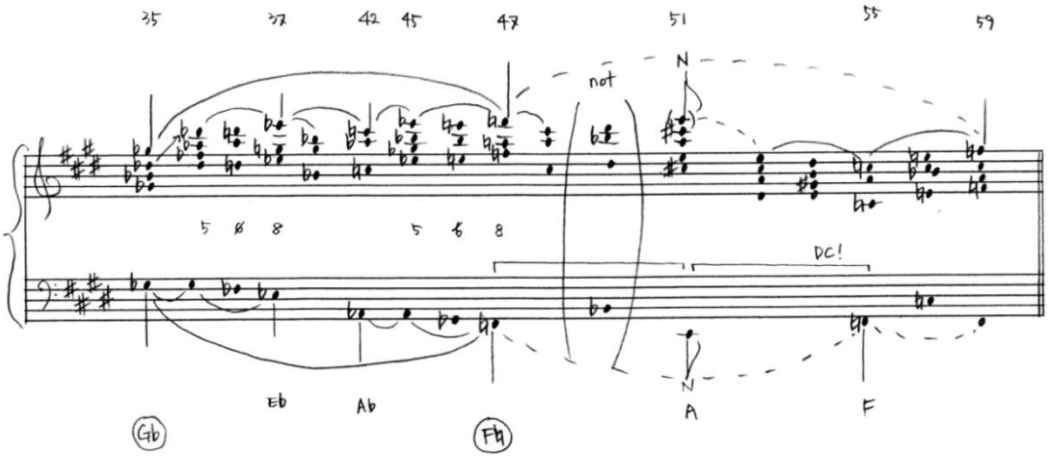


Figure 4.13. *Analysis of Op. 45, mm. 37–59*

The cadenza from m. 79 shows a culmination of semitonal motions; the chromatic descending motions through alternation of the dominant seventh chord and the half diminished seventh chord and ascending motion through successive diminished seventh chords directly sums up the unusual harmonic progressions and constantly fluctuating tonality of the piece. Afterwards, the music proceeds to a strong perfect authentic cadence, and then the last passage, what we might call a codetta, presents the theme in fragments in *piano*. Here Chopin recalls previous semitonal motions by expressly stating the Neapolitan D-major harmony.[24]

[24] In Smith's analysis, this is the moment when the hidden character was revealed but calmly disappeared into the crowd.

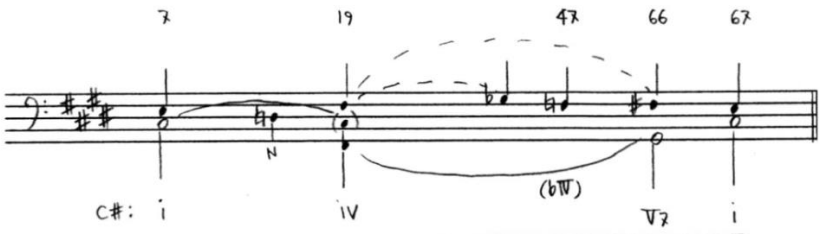


Figure 4.14. *Overall tonal structure of Op. 45*

As discussed so far, semitonal relationships, both direct and indirect, play a critical role in an unusual harmonic journey in this piece at multiple levels. This Prelude contains many local semitonal motions in the form of unexpected deceptive cadences. In addition, a larger-scale leading-tone modulation is used more indirectly; it does not occur between adjacent chords but covers the whole section. Lastly, this Prelude features semitonal-related keys located at both ends of the sections. Figure 4.14 illustrates a possible reading of the overall progression. This graph shows the semitone-related keys, C♯ minor and D major, for the first section and prolongation of the F♯, through the neighboring motion F♮ (♭IV), for the middle section. Thus, in this Prelude, Chopin employs semitonal relationships as not only a chromatic harmony but a harmonic outline of the work.

4.2. Semitonal Relationships as a Formal Element: Pitch Structuring

While I have dealt with semitonal relationships mostly as key relations, it should be emphasized that semitonal relationships engage many musical processes of which modulation is just one. Harmony and tonality are tied together with other musical parameters of the work, some of which I have already examined in earlier examples. This section focuses more on the roles that

semitonal relationships play as musical content. In particular, I discuss how Chopin uses semitonal relations as motivic contents and further as formal elements to organize an entire piece. As analytical examples, I will consider two works, B♭-Minor Nocturne, Op. 9, No. 1 and G-Minor Ballade, Op. 23, using semitonal motions as a lens through which to examine the works.

Nocturne in B♭ Minor, Op. 9, No. 1

In the third chapter of his dissertation (1980), Krebs states:

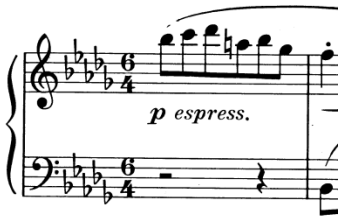
> Unity is, however, provided by various means in the works discussed in [Krebs's third chapter]. . . . In some of the [Schubert] Lieder, and especially in the instrumental works of Chopin, unity is provided by motivic means; the 'permanent modulation' is carefully woven into the motivic framework, just as were many of the temporary modulations discussed in the preceding chapter. These works, then, though anomalous, are not products of undisciplined 'romantic' imagination, but rather of the most careful thought and planning. (169)

Although this remark refers directly to works in which the initial tonic fails to be confirmed and is instead replaced by a third-related triad, it can be applied as well to many other examples by Chopin. Among Chopin's diverse ways to produce motivic consistency, it is of interest that he sometimes uses semitonal motives as a means of unifying a piece.

To illustrate this idea, I will return to the first Chopin example of my dissertation, the B♭-Minor Nocturne, Op. 9, No.1. I mentioned the special effect caused by alternation of semitone-related keys in the middle section of the Nocturne in Chapter 2. In what follows, I point out that, in this Nocturne, semitonal relationships are featured not only as a harmonic event but also as a motive on the surface and in a large-scale form.

Above all, this Nocturne displays a semitonal motive as a trochee, what is often called a "sigh" motive. From the first section of the Nocturne, the leading-tone A♮ plays an important

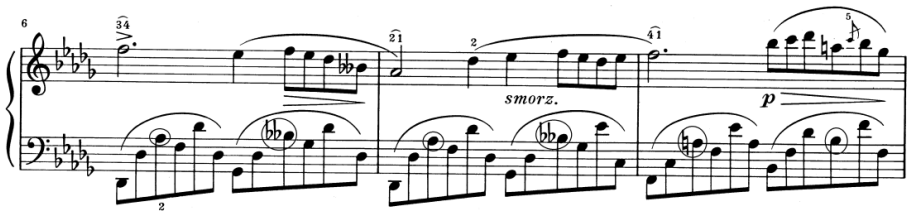
role, manifesting an A♮-B♭ motive on the surface of the very beginning; A♮ is the first chromatic note of the piece, approached from D♭ in the figure of six eighth notes in the incomplete (upbeat) measure (Example 4.11).



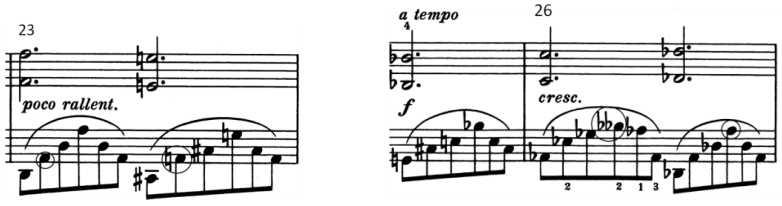
Example 4.11. *Chopin, Op. 9, No. 1: Leading tone A♮ from the incomplete measure*

Then, as the tonic and dominant harmonies alternate in the left hand, A♮ is continuously used as a lower neighbor prolonging B♭ or as a chord member of the dominant chord. Also notable is where Chopin employs a skillful use of enharmonicism between B𝄫 and A♮. For instance, in mm. 7–8, when the music moves back to V of B♭ minor from the brief tonicization of III, Chopin creates an A♭-B𝄫-A♮-B♭ linear motion (Example 4.12a).[25] That is, Chopin uses B𝄫 first, and replaces it with A♮. On the other hand, later in the middle section, the composer deploys the same enharmony by using an A♮ to move to D major and a B𝄫 to get back to D♭ major. As seen in Example 4.12b, when the diminished seventh chord proceeds to the V of D♭ major, the change from A♭ to A♮ is recovered by a B𝄫 to A♭ motion as heard in the first section. It is a brief moment, but the listening experience is enhanced when we recognize that Chopin incorporates motivic gestures that he had previously used.

[25] This was discussed in the seminar class, entitled "Tonal Composition" taught by Prof. Kevin Korsyn in winter 2012. Chopin also employs the same, but descending linear motion in the D♭ major middle section, such as in mm. 25–26 and in m. 38.

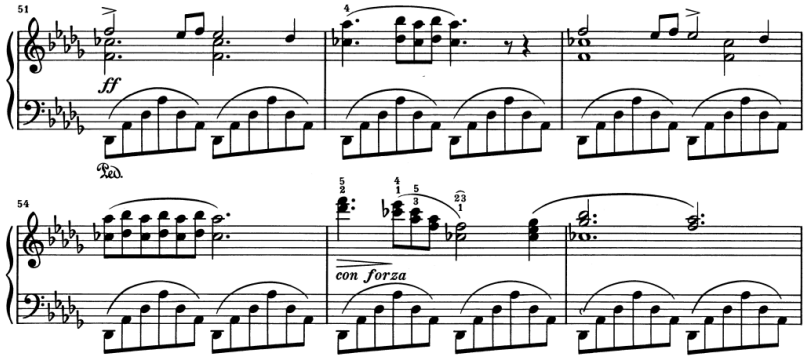


Example 4.12a. *Chopin, Op. 9, No. 1: A♭-B𝄫-A♮-B♭ linear motion in mm. 6–8*

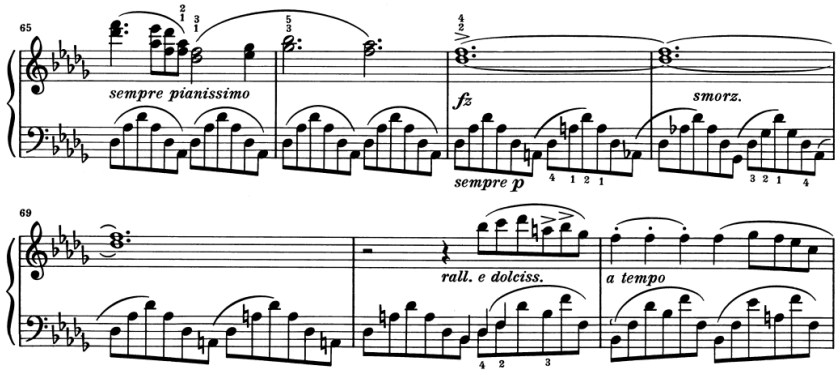


Example 4.12b. *Chopin, Op. 9, No. 1: A♮-B𝄫 enharmony in the middle section*

In the middle section the music modulates to the relative key, a minor third apart, as we saw earlier. However, it soon oscillates with D major, which brings about a B♮. The enharmonic respelling of B♮, C♭, appears again as the seventh of the dominant seventh chord on D♭ in m. 51 (Example 4.13a). As mentioned in section 2.2, this seventh disappears from m. 59, but remains unresolved; it does not descend to B♭ until the last section starts in m. 70. This extensive use of the dominant seventh chord on D♭ and its delayed resolution highlight the C♭-B♭ semitonal motion in the middle section, and this C♭-B♭ gesture can be interpreted as a counterpart of the A♮-B♭ motive in the first section.



Example 4.13a. *Chopin, Op. 9, No. 1: The dominant seventh chord on D♭ from m. 51*



Example 4.13b. *Chopin, Op. 9, No. 1: Beginning of the A' section*

As C♭ is beginning to resolve (at m. 70), the bass evades B♭ initially, first circling around A♭ in mm. 66–68, and finally ascending to B♭, via A♮ (Example 4.13b). In this way, the starting point of the reprise is not only a moment of long-delayed resolution of the C♭ to B♭, but also a moment of the reappearance of the A♮-B♭ motion. The *rallentando, dolcissimo* restatement of the upbeat, together with the two accents on A♮ and B♭ in m. 70, invite the performer to connect the bass A♮-B♭ to this same semitone in the main right-hand melody. That is, the approach to the reprise is where these two semitonal motives are combined, and this convergence continues throughout the reprise. As the reprise is abbreviated a great deal,[26] the music proceeds directly to the cadential motion, after only eight measures. The last part of the reprise emphasizes a ♭II–V–I progression, which appeared only one time at the end of the first section, but is repeated several times in the reprise. In other words, now C♭ is incorporated with the previous motive of A♮-B♭ and plays a more active role in the reprise. In the work's conclusion, the extended Neapolitan augmented sixth makes for a dramatic effect since it shows a striking sonority which

[26] In the last section, after the first phrase (mm. 1–4) returns, the next eight measures (from the second beat in m. 4 to the first beat in m. 12) are omitted; in the first section, these omitted measures move to the III, D♭ major, and the composer may have wished to skip the return of the D♭-major music in the reprise since a long D♭-major section has intervened in the middle section.

simultaneously contains the A♮ and C♭, integrating what has happened so far and supplying no fewer than four semitonal motions approaching the final B♭-major chord. In this sense, we might say that the cadential progression, ♭II–V–I, heard at mm. 17–18, is a seed of a procedure that courses through the entire work.

The following figure shows aspects of the overall pitch structuring of the B♭-Minor Nocturne,[27] as a pattern of inversional symmetry. As illustrated in Figure 4.15, in the first section of the Nocturne, the leading tone A♮ stands out, displaying A♮-B♭ motive from the beginning. In the middle section the music modulates to the relative key, D♭ major, but soon marks a semitonal relationship again, by oscillating between D♭ major and D major. Then the C♭, an enharmonic respelling of B♮, takes to the fore as the seventh of the dominant seventh chord on D♭ at the end of the middle section. It descends to B♭ when the last section starts, and this gesture is characterized as a counterpart of A♮-B♭ motive. At the last minute, the Neapolitan seventh chord, which displays the A♮ and C♭ together, synthesizes the preceding semitonal motions.

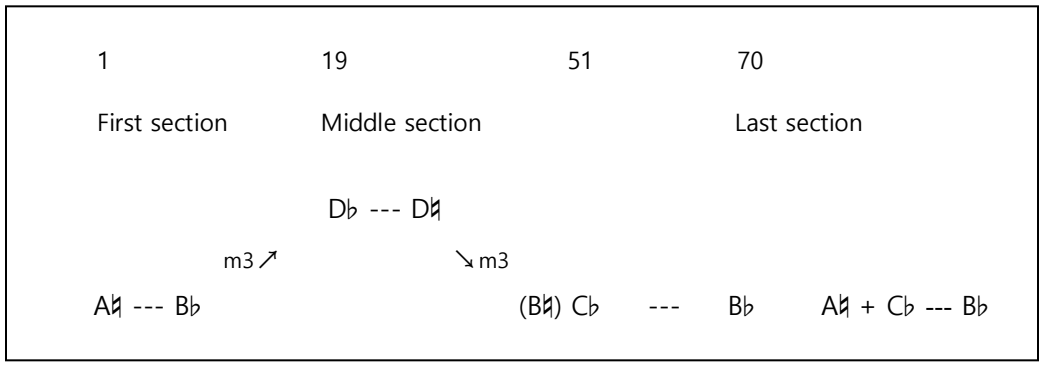


Figure 4.15. *Inversional symmetry in Chopin's Nocturne in B♭ Minor, Op. 9, No. 1*

[27] I use the term, pitch-structuring, to refer to the relationship between salient pitches across the work. A slightly different concept is "pitch-class motives." First used by Steven Laitz (1992), Pitch-class motive designates a particular motive which is maintained on the same pitch class and importantly functions throughout the work (for the discussion of the overall historical origins and analytical examples relating to the term, see McCreless 2011). Since I designate transposable semitonal motives, not specific to certain pitches, the term "pitch structuring" would be more appropriate to use in this section.

To summarize, Chopin imaginatively employs semitonal motives not merely for a surface effect but as a component of pitch structure which engages the piece as whole. Whereas an inversional symmetry by twentieth-century composers such as Schoenberg, Webern, and Bartók has been discussed extensively, Chopin's use of symmetry needs to be further explored. In what follows, I will discuss another case when semitonal relationships in symmetry are crucially involved in constructing a work.

Ballade in G Minor, Op. 23

Whereas the previous section examined the inversional symmetry in a short nocturne, I will now turn to a larger-scale piece, as the issue of the structural logic of the large-scale pieces raises questions about the forms in Chopin's work. Formal ambiguity in Chopin's music has been one of the topics that cause debate among scholars, for it is true that it is often hard to find suitable formal principles when parsing some large-scale and complex compositions by Chopin, the Ballades being representative cases.[28] As Laufer has noted, "the formal designs of the Ballades are perhaps controversial inasmuch as different commentators read them differently, and music that is controversial and problematical is often particularly intriguing just on that account" (157).

Among the four Ballades, I will offer the First Ballade, Op. 23 as an analytical example and focus, in keeping with the topic of this dissertation, on semitonal pitch structuring across the work. My discussion focuses on the principal pitches that are treated with special importance in the piece, a perspective similar to that of Tuchowski (1999), who has noticed an "integrative

[28] In the first part of a 1999 article, Andrzej Tuchowski mentions that Chopin's ability to construct large-scale works was viewed unfavorably by many music critics, adding that this perspective changed through a re-evaluation of "the latent structural logic in Chopin's works" by the scholars in the second the third decades of the twentieth century. See Tuchowski (1999) at http://www.usc.edu/dept/polish_music/PMJ/issue/2.1.99/tuchowski.html.

pitch-axis technique" in which certain notes have structural importance throughout the piece. According to him, these notes are "given a strong emphasis by means of texture, sonority and dynamics, as if Chopin wanted these particular pitches to be well remembered." He cites the Nocturne in C♯ Minor, Op. 27, No.1, where he considers the notes C♯ and G♯ to function as two main pitch axes, along with a subsidiary pitch axis E, adding that the prominence of these notes persists throughout the middle section despite the enharmonic change from G♯ to A♭.

Similar types of pitches are also emphasized and aurally stand out in the G-Minor Ballade. As discussed in my previous study on the form of the Ballade (2008), the overall progression in the upper part consists of continuous minor second intervals, D-E♭-E♮-E♭-D (see Figure 4.16). In the section until m. 68, the D is the focal point of the melodic motion. Whereas Tuchowski uses the term "pitch-axis" to designate "border pitches" which frame a space of a melody, the D is not marked as the highest note in this section, though it is still true that this note stands out from the beginning. At m. 5, the D is where the opening melody in octave arrives; after the melody starts unusually by outlining the Neapolitan sixth, it circles around the tonic G, then descends to the D. Although the upper part descends to the B♭ leading into the main theme, the bass takes over this D at m. 7 as the dominant of the key, as described by David Witten: "Toward the end of the introduction measures, we realize that Chopin's strategy was to structurally outline the pitches above and below the dominant—in other words, to present his first Ballade 'wedge'" (1997, 126).

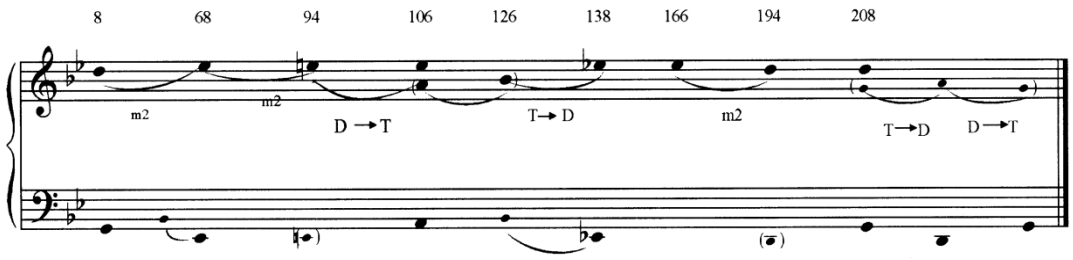


Figure 4.16. *Ballade, Op. 23*: *Overall voice-leading progression (Chung 2008, 96, Example 3)*

The opening *Moderato* theme is followed by a transition from m. 36, and overall this transition shows the G-G♭-F progression. Afterwards, through fifth progressions in the bass (F-B♭-E♭), the second theme starts from m. 68. In the second-theme area, the E♭ is not only treated as a relatively stable tonic but also leads forward to the note E♮. From m. 94, the modified first theme in A minor is repeated over the pedal point E♮, which bridges to the climactic A-major section that begins at m. 106. In the A-major section, continuous returning to E♮ on the first measure of the phrases places much emphasis on the E♮, even more so than on the A, and this semitonal shift from E♭ to E♮ smooths over the augmented fourth between E♭ and A.[29] In addition, the E functions to bring back the E♭ by moving to E♯(F)-B♭ after the A-major section.

Figure 4.16 demonstrates the return from the focal point of pitch structuring, E♮, to E♭ and D, which completes the overall symmetrical semitonal motions of the piece. The E♭-major section from m. 138 is noteworthy since, although the key of the second theme comes back, this section introduces apparently new thematic material that postpones the return of the second theme until m. 166. Witten discusses how differently Chopin treats this modulation to E♭ major from the former one. He says that "it is now firmly ensconced as the key area at the beginning of the recapitulation (mm. 160–80)" due to the "converging wedge motion into V of E♭ major"

[29] Karol Berger (1996) interprets the key by the diminished fifth relationships, B𝄫, rather than A, and states that "Chopin, who loved to flatten the fifth degree of a chord, here transfers his predilection from the level of chordal structure to that of key structure" (55).

while the previous modulation to the second theme (mm. 68–82) is tonally ambiguous (1997, 131–32). Thus, Chopin introduces new thematic material at this moment of the E♭-major return. And this time, it prompts the pitch-axis to go back to the D, which is supported by the continuously appearing pedal point from m. 194.

The symmetrical pitch-axis, consisting of the consecutive semitonal motions, is closely related to the interpretation that reads the Ballade as being in arch form. Witten points out that the tripartite, arch form, D-E♭-D, generates a smaller one (E♭-E♮-E♭) within it (1997, 127–28). Furthermore, he argues that the arch arises from the $\hat{6}$-$\hat{5}$ motif of m. 7.[30] In my article from 2008, I also suggested a reading that interprets the Ballade in double arch form; I argued that this ballade essentially had a dual structure, due to the subtle overlapping of two arch forms, one produced by thematic development, the other by tonal design. In respect to themes, the section from m. 138 with the new theme centers on the symmetrical design, whereas the A-minor/major section in mm. 94–125 is a focal point of the arch in terms of tonal and harmonic design, showing thick chords, a wide-ranging use of the register, technical octave progressions, and intensified tension (101–2).

Still, the amount that scholars emphasize an element of symmetry falls on a spectrum. Witten, for instance, even though he points out the symmetrical element in arch form, also claims that there is a need to pay more attention to the overall tonal plan, especially the location of the structural dominant in the piece, saying that Chopin "extends this trend [of the active use of the mediant and the submediant and delaying the structural dominant] even further" (119). Jim

[30] Witten points to the $\hat{6}$-$\hat{5}$ motion as a prominent feature throughout the Ballades: "In the Ballades, motion form the sixth to the fifth degree is an essential element not only melodically, but on every structural level; it occurs in the melodic contour of the themes, it strengthens various secondary dominants, and it plays the major role in preparing the structural dominant" (1997, 120).

Samson has observed a symmetrical element in the Ballade, stating that "[b]y presenting a mirror reprise and retaining the same tonal setting as in the exposition for the two themes he establishes an element of symmetry, both thematically and tonally" (46), but he also points out that this symmetrical design is "counterpointed against a strongly directional momentum more in the spirit of the sonata-form archtype" (48).[31] That is, Samson's view treats as more or less equal the influence of sonata principle and that of symmetry within the piece.[32] Thus, these discussions show that the First Ballade contains an integration of sonata principle and arch form.

On the other hand, Schenker's graph of the Ballade interprets the piece in three-part form.[33] According to his graph, the E♭-major section, from the second theme at m. 69 to the return of the first theme in G minor at m. 190, is a long span of the neighboring tone E♭, prolonging the primary tone D. It is not until the last *Presto* section that the *Urlinie* starts a descending motion, and this interpretation indeed puts much stress on the last section as a final goal of the piece.

[31] Samson takes sonata form as the "essential reference point for all four ballades" and points out "the accommodation of sonata-based structures to an idiom derived from post-classical concert repertoires" in the beginning of the chapter (1992b, 45). Laufer also deals with the Ballades by comparing their features with those of sonata movements and even multi-movement sonatas (see the last section of the chapter 2, for Laufer's discussion of the Fourth Ballade).

[32] In another article, Samson has also stated: "In the G minor [Ballade] the central ambiguity is between a sonata-based structure, allied to an accelerating intensity curve, and the more formal symmetry of an arch design. Both the thematic pattern and the tonal scheme may be read as non-congruent arch structures, where 'C' is the pivotal waltz theme [m. 138 ff.]. In this interpretation the reversed order of the two themes in the reprise is clearly significant" (1992a, 114)

[33] In *Free Composition* (Fig. 153, 1), Schenker categorizes the form of the Ballade as a three-part song form. See Schenker (1979, 133): "Here we see a very extended three-part form, boldly derived from a neighboring tone, yet unfolding in a single broad sweep."

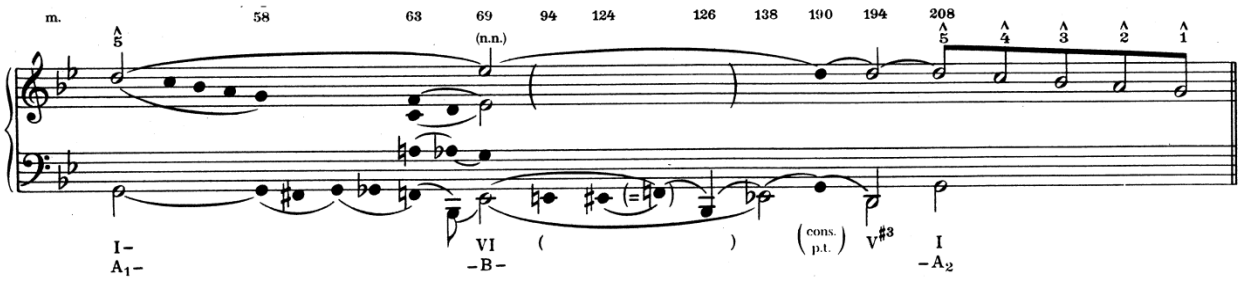


Figure 4.17. *Schenker's graph of the Ballade, Op. 23 (*Free Composition, *Fig. 153,1)*

It is often said that this kind of emphasis on the last moment is related to the narrative within the genre of a ballade. In his book *Chopin's Polish Ballade* (2010), which deals primarily with the Second Ballade, Jonathan Bellman discusses the "constant forward motion in Op. 23," and he explains how the narrative strategies of the Ballade affect the structure of the work, pointing out "a sense of dramatic progression through an unfolding sequence of musical events, events that build to a clear climax at the end of the work" (58).[34]

Just as Bellman points to the narrative element in the Ballades, others have also attempted to understand structures and characteristics of the Ballades using narrative strategies. For example, Michael Klein (2004) approaches harmony in connection with the expressive logic such as temporality, projecting the narratives of Chopin's First and Fourth Ballades. According to Klein, the interpretation of music is not about music itself but about the listening process. His article offers an interesting way of interpreting musical topics in Chopin by explaining the harmonic events of the music as expressive states.

[34] Bellman goes further to examine the first ballade especially based on Mickiewicz's poem *Konrad Wallenrod*. He states that "[i]t is true that there is virtually no external evidence—such as attestations by other people or mentions in the Chopin correspondence—'proving' that Mickiewicz's poem was the model for Chopin's op. 23, but there are enough congruencies between the two that it is worth asking how knowledgeable listeners might have made the connection, and what they heard in the ballade that recalled the poem" (66). For more details on the poem, see Bellman (2010), Chapter 3.

Although these kinds of discussions are fruitful, I have examined the structure of the Ballade without considering a specific narrative, since I think that the semitonal pitch-structuring may also be fruitfully considered as a result of the composer's harmonic strategies. In this sense, I agree with Laufer's standpoint that "it is probably better to regard their formal and tonal designs and motivic aspects *not* as being programmatic representations of any particular literary work, but as expressing a narrative, poetic character in the most general sense—like the 'Im Legendenton' in Schumann's *Fantasy*, or Schumann's *Novelettes*" (157).

Karol Berger's (1996) discussion is also worth addressing here, since he examines the motives of the Ballade, particularly the whole-tone motive and its chromatic inflected semitone motion, without regard to a specific narrative. Although he uses the terms "rhetoric" and "narrative continuity," he refers to each of them to explain cadential punctuation and motivic networks in the piece.[35] He states that "the narrative continuity in the *Ballade* is established mainly by a tight network of motivic interrelationships" (57). He argues that a prominent descending step, a "sigh" motive, interelates the sections of the piece and functions as a "thread" to interweave different elements in the whole piece (66). In particular, he points out how the C-B♭ motif, what he calls the "*Ur*-motif," and its chromatic inflection, C♭-B♭, function as crucial factors in the piece. According to his argument, in the introduction and the first period, which correspond to the section in mm. 1–90, "the individual phases of discourse are connected by economical and rigorous links of motives and pitches," derived from the descending dyad C-B♭ (60). On the other hand, in the transition in mm. 90–137, a "contraction of this descending whole tone, C-B♭, into a semitone, C♭-B♭" (62), plays a structural role. Berger explains further that the B♯, established in m. 106 and confirmed in m. 124, changes enharmonically to C♭ in m.

[35] For his punctuation form of the Ballade, see Figure 1 in his article (1996, 51).

125 and resolves to B♭ in m. 126.[36] This discussion reveals the indispensable moment of the piece, which has not been fully explained by others; it has been seen as only belonging to the parenthetical section in Schenker's and Laufer's graphs. Figure 4.18 illustrates what Berger suggests.

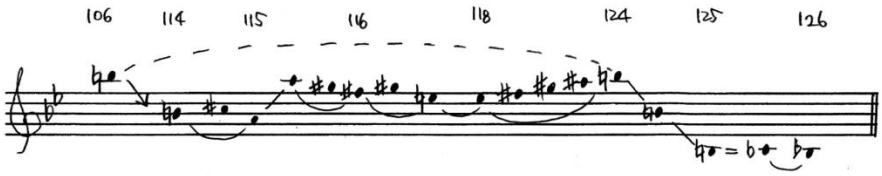
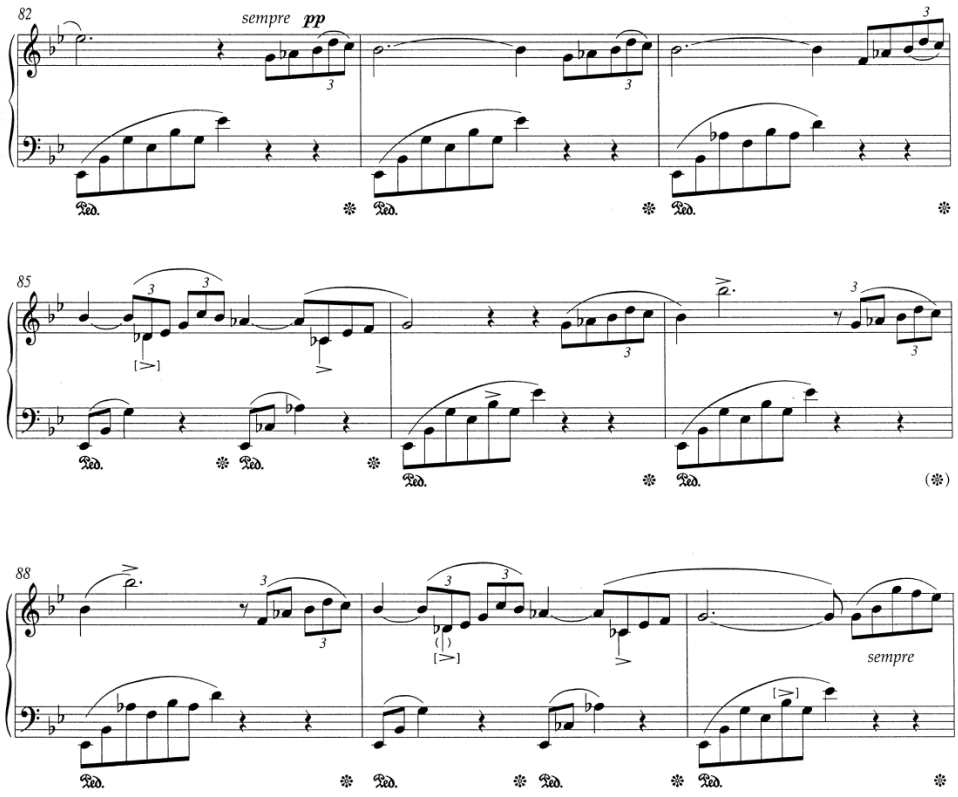


Figure 4.18. *Ballade, Op. 23: B♮/C♭→B♭ motion in the transition*[37]

There are several more semitonal motions to note. First, Berger has noticed that the C♭-B♭ motion is suggested already in the last section of the first period, in m. 85–86 and 89–90. Here the inner voice plays a third progression D♭-C♭-B♭, and, as Berger aptly describes, the two notes C♭-B♭ stand out by accents (Example 4.14).

[36] Berger provides the detailed description and reduction for each section. Particularly, for the discussion of the C♭-B♭ semitonal motion in the transition, see Berger 1996, 61–62.
[37] This figure is my modification of Berger's Example 10 (1996, 61).



Example 4.14. *Chopin, Ballade in G Minor, Op. 23: C♭-B♭ motions in mm. 85–88 and 89–90*

Second, Berger observes that, after an outstanding occurrence of the C♭-B♭ motion in the transition, "the whole episode [in E♭ major], from m. 138 to m. 166, can be seen as a gigantic prolongation of the pitch B♭, prominently embellished with both C and C♭" (63). In this section, C♭ is used mainly as the ♭$\hat{6}$, moving to $\hat{5}$. The consecutive C-C♭-B♭ progression is prominent here, and C♭ is emphasized as equal to the C through the octave doubling and accents. Furthermore, Berger discusses how the highlighted note A♭ is closely related to the chromatic inflection of the other motive in the course of the music. Berger states that the A♭, strongly suggested in the introduction, "makes a clear reference to the contracted semitone form of the

Ur-motif, which played such an important role in the central phase of the discourse" (63). Indeed, the coda nicely incorporates the A♭-G motive with the C-B♭ motive.[38]

Here it is worth noting that both Witten and Berger discuss a semitonal motion as a primary motive of the piece, although Witten points out E♭-D, whereas Berger stresses C♭-B♭. I do not think that we have to choose one of them; as Berger has observed, at the final moment of the piece, the final prolongation of the tonic also summarizes the main theme by evocating the motivic idea, and Chopin shows C-B♭ in mm. 253–54 and E♭-D in mm. 257–58 in a row. We can say that the coda is an array of all the whole-tone and semitonal motives, C-B♭, A♭-G, and E♭-D.

To sum up, I have emphasized the way Chopin employs semitonal motions not only for the overall structure of the pitch axis but also for motivic ideas of the piece. As we have seen, the consecutive semitonal motions D-E♭-E♮-E♭-D comprise the framework of the upper voices of the work. In addition, Chopin intertwines whole tone and semitone motives throughout the piece, which demonstrates what Krebs refers to as "motivic unity," cited in the beginning of this section. I have not insisted on one hearing, but rather wish to convey the range of interpretive possibilities for relations between semitonal pitch motives, and Chopin's large forms, especially in the narrative ones like the G-Minor Ballade.

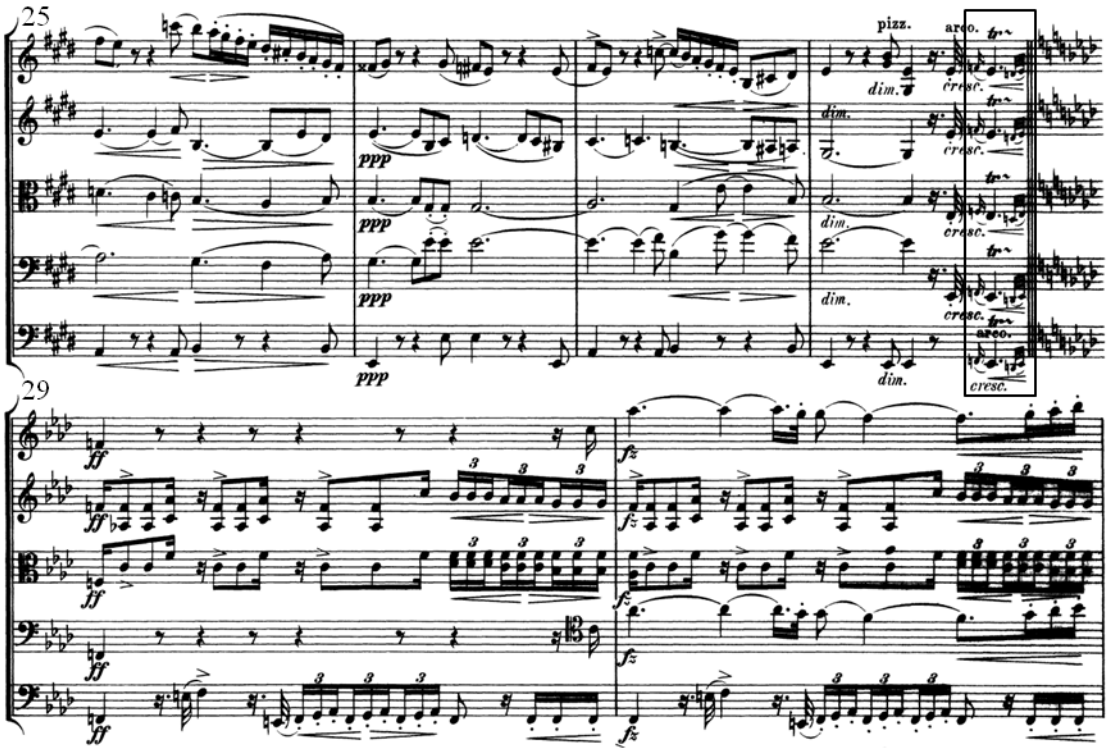
[38] Kallberg (1983) also mentions the cross-reference of the Neapolitan in the Ballade as one of examples of "Chopin deriving later harmonic events from earlier distinctive progressions" in the Ballade. He says "In the G-minor Ballade, op. 23, the Neapolitan inflection in the coda clearly refers to the Neapolitan chord that opens the work (like op. 15 no. 1, the flat supertonic is involved, though here in the more traditional first inversion)." Kallberg 1983, 399, footnote 22.

4.3. Compositional Influence: Chopin's Successors

Although I have examined the importance of semitonal relationships to Chopin's style, this discussion should not imply that the imaginative use of semitonal relationships is unique to Chopin's music. Composers in the late nineteenth century and twentieth century also explore semitonal relationships, in ways that sometimes enlarge on techniques found in Chopin. Whereas I started the first chapter with Chopin's reception of precedent masters, such as Mozart and J. S. Bach, I would like to close this last major chapter of this dissertation by surveying some representative semitonal motions by a few of his successors.

Before doing so, I would like to address a composer, Franz Schubert, perhaps the most discussed composer from the early nineteenth century, and one often paired with Chopin, in terms of the original use of chromatic tonality.[39] As an example, let us consider the noteworthy semitonal motion in the second movement of Schubert's String Quintet in C Major, D. 956. Suurpää (2000) points out that this movement contains a sudden change from the "chorale-like A^1 section in E major" to the "almost violent beginning of the B section in the remote key of F minor" (see Example 4.15). Suurpää continues by stating that "[t]he only clue to this dramatic change is the trill E-F (m. 28) whose F provides, retrospectively, the E with a *leading-tone quality*, thus preparing in a subtle manner the F minor that opens the B section" (2000, 457, italics mine).

[39] See Tovey (1949), Krebs (1980), McCreless (1996), and Rusch (2007) for extensive discussion of Schubert's chromaticism.



Example 4.15. *Schubert, String Quintet D. 956, II, mm. 25–30*

As seen in this example, and noticed by Suurpää, at the end of the E major section, the tonic E at m. 28 changes to the leading tone of the new key, F minor. This abrupt modulation from E major to F minor seems quite similar to Chopin's semitonal modulations. Even in a similar semitonal progression, however, there are subtle differences between the way Schubert uses a semitonal progression and those of Chopin that we saw earlier. First, in Schubert's example above, all five parts play the tonic together, without harmonic support. Next, it seems that Schubert intentionally separates the last two notes E (at m. 28) from the preceding notes of the same pitch; while the previous E's are the root of the tonic triad which closes a cadence of the phrase, the consequent E's after a brief pause are more connected with the next measure as an upbeat to the B section. Dynamics and performing techniques also show deliberate separation.

The last phrase of the section is in *ppp*, with diminuendo indication for the last chord. On the contrary, the dynamic abruptly increases during the last note of the measure with the trill and reaches to *ff* in the next measure. The contrast between *pizzicato* and *arco* is notable as well. Compared to this example, the preferred technique by Chopin is to connect two keys more seamlessly by adjusting linear motions between the two keys. I have claimed that Chopin uses this technique in such a consistent way that we can regard it as a feature of his style. That is, leading-tone modulation does not only indicate Chopin's predilection for a specific semitonal motion, but also includes his individual voice-leading techniques.

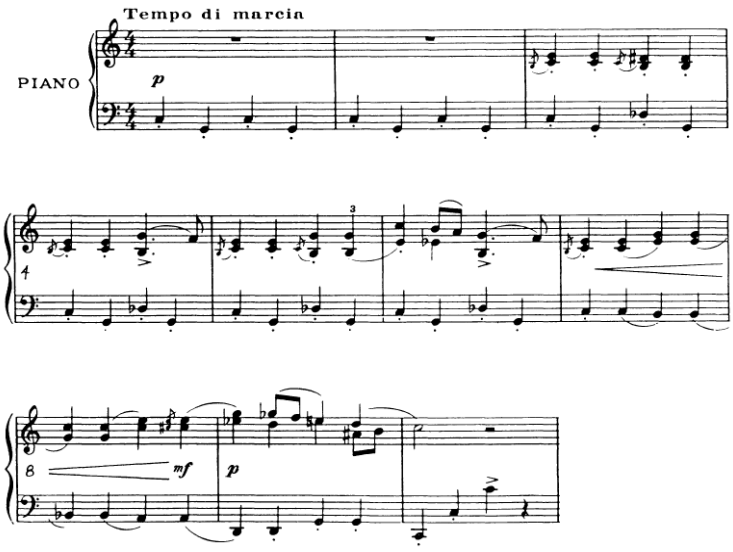
This type of semitonal motion blooms in the works of later generations of composers. In the epilogue to *The Music of Chopin* (1985), Samson offers a useful summary of Chopin's influence on later composers. While pointing out the great impact on the many late nineteenth-century composers with respect to harmony, Samson enumerates several areas as the "prophetic nature of Chopin's achievement": 1) the seventh and ninth harmony sustained through arpeggiation, often without proper resolution, which affect the color of the piano music, especially by French and Russian composers such as Fauré and Skryabin; 2) harmonic symmetries, often using the diminished seventh and parallelism, inherited by the music of Liszt, Rimsky-Korsakov, Busoni, and Debussy; 3) folkloristic modality, which influence particularly the nationalist composers such as Smetana; and 4) expressive chromaticism. What I would like to emphasize here is Samson's last item, which agrees closely with what I have explored so far. As Samson states: "Chopin's expressive chromaticism, realised through *semitonal part movement*, through an almost unprecedented compression of chromatic chord-types within a short span-of-context and through wayward harmonic explorations in parenthesis to the main

tonal goals, which has attracted most interest and which has not infrequently earned him recognition as a forerunner of Wagner" (1985, 213, italics mine).

If, as stated by Samson, semitonal relations not only occupy a preeminent position in Chopin's chromatic techniques but also culminate in late nineteenth- and twentieth-century music, it would be useful to consider some examples of "semitonal part movement" that Samson mentioned but did not clarify completely. For instance, in the music of late nineteenth- and twentieth-century composers such as Sergei Prokofiev, Dmitri Shostakovich, and Hugo Wolf, semitonal relationships are more variously and actively used. First, Chopin's semitonal modulation very much shares the features of chromatic progressions in Prokofiev's music. Richard Bass (1988) points out that "Prokofiev accomplishes [tonal shift by a semitone] fluently and without preparation, often in mid-phrase," comparing Prokofiev's technique with that of Beethoven who "prepares the shift deliberately and at a point of structural articulation" (199). By using a modified Schenkerian method, Bass tries to show how this feature can be explained in "the fundamental diatonic structure of the piece" and "how the seemingly foreign elements assume both a tonal and a motivic role" (200). In this dissertation, I have taken a very similar stance to examine the role of semitonal motions and a composer's style in Chopin's music.

Bass views semitonal motion as "a temporary displacement in a diatonic context," not as a type of modulatory progression, as seen in Example 4.16, and uses the notion of chromatic substitution to explain it: "A chromatically displaced, or so-called 'wrong', note is also a kind of substitution, that is, it appears instead of, rather than in addition to, the notes of the chord. . . . Even though it comes as something of a surprise, the listener is obliged to deal with it in a diatonic context, as a representative of its diatonic shadow" (199–200). In the next example, as

Bass interprets it, the D♭ and D♯ function as neighboring motions on the surface, but they represent the dominant functioning D, in terms of chromatic displacements (202).[40]



Example 4.16. Prokofiev, "March" from *Music for Children* (Bass 1988, 202, Example 4)

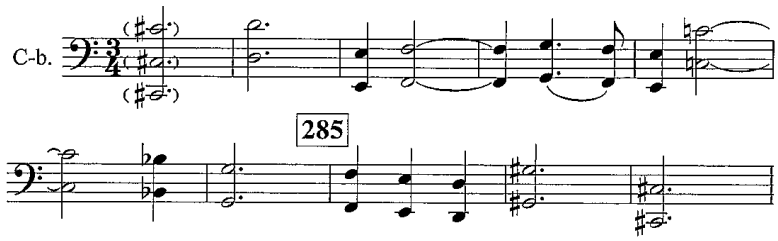
Bass also explores another type of semitonal modulation in Prokofiev's music, "when all voices are displaced to effect a tonal shift" (203), one that it is closer to the Chopin examples in this dissertation. For instance, his example of the second movement of the Piano Sonata No. 8, Op. 84 (his Ex. 9, 208) shows a direct tonal shift from D♭ major to D major, although it does not involve scale-degree transformation.

Still, as his examples show, Bass basically supposes enharmonic equivalence and does not place significance on counting the individual differences of enharmonic notes. The changed

[40] David Heetderks also examines semitonal motions in Prokofiev's music in his dissertation (2011), but from a different perspective. He explores various types of progressions arriving on the tonic in neo-tonal works of the twentieth century, through the concept of changing the "privileged root relation" from a fifth to other intervals, such as a semitone, whole tone, or major third. In addition, he provides secondary literature and detailed analyses of Prokofiev's music in his second chapter and concentrates on the issue of semitone-related triads as a type of "transformation of harmonic syntax."

notes just *replace* the diatonic notes. My approach here has been to focus on *what* causes the ambiguity in regards to the scale-degree transformation (rather than enharmonicism) as a critical element.

A similar technique is found in another Russian composer, Shostakovich, as McCreless examines in a 2010 article. McCreless discusses D/C♯ semitonal relationships in the *Lady Macbeth* passacaglia (between scenes 4 and 5 in Act II). He points out the "sudden sinking of its final two bars from a D-minor orientation to a C♯-minor one," which corresponds to the plot and atmosphere of the drama of Act II (121). McCreless notes that listeners may instinctively recognize the tonal shift at the end of the passage (123), as the theme suddenly proceeds to $\hat{5}$ and $\hat{1}$ in C♯ minor in the last two measures (Example 4.17).



Example 4.17. *Shostakovich, Act II passacaglia from* Lady Macbeth *(McCreless 2010, 122, Example 6.1)*

He argues that this is a feature not only of this work, but a repeating "tonal trope" of many compositions by Shostakovich. That is, Shostakovich so often employed D minor and the keys by a semitone, downward more frequently and upward less commonly, during a certain period of his career to associate or imply musical meanings that it became a compositional trait of music of this period.[41] McCreless then provides an astute analysis of excerpts from the final

[41] See McCreless 2010, 121: "I contend here that the semitone pair, D minor/C♯ minor, resonating from the central moment of *Lady Macbeth*, became a tonal trope for Shostakovich in the years between the composition of the Passacaglia in 1931 and the composition of the Fourth

prelude of the Twenty-Four Preludes (Op. 34), the Cello Sonata (Op. 40), the first of the *Four Romances on Texts of A. Pushkin* (Op. 46), the Fifth Symphony (Op. 37), and the Fourth String Quartet (Op. 83).[42]

As mentioned by McCreless, a semitonal shift in Shostakovich's music usually occurs through a direct change of a note on the surface. Even though the overall musical context admittedly causes a tonal disorientation, the note itself is often unsupported by harmony. Thus, it is indeed a technique more similar to Prokofiev's, a semitonal displacement, than to that of Chopin, but it is still meaningful to consider in the sense that it shows an increasing reliance on semitonal motions.

Another composer who made extensive use of semitonal motions is Hugo Wolf. Example 4.18 is from "Ein Stündlein wohl vor Tag" from the *Mörike Lieder*, and in this piece semitonal transformation is used repeatedly as a harmonic "theme." The opening section of the piece demonstrates the first striking tonal shift. From the piano introduction in mm. 1–4, semitonal motions, such as A-B♭ and F♯-G, already appear to be seminal elements of the work. The vocal melody also contains semitones from the first phrase; the last two notes of the first two measures (C-C♯ in mm. 5–6) stand out in particular. The first modulation occurs at m. 8, as the raised $\hat{4}$ in G minor is transformed to the $\hat{4}$ in A♭ major. This transformation involves only an enharmonic change, similar to the examples that I examined in the last section of chapter 3. However, the

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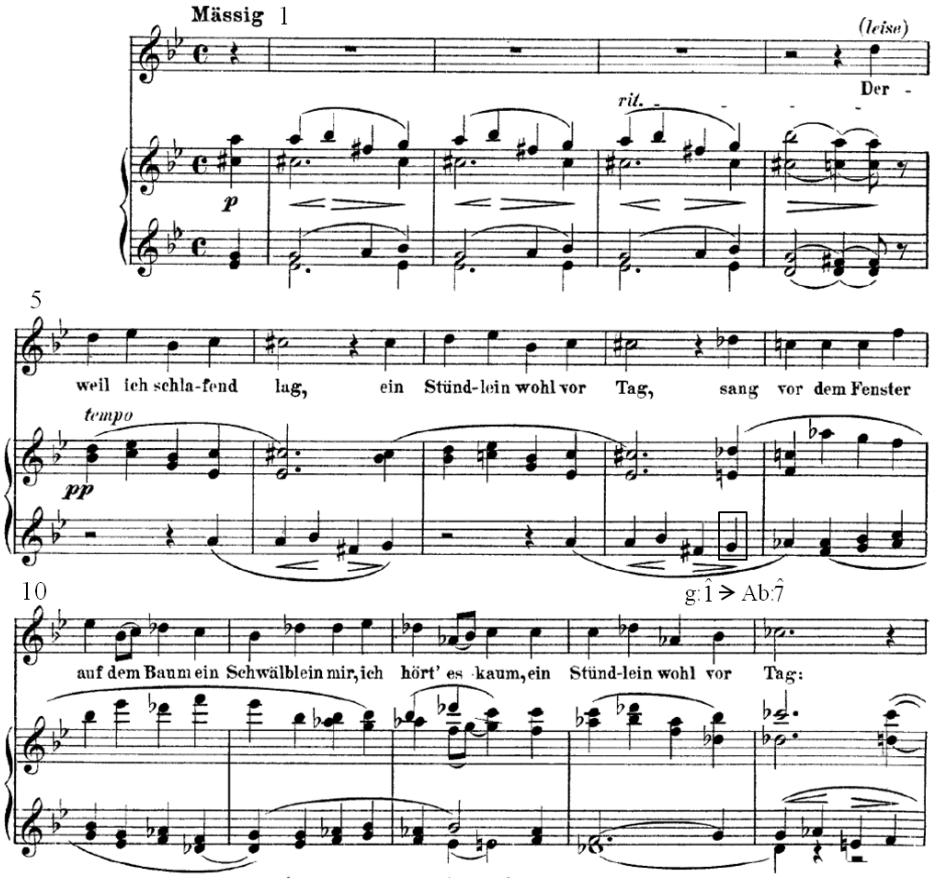
String Quartet eighteen years later, in 1949 – especially in the critical years between the composition of the opera and the successful premiere of the Fifth Symphony in 1937. The d/c♯ relationship usually takes place as a slide from one key directly to the other, right on the musical surface. It comes back repeatedly over these years, cross-referencing pieces that ostensibly have nothing to do with one another." For more of his supporting evidence, see 124–25.

[42] While tracing Shostakovich's compositional techniques, McCreless says that the semitonal shift on the surface is a technique that he frequently uses already in the preceding works such as the "March" from *Children's Games*, Op. 69 and several passages from *The Bedbug*, Op. 19. McCreless analyzes the "March" from *Childeren's Games* in a 1996 article, examining an evolutionary view on semitonal displacement.

lowest voice in the left-hand part of the piano displays the scale-degree transformation between $\hat{1}$ and $\hat{7}$, as the tonic G at m. 8 changes to the leading tone of A♭ major. Thus, this is a type of leading-tone modulation, an even bolder one, and this procedure is reiterated at m. 20, as the tonal shift continues from A♭ minor to A major.



Example 4.18. *Wolf, "Ein Stündlein wohl vor Tag" from the* Mörike Lieder*, mm. 1–14*

The successive semitonal shifts from G minor stop when the music reaches the key of B♭ major, and right before the music ends, through a pivot chord between B♭ major and G minor, the music comes back to where it started. The last representation of the motive leaves the semitone motion C-C♯ unresolved, which goes up to D by a piano postlude. To sum up, this

work shows how Wolf explores semitonal motions not only as a salient motive on the surface but also a key element in designing the music as a whole.

In this section, I have touched briefly on the use of semitonal relations by several composers of the late nineteenth and twentieth centuries. What I am suggesting in this discussion is that Chopin's approach is distinctive enough to be seen as a feature of his individual style, while also belonging to the trends of his time, prompting later composers to extend tonal boundaries to the extreme. There are surely many other composers whose styles have been examined by others but not explored here, including Wagner's musical idioms, Liszt's highly chromatic musical language, and Debussy's linear approach.[43] Delving deeply into reception history, however, on how Chopin's technique directly or indirectly influences these composers, goes beyond the scope of this dissertation, and I will leave it for future studies.

[43] Wagner's semitonal shift has been well-known as a term "expressive tonality" by Bailey. See Chapter 1 on the discussion of Bailey; as for semitonal motions in Liszt, see Satyendra's discussion (1997a) on pitch transformation in Liszt's music, which deals with semitonal displacements of repeated melodic segments. Another article by Satyendra (1997b) also discusses semitonal melodic transformations in a broader context of tonally-open structures in Liszt's music; as for a link between the music of Chopin and Debussy, see Eigeldinger 1986, 126–36. Eigeldinger explains Chopin's early pieces as which a "two-faced Janus looking backward to the heritage of Bach and, we shall see, forward to the future of Liszt/Wagner and Debussy (almost despite the composer's own intentions)" (119). In particular, he points out "undeniable links which can be shown between Chopin and Debussy" and examines the two composers' "linear conception of music" grounded on Bach's techniques as well as affinities in their approach to sonority (126).

Chapter 5

Summary and Conclusion

This dissertation has focused on theoretical problems raised by remote modulation in early nineteenth-century music, particularly in the music of Chopin. Among his chromatic compositional techniques, I have dealt in the previous four chapters with Chopin's use of semitonal relationships as they influence motives, harmonic progressions, tonal structure, and formal design.

I may now summarize my discussions. In the opening chapter, to establish an appropriate theoretical background, I examined general features of Chopin's chromatic harmony and noted the prominence of semitonal relationships as a feature of Chopin's approach to remote modulation. I also discussed previous studies of semitonal relationships and clarified my selected use of them in my methodology.

In the following two chapters, I examined semitonal relationships in modulations, as relationships among key areas. One technique in particular, the leading-tone modulation, is especially representative of semitonal modulations that Chopin often employed, and the second chapter is devoted to this technique. After offering a definition of leading-tone modulation and illustrating its usage in general, I demonstrated how leading-tone modulation causes tonal disruption and functions in a diatonic reinterpretation by emphasizing unusual but creative voice leadings, showing these techniques by analyzing selected works, such as the Nocturnes in B♭

Minor, Op. 9, No. 1, and in C♯ Minor, Op. 27, No. 1. In the last section of the chapter, I extended my discussion into the formal functions of the leading-tone modulation, discussing examples such as the Ballade in F Minor, Op. 52.

In the third chapter, I dealt with other types of scale-degree transformation. I first examined the concept of the upward and downward leading tones, in order to examine Chopin's different treatment between these two types, and then moved to a discussion of the representative downward leading-tone motion, the transformation between $\flat\hat{6}$ and $\hat{5}$. After exploring several short examples, I analyzed mainly the G-Minor Nocturne, Op. 15, No. 3, since this Nocturne juxtaposes a tonally adventurous and highly chromatic section with a diatonic chorale-like section, and the two sections are connected by scale-degree transformation between $\flat\hat{6}$ and $\hat{5}$. I also examined cases which do not involve scale-degree transformation or enharmonic renotation, discussing the Fantasy Op. 49 in particular.

In the last main chapter, I aimed to investigate more analytical issues surrounding semitonal relationships, with the subject of indirectly semitone-related keys, such as that in the F♯-Major Impromptu, Op. 36, and in the Second Scherzo, Op. 31, opening up further discussion. In addition, I discussed how semitonal relationships engage multiple musical parameters, such as motivic content and components of large-scale pitch structuring.

As discussed here, Chopin's music presents an array of individualized approaches to chromatic tonality and voice leading. Schachter states that "although music mostly keeps its promises, it need not do so in the obvious way we might expect" (1987, 295), and this is very true when analyzing Chopin's music. Perhaps it is just these unconventional or irregular features, alluded to by Schachter, that have attracted so many scholars to the study of Chopin's music. And the striking point is that the chromatic irregularities in Chopin's compositions thwart

listeners' expectations on one hand yet fulfill them in an unexpected way. Semitonal relationships handled through scale-degree transformation are one prominent feature that shows the novelty of Chopin's approach to chromaticism, one that neither sacrifices a natural flow of the music nor a delicate handling of tonal stability.

My discussion suggests several other topics that could be explored in the future. Among the many possibilities, I will focus on three main avenues of study: repertoire, other theoretical issues, and musicological study.

Above all, I imagine it would be possible, and desirable, to extend the scope of the issues treated in this dissertation by extending the repertoire. First, there are some works I only touched on in relation to the specific topic of a chapter. For instance, for the sake of space, I selected just a few specific passages from the Sonata in B♭ Minor, Op. 35, and Fantasy Op. 49. Certainly there are further aspects of these works which could be addressed. In the case of a multi-movement piece such as the B♭-Minor Sonata, it would be worth looking at whole movements for any recurring semitonal relations throughout the piece and motivic or harmonic connections between movements. Second, I suggest exploring other piano works that I have not dealt with here. Although I have tried to include a representative sampling of Chopin's primary works, it was not possible to include all of them due to the wide range of piano music by this composer. For instance, the middle section (Trio) of the Polonaise in C Minor, Op. 40, No. 2, contains a tonal shift from A♭ major to A major, which was remarked only in passing in this dissertation.[1] Some works from Chopin's late period, such as Polonaise-Fantasy Op. 61, also need further

[1] See section 1.3, regarding Cone's (1994) analysis of the piece. This piece could be a good example in which to investigate a relation between semitonal shifts and narrative in music. For instance, one might relate this semitonal change to a failed joy. In this kind of reading, the last moment of the piece would be a remembrance of the joyful moment (the music of D♭ major), against the reality (the music of C minor).

study due to their novel and quite arresting tonal structures.[2] Moreover, I believe that analyzing works by Chopin beyond his piano music would be helpful for deepening our understanding of the composer's style. Extending the range of Chopin pieces for study into such works as the two Piano Concertos, in F Minor and E Minor, the Cello Sonata, Op. 65, the songs, and the several other works for piano and orchestra remain for further research. Last but not least, it goes without saying that my work can be expanded by discussing semitonal relationships in works by other composers. In this dissertation, I have offered only a limited discussion of composers other than Chopin, but I hope that this study might nonetheless become a starting point for discussions on a wide spectrum of semitonal relationships explored by other composers.

In addition to the expansion of repertoire, the topic of semitonal relationships also relates to other theoretical issues. For instance, some scholars take note of chromatic sequence through continuous semitonal progressions in Chopin's music.[3] Bass (1996) provides a detailed discussion of sequential techniques in the nineteenth century and connects sequence to other musical elements of the works. Bass distinguishes "tonal sequence" from "real sequence"; while the former refers to a sequence within a key, the latter features the continuous change of keys. Bass discusses the whole-tone partitioning of the octave by sequence in the first movement of the Piano Concerto, Op. 21 by Chopin, as an example of the latter case (see Bass 1996, 272). Since semitonal motions are often involved in a chromatic sequence, this would be an interesting topic to incorporate into the study of semitonal relationships. Even though Chopin's technique of

[2] For the discussions about the piece, see Samson (1988), Kallberg (1985), and Rothstein (2007).
[3] McCreless classifies the semitonal relationships into four types in his 1996 article, and chromatic sequence is one of them: 1) a brief tonicization in a fundamentally diatonic context, 2) chromatic sequences or instances of the transposition operation, 3) two keys functioning together in a double-tonic complex, and 4) semitonal substitution. See McCreless (1996, 95). I have mostly discussed the first type of semitonal relationships so far, the second type has been noticed by many scholars, including Proctor in his pioneering dissertation (1978).

chromatic sequence falls generally within the boundaries of tonality as it often reaches a stable point, such as V-I cadential progression at the end of the passage, it deserves attention in terms of the raised level of tonal dissolution.

The research on two keys by augmented fourth also remains for separate study. By adding semitonal motion to the fifth progression, music may modulate to a key an augmented fourth apart. To illustrate this idea, I mentioned the semitonal shift from E♭ to E♮ in the First Ballade which connects the two sections in the tritone-related keys, E♭ major and A minor/major (see my previous discussion of the Ballade in Section 4.2).

A large area of study also remains that belongs to the field of musicology, which has been beyond the scope of this dissertation. All discussions about Chopin's music in a historical, biographical, and cultural context belong to this category, and I have no doubt that there should be an intersection between historical and analytical studies as well. For instance, Samson (1996) addresses elements that affected Chopin's technique of directional tonality and points out two aspects of the postclassical concert repertory as elements to promote Chopin's harmonic innovation: improvisation and the brilliant style.[4] As another example, Samson also discusses how Chopin's treatment of themes relates to Italian operatic arias in the sense that Chopin's themes show "their priority of decoration and variation over dissection and development" (1985, 214). Others have connected modal elements in Chopin's music to specific geographical practices. These are just a few instances related to a larger area of musicological research which could be connected to Chopin's specific compositional techniques.

[4] Samson states that "improvisation was of central importance, playing a role in the decoration of cantilena, in the practice of 'preludizing,' and in extempore performances on a given theme" (35). He also points out that the formal methods of the brilliant style provide the music with clear demarcations between tonally closed sections (38–39).

Even given that extensions of these kinds are certainly possible, and desirable, I still expect this study to contribute to enriching Chopin scholarship and deepening our understanding of Chopin's style, for a greater sensitivity to the myriad uses of semional relations can be a useful addition to analysis of many of Chopin's most celebrated passages. In particular, I expect this study to provide terminologies and methods to discuss unusual tonal shifts in Chopin's music not only to theorists but also performers. I have found that many performers have struggled with explaining the nature of unusual chromatic passages by Chopin, and this discussion will help them better understand how to interpret such music.

Furthermore, my hope is that this dissertation will help to connect Chopin's techniques to those of later composers. As touched on in Chapter 4, I consider Chopin's way of using semitonal relationships a precursor of later tonal innovations. This dissertation begins and ends by discussing both compositional influence on Chopin and Chopin's influence on others, which reveals how much Chopin's music encompasses tradition and anticipates the future. Discussions of semitonal relations in Chopin's music in particular should provide a bridge from early nineteenth-century music to the more radical tonal dissolutions characteristic of in later periods.

Last, a focus on semitonal relationships is an effective means of gaining new insight into various issues in music theory today. As discussed in this dissertation, semitonal relationships are special cases that pose significant questions for tonal theory, touching as they do upon larger issues such as scale-degree functions, diatonic-chromatic interaction, enharmonicism, and phenomenological hearing. In addition, as Chopin's use of semitonal relationships resonates with other elements of music, semitonal relationships become a lens through which theorists may continue to reflect other issues, such as form, narrative, and motive, in this fascinating and growing field.

Bibliography

Articles & Books

Agmon, Eytan. 1992. “Letter from Eytan Agmon.” *Music Theory Spectrum* 14 (1): 114–16.

Aldwell, Edward, and Carl Schachter, with Allen Cadwallader. 2011. *Harmony and Voice Leading*. 4th edition. Boston: Schirmer/Cengage Learning.

Anderson, Norman Douglas. 1992. “Aspects of Early Major-Minor Tonality: Structural Characteristics of the Music of the Sixteenth and Seventeenth Centuries.” Ph.D. dissertation, Ohio State University.

Atlas, Raphael. 1986. “Coherence vs. Disunity: The Opening Section of Mozart’s Fantasy, K. 475.” *Indiana Theory Review* 7 (1): 23–37.

Bailey, Robert. 1977. “The Structure of the Ring and Its Evolution.” *19th-Century Music* 1 (1): 48–61.

Bass, Richard. 1988. “Prokofiev’s Technique of Chromatic Displacement.” *Music Analysis* 7 (2): 197–214.

_____. 1996. “From Gretchen to Tristan: The Changing Role of Harmonic Sequences in the Nineteenth Century.” *19th-Century Music* 19 (3): 263–85.

Bellman, Jonathan. 2010. *Chopin’s Polish Ballade: Op. 38 as Narrative of National Martyrdom.* New York: Oxford University Press.

Berger, Karol. 1996. “The Form of Chopin’s Ballade, Op. 23.” *19th-Century Music* 20 (1): 46–71.

Berry, David Carson. 2004. *A Topical Guide to Schenkerian Literature: An Annotated Bibliography with Indices.* Hillsdale, NY: Pendragon Press.

Boczkowska, Ewelina. 2012. “Chopin’s Ghosts.” *19th-Century Music* 35 (3): 204–23.

Brown, Matthew, Douglas J. Dempster, and Dave Headlam. 1997. “The ♯IV (♭V) Hypothesis: Testing the Limits of Schenker’s Theory of Tonality.” *Music Theory Spectrum* 19 (2): 155–83.

Burkhart, Charles. 1973. “The Polyphonic Melodic Line of Chopin’s B-minor Prelude.” In *Chopin Preludes, Op. 28: An Authoritative Score, Historical Background, Analysis, Views, and Comments*. Ed. Thomas Higgins. 80–88. New York: W. W. Norton.

_____. 1978. “Schenker’s ‘Motivic Parallelisms.’” *Journal of Music Theory* 22 (2): 145–75.

_____. 1983. “Schenker’s Theory of Levels and Musical Performance.” In *Aspects of Schenkerian Theory.* Ed. David W. Beach. 95–112. New Haven: Yale University Press.

_____. 1997. “Chopin’s ‘Concluding Expansions.’” In *Nineteenth-Century Piano Music: Essays in Performance and Analysis*. Ed. David Witten. 95–116. New York: Garland.

Burstein, L. Poundie. 1997. “Lyricism, Structure, and Gender in Schubert’s G Major Quartet.” *The Musical Quarterly* 81 (1): 51–63.

_____. 1998. “Surprising Returns: The VII♯ in Beethoven’s Op. 18, No. 3, and its Antecedents in Haydn.” *Music Analysis* 17 (3): 295–312.

_____. 2005a. “Unraveling Schenker’s Concept of the Auxiliary Cadence.” *Music Theory Spectrum* 27 (2): 159–85.

_____. 2005b. “The Off-Tonic Return in Beethoven’s Piano Concerto No. 4 in G Major, Op. 58, and Other Works.” *Music Analysis* 24 (3): 305–47.

Caplin, William. 1998. *Classical Form: A Theory of Formal Functions for the Instrumental Music of Haydn, Mozart, and Beethoven.* New York: Oxford University Press.

Cascelli, Antonio. 2013. “Chopin’s Music in the Development of Schenker’s Analytical Thought.” In *Essays from the Fourth International Schenker Symposium*. Ed. L. Poundie Burstein, Lynne Rogers, and Karen M. Bottge. 49–70. Hidesheim: Georg Olms Verlag.

Chew, Geoffrey. 1983. “The Spice of Music: Towards a Theory of the Leading Note.” *Music Analysis* 2 (1): 35–53.

Chung, Heewon. 2008. “A Study on Formal Aspects of Chopin’s Ballade, Op. 23.” *Journal of Music and Theory* 13:89–105.

Cinnamon, Howard. 1992. “New Observations on Voice Leading, Hemiola, and Their Roles in Tonal and Rhythmic Structures in Chopin’s Prelude in B Minor, Op. 28, No. 6.” *Intégral* 6:66–106.

Cohn, Richard. 1996. “Maximally Smooth Cycles, Hexatonic Systems, and the Analysis of Late-Romantic Triadic Progressions.” *Music Analysis* 15 (1): 9–40.

_____. 2004. “Uncanny Resemblances: Tonal Signification in the Freudian Age.” *Journal of the American Musicological Society* 57 (2): 285–323.

_____. 2012. *Audacious Euphony: Chromaticism and the Consonant Triad’s Second Nature*. New York: Oxford University Press.

Cone, Edward T. 1982. “Schubert’s Promissory Note: An Exercise in Musical Hermeneutics.” *19th-Century Music* 5 (3): 233–41.

_____. 1994. “Ambiguity and Reinterpretation in Chopin.” In *Chopin Studies* 2. Ed. John Rink and Jim Samson. 140–60. Cambridge: Cambridge University Press.

Damschroder, David. 2008. *Thinking About Harmony: Historical Perspectives on Analysis.* Cambridge: Cambridge University Press.

Delacroix, Eugène. 1932. *Journal de Eugène Delacroix.* 3 vols. Ed. André Joubin. Paris: Librarie Plon.

Dineen, P. Murray. 1987. “Schoenberg’s Concept of Neutralization.” *Theoria* 2: 13–38.

Eigeldinger, Jean-Jacques. 1986. *Chopin: Pianist and Teacher as Seen by His Pupils*. Ed. Roy Howat. Trans. Krysia Osostowicz and Naomi Shohet. Cambridge: Cambridge University Press.

_____. 1994. “Placing Chopin: Reflections on a Compositional Aesthetic.” In *Chopin Studies* 2. Ed. John Rink and Jim Samson. 102–39. Cambridge: Cambridge University Press.

_____. 1997. “Chopin and ‘La note bleue’: An Interpretation of the Prelude Op. 45.” *Music & Letters* 78 (2): 233–53.

Eisen, Cliff and Christopher Wintle. 1999. “Mozart’s ‘C minor Fantasy, K.475’: An Editorial ‘Problem’ and its Analytical and Critical Consequences.” *Journal of the Royal Musical Association* 124 (1): 26–52.

Ellis, Mark. 2010. *A Chord in Time: The Evolution of the Augmented Sixth from Monteverdi to Mahler*. Aldershot: Ashgate.

Grabowski, Christophe and John Rink. 2010. *Annotated Catalogue of Chopin’s First Editions.* Cambridge: Cambridge University Press.

Goldberg, Halina. 1997. “Musical Life in Warsaw during Chopin’s Youth, 1810–1830.” Ph.D. dissertation, City University of New York.

_____. 2008. *Music in Chopin’s Warsaw*. New York: Oxford University Press.

Harrison, Daniel. 1994. *Harmonic Function in Chromatic Music: A Renewed Dualist Theory and an Account of its Precedents.* Chicago: University of Chicago Press.

_____. 2002. “Nonconformist Notions of Nineteenth-Century Enharmonicism.” *Music Analysis* 21 (2): 115–60.

Hedley, Arthur, ed. 1962. *Selected Correspondence of Fryderyk Chopin*. Trans. Arthur Hedley. London: Heinemann.

Heetderks, David James. 2011. “Transformed Triadic Networks: Hearing Harmonic Closure in Prokofiev, Copland, and Poulenc.” Ph.D. dissertation, University of Michigan.

Hepokoski, James A. and Warren Darcy. 2006. *Elements of Sonata Theory: Norms, Types, and Deformations in the Late-Eighteenth-Century Sonata.* New York: Oxford University Press.

Hood, Alison. 2012. “Ambiguity of Tonal Meaning in Chopin’s Prelude Op. 28, No. 22.” *Music Theory Online* 18 (3).

Huron, David. 2006. “Tonality.” In *Sweet Anticipation: Music and the Psychology of Expectation.*143–74. Cambridge, MA: MIT Press.

Jonas, Oswald. 2005. *Introduction to the Theory of Heinrich Schenker: The Nature of the Musical Work of Art*. 2nd English edition. Trans. and ed. John Rothgeb. Ann Arbor: Musicalia Press.

Kallberg, Jeffrey. 1982. “The Chopin Sources: Variants and Versions in Later Manuscripts and Printed Editions.” Ph.D. dissertation, University of Chicago.

_____. 1983. “Compatibility in Chopin’s Multipartite Publications.” *Journal of Musicology* 2 (4): 391–417.

_____. 1985. “Chopin’s Last Style.” *Journal of the American Musicological Society* 38 (2): 264–315.

_____. 1988. “The Rhetoric of Genre: Chopin’s Nocturne in G minor.” *19th-Century Music* 11 (3): 238–61.

_____. 1992. “Small ‘Forms’: In Defense of the Prelude.” In *The Cambridge Companion to Chopin*. Ed. Jim Samson. 124–44. Cambridge: Cambridge University Press.

_____. 1997. “Nocturnal Thoughts on Impromptu.” *The Musical Quarterly* 81 (2): 199–203.

_____. 2001. “Chopin’s March, Chopin’s Death.” *19th-Century Music* 25 (1): 3–26.

Kinderman, William. 1988. “Directional Tonality in Chopin.” In *Chopin Studies*. Ed. Jim Samson. 59–75. Cambridge: Cambridge University Press.

_____. 1996. “Dramatic Development and Narrative Design in the First Movement of Mozart’s Concerto in C Minor, K.491.” In *Mozart’s Piano Concertos: Text, Context, Interpretation.* Ed. Neal Zaslaw. 285–301. Ann Arbor: University of Michigan Press.

Kim, Youn. 2003. “Theories of Musical Hearing, 1863–1931: Helmholtz, Stumpf, Riemann and Kurth in Historical Context.” Ph.D. dissertation, Columbia University.

Klein, Michael. 2004. “Chopin’s Fourth Ballade as Musical Narrative.” *Music Theory Spectrum* 26 (1): 23–55.

_____. 2012. “Chopin Dreams: The Mazurka in C♯ minor, Op. 30, No. 4.” *19th-Century Music* 35 (3): 238–60.

Kopp, David. 2002. *Chromatic Transformations in Nineteenth-Century Music*. Cambridge: Cambridge University Press.

Korsyn, Kevin. 1991. “Towards a New Poetics of Musical Influence.” *Music Analysis* 10 (1–2): 3–72.

_____. 1996. “Directional Tonality and Intertextuality: Brahms’s Quintet Op. 88 and Chopin’s Ballade Op. 38.” In *The Second Practice of Nineteenth-Century Tonality*. Ed. William Kinderman and Harald Krebs. 45–83. Lincoln: University of Nebraska Press.

Krebs, Harald.1980. “Third Relation and Dominant in Late 18th- and Early 19th-Century Music.” Ph.D dissertation, Yale University.

_____. 1991. “Tonal and Formal Dualism in Chopin’s Scherzo, Op. 31.” *Music Theory Spectrum* 13 (1): 48–60.

_____. 1994. “Tonal Structure in Nielsen’s Symphonies.” In *The Nielsen Companion*. Ed. Mina Miller. 208–49. London: Faber and Faber.

Kurth, Ernst. 1948. *Grundlagen des linearen Kontrapunkts: Bachs melodische Polyphonie.* Bern: Krompholz.

Laitz, Steven. 1992. “Pitch-Class Motive in the Songs of Franz Schubert: The Submediant Complex.” Ph.D. dissertation, University of Rochester.

Laufer, Edward. 1993. “A Different Reading for the Same Music.” Paper read at the annual meeting of Music Theory Society of New York State. Queens College, New York.

_____. 2009. “On Chopin’s Fourth Ballade.” In *Keys to the Drama: Nine Perspectives on Sonata Forms*. Ed. Gordon Sly. 157–75. Burlington, VT: Ashgate.

Lewin, David. 1982. “*Auf dem Flusse*: Image and Background in a Schubert Song.” *19th-Century Music* 6 (1): 47–59.

_____. 1984. “Amfortas’s Prayer to Titurel and the Role of D in *Parsifal*.” *19th-Century Music* 7 (3): 336–49.

_____. 1986. “Music Theory, Phenomenology, and Modes of Perception.” *Music Perception* 3 (4): 327–92.

_____. 1991. “Some Problems and Resources of Music Theory.” *Journal of Music Theory Pedagogy* 5 (2): 111–32.

_____. 1992. “Some Notes on Analyzing Wagner: *The Ring* and *Parsifal*.” *19th-Century Music* 16 (1): 49–58.

_____. 2006. "*Ihr Bild*." In *Studies in Music with Text*. 135–52. New York: Oxford University Press.

McCreless, Patrick. 1983. "Ernst Kurth and the Analysis of the Chromatic Music of the Late Nineteenth Century." *Music Theory Spectrum* 5:56–75.

_____. 1991. "Syntagmatics and Paradigmatics: Some Implications for the Analysis of Chromaticism in Tonal Music." *Music Theory Spectrum* 13 (2): 147–78.

_____. 1996. "An Evolutionary Perspective on Nineteenth-Century Semitonal Relations." In *The Second Practice of Nineteenth-Century Tonality*. Ed. William Kinderman and Harald Krebs. 87–113. Lincoln: University of Nebraska Press.

_____. 2007. "Elgar and Theories of Chromaticism." In *Elgar Studies*. Ed. J.P.E. Harper-Scott and Julian Rushton. 1–49. Cambridge: Cambridge University Press.

_____. 2010. "Shostakovich's Politics of D Minor and its Neighbours, 1931–1949." In *Shostakovich Studies* 2. Ed. Pauline Fairclough. 121–89. Cambridge: Cambridge University Press.

_____. 2011. "The Pitch-Class Motive in Tonal Analysis: Some Historical and Critical Observations." *Res Musica* 3:52–67.

Meyer, Leonard. 1989. *Style and Music: Theory, History, and Ideology.* Philadelphia: University of Pennsylvania Press.

Michałowski, Kornel and Jim Samson. "Chopin, Fryderyk Franciszek." *Grove Music Online. Oxford Music Online.* Oxford University Press. Accessed November 11, 2014, http://www.oxfordmusiconline.com.proxy.lib.umich.edu/subscriber/article/grove/music/51099.

Mitchell, William J. 1962. "The Study of Chromaticism." *Journal of Music Theory* 6 (1): 2–31.

_____. 1967. "The *Tristan* Prelude: Techniques and Structure." *Music Forum* 1:162–203.

Morgan, Robert P. 2008. "Chopin's Modular Forms." In *Variations on the Canon: Essays on Music from Bach to Boulez in Honor of Charles Rosen on His Eightieth Birthday.* Ed. Robert Curry, David Gable, and Robert L. Marshall. 185–204. Rochester, NY: University of Rochester Press.

Niecks, Frederick. 1888. *Frederick Chopin as a Man and Musician*. 2 vols. London: Novello, Ewer and Co.

Noden-Skinner, Cheryl. 1984. "Tonal Ambiguity in the Opening Measures of Selected Works by Chopin." *College Music Symposium* 24 (2): 28–34.

Oren, Benjamin. 2003. "Connections between Bach and Chopin." In *Music in Time: Music for the Piano.* Ed. Michal Smoira-Cohn. 7–46. Israel: Jerusalem Academy of Music and Dance.

Petty, Wayne C. 1999. "Chopin and the Ghost of Beethoven." *19th-Century Music* 22 (3): 281–99.

Phipps, Graham H. 2008. "A Fantasy on Modal Identity: Implications and Explications in Mozart's K. 475 through Fundamental-Bass Strategies." In *A Composition as a Problem* V. Ed. Mart Humal.102–17. Estonian Academy of Music and Theatre.

Pomeroy, Boyd. 2004. "Tales of Two Tonics: Directional Tonality in Debussy's Orchestral Music." *Music Theory Spectrum* 26 (1): 87–118.

Proctor, Gregory. 1978. "Technical Bases of Nineteenth-Century Chromatic Tonality: A Study in Chromaticism." Ph.D. dissertation, Princeton University.

Reale, Haley Britt Beverburg. 2011. "Enharmonic Paradoxes in Classical, Neoclassical, and Popular Music." Ph.D. dissertation, University of Michigan.

Rings, Steven. 2011. *Tonality and Transformation*. New York: Oxford University Press.

Rink, John. 1989. "The Evolution of Chopin's 'Structural Style' and its Relation to Improvisation." Ph.D. dissertation, Cambridge University.

_____. 1990. "Chopin and Schenker: Improvisation and Musical Structure." *Chopin Studies* 3: 219–31.

_____. 1992. "Tonal Architecture in the Early Music." In *The Cambridge Companion to Chopin.* Ed. Jim Samson. 78–97. Cambridge: Cambridge University Press.

_____. 1994. "Chopin's Ballades and the Dialectic: Analysis in Historical Perspective." *Music Analysis* 13 (1): 99–115.

_____. 1997. *Chopin: The Piano Concertos.* Cambridge: Cambridge University Press.

Rosen, Charles. 1971. *The Classical Style: Haydn, Mozart, Beethoven*. New York: W. W. Norton.

_____. 1995. *The Romantic Generation.* Cambridge, MA: Harvard University Press.

Rothfarb, Lee Allen. 1985. "Ernst Kurth as Theorist and Analyst." Ph.D. dissertation, Yale University.

Rothstein, William. 1988. "Phrase Rhythm in Chopin's Nocturnes and Mazurkas." In *Chopin Studies*. Ed. Jim Samson. 115–41. Cambridge: Cambridge University Press.

_____. 1989. "Chopin: Nocturnes, Mazurkas, and Études." In *Phrase Rhythm in Tonal Music*. 214–48. New York: Schirmer Books. Reprint, Ann Arbor: Musicalia Press, 2007.

_____. 1994. "Ambiguity in the Themes of Chopin's First, Second, and Fourth Ballades." *Intégral* 8:1–49.

_____. 1997. "The Form of Chopin's Polonaise-Fantasy." In *Music Theory in Concept and Practice*. Ed. James Baker, David Beach, and Jonathan Bernard. 337–59. Rochester, NY: University of Rochester Press.

_____. 2006. "Circular Motion in Chopin's Late B-major Nocturne (Op. 62, No. 1)." In *Structure and Meaning in Tonal Music: Festschrift in Honor of Carl Schachter.* Ed. L. Poundie Burstein and David Gagné. 19–32. Hillsdale, NY: Pendragon Press.

_____. 2008. "Common-Tone Tonality in Italian Romantic Opera: An Introduction." *Music Theory Online* 14 (1).

Rowland, David. 1992. "The Nocturne: Development of a New Style." In *The Cambridge Companion to Chopin.* 32–49. Cambridge, England: Cambridge University Press.

Rusch, René. 2007. *Imagining Tonal Spaces: Conceptions of Hierarchy, Chromaticism, and Social Constructs in Schubert's Music*. Ph.D. dissertation, University of Michigan.

Rushton, Julian. "Tierce de Picardie." *Grove Music Online. Oxford Music Online*. Oxford University Press. Accessed 21 Sep. 2013. http://www.oxfordmusiconline.com.proxy.lib.umich.edu/subscriber/article/grove/music/27946.

Salzer, Felix. 1952. *Structural Hearing: Tonal Coherence in Music*. New York: Charles Boni. Reprint, New York: Dover Publications, 1982.

_____. 1970. “Chopin’s Nocturne in C-sharp Minor, Opus 27, No. 1.” *Music Forum* 2: 283–97.

_____. 1973. “Chopin’s Etude in F major, Opus 25, No. 3: The Scope of Tonality.” *Music Forum* 3: 281–90.

Salzer, Felix, Heinrich Schenker, William J. Mitchell, Arthur Maisel, and Hedi Siegel. 1990. “Heinrich Schenker: Graphic Analysis of Brahms’s *Auf dem Kirchhofe*, Op. 105, No. 4.” *Theory and Practice* 13:1–14.

Samarotto, Frank. 2004. “Sublimating Sharp $\hat{4}$: An Exercise in Schenkerian Energetics.” *Music Theory Online* 10 (3).

Samson, Jim. 1977. *Music in Transition: A Study of Tonal Expansion and Atonality, 1900–1920.* New York: W.W. Norton.

_____. 1985. *The Music of Chopin*. Boston: Routledge & Kegan Paul.

_____. 1988. “The Composition-Draft of the Polonaise-Fantasy: The Issue of Tonality.” In *Chopin Studies.* Ed. Jim Samson. 41–58. Cambridge: Cambridge University Press.

_____. 1990. “Chopin’s F-Sharp Impromptu: Notes on Genre, Style and Structure.” *Chopin Studies* 3: 297–304.

_____. 1992a. “Extended Forms: The Ballades, Scherzos and Fantasies.” In *The Cambridge Companion to Chopin.* Ed. Jim Samson. 101–23. Cambridge, NY: Cambridge University Press.

_____. 1992b. *Chopin: The Four Ballades*. Cambridge: Cambridge University Press.

_____. 1996a. *Chopin*. Oxford: Oxford University Press.

_____. 1996b. “Chopin’s Alternatives to Monotonality: A Historical Perspective.” In *The Second Practice of Nineteenth-Century Tonality*. Ed. William Kinderman and Harald Krebs. 34–44. Lincoln: University of Nebraska Press.

———. 2001. “Chopin, Past and Present.” *Early Music* 29 (3): 381–87.

_____. 2003. “The Challenge to Analysis.” In *Analytical Perspective on the Music of Chopin*. Ed. Artur Szklener. 9–19. Warsaw: Narodowy Instytut Fryderyka Chopina.

Satyendra, Ramon. 1997a. “Conceptualising Expressive Chromaticism in Liszt’s Music.” *Music Analysis* 16 (2): 219–52.

_____. 1997b. “Liszt’s Open Structures and the Romantic Fragment.” *Music Theory Spectrum* 19 (2): 184–205.

Schachter, Carl. 1987. “Analysis by Key: Another Look at Modulation.” *Music Analysis* 6 (3): 289–318.

_____. 1988. “Chopin’s Fantasy, Op. 49: The Two-Key Scheme.” In *Chopin Studies*. Ed. Jim Samson. 221–53. Cambridge: Cambridge University Press.

_____. 1994a. “The Prelude in E minor Op. 28, No. 4: Autograph Sources and Interpretation.” In *Chopin Studies* 2. Ed. John Rink and Jim Samson. 162–82. Cambridge: Cambridge University Press.

_____. 1994b. “Chopin’s Prelude in D major, Op. 28, No. 5: Analysis and Performance.” *Journal of Music Theory Pedagogy* 8:27–45.

_____. 1995. “The Triad as Place and Action.” *Music Theory Spectrum* 17 (2): 149–69.

_____. 1996. “Idiosyncratic Features of Three Mozart Slow Movements: The Piano Concertos K. 449, K. 453, and K. 467.” In *Mozart’s Piano Concertos: Text, Context, Interpretation*. Ed. Neal Zaslaw. 315–33. Ann Arbor: University of Michigan Press.

_____. 1999. “El Impromptu en Fa Sostenido Mayor Op. 36 de Chopin: Análisis e Interpretación.” *Quodlibet: Revista de Especialización Musical* (14): 116–26.

_____. 2000. “Counterpoint and Chromaticism in Chopin’s Mazurka in C♯ Minor, Opus 50, Number 3.” *Ostinato rigore: Revue internationale d’études musicales* 15:121–34.

Schenker, Heinrich. 1906. *Harmonielehre.* Stuttgart: Cotta.

_____. 1935. *Der freie Satz*. 2 vols. Vienna: Universal Edition.

_____. 1954. *Harmony.* Ed. Oswald Jonas. Trans. Elisabeth Mann Borgese. Chicago: University of Chicago Press.

_____. 1969. *Five Graphic Music Analyses*. New York: Dover Publications.

_____. 1979. *Free Composition*. 2 vols Trans. and ed. Ernst Oster. New York: Longman.

Schmalfeldt, Janet. 2008. "Chopin's Dialogue: The Cello Sonata, Op. 65." In *Chopin's Musical Worlds: The 1840's*. 265–91. Warsaw: Narodowy Instytut Fryderyka Chopina.

_____. 2011. *In the Process of Becoming: Analytic and Philosophical Perspectives on Form in Early Nineteenth-Century Music*. New York: Oxford University Press.

Schoenberg, Arnold. 1978. *Theory of Harmony*. Trans. Roy E. Carter. Berkeley and Los Angeles: University of California Press.

Siepmann, Jeremy. 1995. *Chopin, the Reluctant Romantic*. London: Gollancz.

Smialek, William. 2000. *Frédéric Chopin: A Guide to Research.* New York: Garland.

Smith, Charles J. 1986. "The Functional Extravagance of Chromatic Chords." *Music Theory Spectrum* 8:94–139.

_____. 2005. ""Rounding Up the Usual Suspects?" The Enigmatic Narrative of Chopin's C-Sharp Minor Prelude." In *Engaging Music: Essays in Music Analysis.* Ed. Deborah Stein. 236–52. New York: Oxford University Press.

Spicer, Mark Joseph. 1994. "An Application of *Grundgestalt* Theory in the Late Chromatic Music of Chopin: A Study of His Last Three Polonaises." Ph.D. dissertation, University of North Texas.

Stein, Deborah J. 1985. *Hugo Wolf's Lieder and Extensions of Tonality*. Ann Arbor: University Microfilms International (UMI).

Stern, David. 1995. "Mozart's Adagio in B minor KV 540." *Journal of Schenkerian Studies* 1:149–67.

Suurpää, Lauri. 2000. "The Path from Tonic to Dominant in the Second Movement of Schubert's String Quintet and in Chopin's Fourth Ballade." *Journal of Music Theory* 44 (2): 451–86.

_____. 2008. "Expression, Form, and Voice-Leading Structure in Mozart's B-Minor Adagio, K. 540." In *A Composition as a Problem* V. Ed. Mart Humal. 86–101.Tallinn: Estonian Academy of Music and Theatre.

Szklener, Artur. 2004. “Melodics of Chopin’s Nocturnes. A Multi-Layer Issue.” In *Analytical Perspectives on the Music of Chopin.* Ed. Artur Szklener. 185–202. Warsaw: Narodowy Instytut Fryderyka Chopina.

Temperley, David. 2011. “Scalar Shift in Popular Music.” *Music Theory Online* 17 (4).

Tovey, Donald Francis. 1949. “Tonality in Schubert.” In *Essays and Lectures on Music.* 134–59. London: Oxford University Press.

Tuchowski, Andrzej. 1999. “Chopin’s Integrative Technique and its Repercussions in 20th-Century Polish Music.” *Polish Music Journal* 2 (1–2).

Tymoczko, Dmitri. 2011. *A Geometry of Music: Harmony and Counterpoint in the Extended Common Practice.* New York: Oxford University Press.

Walker, Alan. 1973. “Chopin and Musical Structure: An Analytical Approach.” In *The Chopin Companion: Profiles of the Man and the Musician.* Ed. Alan Walker. 227–79. New York: W.W. Norton.

Wason, Robert W. 2002. “Two Bach Preludes—Two Chopin Etudes, or, *Toujours travailler Bach—Ce sera votre meilleur moyen de progresser*.” *Music Theory Spectrum* 24 (1): 103–20.

Wen, Eric. 1990. “Enharmonic Transformation in the First Movement of Mozart’s Piano Concerto in C Minor, K. 491.” In *Schenker Studies.* Ed. Hedi Siegel. 107–24. New York: Cambridge University Press.

Witten, David. 1997. “The Coda Wagging the Dog: Tails and Wedges in the Chopin Ballades.” In *Nineteenth-Century Piano Music: Essays in Performance and Analysis*. Ed. David Witten. 117–85. New York: Garland.

Wolf, Eugene K. 1992. “The Rediscovered Autograph of Mozart’s Fantasy and Sonata in C Minor, K. 475/457.” *Journal of Musicology* 10 (1): 3–47.

Yip, Joyce. 2010. “Tonal and Formal Aspects of Selected Mazurkas of Chopin: A Schenkerian View.” Ph.D. dissertation, University of Michigan.

Scores

Bach, J. S. 2010. *Vingt-quatre préludes et fugues (Le clavier bien tempéré, Livre 1*), annotated by Frédéric Chopin, commentary by Jean-Jacques Eigeldinger. Paris: Société française de musicologie.

Chopin, Frédéric. 1894–98. *Complete Works for the Piano*. Ed. Carl Mikuli. New York: G. Schirmer.

_____. [1879] 1905. *Fr. Chopin's sämtliche Pianoforte-Werke*. Ed. Herrmann Scholtz. Leipzig: C. F. Peters.

Chopin, Fryderyk. 1974–. *The National Edition of the Works of Fryderyk Chopin.* Ed. Jan Ekier and Paweł Kamiński. Cracow: Polskie Wydawnictwo Muzyczne.

Chopin, Frédéric. 1980. *Nocturnes.* Ed. Ewald Zimmermann. Munich: G. Henle.

Chopin, Fryderyk. 2004–. *The Complete Chopin: A New Critical Edition*. Ed. John Rink, Jim Samson, and Jean-Jacques Eigeldinger. London: Edition Peters.